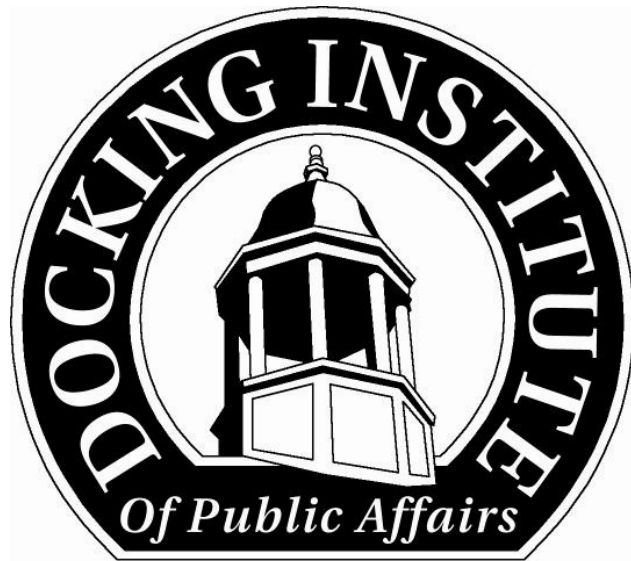


**Resident and Non-Resident
Kansas Hunting License
Holders: Hunting Demographic
Profile, Importance,
Satisfaction, Barriers**

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June 2006



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Resident and Non-Resident Kansas Hunting License Holders: Hunting Demographic Profile, Importance, Satisfaction, Barriers

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June 2006

This research is conducted on behalf of the Kansas Department of Wildlife and Parks. All interpretations and conclusions herein are those of the authors.

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Executive Summary

The Docking Institute of Public Affairs at Fort Hays State University conducted a self-administered mail survey of a random sample of Kansas hunting license holders. This sample included Kansas resident and non-resident hunters who had purchased a hunting license from the Kansas Department of Wildlife and Parks between August 2005 and April 2006. A two-wave self-administered mail survey was conducted in May and June, 2006. Of 1,142 randomly selected Kansas hunting license holders targeted, 478 returned questionnaires, resulting in a response rate of 42%.

The Docking Institute's independent analysis of survey data finds that:

- Non-residents report having greater incomes than residents, with more than half (54.3%) of the non-resident households earning \$100,000 or per year, compared to 15.7% of Kansas residents.
- Non-residents also report generally higher levels of formal education. Nearly 46% of the non-residents hold bachelors degrees or higher, while about 34% of the Kansas residents hold bachelors degrees or higher degrees.
- Most resident and non-resident hunters have hunted for more than 25 years (53.7% and 58.4%, respectively). Majorities of both groups had parents or guardians that hunted, and majorities of both groups began hunting when they were between 9 to 12 years of age. However, 72% of the non-residents report starting to hunt at 12 years or less, compared to 59% of the Kansas residents.
- In 2004, 88.3% of the Kansas residents surveyed purchased a hunting license, compared to 62.7% of the non-residents. More than twice as many residents have already purchased a license for 2006 than have non-residents (68.6% and 32.1%, respectively).
- Regarding hunting in Kansas, 55% of Kansas residents began hunting in the state *prior* to 1980, compared to about 20% of the non-residents. Conversely, 45% percent of the residents began hunting in Kansas *after* 1980, compared to nearly 80% of the non-residents.
- Hunting for waterfowl is a type of hunting that non-residents spend far less time (about 3 days) in Kansas pursuing per year than Kansas residents (about 11 days). Non-residents spend most of their time in Kansas hunting big game (6 days per year on average) and upland game (5 days per year on average).
- The mean and median average number of days hunting per year for Kansas residents exceeds those of the non-residents, for all five hunting types (big game, turkey, waterfowl, upland game, and other small game). However, the statistical standard error for Kansas resident responses exceeds those of the non-residents, suggesting more variability in resident responses.
- Colorado is the most popular location for non-residents to hunt, other than in Kansas (with 15.2% of the non-residents reporting purchasing a hunting license in that state). New Mexico and South Dakota follow with nearly 8% each.
- Among resident hunters relaxation is the most important reason for hunting, followed by being in nature, and the same two reasons are the most important among non-resident hunters but in reverse order.

- There are two significant differences in importance ratings when comparing resident to non-resident hunters. Resident hunters tend to place greater importance on food as a reason to hunt, while non-residents tend to place greater importance on companionship than residents.
- More game (quantity) and better game (quality) are the most important reasons that non-residents choose Kansas as a hunting destination.
- Among resident hunters, satisfaction levels are highest with respect to seeing game, relaxation, being in nature and hunting with friends, in order. Results among non-residents are similar with three of the same four highest satisfaction items, but hunting with family enters the top four for non-residents and being in nature drops from the top four.
- Non-residents report higher levels of satisfaction than residents on: scouting for game, discussing hunting strategies, buying hunting equipment, anticipating hunting season, participating in hunting camp, hunting with family, getting exercise, seeing others bag game and using inedible parts of game. Residents report higher levels of satisfaction on visiting hunting site during off-season.
- For *big game* hunting, family, work and other commitments and access to land are the two most frequent barrier areas for both residents and non-residents.
- For *big game* hunting, non-residents report lower barriers than residents on: cost of equipment, lack of transportation, problems with trespassers, inappropriate length of hunting season, loss of interest, requires too much self discipline, and lack of skill/ability.
- For *turkey* hunting, family, work and other commitments and access to land are the two most frequent barrier areas for both residents and non-residents.
- For *turkey* hunting, non-residents report lower barriers than residents on: cost of equipment, price of gasoline, lack of transportation, difficulty finding others to hunt with, problems with trespassers, problems with poachers, requires too much self discipline, and getting too old.
- For *upland game* hunting, family, work and other commitments constitute the most frequent barrier to upland game hunting as for big game and turkey hunting. In contrast to responses on big game and turkey hunting barriers, both residents and non-residents tend to identify insufficient amount of game as more of a barrier than access to land.
- For *upland game* hunting, non-residents report lower barriers than residents on: lack of transportation, drop-out by companions, difficulty finding others to hunt with, problems with trespassers, inappropriate length of season, recently changed residence/unfamiliar with area, and loss of interest.
- For *waterfowl* hunting, family, work and other commitments and access to land (especially overcrowded public hunting areas) constitute the most frequent barrier areas to waterfowl hunting among Kansas residents. In contrast, non-resident hunters report that other commitments and insufficient game to be the largest two barrier areas, while access to land in general continues to be among the top three barrier areas for non-residents.

- For *waterfowl* hunting, non-residents report lower barriers than residents on: cost of hunting equipment, requires too much self-discipline, and lack of skill/ability.
- For '*other small game*,' family, work and other commitments and land access issues are the two most frequent barrier areas to 'other small game' hunting among both Kansas residents and non-residents.
- For '*other small game*,' Non-residents report lower barriers than residents on: cost of hunting equipment, lack of transportation, finding others to hunt with, and requires too much self-discipline.
- A factor analysis showed that although location-oriented variables (access to land) did well indicating the barriers perceived by hunting participants, they were not influential in determining continuity of hunting participation. NOTE: Only 36 of the respondents were noncontinuous hunters, thus, the very small sample of noncontinuous hunters may have resulted in an underestimation of association. As KDWP continues to use electronic databases of annual licensees, future studies would benefit by including a sample of licensees who have not registered in the one or two most recent years.
- The most frequently reported single source of Kansas hunting information is attributed to a friend, followed by relatives. Furthermore, although more non-residents reported a combination of sources rather than a single source for Kansas hunting information, a friend was also reported among 73% of the responses that indicate more than one source of Kansas hunting information. Relatives, magazine articles, and the KDWP internet site were included in 45%, 43%, and 41% of responses indicating more than one source of Kansas hunting information, respectively.

Introduction

Many of the public outdoor recreation opportunities in Kansas are administered through the Kansas Department of Wildlife and Parks (KDWP). Moreover, financial support for conservation priorities throughout the state is largely derived from expenditures related to hunting. In order to optimize funding for conservation priorities, it is imperative to explore the dynamics that surround hunting participation. Through an understanding of the reasons for hunting, satisfactions derived from hunting, and barriers associated with hunting, creative programs can be utilized to enhance the hunting experience and encourage long-term participation.

Declines in hunting participation have been documented for several years. Although the reasons for hunting, satisfactions of hunting, and barriers to hunting participation have been examined by other researchers, a regional assessment of these barriers that includes Kansas has not been undertaken. Further, an evaluation and comparison of the barriers associated with hunting participation relative to different types of hunting is lacking.

The objectives of this study are to:

- provide a hunting and demographic profile of resident and non-resident individuals that purchase a Kansas hunting license,
- compare resident and non-resident hunters on most important reasons for hunting
- determine primary reasons that non-residents hunt in Kansas
- compare resident and non-resident hunters on the satisfactions associated with hunting
- compare resident and non-resident hunters on the barriers to hunting participation
- examine the hunting barriers association with hunting continuity
- determine non-residents' original sources of information on Kansas hunting

Methods

The Docking Institute of Public Affairs at Fort Hays State University conducted a self-administered mail survey of a random sample of Kansas hunting license holders. This sample included Kansas resident and non-resident hunters who had purchased a hunting license from the Kansas Department of Wildlife and Parks between August 2005 and April 2006. A two-wave self-administered mail survey was conducted in May and June, 2006. Of 1,142 randomly selected Kansas hunting license holders targeted, 478 returned questionnaires, resulting in a response rate of 42%.

Demographic Profile of Resident and Non-Resident Hunters

Sixty-five percent of the original random sample provided to the Docking Institute by KDWP consisted of Kansas residents. The final sample of respondents consisted of 46% Kansas residents. Tables 1 and 2 show various social characteristics of Kansas resident and non-resident hunters. Table 1 suggests that residents and non-residents do not differ much when it comes to racial background and home life. There are about three percent more women respondents from Kansas when compared to non-residents. About five percent more of the non-residents are married when compared to the Kansas respondents.

Table 2 shows that non-residents report having a greater annual income than residents, with more than half (54.3%) of the non-resident households earning \$100,000 or per year, compared to 15.7% of Kansas residents. Non-residents also report generally higher levels of formal education. Nearly 46% of the non-residents hold a bachelors degree or higher, while only 34% of the Kansas residents hold a bachelors degree or higher degree.

Table 1. Gender, Race, Family

<i>Social Indicators</i>		<i>Kansas Resident</i> %	<i>Non-Resident</i> %
Gender	Male	93.9	97.2
	Female	6.1	2.8
Marriage Status	Married	78.4	83.3
	Divorced	8.6	8.9
	Separated	0.0	0.0
	Never Married	12.2	7.2
	Spouse Deceased	0.7	0.6
Live in Single-Parent Household Before 18 Years Old	No	81.2	85.6
	Yes, with Mother	15.9	12.8
	Yes, with Father	2.5	0.6
	Yes, with Other Adult	0.4	1.1
Hispanic Origin	Yes	2.2	1.7
Racial Background	White	98.6	97.8
	Black or African American	0.4	0.0
	Other Race	1.1	2.2
Number of Children Under 18 at Home	None	59.2	65.6
	1 Child	15.2	13.3
	2 to 3 Children	23.8	20.0
	4 to 5 Children	1.4	1.1
	6 to 7 Children	0.4	0.0

Table 2. Income, Education, Age

<i>Social Indicators</i>		<i>Kansas Resident</i> %	<i>Non-Resident</i> %
Total Household Income in 2005	less than \$20,000	7.3	1.9
	\$20,000 - \$29,999	4.2	1.9
	\$30,000 - \$39,999	11.9	4.9
	\$40,000 - \$49,999	16.5	7.4
	\$50,000 - \$59,999	11.5	5.6
	\$60,000 - \$69,999	10.7	7.4
	\$70,000 - \$79,999	9.2	8.0
	\$80,000 - \$89,999	6.9	6.8
	\$90,000 - \$99,999	6.1	1.9
	\$100,000 or more	15.7	54.3
Highest Level of Education Achieved	Primary School	1.8	1.7
	Some high School	5.0	5.6
	High School Diploma	44.2	33.9
	Associates Degree	14.7	13.3
	Bachelors Degree	25.2	28.9
	Masters Degree	6.1	9.4
	Doctorate Degree	0.7	1.7
Age in 2006	Professional Degree	2.2	5.6
	Up to 19 Years	3.6	1.7
	20 to 29 Years	10.5	4.5
	30 to 39 Years	17.3	15.1
	40 to 49 Years	25.3	22.3
	50 to 59 Years	31.4	27.4
	60 to 69 Years	11.9	20.7
	70 to 79 Years	0.0	7.8
80 Years and Above	0.0	0.6	

Family Hunting Experience and Hunting in Kansas

Table 3 shows that most resident and non-resident hunters have hunted for more than 25 years (53.7% and 58.4%, respectively). The majority of both groups had parents or guardians that hunted, and the majority of both groups began hunting when they were between 9 to 12 years of age. However, 72% of the non-residents report starting to hunt at 12 years or less, compared to 59% of the Kansas residents.

Table 4 shows that more than 90% of the residents and non-residents, each, purchased a Kansas hunting license in 2005. For previous years, this similarity ends. Residents out-purchased non-residents by more than 20% for every previous year. For example, in 2004, 88.3% of the Kansas residents surveyed purchased a hunting license, compared to 62.7% of the non-residents. More than twice as many residents have already purchased a license for 2006 than have non-residents (68.6% and 32.1%, respectively).

Table 4 also shows that residents and non-residents differ when it comes to the year they began hunting in Kansas. For example, 55% of the Kansas residents began hunting in the state *prior* to 1980, compared to about 20% of the non-residents. Conversely, 45% percent of the residents began hunting *after* 1980, compared to nearly 80% of the non-residents.

Appendix I provides more demographic information by type of hunting (i.e., big game, turkey, upland game, waterfowl, and other small game).

Table 3. Hunting Experience

<i>Hunting Characteristics</i>		<i>Kansas Resident %</i>	<i>Non-Resident %</i>
Did you Purchase a Kansas Hunting License in...	2005	95.1	94.1
	2004	88.3	62.7
	2003	84.8	52.4
	2002	80.9	48.6
	2001	75.3	42.2
Plan to Purchase Licence for 2006 Season	Yes, I already have	68.6	32.1
	Yes, I plan on doing so	27.2	48.4
	No	0.4	5.4
	I have not decided yet	3.9	14.1
Year Began Hunting in Kansas	Prior to 1950	0.0	1.7
	1950 to 1954	1.8	0.6
	1955 to 1959	6.8	1.7
	1960 to 1964	10.8	3.4
	1965 to 1969	11.5	1.1
	1970 to 1974	10.8	4.5
	1975 to 1979	13.3	7.3
	1980 to 1984	7.9	3.4
	1985 to 1989	5.8	2.2
	1990 to 1994	8.6	4.5
	1995 to 1999	9.0	16.3
	2000 to Present	13.7	53.4

Table 4. Hunting in Kansas

<i>Hunting Characteristics</i>		<i>Kansas Resident %</i>	<i>Non-Resident %</i>
Total Years Participated in Hunting	1 year	1.8	6.5
	2-5 years	10.3	11.4
	6-10 years	10.3	5.4
	11-15 years	8.5	4.9
	16-20 years	8.9	3.8
	21-25 years	6.4	9.7
	More than 25 years	53.7	58.4
	Parent or Guardian Hunted	Yes	74.4
No		24.9	20.6
Don't Know		0.7	0.6
Age Began Hunting	Below 5 Years	2.2	0.0
	5 to 8 Years	11.6	26.3
	9 to 12 Years	45.3	45.8
	13 to 16 Years	24.6	20.1
	17 to 20 Years	5.8	1.1
	21 to 24 Years	2.9	2.8
	25 to 28 Years	1.8	2.2
	29 to 32 Years	2.5	0.0
	33 to 36 Years	0.4	0.0
	37 to 40 Years	0.4	0.6
	More than 40 Years	2.5	1.1

Number of Days Hunting in Kansas

Table 5 shows the mean averages for the number of days hunted in Kansas in one year. Not surprisingly, Kansas residents spent more days hunting in Kansas than did non-residents. The table suggests, however, that hunting for waterfowl is a type of hunting that non-residents spend far less time (about 3 days) in Kansas pursuing per year than do Kansas residents (about 11 days). Non-residents spend most of their time in Kansas hunting big game (6 days per year on average) and upland game (5 days per year on average).

Table 6 shows the mean, median, standard deviation, and range for the days spend in Kansas pursuing the five types of hunting shown in Table 5. The mean and median average number of days hunting per year for Kansas residents exceeds those of the non-residents, for all five hunting types. However, the statistical standard error for Kansas resident responses exceeds those of the non-residents, suggesting more variability in resident responses.

Table 5. Mean Number of Days Hunting by Type

<i>Type of Hunting</i>		<i>Kansas Resident</i> (# Days)	<i>Non-Resident</i> (# Days)
Mean Number of Days Spent Hunting Annually	Big Game	10.3	6.1
	Turkey	7.7	4.3
	Upland Game	10.3	5.0
	Waterfowl	11.0	2.8
	Other Small Game	9.5	3.5

Table 6. Annual Statistics by Type of Hunting

<i>Type of Hunting</i>		<i>Kansas Resident</i>	<i>Non-Resident</i>
Annual Number of Days Spent Hunting Big Game	Mean	10.3	6.1
	Median	6.0	5.0
	Std. Dev.	12.1%	3.5%
	Range	1 to 90	1 to 16
Annual Number of Days Spent Hunting Turkey	Mean	7.7	4.3
	Median	6.0	4.0
	Std. Dev.	7.4%	2.7%
	Range	1 to 45	1 to 13
Annual Number of Days Spent Hunting Upland Game	Mean	10.3	5.0
	Median	6.0	4.0
	Std. Dev.	12.0%	3.4%
	Range	1 to 90	1 to 21
Annual Number of Days Spent Hunting Waterfowl	Mean	11.0	2.8
	Median	5.0	2.0
	Std. Dev.	15.6%	2.4%
	Range	1 to 90	1 to 10
Annual Number of Days Spent Hunting Other Small Game	Mean	9.5	3.5
	Median	6.0	2.5
	Std. Dev.	11.4%	3.4%
	Range	1 to 73	1 to 15

Non-Resident Hunting Outside of Kansas

Table 6 shows that Colorado is the most popular location for non-residents to hunt, other than in Kansas (with 15.2% of the non-residents reporting purchasing a hunting license in that state). New Mexico and South Dakota follow with nearly 8% each. Canada is listed as well, with about 2% of the non-residents purchasing a hunting license in that country.

Additionally, 83% of the non-residents report that they purchased a hunting license in their home state in 2005.

Table 7. Location of Non-Resident Hunting Outside of Kansas (Non-Residents Only)

<i>Location</i>	<i>Frequency</i>	<i>Valid %</i>
Colorado	27	15.2
New Mexico	14	7.9
South Dakota	14	7.9
Nebraska	12	6.7
Texas	12	6.7
Iowa	11	6.2
Oklahoma	9	5.1
Wyoming	8	4.5
Alabama	6	3.4
Montana	6	3.4
North Dakota	6	3.4
Alaska	4	2.2
Canada	4	2.2
Louisiana	4	2.2
Mississippi	4	2.2
Georgia	3	1.7
Illinois	3	1.7
Indiana	3	1.7
Kentucky	3	1.7
Michigan	3	1.7
Missouri	3	1.7
Arizona	2	1.1
New York	2	1.1
South Carolina	2	1.1
Tennessee	2	1.1
Arkansas	1	0.6
California	1	0.6
Idaho	1	0.6
Maryland	1	0.6
Minnesota	1	0.6
New Hampshire	1	0.6
North Carolina	1	0.6
Utah	1	0.6
Virginia	1	0.6
West Virginia	1	0.6
Wisconsin	1	0.6
Total	178	100

Importance of Hunting

Respondents were presented with a several reasons for hunting, and asked to indicate how important these reasons are to their participation in hunting. Figure 1 shows that among resident hunters relaxation is the most important reason for hunting, followed by being in nature. Figure 2 shows that the same two reasons are the most important among non-resident hunters but in reverse order. A gamma correlation was then conducted between residents and non-residents in order to reveal significant differences between resident and non-resident responses.

