

Federal Aid in Wildlife Restoration Project No: W-15-R
Title of Job: Spring 2016 Turkey Hunter Survey

Job: E2



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25 July 2016

The spring turkey hunter survey is conducted each year at the end of the spring season. In 2016, the spring season closed on 31 May. The objective of the survey is to obtain information on the spring turkey harvest and success, to determine age and sex of the harvest, and to assess characteristics of the hunt and hunters (e.g., satisfaction). This year's survey was available to hunters from 20 June to 6 July 2016, inclusive. A summary of estimated harvest and success is available in a separate report, *2016 Spring Wild Turkey Harvest*.

Caveats. The spring Wild Turkey Hunter Survey samples spring turkey hunters who provided valid email addresses at the time they purchased their permit(s). As such, the sample frame may be biased and not strictly generalizable to the population of all spring turkey hunters. For the spring 2016 season, however, 65.2% of all permits sold were associated with an email address. After accounting for individuals who purchased multiple permits, 64.4% of unique, individual permit buyers provided an email address. A reminder email was sent to all non-respondents one week after the initial invitation was sent, but no further attempts were made to contact hunters who failed to respond to the survey. Therefore, results might be biased toward successful hunters, if successful hunters respond more readily to harvest surveys. However, it is likely that such biases are small given the proportion of permit buyers sampled and the response rate (see 2016 Spring Wild Turkey Harvest report).

Interpretations. During the spring 2016 turkey season, non-resident hunters came largely from Colorado and Minnesota, and resident hunters from Lancaster and Douglas Counties. Most non-resident turkey hunters had hunted turkeys in other states, primarily Kansas, in addition to hunting in Nebraska. Residents and non-residents combined averaged 5.7 days afield during the spring season. More non-residents (46%) reported pursuing Merriam's turkeys than residents (20%). Similarly, more non-residents (40%) thought they had harvested a Merriam's turkey than did residents (24%). More hunters rated the number of turkeys they observed as "Moderate" than "Low" or "High," but more rated the number of hunters encountered as "Low" than either "Moderate" or "High." Based on their spring 2016 experiences, 97% of hunters would hunt turkey in Nebraska again. Most hunters agreed or strongly agreed with the statement, "Overall I was satisfied with the quality of my hunting experience." Availability of permits and turkey population abundance were the most important factors influencing hunters' decisions to hunt in Nebraska.

Take-home Message: Spring turkey hunting continues to be popular with hunters and remains a satisfying experience.

Methods. This year's survey was composed and administered in-house using Snap Survey development software (Snap v11) and Snap Webhosting service. An initial invitation to participate in the survey for the spring 2016 season was sent to 17,107 (64.4% of unique permit buyers) permit buyers, but 832 were bounced back as undeliverable, giving an effective sample size of 16,275 permitted hunters. Initial invitations were emailed on 20 June 2016, and a reminder email was sent to all non-responding hunters on 27 June 2016. The survey was closed on 6 July 2016. The survey was also available on the NGPC website for hunters who did not have valid emails associated with their permits. The website survey was open over the same period as the invitation-only version. At the end of the survey period, responses had been received from 4,509 spring turkey hunters, representing 6,421 individual permits for the spring 2016 season. The raw response rate was, therefore, 27.7% and the permit response rate was 39.5%. Each survey respondent represented 5.3 spring 2016 permit buyers.

Results. Below are figures and tables that summarize hunter responses to survey questions. In most cases, the results are presented for residents, non-residents, and all hunters combined.

Table 1. Statistics on how long survey respondents spent (in minutes) taking the survey.

Counts Respondents	Total	Descriptive Statistics				
		Minimum	Maximum	Median	Mean	Standard Deviation
Duration of interview (min)	4509	0.5	633.0	7.1	8.8	13.2

Table 2. Top ten states in which spring 2016 non-resident turkey hunters resided.

State of residence	
Colorado	574
Minnesota	241
Missouri	126
Iowa	122
Arkansas	104
Wisconsin	94
Illinois	77
Indiana	76
Mississippi	66
Florida	52

Table 3. Among Nebraska residents, top 10 counties of residence.

County	
Lancaster	318
Douglas	306
Sarpy	178
Buffalo	89
Hall	63
Seward	58
Saunders	52
Adams	51
Lincoln	46
Platte	45

Table 4. Number of permits purchased by resident, non-resident, and all hunters for the 2016 spring turkey season.

