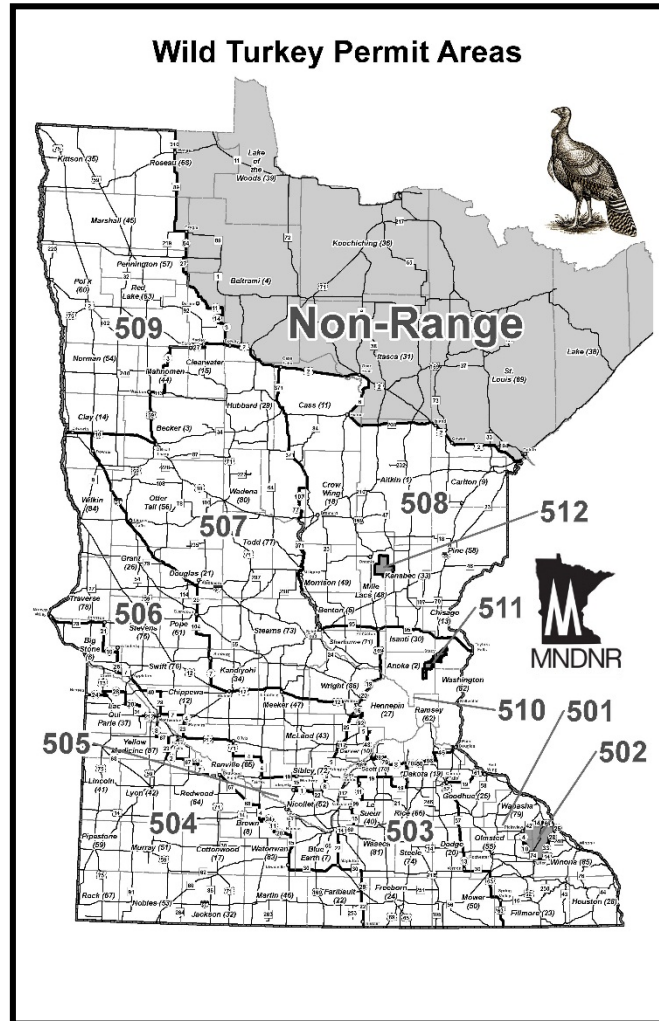


MINNESOTA SPRING WILD TURKEY HUNTING

A study of hunters' opinions and activities



Final Report

A cooperative study conducted by:

Minnesota Cooperative Fish and Wildlife Research Unit
Minnesota Department of Natural Resources

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A study of hunters' opinions and activities

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Executive Summary

This study of the 2014 Minnesota spring turkey-hunting season was conducted to assess hunters’:

- participation and activities,
- satisfaction,
- motivations,
- identification and involvement with the activity,
- perceptions related to hunt quality, and
- attitudes about turkey management and season structure preferences.

The survey was distributed to 2,500 turkey hunters; 1,411 completed surveys were used for this analysis. After adjusting for undeliverable surveys and invalid respondents, the response rate was 57.3%. An additional 229 shortened surveys used to gauge nonresponse were also received for a total response rate of 66.6%.

Respondent Characteristics

The mean age of the study population of respondents was 52 years, and on average, respondents had lived in Minnesota for 94% of their lives. Nearly 9 of 10 respondents were male. Over one-third of respondents had a 4-year college degree or higher level of education, and a household income greater than \$100,000.

Experiences

Respondents had hunted turkey for an average of 13.5 years (not necessarily in Minnesota), and 9.4 years in Minnesota. Nearly 4 in 10 respondents (39%) hunted for turkey in Minnesota every year during the past 5 years. Over 9 of 10 survey respondents (96%) hunted turkey during the 2014 Minnesota season. About 60% of respondents who hunted during 2014 had applied for an early-season permit, with respondents fairly evenly divided among the A, B, and C early seasons. Respondents hunted an average of 3 days during the season. Nearly 4 in 10 respondents (39%) bagged a turkey.

Over three-fourths of respondents (78%) hunted turkeys exclusively on private land, with only 9% hunting public land exclusively. Respondents were asked to indicate how easy or difficult it was for them to find a place to hunt turkey during the 2014 season. Results suggest that most turkey hunters did not have trouble finding a place to hunt. About half of respondents rated the difficulty a 9 (very easy) and only 1% rated it 1 (very difficult). The mean score was 7.3. Respondents were also asked to rate crowding on the most crowded day during the 2014 season. Results suggest that most turkey hunters did not feel crowded. About 60% of respondents rated crowding 1 (not at all crowded) and less than 1% rated it 9 (extremely crowded). The mean score was 2.0.

Satisfaction

Statewide over three-fourths of hunters (80%) reported being satisfied with their general turkey-hunting experience, with 12% expressing dissatisfaction. Age was slightly correlated to general turkey hunting satisfaction, with older hunters less satisfied. Over half of respondents were satisfied with the number of turkey seen during the 2014 hunt. Less than half of respondents were satisfied with their turkey harvest during the 2014 season. Nearly two-thirds of respondents were satisfied with turkey regulations. Results were similar for satisfaction with the number of other turkey hunters seen in the field, with 62% satisfied. Age was slightly correlated to satisfaction with the number of turkeys seen, with older hunters less satisfied. Years of Minnesota turkey hunting experience was also slightly correlated to satisfaction with

turkey harvest, with more experienced hunters reporting greater satisfaction with turkey harvest. Mean levels of satisfaction are shown in Figure S-1.

Respondents were asked to rate the importance and achievement of 13 items related to satisfaction with turkey hunting. Of the listed items related to satisfaction with turkey hunting, the most important items were (a) seeing turkeys, (b) hearing gobbling, and (c) not being interfered with by other hunters. Less than 20% of respondents rated killing a Jake or killing a bearded hen very or extremely important. (See Figure S-2). The only item related to satisfaction with turkey hunting that was, on average, largely achieved was access to private hunting land (See Figure S-3).

Figure S-1: Satisfaction With Turkey Hunting in 2014

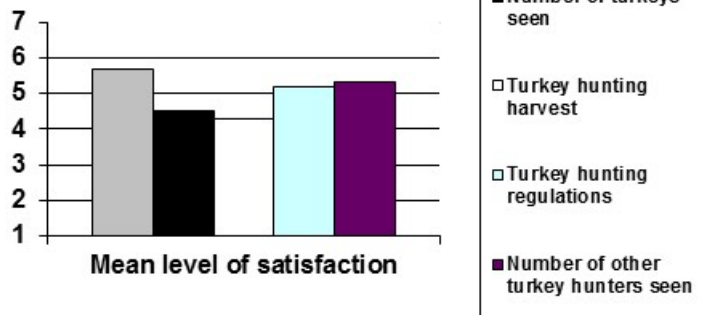


Figure S-2: Importance of Experiences to Turkey Hunting Satisfaction

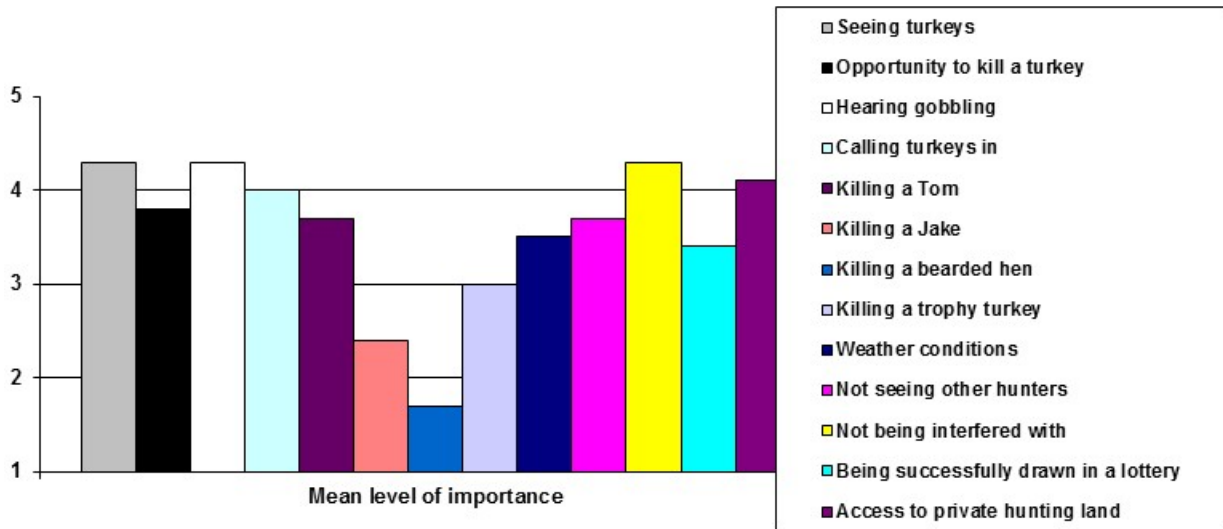
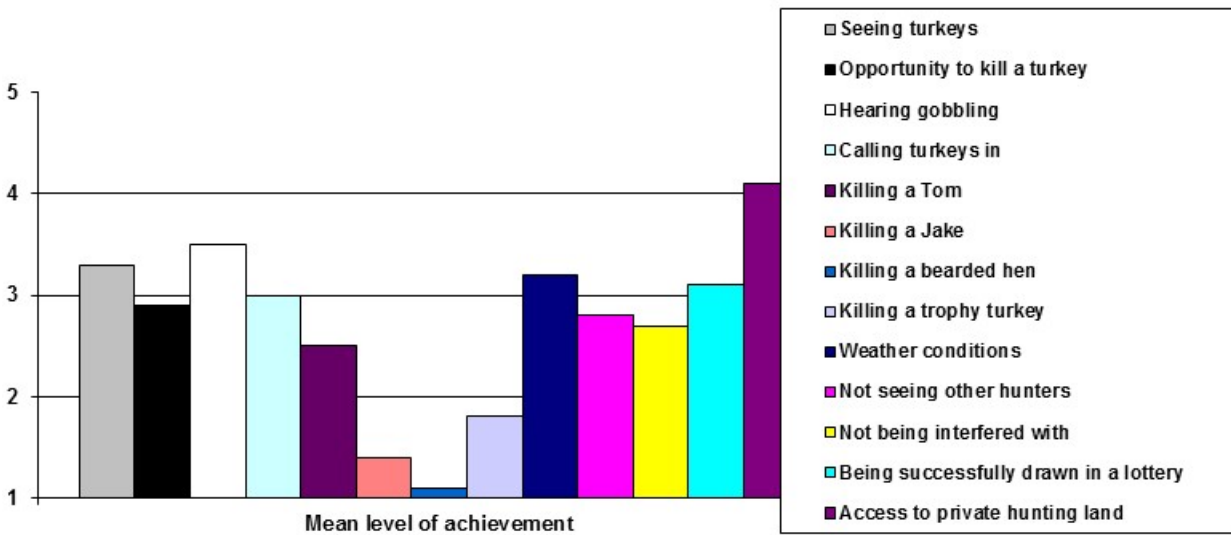


Figure S-3: Achievement of Experiences Turkey Hunting in 2014

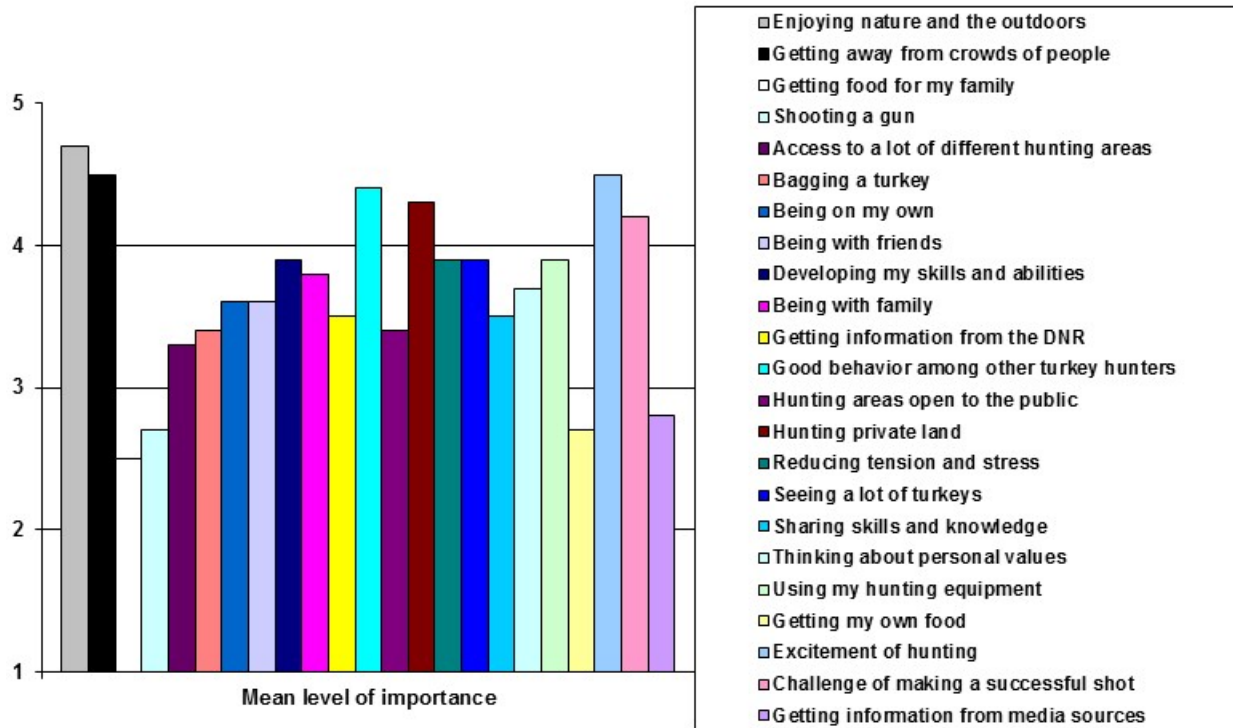


Looking at the importance and achievement of experiences related to turkey hunting satisfaction, the most important areas to concentrate on are minimizing interference by other hunters, and maximizing hunters being able to see and call in more turkeys. Hunters appear to be successful in accessing private hunting land and hearing gobbling.

Importance and Achievement of Recreation Motivations

Respondents were asked to rate the importance and their achievement of 23 recreation motivations while turkey hunting in 2014. Six items were rated very to extremely important: (a) enjoying nature and the outdoors, (b) the excitement of hunting, (c) getting away from crowds of people, (d) good behavior among other turkey hunters, (e) hunting private land, and (f) the challenge of making a successful shot. (See Figure S-4.) Five items were largely to very much achieved during the 2014 hunting season: (a) enjoying nature and the outdoors, (b) getting away from crowds of people, (c) hunting private land, (d) the excitement of hunting, and (e) using hunting equipment.

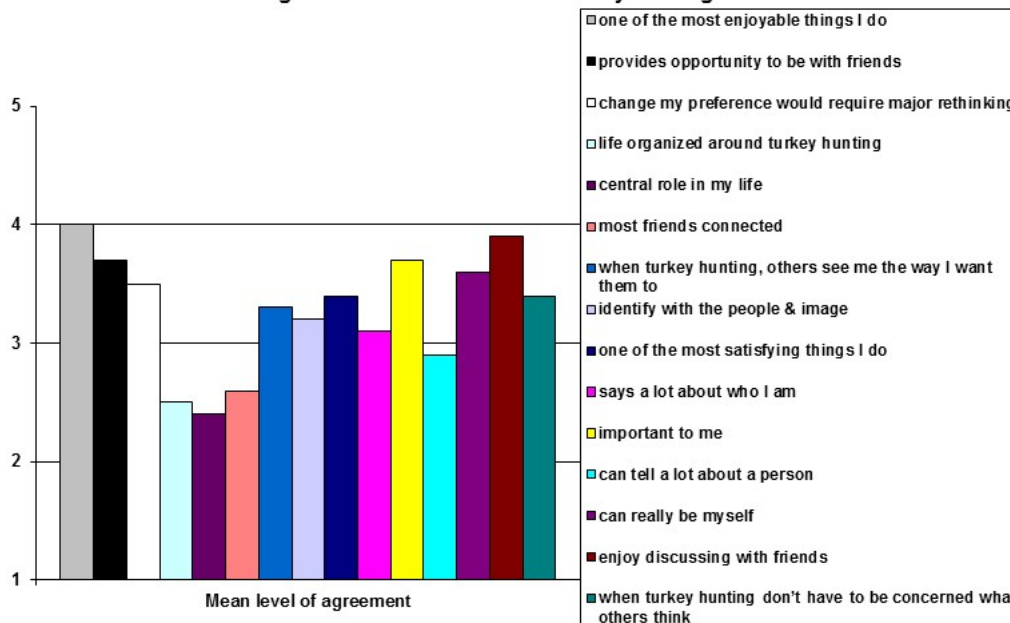
Figure S-4: Importance of Recreation Motivations



Involvement in Turkey Hunting

Respondents were asked to rate 15 items related to their involvement in turkey hunting. Respondents agreed most strongly that “Turkey hunting is one of the most enjoyable things I do” and “I enjoy discussing turkey hunting with my friends,” and they disagreed most strongly that “A lot of my life is organized around turkey hunting” and “Turkey hunting has a central role in my life.” See Figure S-5.

Figure S-5: Involvement With Turkey Hunting



Turkey Populations and Management

Respondents were asked to indicate their perceptions and opinions about turkey populations in the areas they hunt most often for turkey, along with how populations should be managed. Respondents generally thought that turkey populations were largely unchanged in the areas they hunted most in the past 5 years, and thought the population in the area they hunted most was “about right.” However, when respondents were asked about how the population in their area should be managed, on average they thought the population should be increased slightly.

Study participants were asked to indicate their level of opposition or support for several management actions, including: (a) opening “non-range” area to hunting, (b) allowing hunters to buy *both* a regular and an archery turkey license, (c) eliminating the turkey stamp contest and pictorial stamp, (d) allowing unsuccessful turkey hunters to purchase a second license during a later unlimited permit time period, (e) allowing successful turkey hunters to purchase a second license during a later unlimited permit time period. On average, respondents were slightly supportive of all actions, except allowing successful turkey hunters to purchase a second license. In the strongest show of support, nearly 60% of respondents supported or strongly supported allowing unsuccessful turkey hunters to purchase a second license during a later unlimited time period.

Study participants were asked to indicate their level of opposition or support for several management actions related to seasons and permit areas, including: (a) eliminating the different time periods for turkey hunting and having a single 45 day long turkey season, (b) eliminating the 12 different turkey permit areas and permitting open hunting throughout the state, (c) eliminating the different time periods for turkey hunting and having a single 45 day long turkey season while retaining the 12 different turkey permit areas, and (d) eliminating the 12 different turkey permit areas while retaining different time periods for turkey hunting. On average, respondents were neutral to slightly opposed to all changes.

This study also included a stated choice experiment to examine season structure preferences. Stated choice models present hypothetical scenarios to respondents to derive individuals’ preferences for alternatives composed of multiple resource and management attributes (Adamowicz et al., 1994; Oh et al., 2005). Alternatives presented in this season choice experiment consisted of four attributes: (a) season structure, (b) second permit, (c) hunter interference, and (d) lottery. Respondents were presented with 10 season structure choice scenarios and asked to choose one option. Each scenario included two season structure choices plus a “none” (i.e., I would not hunt turkey in Minnesota with these season structures) option. Attribute importances described how much influence each attribute had on season structure choice. The most important attribute was a second permit, followed by hunter interference, season structure, then lottery (Figure S-6). Results of the stated choice model indicated that the current season structure, a second permit only to unsuccessful hunters, low hunter interference, and a lottery only in high demand areas were preferred (Figure S-7).

