RESULTS FROM THE 2006 VIRGINIA SUNDAY HUNTING SURVEY

by

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Abstract: A survey of Virginia hunters was conducted in Fall 2006 to determine their opinions about Sunday hunting in the Commonwealth of Virginia. Surveys were sent to 5,000 licensed Virginia hunters; useable responses were received from 2,789 hunters. The average age of hunters responding to this survey was 45.2 years and 97% of the respondents were male and 3% were female. Sixty-two percent of hunters expressed some degree of support for Sunday hunting, 34% were opposed, and an additional 4% said they neither supported nor opposed Sunday hunting. Regionally, there were only minor differences in hunter support for Sunday hunting. Overall support ranged from 66% in northern Virginia (Region 5) to 58% in the south central Piedmont (Region 2) area of the state. The majority of hunters indicated that, if Sunday hunting were legal, they opposed any restrictions or limits with 56% supporting the idea that Sunday hunting should be "with no limitations, just like any other hunting day". Generally, the majority of hunters supported the hunting of all species on Sundays, with two exceptions: 59% of hunters expressed opposition to deer hunting with dogs on Sunday and 56% of hunters said they opposed bear hunting with dogs. Over three-quarters (78%) believed that Sunday hunting would increase the amount of time to hunt, 62% believed it would increase interest in hunting in Virginia, and 62% thought that youth participation in hunting would increase if Sunday hunting were allowed. Sixty-three percent of hunters thought Sunday hunting would create more opportunities for hunters to try new places to hunt and 76% also believed the number of animals harvested would increase if Sunday hunting were allowed. If Sunday hunting was legalized in Virginia, 52% said they were Very likely whereas only 29% said they were Not at all likely to take a friend or family member hunting on Sunday. Sixty percent of hunters said that they had taken a youth hunting in Virginia since July 2005. Forty-five percent of hunters said they would be Very likely to take a youth hunting on Sunday compared to 32% who said they would be Not at all likely to take a youth hunting on Sunday.

INTRODUCTION

Before the Virginia Game Commission was established in 1916, hunting on Sunday was prohibited in the Commonwealth. The ban on Sunday hunting in Virginia began sometime between 1887 and 1904 and continues to be enforced by the Virginia Department of Game and Inland Fisheries (DGIF).

In 2007, 41 states allowed Sunday hunting. Among the nine that do not allow it, five, including Virginia, make exceptions for some form of Sunday hunting. For example, in Virginia, hunters are allowed to hunt raccoons until 2 am on Sunday mornings and Sunday hunting is permitted on shooting preserves. Nationally, the most recent changes in Sunday hunting laws occurred in West Virginia and Maryland.

In 2006, the North Carolina Wildlife Resources Commission conducted a survey of hunters, landowners, and the general public to determine their attitudes about legalizing Sunday hunting. This study found that 53% of North Carolina hunters opposed legalizing Sunday hunting and 65% of the general public opposed legalization (VPI and RMI 2006).

The DGIF examined this subject in the 1996-1997 Virginia Hunter survey and found that 39% of hunters *Strongly Favored* Sunday hunting whereas 45% *Strongly Opposed* it (Wright and Emerald 1998). The 1996-1997 hunter survey question used a seven point scale (1=Strongly Oppose, 4=Does not matter, 7=Strongly Favor). When categories were combined, 45% of hunters favored Sunday hunting and 48% opposed it.

Additionally, results from a 2000 survey found that 45% of Virginia hunters *Strongly Opposed* Sunday hunting and 34% *Strongly Favored* Sunday hunting (McMullin et al. 2000). This question

used a five point scale and when the categories were combined, 43% of Virginia hunters supported and 52% opposed Sunday hunting.

In August 2006, after reviewing the results of these two studies of Virginia hunters, the Board of the Virginia Department of Game and Inland Fisheries decided a new survey was needed. The Wildlife Division was asked by the Board to examine the issue. The first step of this process was to survey resident Virginia hunters to determine if their attitudes about Sunday hunting had changed since the 1996 and 2000 surveys. Wildlife staff began the process of developing a questionnaire and obtaining a sample of Virginia hunters to survey in Fall 2006.

