

# 2007 Minnesota Spring Turkey Hunter Survey Report

Tonya Klinkner, Jennifer Snyders, Eric Dunton, and Richard Kimmel

## INTRODUCTION

Minnesota's spring turkey hunting season uses a permit area quota system. The system is designed to distribute hunters across space (i.e., permit areas [PAs]) and time (i.e., time period), and allows for greater control of harvest and hunter satisfaction. The goal of this system is to provide quality turkey hunting opportunities where populations can sustain harvest (MDNR 2007a).

During the 2007 spring season, 33,976 permits were available in 66 PA's across 8 time periods, which varied from 5 to 7 days in length. The season began on April 18, 2007 and ran until May 31, 2007 representing a total of 44 turkey hunting days. Currently, the spring turkey hunting PA's represent 46,040 mi<sup>2</sup> or 55% of Minnesota's total land base (R. Wright, Minnesota Department of Natural Resources, personal communication).

Three types of hunting licenses were available to hunters: (1) general lottery permit in which an applicant or a party of up to 4 hunters applied for a specific PA and time period (they also had the option to apply for a second choice area and time period); (2) landowner permit in which up to 20 percent of permits for each PA and time period were reserved for landowners or tenants who lived on 40 acres or more of land with the PA, and (3) archery permits which could be purchased for the last 2 time periods of any PA with 50 or more permits per period. Only general and landowner license purchasers were included in this survey.

Licenses were made available based on a system of preference which was determined by the number of years applicants submitted a valid but unsuccessful application since last receiving a license. Successful applicants were allowed to harvest 1 bearded turkey during the spring season.

The current Wild Turkey Plan (MDNR 2007a) calls for surveying turkey hunters from a portion of PAs open for hunting each year in order to have reasonably current data for modeling permit numbers for future hunts. Permit allocations are adjusted inversely for hunter interference in an attempt to maintain hunt quality and safety (Kimmel 2001, Dingman et al. 2002). In addition, information on hunt quality and access to land for hunting is used to evaluate the quality of spring turkey hunting for each permit area.

## METHODS

A turkey hunter survey consisting of 16 questions (Appendix A) was first mailed to a random sample of 2,774 spring turkey hunters on May 23, 2007. A total of 26 PAs were surveyed based on PA boundary changes or length of time since previous survey (Table 1). Hunter samples were drawn from only the first 4 time periods (i.e., April 18 – May 7 2007) because most turkey hunters prefer to hunt during those time periods and it was assumed that higher interference rates and inaccessibility to hunting lands would occur during those time periods. Surveyed hunters

were randomly selected from the Electronic Licensing System (ELS) database of Spring 2007 turkey hunt license purchasers. Non-respondents were sent a follow-up mailing on June 20, 2007 with 1,424 surveys mailed. A third and final mailing was sent to 1,245 non-respondents on July 26, 2007. Surveys received after September 14, 2007 were not used in this analysis.

PA 456 was later added to the survey because of concern for low hunter success (i.e., 9.4% success in 2007 and 7.1% 3 year average success) (MDNR 2007*b*). There were a total of 32 permits available for all time periods; therefore, all hunters within the PA and time periods were surveyed. Surveys were mailed to 32 hunters on June 27, 2007. Non-respondents were sent a follow-up mailing on July 11, 2007 with 17 surveys mailed. A third and final mailing was sent to 10 non-respondents on July 26, 2007.

The survey was designed to determine relationship between indices of hunter crowding (i.e., hunter interference, access to land for hunting) and hunt quality for spring turkey hunting seasons in Minnesota.

## **RESULTS**

The overall response rate across all time periods and PAs averaged 80.9% and varied among PAs from 73.7-94.4% (Table 1). The majority of respondents (97.8%) reported that they hunted turkeys in 2007 (Table 2). Most spring turkey hunters (87%) possessed a general lottery hunting permit (Table 3) and hunters were evenly distributed across the 4 surveyed time periods (Table 4). All hunters (i.e., general lottery and landowner) spent an average of 2.7 days hunting (Table 5). Hunting by shotgun was far more common (92%) than by archery (4%) or shotgun and archery (4%, Table 6).