Figure S-6: Importance of Attributes in Stated Choice Experiment

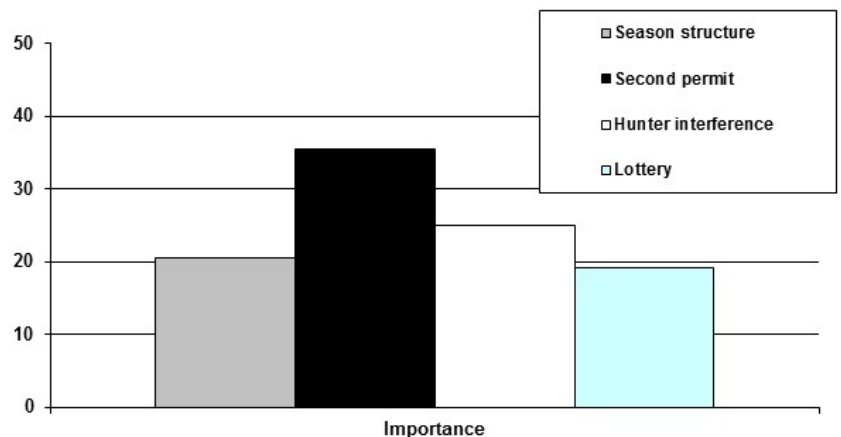
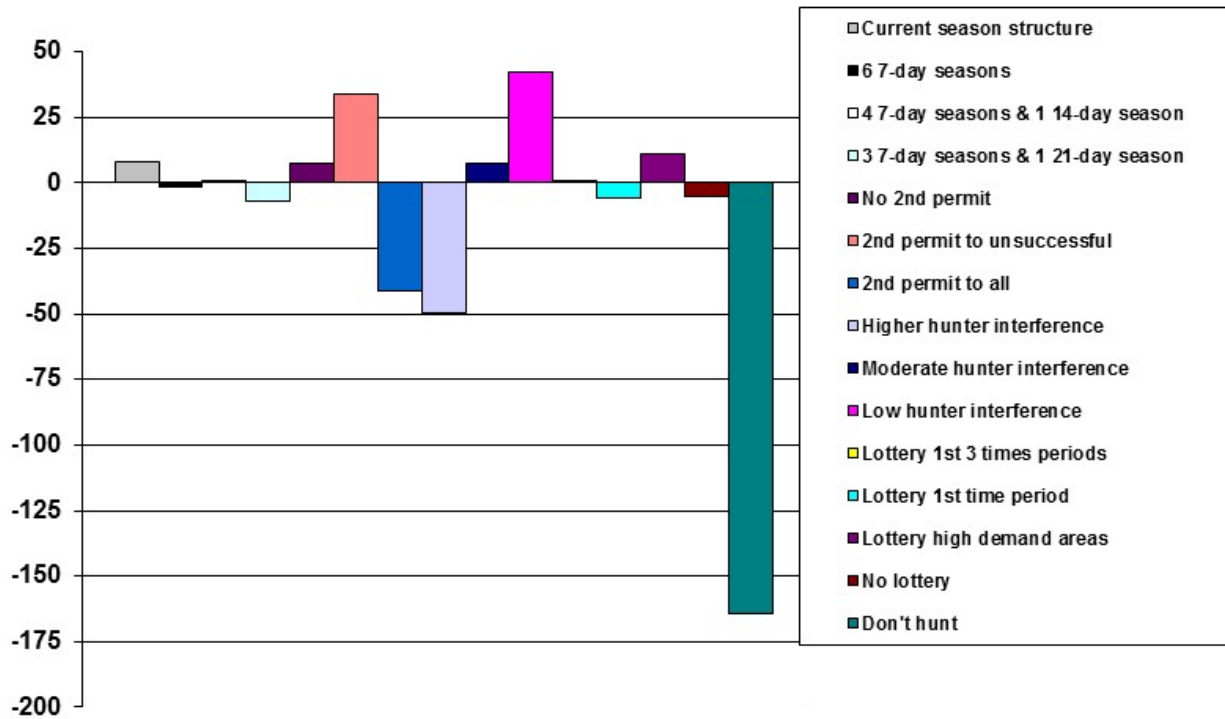


Figure S-7: Utilities of Attribute Levels in State Choice Experiment



Agency Trust and Desire for Voice in Management

Respondents were asked to rate their agreement with six items addressing their trust in the Minnesota Department of Natural Resources. Mean responses were above the neutral point on the scale for all items.

Respondents rated 14 statements related to desire for voice, fairness, acceptance, suggestions, and trust related to Minnesota DNR turkey management. Respondents agreed most that “Minnesotans have the right to voice opinions about turkey management to the DNR.” See Figure S-8.

Figure S-8: Voice, Trust, Acceptance, Openness Related to MNDNR

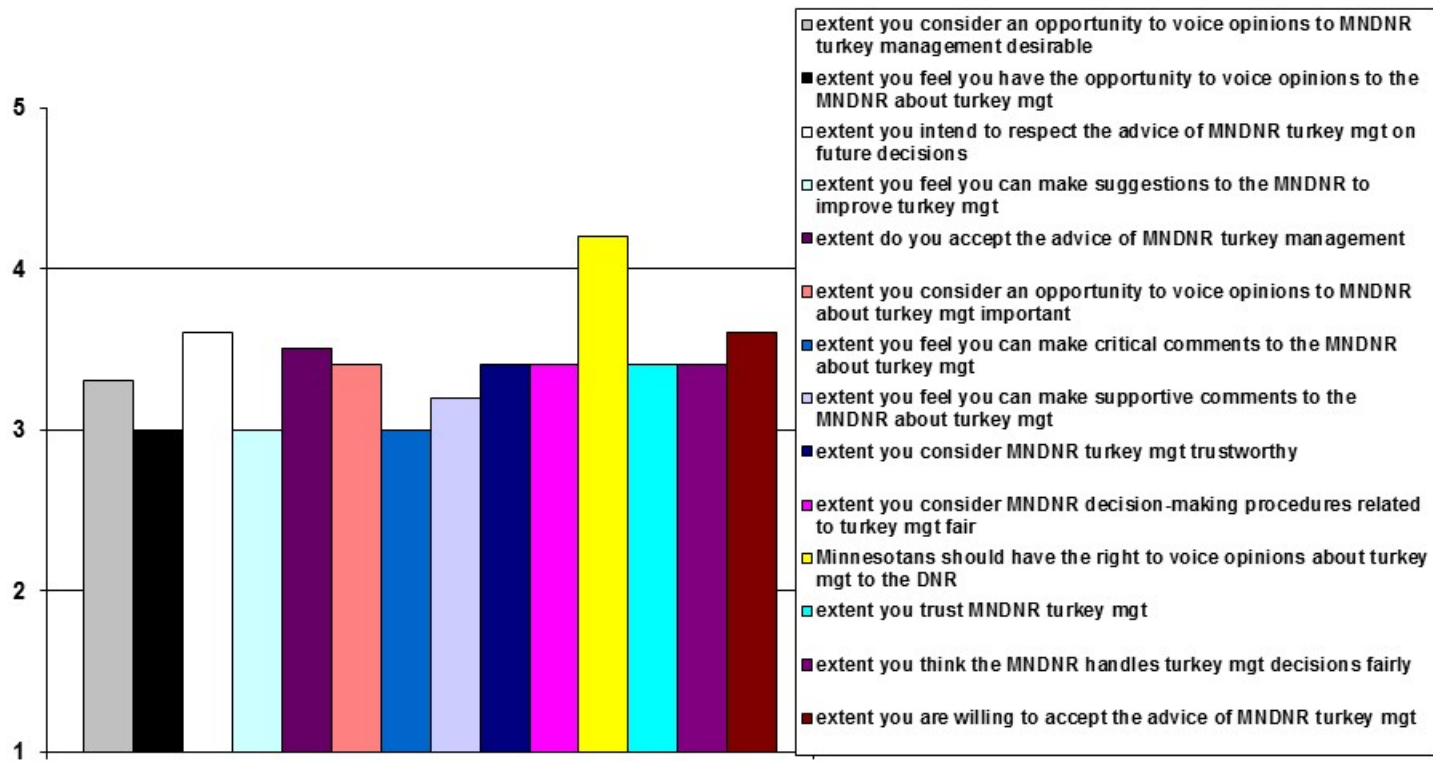


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Introduction

Populations of, and hunting opportunities for, wild turkeys have increased greatly in Minnesota over time. Management of wild turkey hunting has been in a state of change moving from conservative management strategies that allowed the population to expand, to strategies that increase turkey-hunting opportunities and minimize regulatory complexity while still sustaining a healthy turkey population.

A legislative report outlining the future direction of turkey hunting management was completed in 2009. Most recommendations from that report have been adopted including permit area consolidation, expansion of over-the-counter license sales, electronic registration, and expanded youth and disabled hunt opportunities. However, the basic structure of the spring hunting season has remained relatively unchanged. Additional youth and disabled hunts have become challenging to administer. Stakeholders and wildlife managers have both suggested changes to turkey hunting in Minnesota now that the state is essentially fully occupied and populations in many areas have reached social or biological carrying capacities.

As most of the administrative changes have been made, a comprehensive survey of turkey hunters was needed to gauge hunter attitudes before additional management changes could be considered.

Study Purpose and Objectives

The goal of this study was to enhance understanding of turkey hunter attitudes and perceptions of regulatory alternatives. Specific objectives were to:

- 1) Critically evaluate Minnesota's spring turkey hunting season and determine if changes are appropriate,
- 2) Examine alternatives that provide more opportunity, improve hunter satisfaction, remain safe, and sustain the turkey population at target levels,
- 3) Use study results to implement regulatory harvest changes that achieve hunter and turkey population objectives.

Methods

Sampling

The population of interest in this study included all Minnesota residents 18 years of age and older who purchased turkey licenses in 2014. The sampling frame used to draw the study sample was the Minnesota Department of Natural Resources' (DNR) Electronic Licensing System (ELS). A random sample of 2,500 resident turkey license buyers in the ELS was drawn. In order to have adequate power to conduct a season choice experiment, we developed 10 survey versions, and the study sample was divided into 10 subsamples who received different survey versions. Surveys were identical except for the choices included in the choice experiment.

Data Collection

Data were collected using a mail-back survey following a process outlined by Dillman (2000) to enhance response rates. We constructed a relatively straightforward questionnaire, created personalized cover letters, and made multiple contacts with the targeted respondents. Potential study respondents were contacted four times between August and November 2014. In the initial contact, a cover letter, survey questionnaire, and business-reply envelope were mailed to all potential study participants. The personalized cover letter explained the purpose of the study and made a personal appeal for respondents

to complete and return the survey questionnaire. Approximately 3 weeks later, a second letter with another copy of the survey and business-reply envelope was sent to all study participants who had not responded to the first mailing. Three weeks after the second mailing a third mailing that included a personalized cover letter and replacement questionnaire with business-reply envelope was sent to all individuals with valid addresses who had not yet replied. About 6 weeks later, we distributed a shortened one-page, two-sided survey to assess nonresponse bias.

Survey Instrument

The data collection instrument was a 12-page self-administered survey with 11 pages of questions (Appendix A). The questionnaire addressed the following topics:

- Part 1: Background and length of experience as a turkey hunter;
- Part 2: Hunting experiences during the 2014 Minnesota spring turkey hunting season, including: seasons and permit areas hunted, days hunted, crowding issues, and satisfaction;
- Part 3: Minnesota turkey hunting quality;
- Part 4: Motivations for and involvement in turkey hunting;
- Part 5: Perceptions and opinions about turkey populations and management;
- Part 6: Choosing a season structure for Minnesota spring wild turkey hunting;
- Part 7: Minnesota DNR turkey management;
- Part 8: Sociodemographics and information about group membership and hunting outside Minnesota.

Additional information concerning age and gender of respondents was obtained from the ELS database.

Data Entry and Analysis

Data were keypunched and the data were analyzed on a PC using the Statistical Program for the Social Sciences (SPSS for Windows 21). We computed basic descriptive statistics and frequencies for the statewide results. Regional results were compared using one-way analysis of variance and cross-tabulations.

Survey Response Rate

Of the 2,500 questionnaires mailed, 38 were undeliverable or otherwise invalid. Of the remaining 2,462 surveys, a total of 1,411 were returned, resulting in a response rate of 57.3%. An additional 229 shortened or late full-length surveys, used to gauge nonresponse, were returned for a total response rate of 66.6%. Response rates for each survey version are summarized in Table I-1.

Table I-1: Response rates.

	Initial sample size	Number invalid	Valid sample size	Full surveys completed and returned	Full survey response rate %	Shortened surveys used to gauge non-response	Total surveys returned	Total survey response rate
Version 1	250	5	245	141	57.6%	30	171	69.8%
Version 2	250	4	246	147	59.8%	17	164	66.7%
Version 3	250	3	247	145	58.7%	18	163	66.0%
Version 4	250	5	245	146	59.6%	19	165	67.3%
Version 5	250	1	249	147	59.0%	23	170	68.3%
Version 6	250	3	247	136	55.1%	26	162	65.6%
Version 7	250	4	246	138	56.1%	32	170	69.1%
Version 8	250	7	243	131	53.9%	20	151	62.1%
Version 9	250	4	246	137	55.7%	29	166	67.5%
Version 10	250	2	248	143	57.7%	15	158	63.7%
Total	2,500	38	2,462	1,411	57.3%	229	1640	66.6%

Section 1: Experiences During the 2014 Spring Turkey Hunt

Results for Part 2 of the turkey hunter survey are reviewed below. This section of the survey focused on hunting experiences during the 2014 Minnesota spring turkey hunting season. Only individuals who hunted turkey in Minnesota in 2014 completed this section of the survey.

Turkey Hunting in Minnesota in 2014

Respondents were first asked to report if they had actually hunted for turkey in Minnesota in 2014. Nearly 96% of the survey respondents indicated that they had hunted turkey in 2014 (Table 1-1). Respondents who had hunted in 2014 were next asked if they had applied for an early season (A, B, or C) hunt; 60.2% had (Table 1-2). Respondents who had applied for an early season hunt were fairly evenly divided in which of the three hunts they applied for with about one-third applying for each (Table 1-3). All respondents who had hunted during 2014 were asked which season they hunted for spring turkey. Seasons A, B, C, and D had the greatest proportion of participants, with nearly 20% of hunters hunting each of these seasons, and between 4 and 8% of respondents hunting the E, F, G, and H seasons (Table 1-4). All respondents who had hunted during 2014 were asked which permit area they hunted. Permit Areas 501 and 507 were the most popular, with over 20% of hunters hunting in each of these areas (Table 1-5). On average, respondents hunted 1.5 days on weekends or holidays, and 1.9 weekdays (Tables 1-6 and 1-7). Nearly 4 in 10 respondents bagged a turkey during the 2014 season (Table 1-8). A greater proportion of hunters from the early season bagged a turkey (41.2%) compared to those who did not apply for an early season hunt (34.1%).

Age and years hunting turkey were related to the number of days hunted. Younger hunters ($r = 0.079$, $p < 0.01$), and hunters who had been hunting for fewer years ($r = 0.073$, $p < 0.01$) hunted a significantly greater number of days during the season.

Locations Hunted and Crowding

Respondents were asked to indicate how easy or difficult it was for them to find a place to hunt turkey during the 2014 season using the scale 1 (very difficult) to 9 (very easy). Results suggest that most turkey hunters did not have trouble finding a place to hunt during the 2014 season. About half of respondents rated the difficulty a 9 (very easy) and only 1.4% rated it 1 (very difficult). The mean score was 7.3 (Table 1-9). Over three-fourths of respondents (78.2%) hunted turkeys exclusively on private land, with only 8.8% hunting public land exclusively (Table 1-10). Of the 106 respondents who hunted on public land, 58.5% of them said they hunted there because they could not gain access to private land (Table 1-11). Age was related to the ease of finding a place to hunt. Older hunters rated it significantly easier to find a place to hunt during the 2014 season ($r = 0.104$, $p < 0.001$).

Respondents were asked to indicate an acceptable number of other turkey hunters (not from your party) to see in one day. Responses ranged from 0 to 10 with a mean of 1.3 (Table 1-12). Respondents who could not indicate a number were asked to indicate why. About one-third (35.8%) indicated that “it doesn’t matter to me” and 64.2% said “it matters to me, but I cannot specify a number” (Table 1-13). Respondents were asked to indicate how many turkey hunters (not part of your party) they encountered on their most crowded day in the field during the 2014 season. Responses ranged from 0 to 15 with a mean of 0.9 (Table 1-14). Respondents were asked to rate crowding on the most crowded day during the 2014 season using the scale 1 (not at all crowded) to 9 (extremely crowded). Results suggest that most turkey hunters did not feel crowded during the 2014 season. About 60% of respondents rated crowding 1 (not at all crowded) and only 0.5% rated it 9 (extremely crowded). The mean score was 2.0 (Table 1-15). Respondents were also asked to rate hunter interference using the scale 1 (no, not at all) to 9 (yes,

Section 1: Experiences During the 2014 Spring Turkey Hunt

extremely). Results suggest that most turkey hunters did not feel interfered with by other turkey hunters. About 70% of respondents rated interference 1 (no, not at all) and only 1.7% rated it 9 (yes, extremely). The mean score was 2.0 (Table 1-16). Finally, hunters were asked if another hunter interfered with their chance to harvest a turkey and only 7.9% said yes (Table 1-17). There were no substantive differences between early and late season hunters in crowding or interference from other turkey hunters.

Age was related to perceptions of crowding and rating of interference from other hunters. Older hunters rated significantly less crowding ($r = 0.090$, $p < 0.01$), and less interference ($r = .121$, $p < 0.001$).

Section 1: Experiences During the 2014 Spring Turkey Hunt

Table 1-1: Proportion of respondents participating in 2014 hunt

n	% who hunted
1365	95.8%

Table 1-2: Proportion of hunters applying for an early season (A, B, or C) 2014 hunt

n	% who applied ¹
1284	60.2%

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

Table 1-3: If applied for early season hunt, which one?

Season	n	% ¹
Season A. (April 16-20)	272	35.7%
Season B. (April 21-25)	243	31.9%
Season C. (April 26-30)	246	32.3%
	761	$\chi^2=1.689$ n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season *and* applied for an early season hunt. (n=772)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 1-4: Season hunted for spring turkey in 2014

Season	n	% ¹
Season A. (April 16-20)	233	18.2%
Season B. (April 21-25)	245	19.1%
Season C. (April 26-30)	233	18.2%
Season D. (May 1-5)	271	21.1%
Season E. (May 6-10)	102	8.0%
Season F. (May 11-15)	61	4.8%
Season G. (May 16-22)	85	6.6%
Season H. (May 23-29)	53	4.1%
	1283	$\chi^2= 376.878$ ***

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 1: Experiences During the 2014 Spring Turkey Hunt

Table 1-5: Permit area hunted for spring turkey in 2014

Permit area	n	% ¹
501	283	22.9%
502	58	4.7%
503	156	12.6%
504	37	3.0%
505	94	7.6%
506	64	5.2%
507	310	25.1%
508	130	10.5%
509	13	1.1%
510	74	6.0%
511	7	0.6%
512	8	0.6%
	1234	$\chi^2= 1108.120^{***}$

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 1-6: Mean number of days hunting on weekends and weekdays

Mean number of days hunted during 2014 spring turkey season		
Weekends/Holidays	Weekdays (Monday-Friday)	Total ¹
1.5	1.9	3.0

¹ Total number of days hunting not asked directly. Number is sum of weekend and week day responses.

Table 1-7: Mean percent of days hunting on weekends and weekdays

Mean % of days hunted during 2014 spring turkey season ¹	
Weekends/Holidays	Weekdays (Monday-Friday)
51.7%	62.1%

¹ Some hunters hunted exclusively on weekends/holidays or weekdays.

Table 1-8: Proportion of hunters who bagged a turkey during the 2014 season.

	n	% who bagged a turkey ¹
All respondents	1288	38.5%
Early season	763	41.2%
Late season	504	34.1%
		$\chi^2= 6.337^*$, V=.071

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

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Table 1-9: Ease or difficulty of finding a place to hunt during the 2014 Minnesota spring turkey season.

	n	Very Difficult							Very Easy		Mean
		1	2	3	4	5	6	7	8	9	
All respondents	1289	1.4%	1.8%	4.7%	4.1%	11.6%	7.8%	11.9%	8.7%	48.1%	7.3
Early season	764	1.6%	2.0%	5.0%	4.6%	12.3%	7.9%	10.6%	8.5%	47.6%	7.2
Late season	505	1.2%	1.4%	4.4%	3.6%	10.1%	7.9%	13.5%	8.9%	49.1%	7.4
$\chi^2 = 5.506$ n.s.											t=1.500 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 1-10: Type of land hunted during the 2014 Minnesota spring turkey season.

	n	Public land only	Private land only	Both public and private land
All respondents	1297	8.8%	78.2%	13.0%
Early season	770	10.0%	77.5%	12.5%
Late season	506	6.9%	79.2%	13.8%
$\chi^2 = 3.860$ n.s.				

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 1-11: If hunted public land, was it because you could not gain access to private land?

n	% No	% Yes
106	41.5%	58.5%
$\chi^2 = 3.057$ n.s.		

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 1: Experiences During the 2014 Spring Turkey Hunt

Table 1-12: Acceptable number of other turkey hunters (not from your party) to see in one day while you are in the field.

	n	Mean number of other hunters ¹	Minimum	Maximum
All respondents	722	1.3	0	10.0
Early season	431	1.2	0	10.0
Late season	282	1.3	0	10.0
		t=1.271 n.s.		

¹Mean reflects only % of respondents that actually hunted during 2014 season (n=1308)

Table 1-13: If cannot specify an acceptable number of other turkey hunters (not from your party) to see in one day while you are in the field, why not?

	n	% It doesn't matter to me	% It matters to me, but I cannot specify a number
All respondents	534	35.8%	64.2%
Early season	309	34.3%	65.7%
Late season	214	37.4%	62.6%
		$\chi^2= 0.523$ n.s.	

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 1-14: About how many turkey hunters (that were not part of your party) encountered on your MOST crowded day in the field during the 2014 Minnesota spring turkey season.

	n	Mean number of other hunters ¹	Minimum	Maximum
All respondents	1280	0.9	0	15.0
Early season	761	0.9	0	12.0
Late season	499	0.8	0	15.0
		t=0.318 n.s.		

¹Mean reflects only % of respondents that actually hunted during 2014 season (n=1308)

Section 1: Experiences During the 2014 Spring Turkey Hunt

Table 1-15: Perceptions of crowding on most crowded day during the 2014 Minnesota spring turkey season.

	n	Not at all crowded					Extremely crowded					Mean
		1	2	3	4	5	6	7	8	9		
All respondents	1276	60.9%	13.9%	9.2%	4.6%	4.3%	3.7%	1.7%	1.0%	0.5%	2.0	
Early season	756	59.1%	13.2%	10.4%	5.3%	4.5%	3.6%	1.7%	1.6%	0.5%	2.1	
Late season	499	63.5%	15.0%	7.4%	3.8%	3.8%	3.8%	1.8%	0.2%	0.6%	1.9	
$\chi^2 = 12.065$ n. s.											t=1.915 n.s.	

¹ % and mean reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 1-16: Did other hunters keep you from hunting where you wanted to hunt?

	n	No, not at all					Yes, extremely					Mean
		1	2	3	4	5	6	7	8	9		
All respondents	1286	70.4%	8.1%	6.3%	4.2%	1.8%	3.2%	2.4%	1.9%	1.7%	2.0	
Early season	763	68.8%	7.5%	7.3%	5.0%	1.6%	3.7%	2.5%	1.6%	2.1%	2.0	
Late season	502	72.7%	8.8%	4.8%	3.2%	2.2%	2.6%	2.4%	2.2%	1.2%	1.9	
$\chi^2 = 10.383$ n.s.											t=1.405 n.s.	