METHODS

The process of surveying Virginia hunters began with drawing a random sample of 5,000 resident licensed hunters. Three types of resident Virginia license buyers were surveyed: general resident hunting license, county/city license, and senior license buyers for the 2006-2007 hunting season. Names of license buyers were drawn from the DGIF Point of Sale database on November 15, 2006. The survey included a cover letter (Appendix A) and a stamped, self-addressed, return envelope.

On November 22, 2006 the first mailing of the survey was sent to the selected 5,000 licensed hunters throughout Virginia. A second, follow-up mailing was sent to non-respondents on December 8, 2006. A response rate of 59% was obtained from these two mailings. This sample size of 5,000 hunters reflects over ten times the number of completed surveys required to ensure that survey results would be generalizable to the total population of Virginia licensed hunters within a five

percent margin of error at a 95 percent confidence level (Krejce and Morgan 1970).

Of the 5,000 surveys that were mailed, only 4,730 of these hunters had valid addresses. Usable responses were received from 2,789 hunters for a response rate of 59%. All of the 2,789 completed surveys were used in the analysis of the survey results.

The survey consisted of fourteen questions. First, individual hunters were asked about their support or opposition to Sunday hunting. Other questions asked hunters how they felt about potential restrictions or limits placed upon Sunday hunting, the distance they traveled to hunt, the number of days they hunted, and types of land they hunted on. Hunters were asked their opinions about how Sunday hunting could potentially impact relationships with landowners, time and opportunity to hunt, and the number of animals harvested. Finally, a series of demographic questions were included to obtain information about the hunter's age, gender, and place of residence.

The majority of the survey questions were measured on a seven point Likert scale. Some of these questions measured hunter support or opposition (1=Strongly Oppose, 4=Neither Oppose nor Support, 7=Strongly Support) to Sunday hunting and potential restrictions and limitations. Another battery of questions measured hunters' opinions about the impacts of Sunday hunting and ranged from 1=Greatly Reduce, 4=Neither Reduce nor Increase, 7=Greatly Increase.

Analyses were conducted using SPSS 14.0 software. Descriptive statistics including frequencies and mean scores were performed for each survey question. Several questions were also analyzed regionally. DGIF divides Virginia into five regions for management purposes based roughly on physiographic regions of the state. Region 1 encompasses the coastal plain, Region 2 is the southern Piedmont, Region 3 is the southern Blue Ridge Mountains, Region 4 is the northern Blue Ridge Mountains, and Region 5 is the northern Piedmont. Respondents were asked in which Virginia County or Independent City they resided and this information was recoded into the appropriate region.

Additionally, t-tests were performed on certain questions to determine if means differed significantly. Finally, crosstabulations were used to determine if there were relationships between individual variables and support or opposition to Sunday hunting (Q1).

RESULTS

Hunter Characteristics and Participation

The average age of hunters responding to this survey was 45.2 years and they ranged in age from 14 to 83 years of age. Ninety-seven percent of the respondents were male and 3% were female. Twenty-three percent of the respondents said they lived on farms, 43% lived in rural areas, 13% lived in towns with a

population less than 50,000, 12% lived in the suburbs, and 9% lived in urban areas.

Results indicate that 26% of respondents lived in Region 5, 20% lived in Region 1, 21% lived in Region 2, 17% lived in Region 4, and 16% lived in Region 3. When asked how far they typically traveled to hunt in Virginia, 40% said they traveled less than 25 miles, 35% traveled between 25 and 50 miles, 17% traveled 51-100 miles and 8% traveled over 100 miles to hunt.

Hunters were asked how many days they hunted during the 2005-2006 hunting season. Seventeen percent said they hunted 0-9 days, 31% hunted 10-19 days, 22% hunted 20-29 days, and 30% hunted 30 or more days in the 2005-2006 season.

Hunters were asked to identify the types of land they typically hunted on. Ten percent said they hunted on public land, 65% hunted on private land, and 25% said they hunted an equal amount of time on both types.

Support of Sunday Hunting

Hunters were asked to indicate their support or opposition to Sunday hunting on a seven point Likert scale (Question 1). Fifty-three percent of hunters said they strongly supported Sunday hunting in Virginia, compared to 28.5% who said they strongly opposed it. When categories were combined, 62% of hunters expressed support for Sunday hunting, 34% were opposed and an additional 4% said they neither supported nor opposed Sunday hunting. Regionally, there were minor differences in hunter support for Sunday hunting. Overall support ranged from 66% in northern Virginia (Region 5) to 58% in the south central Piedmont (Region 2) area of the state.