Hunters reported observing an average of 12 turkeys while hunting but this varied widely among PAs from 44 turkeys in PA 422 to 3 turkeys in PA 456 (Table 7). Most hunters (94%) reported observing at least 1 turkey while hunting (Table 7). Nearly 60% of respondents reported shooting at a turkey (Table 8), and 51% indicated they were successful in harvesting a turkey (Table 9). Most turkeys were harvested in the morning (74.9%) and nearly all (97.1%) were harvested by shotgun (Table 9).

The majority of hunters (83.6%) described access to land as either “very easy” or “somewhat easy” (Table 10). Most hunters utilized private land (82.4%, Table 11). On average hunters were denied access to private land 0.7 times (Table 11).

Most hunters (99%) reported no feeling of danger while hunting (Table 12). On average, 0.4 hunters outside the respondents hunting party were observed while hunting, and 12.6% of hunters indicated observing  $\geq 1$  other hunter (Table 13). Only 6% of hunters reported interference from other turkey hunters (range of 0.00 to 0.16, Table 14). 10% of hunters reported interference from non-turkey hunters (range of 0.00 to 0.22; Table 15). On a scale of 1 to 10, overall quality rating from turkey hunters for the spring 2007 hunting season averaged 7.51 (i.e., 0 represents poor quality and 10 represents high quality, range 5.68 in PA 456 to 8.68 in PA 248, Table 16).

## DISCUSSION

Since Minnesota's first modern hunting season in 1978, there have always been more applications for hunting than available permits (MDNR 2004). For the 2007 spring turkey season there were a total of 52,566 applicants for 33,976 available permits (MDNR 2007). The goal of a structured spring turkey hunting season is to regulate hunter numbers in order to provide quality hunting opportunities while maintaining sustainable populations. Results from this survey indicate that hunters are experiencing a high quality hunt (7.51 quality rating), characterized by high success rates (51%), low interference (0.06 interference rate from other hunters and 0.10 from non-hunters), and good access to private land (hunters averaged < 1 time being denied access to private land). The factors most often cited as contributing to a quality hunt include ease of access to hunting lands, feeling of safety, proper distribution of hunters (i.e., lack of interference from other hunters), observing turkeys while hunting, having the opportunity to get a shot, and success in harvesting a turkey (Smith et al. 1992, Dingman 2003). Success is the most often cited factor influencing a quality hunting experience (Stankey et. al. 1973, Hende 1974, Dingman 2003).

The spring turkey hunter survey results are used in part as a tool to gauge hunter satisfaction and estimate interference rates. Hunter density and number of permits available appear to be acceptable and permit numbers likely can be increased in future hunting seasons (Dingman 2003). One contributing factor to interference is hunter density. Increased hunter density has the potential to lead to safety concerns particularly on public lands. Therefore, interference rates are a factor used in modeling when setting permit numbers. The goal is to maximize the amount of turkey hunting across each permit area while providing a safe quality hunting experience.

Quality factors reported in this survey such as hunters getting a shot at a turkey (62%), success in harvesting a turkey (51%), ease of access to hunting land (83.6% "very easy" or "somewhat easy" access), little or no feeling of danger (99% indicated "no" feeling of danger), low interference rates from turkey hunters (6%) and low interference from non-turkey hunters (10%), and an overall quality rating of 7.51 indicate that most hunters are experiencing a quality spring turkey hunt.

## LITERATURE CITED

- Dingman, K.L. 2003. Factors affecting the quality of wild turkey (*Meleagris gallopavo*) spring hunting in Minnesota. M.S. Thesis, Minnesota State University, Mankato, Minnesota. 52pp.
- Dingman, K.L., R.O. Kimmel, J.D. Krenz, and B.R. McMillian. 2002. 2002 - Hunter interference and ease of access for spring wild turkey hunting in Minnesota. Minnesota Department of Natural Resources Report. 14pp.
- Hende, J.C. 1974. A multiple-satisfaction approach to game management. Wildlife Society Bulletin 2:104-113.
- Kimmel, R.O. 2001. Regulating spring wild turkey hunting based on population and hunting quality. Proceedings of the National Wild Turkey Symposium 8: 243-250.
- MDNR. 2007a. Long range plan for the wild turkey in Minnesota. Minnesota Department of Natural Resources, Division of Wildlife. 17pp.  
[http://files.dnr.state.mn.us/outdoor\\_activities/hunting/turkey/long\\_range\\_turkey\\_plan\\_2007.pdf](http://files.dnr.state.mn.us/outdoor_activities/hunting/turkey/long_range_turkey_plan_2007.pdf)
- MDNR. 2007b. 2007 spring turkey harvest report. Minnesota Department of Natural Resources, Division of Wildlife. 8pp.
- Smith, J. L. D., A. H. Berner, F. J. Cuthbert, and J.A. Kitts. 1992. Interest in fee hunting by Minnesota small game hunters. Wildlife Society Bulletin 20:20-26.
- Stankey, G.H., R.C. Lucas, and R. R. Ream. 1973. Relationships between hunting success and satisfaction. Thirty-eight North American Wildlife Conference 235-242.