Figure 1. Importance of Reasons for Hunting: Residents

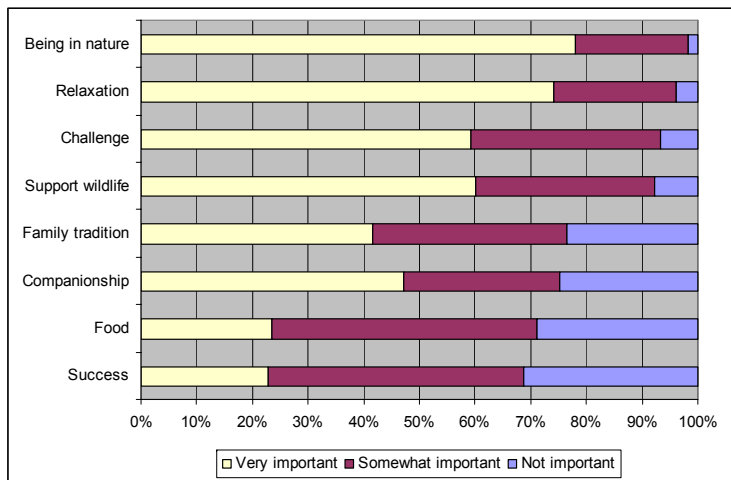
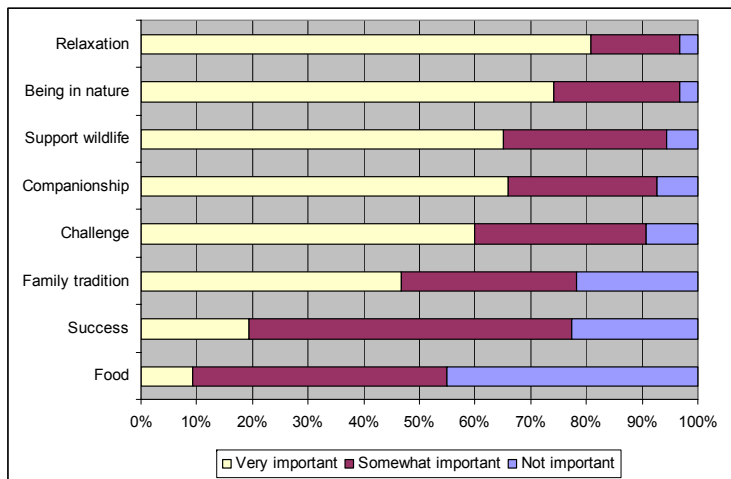


Figure 2. Importance of Reasons for Hunting: Non-Residents



There are two significant differences in importance ratings when comparing resident to non-resident hunters. Figure 3 shows that resident hunters tend to place greater importance on food as a reason to hunt, and Figure 4 shows that non-residents tend to place greater importance on companionship than residents. Gamma correlations (G) of 0.35 are considered 'moderate' in strength, while correlations of 0.50 and higher are strong.

Figure 3. Importance of Hunting for Food: Resident & Non-Resident (G = -0.357; P > 0.001)

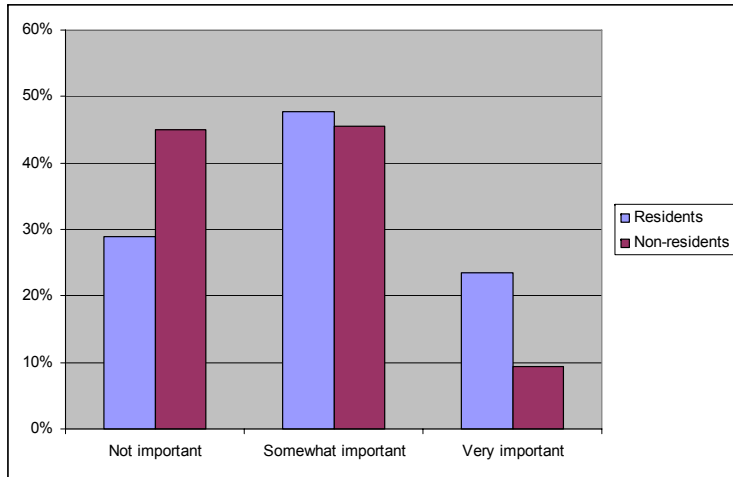
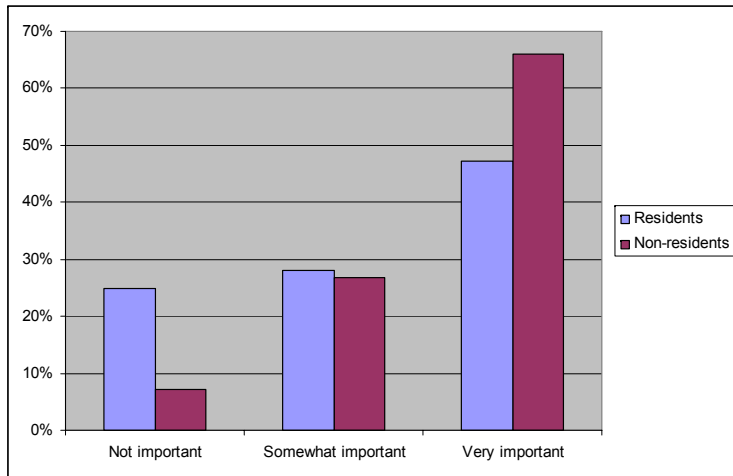
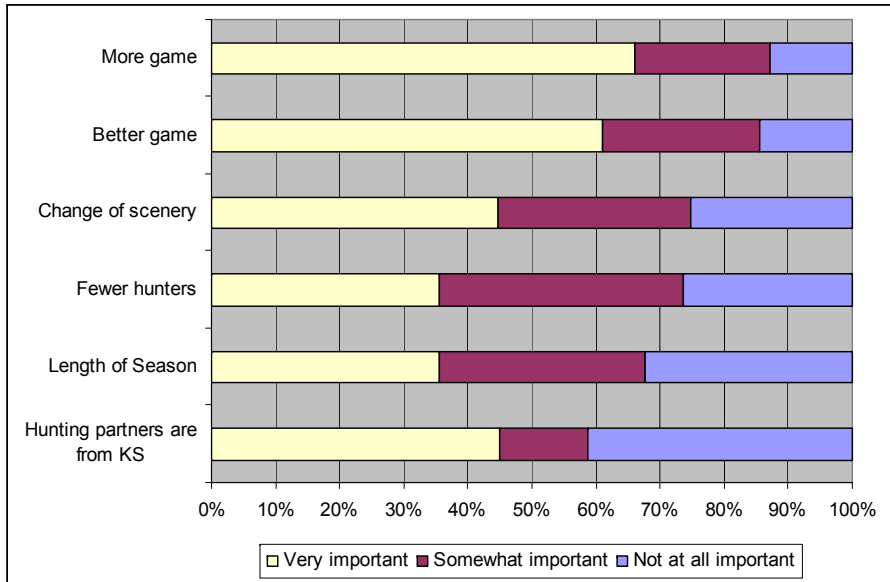


Figure 4. Importance of Companionship: Resident & Non-Resident (G = 0.392; P > 0.001)



Non-resident hunters were also asked to indicate the importance of particular reasons for hunting in Kansas. Figure 5 shows that more game (quantity) and better game (quality) are the most important reasons for Kansas as a hunting destination.

Figure 5. Reasons that Non-Residents Come to Kansas to Hunt



Satisfaction with Hunting

Respondents were presented with a series of possible satisfactions that are often derived from hunting, and were asked to indicate whether each item is very satisfying, somewhat satisfying or not at all satisfying. Figure 6 shows that among resident hunters, satisfaction levels are highest with respect to seeing game, relaxation, being in nature and hunting with friends, in order. Results among non-residents are similar with three of the same for highest satisfaction items, but hunting with family enters the top four for non-residents and being in nature drops from the top four.

Figure 6. Satisfaction with Hunting: Residents

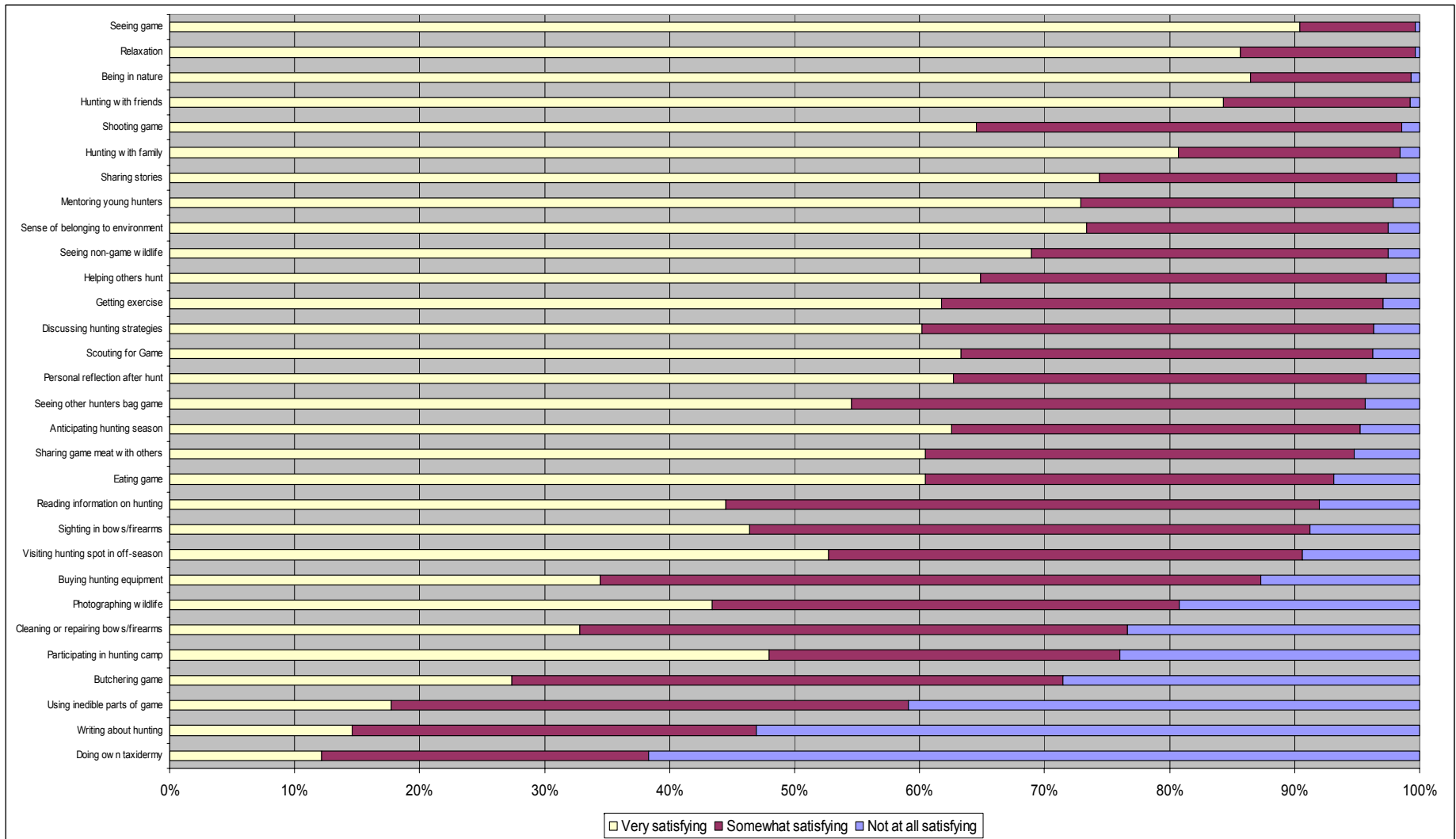
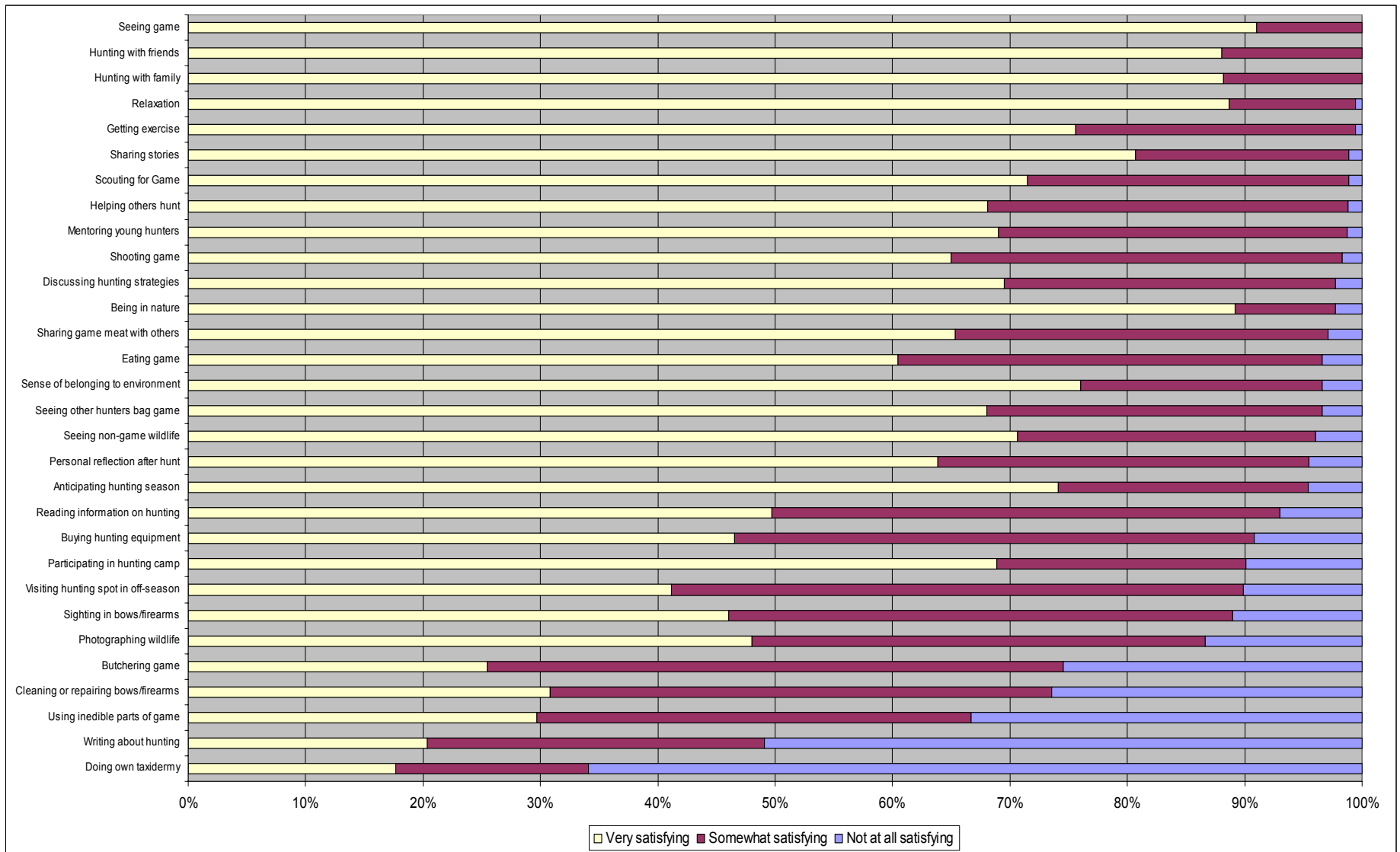


Figure 7. Satisfaction with Hunting: Non-Residents



A gamma correlation was conducted between residents and non-residents relative to satisfaction items. Figures 8 through 17 display resident and non-resident response for those items on which significant satisfaction differences exist. Non-residents report higher levels of satisfaction than residents on: scouting for game, discussing hunting strategies, buying hunting equipment, anticipating hunting season, participating in hunting camp, hunting with family, getting exercise, seeing others bag game and using inedible parts of game. Residents report higher levels of satisfaction on visiting hunting site during off-season.

Figure 8. Satisfaction with Scouting for Game: Resident & Non-Resident (G = 0.194; P = 0.051)

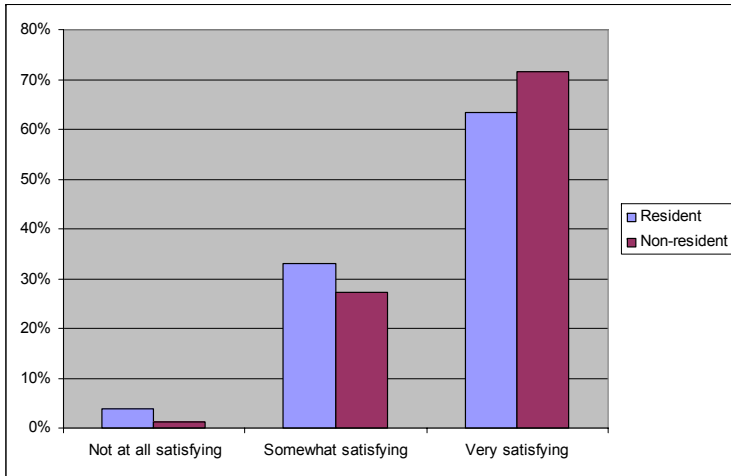


Figure 9. Satisfaction with Discussing Hunting Strategies: Resident & Non-Resident (G = 0.198; P = 0.038)

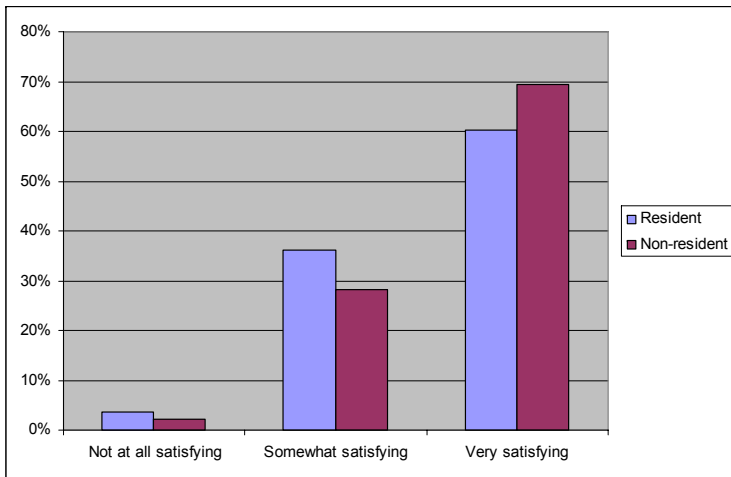


Figure 10. Satisfaction with Buying Hunting Equipment: Resident & Non-Resident (G = 0.217; P = 0.010)

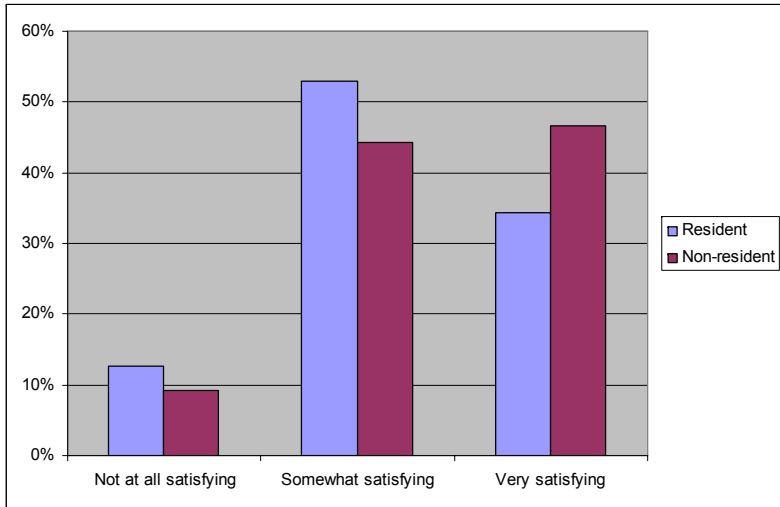


Figure 11. Satisfaction with Anticipating Hunting Season: Resident & Non-Resident (G = 0.239; P = 0.014)

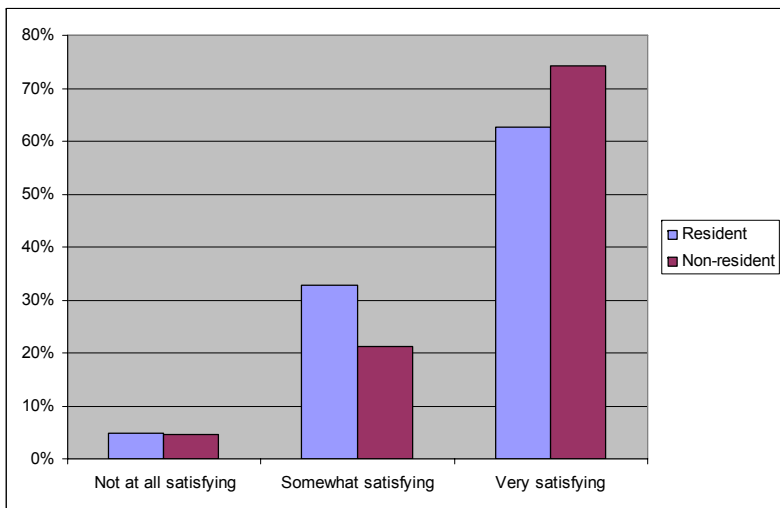


Figure 12. Satisfaction with Participating in Hunting Camp: Resident & Non-Resident (G = 0.396; P > 0.001)

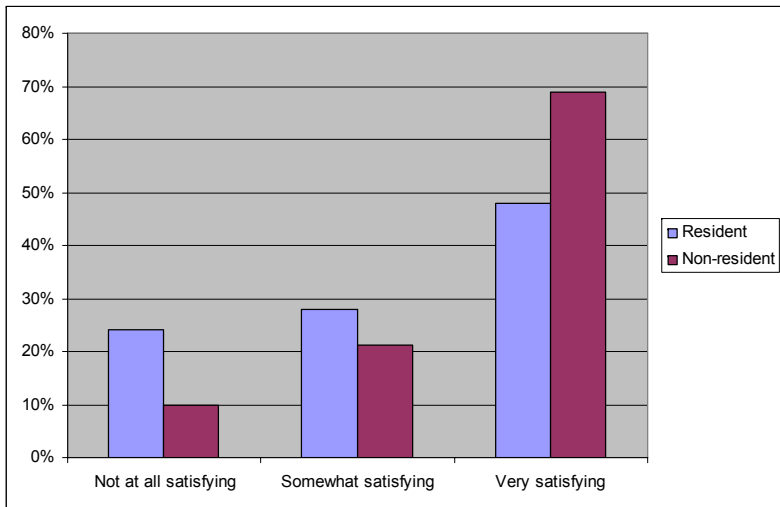


Figure 13. Satisfaction with Hunting with Family: Resident & Non-Resident (G = 0.286; P = 0.028)