Hunters were asked their level of support or opposition to certain restrictions or limitations to Sunday hunting. Sunday hunting "with no limitations, just like any other hunting day" was supported by 56% of hunters and no one category of restrictions or limitations was supported by the majority of hunters.

The majority of hunters indicated their opposition to most of the restrictions. Seventy-four percent of respondents said they opposed Sunday hunting only for youth hunters. Sixty-eight percent of Virginia hunters opposed allowing hunting only on certain Sundays (e.g., opening weekend of firearms, muzzleloader) and the same percentage were opposed to allowing Sunday hunting only after a certain time. Sixty-four percent were opposed to limiting Sunday hunting for bowhunting only. Sixty-four percent of responding hunters were also opposed to adjusting season lengths and bag limits if Sunday hunting were allowed.

Not surprisingly, 87% of hunters who supported Sunday hunting (hunter responded 5, 6, or 7 to Question 1), said they supported it "with no limitations, just like any other hunting day" (Q2K). Also, certain restrictions and limitations were supported by the majority of Sunday hunting supporters. For example, restricting hunting on Sundays to private land was supported by 70% of these hunters and 54% supported restricting Sunday hunting to public land. Also, 58% supported creating safety zones around churches. Clearly, this reflects the willingness of many hunters to accept Sunday hunting in

any form. It also indicates that they may be willing to make a variety of accommodations to have the opportunity to hunt on Sunday.

Conversely, 95% of hunters who opposed Sunday hunting (hunter responded 1, 2, or 3 to Question 1) said they opposed Sunday hunting without limitations (Table 1). Furthermore, approximately 75%-80% of this group of hunters opposed every single restriction or limitation that was presented to them.

Hunters were also asked if they supported or opposed Sunday hunting for certain species (Table 2). Generally, the majority of hunters supported the hunting of all species on Sundays, with two exceptions. First, 59% of hunters expressed opposition to deer hunting with dogs on Sunday whereas 37% of hunters opposed deer hunting without dogs on Sunday. Additionally, 55.5% of hunters said they opposed bear hunting with dogs while only 40% said they opposed bear hunting without dogs on Sunday

Table 1. Hunters' opinions about Sunday hunting in Virginia.

Question 2. Please indicate your level of support or opposition to allow Sunday hunting.....

	trongly Oppose			either (nor sup			Strongly Support
Only on private lands	38.7	4.6	2.1	9.9	3.9	4.8	36.0
Only on public lands	45.2	5.4	3.1	13.6	3.9	4.2	24.7
For bowhunting only		7.2	3.4	15.5	4.9	2.7	13.5
Only on certain Sundays		8.2	4.2	14.9	4.6	3.5	9.1
(e.g., opening firearm weekend, muzzl		etc.)					
If safety zones are created around churches	38.7	4.5	2.0	16.7	4.9	5.6	27.6
After a certain time (for example, 1pm)	56.4	7.4	3.9	14.1	4.0	3.4	10.7
Only for youth hunters	61.4	9.0	3.7	16.0	3.0	1.3	5.6
Only if deer hounds are not used	45.9	5.4	2.4	14.3	3.3	3.7	25.0
Only if certain season lengths andbag limits are adjusted	53.1	6.4	4.4	20.5	3.8	2.8	8.9
Only if there are increased penalties for trespass	45.5	5.4	3.0	21.9	4.7	4.4	15.1
With no limitations,	31.9	3.4	1.9	6.9	3.6	4.7	47.7

Table 2. Hunter support or opposition for hunting individual species on Sundays

Question 3. Do you support or oppose Sunday hunting in Virginia for each of these species?

	Strong Oppos			Neither o			Strongly Support
Small game (squirrel, rabbit, grouse, quail)	.28.4	3.3	1.2	6.8	3.8	5.7	50.8
Deer hunting (without dogs)	. 32.6	3.0	1.2	4.9	2.6	4.2	51.5
Deer hunting with dogs	. 51.8	4.6	2.9	9.4	2.8	2.5	26.0
Bear hunting (without dogs)	. 35.3	3.1	1.5	11.9	3.3	3.9	41.1
Bear hunting with dogs	. 48.4	4.5	2.6	13.4	2.8	2.5	25.8
Fall turkey	. 29.6	3.0	1.5	6.4	3.2	5.7	50.6
Spring turkey	29.5	2.9	1.5	5.6	3.3	5.3	51.8
Waterfowl	30.5	3.3	1.4	13.2	3.6	4.5	43.5
Groundhog	26.9	2.6	1.3	10.9	3.0	4.7	50.6
Coyote	. 25.9	2.1	1.1	8.4	2.6	4.7	55.2
Raccoon	29.0	2.7	1.4	13.7	3.7	4.2	45.4
Dove	. 30.7	3.0	1.5	11.1	3.0	4.6	46.0
Fox.	. 28.1	2.6	1.4	11.3	3.4	4.3	48.8