Table 1. Response rates by permit area for the Minnesota 2007 Spring Turkey Hunter Survey.

Permit area	Hunters surveyed	Surveys returned	Response rate (%)
157	78	60	76.9
159	20	16	80.0
213	170	142	83.5
218	250	196	78.4
221	87	75	86.2
222	57	49	86.0
225	315	245	77.8
227	188	149	79.3
236	315	239	75.9
239	227	193	85.0
240	180	151	83.9
244	120	99	82.5
248	38	28	73.7
249	87	72	82.8
416	36	34	94.4
417	172	142	82.6
420	23	19	82.6
422	18	17	94.4
428	55	46	83.6
446	18	17	94.4
447	13	10	76.9
448	28	24	85.7
451/452/453	28	24	85.7
456	32	27	84.4
458	25	20	80.0
461	226	177	78.3
Total	2806	2271	80.9

Table 2. Participation rates of hunters by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Individuals that hunted	Individuals that did not hunt	Percentage (%) that hunted
157	60	59	1	98.3
159	16	15	1	93.8
213	142	138	4	97.2
218	196	194	2	99.0
221	75	74	1	98.7
222	49	48	1	98.0
225	245	242	3	98.8
227	149	145	4	97.3
236	239	234	5	97.9
239	193	186	7	96.4
240	151	149	2	98.7
244	99	95	4	96.0
248	28	25	3	89.3
249	72	69	3	95.8
416	34	34	0	100.0
417	142	138	4	97.2
420	19	19	0	100.0
422	17	16	1	94.1
428	45	45	0	100.0
446	18	17	1	94.4
447	9	9	0	100.0
448	24	24	0	100.0
451/452/453	24	23	1	95.8
456	27	25	2	92.6
458	20	19	1	95.0
461	177	177	0	100.0
Total	2270	2219	51	97.8

Table 3. Permit type purchased by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit Area	Respondents	Landowner	General lottery
157	60	6	54
159	16	2	14
213	142	24	118
218	196	30	166
221	75	13	62
222	49	9	40
225	245	34	211
227	149	17	132
236	239	12	227
239	193	26	167
240	151	19	132
244	99	13	86
248	28	5	23
249	72	12	60
416	34	3	31
417	142	15	127
420	19	3	16
422	17	1	16
428	45	5	40
446	18	7	11
447	9	3	6
448	24	8	16
451/452/453	24	1	23
456	27	1	26
458	20	1	19
461	177	22	155
Total	2270	292	1978

Table 4. Time period hunted by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	April 18-22	April 23-27	April 28-May 2	May 3-7
157	59	17	12	18	12
159	15	4	3	3	5
213	138	33	37	35	33
218	194	44	52	52	46
221	74	22	22	19	11
222	48	13	11	12	12
225	242	61	68	62	51
227	145	36	37	39	33
236	234	54	65	62	53
239	186	49	46	54	37
240	149	37	40	39	33
244	95	29	25	21	20
248	25	9	5	5	6
249	68	19	23	13	13
416	34	11	6	9	8
417	138	33	37	39	29
420	19	5	5	5	4
422	16	4	4	3	5
428	15	10	15	11	9
446	17	6	5	4	2
447	9	2	3	3	1
448	24	6	5	7	6
451/452/453	23	6	6	5	6
456 <sup>a</sup>	25	5	4	3	8
458	19	7	5	4	3
461	177	49	45	40	43
<b>Total</b>	<b>2188</b>	<b>571</b>	<b>586</b>	<b>567</b>	<b>489</b>