¹ % and mean reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 1-17: Did another hunter interfere with your chance to harvest a turkey during the 2014 Minnesota spring turkey season?

	n	% No	% Yes
All respondents	1295	92.1%	7.9%
Early season	770	91.7%	8.3%
Late season	504	92.9%	7.1%
$\chi^2 = 0.575$ n.s.			

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 2: Satisfaction With the 2014 Spring Turkey Hunt

Study participants were asked to rate their satisfaction with their general turkey-hunting experience on a 7-point scale where 1 = very dissatisfied, 2 = moderately dissatisfied, 3 = slightly dissatisfied, 4 = neither, 5 = slightly satisfied, 6 = moderately satisfied, and 7 = very satisfied. They were also asked to rate number of turkeys seen, number of other turkey hunters seen, turkey hunting harvest, and turkey hunting regulations, using the same response scale.

Satisfaction With the General Turkey Hunting Experience

Statewide over three-fourths of hunters (80.1%) reported being satisfied with their general turkey-hunting experience, with 12.4% expressing dissatisfaction. The overall mean satisfaction score was 5.7 (Tables 2-1 and 2-2). There was no significant difference in satisfaction between hunters who hunted early season time periods and those who hunted later seasons. Age was slightly correlated to general turkey hunting satisfaction ($r = 0.056$, $p < .05$) and satisfaction with the number of turkeys seen ($r = 0.059$, $p < .05$), with older hunters less satisfied.

Satisfaction With Specific Aspects of Turkey Hunting

Over half (58.1%) of respondents were satisfied with the number of turkey seen during the 2014 hunt, with 35.2% dissatisfied. The mean level of satisfaction for turkeys seen in the field was 4.5 (Table 2-3). Less than half of respondents (45.2%) were satisfied with their turkey harvest during the 2014 season, with 36.2% dissatisfied and the remaining 18.5% neither satisfied nor dissatisfied. The mean level of satisfaction with harvest was 4.3 (Table 2-4). Nearly two-thirds of respondents (63.7%) were satisfied with turkey regulations, with only 11.1% dissatisfied and 25.2% neither satisfied nor dissatisfied. The mean level of satisfaction with regulations was 5.2 (Table 2-5). Results were similar for satisfaction with the number of other turkey hunters seen in the field, with 61.9% satisfied, 15.8% dissatisfied, and 22.3% neither. The mean level of satisfaction for seeing other hunters in the field was 5.3 (Table 2-6). There were no significant differences in satisfaction between hunters who hunted early season time periods and those who hunted later seasons. Years of Minnesota turkey hunting experience was also slightly correlated to satisfaction with turkey harvest ($r = 0.094$, $p < .01$), with more experienced hunters reporting greater satisfaction with the number of turkeys seen ($r = 0.059$, $p < .05$).

Section 2: Satisfaction With the 2014 Spring Turkey Hunt

Table 2-1: Satisfaction with the 2014 spring turkey hunt.

	n	Mean ^{1,2}
General turkey hunting experience	1280	5.7
Number of turkeys seen	1277	4.5
Turkey hunting harvest	1225	4.3
Turkey hunting regulations	1265	5.2
Number of other turkey hunters seen	1267	5.3
		F=201.840***

¹ Mean reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 = very dissatisfied; 2 = moderately dissatisfied; 3 = slightly dissatisfied, 4 = neither; 5 = slightly satisfied; 6 = moderately satisfied; 7 = very satisfied.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 2-2: Satisfaction with the general turkey hunting experience for the 2014 spring turkey hunt.

	n	% of hunters ¹ indicating that level of satisfaction:							Mean ²
		Very dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither	Slightly satisfied	Moderately satisfied	Very satisfied	
All respondents	1280	2.8%	3.7%	5.9%	7.4%	11.4%	30.2%	38.5%	5.7
Early season	757	2.9%	4.1%	5.7%	7.3%	10.6%	30.5%	39.0%	5.7
Late season	502	2.8%	3.0%	6.6%	7.6%	12.7%	29.1%	38.2%	5.7
		$\chi^2 = 2.967$ n.s.							t=.129 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 = very dissatisfied; 2 = moderately dissatisfied; 3 = slightly dissatisfied, 4 = neither; 5 = slightly satisfied; 6 = moderately satisfied; 7 = very satisfied.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 2-3: Satisfaction with the number of turkeys seen during the 2014 spring turkey hunt.

	n	% of hunters ¹ indicating that level of satisfaction:							Mean ²
		Very dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither	Slightly satisfied	Moderately satisfied	Very satisfied	
All respondents	1277	10.5%	11.7%	13.0%	6.7%	18.0%	21.6%	18.5%	4.5
Early season	757	11.0%	11.4%	12.7%	7.1%	17.6%	21.1%	19.2%	4.5
Late season	500	10.2%	12.8%	13.6%	5.8%	18.6%	21.8%	17.2%	4.4
		$\chi^2 = 2.559$ n.s.							t=.432 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 = very dissatisfied; 2 = moderately dissatisfied; 3 = slightly dissatisfied, 4 = neither; 5 = slightly satisfied; 6 = moderately satisfied; 7 = very satisfied.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 2: Satisfaction With the 2014 Spring Turkey Hunt

Table 2-4: Satisfaction with the turkey hunting harvest during the 2014 spring turkey hunt.

	n	% of hunters ¹ indicating that level of satisfaction:							Mean ²
		Very dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither	Slightly satisfied	Moderately satisfied	Very satisfied	
All respondents	1225	15.9%	10.3%	10.0%	18.5%	6.4%	12.4%	26.4%	4.3
Early season	724	16.3%	9.4%	9.7%	18.0%	5.5%	12.2%	29.0%	4.4
Late season	481	15.8%	11.6%	10.6%	18.9%	7.3%	12.7%	23.1%	4.2
$\chi^2 = 7.167$ n.s.									t=1.466 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 = very dissatisfied; 2 = moderately dissatisfied; 3 = slightly dissatisfied, 4 = neither; 5 = slightly satisfied; 6 = moderately satisfied; 7 = very satisfied.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 2-5: Satisfaction with the turkey hunting regulations for the 2014 spring turkey hunt.

	n	% of hunters ¹ indicating that level of satisfaction:							Mean ²
		Very dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither	Slightly satisfied	Moderately satisfied	Very satisfied	
All respondents	1265	2.5%	3.3%	5.3%	25.2%	12.2%	25.6%	25.9%	5.2
Early season	750	2.8%	3.6%	5.6%	24.1%	11.1%	25.6%	27.2%	5.2
Late season	494	1.8%	3.0%	4.7%	27.1%	13.2%	25.7%	24.5%	5.2
$\chi^2 = 4.954$ n.s.									t=.089 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 = very dissatisfied; 2 = moderately dissatisfied; 3 = slightly dissatisfied, 4 = neither; 5 = slightly satisfied; 6 = moderately satisfied; 7 = very satisfied.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 2-6: Satisfaction with the number of other turkey hunters seen during the 2014 spring turkey hunt.

	n	% of hunters ¹ indicating that level of satisfaction:							Mean ²
		Very dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither	Slightly satisfied	Moderately satisfied	Very satisfied	
All respondents	1267	3.9%	4.7%	7.2%	22.3%	6.2%	14.7%	41.0%	5.3
Early season	749	3.5%	4.5%	8.0%	20.4%	6.0%	15.8%	41.8%	5.4
Late season	498	4.2%	4.8%	6.0%	24.3%	6.6%	13.7%	40.4%	5.3
$\chi^2 = 5.381$ n.s.									t=.835 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 = very dissatisfied; 2 = moderately dissatisfied; 3 = slightly dissatisfied, 4 = neither; 5 = slightly satisfied; 6 = moderately satisfied; 7 = very satisfied.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 3: Minnesota Turkey Hunting Quality

Respondents were asked to rate the importance of 13 items related to satisfaction with turkey hunting using the scale 1 (not at all important), 2 (slightly important), 3 (somewhat important), 4 (very important), and 5 (extremely important) (Tables 3-1 to 3-14). Then they were asked whether these outcomes happened during their 2014 hunting season, using the scale 1 (not at all), 2 (slightly), 3 (somewhat), 4 (largely), and 5 (very much) (Tables 3-15 to 3-28).

Importance of Outcomes

Of the listed items related to satisfaction with turkey hunting, the most important items were (a) seeing turkeys, (b) hearing gobbling, and (c) not being interfered with by other hunters. Each of these had a

\bar{x}

mean of 4.3 on the 5-point scale (Table 3-1). Access to private hunting land ($\bar{x}=4.1$) and calling turkeys in ($\bar{x}=4.$) were also important. Killing a bearded hen ($\bar{x}=1.7$) and killing a Jake ($\bar{x}=2.4$) were the least-important. Nearly 9 out of 10 respondents rated seeing turkeys (87.1%) (Table 3-2) and hearing gobbling (86.7%) (Table 3-4) very or extremely important. About three-fourths of respondents rated calling turkeys in (76.9%) (Table 3-5), not being interfered with by other hunters (82.4%) (Table 3-12), and access to private hunting land (76.9%) (Table 3-14) very or extremely important. About 6 in 10 respondents rated (a) an opportunity to kill a turkey (61.1%) (Table 3-3), (b) killing a Tom (56.4%) (Table 3-6), and (c) not seeing other hunters (60.5%) (Table 3-11) very or extremely important. About half of respondents rated (a) weather conditions (48.8%) (Table 3-10), and (b) being successfully drawn in a lottery to hunt an early time period (50.5%) (Table 3-13) very or extremely important. About one-third of respondents rated killing a trophy turkey very or extremely important (33.0%) (Table 3-9). Less than 20% of respondents rated (a) killing a Jake (15.2%) (Table 3-7), (b) killing a bearded hen (6.5%) (Table 3-8) very or extremely important. There were no substantive differences in the importance of outcomes between hunters who hunted early season time periods and those who hunted later seasons, except for the importance of being drawn in a lottery to hunt an early time period (Table 3-13).

Achievement of Outcomes During 2014 Season

The only item related to satisfaction with turkey hunting that was, on average, largely achieved was access to private hunting land ($\bar{x}=4.1$) (Table 3-15). Hearing gobbling ($\bar{x}=3.5$), seeing turkeys ($\bar{x}=3.3$), weather conditions ($\bar{x}=3.2$), being successfully drawn in a lottery to hunt an early time period ($\bar{x}=3.1$), and calling turkeys in ($\bar{x}=3.0$) were somewhat achieved (Table 3-15). Two items were “not at all achieved:” killing a Jake ($\bar{x}=1.4$) and killing a bearded hen ($\bar{x}=1.1$). Over half of respondents largely or very much achieved the outcomes: hearing gobbling (53.6%) (Table 3-18), and access to private hunting land (76%) (Table 3-28). Between 30 to 50% of respondents achieved the outcomes: (a) seeing turkeys (44.1%) (Table 3-16), (b) an opportunity to kill a turkey (42.1%) (Table 3-17), (c) calling turkeys in (39.8%) (Table 3-19), (d) killing a Tom (36%) (Table 3-20), (e) good weather conditions (40.1%) (Table 3-24), (f) not seeing other hunters (43.4%) (Table 3-25), (g) not being interfered with by other hunters (38.2%) (Table 3-26), and (h) being successfully drawn in a lottery to hunt an early time period (49.2%) (Table 3-27). Less than 20% of respondents largely or very much achieved the following outcomes: (a) killing a Jake (7.5%) (Table 3-21), (b) killing a bearded hen (1.3%) (Table 3-22), and (c) killing a trophy turkey (15.5%) (Table 3-23). There were just a few substantive differences in the importance of outcomes

between hunters who hunted early season time periods and those who hunted later seasons. Early season hunters were more likely to have killed a Tom (Table 3-20), killed a trophy turkey (Table 3-23), and been successfully drawn in a lottery to hunt an early time period (Table 3-27). Late season hunters reported experiencing better weather conditions (Table 3-24).

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Importance and Achievement of Outcomes

Importance and achievement of turkey hunting quality items is detailed in Figure 3-1. Importance-performance analysis provides a two-dimensional graphic interpretation of survey results. This type of analysis produces four quadrants: (a) concentrate here, (b) keep up the good work, (c) possible overkill, and (d) low priority. Dotted lines are midpoint of scale, and solid lines are the means for importance and performance. “Using the means as a frame of reference is preferable, as the means divide the quadrant into below average and above-average importance, as well as below-average and above average performance.” (Van Ryzin & Immerwahr, 2007, p. 221). Using the means (solid lines) to define the importance-performance quadrants, we see that actions to reduce interference by other hunters, help hunters see and call in more turkeys are the most important areas to concentrate. Hunters appear to be successful in accessing private hunting land and hearing gobbling.

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Table 3-1: Importance of experiences to turkey hunting satisfaction.

	n	Mean^{1,2}
Seeing turkeys	1274	4.3
Hearing gobbling	1244	4.3
Not being interfered with by other hunters	1263	4.3
Access to private hunting land	1269	4.1
Calling turkeys in	1262	4.0
An opportunity to kill a turkey	1261	3.8
Killing a Tom	1259	3.7
Not seeing other hunters	1268	3.7
Weather conditions	1273	3.5
Being successfully drawn in a lottery to hunt an early time period	1261	3.4
Killing a trophy turkey (i.e., large birds with long beards, multiple beards, long spurs)	1273	3.0
Killing a Jake	1262	2.4
Killing a bearded hen	1230	1.7
		F=800.973***

¹ Mean reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

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Table 3-2: Importance of seeing turkeys to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1274	0.4%	1.4%	11.1%	43.2%	43.9%	4.3
Early season	754	0.4%	1.7%	9.8%	42.4%	45.6%	4.3
Late season	499	0.4%	1.0%	13.0%	44.3%	41.3%	4.3
$\chi^2 = 5.409$ n.s.							t=1.416 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-3: Importance of an opportunity to kill a turkey to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1261	2.5%	5.9%	30.5%	34.7%	26.4%	3.8
Early season	745	3.1%	4.3%	29.9%	35.0%	27.7%	3.8
Late season	495	1.6%	8.5%	30.5%	34.9%	24.4%	3.7
$\chi^2 = 12.514^*$, V = .100							t=1.352 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-4: Importance of hearing gobbling to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1244	1.0%	1.8%	10.5%	40.0%	46.7%	4.3
Early season	742	1.2%	1.5%	9.0%	41.1%	47.2%	4.3
Late season	482	0.6%	2.3%	12.7%	38.8%	45.6%	4.3
$\chi^2 = 6.286$ n.s.							t=1.061 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 3-5: Importance of calling turkeys in to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1262	2.5%	3.6%	17.1%	42.6%	34.3%	4.0
Early season	743	2.3%	3.1%	16.0%	43.7%	34.9%	4.1
Late season	499	2.8%	4.2%	18.2%	41.3%	33.5%	4.0
$\chi^2 = 2.825$ n.s.							t=1.363 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-6: Importance of killing a Tom to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1259	4.3%	6.9%	32.4%	30.7%	25.7%	3.7
Early season	745	4.6%	7.7%	31.1%	30.3%	26.3%	3.7
Late season	494	3.8%	6.1%	34.2%	31.4%	24.5%	3.7
$\chi^2 = 2.763$ n.s.							t=.069 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-7: Importance of killing a Jake to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1262	28.1%	21.9%	34.8%	10.9%	4.3%	2.4
Early season	745	29.5%	21.9%	33.4%	11.4%	3.8%	2.4
Late season	496	26.4%	22.0%	36.1%	10.7%	4.8%	2.5
$\chi^2 = 2.609$ n.s.							t=1.155 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 3-8: Importance of killing a bearded hen to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1230	61.5%	16.2%	15.8%	4.1%	2.4%	1.7
Early season	727	61.8%	15.8%	15.8%	4.1%	2.5%	1.7
Late season	486	61.3%	16.7%	15.6%	4.1%	2.3%	1.7
$\chi^2 = 0.200$ n.s.							t=.066 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-9: Importance of killing a trophy turkey (i.e., large birds with long beards, multiple beards, long spurs) to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1273	17.7%	14.1%	35.2%	17.9%	15.1%	3.0
Early season	755	16.6%	14.4%	35.9%	17.6%	15.5%	3.0
Late season	497	19.5%	13.9%	33.6%	18.3%	14.7%	2.9
$\chi^2 = 2.206$ n.s.							t=.851 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-10: Importance of weather conditions to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1273	5.8%	7.8%	37.5%	32.5%	16.3%	3.5
Early season	754	5.3%	7.6%	36.5%	34.0%	16.7%	3.5
Late season	499	6.4%	8.0%	39.3%	30.7%	15.6%	3.4
$\chi^2 = 2.562$ n.s.							t=1.358 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 3-11: Importance of not seeing other hunters to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1268	7.5%	8.0%	24.0%	30.8%	29.7%	3.7
Early season	750	6.3%	7.5%	24.3%	30.5%	31.5%	3.7
Late season	497	9.1%	8.5%	24.1%	31.2%	27.2%	3.6
$\chi^2 = 5.421$ n.s.							t=2.112*

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-12: Importance of not being interfered with by other hunters to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1263	4.9%	3.5%	9.3%	26.0%	56.4%	4.3
Early season	748	4.0%	3.3%	10.4%	23.9%	58.3%	4.3
Late season	494	6.3%	3.2%	7.7%	29.6%	53.2%	4.2
$\chi^2 = 10.444^*$, V=.092							t=1.423 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-13: Importance of being successfully drawn in a lottery to hunt an early time period to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1261	14.4%	7.9%	27.2%	25.5%	25.0%	3.4
Early season	754	2.7%	4.4%	24.0%	33.8%	35.1%	3.9
Late season	486	33.1%	13.2%	31.3%	13.0%	9.5%	2.5
$\chi^2 = 350.880^{***}$, V = .532							t=21.461***

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 3-14: Importance of access to private hunting land to turkey hunting satisfaction.

	n	% of hunters ¹ indicating that level of importance:					Mean ²
		Not at all	Slightly	Somewhat	Very	Extremely	
All respondents	1269	5.8%	2.6%	14.7%	31.0%	45.9%	4.1
Early season	753	5.6%	2.3%	15.5%	31.3%	45.3%	4.1
Late season	496	5.8%	3.0%	13.5%	30.6%	47.0%	4.1
$\chi^2 = 1.793$ n.s.							t= .216 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = very; 5 = extremely.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 3-15: Did experiences happen during the 2014 season?

	n	Mean ^{1,2}
Access to private hunting land	1227	4.1
Hearing gobbling	1208	3.5
Seeing turkeys	1238	3.3
Weather conditions	1212	3.2
Being successfully drawn in a lottery to hunt an early time period	1207	3.1
Calling turkeys in	1229	3.0
An opportunity to kill a turkey	1234	2.9
Not seeing other hunters	1223	2.8
Not being interfered with by other hunters	1218	2.7
Killing a Tom	1217	2.5
Killing a trophy turkey (i.e., large birds with long beards, multiple beards, long spurs)	1230	1.8
Killing a Jake	1211	1.4
Killing a bearded hen	1188	1.1
		F= 492.895***

¹ Mean reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

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Table 3-16: See turkeys during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1238	10.5%	17.7%	27.7%	23.7%	20.4%	3.3
Early season	736	10.9%	16.4%	27.4%	24.3%	20.9%	3.3
Late season	484	10.1%	19.4%	28.5%	22.9%	19.0%	3.2
$\chi^2 = 2.513$ n.s.							t=.912 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-17: Have an opportunity to kill a turkey during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1234	35.8%	10.6%	11.5%	12.4%	29.7%	2.9
Early season	732	33.9%	10.4%	11.2%	13.4%	31.1%	3.0
Late season	483	39.1%	10.8%	12.0%	11.0%	27.1%	2.8
$\chi^2 = 5.396$ n.s.							t=2.164*

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-18: Hear gobbling during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1208	9.0%	11.7%	25.7%	23.5%	30.1%	3.5
Early season	722	8.9%	12.7%	25.3%	23.1%	29.9%	3.5
Late season	468	9.6%	10.0%	25.4%	24.4%	30.6%	3.6
$\chi^2 = 2.167$ n.s.							t=.488 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 3-19: Call turkeys in during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1229	23.8%	15.8%	20.6%	17.2%	22.6%	3.0
Early season	729	22.4%	15.8%	19.9%	17.4%	24.6%	3.1
Late season	481	26.0%	16.2%	21.4%	17.0%	19.3%	2.9
$\chi^2 = 5.502$ n.s.							t=2.135*

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-20: Kill a Tom during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1217	56.1%	3.0%	4.9%	8.7%	27.3%	2.5
Early season	724	52.2%	2.8%	5.2%	10.5%	29.3%	2.6
Late season	475	61.9%	3.2%	4.2%	6.1%	24.6%	2.3
$\chi^2 = 14.171^{**}$							t=3.182**

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-21: Kill a Jake during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1211	84.2%	4.0%	4.3%	3.2%	4.3%	1.4
Early season	721	84.5%	3.6%	4.2%	3.7%	4.0%	1.4
Late season	472	84.3%	4.2%	4.4%	2.5%	4.4%	1.4
$\chi^2 = 1.737$ n.s.							t=.155 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 3-22: Kill a bearded hen during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1188	93.9%	1.9%	2.9%	0.7%	0.6%	1.1
Early season	702	94.0%	1.0%	3.6%	0.9%	0.6%	1.1
Late season	470	94.0%	3.0%	1.9%	0.4%	0.6%	1.1
$\chi^2 = 9.581^*$							t=.741 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-23: Kill a trophy turkey (i.e., large birds with long beards, multiple beards, long spurs) during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1230	67.2%	5.8%	11.6%	7.5%	7.9%	1.8
Early season	730	64.4%	5.8%	12.3%	8.2%	9.3%	1.9
Late season	481	71.5%	5.6%	10.6%	6.4%	5.8%	1.7
$\chi^2 = 8.627$ n.s.							t=2.934**

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-24: Good weather conditions during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1212	12.3%	12.7%	34.9%	23.7%	16.4%	3.2
Early season	723	14.1%	14.2%	32.2%	22.5%	16.9%	3.1
Late season	471	9.3%	10.2%	38.9%	25.9%	15.7%	3.3
$\chi^2 = 14.183^{**}$							t=2.036*

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 3-25: Not see other hunters during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1223	33.2%	13.9%	14.5%	15.0%	23.4%	2.8
Early season	729	31.8%	14.1%	14.7%	15.0%	24.4%	2.9
Late season	475	35.2%	13.7%	14.3%	14.9%	21.9%	2.8
$\chi^2 = 1.812$ n.s.							t=1.204 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-26: Not interfered with by other hunters during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1218	41.6%	9.9%	10.3%	11.5%	26.7%	2.7
Early season	721	40.1%	9.6%	11.5%	11.8%	27.0%	2.8
Late season	478	44.4%	10.0%	8.6%	10.9%	26.2%	2.6
$\chi^2 = 4.007$ n.s.							t=1.172 n.s.