Number of Permits	Resident				Non-resident				Total			
	0	1	2	3	0	1	2	3	0	1	2	3
\$5.00 Statewide Youth Permit	1897	266	74	24	2009	138	59	42	3906	404	133	66
	84%	12%	3%	1%	89%	6%	3%	2%	87%	9%	3%	1%
Statewide Regular or Landowner Permit	294	1506	305	156	342	1086	577	243	636	2592	882	399
	13%	67%	13%	7%	15%	48%	26%	11%	14%	57%	20%	9%

Table 5. Resident, non-resident, and total number of hunters reporting hunting wild turkey in states other than Nebraska during the spring 2016 season.

Did you hunt turkeys during the spring 2016 season in any state other than Nebraska?	Resident	Non-resident	Total
Yes	115 5%	1536 68%	1651 37%
No	2144 95%	709 32%	2853 63%

Table 6. State most frequently hunted by resident, non-resident, and all hunters who indicated that they hunted in states other than Nebraska during the spring 2016 turkey season.

Resident		Non-resident		Total	
Kansas	31	Kansas	204	Kansas	235
Iowa	13	Colorado	137	Colorado	137
South Dakota	5	Minnesota	122	Minnesota	122
Texas	4	Missouri	113	Missouri	116
Missouri	3	Iowa	96	Iowa	109
Oklahoma	3	Wisconsin	92	Wisconsin	92
Florida	1	Mississippi	53	South Dakota	58
Idaho	1	South Dakota	53	Mississippi	53
Michigan	1	Indiana	52	Indiana	52
West Virginia	1	Illinois	51	Illinois	51

Table 7. Number of resident, non-resident, and total respondents who indicated whether they hunted turkeys during the spring 2016 spring turkey season.

Did you hunt turkeys in Nebraska during the spring 2016 season?	Resident	Non-resident	Total
Yes	2,157 95%	2,202 98%	4,359 97%
No	104 5%	46 2%	150 3%

Table 8. Total and average number of days afield during the 2016 spring turkey season reported by resident, non-resident, and total hunter respondents who hunted.

How many days did you hunt turkeys during the 2016 spring season?	Resident	Non-resident	Total
Total	12,358	12,308	24,666
Days per hunter	5.7	5.6	5.7

Table 9. Top 10 counties resident, non-resident, and all hunters reported hunting in most frequently during the 2016 spring turkey hunting season.

Resident		Non-Resident		Total	
Lancaster	115	Dawes	144	Knox	207
Knox	102	Lincoln	140	Lincoln	203
Custer	65	Custer	108	Dawes	176
Lincoln	63	Knox	105	Custer	173
Buffalo	61	Unknown	90	Holt	129
Otoe	61	Frontier	82	Lancaster	129
Cass	58	Cherry	80	Frontier	123
Saunders	58	Holt	77	Cherry	113
Washington	55	Red Willow	63	Unknown	94
Holt	52	Sheridan	60	Red Willow	89

Table 10. Turkey sub-species resident, non-resident and total hunters reported pursuing during the 2016 spring turkey season.

Subspecies	Resident	Non-resident	Total
Respondents	2,141	2,187	4,328
Eastern	272 13%	197 9%	469 11%
Merriam's	429 20%	1,008 46%	1,437 33%
Rio Grande	59 3%	299 14%	358 8%
No particular subspecies	1,525 71%	987 45%	2,512 58%

Table 11. Top 10 counties of harvest for the first turkey harvested for resident, non-resident, and total hunters during the 2016 spring turkey season.

Resident		Non-resident		Total	
Knox	65	Lincoln	113	Lincoln	156
Custer	55	Custer	97	Custer	152
Lancaster	51	Dawes	79	Knox	142
Lincoln	43	Knox	77	Holt	94
Buffalo	35	Cherry	67	Cherry	92
Otoe	35	Holt	61	Dawes	87
Holt	33	Frontier	60	Frontier	87
Cass	32	Harlan	44	Red Willow	64
Gage	32	Boyd	42	Lancaster	60
Sarpy	31	Red Willow	42	Harlan	56

Table 12. Top 10 counties of harvest for the second turkey harvested for resident, non-resident, and total hunters during the 2016 spring turkey season.