<sup>a</sup> All 8 time periods were surveyed due to low sample size (i.e., 32 permits for all time periods)



Table 5. Average number of days hunted by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Hunting effort (days)
157	59	2.8
159	15	1.9
213	138	3.1
218	194	2.8
221	74	2.6
222	48	3.0
225	241	3.0
227	144	2.9
236	231	2.8
239	185	2.7
240	148	2.9
244	95	2.8
248	24	2.7
249	69	2.6
416	34	3.0
417	138	3.2
420	19	2.3
422	16	1.6
428	45	2.8
446	17	2.5
447	9	2.8
448	23	2.9
451/452/453	23	2.7
456	24	2.8
458	19	2.6
461	177	2.9
Total	2209	2.7

Table 6. Hunting method by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Shotgun	Archery	Shotgun and archery
157	59	56	2	1
159	15	14	1	0
213	138	131	3	4
218	194	179	11	4
221	74	67	5	2
222	48	45	3	0
225	242	216	10	16
227	145	131	9	5
236	233	202	13	18
239	186	172	9	5
240	147	135	5	7
244	95	88	3	4
248	25	23	0	2
249	68	66	0	2
416	34	34	0	0
417	137	129	3	5
420	19	14	4	1
422	16	14	1	1
428	45	44	0	1
446	17	15	0	2
447	9	9	0	0
448	24	23	0	1
451/452/453	23	20	1	2
456	25	25	0	0
458	19	19	0	0
461	177	166	6	5
Total	2214	2037	89	88

Table 7. Number of hunters that observed turkeys by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Hunters that observed turkeys	Average turkeys observed per hunter
157	58	55	12
159	14	12	4
213	137	126	11
218	193	180	13
221	74	71	13
222	48	47	10
225	240	224	11
227	141	136	11
236	232	226	16
239	183	178	13
240	143	135	11
244	95	82	9
248	25	24	11
249	69	63	8
416	32	31	12
417	135	129	11
420	18	15	11
422	15	15	44
428	45	43	7
446	16	15	12
447	9	8	8
448	22	22	21
451/452/453	23	21	11
456	24	17	3
458	18	16	7
461	174	165	12
Total	2183	2056	12

Table 8. Average number of hunters that got a shot at a turkey by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Hunters that got a shot	Hunters that got shot (%)
157	59	36	61.0
159	15	10	66.7
213	138	87	63.0
218	194	124	63.9
221	74	50	67.6
222	48	37	77.1
225	242	111	45.9
227	145	83	57.2
236	233	132	56.7
239	186	128	68.8
240	149	95	63.8
244	94	51	54.3
248	24	20	83.3
249	69	38	55.1
416	33	17	51.5
417	138	62	44.9
420	19	14	73.7
422	16	16	100.0
428	45	31	68.9
446	16	11	68.8
447	9	6	66.7
448	24	21	87.5
451/452/453	23	13	56.5
456	24	4	16.7
458	19	7	36.8
461	177	97	54.8
Total	2213	1301	58.8

Table 9. Hunter success by permit area, time of day, and harvest method for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Hunters that harvested a turkey	Percentage (%)			
			Harvest Time		Harvest Method	
			AM	PM	Shotgun	Archery
157	59	31	74.2	25.8	96.8	3.2
159	15	8	75.0	25.0	100.0	0.0
213	138	72	76.4	23.6	97.2	2.8
218	194	108	63.9	36.1	95.4	2.8
221	74	47	78.7	21.3	93.6	6.4
222	48	30	73.3	26.7	93.3	6.7
225	242	93	80.2	19.8	95.7	4.3
227	145	74	73.0	27.0	95.9	4.1
236	233	109	69.2	30.8	97.2	2.8
239	186	113	74.1	25.9	98.2	1.8
240	149	85	67.9	32.1	97.6	2.4
244	94	44	79.5	20.5	97.7	2.3
248	24	18	83.3	16.7	100.0	0.0
249	69	35	74.3	25.7	100.0	0.0
416	33	15	100.0	0.0	100.0	0.0
417	138	56	71.4	28.6	98.2	1.8
420	19	12	75.0	25.0	75.0	25.0
422	16	16	75.0	25.0	93.8	6.3
428	45	30	80.0	20.0	100.0	0.0
446	16	10	50.0	50.0	100.0	0.0
447	9	5	80.0	20.0	100.0	0.0
448	24	18	66.7	33.3	100.0	0.0
451/452/453	23	12	66.7	33.3	100.0	0.0
456	25	4	75.0	25.0	100.0	0.0
458	19	7	100.0	0.0	100.0	0.0
461	177	80	65.4	34.6	100.0	0.0
Total	2214	1132	74.9	25.1	97.1	2.8