Impacts of Sunday Hunting

Hunters were asked a battery of questions about their opinions on how allowing Sunday hunting would affect various aspects of the hunting experience in Virginia (Question 6). Results from this question can be found in Table 3. Over three-quarters (78%) of hunters acknowledged that Sunday hunting would increase the amount of time to hunt. Sixty-two percent of respondents believed allowing Sunday hunting would increase

interest in hunting in Virginia and the same percentage thought that youth participation in hunting would increase. Sixty-three percent of responding hunters thought Sunday hunting would create more opportunities for hunters to try new places to hunt in Virginia. The majority of hunters (76%) also acknowledged that they believed the number of animals harvested would increase if Sunday hunting were allowed.

Table 3. Hunters' opinions about impacts of allowing Sunday hunting in Virginia.

	Great Redu	•		either Re or Increa			Greatly Increase
Amount of time to hunt	2.7	0.9	0.9	18.0	9.8	16.0	51.7
Conflicts between hunters and other	6.8	2.1	3.4	48.7	10.5	8.5	19.9
outdoor users (e.g., hikers, horseback	k rider	s, wildl	ife wate	chers)			
Interest in hunting in Virginia	4.5	1.1	1.9	30.1	11.6	13.9	36.8
Access to private land	8.6	3.5	4.1	55.4	8.9	5.0	14.6
Youth participation in hunting	4.3	1.0	2.0	30.6	12.9	14.9	34.4
Trespass problems	7.0	2.2	3.3	54.3	10.8	7.3	15.1
Opportunities for hunters to try		0.8	1.3	31.1	12.8	15.2	35.1
new places to hunt in Virginia							
Number of animals harvested	2.3	0.5	0.7	20.1	26.6	23.1	26.6
Bag limits	3.2	1.1	2.9	46.9	17.3	12.0	16.7
Season lengths	3.6	1.5	3.5	43.3	14.4	11.5	22.2
Conflicts between hunters and	6.3	2.1	2.6	53.1	10.2	8.0	17.8
landowners (e.g. boaters, fishermen)							

Recruitment

Several of the survey questions focused on how allowing Sunday hunting would increase recruitment of new hunters in Virginia. First, Question 8 asked hunters, "If hunting on Sunday were allowed, how likely would you be to take a friend or family member hunting on Sunday in Virginia?" Fifty-two percent of hunters said they were *Very likely*, an additional 14% said they would be *Somewhat likely*, and only 29% said they were *Not at all likely* to take a friend or family member hunting.

Two survey questions focused on the impact Sunday hunting would have on youth hunting. Specifically, Question 9 asked hunters if they had taken a youth hunting in Virginia since July 2005. Sixty percent of hunters responded "Yes" to this question. Next, in Question 10, hunters were asked, "If hunting on Sunday were allowed in Virginia, how likely would you be to take a youth hunting on Sunday in VA?" Forty-five percent of hunters said

they would be *Very likely* to take a youth hunting and 16% were *Somewhat likely* compared to 32% who said they would be *Not at all likely* to take a youth hunting.

Crosstabulations

Additional statistical analyses revealed a significant relationship between variables. Results from these analyses can be found in Appendix C. First, there was a relationship between distance traveled to hunt and support of Sunday hunting. Among hunters who traveled less than 25 miles to hunt 44% strongly supported Sunday hunting, 58% of those who traveled 25-50 miles to hunt strongly supported Sunday hunting, 60% of hunters traveling 51-100 miles to hunt strongly supported Sunday hunting, and 65% of hunters who traveled more than 100 miles strongly supported Sunday hunting.