Resident		Non-resident		Total	
Custer	15	Lincoln	57	Lincoln	71
Knox	15	Custer	40	Custer	55
Lincoln	14	Dawes	35	Knox	48
Lancaster	9	Knox	33	Dawes	37
Buffalo	8	Holt	30	Holt	35
Harlan	8	Frontier	29	Cherry	34
Otoe	8	Cherry	28	Frontier	34
Saunders	7	Unknown	21	Boyd	23
Cass	6	Boyd	19	Harlan	22
Cherry	6	Red Willow	18	Unknown	21

Table 13. Top 10 counties of harvest for the third turkey harvested for resident, non-resident, and total hunters during the 2016 spring turkey season.

Resident		Non-resident		Total	
Custer	9	Lincoln	16	Custer	21
Knox	4	Knox	13	Lincoln	18
Buffalo	3	Custer	12	Knox	17
Dawson	3	Harlan	9	Harlan	10
Howard	3	Dawes	8	Dawes	9
Otoe	3	Frontier	8	Dawson	9
Sheridan	3	Red Willow	8	Frontier	8
Cass	2	Dawson	6	Holt	8
Douglas	2	Holt	6	Red Willow	8
Holt	2	Hayes	5	Hayes	6

Table 14. Hunting activity and timing of harvest by week of season for resident, non-resident, and total hunters during the 2016 spring turkey season.

Week of season	Resident		Non-resident		Total	
	Hunted	Harvested	Hunted	Harvested	Hunted	Harvested
25 March-8 April	348 7%	117 2%	251 9%	141 5%	599 8%	258 3%
9 April-31 May	456 9%	135 3%	191 7%	84 3%	647 8%	219 3%
16-22 April	965 18%	274 5%	534 20%	350 13%	1499 19%	624 8%
23-29 April	894 17%	262 5%	470 17%	275 10%	1364 17%	537 7%
April-6 May	771 15%	168 3%	408 15%	249 9%	1179 15%	417 5%
7-13 May	635 12%	149 3%	279 10%	188 7%	914 12%	337 4%
14-20 May	522 10%	117 2%	238 9%	153 6%	760 10%	270 3%
21-31 May	420 8%	116 2%	190 7%	104 4%	610 8%	220 3%

Table 15. Subspecies of wild turkey resident, non-resident, and total hunters purported as the last turkey they harvested during the 2016 spring turkey season.

Respondents	Resident	Non-resident	Total
	1237	1615	2852
Eastern Wild Turkey	391 32%	181 11%	572 20%
Rio Grande Wild Turkey	165 13%	306 19%	471 17%
Merriam's Wild Turkey	293 24%	639 40%	932 33%
A mixture of one or more of these (hybrid)	256 21%	459 28%	715 25%
Do not remember	132 10%	30 2%	162 5%

Table 16. Number of turkeys harvested by age and sex by resident, non-resident, and total hunters during the 2016 spring turkey season. Percentages may not sum to 100% due to rounding errors.

Number harvested	Resident				Non-resident				Total			
	0	1	2	3	0	1	2	3	0	1	2	3
Respondents	2223	1060	209	64	2555	1130	438	162	4778	2190	647	226
Adult males (toms)	132 11%	817 69%	169 14%	61 5%	98 6%	891 57%	404 26%	158 10%	230 8%	1708 63%	573 21%	219 8%
Juvenile males (jakes)	599 70%	222 26%	37 4%	2 0%	745 75%	223 22%	28 3%	3 0%	1344 72%	445 24%	65 3%	5 0%
Bearded hens	745 97%	19 2%	1 0%	- -	858 98%	16 2%	1 0%	- -	1603 98%	35 2%	2 0%	- -
Unknown age/sex	747 99%	2 0%	2 0%	1 0%	854 99%	- -	5 1%	1 0%	1601 99%	2 0%	7 0%	2 0%

Table 17. Allocation of harvest by residents, non-residents, and total hunters between private land where permission was required to hunt and public lands during the 2016 spring season. Percentages may not sum to 100% due to rounding errors.