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 3-27: Successfully drawn in a lottery to hunt an early time period during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1207	36.5%	3.8%	10.5%	13.7%	35.5%	3.1
Early season	729	10.7%	3.8%	11.7%	19.1%	54.7%	4.0
Late season	458	78.2%	3.9%	8.3%	4.4%	5.2%	1.6
$\chi^2 = 90.360$ ***							t=32.987***

¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 3: Minnesota Turkey Hunting Quality

Table 3-28: Have access to private hunting land during 2014 season.

	n	% of hunters ¹ indicating:					Mean ²
		Not at all	Slightly	Somewhat	Largely	Very much	
All respondents	1227	10.2%	2.9%	10.9%	17.1%	58.9%	4.1
Early season	731	10.0%	3.4%	10.9%	17.8%	57.9%	4.1
Late season	477	10.5%	2.1%	10.7%	16.1%	60.6%	4.1
$\chi^2 = 2.648$ n.s.							t=.536 n.s.

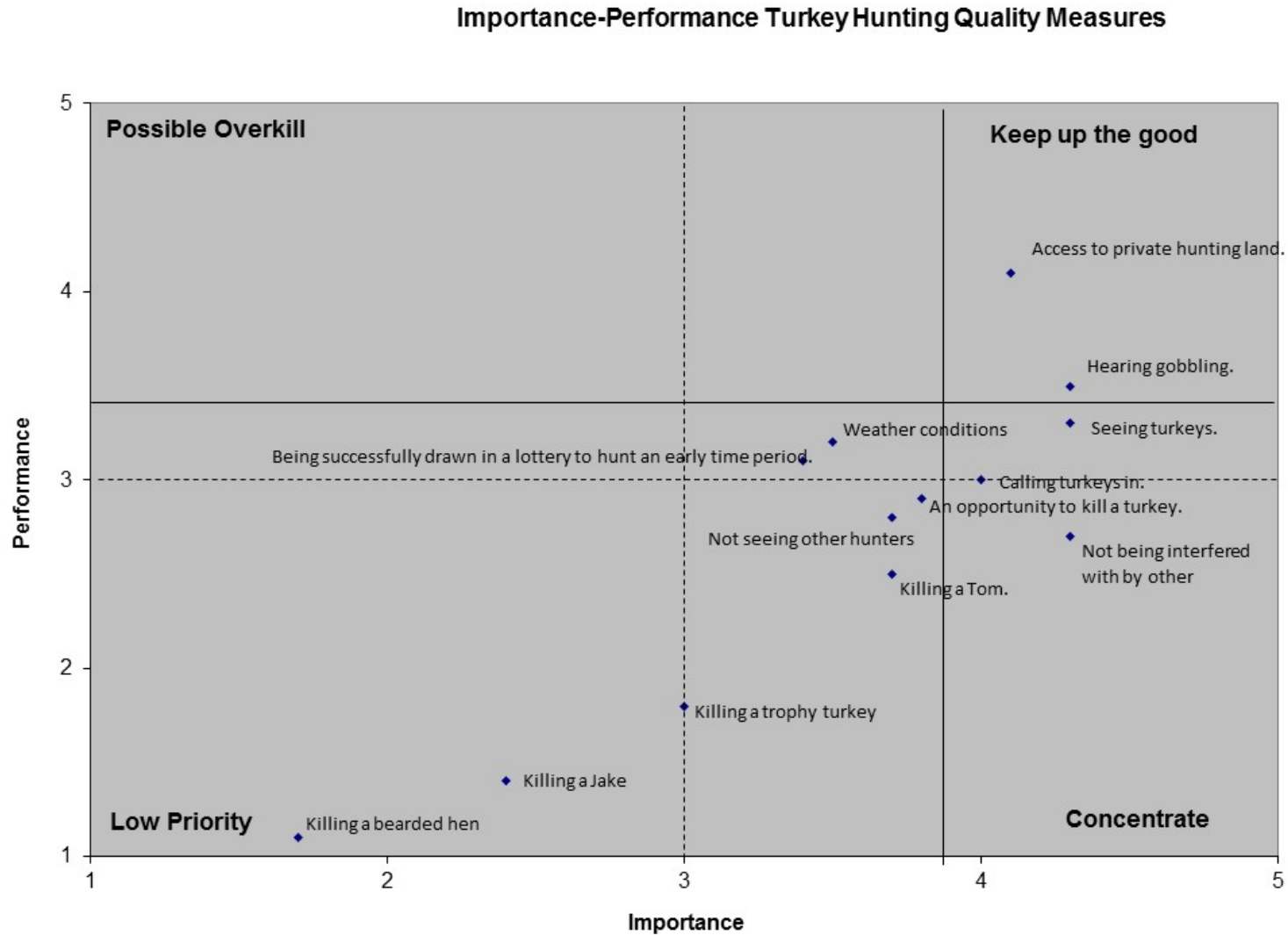
¹ % reflects only % of respondents that actually hunted during 2014 season (n=1308)

² Mean is based on the following scale: 1 =not at all; 2 = slightly; 3 = somewhat, 4 = largely; 5 = very much.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 3: Minnesota Turkey Hunting Quality

Figure 3-1: Importance-performance analysis of turkey hunting quality measures.



Section 4: Motivations for and Involvement in Turkey Hunting

Motivations

Respondents were asked to report how important 23 aspects of turkey hunting were to them using the scale: 1 = not at all important to 5 = extremely important (Table 4-1 to 4-24). Then they were asked whether these outcomes happened during their 2014 hunting season, using the scale 1 (not at all), 2 (slightly), 3 (somewhat), 4 (largely), and 5 (very much) (Tables 4-25 to 4-48).

Six items were rated very to extremely important: (a) enjoying nature and the outdoors ($\bar{x} = 4.7$), (b) the excitement of hunting ($\bar{x} = 4.5$), (c) getting away from crowds of people ($\bar{x} = 4.5$), (d) good behavior among other turkey hunters ($\bar{x} = 4.4$), (e) hunting private land ($\bar{x} = 4.3$), and (f) the challenge of making a successful shot ($\bar{x} = 4.2$). Means and frequencies for all 23 motivations are presented in Tables 4-2 through 4-24.

Five items were largely to very much achieved during the 2014 hunting season: (a) enjoying nature and the outdoors ($\bar{x} = 4.6$), (b) getting away from crowds of people ($\bar{x} = 4.4$), (c) hunting private land ($\bar{x} = 4.2$), (d) the excitement of hunting ($\bar{x} = 4.2$), and (e) using hunting equipment ($\bar{x} = 4.0$). Means and frequencies for achievement of the 23 motivation items are presented in Tables 4-25 to 4-48.

There were no substantive differences in the importance or achievement of motivation outcomes between hunters who hunted early season time periods and those who hunted later seasons.

Importance and Achievement of Motivations

Importance and achievement of turkey hunting motivations is detailed in Figure 4-1. To minimize crowding, only some items are labeled. Using the means (solid lines) to define the importance-performance quadrants, we see that if hunters can improve on the challenge of making a successful shot, see more turkeys, and be with their family, they may be more satisfied. They are successful in enjoying nature and the outdoors and getting away from crowds of people.

Involvement in Turkey Hunting

Respondents were asked to rate 15 items related to their involvement in turkey hunting using the scale 1 (strongly disagree) to 5 (strongly agree) (Tables 4-49 through 4-64). Respondents agreed most strongly that “Turkey hunting is one of the most enjoyable things I do” ($\bar{x} = 4.0$) and “I enjoy discussing turkey hunting with my friends” ($\bar{x} = 3.9$), and they disagreed most strongly that “A lot of my life is organized around turkey hunting” ($\bar{x} = 2.5$) and “Turkey hunting has a central role in my life” ($\bar{x} = 2.4$) (Table 4-49).

About three-fourths of respondents agreed or strongly agreed that: “Turkey hunting is one of the most enjoyable things I do” (73.5%) (Table 4-50), and “I enjoy discussing turkey hunting with my friends” (78.1%) (Table 4-63),

About two-thirds of respondents agreed or strongly agreed that: “Turkey hunting provides me with the opportunity to be with friends” (64.0%) (Table 4-51), and “Turkey hunting is very important to me” (59.9%) (Table 4-60)..

Section 4: Motivations for and Involvement in Turkey Hunting

About half of respondents agreed or strongly agreed that: (a) “To change my preference from turkey hunting to another recreation activity would require major rethinking” (49.2%) (Table 4-52), (c) “Turkey hunting is one of the most satisfying things I do” (48.9%) (Table 4-58), (d) “When I am turkey hunting I can really be myself” (54.6%) (Table 4-62), and (e) “When I am turkey hunting, I don’t have to be concerned about what other people think of me” (49.2%) (Table 4-64).

One-third to one-half of respondents agreed or strongly agreed that: (a) “When I am turkey hunting, others see me the way I want them to see me” (42.6%) (Table 4-56), (b) “I identify with the people and image associated with turkey hunting” (37.4%) (Table 4-57), and (c) “Participating in turkey hunting says a lot about who I am” (36.0%) (Table 4-59),

Less than one-third of respondents agreed or strongly agreed that: (a) “A lot of my life is organized around turkey hunting” (13.9%) (Table 4-52), (b) “Turkey hunting has a central role in my life,” (17.8%) (Table 4-53), (c) “Most of my friends are in some way connected with turkey hunting” (20.0%) (Table 4-54), and (d) “You can tell a lot about a person when you see them turkey hunting” (24.9%) (Table 4-61).

There were no substantive differences in measures of involvement between hunters who hunted early season time periods and those who hunted later seasons.

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-1: Motivations for turkey hunting: Importance of...

	Mean ²
Enjoying nature and the outdoors	4.7
Getting away from crowds of people	4.5
Getting food for my family	2.5
Shooting a gun	2.7
Access to a lot of different hunting areas	3.3
Bagging a turkey	3.4
Being on my own	3.6
Being with friends	3.6
Developing my skills and abilities	3.9
Being with family	3.8
Getting information about hunting seasons and conditions from the DNR	3.5
Good behavior among other turkey hunters	4.4
Hunting areas open to the public	3.4
Hunting private land	4.3
Reducing tension and stress	3.9
Seeing a lot of turkeys	3.9
Sharing my hunting skills and knowledge	3.5
Thinking about personal values	3.7
Using my hunting equipment (calls, blinds, guns, etc.)	3.9
Getting my own food	2.7
The excitement of hunting	4.5
The challenge of making a successful shot	4.2
Getting information about turkey hunting from media sources like magazines, TV, and social media	2.8
	F=428.151***

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4 = very important, 5 = extremely important.

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-2: Motivations for turkey hunting: Importance of... Enjoying nature and the outdoors

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1277	0.3%	0.2%	2.0%	28.5%	69.1%	4.7
Early season	759	0.4%	0.1%	2.1%	28.9%	68.5%	4.7
Late season	497	0.0%	0.2%	1.6%	28.2%	70.0%	4.7
$\chi^2=2.594$ n.s.							t=.965 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-3: Motivations for turkey hunting: Importance of... Getting away from crowds of people.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1265	0.9%	1.3%	5.9%	31.3%	60.6%	4.5
Early season	752	0.7%	1.5%	6.3%	31.8%	59.8%	4.5
Late season	493	1.0%	1.0%	5.7%	30.2%	62.1%	4.5
$\chi^2=1.555$ n.s.							t=.619 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-4: Motivations for turkey hunting: Importance of... Getting food for my family.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1237	29.3%	23.0%	27.2%	11.6%	9.0%	2.5
Early season	730	29.3%	22.3%	27.1%	11.8%	9.5%	2.5
Late season	487	29.6%	24.2%	26.5%	11.7%	8.0%	2.4
$\chi^2=1.195$ n.s.							t=.724 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-5: Motivations for turkey hunting: Importance of.... Shooting a gun

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1255	22.9%	19.4%	32.0%	15.1%	10.6%	2.7
Early season	741	23.8%	20.4%	30.6%	14.3%	10.9%	2.7
Late season	493	21.3%	18.3%	33.9%	16.8%	9.7%	2.8
$\chi^2=4.081$ n.s.							t=.977 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-6: Motivations for turkey hunting: Importance of... Access to a lot of different hunting areas.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1257	9.5%	12.4%	30.5%	29.2%	18.4%	3.3
Early season	744	9.8%	12.5%	30.6%	28.1%	19.0%	3.3
Late season	495	8.7%	12.3%	30.3%	31.3%	17.4%	3.4
$\chi^2=1.875$ n.s.							t=.362 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-7: Motivations for turkey hunting: Importance of... Bagging a turkey.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1262	5.5%	10.4%	37.2%	28.8%	18.1%	3.4
Early season	752	5.2%	9.3%	37.4%	28.1%	20.1%	3.5
Late season	490	6.1%	11.6%	36.7%	30.4%	15.1%	3.4
$\chi^2=6.690$ n.s.							t=1.900 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-8: Motivations for turkey hunting: Importance of... Being on my own.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1254	6.7%	7.9%	29.0%	30.5%	25.8%	3.6
Early season	750	6.7%	7.9%	28.8%	30.4%	26.3%	3.6
Late season	484	6.4%	8.1%	30.2%	30.6%	24.8%	3.6
$\chi^2=.483$ n.s.							t=.365 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-9: Motivations for turkey hunting: Importance of... Being with friends.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1270	9.4%	8.3%	23.6%	31.2%	27.5%	3.6
Early season	755	8.5%	7.7%	23.8%	32.2%	27.8%	3.6
Late season	494	10.3%	9.3%	23.1%	29.6%	27.7%	3.6
$\chi^2=2.797$ n.s.							t=1.140 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-10: Motivations for turkey hunting: Importance of... Developing my skills and abilities.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1256	4.2%	4.9%	22.1%	37.3%	31.6%	3.9
Early season	747	4.0%	5.2%	20.9%	37.1%	32.8%	3.9
Late season	489	4.7%	4.1%	23.7%	38.0%	29.4%	3.8
$\chi^2=3.325$ n.s.							t=.984 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-11: Motivations for turkey hunting: Importance of... Being with family.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1257	12.0%	5.4%	17.3%	26.0%	39.3%	3.8
Early season	744	10.9%	5.6%	18.3%	26.1%	39.1%	3.8
Late season	492	13.6%	4.9%	15.9%	25.8%	39.8%	3.7
$\chi^2=3.225$ n.s.							t=.450 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-12: Motivations for turkey hunting: Importance of... Getting information about hunting seasons and conditions from the DNR.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1268	7.5%	8.8%	28.0%	32.9%	22.8%	3.5
Early season	753	7.3%	8.9%	29.2%	30.9%	23.6%	3.5
Late season	495	7.9%	8.9%	26.1%	35.4%	21.8%	3.5
$\chi^2=3.404$ n.s.							t=.055 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-13: Motivations for turkey hunting: Importance of... Good behavior among other turkey hunters.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1260	2.8%	1.7%	8.3%	32.1%	55.0%	4.4
Early season	746	2.9%	1.6%	8.7%	31.5%	55.2%	4.3
Late season	494	2.6%	1.8%	8.1%	33.2%	54.3%	4.4
$\chi^2=.637$ n.s.							t=.031 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-14: Motivations for turkey hunting: Importance of... Hunting areas open to the public.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1241	17.9%	7.7%	22.6%	24.3%	27.6%	3.4
Early season	740	18.4%	8.2%	22.0%	22.8%	28.5%	3.4
Late season	482	17.0%	6.6%	23.9%	26.3%	26.1%	3.4
$\chi^2=3.804$ n.s.							t=.374 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-15: Motivations for turkey hunting: Importance of... Hunting private land.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1263	2.5%	2.1%	10.9%	29.0%	55.4%	4.3
Early season	750	2.9%	2.0%	11.9%	29.1%	54.1%	4.3
Late season	494	2.0%	2.4%	9.5%	28.9%	57.1%	4.4
$\chi^2=3.188$ n.s.							t=1.322 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-16: Motivations for turkey hunting: Importance of... Reducing tension and stress.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1242	4.2%	5.3%	21.5%	30.0%	39.0%	3.9
Early season	739	3.9%	5.8%	21.4%	31.5%	37.3%	3.9
Late season	483	4.1%	4.6%	21.9%	28.4%	41.0%	4.0
$\chi^2=2.922$ n.s.							t=.781 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-17: Motivations for turkey hunting: Importance of... Seeing a lot of turkeys.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1265	1.3%	3.2%	29.9%	40.0%	25.7%	3.9
Early season	753	1.6%	2.7%	29.1%	39.7%	27.0%	3.9
Late season	491	0.8%	4.1%	31.0%	40.3%	23.8%	3.8
$\chi^2=4.769$ n.s.							t=1.074 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-18: Motivations for turkey hunting: Importance of... Sharing my hunting skills and knowledge.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1245	7.1%	8.7%	31.2%	30.0%	23.1%	3.5
Early season	744	6.9%	8.3%	30.8%	30.9%	23.1%	3.6
Late season	482	7.3%	9.1%	32.2%	28.8%	22.6%	3.5
$\chi^2=.911$ n.s.							t=.703 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-19: Motivations for turkey hunting: Importance of... Thinking about personal values.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1238	7.7%	6.0%	26.0%	34.4%	25.9%	3.7
Early season	734	6.9%	6.3%	24.7%	36.6%	25.5%	3.7
Late season	484	8.9%	5.6%	27.7%	31.2%	26.7%	3.6
$\chi^2=5.348$ n.s.							t=.930 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-20: Motivations for turkey hunting: Importance of... Using my hunting equipment (calls, blinds, guns, etc.).

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1267	2.8%	4.3%	24.0%	37.3%	31.6%	3.9
Early season	753	2.8%	3.6%	22.8%	37.7%	33.1%	3.9
Late season	493	2.6%	4.9%	25.8%	37.1%	29.6%	3.9
$\chi^2=3.429$ n.s.							t=1.495 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-21: Motivations for turkey hunting: Importance of... Getting my own food.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1264	26.3%	18.0%	27.5%	16.0%	12.3%	2.7
Early season	752	26.2%	18.0%	28.2%	14.9%	12.8%	2.7
Late season	491	25.7%	18.1%	26.7%	17.9%	11.6%	2.7
$\chi^2=2.300$ n.s.							t=.207 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Table 4-22: Motivations for turkey hunting: Importance of... The excitement of hunting.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1246	0.7%	1.0%	6.6%	34.7%	57.1%	4.5
Early season	740	0.9%	0.8%	5.3%	33.6%	59.3%	4.5
Late season	485	0.2%	1.2%	8.5%	36.5%	53.6%	4.4
$\chi^2=9.905^*$							t=1.795 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-23: Motivations for turkey hunting: Importance of... The challenge of making a successful shot.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1262	2.1%	2.5%	12.8%	35.0%	47.7%	4.2
Early season	752	2.0%	2.7%	16.8%	32.9%	45.6%	4.3
Late season	489	2.0%	2.4%	10.4%	35.9%	49.3%	4.2
$\chi^2=11.110^*$							t=2.042*

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-24: Motivations for turkey hunting: Importance of... Getting information about turkey hunting from media sources like magazines, TV, and social media.

	n	Not at all	Slightly	Somewhat	Very	Extremely	Mean ^{1,2}
All respondents	1264	19.5%	17.2%	35.6%	17.6%	10.1%	2.8
Early season	753	19.1%	16.7%	34.9%	17.4%	11.8%	2.9
Late season	490	20.2%	18.6%	36.1%	17.1%	8.0%	2.7
$\chi^2=5.178$ n.s.							t=1.681 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all important, 2 = slightly important, 3 = somewhat important, 4= very important, 5 = extremely important.

n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-25: 2014 spring turkey hunting experiences: Did it happen...

	Mean ²
Enjoying nature and the outdoors	4.6
Getting away from crowds of people	4.4
Hunting private land	4.2
The excitement of hunting	4.2
Using my hunting equipment (calls, blinds, guns, etc.)	4.0
Reducing tension and stress	3.9
Good behavior among other turkey hunters	3.8
Being on my own	3.7
Developing my skills and abilities	3.6
Thinking about personal values	3.5
Being with friends	3.4
Being with family	3.4
Getting information about hunting seasons and conditions from the DNR	3.2
Sharing my hunting skills and knowledge	3.2
Seeing a lot of turkeys	3.0
The challenge of making a successful shot	2.9
Access to a lot of different hunting areas	2.8
Getting information about turkey hunting from media sources like magazines, TV, and social media	2.7
Shooting a gun	2.6
Bagging a turkey	2.6
Hunting areas open to the public	2.6
Getting my own food	2.5
Getting food for my family	2.4
	F=310.248***

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4 = largely, 5 = very much.