There was also a relationship between a hunter's place of residence and support of Sunday hunting. Fifty-five percent of hunters who reside on farms supported Sunday hunting, 60% of hunters residing in rural areas supported Sunday hunting, 66% of hunters who live in towns with populations less than 50,000 supported Sunday hunting, 70% of hunters residing in the suburbs supported Sunday hunting, and 77% of hunters who live in urban areas supported Sunday hunting.

Crosstabulations also revealed a relationship between the age of hunters and support of Sunday hunting. Specifically, 76% of hunters under the age of 30 supported Sunday hunting, 69% of hunters aged 30-44 supported it, 58% ranging in age from 45-59 supported it, and 41% over the age of 60 were supporters of Sunday hunting.

Comparisons to 1996-1997 Hunter Survey

In the 1996-1997 Annual Hunter Survey 5,000 licensed Virginia hunters were asked their opinions about Sunday hunting. Specifically, hunters were asked, "Please indicate the degree to which you would favor or oppose Sunday hunting." This question was measured on a seven point Likert scale ranging from Strongly Oppose (1), Does not matter (4), and Strongly Favor (7).

Question 1 of the 2006 Sunday Hunting survey was designed to allow for comparison between the two survey questions. First, Table 4 shows the mean scores statewide and for each of the five regions. The mean scores in the 2006 survey were significantly higher statewide and for all five regions than the mean scores from the 1996-1997 survey.

Table 4. Mean scores of hunter preferences for Sunday hunting in 1996 and 2006.

	Statewide	Region 1	Region 2	Region 3	Region 4	Region 5
1996*	3.87	4.09	3.76	3.93	3.81	4.36
2006**	4.79	4.82	4.57	4.90	4.73	4.98

^{*} Mean scores: 1=Strongly Oppose, 4=Does not Matter, 7=Strongly Favor

^{**}Mean scores: 1=Strongly Oppose, 4=Neither Oppose nor Support, 7=Strongly Support

Summary

Results from the survey of hunters indicate that a majority of Virginia hunters in all regions of the state support Sunday hunting. Support for Sunday hunting was the greatest in northern Virginia (Region 5), followed by the southern Blue Ridge Mountains (Region 3), the coastal plain (Region 1), the northern Blue Ridge mountains (Region 4), and the southern Piedmont (Region 2).

Results of the survey also indicate that hunters are interested in Sunday hunting without limitations. When hunters were given the option to have Sunday hunting in Virginia with certain restrictions or limitations or with no limitations, the majority of hunters supported Sunday hunting with "no limitations, just like any other hunting day." No other restriction or limitation was supported by a majority of the responding hunters.

Hunters believe that Sunday hunting may prove to be very effective in introducing new hunters to the sport (both youth and adult) and retaining current hunters. The majority of hunters believed legalizing Sunday hunting would increase the amount of time to hunt and thought that youth participation in hunting would increase. Two-thirds of responding hunters were either *Very likely* or *Somewhat likely* to take a friend or family member hunting

on Sunday if it was allowed. Sixty percent of hunters said they would be *Very likely* or *Somewhat likely* to take a youth hunting on Sunday.

There were also relationships between variables in the survey. First, there was a relationship between distance traveled to hunt and support of Sunday hunting. The greater the distance a hunter traveled the more support they showed for Sunday hunting. There was also a relationship between a hunter's place of residence and support of Sunday hunting. Hunters who lived in metropolitan areas (urban and suburban) supported Sunday hunting more than hunters who lived in rural areas, small towns, and on farms. Finally, the age of hunters was also related to their support of Sunday hunting. Younger hunters were more supportive of allowing Sunday hunting than their older counterparts.

Comparisons between the 1996 survey of hunters and the 2006 Sunday hunting survey revealed shifts in hunters' attitudes about Sunday hunting. Specifically, mean scores for support of Sunday hunting in the 2006 survey were significantly higher statewide and for all five regions than the mean scores from the 1996 survey.

Literature Cited

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Appendix A. Cover Letter

Dear Fellow Virginia Hunter:

On behalf of the Board of the Department of Game and Inland Fisheries, I am writing to request your help in gathering information on hunter opinions regarding the issue of Sunday hunting in the Old Dominion. The Department is taking this opportunity to obtain current information on Virginia hunter attitudes about Sunday hunting since the question was last asked ten years ago.

Your name was selected from all those purchasing a Virginia state hunting license for the 2006-2007 hunting season. Your views are very important to us. Therefore, we need your help in completing the enclosed survey. **Please return the questionnaire to us by November 30, 2006.** A prestamped, self-addressed envelope is enclosed for your convenience.