Turkeys harvested	Resident				Non-resident				Total			
	0	1	2	3	0	1	2	3	0	1	2	3
Respondents	906	941	216	88	1004	1028	458	173	906	941	216	88
Private land where permission was required?	100 11%	848 90%	192 89%	83 94%	163 16%	846 82%	400 87%	157 91%	100 11%	848 90%	192 89%	83 94%
Land open to public hunting?	806 89%	93 10%	24 11%	5 6%	841 84%	182 18%	58 13%	16 9%	806 89%	93 10%	24 11%	5 6%

Figure 1. Resident, non-resident, and total hunters' rating of the number of turkeys observed during the spring 2016 turkey season.

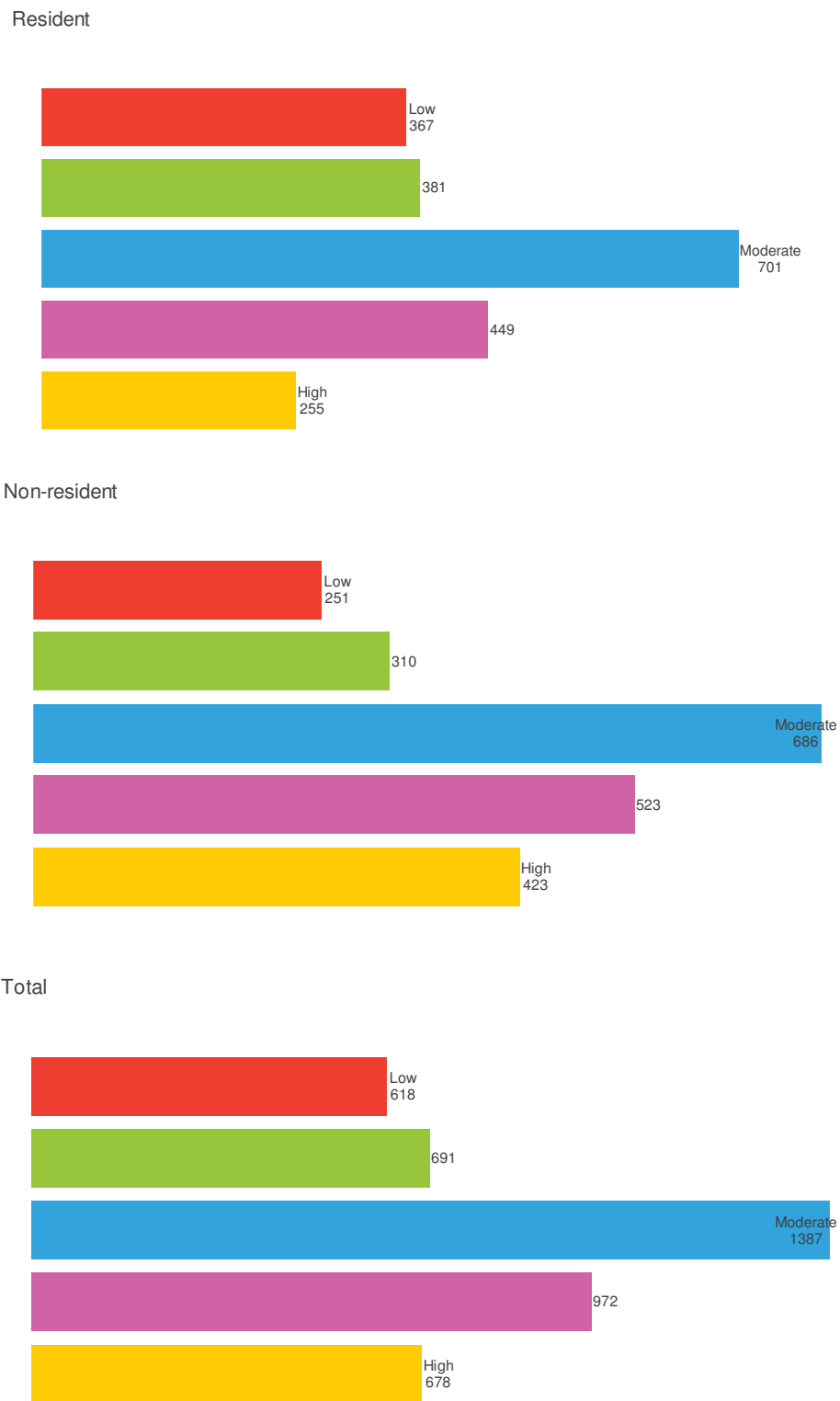
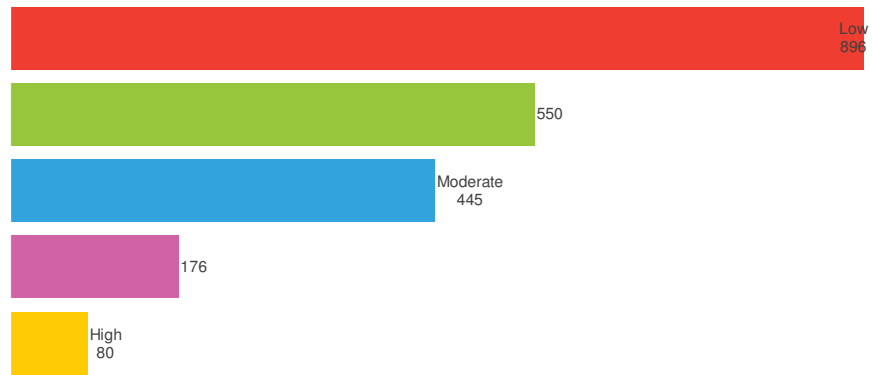
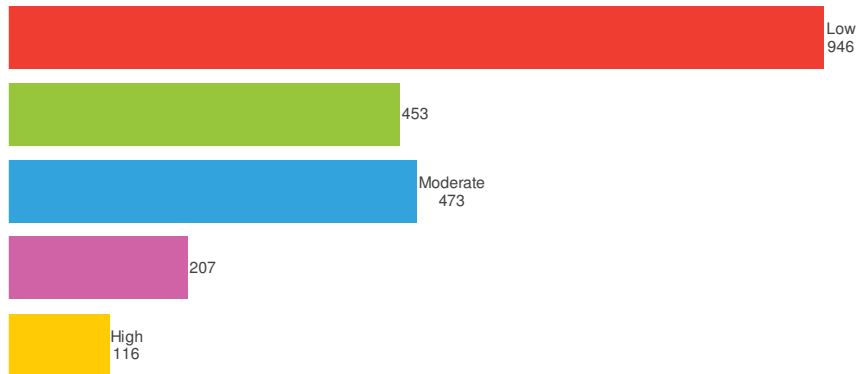