Table 10. Accessibility of hunting land by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Percentage (%)			
		Very easy	Somewhat easy	Somewhat difficult	Very difficult
157	58	65.5	22.4	12.1	0.0
159	15	66.7	13.3	20.0	0.0
213	138	55.1	32.6	11.6	0.7
218	194	38.7	40.7	18.6	1.5
221	72	48.6	33.3	16.7	1.4
222	47	46.8	40.4	12.8	0.0
225	240	52.5	31.7	13.8	2.1
227	145	51.0	33.8	15.2	0.0
236	228	41.7	32.5	23.2	2.6
239	185	56.2	28.6	13.5	1.6
240	146	57.5	30.1	11.0	1.4
244	94	38.3	30.9	23.4	7.4
248	25	56.0	44.0	0.0	0.0
249	69	55.1	34.8	8.7	1.4
416	34	52.9	29.4	17.6	0.0
417	139	49.6	40.3	8.6	1.4
420	18	16.7	66.7	16.7	0.0
422	16	50.0	25.0	18.8	6.3
428	45	46.7	35.6	15.6	2.2
446	17	58.8	35.3	5.9	0.0
447	9	44.4	55.6	0.0	0.0
448	24	50.0	37.5	12.5	0.0
451/452/453	23	26.1	56.5	17.4	0.0
456	24	45.8	33.3	12.5	8.3
458	19	21.1	36.8	15.8	26.3
461	176	47.2	31.3	14.8	6.8
Total	2200	47.7	35.9	13.7	2.8

Table 11. Type of land hunted and accessibility of private land by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Percentage (%)			Frequency access to private land denied	
		Public land	Private land	Public and Private	Rate	<i>n</i>
157	59	5.1	84.7	10.2	0.34	49
159	15	0	86.7	13.3	0.6	12
213	138	5.1	84.8	10.1	0.31	100
218	192	2.6	89.1	8.3	0.47	151
221	74	5.4	81.1	13.5	0.34	54
222	48	2.1	93.8	4.2	0.51	32
225	241	6.2	86.3	7.5	0.5	179
227	145	5.5	84.8	9.7	0.44	115
236	233	8.2	85	6.9	0.95	182
239	186	1.1	88.7	10.2	0.72	149
240	149	2	89.3	8.7	0.62	119
244	95	10.5	63.2	26.3	0.97	71
248	25	20	64	16	0.15	16
249	69	8.7	76.8	14.5	0.73	53
416	34	0	67.6	32.4	0.53	24
417	138	2.9	88.4	8.7	0.49	114
420	18	5.6	94.4	0	1	14
422	16	6.3	75	18.8	0.64	11
428	45	0	95.6	4.4	0.58	38
446	17	5.9	82.4	11.8	1.2	15
447	9	0	77.8	22.2	0.5	8
448	24	12.5	70.8	16.7	1	19
451/452/453	23	4.3	91.3	4.3	0.31	16
456	24	0	95.8	4.2	1.24	21
458	19	10.5	73.7	15.8	1.87	15
461	176	7.4	71.6	21	1.03	123
Total	2212	5.3	82.4	12.3	0.69	1700

Table 12. Hunters response to their feeling of being put in danger by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Feeling of Danger	
		Yes	No
157	59	0	59
159	15	0	15
213	138	0	138
218	194	0	194
221	74	1	73
222	48	0	48
225	242	2	240
227	145	1	144
236	234	3	231
239	186	0	186
240	147	0	147
244	95	0	95
248	25	1	24
249	69	0	69
416	34	0	34
417	138	1	137
420	18	0	18
422	16	0	16
428	45	0	45
446	17	0	17
447	9	0	9
448	24	0	24
451/452/453	23	0	23
456	25	0	25
458	19	0	19
461	177	5	172
Total	2216	14	2202