If you have any questions regarding the questionnaire or the study itself, please feel free to contact the agency's survey coordinator, Coren Jagnow at (804) 367-0730 or email her at: coren.jagnow@dgif.virginia.gov.

Again, your cooperation and input are most important as we evaluate this topic and will be greatly appreciated. We look forward to hearing from you in the next few days.

Sincerely,

Bob Duncan Director, Division of Wildlife Appendix B. Survey Results

1 Diagram in diagram and an	Stron Oppo	· ·		ither Op or Suppo	-		Strongly Support
1. Please indicate your level of support or opposition to Sunday hunting in Virginia.	28.5	3.5	2.3	3.8	3.6	5.2	53.1
2. Please indicate your level of support or opposi	ition to	allow	Sunday	huntin	ıg		
a. Only on private lands	38.7	4.6	2.1	9.9	3.9	4.8	36.0
b. Only on public lands	45.2	5.4	3.1	13.6	3.9	4.2	24.7
c. For bowhunting only	52.9	7.2	3.4	15.5	4.9	2.7	13.5
d. Only on certain Sundays (e.g., opening							
firearm weekend, muzzleloader, etc.)	55.5	8.2	4.2	14.9	4.6	3.5	9.1
e. If safety zones are created around churches	38.7	4.5	2.0	16.7	4.9	5.6	27.6
f. After a certain time (for example, 1pm)	56.4	7.4	3.9	14.1	4.0	3.4	10.7
g. Only for youth hunters	61.4	9.0	3.7	16.0	3.0	1.3	5.6
h. Only if deer hounds are not used	45.9	5.4	2.4	14.3	3.3	3.7	25.0
i. Only if certain season lengths and							
bag limits are adjusted	53.1	6.4	4.4	20.5	3.8	2.8	8.9
j. Only if there are increased penalties for trespass	45.5	5.4	3.0	21.9	4.7	4.4	15.1
k. With no limitations, just like							
any other hunting day	31.9	3.4	1.9	6.9	3.6	4.7	47.7

3. Do you support or oppose Sunday hunting in Virginia for each of these species?

Strongly		Neither Oppose			Strongly		
Oppos	se	no	or Suppo	ort		Support	
28.4	3.3	1.2	6.8	3.8	5.7	50.8	
32.6	3.0	1.2	4.9	2.6	4.2	51.5	
51.8	4.6	2.9	9.4	2.8	2.5	26.0	
35.3	3.1	1.5	11.9	3.3	3.9	41.1	
48.4	4.5	2.6	13.4	2.8	2.5	25.8	
29.6	3.0	1.5	6.4	3.2	5.7	50.6	
29.5	2.9	1.5	5.6	3.3	5.3	51.8	
30.5	3.3	1.4	13.2	3.6	4.5	43.5	
26.9	2.6	1.3	10.9	3.0	4.7	50.6	
25.9	2.1	1.1	8.4	2.6	4.7	55.2	
29.0	2.7	1.4	13.7	3.7	4.2	45.4	
30.7	3.0	1.5	11.1	3.0	4.6	46.0	
28.1	2.6	1.4	11.3	3.4	4.3	48.8	
	Oppose 28.4 32.6 51.8 35.3 48.4 29.6 29.5 30.5 26.9 25.9 29.0 30.7	Oppose 28.4 3.3 32.6 3.0 51.8 4.6 35.3 3.1 48.4 4.5 29.6 3.0 29.5 2.9 30.5 3.3 26.9 2.6 25.9 2.1 29.0 2.7 30.7 3.0	Oppose 28.4 3.3 1.2 32.6 3.0 1.2 51.8 4.6 2.9 35.3 3.1 1.5 48.4 4.5 2.6 29.6 3.0 1.5 29.5 2.9 1.5 30.5 3.3 1.4 26.9 2.6 1.3 25.9 2.1 1.1 29.0 2.7 1.4 30.7 3.0 1.5	Oppose nor Suppose 28.4 3.3 1.2 6.8 32.6 3.0 1.2 4.9 51.8 4.6 2.9 9.4 35.3 3.1 1.5 11.9 48.4 4.5 2.6 13.4 29.6 3.0 1.5 6.4 29.5 2.9 1.5 5.6 30.5 3.3 1.4 13.2 26.9 2.6 1.3 10.9 25.9 2.1 1.1 8.4 29.0 2.7 1.4 13.7 30.7 3.0 1.5 11.1	Oppose nor Support 28.4 3.3 1.2 6.8 3.8 32.6 3.0 1.2 4.9 2.6 51.8 4.6 2.9 9.4 2.8 35.3 3.1 1.5 11.9 3.3 48.4 4.5 2.6 13.4 2.8 29.6 3.0 1.5 6.4 3.2 29.5 2.9 1.5 5.6 3.3 30.5 3.3 1.4 13.2 3.6 26.9 2.6 1.3 10.9 3.0 25.9 2.1 1.1 8.4 2.6 29.0 2.7 1.4 13.7 3.7 30.7 3.0 1.5 11.1 3.0	Oppose nor Support 28.4 3.3 1.2 6.8 3.8 5.7 32.6 3.0 1.2 4.9 2.6 4.2 51.8 4.6 2.9 9.4 2.8 2.5 35.3 3.1 1.5 11.9 3.3 3.9 48.4 4.5 2.6 13.4 2.8 2.5 29.6 3.0 1.5 6.4 3.2 5.7 29.5 2.9 1.5 5.6 3.3 5.3 30.5 3.3 1.4 13.2 3.6 4.5 26.9 2.6 1.3 10.9 3.0 4.7 25.9 2.1 1.1 8.4 2.6 4.7 29.0 2.7 1.4 13.7 3.7 4.2 30.7 3.0 1.5 11.1 3.0 4.6	