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Table 4-26: 2014 spring turkey hunting experiences: Enjoying nature and the outdoors

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1239	0.6%	1.2%	5.2%	27.8%	65.2%	4.6
Early season	730	0.5%	1.6%	6.0%	29.0%	62.7%	4.5
Late season	489	0.6%	0.4%	3.9%	26.4%	68.7%	4.6
$\chi^2=8.854$ n.s.							t=2.550*

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-27: 2014 spring turkey hunting experiences: Getting away from crowds of people.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1229	1.8%	1.8%	7.6%	31.2%	57.7%	4.4
Early season	729	2.2%	1.8%	9.1%	31.7%	55.3%	4.4
Late season	481	1.2%	1.9%	5.6%	30.1%	61.1%	4.5
$\chi^2=7.843$ n.s.							t=2.396*

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-28: 2014 spring turkey hunting experiences: Getting food for my family.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1195	53.9%	5.0%	9.5%	9.5%	22.0%	2.4
Early season	700	52.0%	4.4%	9.9%	9.9%	23.9%	2.5
Late season	476	56.9%	5.7%	9.0%	9.2%	19.1%	2.3
$\chi^2=5.379$ n.s.							t=2.124*

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-29: 2014 spring turkey hunting experiences: Shooting a gun

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1219	47.0%	6.0%	13.1%	9.3%	24.6%	2.6
Early season	721	45.5%	6.7%	13.6%	8.9%	25.4%	2.6
Late season	479	49.9%	5.0%	11.7%	10.2%	23.2%	2.5
$\chi^2=4.425$ n.s.							t=1.027 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-30: 2014 spring turkey hunting experiences: Access to a lot of different hunting areas.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1214	22.3%	17.1%	30.0%	17.9%	12.7%	2.8
Early season	714	22.4%	15.7%	31.8%	17.5%	12.6%	2.8
Late season	482	22.2%	19.7%	27.0%	18.5%	12.7%	2.8
$\chi^2=5.086$ n.s.							t=.329 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-31: 2014 spring turkey hunting experiences: Bagging a turkey.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1225	54.5%	2.2%	5.5%	7.8%	30.0%	2.6
Early season	725	51.6%	2.5%	5.7%	8.0%	32.3%	2.7
Late season	482	58.9%	1.7%	5.0%	7.5%	27.0%	2.4
$\chi^2=6.820$ n.s.							t=2.344*

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-32: 2014 spring turkey hunting experiences: Being on my own.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1211	10.5%	7.1%	19.4%	24.6%	38.4%	3.7
Early season	723	9.8%	7.7%	19.4%	25.6%	37.5%	3.7
Late season	469	11.7%	6.4%	19.8%	23.0%	39.0%	3.7
$\chi^2=2.662$ n.s.							t=.249 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-33: 2014 spring turkey hunting experiences: Being with friends.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1231	21.3%	6.9%	17.5%	22.7%	31.6%	3.4
Early season	728	21.2%	6.2%	18.0%	24.0%	30.6%	3.4
Late season	484	21.5%	8.3%	16.1%	20.7%	33.5%	3.4
$\chi^2=4.608$ n.s.							t=.051 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 4-34: 2014 spring turkey hunting experiences: Developing my skills and abilities.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1210	5.5%	8.4%	30.2%	31.8%	24.1%	3.6
Early season	718	5.3%	9.3%	29.5%	31.6%	24.2%	3.6
Late season	473	5.7%	7.2%	31.3%	32.3%	23.5%	3.6
$\chi^2=2.046$ n.s.							t=.078 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-35: 2014 spring turkey hunting experiences: Being with family.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1216	24.7%	6.1%	12.3%	18.6%	38.3%	3.4
Early season	717	22.6%	6.8%	13.5%	19.2%	37.8%	3.4
Late season	480	28.3%	5.2%	10.2%	17.1%	39.2%	3.3
$\chi^2=8.505$ n.s.							t=.971 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-36: 2014 spring turkey hunting experiences: Getting information about hunting seasons and conditions from the DNR.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1228	12.6%	11.9%	32.5%	26.6%	16.4%	3.2
Early season	726	12.0%	12.7%	32.2%	25.9%	17.2%	3.2
Late season	483	13.5%	11.0%	33.3%	27.1%	15.1%	3.2
$\chi^2=2.256$ n.s.							t=.589 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-37: 2014 spring turkey hunting experiences: Good behavior among other turkey hunters.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1199	8.9%	4.3%	18.1%	32.5%	36.1%	3.8
Early season	708	7.1%	4.7%	19.4%	32.6%	36.3%	3.9
Late season	473	11.6%	4.0%	16.7%	31.7%	35.9%	3.8
$\chi^2=8.087$ n.s.							t=1.396 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 4-38: 2014 spring turkey hunting experiences: Hunting areas open to the public.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1190	36.7%	10.8%	22.4%	15.0%	15.1%	2.6
Early season	703	35.3%	10.4%	22.6%	15.8%	15.9%	2.7
Late season	469	39.0%	11.5%	22.2%	13.6%	13.6%	2.5
$\chi^2=3.271$ n.s.							t=1.744 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-39: 2014 spring turkey hunting experiences: Hunting private land.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1223	8.2%	2.9%	9.4%	19.5%	59.9%	4.2
Early season	723	9.0%	3.2%	8.6%	18.9%	60.3%	4.2
Late season	480	7.3%	2.3%	10.2%	20.6%	59.6%	4.2
$\chi^2=3.081$ n.s.							t=.624 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-40: 2014 spring turkey hunting experiences: Reducing tension and stress.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1206	3.6%	4.3%	23.0%	31.9%	37.1%	3.9
Early season	716	3.4%	4.6%	22.8%	33.7%	35.6%	3.9
Late season	470	3.6%	4.0%	23.4%	29.8%	39.1%	4.0
$\chi^2=2.597$ n.s.							t=.523 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-41: 2014 spring turkey hunting experiences: Seeing a lot of turkeys.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1228	16.6%	20.5%	27.6%	20.0%	15.3%	3.0
Early season	725	17.0%	18.9%	27.0%	20.8%	16.3%	3.0
Late season	483	16.4%	23.2%	27.5%	19.0%	13.9%	2.9
$\chi^2=4.232$ n.s.							t=1.266 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 4-42: 2014 spring turkey hunting experiences: Sharing my hunting skills and knowledge.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1208	14.7%	12.5%	31.8%	23.2%	17.9%	3.2
Early season	720	14.3%	11.4%	32.2%	24.0%	18.1%	3.2
Late season	470	15.1%	14.5%	30.6%	22.3%	17.4%	3.1
$\chi^2=2.895$ n.s.							t=1.002 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-43: 2014 spring turkey hunting experiences: Thinking about personal values.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1202	8.5%	6.4%	31.0%	30.5%	23.5%	3.5
Early season	708	7.5%	6.8%	29.5%	32.8%	23.4%	3.6
Late season	474	9.7%	5.9%	32.9%	27.8%	23.6%	3.5
$\chi^2=5.299$ n.s.							t=1.178 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-44: 2014 spring turkey hunting experiences: Using my hunting equipment (calls, blinds, guns, etc.).

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1226	2.9%	4.1%	20.2%	36.2%	36.5%	4.0
Early season	725	2.8%	3.6%	18.9%	37.9%	36.8%	4.0
Late season	481	3.1%	4.6%	21.8%	34.7%	35.8%	4.0
$\chi^2=2.982$ n.s.							t=1.209 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-45: 2014 spring turkey hunting experiences: Getting my own food.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1222	49.5%	6.5%	12.8%	10.6%	20.6%	2.5
Early season	722	48.1%	6.8%	12.5%	10.8%	21.9%	2.5
Late season	480	51.5%	6.0%	13.8%	10.0%	18.8%	2.4
$\chi^2=2.836$ n.s.							t=1.360 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-46: 2014 spring turkey hunting experiences: The excitement of hunting.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1207	3.4%	3.3%	14.5%	28.5%	50.3%	4.2
Early season	714	2.9%	3.4%	14.0%	28.0%	51.7%	4.2
Late season	473	4.0%	3.4%	15.0%	29.8%	47.8%	4.1
$\chi^2=2.361$ n.s.							t=1.347 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-47: 2014 spring turkey hunting experiences: The challenge of making a successful shot.

	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1220	43.5%	3.0%	6.5%	11.8%	35.2%	2.9
Early season	720	41.3%	3.1%	6.3%	12.4%	37.1%	3.0
Late season	480	46.9%	3.1%	6.7%	10.6%	32.7%	2.8
$\chi^2=4.481$ n.s.							t=2.041*

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-48: 2014 spring turkey hunting experiences: Getting information about turkey hunting from media sources like magazines, TV, and social media.

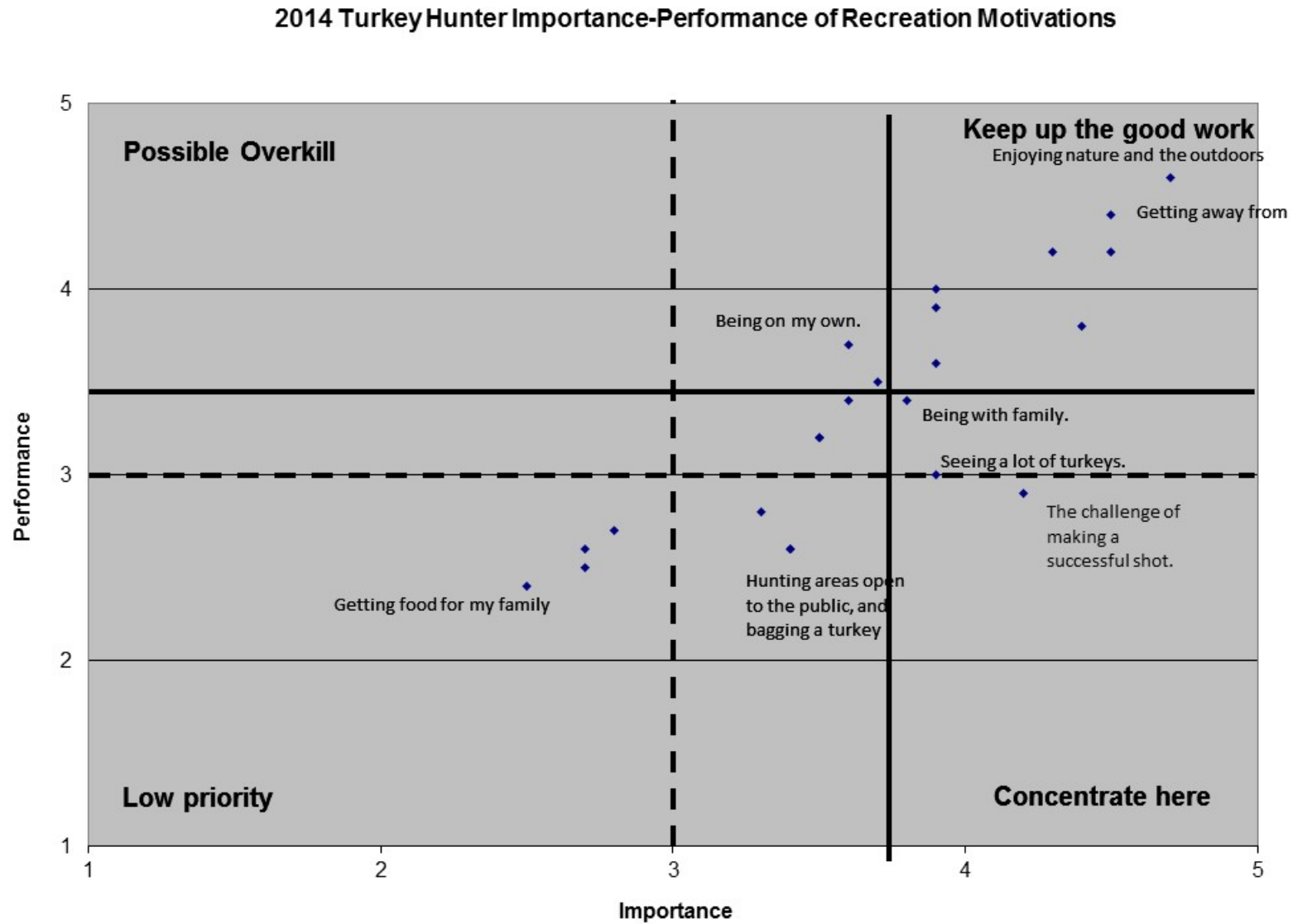
	n	Not at all	Slightly	Somewhat	Largely	Very much	Mean ^{1,2}
All respondents	1229	22.5%	19.0%	35.4%	15.0%	8.2%	2.7
Early season	726	23.0%	18.2%	36.4%	14.5%	8.0%	2.7
Late season	483	22.2%	20.5%	33.1%	15.5%	8.7%	2.7
$\chi^2=2.169$ n.s.							t=.262 n.s.

¹ This table does not include those respondents who did not hunt spring turkey in Minnesota in 2014.

² Mean is based on the scale: 1 = not at all, 2 = slightly, 3 = somewhat, 4= largely, 5 = very much.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Figure 4-1: Importance-performance analysis of turkey hunting motivations.



Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-49: Involvement in turkey hunting: Level of agreement/disagreement that...

	Mean ¹
Turkey hunting is one of the most enjoyable things I do.	4.0
I enjoy discussing turkey hunting with my friends.	3.9
Turkey hunting provides me with the opportunity to be with friends.	3.7
Turkey hunting is very important to me.	3.7
When I am turkey hunting I can really be myself.	3.6
To change my preference from turkey hunting to another recreation activity would require major rethinking.	3.5
Turkey hunting is one of the most satisfying things I do.	3.4
When I am turkey hunting, I don't have to be concerned about what other people think of me.	3.4
When I am turkey hunting, others see me the way I want them to see me.	3.3
I identify with the people and image associated with turkey hunting.	3.2
Participating in turkey hunting says a lot about who I am.	3.1
You can tell a lot about a person when you see them turkey hunting.	2.9
Most of my friends are in some way connected with turkey hunting.	2.6
A lot of my life is organized around turkey hunting.	2.5
Turkey hunting has a central role in my life.	2.4
	F=492.063***

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.

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Table 4-50: Involvement in turkey hunting: Agreement/disagreement that... Turkey hunting is one of the most enjoyable things I do.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1287	0.8%	4.3%	21.4%	45.7%	27.8%	4.0
Early season	761	0.9%	4.6%	19.2%	47.6%	27.7%	4.0
Late season	504	0.6%	3.6%	24.4%	43.5%	28.0%	3.9
$\chi^2 = 6.178$ n.s.							t = 396 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-51: Involvement in turkey hunting: Agreement/disagreement that... Turkey hunting provides me with the opportunity to be with friends.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1280	3.1%	7.3%	25.6%	42.8%	21.2%	3.7
Early season	758	2.9%	7.5%	24.7%	42.3%	22.6%	3.7
Late season	501	3.2%	7.0%	26.7%	43.7%	19.4%	3.7
$\chi^2 = 2.293$ n.s.							t = 903 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-52: Involvement in turkey hunting: Agreement/disagreement that... To change my preference from turkey hunting to another recreation activity would require major rethinking.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1283	4.9%	13.6%	32.3%	28.8%	20.4%	3.5
Early season	757	4.6%	11.9%	32.0%	30.3%	21.3%	3.5
Late season	504	5.6%	16.1%	32.1%	27.0%	19.2%	3.4
$\chi^2 = 6.152$ n.s.							t = 2098*

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-53: Involvement in turkey hunting: Agreement/disagreement that... A lot of my life is organized around turkey hunting.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1286	15.9%	36.5%	33.7%	11.3%	2.6%	2.5
Early season	760	15.4%	37.0%	33.6%	11.3%	2.8%	2.5
Late season	504	16.1%	36.5%	33.7%	11.1%	2.6%	2.5
$\chi^2 = .159$ n.s.							t = .261 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-54: Involvement in turkey hunting: Agreement/disagreement that... Turkey hunting has a central role in my life.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1275	19.5%	33.7%	32.0%	12.5%	2.3%	2.4
Early season	755	18.9%	35.0%	32.2%	11.7%	2.3%	2.4
Late season	499	19.6%	32.7%	31.5%	13.8%	2.4%	2.5
$\chi^2 = 1.755$ n.s.							t = .580 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-55: Involvement in turkey hunting: Agreement/disagreement that... Most of my friends are in some way connected with turkey hunting.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1282	15.7%	36.8%	27.5%	16.3%	3.7%	2.6
Early season	757	14.9%	35.8%	28.1%	17.4%	3.7%	2.6
Late season	503	16.7%	38.6%	26.6%	14.1%	4.0%	2.5
$\chi^2 = 3.612$ n.s.							t = 1.498 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-56: Involvement in turkey hunting: Agreement/disagreement that... When I am turkey hunting, others see me the way I want them to see me.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1272	6.8%	10.4%	40.3%	30.7%	11.9%	3.3
Early season	749	6.1%	10.1%	39.0%	33.0%	11.7%	3.3
Late season	501	7.0%	11.2%	42.1%	27.5%	12.2%	3.3
$\chi^2 = 4.286$ n.s.							t=1.232 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-57: Involvement in turkey hunting: Agreement/disagreement that... I identify with the people and image associated with turkey hunting.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1277	7.2%	15.3%	40.1%	30.3%	7.1%	3.2
Early season	753	7.2%	15.1%	39.6%	30.7%	7.4%	3.2
Late season	503	7.0%	15.5%	41.2%	29.6%	6.8%	3.1
$\chi^2 = 5.37$ n.s.							t=.407 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-58: Involvement in turkey hunting: Agreement/disagreement that... Turkey hunting is one of the most satisfying things I do.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1278	4.9%	13.4%	32.8%	34.7%	14.2%	3.4
Early season	755	4.4%	14.7%	31.7%	34.7%	14.6%	3.4
Late season	502	6.0%	11.2%	34.5%	35.1%	13.3%	3.4
$\chi^2 = 5.461$ n.s.							t=.292 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-59: Involvement in turkey hunting: Agreement/disagreement that... Participating in turkey hunting says a lot about who I am.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1281	8.0%	15.9%	40.1%	28.3%	7.7%	3.1
Early season	756	7.4%	16.3%	38.6%	29.6%	8.1%	3.1
Late season	504	8.7%	15.3%	42.9%	26.2%	6.9%	3.1
$\chi^2=3.966$ n.s.							t=1.246 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-60: Involvement in turkey hunting: Agreement/disagreement that... Turkey hunting is very important to me.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1278	2.7%	6.8%	30.5%	41.6%	18.3%	3.7
Early season	755	2.5%	6.9%	28.5%	42.9%	19.2%	3.7
Late season	502	3.0%	6.2%	33.7%	40.4%	16.7%	3.6
$\chi^2=4.589$ n.s.							t=1.415 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-61: Involvement in turkey hunting: Agreement/disagreement that... You can tell a lot about a person when you see them turkey hunting.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1279	9.2%	19.2%	46.8%	20.9%	4.0%	2.9
Early season	756	8.5%	19.3%	45.0%	22.2%	5.0%	3.0
Late season	502	10.0%	19.1%	49.6%	18.7%	2.6%	2.8
$\chi^2=8.320$ n.s.							t=2.027*

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 4: Motivations for and Involvement in Turkey Hunting

Table 4-62: Involvement in turkey hunting: Agreement/disagreement that... When I am turkey hunting I can really be myself.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1275	3.1%	6.5%	35.8%	40.9%	13.7%	3.6
Early season	753	2.9%	6.2%	34.4%	40.9%	15.5%	3.6
Late season	501	3.4%	6.4%	37.9%	41.3%	11.0%	3.5
$\chi^2=5.844$ n.s.							t=1.862 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-63: Involvement in turkey hunting: Agreement/disagreement that... I enjoy discussing turkey hunting with my friends.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1283	1.2%	2.7%	18.1%	57.9%	20.2%	3.9
Early season	759	1.6%	3.0%	16.1%	57.3%	22.0%	4.0
Late season	503	0.6%	2.2%	21.1%	58.8%	17.3%	3.9
$\chi^2=10.904^*$, V=.093							t=1.145 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 4-64: Involvement in turkey hunting: Agreement/disagreement that... When I am turkey hunting, I don't have to be concerned about what other people think of me.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1280	8.4%	13.0%	29.4%	32.8%	16.4%	3.4
Early season	757	9.5%	13.5%	26.8%	33.3%	16.9%	3.3
Late season	502	6.4%	12.2%	33.5%	32.7%	15.3%	3.4
$\chi^2=9.025$ n.s.							t=.582 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 5: Minnesota Turkey Populations and Management

Turkey Populations

Respondents were asked to indicate their perceptions and opinions about turkey populations in the areas they hunt most often for turkey, along with how populations should be managed. Responses were on 5-point scales for perceptions and opinions, and a 7-point scale for management. On average, respondents thought that turkey populations were about the same in the areas they hunted most ($\bar{x} = 3.0$) (Table 5-1). The majority of respondents thought the population in the area they hunted most was “about right” (58.0%) ($\bar{x} = 2.6$) (Table 5-2). On average, however, respondents thought the turkey population in the area they hunted most should be increased slightly ($\bar{x} = 4.9$) (Table 5-3). There were no significant differences in perceptions or opinions about turkey populations between hunters who hunted early season time periods and those who hunted later seasons.