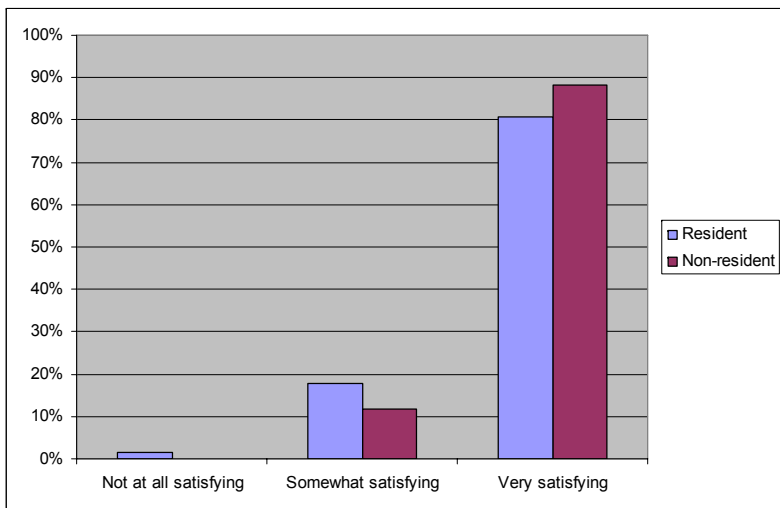


Figure 14. Satisfaction with Getting Exercise: Resident & Non-Resident (G = 0.319; P = 0.001)

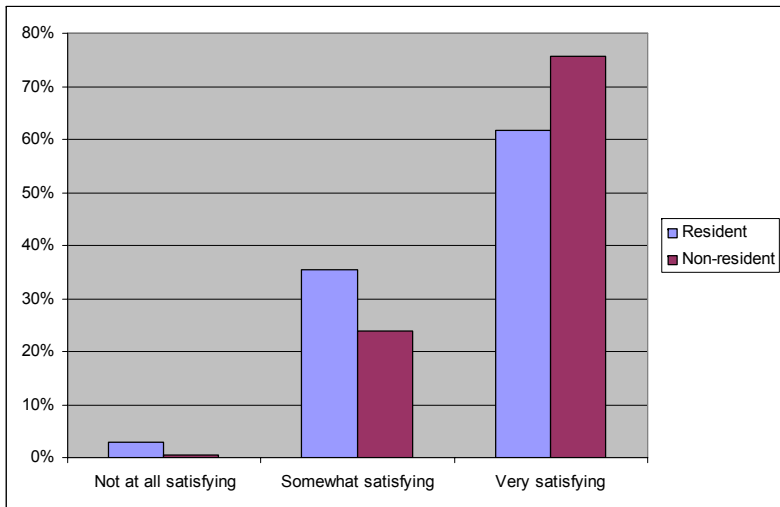


Figure 15. Satisfaction with Seeing Other Hunters Bag Game: Resident & Non-Resident (G = 0.252; P = 0.006)

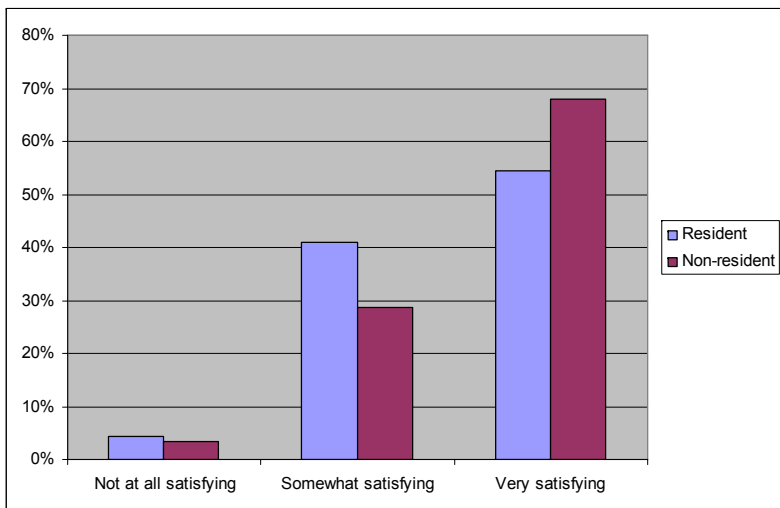


Figure 16. Satisfaction with Using Inedible Parts of Game: Resident & Non-Resident (G = 0.202; P = 0.026)

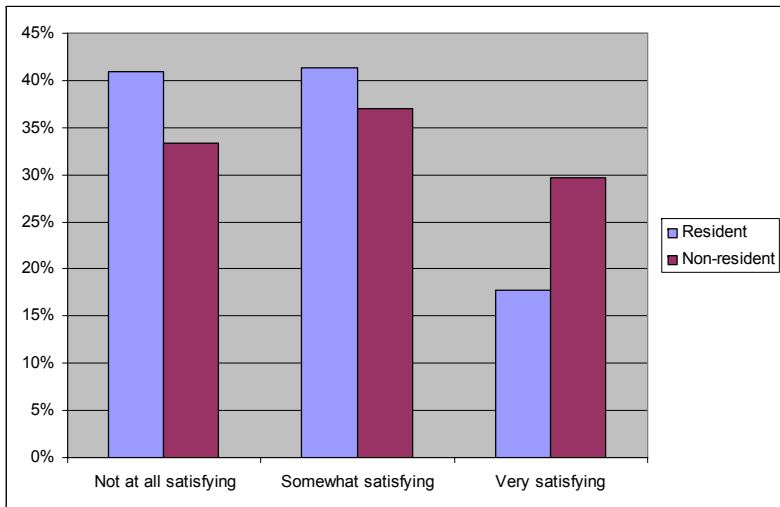
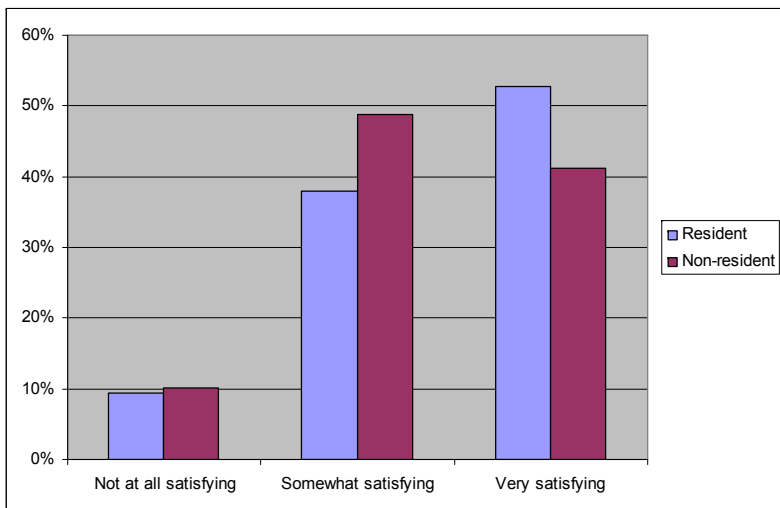


Figure 17. Satisfaction with Visiting Hunting Spot in Off-Season: Resident & Non-Resident (G = -0.184; P = 0.037)



Barriers to Hunting

Respondents were presented with a series of potential barriers to hunting, and asked to indicate the extent to which each is barrier to them personally. Respondents were asked to rate each barrier across five hunting seasons: big game, turkey, upland game, waterfowl, and other small game. For those who did not hunt in a particular season, a 'not applicable' response option was provided. A gamma correlation was conducted between resident and non-resident respondents among each type of hunting relative to each barrier item.

Big Game

Figures 18 and 19 show that family, work and other commitments and access to land are the most frequent barrier areas for both residents and non-residents.

Figure 18. Barriers to Hunting Big Game: Residents

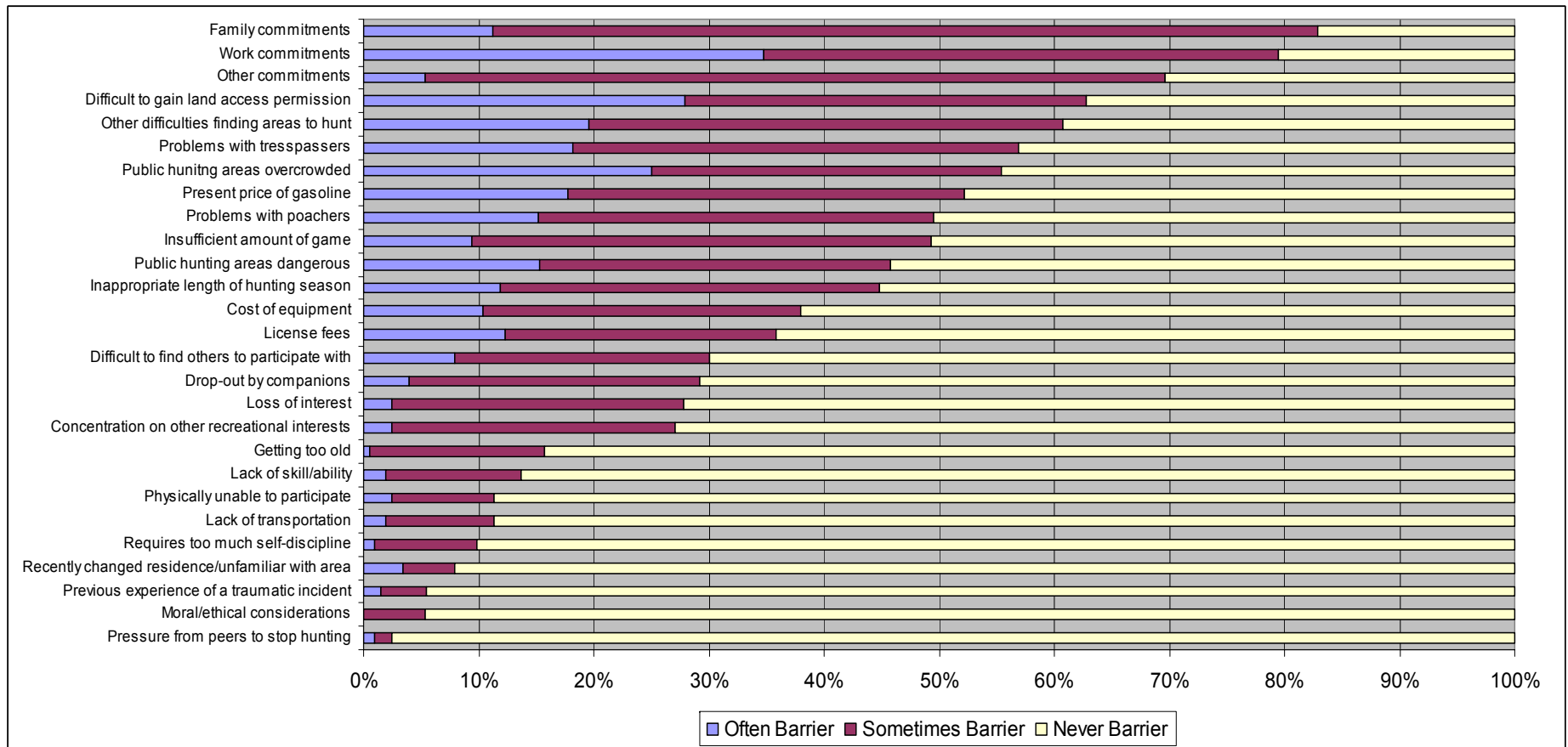
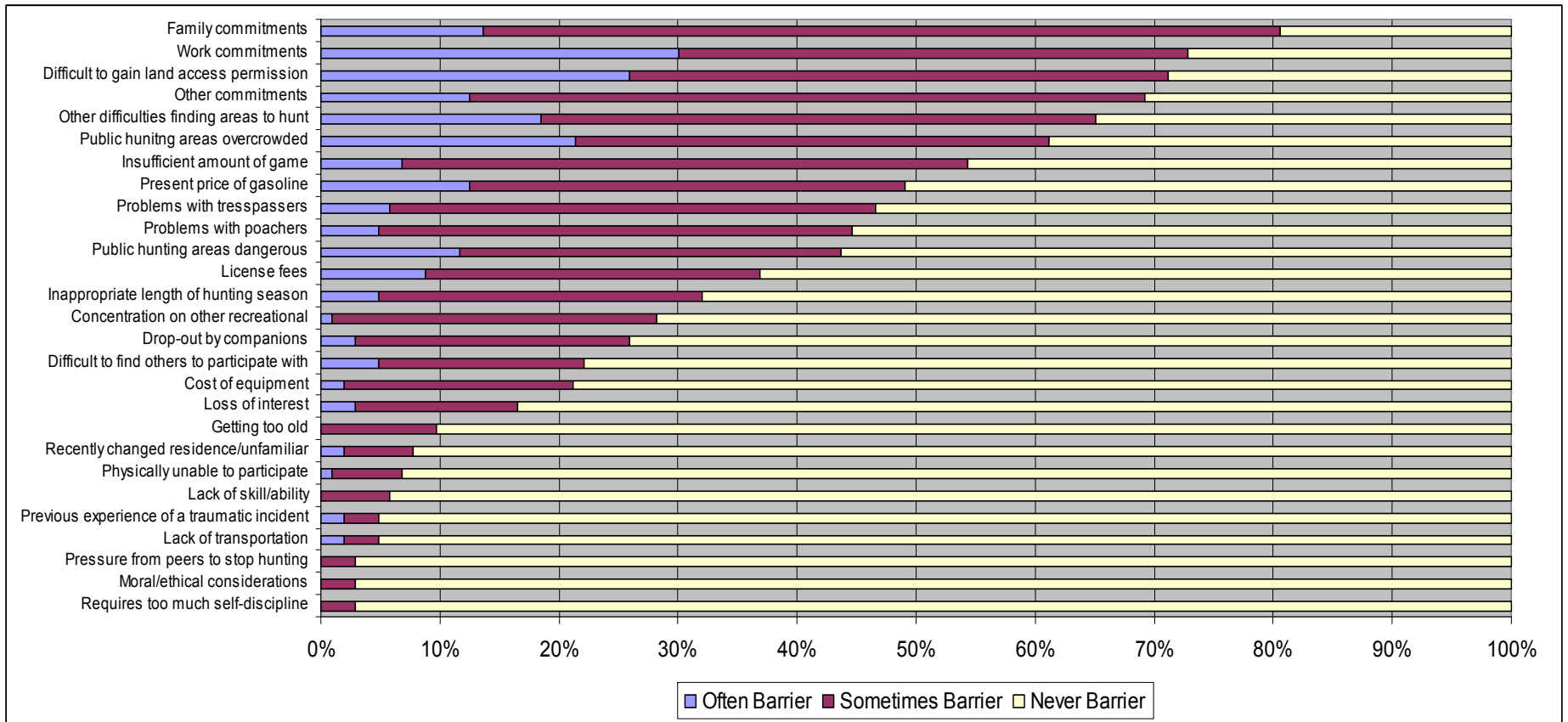


Figure 19. Barriers to Hunting Big Game: Non-Residents



Figures 20 through 26 display resident and non-resident response for those items on which significant barrier differences exist when hunting *big game*. Non-residents report lower barriers than residents on: cost of equipment, lack of transportation, problems with trespassers, inappropriate length of hunting season, loss of interest, requires too much self discipline, and lack of skill/ability.

Figure 20. Cost of Equipment as Big Game Hunting Barrier: Resident & Non-Resident (G = 0.400; P > 0.001)

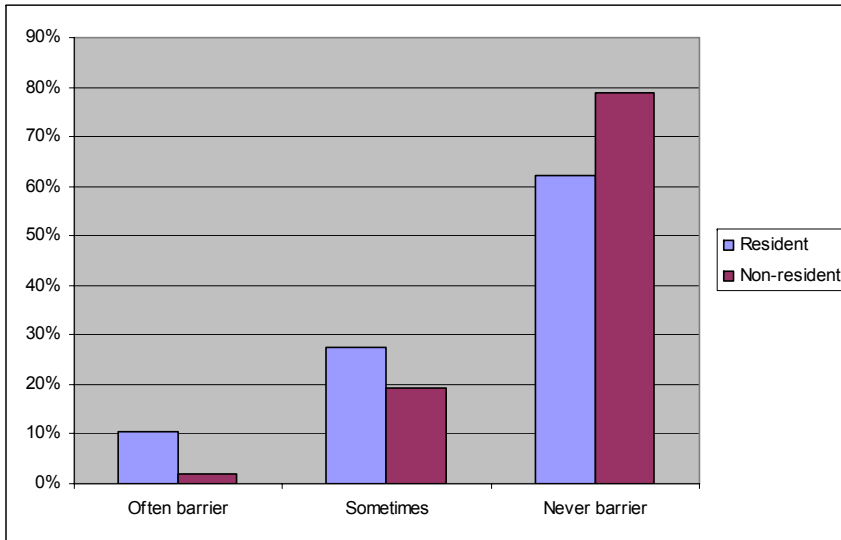


Figure 21. Lack of Transportation as Big Game Hunting Barrier: Resident & Non-Resident (G = 0.419; P = 0.038)

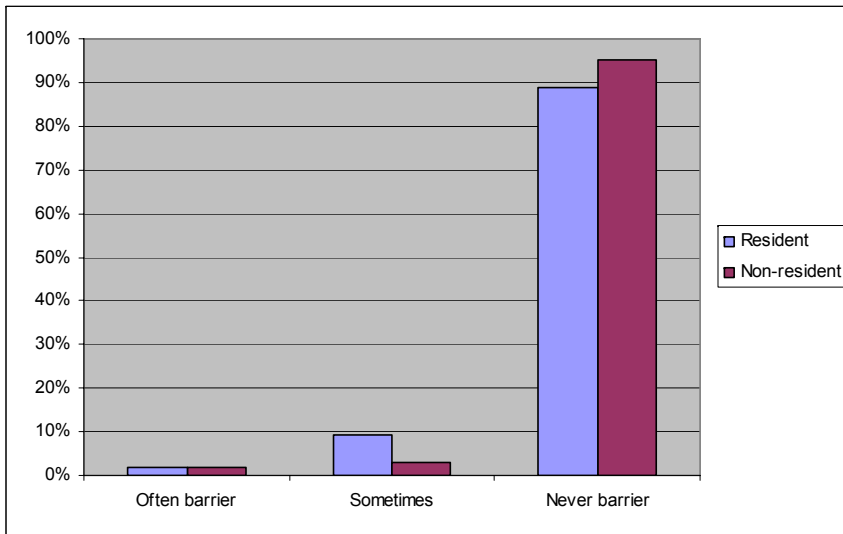


Figure 22. Problems with Trespassers as Big Game Hunting Barrier: Resident & Non-Resident (G = 0.256; P = 0.011)

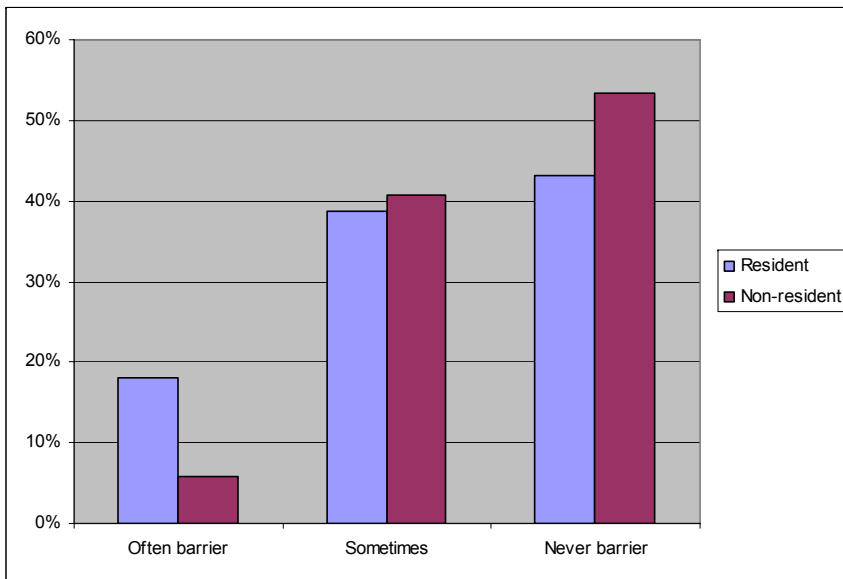


Figure 23. Inappropriate Length of Hunting Season as Big Game Hunting Barrier: Resident & Non-Resident (G = 0.272; P = 0.013)