4. How far do you typically travel to hunt in Virginia? (check only one)

□Less than 25 miles 40.3%	□25-50 miles 34.7%
□51-100 miles 17.3%	☐More than 100 miles 7.7%

5. How many days did you hunt during the 2005-2006 hunting season (last year)?

□0-9 Days **17.3%** □10-19 Days **30.5%** □20-29 Days **22.4%** □30 or more days **29.9%**

6. In your opinion, if Sunday hunting is allowed	it will	reduce	or inc	rease			
	Great	tly	Ne	ither Re	duce	(Greatly
	Redu			or Increa			ncrease
a. Amount of time to hunt	2.7	0.9	0.9	18.0	9.8	16.0	51.7
b. Conflicts between hunters and other outdoor use		2.1	2.4	40.7	10.5	0.5	10.0
(e.g., hikers, horseback riders, wildlife watchers)		2.1	3.4	48.7	10.5	8.5	19.9
c. Interest in hunting in Virginia	4.5 8.6	1.1 3.5	1.9	30.1 55.4	11.6 8.9	13.9 5.0	36.8 14.6
d. Access to private land	4.3	3.3 1.0	4.1 2.0	30.6	8.9 12.9	3.0 14.9	34.4
e. Youth participation in huntingf. Trespass problems	7.0	2.2	3.3	54.3	10.8	7.3	15.1
g. Opportunities for hunters to try	7.0	2.2	3.3	34.3	10.8	7.3	13.1
new places to hunt in Virginia	3.7	0.8	1.3	31.1	12.8	15.2	35.1
h. Number of animals harvested	2.3	0.5	0.7	20.1	26.6	23.1	26.6
i. Bag limits	3.2	1.1	2.9	46.9	17.3	12.0	16.7
j. Season lengths	3.6	1.5	3.5	43.3	14.4	11.5	22.2
k. Conflicts between hunters and landowners	6.3	2.1	2.6	53.1	10.2	8.0	17.8
R. Commets between numers and lands whers	0.5	2.1	2.0	55.1	10.2	0.0	17.0
7. Do you hunt primarily on? Public land 10.3% Private land 65.2%							
□ Equal amount of time on both 24.5%							
8. If hunting on Sunday were allowed, how likely would you be to take a friend or family member hunting on Sunday in Virginia?							
□Not at all Likely 29.1% □Somewhat Likely 13	.7% □	Very L	ikely 5	51.9%			
□Don't Know 5.4%							
O III A-l	r1 2 0	.0 5 9 □	1x/ <i>E</i> /	0. 7 0/ [□NI - 44	0.20/	
9. Have you taken a youth hunting in VA since J	uly 20	03: L	1168 3	9.770 L	_1NO 4	0.5 70	
10. If hunting on Sunday were allowed in Virgin hunting on Sunday in VA?	ia, hov	w likely	would	you be	to take	a youtl	n
·	. 00/	□ ▼ 7	T '1 1	45 40/	□ ъ ,	. 77	
□Not at all Likely 31.9% □Somewhat Likely 15 7.0%	5.8%	∟very	Likely	45.4%	⊔Don	t Know	
11. In which Virginia county (or independent cit	ty) do y	you cur	rently	reside?			_
12. In which type of area do you reside?							
□Farm 22.7% □Rural, but not farm 43.2%	□То	wn (les	s than 5	0,000 in	popula	tion) 1 3	3.0%
□ Urban (city over 50,000 in population) 8.9% 12.2%	□Su	burban	(adjace	nt to city	over 5	0,000)	
13. Are you? □Male 96.8% □Female 3.2%	14. H	low old	are yo	u? <u>Mear</u>	n=45.19	Years	