Figure 2. Resident, non-resident, and total hunter rating of the number of turkey hunters encountered during the spring 2016 turkey season.

Resident



Non-resident



Total

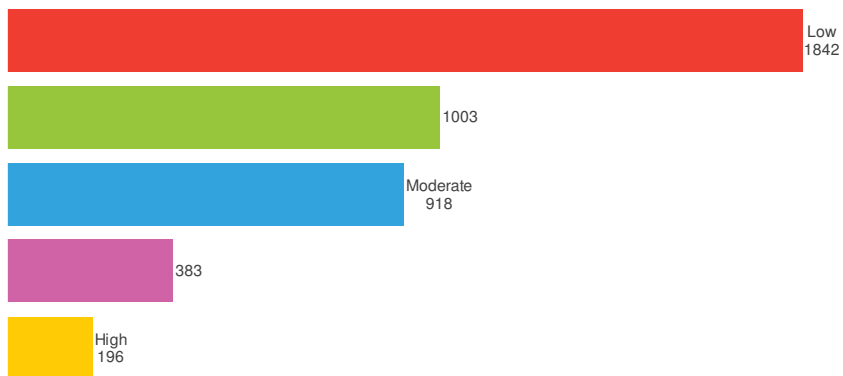


Table 18. Resident, non-resident, and total number of hunters who would hunt turkeys in Nebraska again in the future given their experiences during the 2016 spring season.

Respondents	Resident	Non-resident	Total
		2154	2200
Yes	2125 99%	2107 96%	4232 97%
No	29 1%	93 4%	122 3%

Figure 3. Hunter agreement with the statement, “I saw too many hunters,” regarding their experiences during the spring 2016 turkey season.

“I saw too many hunters.”