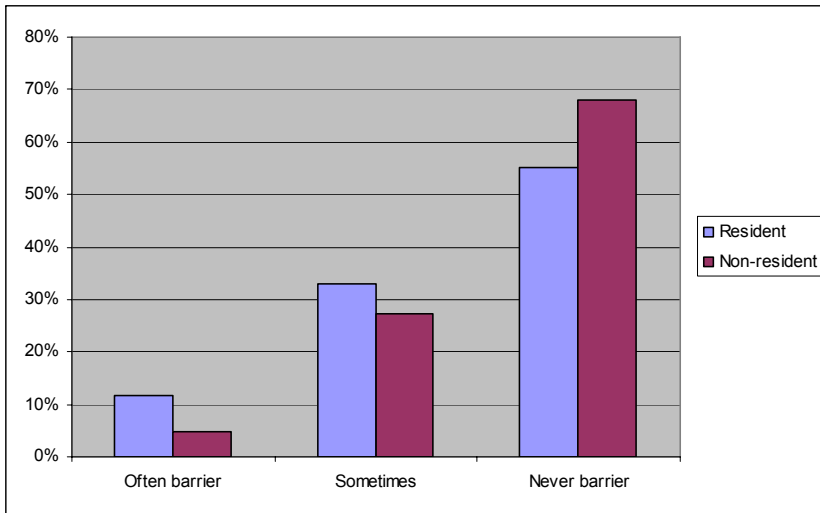


Figure 24. Loss of Interest as Big Game Hunting Barrier: Resident & Non-Resident (G = 0.301; P = 0.026)

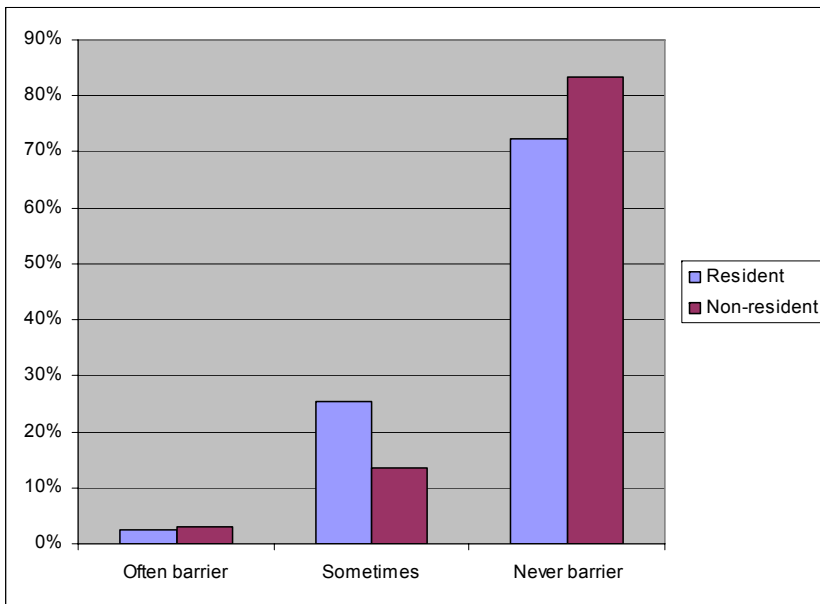


Figure 25. Requires Too Much Self-Discipline as Big Game Hunting Barrier: Resident & Non-Resident (G = 0.570; P = 0.009)

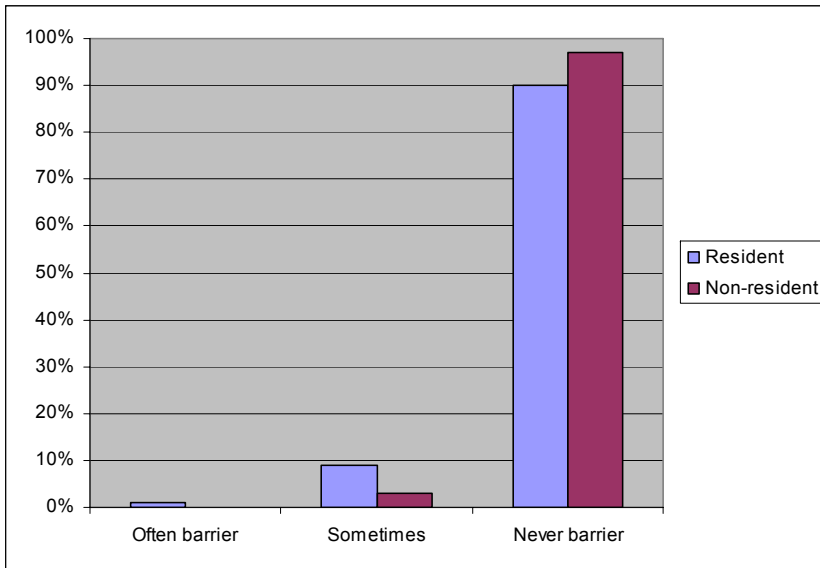
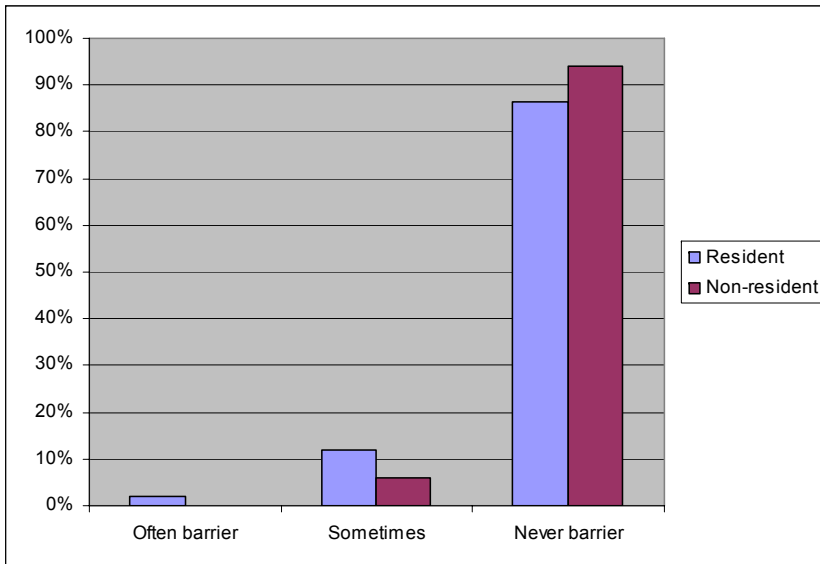


Figure 26. Lack of Skill/Ability as Big Game Hunting Barrier: Resident & Non-Resident (G = 0.444; P = 0.016)



Turkey

Figures 27 and 28 show that family, work and other commitments and access to land are the most frequent barrier areas for both residents and non-residents.

Figure 27. Barriers to Hunting Turkey: Residents

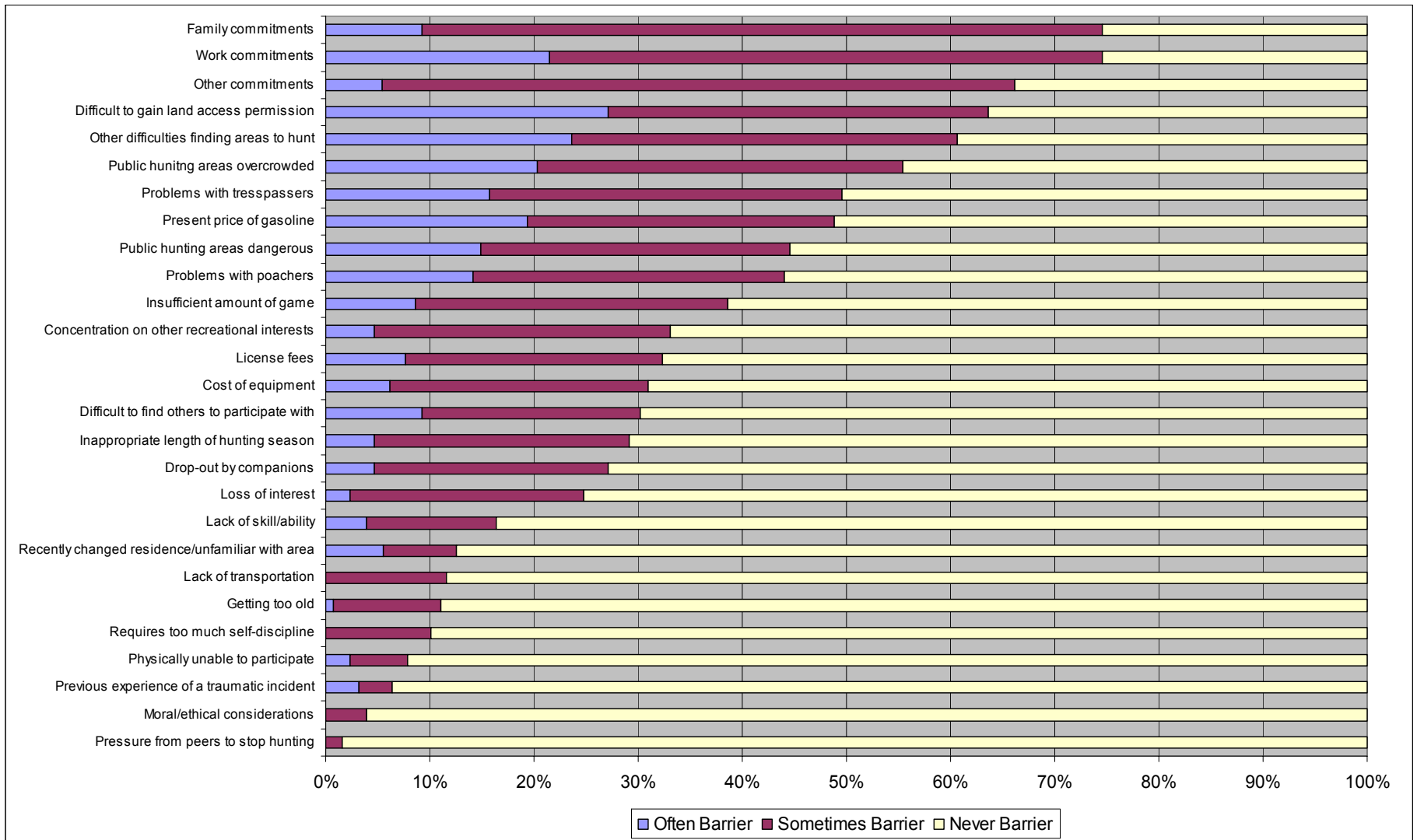
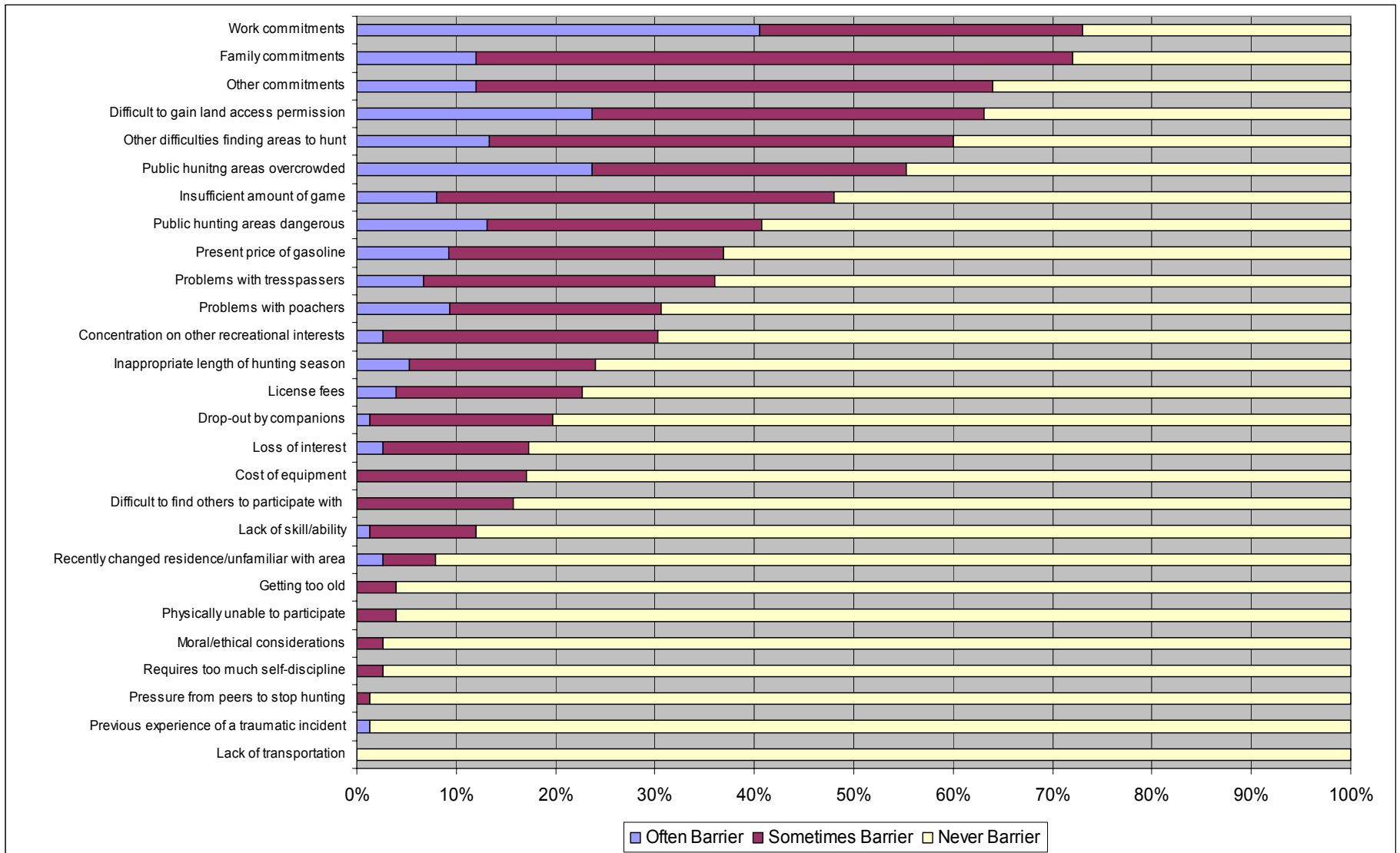


Figure 28. Barriers to Hunting Turkey: Non-Residents



Figures 29 through 36 display resident and non-resident response for those items on which significant barrier differences exist when hunting *turkey*. Non-residents report lower barriers than residents on: cost of equipment, price of gasoline, lack of transportation, difficulty finding others to hunt with, problems with trespassers, problems with poachers, requires too much self discipline, and getting too old.

Figure 29. Cost of Equipment as Turkey Hunting Barrier: Resident & Non-Resident (G = 0.388; P = 0.011)

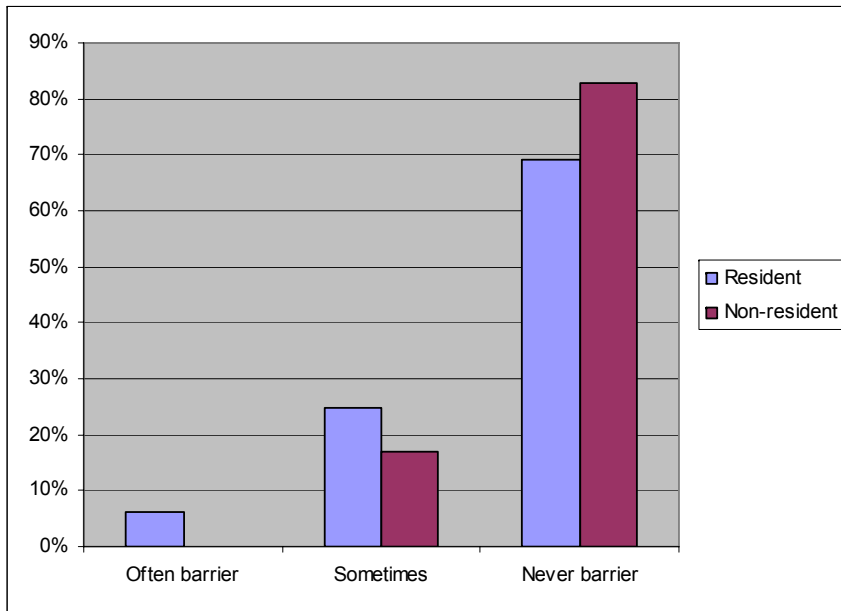


Figure 30. Price of Gasoline as Turkey Hunting Barrier: Resident & Non-Resident (G = 0.253; P = 0.042)

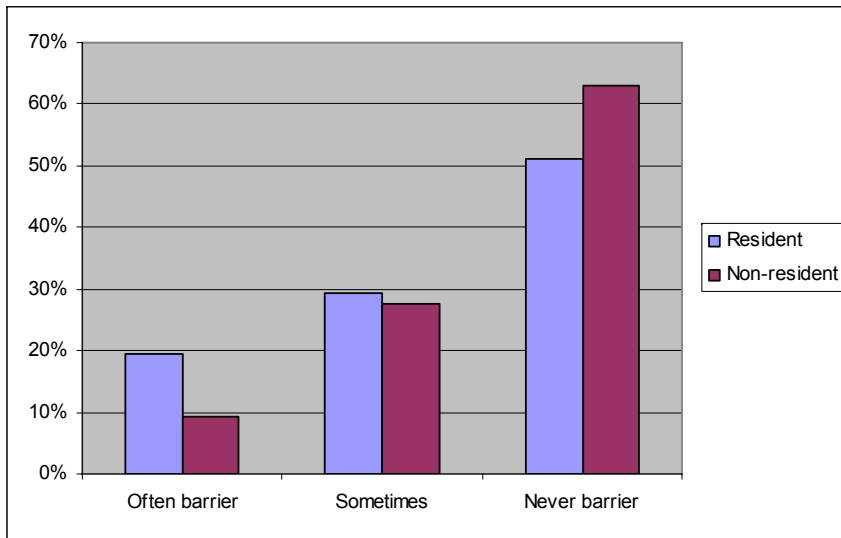


Figure 31. Lack of Transportation as Turkey Hunting Barrier: Resident & Non-Resident (G = 1.000; P > 0.001)

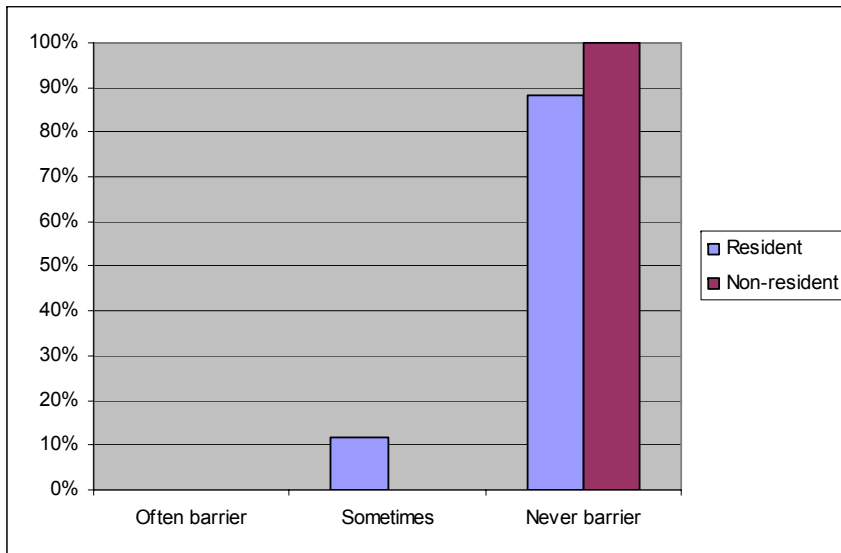


Figure 32. Difficulty Finding Others to Hunt With as Turkey Hunting Barrier: Resident & Non-Resident (G = 0.419; P = 0.005)

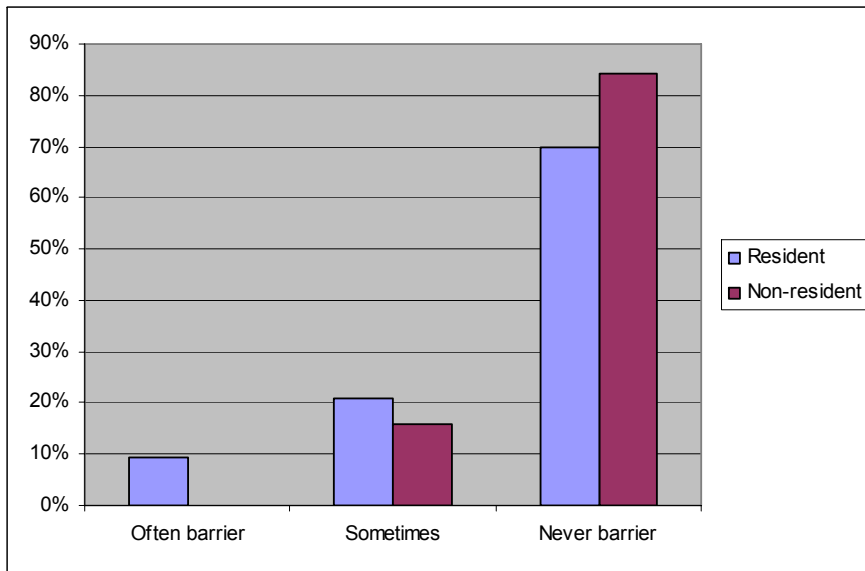


Figure 33. Problems with Trespassers as Turkey Hunting Barrier: Resident & Non-Resident (G = 0.281; P = 0.026)