Appendix C. Crosstabulations of Survey Questions 4, 8, 9, 10, 12, and 14 with Survey Question 1 (Level of support or opposition to Sunday hunting).

Q4. How far do you typically travel to hunt in Virginia?

	Less than 25	<u>25-50</u>	<u>51-100</u>	More than 100
Strongly Oppose	36%	25%	23%	19%
Oppose	4%	3%	3%	3%
Somewhat Oppose	3%	2%	3%	4%
Neither oppose				
nor support	4%	3%	3%	3%
Somewhat Support	4%	3%	4%	3%
Support	5%	6%	5%	4%
Strongly Support	44%	58%	60%	65%
$X^2=73.27$, df=18, p<	0.001			

Q8. If hunting on Sunday were allowed, how likely would you be to take a friend or family member hunting on Sunday in Virginia?

Not at	t all likely	Somewhat likely	Very Likely	Don't Know
Strongly Oppose	82%	14%	1%	30%
Oppose	8%	6%	1%	5%
Somewhat Oppose	2%	7%	1%	5%
Neither oppose				
nor support	3%	10%	2%	14%
Somewhat Support	1%	11%	3%	6%
Support	0%	11%	7%	2%
Strongly Support	4%	41%	86%	39%
$X^2=1986.22$, df=18, p	0.001			

Q9. Have you taken a youth hunting in Virginia since July 2005?

	<u>Yes</u>	<u>No</u>
Strongly Oppose	27%	30%
Oppose	3%	4%
Somewhat Oppose	2%	3%
Neither oppose		
nor support	3%	5%
Somewhat Support	3%	5%
Support	5%	6%
Strongly Support	57%	48%
$X^2=29.94$, df=6, p<0.001		

Q10. If hunting on Sunday were allowed, how likely would you be to take youth hunting on Sunday in Virginia?

Not	at all likely	Somewhat likely	Very Likely	Don't Know
Strongly Oppose	76%	11%	2%	24%
Oppose	7%	6%	1%	4%
Somewhat Oppose	3%	5%	1%	3%
Neither oppose				
nor support	4%	8%	2%	9%
Somewhat Suppor	t 2%	10%	3%	7%
Support	1%	8%	7%	7%
Strongly Support	9%	53%	86%	47%
$X^2=1638.94$, df=18	8, p<0.001			

Q12. In which type of area do you reside?

	<u>Farm</u>	Rural	Town	<u>Urban</u>	<u>Suburban</u>
Strongly Oppose	36%	30%	27%	15%	22%
Oppose	5%	3%	3%	3%	3%
Somewhat Oppose	2%	3%	2%	1%	3%
Neither oppose					
nor support	3%	4%	3%	4%	3%
Somewhat Support	4%	3%	5%	2%	6%
Support	5%	4%	8%	6%	8%
Strongly Support	46%	53%	53%	69%	56%
$X^2=69.04$, df=24, p<	0.001				

Q14. How old are you?

Q14. How old are you.							
	Under 30	30-44	45-59	60 and Over			
Strongly Oppose	15%	22%	33%	47%			
Oppose	2%	3%	3%	6%			
Somewhat Oppose	3%	2%	2%	3%			
Neither oppose nor							
Support	4%	3%	4%	5%			
Somewhat Support	4%	4%	3%	3%			
Support	5%	5%	6%	4%			
Strongly Support	67%	60%	49%	34%			
$X^2=151.86$, df=18, p	< 0.001						