Table 13. Average number of people other than members of their hunting party, observed in the field by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	Average number of people observed per hunter	Hunters observing $\geq 1$ person (%)
157	59	0.51	5.1
159	15	0.00	0.0
213	138	0.19	14.5
218	194	0.27	14.4
221	74	0.24	4.1
222	48	0.25	8.3
225	240	0.36	20.4
227	145	0.41	11.0
236	232	0.44	11.6
239	184	0.35	17.4
240	148	0.35	20.3
244	95	0.31	20.0
248	25	1.04	12.0
249	69	0.28	17.4
416	34	0.21	5.9
417	138	0.30	8.0
420	19	0.89	36.8
422	16	2.19	25.0
428	45	0.11	0.0
446	17	0.00	0.0
447	9	0.00	0.0
448	24	0.75	33.3
451/452/453	23	0.09	0.0
456	25	0.04	4.0
458	19	0.26	10.5
461	177	0.64	28.2
Total	2212	0.40	12.6

Table 14. Hunter interference rates by other turkey hunters by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	No <sup>a</sup> Interference	Interference <sup>b</sup>	Interference rate (IR)
157	59	59	0	0.00
159	15	15	0	0.00
213	138	135	3	0.02
218	193	186	7	0.04
221	74	71	3	0.04
222	48	46	2	0.04
225	241	225	16	0.07
227	144	132	12	0.08
236	233	209	24	0.10
239	186	175	11	0.06
240	149	140	9	0.06
244	95	93	2	0.02
248	25	25	0	0.00
249	69	69	0	0.00
416	33	31	2	0.06
417	138	133	5	0.04
420	19	16	3	0.16
422	16	16	0	0.00
428	45	45	0	0.00
446	17	17	0	0.00
447	9	9	0	0.00
448	24	23	1	0.04
451/452/453	23	22	1	0.04
456	25	25	0	0.00
458	19	18	1	0.05
461	177	155	22	0.12
<b>Total</b>	<b>2214</b>	<b>2084</b>	<b>124</b>	<b>0.06</b>

<sup>a</sup> Hunters experienced no or 0 interference episodes by other turkey hunters

<sup>b</sup> Hunters experienced 1 or more interference episodes by other turkey hunters

Table 15. Hunter interference from non-turkey hunters by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit area	Respondents	No <sup>a</sup>		Interference rate (IR)
		Interference	Interference <sup>b</sup>	
157	59	54	5	0.08
159	15	15	0	0.00
213	137	126	11	0.08
218	193	169	24	0.12
221	74	67	7	0.09
222	48	43	5	0.10
225	238	218	20	0.08
227	143	125	18	0.13
236	231	195	36	0.16
239	185	163	22	0.12
240	147	136	11	0.07
244	94	83	11	0.12
248	25	22	3	0.12
249	68	59	9	0.13
416	33	28	5	0.15
417	138	129	9	0.07
420	19	16	3	0.16
422	16	16	0	0.00
428	44	41	3	0.07
446	17	17	0	0.00
447	9	7	2	0.22
448	23	20	3	0.13
451/452/453	23	20	3	0.13
456	25	24	1	0.04
458	18	16	2	0.11
461	176	159	17	0.10
<b>Total</b>	<b>2198</b>	<b>1968</b>	<b>230</b>	<b>0.10</b>

<sup>a</sup>Hunters experienced no or 0 interference episodes from non-turkey hunters

<sup>b</sup>Hunters experienced 1 or more interference episodes from non-turkey hunters

Table 16. Rating of hunt quality by permit area for the 2007 Minnesota Spring Turkey Hunter Survey.