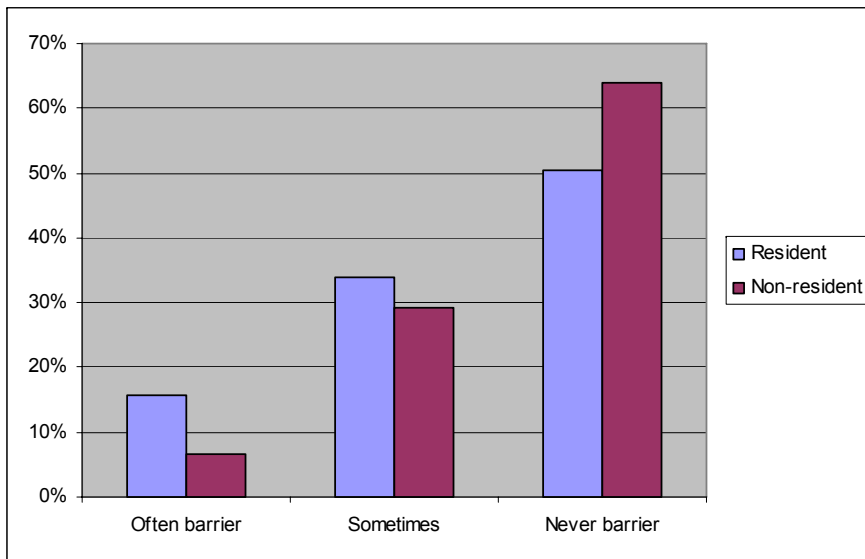


Figure 34. Problems with Poachers as Turkey Hunting Barrier: Resident & Non-Resident (G = 0.255; P = 0.054)

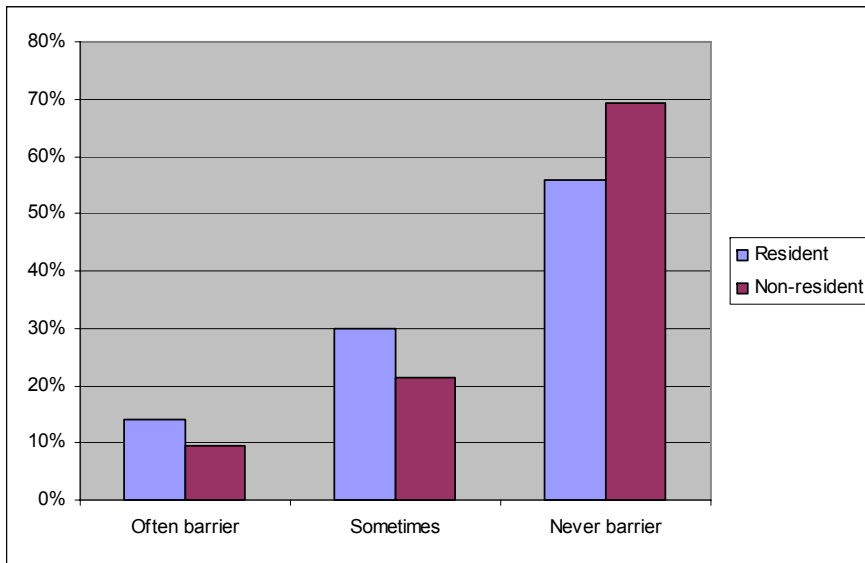


Figure 35. Requires Too Much Self-Discipline as Turkey Hunting Barrier: Resident & Non-Resident (G = 0.610; P = 0.022)

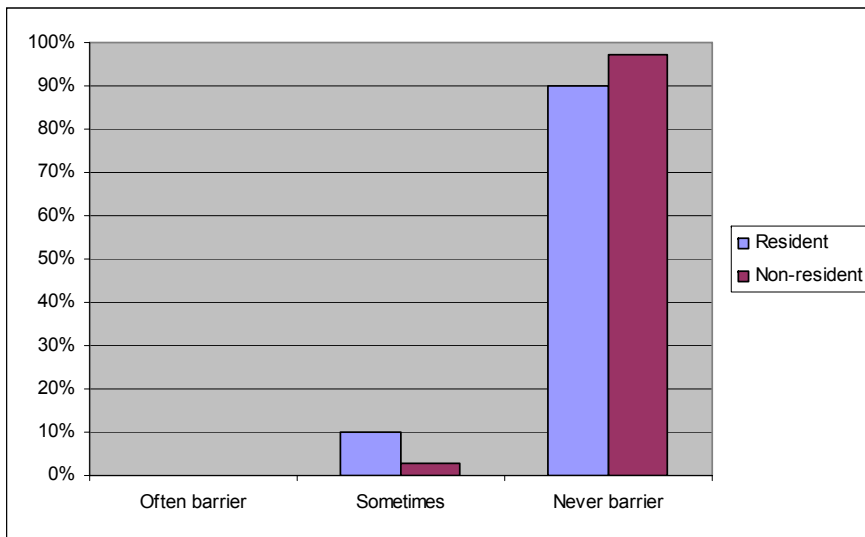
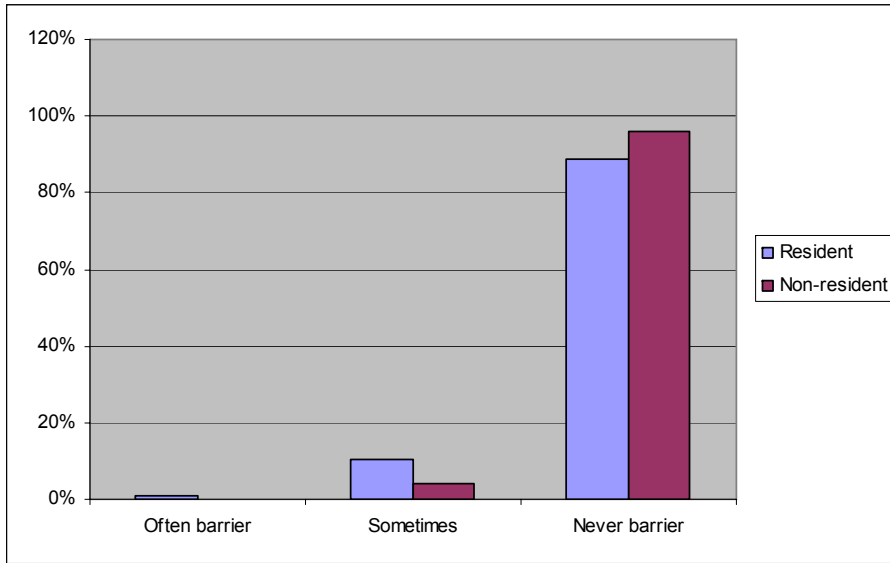


Figure 36. Getting Too Old as Turkey Hunting Barrier: Resident & Non-Resident (G = 0.498; P = 0.049)



Upland Game

Figures 37 and 38 show that family, work and other commitments constitute the most frequent barrier to upland game hunting as for big game and turkey hunting. In contrast to responses on big game and turkey hunting barriers, both residents and non-residents tend to identify insufficient amount of game as more of a barrier than access to land.

Figure 37. Barriers to Hunting Upland Game: Residents

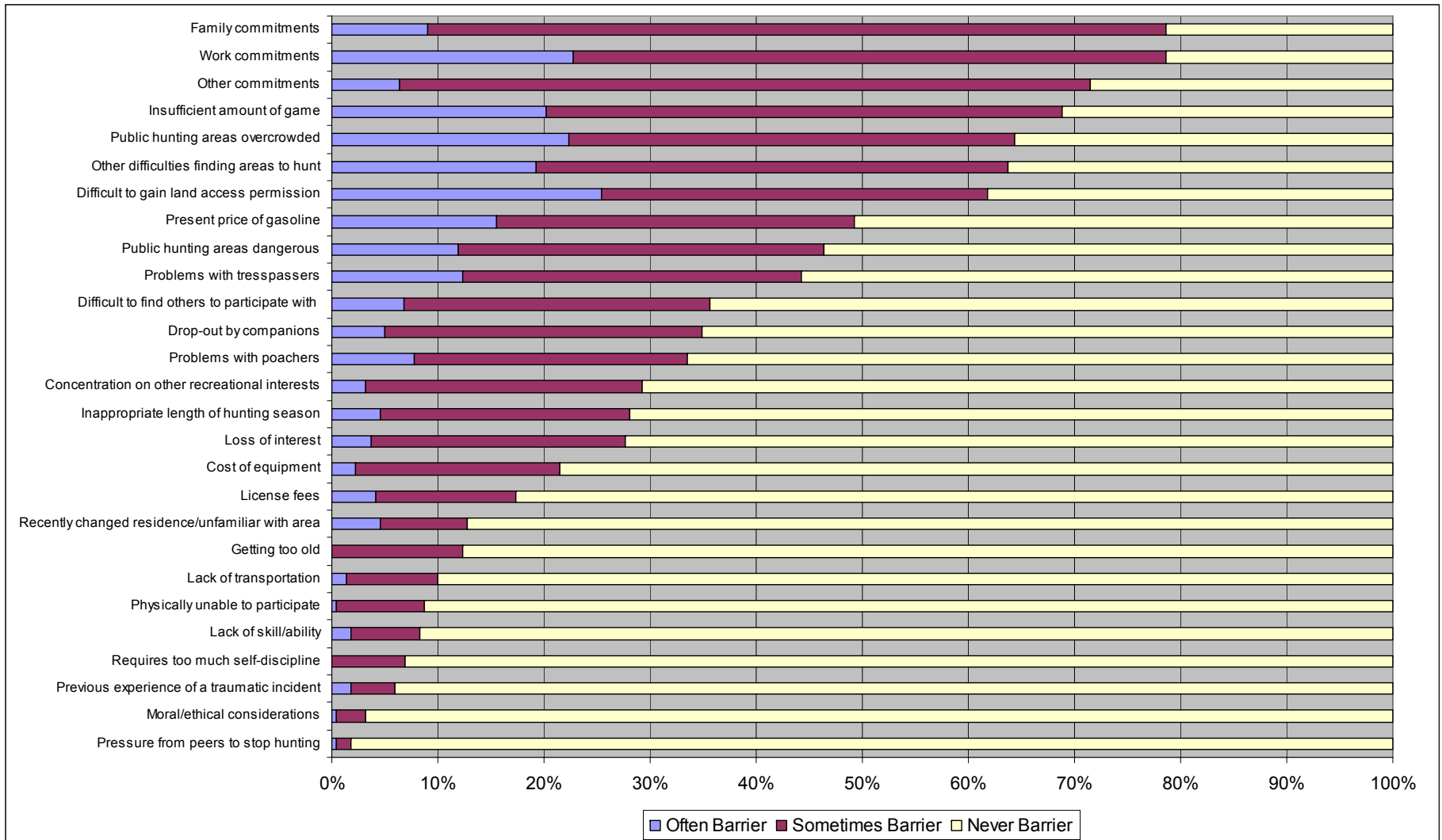
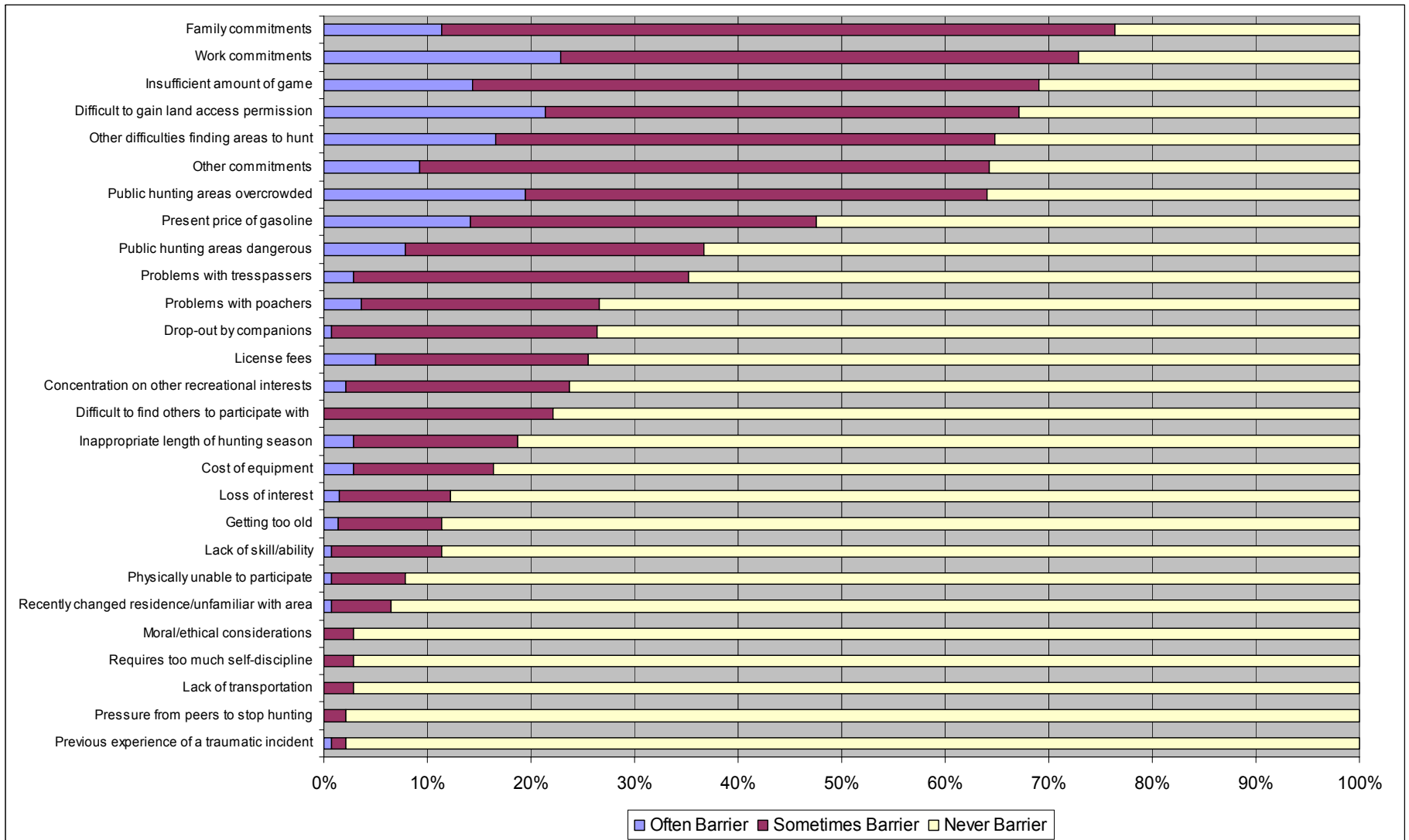


Figure 38. Barriers to Hunting Upland Game: Non-Residents



Figures 39 through 45 display resident and non-resident response for those items on which significant barrier differences exist when hunting *upland game*. Non-residents report lower barriers than residents on: lack of transportation, drop-out by companions, difficulty finding others to hunt with, problems with trespassers, inappropriate length of season, recently changed residence/unfamiliar with area, and loss of interest.

Figure 39. Lack of Transportation as Upland Game Hunting Barrier: Resident & Non-Resident (G = 0.584; P = 0.003)

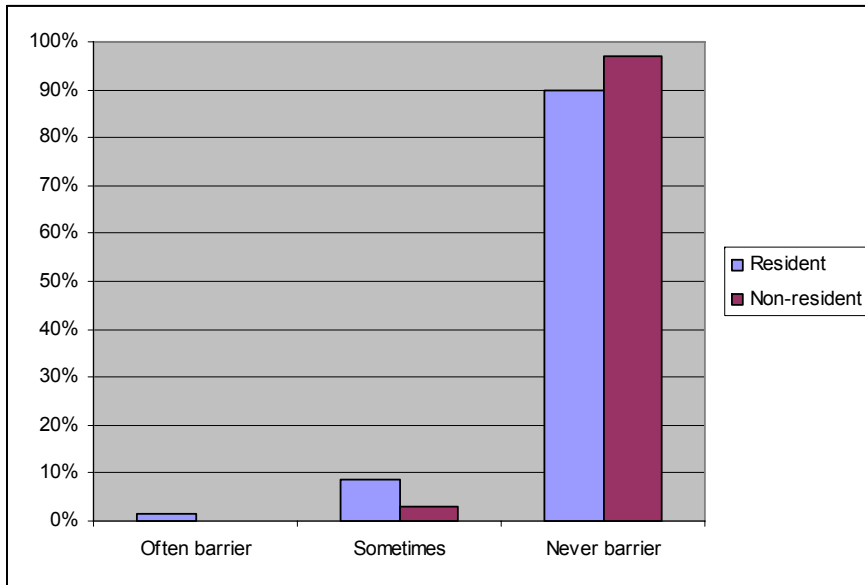


Figure 40. Drop-out by Companions as Upland Game Hunting Barrier: Resident & Non-Resident ($G = 0.215$; $P = 0.052$)

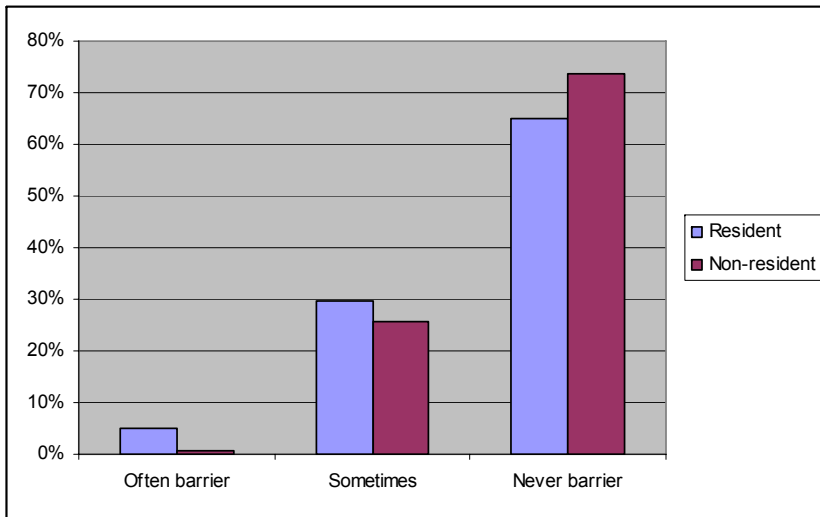


Figure 41. Finding Others to Hunt with as Upland Game Hunting Barrier: Resident & Non-Resident ($G = 0.345$; $P = 0.002$)

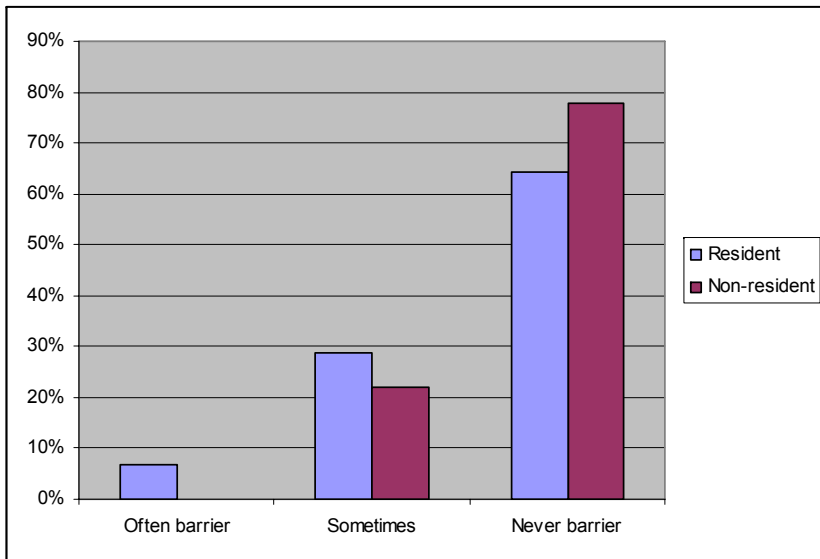


Figure 42. Problems with Trespassers as Upland Game Hunting Barrier: Resident & Non-Resident (G = 0.228; P = 0.021)

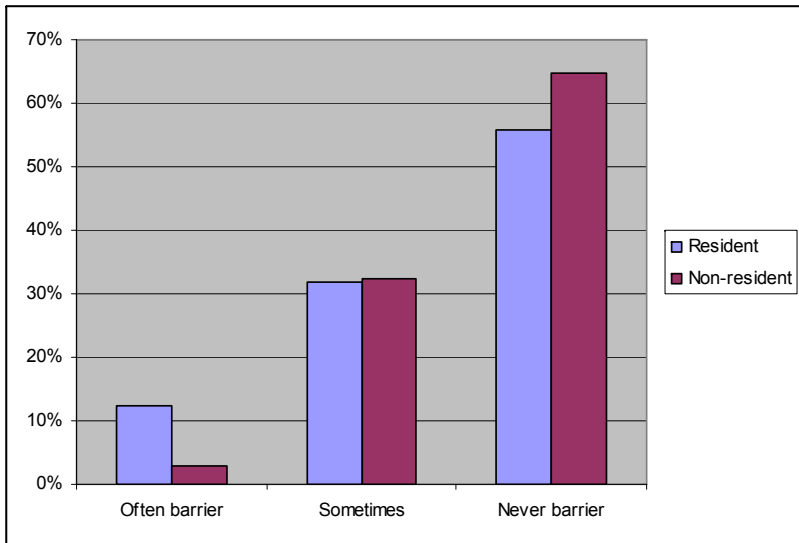


Figure 43. Inappropriate Length of Season as Upland Game Hunting Barrier: Resident & Non-Resident (G = 0.251; P = 0.037)