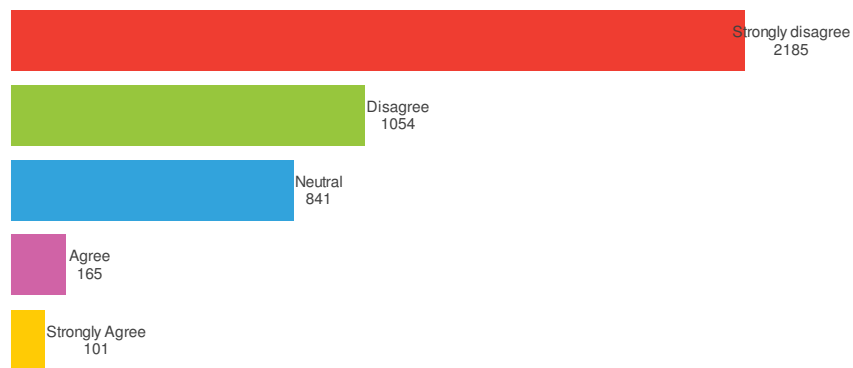


Figure 4. Hunter agreement with the statement, “I was satisfied with the number of turkeys I saw,” regarding their experiences during the spring 2016 turkey season.

“I was satisfied with the number of turkeys I saw.”

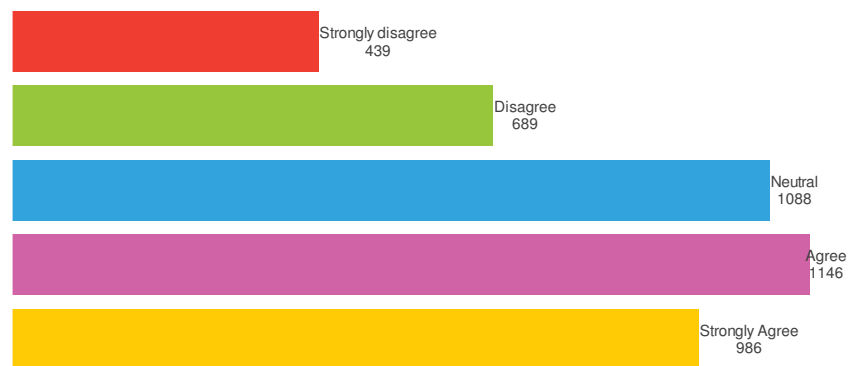


Figure 5. Hunter agreement with the statement, “I was satisfied with the amount of land open to public hunting,” regarding their experiences during the 2016 spring turkey season.

"I was satisfied with the amount of land open to public hunting."

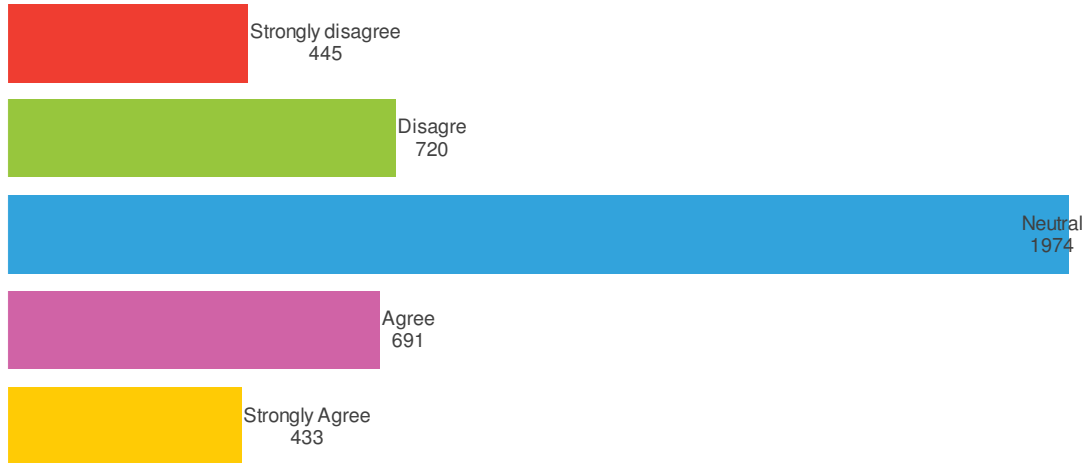


Figure 6. Hunter agreement with the statement, “Overall, I was satisfied with the quality of my hunting experience,” regarding their experiences during the 2016 spring turkey season.

"Overall, I was satisfied with the quality of my hunting experience."