Permit Area	Respondents	Average hunt quality <sup>a</sup>
157	59	7.63
159	15	7.40
213	138	7.88
218	194	7.64
221	72	8.22
222	48	8.40
225	242	7.24
227	145	7.74
236	234	7.60
239	184	7.91
240	149	7.79
244	94	7.00
248	25	8.68
249	69	7.67
416	34	7.41
417	138	7.15
420	19	7.95
422	16	8.38
428	45	7.49
446	16	6.56
447	9	7.44
448	24	8.33
451/452/453	23	6.78
456	25	5.68
458	19	6.00
461	177	7.38
<b>Total</b>	<b>2213</b>	<b>7.51</b>

<sup>a</sup>Quality was rated from 0-10 with 0 representing poor quality and 10 representing excellent quality

Table 17. Additional Comments of spring wild turkey hunters for the 2007 Minnesota Spring Turkey Hunter Survey.

Comment	Responses
Enjoyed opportunity to turkey hunt and being in woods	85
Poor weather conditions (rainy, hot, bugs, etc...)	65
Successful in harvesting a turkey	38
Hunted private land and had no problems with interference	34
Want permit numbers increased	30
Problem accessing private land	25
Did not see enough turkeys	16
Positive comment toward DNR turkey management	14
Hunt time periods too short	12
Complaints about landowner permits (i.e., landowners get permit and hunt somewhere else)	10
Interference or harassment from non-hunters (i.e., ATV's, campers, hikers, etc...)	9
Maintain current permit numbers	7
Saw turkeys while hunting	7
More archery hunting opportunity (i.e., archery only season, more archery permits)	7
Change to Wisconsin system	6
Saw too many hens	6
Landowners should be able to buy permit over the counter with no lottery	6