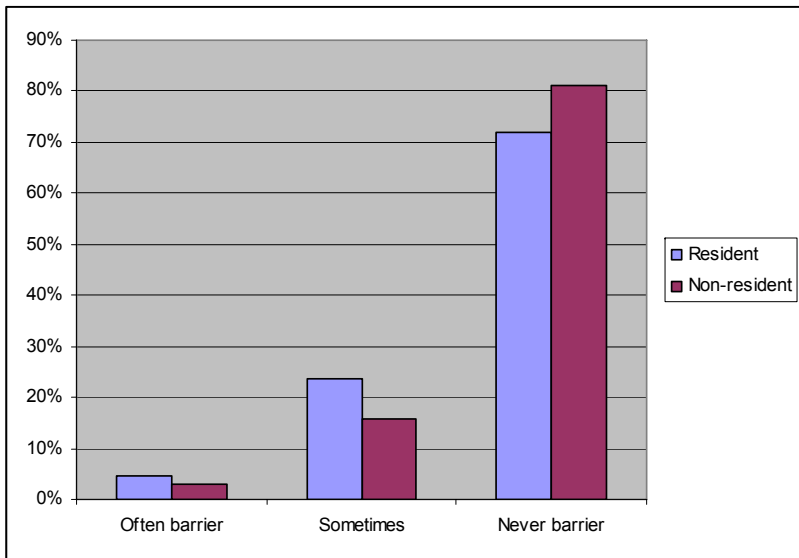


Figure 44. Recently Changed Res./Unfamiliar with Area as Upland Game Hunting Barrier: Resident & Non-Resident

(G = 0.363; P = 0.033)

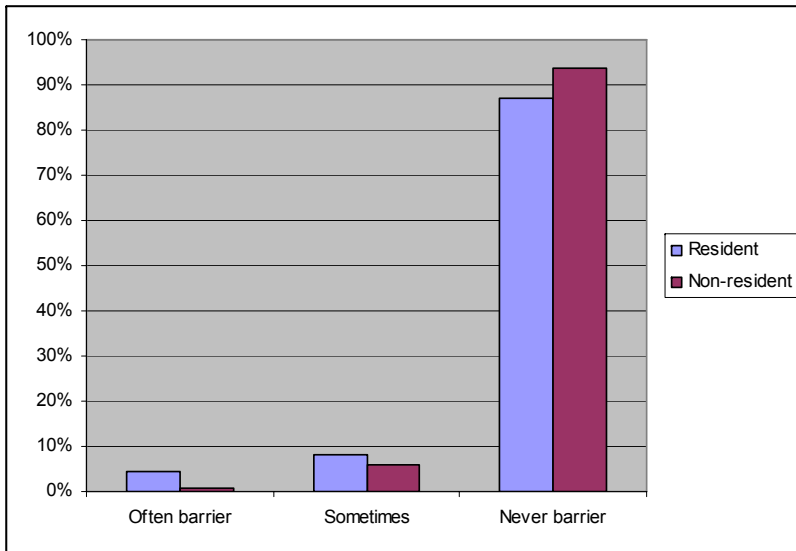
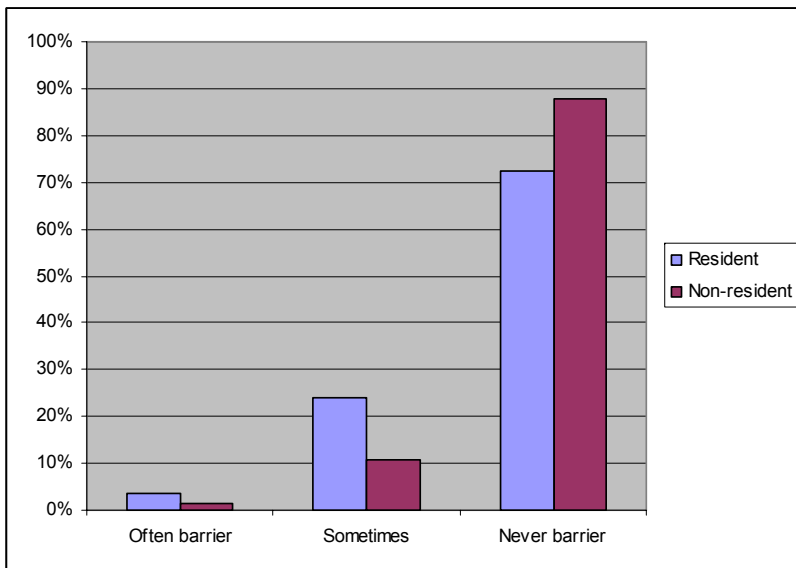


Figure 45. Loss of Interest as Upland Game Hunting Barrier: Resident & Non-Resident (G = 0.457; P > 0.001)



Waterfowl

Figures 46 and 47 show that family, work and other commitments and access to land (especially overcrowded public hunting areas) constitute the most frequent barrier areas to waterfowl hunting among Kansas residents. In contrast, non-resident hunters report that commitments other than hunting and insufficient game to be the largest two barrier areas, while access to land in general continues to be among the top three barrier areas for non-residents.

Figure 46. Barriers to Hunting Waterfowl: Residents

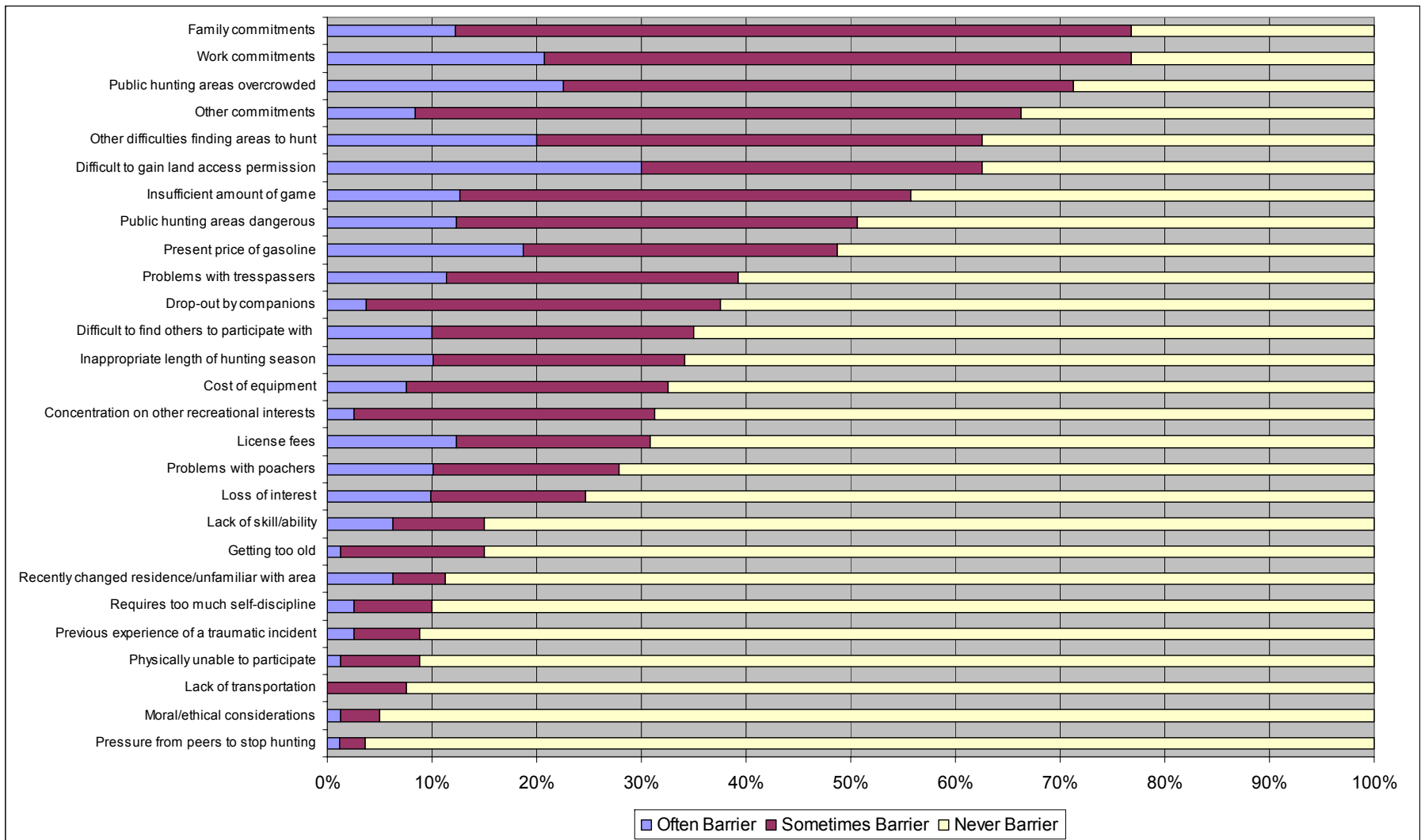
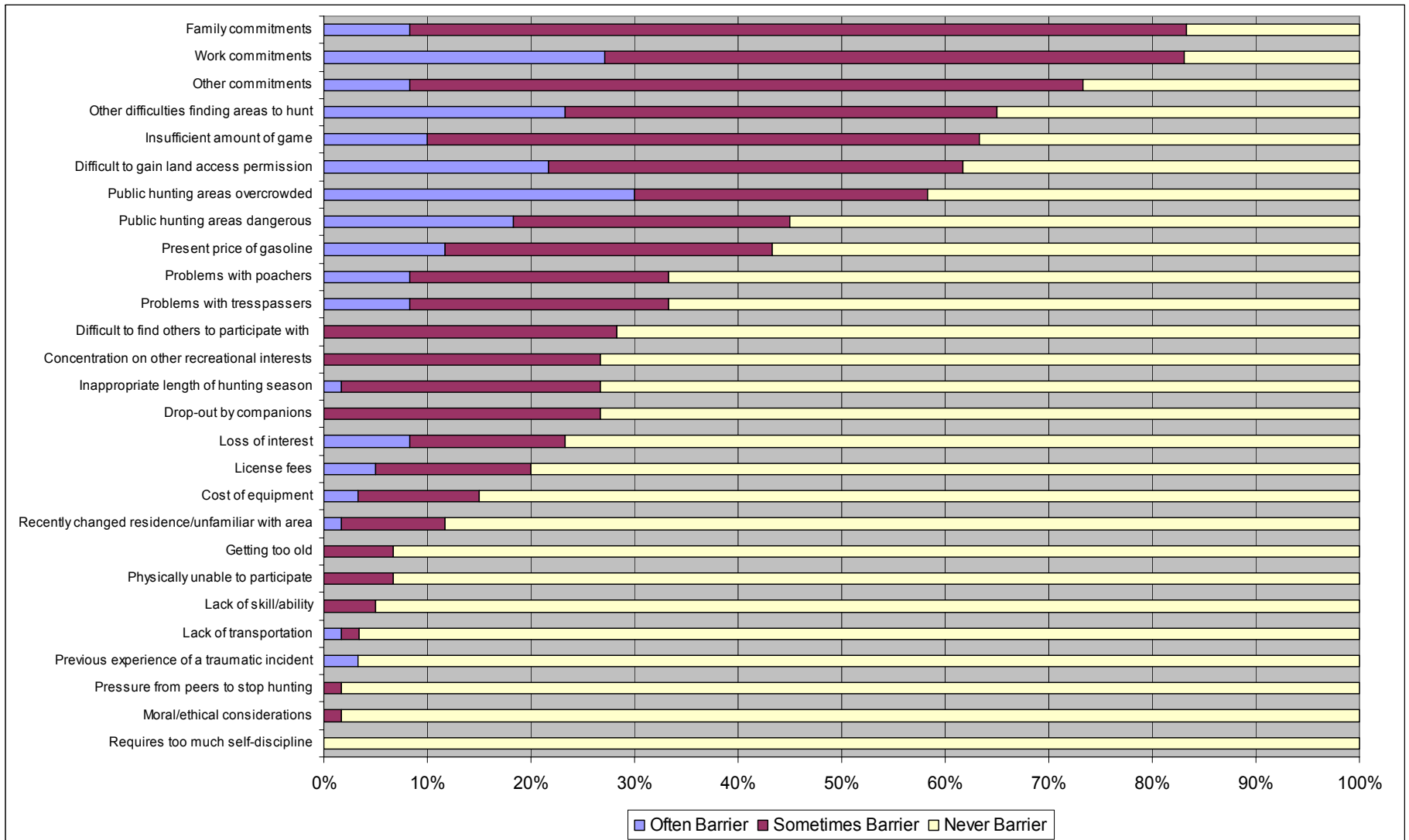


Figure 47. Barriers to Hunting Waterfowl: Non-Residents



Figures 48 through 50 display resident and non-resident response for those items on which significant barrier differences exist when hunting *waterfowl*. Non-residents report lower barriers than residents on: cost of hunting equipment, requires too much self-discipline, and lack of skill/ability.

Figure 48. Cost of Hunting Equipment as Waterfowl Hunting Barrier: Residents & Non-Residents (G= 0.445; P = 0.013)

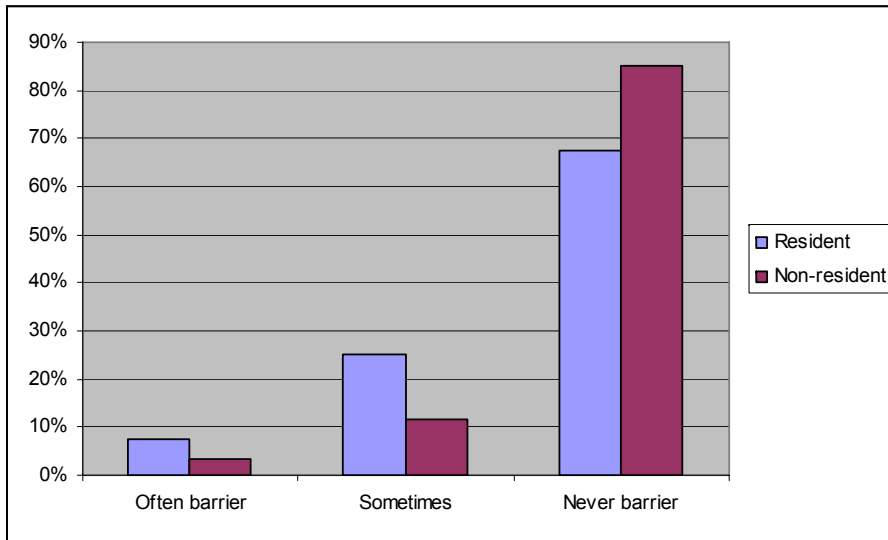


Figure 49. Requires Too Much Self-Discipline as Waterfowl Hunting Barrier: Residents & Non-Residents (G = 1.000; P = 0.003)

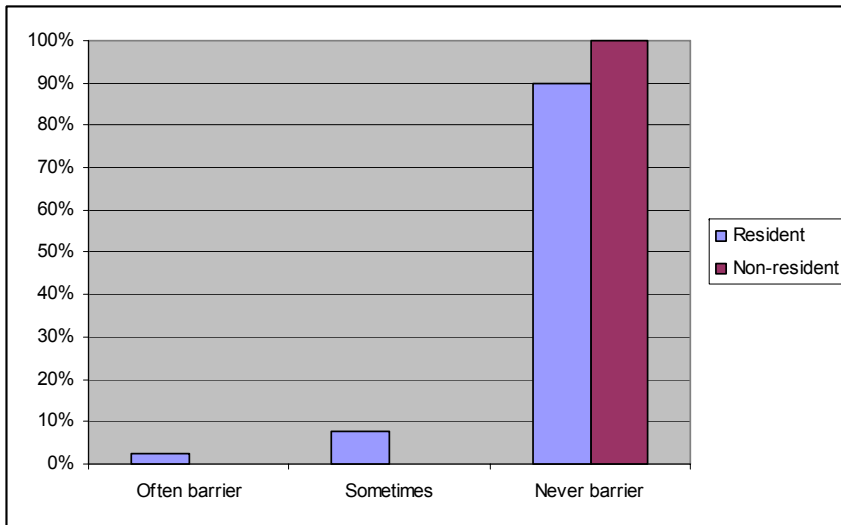
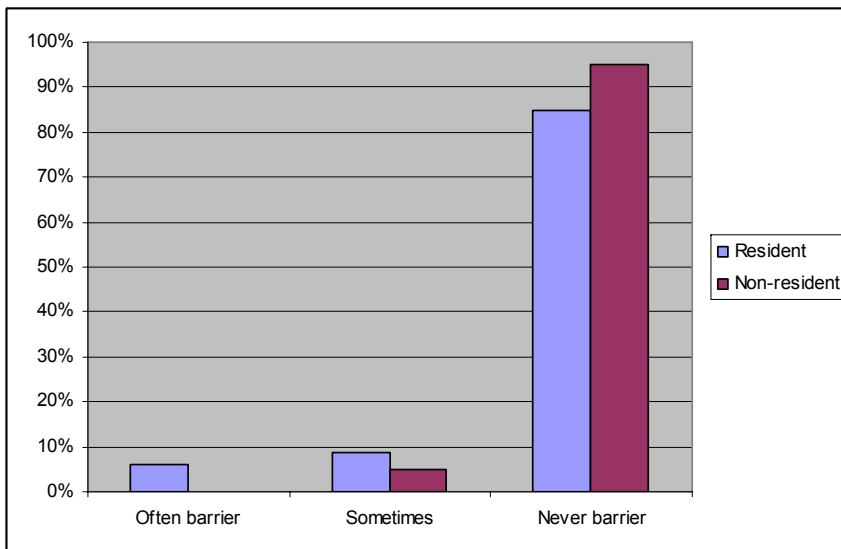


Figure 50. Lack of Skill/Ability as Waterfowl Hunting Barrier: Residents & Non-Residents (G = 0.548; P = 0.034)



Other Small Game

Figures 51 and 52 show that family, work and other commitments and land access issues are the two most frequent barrier areas to 'other small game' hunting among both Kansas residents and non-residents. It is interesting to note that among resident hunters the price of gasoline shows up as slightly more of a barrier than insufficient game.