Management Actions

Study participants were asked to indicate their level of opposition or support for several management actions, including: (a) opening “non-range” area to hunting (Table 5-4), (b) allowing hunters to buy *both* a regular and an archery turkey license (Table 5-5), (c) eliminating the turkey stamp contest and pictorial stamp (Table 5-6), (d) allowing unsuccessful turkey hunters to purchase a second license during a later unlimited permit time period (Table 5-7), (e) allowing successful turkey hunters to purchase a second license during a later unlimited permit time period (Table 5-8). Response was on the scale 1 (strongly oppose) to 5 (strongly support). On average, respondents were slightly supportive of all actions, except allowing successful turkey hunters to purchase a second license. In the strongest show of support, nearly 60% of respondents (58.7%) supported or strongly supported allowing unsuccessful turkey hunters to purchase a second license during a later unlimited time period. There were no significant differences in support or opposition to the listed management actions between hunters who hunted early season time periods and those who hunted later seasons.

Season and Permit Areas

Study participants were asked to indicate their level of opposition or support for several management actions related to seasons and permit areas (Table 5-9 to Table 5-13), including: (a) eliminating the different time periods for turkey hunting and having a single 45 day long turkey season, (b) eliminating the 12 different turkey permit areas and permitting open hunting throughout the state, (c) eliminating the different time periods for turkey hunting and having a single 45 day long turkey season while retaining the 12 different turkey permit areas, and (d) Eliminating the 12 different turkey permit areas while retaining different time periods for turkey hunting. On average, respondents were neutral to slightly opposed to all changes (Table 5-9). Compared to late season hunters, early season hunters reported slightly more opposition to (a) eliminating the different time periods for turkey hunting and having a single 45 day long turkey season, (b) eliminating the 12 different turkey permit areas and permitting open hunting throughout the state, and (c) eliminating the different time periods for turkey hunting and having a single 45 day long turkey season while retaining the 12 different turkey permit areas.

Section 5: Minnesota Turkey Populations and Management

Table 5-1: Trend in the turkey population in the past 5 years in the areas you most often hunt for turkey.

	n	A lot fewer	Fewer	About the same number	More	A lot more	Mean ¹
All respondents	1355	6.6%	23.4%	39.3%	25.8%	5.0%	3.0
Early season	773	7.1%	23.3%	39.2%	25.0%	5.4%	3.0
Late season	512	6.1%	24.0%	39.8%	25.8%	4.3%	3.0
$\chi^2=1.500$ n.s.							t=.014 n.s.

¹ Mean is based on the scale: 1 = a lot fewer, 2 = fewer, 3 = about the same number, 4 = more, 5 = a lot more.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-2: Opinion about turkey population in the areas you most often hunt for turkey.

	n	Way too low	Too low	About right	Too high	Way too high	Mean ¹
All respondents	1351	3.3%	34.0%	58.0%	3.7%	1.0%	2.7
Early season	770	3.9%	35.1%	55.7%	4.2%	1.2%	2.6
Late season	511	2.3%	34.2%	60.1%	2.7%	0.6%	2.7
$\chi^2=6.147$ n.s.							t=.359 n.s.

¹ Mean is based on the scale: 1 = way too low, 2 = too low, 3 = about right, 4 = too high, 5 = way too high.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-3: How the turkey population should be managed in the areas you most often hunt for turkey.

	n	Decrease 50%	Decrease 25%	Decrease 10%	No change	Increase 10%	Increase 25%	Increase 50%	Mean ¹
All respondents	1352	0.4%	2.1%	3.5%	31.4%	34.9%	20.3%	7.2%	4.9
Early season	773	0.1%	1.9%	4.0%	29.2%	35.3%	21.0%	8.4%	4.9
Late season	510	1.0%	2.0%	2.7%	33.7%	34.5%	20.2%	5.9%	4.8
$\chi^2=10.950$ n.s.									t=1.804 n.s.

¹ Mean is based on the scale: 1 = decrease 50%, 2 = decrease 25%, 3 = decrease 10%, 4 = no change, 5 = increase 10%, 6 = increase 25%, 7 = increase 50%.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-4: Support or oppose: Opening “non-range” area to hunting.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1354	5.7%	16.4%	44.5%	27.4%	6.0%	3.1
Early season	770	5.2%	15.8%	44.3%	27.9%	6.8%	3.2
Late season	515	5.2%	16.7%	45.8%	27.4%	4.9%	3.1
$\chi^2=2.193$ n.s.							t=.996 n.s.

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4 = support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 5: Minnesota Turkey Populations and Management

Table 5-5: Support or oppose: allowing hunters to buy both a regular and an archery turkey license.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1355	8.9%	19.3%	24.1%	31.6%	16.1%	3.3
Early season	773	8.8%	21.3%	23.4%	30.3%	16.2%	3.2
Late season	512	9.2%	15.6%	24.8%	34.0%	16.4%	3.3
$\chi^2=6.932$ n.s.							t=1.335 n.s.

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-6: Support or oppose eliminating the turkey stamp contest and pictorial stamp.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1358	8.2%	19.0%	47.6%	18.0%	7.2%	3.0
Early season	774	8.8%	19.1%	47.4%	17.6%	7.1%	3.0
Late season	514	7.2%	19.5%	46.9%	19.3%	7.2%	3.0
$\chi^2=1.478$ n.s.							t=.834 n.s.

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-7: Support or oppose allowing unsuccessful turkey hunters to purchase a second license during a later unlimited permit time period.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1358	9.0%	16.1%	16.2%	40.6%	18.1%	3.4
Early season	775	8.5%	15.5%	16.4%	42.1%	17.5%	3.5
Late season	513	10.3%	17.0%	16.2%	37.2%	19.3%	3.4
$\chi^2=3.841$ n.s.							t=.928 n.s.

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-8: Support or oppose allowing successful turkey hunters to purchase a second license during a later unlimited permit time period.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1361	24.5%	37.3%	15.3%	16.1%	6.8%	2.4
Early season	775	24.0%	37.3%	15.7%	16.4%	6.6%	2.4
Late season	515	24.2%	37.0%	15.5%	15.7%	7.6%	2.5
$\chi^2=.540$ n.s.							t=.158 n.s.

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 5: Minnesota Turkey Populations and Management

Table 5-9: Support or oppose changes to seasons and permit areas. Level of support/opposition to...

	Mean ¹
Eliminating the different time periods for turkey hunting and having a single 45 day long turkey season.	2.9
Eliminating the 12 different turkey permit areas and permitting open hunting throughout the state.	2.9
Eliminating the different time periods for turkey hunting and having a single 45 day long turkey season <u>while retaining the 12 different turkey permit areas.</u>	2.8
Eliminating the 12 different turkey permit areas <u>while retaining different time periods for turkey hunting.</u>	2.6
	F=24.467***

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p< 0.01, ***p< 0.001

Section 5: Minnesota Turkey Populations and Management

Table 5-10: Support or oppose eliminating the different time periods for turkey hunting and having a single 45 day long turkey season.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1349	19.5%	25.0%	13.6%	25.8%	16.1%	2.9
Early season	770	21.3%	27.8%	14.0%	22.1%	14.8%	2.8
Late season	511	17.8%	20.9%	13.7%	30.5%	17.0%	3.1
$\chi^2=17.244^{**}$							t=3.391 ^{**}

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-11: Support or oppose eliminating the 12 different turkey permit areas and permitting open hunting throughout the state.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1349	16.1%	27.4%	20.8%	23.4%	12.3%	2.9
Early season	769	17.4%	29.8%	20.2%	20.9%	11.7%	2.8
Late season	512	14.3%	24.0%	22.3%	26.4%	13.1%	3.0
$\chi^2=10.667^*$							t=2.794 ^{**}

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-12: Support or oppose eliminating the different time periods for turkey hunting and having a single 45 day long turkey season while retaining the 12 different turkey permit areas.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1344	16.7%	26.6%	24.7%	21.6%	10.3%	2.8
Early season	768	18.1%	28.1%	24.2%	18.6%	10.9%	2.8
Late season	509	15.3%	23.6%	25.9%	25.7%	9.4%	2.9
$\chi^2=12.055^*$							t=2.005 [*]

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 5-13: Support or oppose Eliminating the 12 different turkey permit areas while retaining different time periods for turkey hunting.

	n	Strongly oppose	Oppose	Neutral	Support	Strongly support	Mean ¹
All respondents	1342	16.6%	29.1%	34.0%	15.6%	4.6%	2.6
Early season	768	17.3%	31.0%	31.6%	15.5%	4.6%	2.6
Late season	507	15.4%	25.4%	38.7%	15.4%	5.1%	2.7
$\chi^2=8.534$ n.s.							t=1.695 n.s.

¹ Mean is based on the scale: 1 = strongly oppose, 2 = oppose, 3 = neutral, 4= support, 5 = strongly support.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 6: Choosing a Season Structure for Minnesota Spring Wild Turkey Hunting

Season Choice

This study included a season stated choice experiment. Stated choice models present hypothetical scenarios to respondents to derive individuals' preferences for alternatives composed of multiple resource and management attributes (Adamowicz et al. 1994; Oh et al. 2005). The approach depends on the imperfect relationship between behavioral intention and behavior (Ajzen and Fishbein 1980), yet allows estimation of the effects of all parameters of interest independently. Individuals are assumed to be utility maximizers, and respondents' choices reflect the perceived utility of the alternatives presented (McFadden 1981). Respondent choices reflect the utility (or part-worths) of attributes and attribute levels, and are aggregated to estimate the utility of attributes and attribute levels in a population (McFadden 1981).

Alternatives presented in this season choice experiment consisted of four attributes: (a) season structure, (b) second permit, (c) hunter interference, and (d) lottery (Table 6-1). There were four possible levels for the season structure and lottery attributes, and three levels for both second permit and hunter interference attributes. In order to have adequate power to conduct this experiment, we developed 10 survey versions. In each, respondents were presented with 10 season structure choice scenarios and asked to choose one option. Each scenario included two season structure choices plus a "none" (i.e., I would not hunt turkey in Minnesota with these season structures) option.

Results for the hierarchical Bayes model (Tables 6-2 and 6-3), including average utilities for each attribute level, indicated that the current season structure, a second permit only to unsuccessful hunters, low hunter interference, and a lottery only in high demand areas were preferred (Table 6-3). Attribute importances (Table 6-2) described how much influence each attribute had on lake choice. The importance of attributes in influencing a decision can be measured by comparing the difference between the highest and lowest part-worth utility of its levels. The most important attribute was a second permit, followed by hunter interference, season structure, then lottery.

Section 6: Choosing a Season Structure

Table 6-1. Possible season choice characteristics in stated choice experiment

Regulatory Attribute	Possible values
Season structure	<ul style="list-style-type: none"> - <u>Current season structure</u> with <u>six consecutive 5-day seasons</u> followed by two consecutive <u>7-day seasons</u>, and the first season starting the Wednesday nearest April 15. - <u>Six consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15. - <u>Four consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, followed by one <u>14-day season</u> running through the end of May. - <u>Three consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, followed by one <u>21-day season</u> running through the end of May.
Second permit	<ul style="list-style-type: none"> - No permit for a 2nd turkey. - 2nd permit to unsuccessful hunters. - 2nd permit to all hunters.
Hunter interference	<ul style="list-style-type: none"> - Higher potential for interference from other hunters. - Moderate potential for interference from other hunters - Low potential for interference from other hunters
Lottery	<ul style="list-style-type: none"> - Lottery for <u>all areas</u> for the <u>first 3</u> time periods. - Lottery for <u>all areas</u> for the <u>first</u> time period. - Lottery for only a few high demand areas. - No lottery.

Table 6-2: Relative attribute importance derived from hierarchical Bayes estimation of utilities.

Season choice attribute	Importance	SD
Season structure	20.4	10.8
Second permit	35.4	15.4
Hunter interference	25.0	14.4
Lottery	19.1	11.2

Notes: n=1,284

Table 6-3: Results of the hierarchical Bayes model for season choice for Minnesota turkey hunters showing utilities of different levels of season attributes.

Choice attribute - level	Average utilities	SD
Season Structure		
- <i>Current season</i>	7.7	47.9
- 6 7-day seasons	-1.4	24.8
- 4 7-day seasons & 1 14-day season	0.9	22.1
- 3 7-day seasons & 1 21-day season	-7.3	38.7
Second permit		
- No	7.5	66.2
- <i>Yes, unsuccessful</i>	33.6	47.4
- Yes, all	-41.2	59.4
Hunter interference		
- Higher	-49.4	36.5
- Moderate	7.3	12.4
- <i>Low</i>	42.1	33.8
Lottery		
- Yes, 1st 3 times periods	0.1	40.2
- Yes, 1st time period	-5.8	19.0
- <i>Yes, high demand areas</i>	11.0	21.9
- No	-5.4	44.4
None	-164.4	200.8

Notes: n=1,284, attribute with highest utility in italics.

Section 7: Trust in Minnesota Department of Natural Resources

Trust in the Minnesota Department of Natural Resources

Respondents were asked to rate their agreement with six items addressing their trust in the Minnesota Department of Natural Resources using the scale 1 (strongly disagree) to 5 (strongly agree). Mean responses were above the neutral point on the scale for all items (Table 7-1). Means and frequencies for the 6 trust statements strategies are presented in Tables 7-2 through 7-7. There were no significant differences in trust ratings between hunters who hunted early season time periods and those who hunted later seasons. Level of education was positively correlated with all trust measures, suggesting that individuals with higher levels of education were more trusting of the Minnesota Department of Natural Resources.

Desire for Voice and Management Decisions

Respondents rated 14 statements related to desire for voice, fairness, acceptance, suggestions, and trust related to Minnesota DNR turkey management, using the scale 1 (not at all) to 5 (very much) (Tables 7-8 to 7-22). Respondents agreed most that “Minnesotans have the right to voice opinions about turkey management to the DNR” ($\bar{x} = 4.2$), (Table 7-19). Respondents also agreed somewhat that: (a) they intend to respect the advice of MNDNR turkey management on future management decisions ($\bar{x} = 3.6$) (Table 7-11), (b) they are willing to accept the advice of MNDNR turkey management ($\bar{x} = 3.6$) (Table 7-22), and they accept the advice of MNDNR turkey management ($\bar{x} = 3.5$), (Table 7-13). Respondents agreed slightly that: (a) they consider an opportunity to voice opinions to Minnesota DNR about turkey management important ($\bar{x} = 3.4$), (Table 7-14), (b) they trust MNDNR turkey management ($\bar{x} = 3.4$), (Table 7-20), (c) they consider Minnesota DNR decision-making procedures related to turkey management fair ($\bar{x} = 3.4$), (Table 7-18), (d) they think the Minnesota DNR handles turkey management related decisions fairly ($\bar{x} = 3.4$), (Table 7-21), (e) they consider MNDNR turkey management to be trustworthy ($\bar{x} = 3.4$), (Table 7-17), (f) they consider an opportunity to voice opinions to Minnesota DNR turkey management desirable ($\bar{x} = 3.3$), (Table 7-9), and (g) they can make supportive comments to the MNDNR about turkey management ($\bar{x} = 3.2$), (Table 7-16). On average, respondents were neutral that: (a) they have the opportunity to voice opinions to the Minnesota DNR about turkey management ($\bar{x} = 3.0$), (Table 7-10), (b) can make suggestions to the MNDNR to improve turkey management ($\bar{x} = 3.0$), (Table 7-12), and (c) they can make critical comments to the MNDNR about turkey management ($\bar{x} = 3.0$), (Table 7-15).

There were no significant differences in responses to statements related to desire for voice, fairness, and trust between hunters who hunted early season time periods and those who hunted later seasons. Level of education was positively correlated with all measures, suggesting that individuals with higher levels of education sought greater voice, were more accepting, and more trusting of turkey management decisions by the Minnesota Department of Natural Resources. More educated individuals also felt that the agency was more open to suggestions, and decisions were more fair. Alternatively, percentage of life lived in Minnesota was negatively correlated with most of these measures, suggesting that individuals who had lived in the state a greater proportion of their lives sought less voice, were less accepting, and less trusting of turkey management decisions by the Minnesota Department of Natural Resources. These individuals also felt that the agency was less open to suggestions and decisions were less fair.

Section 7: Trust in the Minnesota Department of Natural Resources

Table 7-1: Mean statewide results: Trust in the Minnesota Department of Natural Resources.

Trust item	N	Mean ¹
The Minnesota DNR does a good job of managing wild turkey in Minnesota.	1326	3.6
The Minnesota DNR has wildlife managers and biologists who are well-trained for their jobs.	1318	3.6
The Minnesota DNR can be trusted to make decisions about turkey management that are good for the resource.	1325	3.5
The Minnesota DNR will make decisions about turkey management in a way that is fair.	1325	3.5
When deciding about wild turkey management in Minnesota, the Minnesota DNR will be open and honest in the things they do and say.	1326	3.4
The Minnesota DNR listens to turkey hunters' concerns.	1322	3.4

¹ F=44.900***. Mean based on scale: 1=strongly disagree, 2=disagree, 3=neither, 4=agree, 5=strongly agree.

Table 7-2: Trust in Minnesota Department of Natural Resources: Agreement/disagreement that... The Minnesota DNR does a good job of managing wild turkey in Minnesota.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1326	1.7%	5.6%	32.5%	51.9%	8.3%	3.6
Early season	757	1.7%	5.0%	32.2%	52.6%	8.5%	3.6
Late season	503	1.8%	6.6%	34.0%	49.5%	8.2%	3.6
$\chi^2=2.157$ n.s.							t= 1.178 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-3: Trust in Minnesota Department of Natural Resources: Agreement/disagreement that... When deciding about turkey management in Minnesota, the Minnesota DNR will be open and honest in the things they do and say.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1326	2.3%	8.4%	41.3%	41.1%	6.9%	3.4
Early season	758	1.8%	7.7%	41.7%	42.0%	6.9%	3.4
Late season	502	3.0%	9.6%	41.8%	38.2%	7.4%	3.4
$\chi^2=4.155$ n.s.							t= 1.438 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 7: Trust in the Minnesota Department of Natural Resources

Table 7-4: Trust in Minnesota Department of Natural Resources: Agreement/disagreement that... The Minnesota DNR can be trusted to make decisions about turkey management that are good for the resource.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1325	2.4%	10.4%	32.5%	47.5%	7.2%	3.5
Early season	756	2.0%	9.1%	34.9%	47.1%	6.9%	3.5
Late season	503	3.2%	11.7%	28.6%	48.5%	8.0%	3.5
$\chi^2=8.064$ n.s.							t= .287 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-5: Trust in Minnesota Department of Natural Resources: Agreement/disagreement that... The Minnesota DNR will make decisions about turkey management in a way that is fair.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1325	2.1%	7.2%	34.9%	49.5%	6.3%	3.5
Early season	757	2.0%	6.2%	35.0%	51.4%	5.4%	3.5
Late season	503	2.4%	8.2%	35.0%	47.1%	7.4%	3.5
$\chi^2=4.809$ n.s.							t= .681 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-6: Trust in Minnesota Department of Natural Resources: Agreement/disagreement that... The Minnesota DNR has wildlife managers and biologists who are well-trained for their jobs.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1318	1.4%	4.9%	36.9%	47.3%	9.4%	3.6
Early season	753	1.2%	5.0%	36.5%	47.8%	9.4%	3.6
Late season	500	2.0%	5.0%	37.0%	46.2%	9.8%	3.6
$\chi^2=1.512$ n.s.							t= .532 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 7-7: Trust in Minnesota Department of Natural Resources: Agreement/disagreement that... The Minnesota DNR listens to turkey hunters' concerns.

	n	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean ¹
All respondents	1322	1.7%	10.1%	43.6%	38.7%	5.8%	3.4
Early season	753	1.9%	9.0%	43.7%	40.0%	5.4%	3.4
Late season	503	1.6%	11.5%	43.3%	37.2%	6.4%	3.4
$\chi^2 = 3.055$ n.s.							t = .627 n.s.

¹ Mean is based on the scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-8: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources.

Item	N	Mean ¹
Minnesotans should have the right to voice opinions about turkey management to the DNR.	1307	4.2
To what extent do you intend to respect the advice of MNDNR turkey management on future management decisions?	1299	3.6
To what extent are you willing to accept the advice of MNDNR turkey management?	1306	3.6
To what extent do you accept the advice of MNDNR turkey management?	1287	3.5
To what extent do you consider an opportunity to voice opinions to Minnesota DNR about turkey management important?	1307	3.4
To what extent do you consider MNDNR turkey management to be trustworthy?	1284	3.4
To what extent do you consider Minnesota DNR decision-making procedures related to turkey management fair?	1305	3.4
To what extent do you trust MNDNR turkey management?	1296	3.4
To what extent do you think the Minnesota DNR handles turkey management related decisions fairly?	1306	3.4
To what extent do you consider an opportunity to voice opinions to Minnesota DNR turkey management desirable?	1322	3.3
To what extent do you feel you can make <u>supportive</u> comments to the MNDNR about turkey management?	1309	3.2
To what extent do you feel you have the opportunity to voice opinions to the Minnesota DNR about turkey management?	1317	3.0
To what extent do you feel you can make suggestions to the MNDNR to improve turkey management?	1315	3.0
To what extent do you feel you can make <u>critical</u> comments to the MNDNR about turkey management?	1307	3.0

¹ F=256.449***. Mean based on scale: 1=not at all, 5=very much.