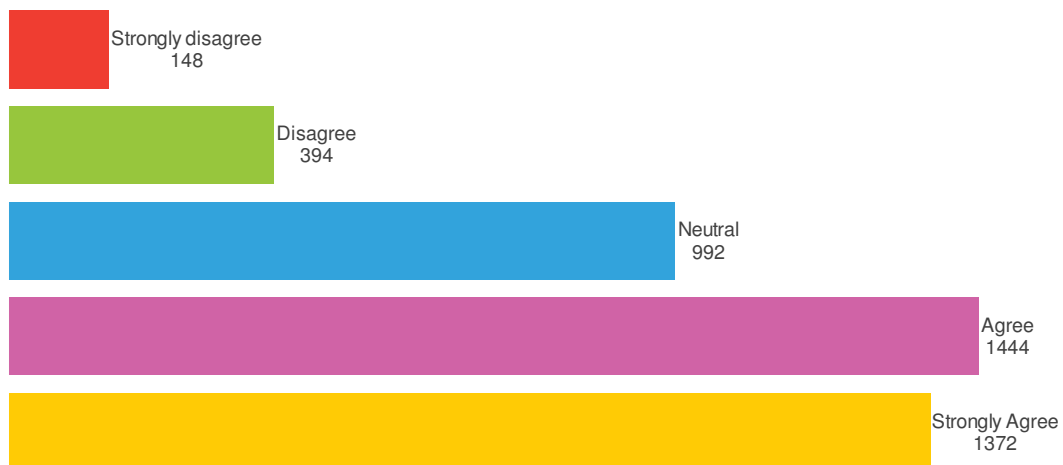
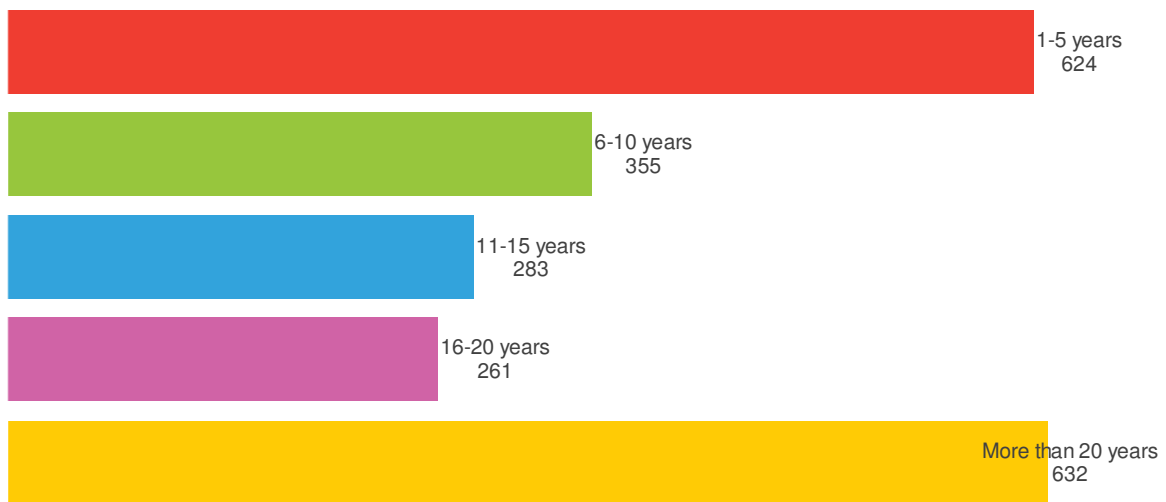


Table 19. Number of hunters accompanying youth, novice, women, and apprentice hunters afield, and the number they reported accompanying during the spring 2016 turkey season.