Figure 51. Barriers to Hunting 'Other Small Game': Residents

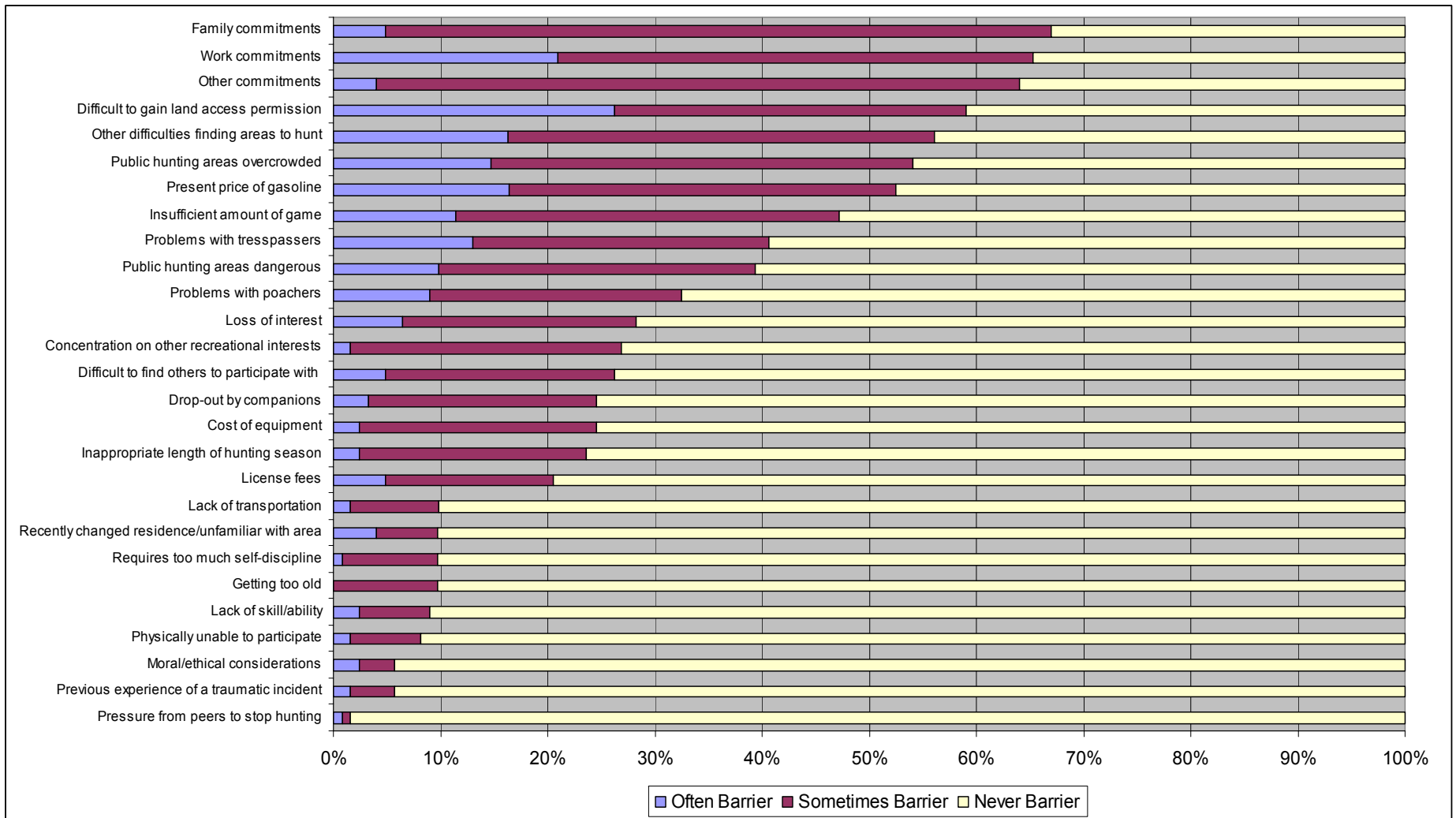
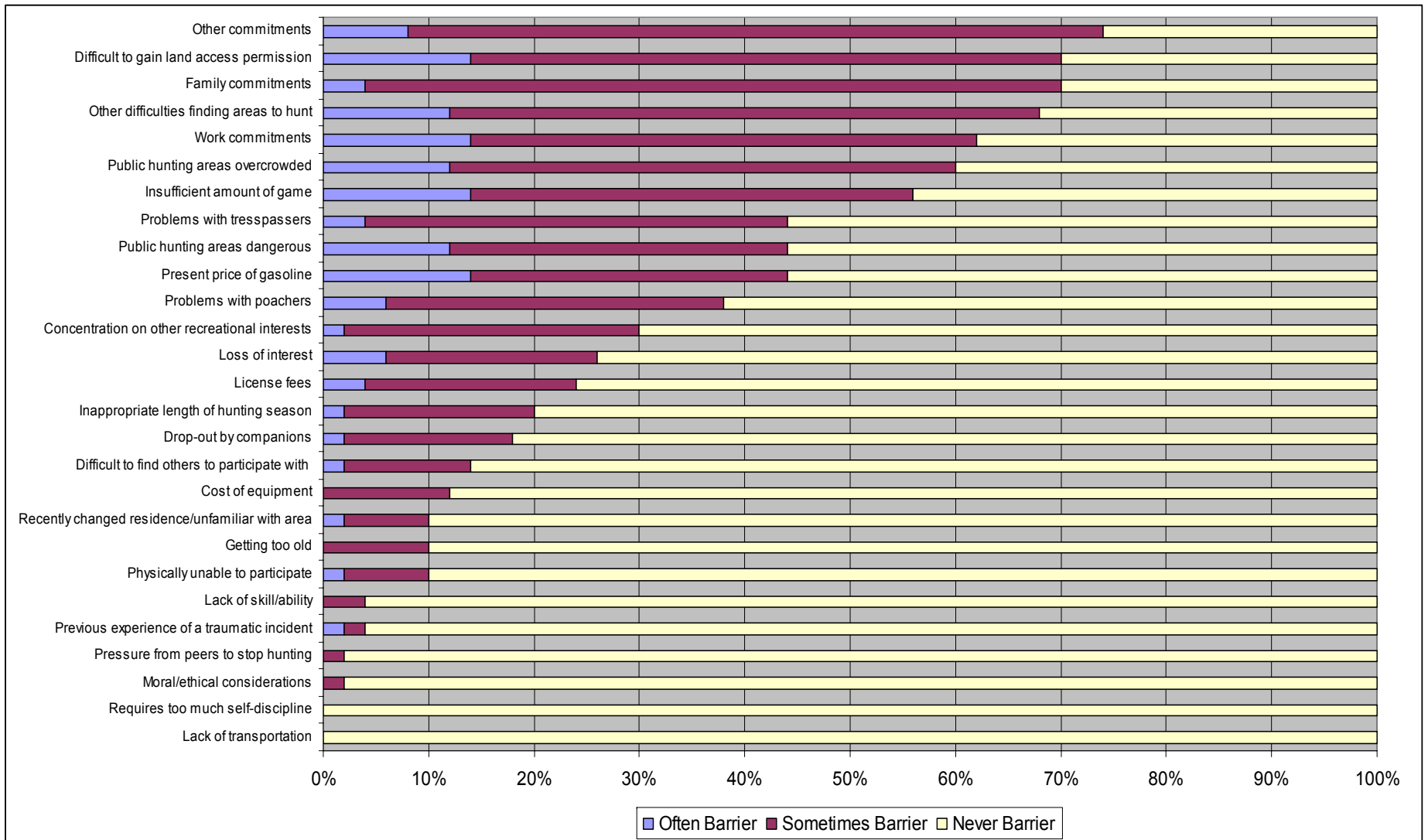


Figure 52. Barriers to Hunting 'Other Small Game': Non-Residents



Figures 53 through 56 display resident and non-resident response for those items on which significant barrier differences exist when hunting 'other small game.' Non-residents report lower barriers than residents on: cost of hunting equipment, lack of transportation, finding others to hunt with, and requires too much self-discipline.

Figure 53. Cost of Hunting Equipment as 'Other Small Game' Hunting Barrier: Residents & Non-Residents (G = 0.416; P = 0.033)

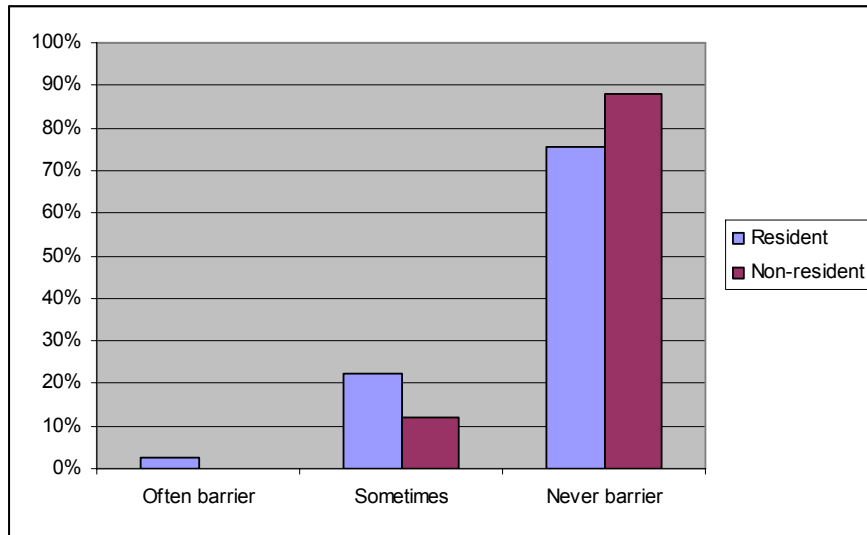


Figure 54. Lack of Transportation as ‘Other Small Game’ Hunting Barrier: Residents & Non-Residents (G = 1.000; P > 0.001)

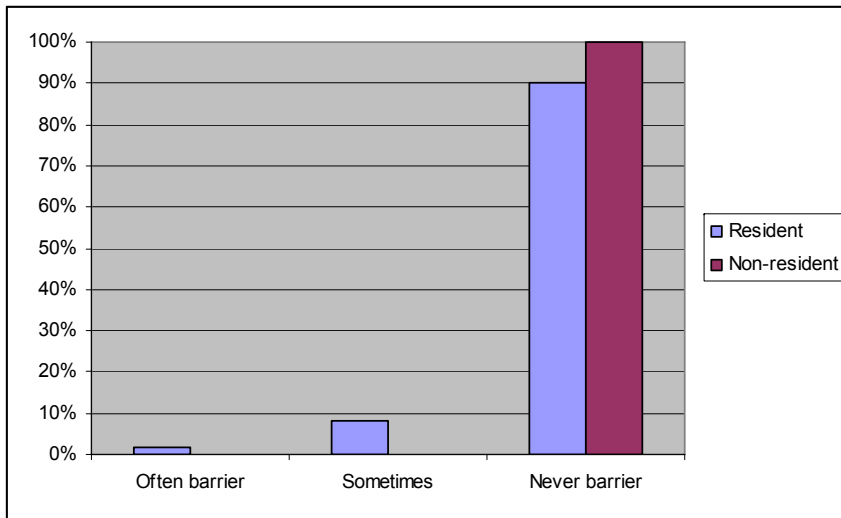


Figure 55. Finding Others to Hunt With as ‘Other Small Game’ Hunting Barrier: Residents & Non-Residents (G = 0.366; P = 0.052)

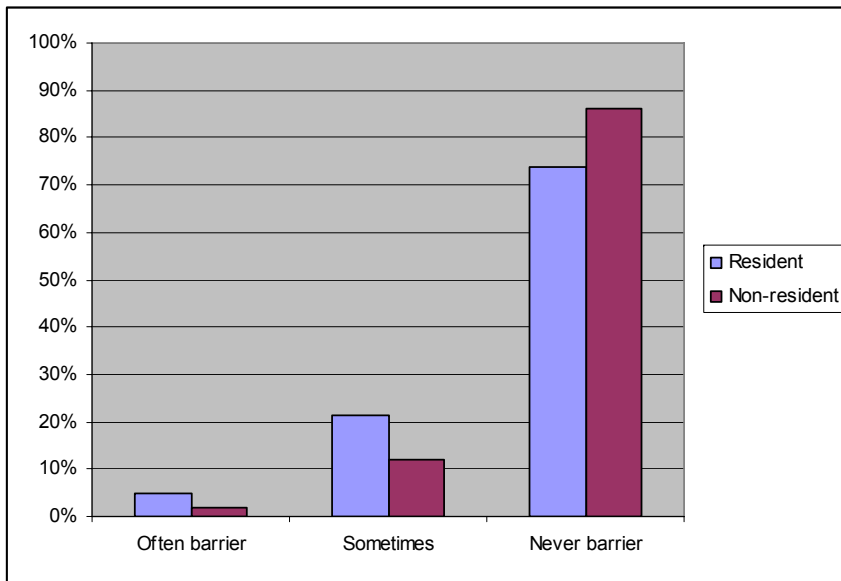
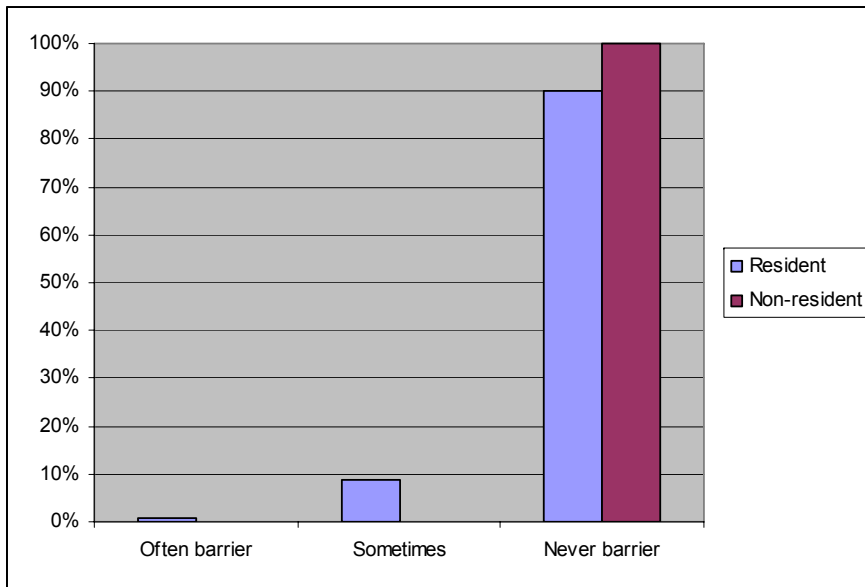


Figure 56. Requires Too Much Self-Discipline as 'Other Small Game' Hunting Barrier: Residents & Non-Residents (G = 1.000; P > 0.001)



Hunting Barrier Factors and Association with Continuity of Hunting

Factor analysis was used to reduce the dimensionality of the barrier items for each type of hunting. Big game, turkey, upland game, and other small game were reduced to nine factors and waterfowl was reduced to eight factors. Because factors are constructed in descending order of the amount of variance explained from the original variables, the first two factors for each type of hunting, the amount of variation the factor explains within that type of hunting, and the top four influential variables with their associated loadings are included in Table 8. Of particular concern is that Factor 1 for all types of hunting are constructed of the same influential barrier items. These barrier items (difficult to gain land access permission, public hunting areas overcrowded, public hunting areas dangerous, and other difficulty finding areas to hunt) are all location-oriented variables of hunting. Overall, these four barrier items are better indicators of the barriers perceived by respondents for each type of hunting than the other barrier items.

Table 8. Hunting Barrier Factors

Type of Hunting	Factor 1 explained variation	Factor 1 components (loading)	Factor 2 explained variation	Factor 2 components (loading)
Big Game	16.982	k. public hunting areas overcrowded (0.815) m. other difficulty finding areas to hunt (0.780) j. difficult to gain land access permission (0.735) l. public hunting areas dangerous (0.652)	8.552	d. license Fees (0.806) e. cost of equipment (0.805) f. present price of gasoline (0.677) g. lack of transportation (0.547)
Turkey	15.940	k. public hunting areas overcrowded (0.831) m. other difficulty finding areas to hunt (0.774) j. difficult to gain land access permission (0.731) l. public hunting areas dangerous (0.697)	8.999	e. cost of equipment (0.749) d. license fees (0.733) f. price of gasoline (0.637) g. lack of transportation (0.497)
Upland Game	15.975	m. other difficulty finding areas to hunt (0.790) k. public hunting areas overcrowded (0.785) j. difficult to gain land access permission (0.719) l. public hunting areas dangerous (0.690)	9.074	d. license fees (0.801) e. cost of equipment (0.722) f. present price of gasoline (0.641) y. lack of skill/ability (0.441)
Waterfowl	19.109	k. public hunting areas overcrowded (0.834) j. difficult to gain land access permission (0.775) m. other difficulty finding areas to hunt (0.744) l. public hunting areas dangerous (0.708)	9.992	aa. pressure from peers to stop hunting (0.896) z. moral/ethical considerations (0.831) y. lack of skill/ability (0.586) x. requires too much self-discipline (0.560)
Other Small Game	18.729	k. public hunting areas overcrowded (0.822) m. other difficulty finding areas to hunt (0.730) l. public hunting areas dangerous (0.713) j. difficult to gain land access permission (0.688)	8.819	b. family commitments (0.797) c. other commitments (0.784) a. work commitments (0.753) v. concentration on other recreational interests (0.423)

A Pearson's correlation was conducted for each type of hunting between hunting continuity (purchased a Kansas hunting license every year from 2001-2005 versus did not purchase every year) and the barrier factors. Table 9 shows the factors that were significantly correlated with hunting continuity, correlation values associated with the factors, and the influential barrier items of each factor. Of the factors for each type of hunting, two factors for big game and one factor for turkey and other small game were significantly correlated with continuity of hunting participation. Factor 3 for big game is influenced by drop-out by other companions, difficult to find others to participate with, inappropriate length of season, and lack of transportation. Factor 6 for big game is influenced by family commitments, work commitments, and other commitments. Factor 3 for turkey is largely influenced by family commitments, work commitments, and other commitments. Factor 5 for other small game is largely influenced by difficult to find others to participate with and drop out by companions. Therefore, although location-oriented variables did well indicating the barriers perceived by hunting participants, they were not influential in determining continuity of hunting participation. NOTE: Only 36 of the respondents were noncontinuous hunters, thus, the very small sample of noncontinuous hunters may have resulted in an underestimation of association. Future studies would benefit by including a sample of licensees who have not registered in the one or two most recent years.

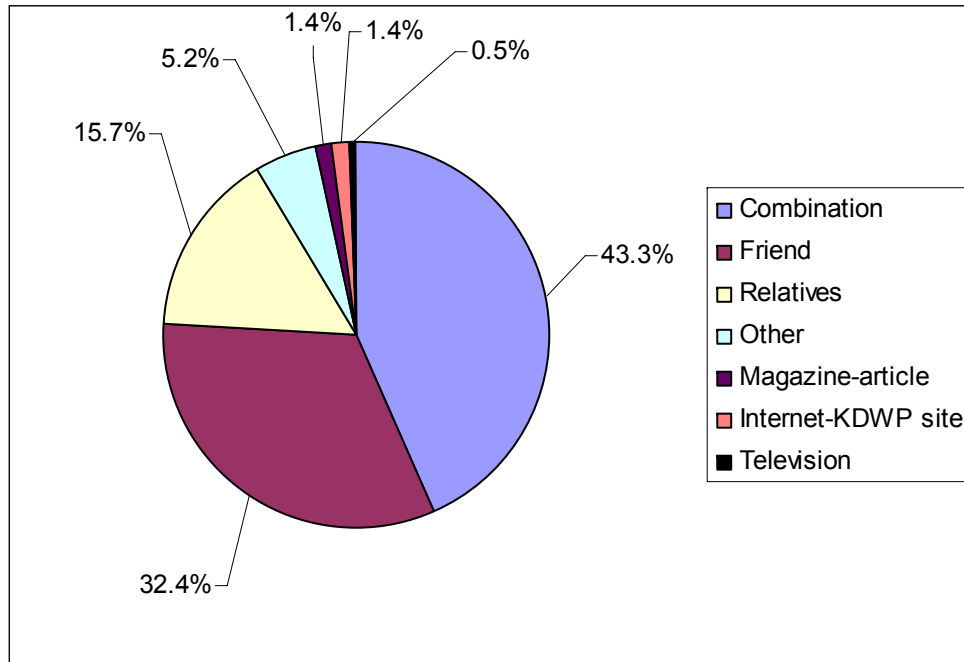
Table 9. Hunting Barrier Factors Association with Hunting Continuity

Big Game	Turkey	Other Small Game
<p>Factor 3 ($r = -0.136$; $P = 0.018$)</p> <ul style="list-style-type: none"> Drop-out by companions Difficult to find others to participate with Inappropriate length of season Lack of transportation 	<p>Factor 3 ($r = -0.16$; $P = 0.022$)</p> <ul style="list-style-type: none"> Family commitments Work commitments Other commitments 	<p>Factor 5 ($r = -0.182$; $P = 0.016$)</p> <ul style="list-style-type: none"> Difficult to find others to participate with Drop-out by companions
<p>Factor 6 ($r = -0.139$; $P = 0.015$)</p> <ul style="list-style-type: none"> Family commitments Work commitments Other commitments 		

Non-Resident Original Source of Kansas Hunting Information

The most frequently reported single source of Kansas hunting information is attributed to a friend, followed by relatives. Furthermore, although more non-residents reported a combination of sources rather than a single source for Kansas hunting information, a friend was also reported among 73% of the responses that indicate more than one source of Kansas hunting information. Relatives, magazine articles, and the KDWP internet site were included in 45%, 43%, and 41% of responses indicating more than one source of Kansas hunting information, respectively.