Section 7: Trust in the Minnesota Department of Natural Resources

Table 7-9: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you consider an opportunity to voice opinions to Minnesota DNR turkey management desirable?

	n	Not at all				Very much	Mean ¹
All respondents	1322	6.1%	13.0%	38.9%	28.2%	13.8%	3.3
Early season	754	4.9%	12.3%	40.3%	29.2%	13.3%	3.3
Late season	501	7.6%	13.0%	36.9%	28.1%	14.4%	3.3
$\chi^2=4.980$ n.s.							t= .795 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-10: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you feel you have the opportunity to voice opinions to the Minnesota DNR about turkey management?

	n	Not at all				Very much	Mean ¹
All respondents	1317	9.4%	19.4%	42.7%	23.2%	5.3%	3.0
Early season	752	9.3%	18.9%	42.3%	23.8%	5.7%	3.0
Late season	498	8.6%	20.9%	43.6%	21.7%	5.2%	3.0
$\chi^2=1.594$ n.s.							t= .649 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-11: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you intend to respect the advice of MNDNR turkey management on future management decisions?

	n	Not at all				Very much	Mean ¹
All respondents	1299	2.2%	7.1%	36.2%	40.7%	13.8%	3.6
Early season	741	2.2%	7.0%	35.6%	42.4%	12.8%	3.6
Late season	491	2.4%	7.1%	35.2%	40.1%	15.1%	3.6
$\chi^2=1.575$ n.s.							t= .302 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 7-12: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you feel you can make suggestions to the MNDNR to improve turkey management?

	n	Not at all				Very much	Mean ¹
All respondents	1315	8.6%	19.5%	43.6%	22.7%	5.6%	3.0
Early season	750	8.0%	18.9%	43.9%	24.1%	5.1%	3.0
Late season	498	8.6%	21.5%	42.6%	20.7%	6.6%	3.0
$\chi^2=4.085$ n.s.							t= .724 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-13: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you accept the advice of MNDNR turkey management?

	n	Not at all				Very much	Mean ¹
All respondents	1287	2.7%	8.1%	38.7%	39.4%	11.1%	3.5
Early season	732	3.1%	8.6%	39.1%	39.2%	10.0%	3.4
Late season	491	2.2%	7.5%	38.1%	39.9%	12.2%	3.5
$\chi^2=2.748$ n.s.							t= 1.552 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-14: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you consider an opportunity to voice opinions to Minnesota DNR about turkey management important?

	n	Not at all				Very much	Mean ¹
All respondents	1307	4.5%	11.3%	38.6%	34.2%	11.4%	3.4
Early season	747	4.0%	11.6%	39.0%	34.0%	11.4%	3.4
Late season	495	4.8%	11.3%	37.2%	35.4%	11.3%	3.4
$\chi^2=.909$ n.s.							t= .020 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

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Table 7-15: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you feel you can make critical comments to the MNDNR about turkey management?

	n	Not at all				Very much	Mean ¹
All respondents	1307	8.6%	18.1%	42.3%	24.1%	6.9%	3.0
Early season	746	8.3%	18.8%	42.1%	24.1%	6.7%	3.0
Late season	496	8.5%	16.9%	43.1%	24.2%	7.3%	3.0
$\chi^2=.774$ n.s.							t= .457 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-16: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you feel you can make supportive comments to the MNDNR about turkey management?

	n	Not at all				Very much	Mean ¹
All respondents	1309	5.8%	14.7%	40.9%	30.5%	8.2%	3.2
Early season	746	6.4%	13.8%	39.3%	32.4%	8.0%	3.2
Late season	497	4.4%	16.1%	42.5%	28.4%	8.7%	3.2
$\chi^2=5.667$ n.s.							t= .198 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-17: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you consider MNDNR turkey management to be trustworthy?

	n	Not at all				Very much	Mean ¹
All respondents	1284	3.3%	9.1%	40.3%	37.5%	9.7%	3.4
Early season	729	3.3%	9.7%	38.5%	39.6%	8.8%	3.4
Late season	489	3.3%	8.6%	41.9%	35.2%	11.0%	3.4
$\chi^2=4.347$ n.s.							t= .236 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 7: Trust in the Minnesota Department of Natural Resources

Table 7-18: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you consider Minnesota DNR decision-making procedures related to turkey management fair?

	n	Not at all				Very much	Mean ¹
All respondents	1305	2.9%	8.7%	41.8%	38.6%	8.0%	3.4
Early season	745	3.4%	8.6%	39.2%	41.6%	7.2%	3.4
Late season	494	2.0%	9.9%	43.5%	35.8%	8.7%	3.4
$\chi^2=7.128$ n.s.							t= .305 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-19: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: Minnesotans should have the right to voice opinions about turkey management to the DNR.

	n	Not at all				Very much	Mean ¹
All respondents	1307	0.7%	2.4%	17.6%	39.1%	40.2%	4.2
Early season	745	0.7%	2.6%	17.7%	40.9%	38.1%	4.1
Late season	496	0.8%	2.0%	17.9%	37.1%	42.1%	4.2
$\chi^2=2.772$ n.s.							t= .911 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-20: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you trust MNDNR turkey management?

	n	Not at all				Very much	Mean ¹
All respondents	1296	3.2%	9.3%	37.8%	39.5%	10.1%	3.4
Early season	741	3.1%	9.0%	37.1%	40.8%	10.0%	3.5
Late season	490	3.1%	9.8%	38.8%	38.0%	10.4%	3.4
$\chi^2=1.031$ n.s.							t= .496 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 7: Trust in the Minnesota Department of Natural Resources

Table 7-21: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent do you think the Minnesota DNR handles turkey management related decisions fairly?

	n	Not at all				Very much	Mean ¹
All respondents	1306	2.7%	7.8%	41.4%	40.2%	7.9%	3.4
Early season	743	2.6%	7.8%	40.0%	42.4%	7.3%	3.4
Late season	496	2.4%	8.1%	43.8%	37.1%	8.7%	3.4
$\chi^2=3.890$ n.s.							t= .507 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Table 7-22: Voice, perceived fairness, openness in the Minnesota Department of Natural Resources: To what extent are you willing to accept the advice of MNDNR turkey management?

	n	Not at all				Very much	Mean ¹
All respondents	1306	2.2%	6.1%	36.8%	43.0%	11.9%	3.6
Early season	746	2.1%	6.6%	35.8%	44.8%	10.7%	3.6
Late season	493	1.8%	5.7%	38.5%	41.2%	12.8%	3.6
$\chi^2=3.107$ n.s.							t= .414 n.s.

¹ Mean based on scale: 1=not at all, 5=very much..
n.s. = not significant, *p < 0.05, **p < 0.01, ***p < 0.001

Section 8: Characteristics of Turkey Hunters in Minnesota

Turkey Hunting Background

At the beginning of the survey instrument, respondents were asked to report the year they first hunted turkey, and the number of years hunting turkey in the state of Minnesota. Respondents had hunted turkey for an average of 13.5 years (not necessarily in Minnesota), and 9.4 years in Minnesota (Table 8-1). Statewide nearly 25% of respondents began hunting turkey in 2010 or more recently.

Nearly 4 in 10 respondents (39.0%) hunted for turkey in Minnesota every year during the past 5 years (Table 8-2). Late season hunters were significantly more likely to have hunted all the past 5 years (46.1%) compared to early season hunters (35.7%). Of the 9.2% of respondents who did not hunt turkey during any of the years between 2009 and 2013, approximately nearly all (95.2%) hunted during 2014. This would be expected because we drew a sample of those who purchased turkey stamps in 2014.

Membership in Conservation and Hunting Organizations

Nearly 20% of respondents reported a membership in the National Wild Turkey Federation (18.9%) and 29.3% reported having a membership in a local sportsmen's club (Table 8-3).

Other Species Hunted in Minnesota

Over 9 of 10 respondents (91.9%) hunted for deer in Minnesota, with about half targeting pheasants (53.7%), waterfowl (46.2%), and grouse (47.5%) (Table 8-4). About one-third of respondents targeted small game (33.4%) or predators (33.4%), and only 14.3% targeted bears.

Demographics

The mean age of the study population of respondents was 51.8 years (Table 8-5), and on average, they had lived in Minnesota for 93.9% of their lives (Table 8-6). Nearly 9 in 10 respondents (88.7%) were male (Table 8-7). Over one-third of respondents had (a) a 4-year college degree or higher level of education (35%) (Table 8-8), and (b) a household income greater than \$100,000 (34.3%) (Table 8-9).

Late Respondents

A comparison of late respondents to other respondents found that late respondents ($\bar{x} = 46.3$ years) were significantly younger than early respondents ($\bar{x} = 51.8$ years) ($t=13.921^{***}$), but there was no significant difference in the average level of education. Late respondents had been turkey hunting in Minnesota for somewhat fewer years ($\bar{x} = 8.4$ years) than early respondents had ($\bar{x} = 9.4$ years) ($t = 5.199^{***}$). Late respondents had hunted an average of 3.0 of the previous 5 years compared to 3.4 years for early respondents ($t = 7.806^{***}$). A greater proportion of early respondents (38.5%) than late respondents (34.5%) reported bagging a turkey during the 2014 season ($\chi^2 = 9.343^{**}$), but there was no significant difference in the overall level of satisfaction or harvest satisfaction between the groups. Late respondents, however, were more satisfied with the number of turkeys seen ($\bar{x} = 4.7$ vs. 4.5, $t=4.156^{***}$), but less satisfied with regulations ($\bar{x} = 5.1$ vs. 5.2, $t=3.842^{***}$), and the number of other hunters seen ($\bar{x} = 4.9$ vs. 5.3, $t=7.478^{***}$).

Section 8: Characteristics of Minnesota Spring Wild Turkey Hunters

Table 8-1: Number of years hunting turkey.

	n	Mean years
Not necessarily in Minnesota	1329	13.5
In Minnesota	1340	9.4

Table 8-2: Recent years hunting turkey in Minnesota.

	2013	2012	2011	2010	2009	None of these years	All of these years
All respondents	76.6%	74.2%	65.9%	63.9%	57.8%	9.2%	39.0%
Early season	75.7%	74.6%	64.7%	63.3%	56.1%	7.8%	35.7%
Late season	79.8%	75.9%	69.5%	68.2%	61.7%	10.7%	46.1%
	$\chi^2=2.929$ n.s.	$\chi^2=.298$ n.s.	$\chi^2=3.234$ n.s.	$\chi^2=3.241$ n.s.	$\chi^2=4.072^*$	$\chi^2=3.297$ n.s.	$\chi^2=14.062^{***}$

Table 8-3: Membership in hunting-related groups.

	% of hunters indicating membership in that group:			
	No Groups ¹	National Wild Turkey Federation	Local sportsmen's club	Other
All respondents	55.7%	18.9%	29.3%	32.8%
Early season	57.2%	19.1%	30.7%	31.7%
Late season	54.8%	19.9%	27.7%	34.7%
	$\chi^2=.623$ n.s.	$\chi^2=.099$ n.s.	$\chi^2=1.130$ n.s.	$\chi^2=1.048$ n.s.

¹“Not a member of any conservation/hunting organization” was not a direct question. It was determined by counting those respondents who did not indicate they were members of any of the group categories.

Table 8-4: Other species hunted in Minnesota.

	Other species hunted in Minnesota							
	Deer	Pheasants	Waterfowl	Grouse	Other small game	Bears	Predators	NONE
All respondents	91.9%	53.7%	46.2%	47.5%	33.4%	14.3%	33.4%	2.7%
Early season	92.7%	54.9%	45.0%	47.4%	32.4%	17.2%	34.1%	2.6%
Late season	91.8%	52.1%	48.5%	48.1%	36.2%	10.6%	34.2%	2.3%
	$\chi^2=.334$ n.s.	$\chi^2=1.007$ n.s.	$\chi^2=1.576$ n.s.	$\chi^2=.060$ n.s.	$\chi^2=2.005$ n.s.	$\chi^2=10.745^{**}$	$\chi^2=.004$ n.s.	$\chi^2=.087$ n.s.

Section 8: Characteristics of Minnesota Spring Wild Turkey Hunters

Table 8-5: Age of study population and survey respondents

	n	18-19	20 – 29	30 – 39	40 – 49	50 - 59	60 - 64	65 +	Mean age
Population¹									
All respondents	1334	0.9%	8.3%	12.7%	16.5%	28.1%	13.2%	20.3%	51.8
Early season	762	1.0%	8.3%	11.7%	16.8%	29.1%	13.3%	19.8%	51.8
Late season	505	0.8%	8.7%	14.7%	15.4%	27.1%	12.7%	20.6%	51.5
		$\chi^2=3.315$ n.s.							t=.414 n.s.

¹ Source: DNR license database

Table 8-6: Number and percent of years living in Minnesota

	n	Mean number of years	% of life
All respondents	1349	48.6	93.9%
Early season		48.7	94.0%
Late season		48.3	94.1%
		t=.367 n.s.	t=.092 n.s.

Table 8-7: Gender.

	n	% Male	% Female
All respondents	1345	88.7%	11.3%
Early season	769	88.7%	11.3%
Late season	508	87.6%	12.4%
		$\chi^2=.349$ n.s.	

Table 8-8: Education.

	n	GS	Some HS	HS degree	Some vo-tech	Vo-tech degree	Some college	4 yr. degree	Some grad. school	Grad. degree
All respondents	1348	0.7%	1.6%	16.8%	10.5%	19.7%	15.6%	20.6%	4.5%	9.9%
Early season	768	1.0%	1.7%	15.8%	11.2%	20.4%	15.0%	21.1%	4.8%	9.0%
Late season	513	0.4%	1.4%	17.9%	9.6%	18.7%	16.0%	20.5%	4.1%	11.5%
		$\chi^2=6.588$ n.s.								

Table 8-9: Mean annual household income

	n	Mean income	% \$100,000+
All respondents	980	\$91,516.71	34.4%
Early season	572	\$92,490.58	35.1%
Late season	358	\$88,878.58	32.3%
		t=.810 n.s.	$\chi^2=.753$ n.s.

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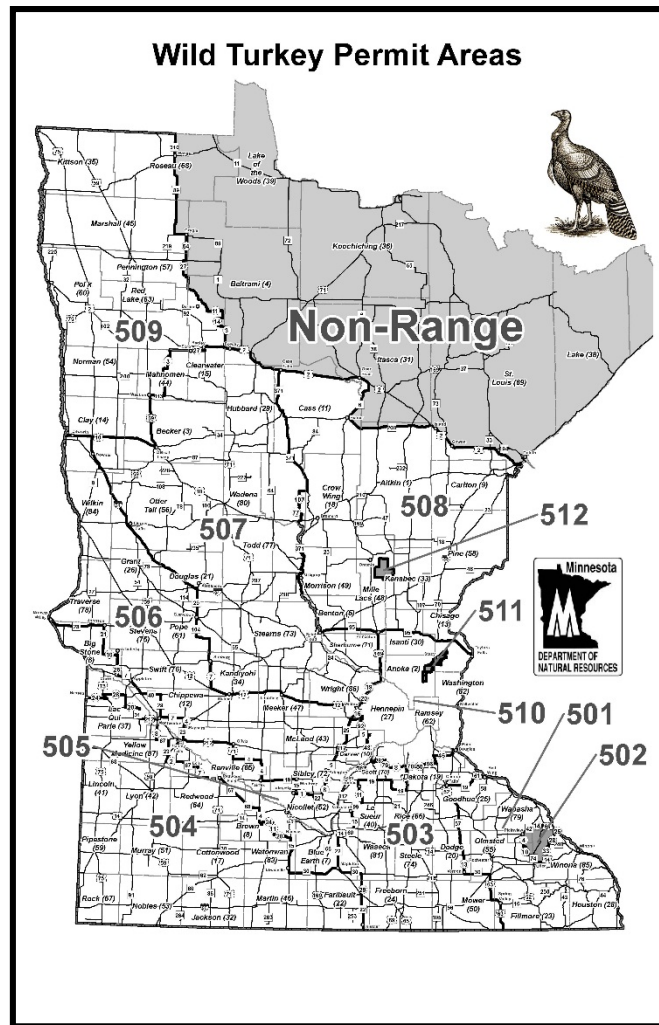
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Appendix A: Survey Instrument

MINNESOTA SPRING WILD TURKEY HUNTING

A study of hunters' opinions and activities



**A cooperative study conducted by the University of Minnesota for the
Minnesota Department of Natural Resources**

Your help on this study is greatly appreciated!

Please return your completed questionnaire in the enclosed envelope. The envelope is self-addressed and no postage is required. Thanks!

Minnesota Cooperative Fish and Wildlife Research Unit,
Department of Fisheries, Wildlife and Conservation Biology
University of Minnesota
St. Paul, Minnesota 55108-6124
(612) 624-3479
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VERSION 3

Part I. Your Turkey Hunting Background

Q1. In what year did you first hunt turkey, not necessarily in Minnesota? *If uncertain please estimate.*

_____ year (*If you have never hunted turkey, please enter '0' here, and return your survey.*)

Q2. How many years have you hunted turkey in Minnesota? *If uncertain please estimate.*

_____ years

Q3. For the 5 years prior to this year's spring turkey season, indicate which years you hunted spring turkey in Minnesota? (*Check all that apply.*)

- 2013
- 2012
- 2011
- 2010
- 2009
- I did not hunt turkey in Minnesota during any of these years.

Q4. Did you hunt turkey in Minnesota during the 2014 spring season? (*Please check one.*)

- No → (*Skip to Part V, question Q21.*)
- Yes (*Please continue with Part II, Q5.*)



Part II. Your 2014 Minnesota Spring Turkey Hunting Season

Next we have a few questions about your hunting experiences during the 2014 Minnesota spring turkey-hunting season. (*If you did not hunt turkey in Minnesota in 2014 please skip to question Q21.*)

Q5. Did you apply for an early season (A, B, or C) 2014 spring turkey hunt?

- No (*If no, please skip to Q6.*)
- Yes (*If yes, please answer Q5a.*)



Q5a. If yes, please indicate which season you applied for:

- Season A. April 16-20
- Season B. April 21-25
- Season C. April 26-30

Q6. Please indicate which season/time period you hunted for spring turkey in Minnesota in 2014.

- Season A. April 16-20
- Season B. April 21-25
- Season C. April 26-30
- Season D. May 1-5
- Season E. May 6-10
- Season F. May 11-15
- Season G. May 16-22
- Season H. May 23-29

Q7. Please indicate which permit area you hunted for spring turkey in Minnesota in 2014.

- | | | |
|------------------------------|------------------------------|------------------------------|
| <input type="checkbox"/> 501 | <input type="checkbox"/> 505 | <input type="checkbox"/> 509 |
| <input type="checkbox"/> 502 | <input type="checkbox"/> 506 | <input type="checkbox"/> 510 |
| <input type="checkbox"/> 503 | <input type="checkbox"/> 507 | <input type="checkbox"/> 511 |
| <input type="checkbox"/> 504 | <input type="checkbox"/> 508 | <input type="checkbox"/> 512 |

Q8. During the 2014 Minnesota spring turkey season, about how many days did you hunt on...

Weekend days or holidays: _____ days

Weekdays (Monday-Friday): _____ days

Q9. Did you bag a turkey during the 2014 Minnesota spring turkey season? (Please check one.)

- No
- Yes

Q10. How easy or difficult was it for you to find a place to hunt during the 2014 Minnesota spring turkey season? (Circle one number below.)

Very difficult	1	2	3	4	5	6	7	8	9	Very easy
---------------------------	---	---	---	---	---	---	---	---	---	----------------------

Q11. What type of land did you hunt during the 2014 Minnesota spring turkey season? (Please check one.)

- Public land only (If you only hunted public land, please answer Q11a.)
 - Private land only
 - Both private and public land
- (If you hunted private land at all, please skip to Q12.)

Q11a. If you hunted only public land, was it because you could not gain access to private land? (Check one.)

- No
- Yes

Q12. What is an acceptable number of other turkey hunters (not from your party) to see in one day while you are in the field hunting? (Please fill in a number or check one of the other two options.)

It is OK to see as many as: _____ turkey hunters in the field in one day while turkey hunting.

It doesn't matter to me ____ It matters to me, but I cannot specify a number ____

Q13. About how many turkey hunters (that were not part of your party) did you encounter on your MOST crowded day in the field during the 2014 Minnesota spring turkey season (Please fill in a number below)?

_____ other turkey hunters (not from my party)

Q14. Using the scale below, circle the number that best describes your perceptions of crowding on your MOST crowded day during the 2014 Minnesota spring turkey season. (Please circle one number.)

1	2	3	4	5	6	7	8	9
Not at all Crowded	Slightly Crowded			Moderately Crowded			Extremely Crowded	

Q15. During the 2014 Minnesota spring turkey season, did other hunters keep you from hunting where you wanted to hunt? (Please circle one number.)

1	2	3	4	5	6	7	8	9	
No, not at all		Slightly			Moderately			Yes, Extremely	

Q16. Did another hunter interfere with your chance to harvest a turkey during the 2014 Minnesota spring turkey season? (Please check one.)

- No
- Yes

Q17. During the 2014 Minnesota spring turkey season, how satisfied or dissatisfied were you with the following?

	Very dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither	Slightly satisfied	Moderately satisfied	Very satisfied
General turkey hunting experience	1	2	3	4	5	6	7
Number of turkeys seen	1	2	3	4	5	6	7
Turkey hunting harvest	1	2	3	4	5	6	7
Turkey hunting regulations	1	2	3	4	5	6	7
Number of other turkey hunters seen	1	2	3	4	5	6	7

Part III. Minnesota Turkey Hunting Quality

Q18. How important are the following experiences to your Minnesota spring turkey hunting experience?

For each:

- First, tell us how important it is to your turkey hunting satisfaction.
- Next, tell us to what extent each happened during your 2014 Minnesota spring turkey hunting season.