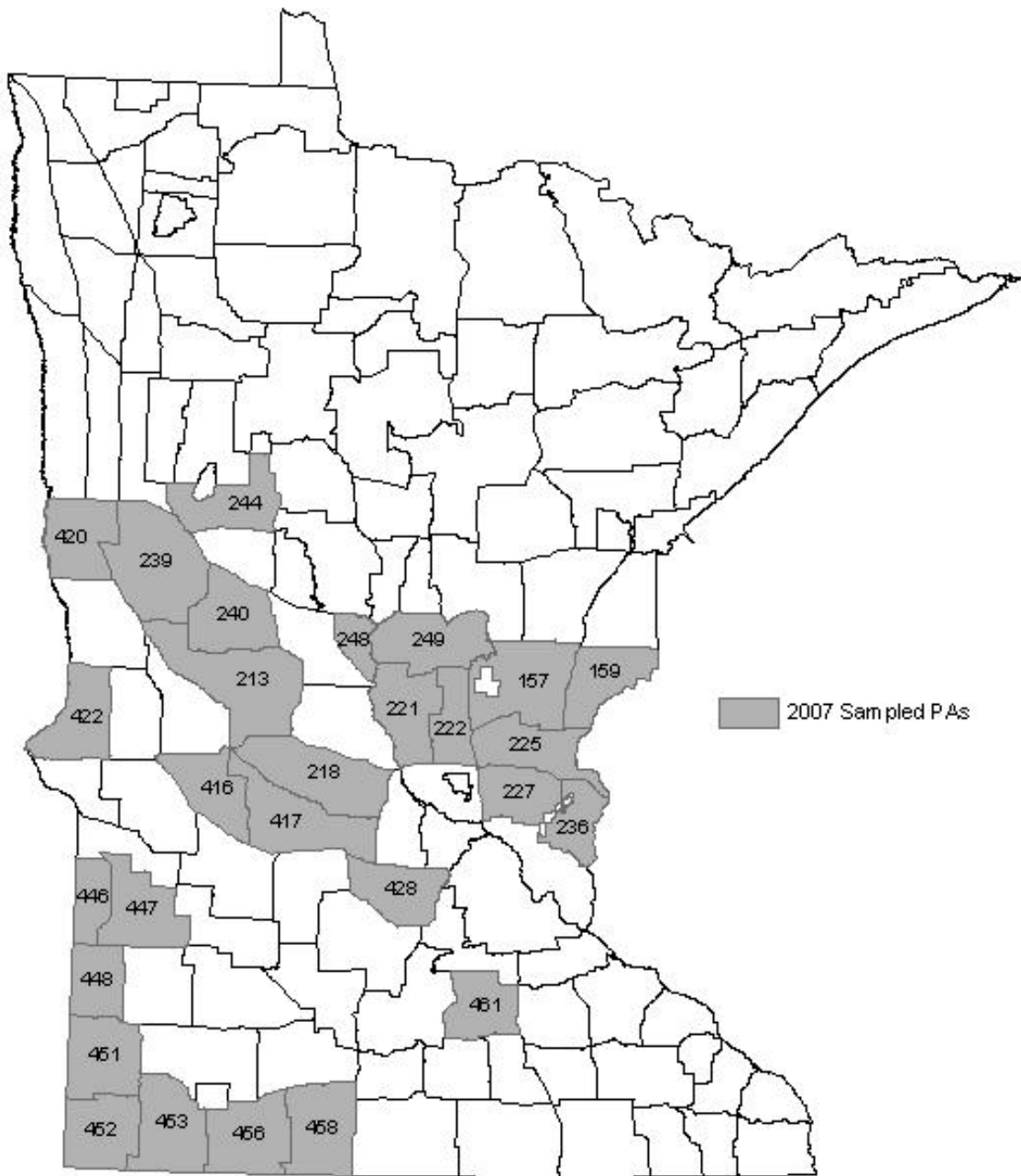


Figure 1. Permit Areas (shaded gray) used for the Minnesota 2007 Spring Turkey Hunter Survey.

## Appendix A

### Minnesota Spring Turkey Hunter Survey

\*Please respond to all questions based on the **SPRING 2007 TURKEY SEASON**.

1. Did you hunt turkeys in Minnesota during the spring 2007 season? Yes \_\_\_\_ No\* \_\_\_\_  
\*If no, you do not need to continue but please return survey.
2. Which wild turkey permit area did you hunt in? \_\_\_\_\_
3. Did you have a landowner permit or a regular lottery permit? Landowner \_\_\_\_ Regular Lottery \_\_\_\_
4. Which season did you hunt? April 18-22 \_\_\_\_ April 23-27 \_\_\_\_ April 28-May 2 \_\_\_\_ May 3-7 \_\_\_\_
5. How many days did you hunt turkeys during spring 2007? \_\_\_\_\_
6. How did you hunt turkeys in 2007? Shotgun only \_\_\_\_ Bow Only \_\_\_\_ Shotgun and Bow \_\_\_\_
7. How many turkeys did you see while turkey hunting in 2007? \_\_\_\_\_
8. How many turkeys did you shoot at? \_\_\_\_\_
9. Were you successful in bagging a turkey? Yes\* \_\_\_\_ No \_\_\_\_  
\*If yes, was it killed in the morning or afternoon? AM \_\_\_\_ PM \_\_\_\_  
\*If yes, with what weapon did you harvest your turkey? Shotgun \_\_\_\_ Bow \_\_\_\_
10. How difficult was it for you to find a place to hunt during the spring 2007 wild turkey hunting season?  
(check one answer)  
Very easy \_\_\_\_ Somewhat easy \_\_\_\_ Somewhat difficult \_\_\_\_ Very difficult \_\_\_\_
11. Did you hunt on public land or private land during the spring 2007 season? Public \_\_\_\_ Private\* \_\_\_\_ Both \_\_\_\_  
\*If you hunted on private land, how many landowners turned down your request for permission? \_\_\_\_
12. Did you at any time feel you were put in danger by other hunters while turkey hunting? Yes \_\_\_\_ No \_\_\_\_
13. On average, how many hunters, other than members of your own party, did you see each day while you were actually in the field hunting during spring 2007? \_\_\_\_\_
14. How many times did hunters, other than members of your own party, interfere with your hunting during spring 2007? \_\_\_\_\_
15. How many times did people **other than hunters** interfere with your hunting during spring 2007? \_\_\_\_\_
16. Rate the quality of your turkey hunting experience during spring 2007 on a scale of 1-10 (check one number):  
Poor Quality                                      Average Quality                                      Excellent Quality  
0 \_\_\_\_ 1 \_\_\_\_ 2 \_\_\_\_ 3 \_\_\_\_ 4 \_\_\_\_ 5 \_\_\_\_ 6 \_\_\_\_ 7 \_\_\_\_ 8 \_\_\_\_ 9 \_\_\_\_ 10 \_\_\_\_

Additional comments can be written on the back.