Figure 57. Source of Kansas Hunting Information. Non-Residents



Appendix I: Demographic Profile by Type of Hunting

Table 10. Gender, Race, Family by Type of Hunting

Social Indicators		Big Game		Turkey		Upland Game		Waterfowl		Other Small Game	
		Res. %	N-Res. %	Res. %	N-Res. %	Res. %	N-Res. %	Res. %	N-Res. %	Res. %	N-Res. %
Gender	Male	(N=173) 93.1	(N=53) 96.2	(N=87) 94.3	(N=26) 88.5	(N=196) 97.4	(N=116) 98.3	(N=59) 98.3	(N=13) 100.0	(N=84) 98.8	(N=16) 93.8
	Female	6.9	3.8	5.7	11.5	2.6	1.7	1.7	0.0	1.2	6.3
Marriage Status	Married	(N=173) 78.6	(N=53) 73.6	(N=87) 78.2	(N=26) 73.1	(N=196) 77.0	(N=116) 86.2	(N=59) 74.6	(N=13) 61.5	(N=84) 71.4	(N=16) 75.0
	Divorced	11.0	17.0	10.3	7.7	7.7	7.8	8.5	15.2	8.3	18.8
	Seperated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Never Married	10.4	9.4	11.5	15.4	14.3	6.0	16.9	23.1	20.2	6.3
	Spouse Deceased	0.0	0.0	0.0	3.8	1.0	0.0	0.0	0.0	0.0	0.0
Live in Single-Parent Household Before 18 Years Old	No	(N=172) 79.7	(N=53) 84.9	(N=87) 79.3	(N=26) 96.2	(N=196) 81.6	(N=116) 84.5	(N=59) 81.4	(N=13) 76.9	(N=84) 76.2	(N=16) 87.5
	Yes, with Mother	16.3	13.2	17.2	3.8	15.3	13.8	16.9	23.1	21.4	12.5
	Yes, with Father	3.5	1.9	3.4	0.0	2.6	0.0	1.7	0.0	2.4	0.0
	Yes, with Other Adult	0.6	0.0	0.0	0.0	0.5	1.7	0.0	0.0	0.0	0.0
Hispanic Origin	Yes	(N=170) 1.8	(N=53) 0.0	(N=86) 0.0	(N=25) 0.0	(N=196) 1.6	(N=116) 1.7	(N=58) 0.0	(N=12) 8.3	(N=82) 1.2	(N=14) 0.0
Racial Background	White	(N=173) 98.8	(N=53) 96.2	(N=87) 100.0	(N=26) 100.0	(N=196) 99.0	(N=116) 98.3	(N=59) 100.0	(N=13) 92.3	(N=84) 100.0	(N=16) 100.0
	Black or African Amer.	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
	Other Race	1.2	3.8	0.0	0.0	0.5	1.7	0.0	7.7	0.0	0.0
Number of Children Under 18 at Home	None	(N=173) 57.8	(N=53) 62.3	(N=87) 56.3	(N=25) 65.4	(N=196) 59.7	(N=116) 66.4	(N=59) 59.3	(N=13) 53.8	(N=84) 54.8	(N=16) 50.0
	1 Child	17.3	13.2	16.1	15.4	15.3	14.7	13.6	23.1	16.7	31.3
	2 to 3 Children	22.5	20.8	25.3	19.2	24.0	19.0	27.1	23.1	27.4	18.8
	4 to 5 Children	2.3	3.8	2.3	0.0	0.5	0.0	0.0	0.0	1.2	0.0
	6 to 7 Children	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0

Table 11. Income, Education, Age by Type of Hunting

Social Indicators		Big Game		Turkey		Upland Game		Waterfowl		Other Small Game	
		Res. %	N-Res. %	Res. %	N-Res. %	Res. %	N-Res. %	Res. %	N-Res. %	Res. %	N-Res. %
Total Household Income in 2005	less than \$20,000	(N=166) 6.6	(N=50) 0.0	(N=82) 7.3	(N=26) 8.0	(N=196) 5.9	(N=116) 1.0	(N=55) 9.1	(N=10) 10.0	(N=81) 6.2	(N=15) 13.3
	\$20,000 - \$29,999	3.6	0.0	3.7	0.0	4.8	2.0	1.8	10.0	3.7	0.0
	\$30,000 - \$39,999	12.7	4.0	14.6	8.0	11.8	3.0	7.3	0.0	17.3	6.7
	\$40,000 - \$49,999	16.9	8.0	9.8	8.0	15.5	8.9	14.5	10.0	23.5	0.0
	\$50,000 - \$59,999	14.5	6.0	15.9	4.0	8.0	5.9	1.8	0.0	13.6	13.3
	\$60,000 - \$69,999	9.6	12.0	7.3	12.0	9.1	4.0	14.5	0.0	6.2	13.3
	\$70,000 - \$79,999	9.6	4.0	9.8	4.0	11.8	8.9	7.3	20.0	9.9	13.3
	\$80,000 - \$89,999	6.6	8.0	13.4	16.0	7.5	5.0	12.7	10.0	7.4	0.0
	\$90,000 - \$99,999	7.2	4.0	3.7	0.0	6.4	2.0	9.1	0.0	8.6	0.0
	\$100,000 or more	12.7	54.0	14.6	40.0	19.3	59.4	21.8	40.0	3.7	40.0
Highest Level of Education Achieved	Primary School	(N=173) 1.2	(N=53) 0.0	(N=87) 2.3	(N=26) 0.0	(N=196) 1.0	(N=116) 1.7	(N=59) 1.7	(N=13) 0.0	(N=84) 2.4	(N=16) 6.3
	Some high School	5.2	7.5	3.4	3.8	5.6	4.3	5.1	15.4	9.5	6.3
	High School Diploma	49.7	30.2	46.0	30.8	39.3	36.2	40.7	38.5	44.0	50.0
	Associates Degree	15.6	20.8	13.8	30.8	15.8	7.8	10.2	7.7	14.3	12.5
	Bachelors Degree	21.4	30.2	21.8	26.9	27.6	31.9	33.9	15.4	25.0	25.0
	Masters Degree	5.2	5.7	11.5	7.7	7.1	10.3	5.1	15.4	3.6	0.0
	Doctorate Degree	0.6	1.9	1.1	0.0	0.5	0.9	0.0	0.0	0.0	0.0
	Professional Degree	1.2	3.8	0.0	0.0	3.1	6.9	3.4	7.7	1.2	0.0
Age in 2006	Up to 19 Years	(N=173) 3.5	(N=53) 1.9	(N=87) 3.4	(N=26) 0.0	(N=196) 4.1	(N=116) 1.7	(N=59) 8.5	(N=13) 7.7	(N=84) 9.5	(N=16) 6.3
	20 to 29 Years	9.2	1.9	11.5	7.7	10.7	3.5	10.2	23.1	10.7	6.3
	30 to 39 Years	16.2	24.5	17.2	19.2	17.3	10.4	18.6	15.4	19.0	6.3
	40 to 49 Years	29.5	20.8	23.0	19.2	23.0	25.2	23.7	15.4	22.6	31.3
	50 to 59 Years	30.1	32.1	35.6	26.9	33.2	28.7	30.5	15.4	29.8	37.5
	60 to 69 Years	11.6	13.2	9.2	26.9	11.7	20.9	8.5	23.1	8.3	6.3
	70 to 79 Years	0.0	5.7	0.0	0.0	0.0	8.7	0.0	0.0	0.0	6.3
	80 Years and Above	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0

Table 12. Hunter Experience by Type of Hunting

<i>Hunting Characteristics</i>		<i>Big Game</i>		<i>Turkey</i>		<i>Upland Game</i>		<i>Waterfowl</i>		<i>Other Small Game</i>	
		<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>
		<i>(N=176)</i>	<i>(N=55)</i>	<i>(N=89)</i>	<i>(N=26)</i>	<i>(N=196)</i>	<i>(N=116)</i>	<i>(N=60)</i>	<i>(N=13)</i>	<i>(N=86)</i>	<i>(N=16)</i>
Total Years Participated in Hunting	1 year	0.6	3.6	0.0	0.0	1.5	7.6	1.7	7.7	0.0	6.3
	2-5 years	8.5	18.2	11.2	19.2	8.0	5.9	10.0	15.4	12.8	6.3
	6-10 years	8.5	3.6	5.6	11.5	10.6	6.7	13.3	15.4	9.3	12.5
	11-15 years	6.3	3.6	5.6	3.8	6.0	5.0	5.0	0.0	10.5	0.0
	16-20 years	9.1	7.3	10.1	11.5	7.5	2.5	6.7	0.0	10.5	0.0
	21-25 years	7.4	9.1	7.9	15.4	6.5	7.6	6.7	15.4	4.7	6.3
	More than 25 years	59.7	54.5	59.6	38.5	59.8	64.7	56.7	46.2	52.3	68.8
Parent or Guardian Hunted	Yes	<i>(N=172)</i>	<i>(N=53)</i>	<i>(N=87)</i>	<i>(N=26)</i>	<i>(N=196)</i>	<i>(N=116)</i>	<i>(N=59)</i>	<i>(N=13)</i>	<i>(N=84)</i>	<i>(N=16)</i>
	No	76.2	84.9	79.3	80.8	76.4	76.7	76.3	76.9	78.6	87.5
	Don't Know	22.7	15.1	20.7	19.2	22.6	22.4	23.7	23.1	21.4	12.5
		<i>(N=172)</i>	<i>(N=53)</i>	<i>(N=86)</i>	<i>(N=26)</i>	<i>(N=196)</i>	<i>(N=116)</i>	<i>(N=59)</i>	<i>(N=13)</i>	<i>(N=84)</i>	<i>(N=16)</i>
Age Began Hunting	Below 5 Years	3.5	0.0	3.5	0.0	1.5	0.0	1.7	0.0	6.0	0.0
	5 to 8 Years	12.8	24.5	14.0	19.2	13.3	26.1	16.9	30.8	14.3	25.0
	9 to 12 Years	44.2	52.8	48.8	57.7	51.3	44.3	54.2	23.1	46.4	50.0
	13 to 16 Years	23.3	20.8	23.3	19.2	23.1	20.0	16.9	30.8	22.6	18.8
	17 to 20 Years	5.2	0.0	5.8	0.0	4.6	1.7	6.8	0.0	4.8	0.0
	21 to 24 Years	1.7	0.0	1.2	0.0	2.1	3.5	3.4	7.7	2.4	6.3
	25 to 28 Years	2.9	0.0	0.0	0.0	0.0	3.5	0.0	0.0	2.4	0.0
	29 to 32 Years	2.3	0.0	1.2	0.0	2.6	0.0	0.0	0.0	1.2	0.0
	33 to 36 Years	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	37 to 40 Years	0.6	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
More than 40 Years	2.9	1.9	2.3	3.8	1.5	0.0	0.0	7.7	0.0	0.0	

Table 13. Hunting in Kansas by Type of Hunting

<i>Hunting Characteristics</i>		<i>Big Game</i>		<i>Turkey</i>		<i>Upland Game</i>		<i>Waterfowl</i>		<i>Other Small Game</i>	
		<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>	<i>Res. %</i>	<i>N-Res. %</i>
Did you Purchase a Kansas Hunting License in...	2005	(N=176) 97.2	(N=55) 96.4	(N=89) 98.9	(N=26) 92.3	(N=196) 96.5	(N=116) 98.3	(N=60) 93.3	(N=13) 92.3	(N=86) 94.2	(N=16) 93.8
	2004	94.9	70.9	97.8	88.5	91.0	87.2	88.3	53.8	91.9	68.8
	2003	91.5	58.2	97.8	80.8	87.5	55.5	83.3	46.2	83.7	62.5
	2002	86.4	43.6	92.1	73.1	83.0	55.5	73.3	46.2	81.4	62.5
	2001	83.0	34.5	86.5	53.8	78.0	49.6	78.3	46.2	77.9	56.3
Plan to Purchase Licence for 2006 Season	Yes, I already have	(N=176) 72.7	(N=54) 31.5	(N=89) 83.1	(N=26) 65.4	(N=196) 72.5	(N=116) 29.7	(N=60) 78.3	(N=13) 53.8	(N=86) 77.9	(N=16) 31.3
	Yes, I plan on doing so	22.7	46.3	15.7	19.2	25.5	55.1	30.0	38.5	78.6	50.0
	No	0.0	7.4	0.0	11.5	0.0	3.4	0.0	0.0	0.0	0.0
	I have not decided yet	4.5	14.8	1.1	3.8	2.0	11.9	1.7	7.7	3.5	18.8
Year Began Hunting in Kansas	Prior to 1950	(N=175) 0.0	(N=51) 0.0	(N=88) 0.0	(N=24) 4.2	(N=196) 0.0	(N=116) 2.6	(N=59) 0.0	(N=12) 8.3	(N=85) 0.0	(N=15) 0.0
	1950 tp 1954	1.7	2.0	2.3	0.0	1.5	0.0	0.0	0.0	1.2	0.0
	1955 to 1959	5.7	3.9	6.8	4.2	7.6	1.7	6.8	0.0	7.1	0.0
	1960 to 1964	12.6	5.9	12.5	0.0	11.1	4.3	8.5	0.0	10.6	6.7
	1965 to 1969	12.0	0.0	14.8	0.0	13.1	1.7	11.9	0.0	15.3	0.0
	1970 to 1974	12.0	0.0	10.2	0.0	10.6	6.8	11.9	8.3	5.9	0.0
	1975 to 1979	13.7	2.0	9.1	4.2	15.2	10.3	15.3	0.0	15.3	13.3
	1980 to 1984	9.1	0.0	6.8	0.0	7.1	4.3	6.8	0.0	5.9	6.7
	1985 to 1989	6.3	2.0	9.1	0.0	6.1	2.6	5.1	0.0	5.9	0.0
	1990 to 1994	8.0	7.8	12.5	4.2	7.1	5.1	6.8	0.0	10.6	0.0
	1995 to 1999	8.6	21.6	4.5	25.0	7.6	15.4	10.2	8.7	12.9	26.7
2000 to Present	10.3	54.9	11.4	58.2	13.1	45.3	16.9	66.7	9.4	46.7	

Appendix II: Survey Instrument

Kansas Hunting Participation Survey

For the purposes of this study, any questions that ask about a hunting participation or a hunting license are referring to the purchase of a general hunting license. Any reference to Big Game includes white-tailed deer, mule deer, pronghorn, and elk. Any reference to Upland Game includes ring-necked pheasant, bobwhite quail, greater prairie chicken, and lesser prairie chicken. Circle the most appropriate answer to each question unless otherwise noted.

1. Of the previous 5 years, in which did you purchase a Kansas hunting license?

		Yes	No
a.	2005	1	2
b.	2004	1	2
c.	2003	1	2
d.	2002	1	2
e.	2001	1	2

2. Do you plan on purchasing a hunting license for the 2006 hunting season?

1. Yes, I already have
2. Yes, I plan on doing so
3. No
4. I have not decided yet

3. Fill in approximately how many days you spent participating in the following types of hunting in Kansas in the corresponding years.

		2003	2004	2005
a.	Big Game			
b.	Turkey			
c.	Upland Game			
d.	Waterfowl			
e.	Other Small Game			

4. Not counting the 2006 hunting season, how many total years have you participated in hunting?

1. 1 year
2. 2 – 5 years
3. 6 – 10 years
4. 11 -15 years
5. 16 – 20 years
6. 21 – 25 years
7. More than 25 years

5. What year did you first begin hunting *in Kansas*? _____

6. There are many reasons that people hunt. Please tell us whether each of the following reasons for hunting are not important, somewhat important, or very important to you.

		Not Important	Somewhat Important	Very Important
a.	Food	1	2	3
b.	Being in nature	1	2	3
c.	Success	1	2	3
d.	Companionship	1	2	3
e.	Challenge	1	2	3
f.	Family tradition	1	2	3
g.	Support wildlife	1	2	3
h.	Relaxation	1	2	3

7. **Did you have a mentor available to aid in your early hunting experiences?**
- a. No
 - b. Yes, parent
 - c. Yes, older sibling
 - d. Yes, another relative
 - e. Yes, some other adult
8. **About how many times did you hunt with a mentor per year?**
- a. Less than 1 experience per year
 - b. 1 to 5 experiences per year
 - c. 6 to 10 experiences per year
 - d. 11 to 15 experiences per year
 - e. 16 or more experiences per year
9. **Where do you hunt in Kansas?**
- a. I hunt exclusively on my own land
 - b. I hunt exclusively on private land (excluding WIHA land)
 - c. I hunt exclusively on public land (including WIHA land)
 - d. I hunt mostly on private land, but some on public land
 - e. I hunt mostly on public land, but some on private land
 - f. I hunt equal portions of public and private land

10. **Which answer best describes the distance of your frequent hunting areas from your residence? (circle one answer that best applies)**
- a. I hunt at my residence or land adjacent to my residence
 - b. I hunt within 10 miles of my residence
 - c. I hunt 10 to 25 miles from my residence
 - d. I hunt 25 to 50 miles from my residence
 - e. I hunt more than 50 miles from my residence
11. **Do you think of yourself as a hunter?**
- a. Yes
 - b. No → Why not?

 - c. Don't know
12. **If no, do you eventually want to think of yourself as a hunter?**
- a. Yes
 - b. No → Why not?

 - c. Don't know

13. Below is a table that includes possible barriers to hunting in each row. In the columns, we ask you to circle an answer that best describes how often the possible barrier is actually a barrier for you in each of the hunting seasons mentioned. If you have never hunted in a particular season, just circle the answer for Not Applicable (NA).

	Possible Barriers to Hunting	Big Game				Turkey				Upland Game				Waterfowl				Other Small Game			
		Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA
a.	Work commitments	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
b.	Family commitments	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
c.	Other commitments	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
d.	License fees	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
e.	Cost of equipment	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
f.	Present price of gasoline	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
g.	Lack of transportation	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
h.	Drop-out by other companions	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
i.	Difficult to find others to participate with	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
j.	Difficult to gain land access permission	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7

Possible Barriers to Hunting		Big Game				Turkey				Upland Game				Waterfowl				Other Small Game			
		Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA
k.	Designated public hunting areas overcrowded	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
l.	Designated public hunting areas dangerous	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
m.	Other difficulties in finding areas to hunt	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
n.	Problems with trespassers	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
o.	Problems with poachers	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
p.	Previous experience of a traumatic incident	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
q.	Insufficient amount of game	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
r.	Inappropriate length of hunting season	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
s.	I am physically unable to participate	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
t.	Getting too old	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
u.	Recently changed residence-unfamiliar with area	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
v.	Concentration on other recreational interests	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7

Possible Barriers to Hunting		Big Game				Turkey				Upland Game				Waterfowl				Other Small Game			
		Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA	Often	Sometimes	Never	NA
w.	Loss of interest	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
x.	Requires too much self-discipline	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
y.	Lack of skill/ability	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
z.	Moral/ethical considerations	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
aa.	Pressure from peers to stop participating	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7
bb.	Other (specify) _____	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7	1	2	3	7

14. Of all the possible barriers above, which 3 barriers listed above have most hampered your hunting participation? Then, in the extra space provided, please tell us how you have overcome those barriers, so that you could still participate in hunting.

1. _____

2. _____

3. _____

15. People often draw several satisfactions from hunting. Please tell us whether each of the following activities of hunting is not satisfying at all, somewhat satisfying, or very satisfying. If you have never participated in an activity, just circle the answer for not applicable.

	Not at all Satisfying	Somewhat Satisfying	Very Satisfying	Not Applicable
Scouting for game	1	2	3	4
Seeing non-game wildlife	1	2	3	4
Relaxation	1	2	3	4
Sharing stories	1	2	3	4
Discussing hunting strategies	1	2	3	4
Buying hunting equipment	1	2	3	4
Sighting in bows/firearms	1	2	3	4
Anticipating hunting season	1	2	3	4
Participating in hunting camp	1	2	3	4
Hunting with family	1	2	3	4
Hunting with friends	1	2	3	4
Mentoring young hunters	1	2	3	4
Helping others hunt	1	2	3	4
Seeing game	1	2	3	4
Shooting game	1	2	3	4
Getting exercise	1	2	3	4
Seeing other hunters bag game	1	2	3	4
Sense of belonging to environment	1	2	3	4
Being in nature	1	2	3	4
Visiting hunting spot in off-season	1	2	3	4
Personal reflection after hunt	1	2	3	4
Sharing game meat with others	1	2	3	4
Butchering game	1	2	3	4
Eating game	1	2	3	4
Using inedible parts of game	1	2	3	4
Doing own taxidermy	1	2	3	4
Cleaning or repairing bow/firearms	1	2	3	4
Photographing wildlife	1	2	3	4
Writing about hunting	1	2	3	4
Reading information on hunting	1	2	3	4

16. At what age did you begin hunting? _____

17. Did you have a parent or guardian that hunted while you were growing up?

- 1. Yes
- 2. No
- 3. Don't know

18. What is your marital status?

- 1. Married
- 2. Divorced
- 3. Separated
- 4. Never married
- 5. Spouse deceased

19. What year were you born? 19_____

20. What is your race?

- 1. White
- 2. Black
- 3. Other

21. Are you of Hispanic background?

- 1. Yes
- 2. No

22. How many children, if any, do you have less than 18 years old?

23. What is your gender?

- 1. Male
- 2. Female

24. What is your highest completed level of formal education?

- 1. Primary school
- 2. Some high school
- 1. High school diploma (or GED)
- 2. Associated degree
- 3. Bachelors degree
- 4. Masters degree
- 5. Doctorate degree
- 6. Professional degree (e.g., M.D., D.D.S., D.V.M.)

25. Which category is closest to your total household income before taxes in 2005?

- 1. less than \$20,000
- 2. \$20,000 - \$29,999
- 3. \$30,000 - \$39,999
- 4. \$40,000 - \$49,999
- 5. \$50,000 - \$59,999
- 6. \$60,000 - \$69,999
- 7. \$70,000 - \$79,999
- 8. \$80,000 - \$89,999
- 9. \$90,000 - \$99,999
- 10. \$100,000 or more

26. Did you ever live in a single-parent household at any time before you were 18 years old?

- 1. No
- 2. Yes, with mother
- 3. Yes, with father
- 4. Yes, with other adult

Non-Kansas residents, please continue to question 27 on the next page.

Kansas residents: you are finished. Thank you for your participation. Please place this in the postage paid envelope provided and drop in the mail.

27. How important are the following reasons in deciding to hunt in Kansas?

		Not at all important	Somewhat important	Very important	Don't know
a.	Better game	1	2	3	7
b.	More game	1	2	3	7
c.	Lengthen season	1	2	3	7
d.	Fewer hunters	1	2	3	7
e.	Change of scenery	1	2	3	7
f.	Hunting partners are from Kansas	1	2	3	7
g.	Other (specify)				
	_____	1	2	3	7

28. Please list any states other than Kansas that you hunt in as a non-resident.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

29. When you first decided to hunt in Kansas, from which sources did you get information about hunting opportunities in the state (circle all that apply)?

- 1. Friend
- 2. Relatives
- 3. Magazine—article
- 4. Magazine—outfitter
- 5. Internet—KDWP site
- 6. Internet—Outfitter
- 7. Television
- 8. Kansas travel guide
- 9. Other (please specify) _____

Non-Kansas residents, you are finished. Thank you for your participation. Please place this in the postage paid envelope provided and drop in the mail.