	HOW IMPORTANT TO YOU?					DID IT HAPPEN?				
	Not at all	Slightly	Somewhat	Very	Extremely	Not at all	Slightly	Somewhat	Largely	Very much
Seeing turkeys	1	2	3	4	5	1	2	3	4	5
An opportunity to kill a turkey	1	2	3	4	5	1	2	3	4	5
Hearing gobbling	1	2	3	4	5	1	2	3	4	5
Calling turkeys in	1	2	3	4	5	1	2	3	4	5
Killing a Tom	1	2	3	4	5	1	2	3	4	5
Killing a Jake	1	2	3	4	5	1	2	3	4	5
Killing a bearded hen	1	2	3	4	5	1	2	3	4	5
Killing a trophy turkey (i.e., large birds with long beards, multiple beards, long spurs)	1	2	3	4	5	1	2	3	4	5
Weather conditions	1	2	3	4	5	1	2	3	4	5
Not seeing other hunters	1	2	3	4	5	1	2	3	4	5
Not being interfered with by other hunters	1	2	3	4	5	1	2	3	4	5
Being successfully drawn in a lottery to hunt an early time period	1	2	3	4	5	1	2	3	4	5
Access to private hunting land	1	2	3	4	5	1	2	3	4	5

Part IV. Importance of and Motivations for Turkey Hunting

Q19. Below is a list of possible experiences that might affect how satisfied you are with turkey hunting. For each:

- First, tell us how important it is to your turkey hunting satisfaction.
- Next, tell us the degree to which each happened during your 2014 Minnesota spring turkey hunting season.



	HOW IMPORTANT TO YOU?					DID IT HAPPEN?				
	Not at all	Slightly	Somewhat	Very	Extremely	Not at all	Slightly	Somewhat	Largely	Very much
Enjoying nature and the outdoors	1	2	3	4	5	1	2	3	4	5
Getting away from crowds of people	1	2	3	4	5	1	2	3	4	5
Getting food for my family	1	2	3	4	5	1	2	3	4	5
Shooting a gun	1	2	3	4	5	1	2	3	4	5
Access to a lot of different hunting areas	1	2	3	4	5	1	2	3	4	5
Bagging a turkey	1	2	3	4	5	1	2	3	4	5
Being on my own	1	2	3	4	5	1	2	3	4	5
Being with friends	1	2	3	4	5	1	2	3	4	5
Developing my skills and abilities	1	2	3	4	5	1	2	3	4	5
Being with family	1	2	3	4	5	1	2	3	4	5
Getting information about hunting seasons and conditions from the DNR	1	2	3	4	5	1	2	3	4	5
Good behavior among other turkey hunters	1	2	3	4	5	1	2	3	4	5
Hunting areas open to the public	1	2	3	4	5	1	2	3	4	5
Hunting private land	1	2	3	4	5	1	2	3	4	5
Reducing tension and stress	1	2	3	4	5	1	2	3	4	5
Seeing a lot of turkeys	1	2	3	4	5	1	2	3	4	5
Sharing my hunting skills and knowledge	1	2	3	4	5	1	2	3	4	5
Thinking about personal values	1	2	3	4	5	1	2	3	4	5
Using my hunting equipment (calls, blinds, guns, etc.)	1	2	3	4	5	1	2	3	4	5
Getting my own food	1	2	3	4	5	1	2	3	4	5
The excitement of hunting	1	2	3	4	5	1	2	3	4	5
The challenge of making a successful shot	1	2	3	4	5	1	2	3	4	5
Getting information about turkey hunting from media sources like magazines, TV, and social media	1	2	3	4	5	1	2	3	4	5

Q20. Please indicate how much you agree or disagree with the following statements about your involvement in turkey hunting in Minnesota. (Please circle one response for each):

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Turkey hunting is one of the most enjoyable things I do.	1	2	3	4	5
Turkey hunting provides me with the opportunity to be with friends.	1	2	3	4	5
To change my preference from turkey hunting to another recreation activity would require major rethinking.	1	2	3	4	5
A lot of my life is organized around turkey hunting.	1	2	3	4	5
Turkey hunting has a central role in my life.	1	2	3	4	5
Most of my friends are in some way connected with turkey hunting.	1	2	3	4	5
When I am turkey hunting, others see me the way I want them to see me.	1	2	3	4	5
I identify with the people and image associated with turkey hunting.	1	2	3	4	5
Turkey hunting is one of the most satisfying things I do.	1	2	3	4	5
Participating in turkey hunting says a lot about who I am.	1	2	3	4	5
Turkey hunting is very important to me.	1	2	3	4	5
You can tell a lot about a person when you see them turkey hunting.	1	2	3	4	5
When I am turkey hunting I can really be myself.	1	2	3	4	5
I enjoy discussing turkey hunting with my friends.	1	2	3	4	5
When I am turkey hunting, I don't have to be concerned about what other people think of me.	1	2	3	4	5

Part V. Minnesota Turkey Populations and Management

Q21. Over the past 5 years, what trend have you seen in the turkey population in the areas you most often hunt for turkey? (Please circle one.)

- | | | | | |
|-------------|----------|-----------------------|----------|------------|
| 1 | 2 | 3 | 4 | 5 |
| A lot fewer | Fewer | About the same number | More | A lot more |

Q22. In thinking about the areas you most often hunt for turkey, would you say the turkey population is... (Circle one.)

- | | | | | |
|-------------|----------|-------------|----------|--------------|
| 1 | 2 | 3 | 4 | 5 |
| Way too low | Too low | About right | Too high | Way too high |

Q23. In thinking about the areas you hunt for turkey, at what level do you think the turkey population should be managed? (Please circle one.)

- | | | | | | | |
|---------------------------------------|------------------------------------|----------------------------------|-----------|----------------------------------|------------------------------------|---------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Decrease Population 50% (Significant) | Decrease Population 25% (Moderate) | Decrease Population 10% (Slight) | No Change | Increase Population 10% (Slight) | Increase Population 25% (Moderate) | Increase Population 50% (Significant) |

Q24. The “non-range” area on the map on the cover of this booklet is closed to turkey hunting, primarily because it is considered non-turkey habitat and is essentially unoccupied by turkeys. Some turkeys, however, are occasionally seen in this area. Would you support or oppose opening this area to turkey hunting? (Circle one.)

1 Strongly oppose 2 Oppose 3 Neutral 4 Support 5 Strongly support

Q25. Currently, hunters buy either a regular or an archery turkey license. Would you support or oppose allowing hunters to buy both a regular and an archery turkey license? (Please circle one.)

1 Strongly oppose 2 Oppose 3 Neutral 4 Support 5 Strongly support

Q26. Currently, turkey hunters do not need to purchase a separate turkey stamp, as the stamp fee is incorporated into the cost of the license. The DNR still holds an annual turkey stamp contest and prints a small number of stamps. Would you support or oppose eliminating the turkey stamp contest and pictorial stamp? (Circle one.)

1 Strongly oppose 2 Oppose 3 Neutral 4 Support 5 Strongly support

Q27. Do you support or oppose allowing unsuccessful turkey hunters to purchase a second license during a later unlimited permit time period? (Circle one.)

1 Strongly oppose 2 Oppose 3 Neutral 4 Support 5 Strongly support

Q28. Do you support or oppose allowing successful turkey hunters to purchase a second license during a later unlimited permit time period? (Circle one.)

1 Strongly oppose 2 Oppose 3 Neutral 4 Support 5 Strongly support

Q29. How much do you oppose or support the following? Please circle one response for each of the following statements:

	Strongly Oppose	Oppose	Neutral	Support	Strongly Support
Eliminating the different time periods for turkey hunting and having a single 45 day long turkey season.	1	2	3	4	5
Eliminating the 12 different turkey permit areas and permitting open hunting throughout the state.	1	2	3	4	5
Eliminating the different time periods for turkey hunting and having a single 45 day long turkey season <u>while retaining the 12 different turkey permit areas.</u>	1	2	3	4	5
Eliminating the 12 different turkey permit areas <u>while retaining different time periods for turkey hunting.</u>	1	2	3	4	5

Part VI. Choosing a Season Structure for Minnesota Spring Wild Turkey Hunting

Q30. Below is a series of hypothetical comparisons that illustrate choices among season structures that might be used for managing turkey hunting. In all cases hunters would be required to choose a season and one of the 12 permit areas to hunt turkey. Some of these scenarios may seem unlikely, but we are still interested in understanding your preferences for the stated season attributes. Even though turkey hunting in Minnesota may not be managed as described, your opinions about these comparisons help us better understand hunter preferences. (For each scenario, select the one choice with the characteristics you would prefer.)

<p>Scenario 1. Which season structure would you prefer?</p>	<p>Season structure 1</p> <ul style="list-style-type: none"> ➤ <u>Current season structure with six consecutive 5-day seasons followed by two consecutive 7-day seasons</u>, and the first season starting the Wednesday nearest April 15. ➤ No permit for a 2nd turkey. ➤ Moderate potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first</u> time period. 	<p>Season structure 2</p> <ul style="list-style-type: none"> ➤ <u>Four consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 14-day season running through the end of May.</u> ➤ 2nd permit to all hunters. ➤ Low potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first 3</u> time periods. 	<p>NONE: I would not hunt turkey in MN with these season structures.</p>
<p>Check one box ►</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Scenario 2. Which season structure would you prefer?</p>	<p>Season structure 1</p> <ul style="list-style-type: none"> ➤ <u>Three consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 21-day season running through the end of May.</u> ➤ 2nd permit to all hunters. ➤ Higher potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first 3</u> time periods. 	<p>Season structure 2</p> <ul style="list-style-type: none"> ➤ <u>Three consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 21-day season running through the end of May.</u> ➤ No permit for a 2nd turkey. ➤ Moderate potential for interference from other hunters. ➤ No lottery. 	<p>NONE: I would not hunt turkey in MN with these season structures.</p>
<p>Check one box ►</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Scenario 3. Which season structure would you prefer?</p>	<p>Season structure 1</p> <ul style="list-style-type: none"> ➤ <u>Six consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15. ➤ No permit for a 2nd turkey. ➤ Moderate potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first</u> time period. 	<p>Season structure 2</p> <ul style="list-style-type: none"> ➤ <u>Three consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 21-day season running through the end of May.</u> ➤ 2nd permit to unsuccessful hunters. ➤ Low potential for interference from other hunters. ➤ Lottery for only a few high demand areas. 	<p>NONE: I would not hunt turkey in MN with these season structures.</p>
<p>Check one box ►</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 4. Which season structure would you prefer?	Season structure 1 <ul style="list-style-type: none"> ➤ <u>Six consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15. ➤ 2nd permit to unsuccessful hunters. ➤ Higher potential for interference from other hunters. ➤ No lottery. 	Season structure 2 <ul style="list-style-type: none"> ➤ <u>Current season structure with six consecutive 5-day seasons followed by two consecutive 7-day seasons</u>, and the first season starting the Wednesday nearest April 15. ➤ No permit for a 2nd turkey. ➤ Low potential for interference from other hunters. ➤ Lottery for only a few high demand areas. 	NONE: I would not hunt turkey in MN with these season structures.
Check one box ►	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 5. Which season structure would you prefer?	Season structure 1 <ul style="list-style-type: none"> ➤ <u>Six consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15. ➤ 2nd permit to all hunters. ➤ Moderate potential for interference from other hunters. ➤ No lottery. 	Season structure 2 <ul style="list-style-type: none"> ➤ <u>Four consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 14-day season running through the end of May.</u> ➤ 2nd permit to unsuccessful hunters. ➤ Low potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first 3</u> time periods. 	NONE: I would not hunt turkey in MN with these season structures.
Check one box ►	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 6. Which season structure would you prefer?	Season structure 1 <ul style="list-style-type: none"> ➤ <u>Four consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 14-day season running through the end of May.</u> ➤ 2nd permit to unsuccessful hunters. ➤ Higher potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first</u> time period. 	Season structure 2 <ul style="list-style-type: none"> ➤ <u>Current season structure with six consecutive 5-day seasons followed by two consecutive 7-day seasons</u>, and the first season starting the Wednesday nearest April 15. ➤ No permit for a 2nd turkey. ➤ Higher potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first 3</u> time periods. 	NONE: I would not hunt turkey in MN with these season structures.
Check one box ►	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 7. Which season structure would you prefer?	Season structure 1 <ul style="list-style-type: none"> ➤ <u>Six consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15. ➤ 2nd permit to unsuccessful hunters. ➤ Moderate potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first</u> time period. 	Season structure 2 <ul style="list-style-type: none"> ➤ <u>Three consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 21-day season running through the end of May.</u> ➤ 2nd permit to all hunters. ➤ Moderate potential for interference from other hunters. ➤ Lottery for only a few high demand areas. 	NONE: I would not hunt turkey in MN with these season structures.
Check one box ►	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 8. Which season structure would you prefer?	Season structure 1 <ul style="list-style-type: none"> ➤ <u>Four consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 14-day season running through the end of May.</u> ➤ 2nd permit to all hunters. ➤ Low potential for interference from other hunters. ➤ Lottery for only a few high demand areas. 	Season structure 2 <ul style="list-style-type: none"> ➤ <u>Current season structure</u> with <u>six consecutive 5-day seasons followed by two consecutive 7-day seasons</u>, and the first season starting the Wednesday nearest April 15. ➤ 2nd permit to unsuccessful hunters. ➤ Higher potential for interference from other hunters. ➤ No lottery. 	NONE: I would not hunt turkey in MN with these season structures.
Check one box ▶	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scenario 9. Which season structure would you prefer?	Season structure 1 <ul style="list-style-type: none"> ➤ <u>Four consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15, <u>followed by one 14-day season running through the end of May.</u> ➤ 2nd permit to unsuccessful hunters. ➤ Higher potential for interference from other hunters. ➤ No lottery. 	Season structure 2 <ul style="list-style-type: none"> ➤ <u>Six consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15. ➤ No permit for a 2nd turkey. ➤ Moderate potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first</u> time period. 	NONE: I would not hunt turkey in MN with these season structures.
Check one box ▶	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scenario 10. Which season structure would you prefer?	Season structure 1 <ul style="list-style-type: none"> ➤ <u>Six consecutive 7-day seasons</u> with first season starting on the Saturday nearest April 15. ➤ No permit for a 2nd turkey. ➤ Low potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first 3</u> time periods. 	Season structure 2 <ul style="list-style-type: none"> ➤ <u>Current season structure</u> with <u>six consecutive 5-day seasons followed by two consecutive 7-day seasons</u>, and the first season starting the Wednesday nearest April 15. ➤ 2nd permit to all hunters. ➤ Low potential for interference from other hunters. ➤ Lottery for <u>all areas</u> for the <u>first</u> time period. 	NONE: I would not hunt turkey in MN with these season structures.
Check one box ▶	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part VII. Minnesota DNR Turkey Management

Q31. How do you feel about the Minnesota Department of Natural Resources (DNR)? Circle one response for each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The MN DNR does a good job of managing wild turkey in Minnesota.	1	2	3	4	5
When deciding about wild turkey management in Minnesota, the Minnesota DNR will be open and honest in the things they do and say.	1	2	3	4	5
The Minnesota DNR can be trusted to make decisions about turkey management that are good for the resource.	1	2	3	4	5
The Minnesota DNR will make decisions about turkey management in a way that is fair.	1	2	3	4	5
The Minnesota DNR has wildlife managers and biologists who are well-trained for their jobs.	1	2	3	4	5
The Minnesota DNR listens to turkey hunters' concerns.	1	2	3	4	5

Q32. Please respond to the following statements. (Circle one answer for each statement.)

	Not at all				Very much
To what extent do you consider an opportunity to voice opinions to Minnesota DNR turkey management desirable?	1	2	3	4	5
To what extent do you feel you have the opportunity to voice opinions to the Minnesota DNR about turkey management?	1	2	3	4	5
To what extent do you intend to respect the advice of MNDNR turkey management on future management decisions?	1	2	3	4	5
To what extent do you feel you can make suggestions to the MNDNR to improve turkey management?	1	2	3	4	5
To what extent do you accept the advice of MNDNR turkey management?	1	2	3	4	5
To what extent do you consider an opportunity to voice opinions to Minnesota DNR about turkey management important?	1	2	3	4	5
To what extent do you feel you can make <u>critical</u> comments to the MNDNR about turkey management?	1	2	3	4	5
To what extent do you feel you can make <u>supportive</u> comments to the MNDNR about turkey management?	1	2	3	4	5
To what extent do you consider MNDNR turkey management to be trustworthy?	1	2	3	4	5
To what extent do you consider Minnesota DNR decision-making procedures related to turkey management fair?	1	2	3	4	5
Minnesotans should have the right to voice opinions about turkey management to the DNR.	1	2	3	4	5
To what extent do you trust MNDNR turkey management?	1	2	3	4	5
To what extent do you think the Minnesota DNR handles turkey management related decisions fairly?	1	2	3	4	5
To what extent are you willing to accept the advice of MNDNR turkey management?	1	2	3	4	5

Part VIII. About You

Q33. Are you currently a member of: (Check all that apply.)

- National Wild Turkey Federation
- Local sportsman's club
- Other national/statewide conservation/hunting organization(s) *Please specify:* _____

Q34. What other species do you hunt in Minnesota? (Check all that apply.)

- Deer
- Pheasants
- Waterfowl
- Grouse
- Other small game (rabbits, squirrels)
- Bears
- Predators (coyotes, fox, raccoon, wolves)
- NONE

Q35. What is your age?

_____ years

Q36. How many years have you lived in Minnesota?

_____ years

Q37. How many years did you live on a farm or ranch, or in a non-suburban rural area from birth until age 17?

_____ years

Q38. How many years have you lived on a farm or ranch, or in a non-suburban rural area from age 18 until now?

_____ years

Q39. What is your gender?

- Male
- Female

Q40. What is the highest level of education you have completed? (*Check one.*)

- | | |
|--|---|
| <input type="checkbox"/> Grade school | <input type="checkbox"/> Some college |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Four-year college (bachelor's) degree |
| <input type="checkbox"/> High school diploma or GED | <input type="checkbox"/> Some graduate school |
| <input type="checkbox"/> Some vocational or technical school | <input type="checkbox"/> Graduate (master's or doctoral) degree |
| <input type="checkbox"/> Vocational or technical school (associate's) degree | |

Q41. What was your annual household income from all sources, before taxes, in 2013?

\$ _____

Please write additional comments below or on additional sheets. Survey results will be available on the Minnesota Department of Natural Resources Web site, [DNR website](#). If you have a question about the survey, contact Sue at sas@umn.edu or 612-624-3479. If you have a specific turkey management question, please contact the Minnesota DNR at 1-888-MINNDNR.

THANK YOU FOR YOUR HELP!

Please return the completed questionnaire in the enclosed self-addressed, stamped envelope.

Appendix B: Shortened Survey to Gauge Nonresponse Bias

FOLLOW-UP SURVEY OF MINNESOTA WILD TURKEY HUNTERS

A study of hunters' opinions and activities

Dear «FNAME»,

«ID»

During the past few months, we have sent you several survey mailings. We are sending you this shortened survey because we are concerned that people who have not responded may differ from those who have already responded. We appreciate your willingness to complete this short survey as we conclude this effort to better understand issues related to spring wild turkey hunting in Minnesota.

Sincerely,

David Fulton, Ph.D., Adj. Professor

Q1. Why you did not respond to our earlier survey mailings. (Please check all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> I am not that interested in turkey hunting. | <input type="checkbox"/> I intended to complete it, but did not get to it. |
| <input type="checkbox"/> I did not have time. | <input type="checkbox"/> Challenge of returning "snail mail" postal survey |
| <input type="checkbox"/> The original survey was too long. | <input type="checkbox"/> I returned it. |
| <input type="checkbox"/> I never received the earlier mailings. | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> I misplaced my earlier mailings. | |

Q2. In what year did you first hunt turkey, not necessarily in Minnesota? If uncertain please estimate.

_____ year (If you have never hunted turkey, please enter '0' here, and return your survey.)

Q3. How many years have you hunted turkey in Minnesota? If uncertain please estimate.

_____ years

Q4. For the 5 years prior to this year's spring turkey season, indicate which years you hunted spring turkey in Minnesota? (Check all that apply.)

- 2013
- 2012
- 2011
- 2010
- 2009
- I did not hunt turkey in Minnesota during any of these years.

Q5. Did you hunt turkey in Minnesota during the 2014 spring season? (Please check one.)

- No → (Skip to question Q9.)
- Yes (Please continue with question Q6.)

→ **Q6. During the 2014 Minnesota spring turkey season, about how many days did you hunt on...**

Weekend days or holidays: _____ days

Weekdays (Monday-Friday): _____ days

Q7. Did you bag a turkey during the 2014 Minnesota spring turkey season? (Please check one.)

- No
- Yes

Q8. During the 2014 Minnesota spring turkey season, how satisfied or dissatisfied were you with the following?

	Very dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither	Slightly satisfied	Moderately satisfied	Very satisfied
General turkey hunting experience	1	2	3	4	5	6	7
Number of turkeys seen	1	2	3	4	5	6	7
Turkey hunting harvest	1	2	3	4	5	6	7
Turkey hunting regulations	1	2	3	4	5	6	7
Number of other turkey hunters seen	1	2	3	4	5	6	7

Q9. What is the highest level of education you have completed? (Check one.)

- Grade school
- Some high school
- High school diploma or GED
- Some vocational or technical school
- Vocational or technical school (associate's) degree
- Some college
- Four-year college (bachelor's) degree
- Some graduate school
- Graduate (master's or doctoral) degree

Q10. What is your age?

_____ Years

THANK YOU FOR YOUR HELP!
Please return the completed questionnaire in the
 enclosed self-addressed, stamped envelope.