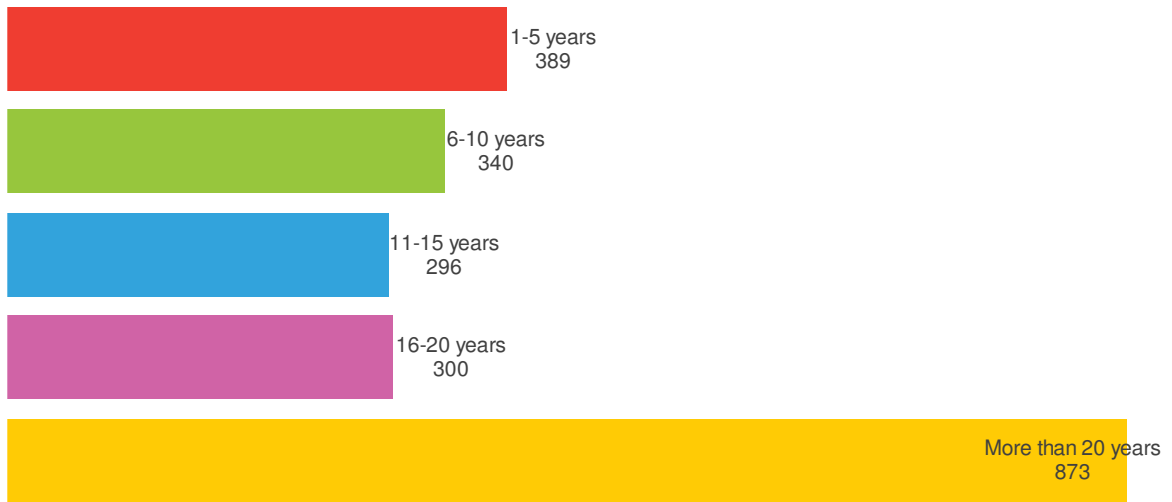
Respondents	Hunters Accompanying	Number Accompanied
	1709	
Youth hunters less than 16 years old	832 49%	812
New adult hunters at least 16 years old	570 33%	552
Women	515 30%	482
Apprentice license holders	151 9%	127

Figure 7. Resident, non-resident, and total number of years of experience hunting turkeys reported by hunters who hunted during the 2016 spring turkey season.

Resident



Non-resident



Total

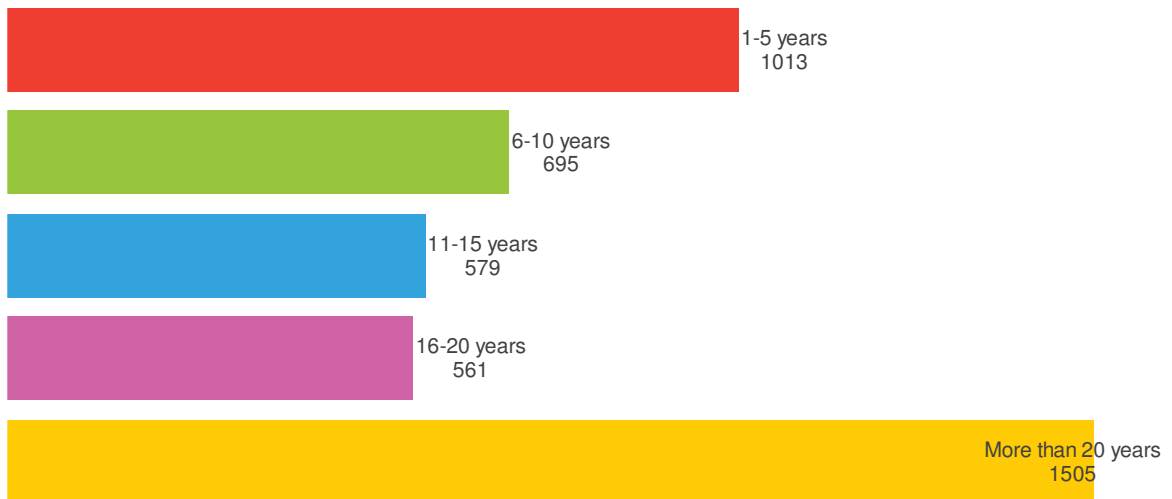


Table 20. Factors influencing resident, non-resident, and total hunters' decisions to hunt turkeys in Nebraska during the 2016 spring season.

Respondents	Resident	Non-resident	Total
	2133	2200	4333
Availability of public land to hunt	368 17%	566 26%	934 22%
Family and/or friends who live in state	987 46%	897 41%	1884 43%
Ability to hunt a different or particular subspecies of turkey	213 10%	936 43%	1149 27%
Availability of permits	1148 54%	1273 58%	2421 56%
Permit costs	722 34%	537 24%	1259 29%
Number of permits allowed per hunter	534 25%	823 37%	1357 31%
Hunter success rate	617 29%	813 37%	1430 33%
Turkey population abundance	1078 51%	1285 58%	2363 55%
Other	353 17%	214 10%	567 13%

Figure 8. Word cloud of hunters' "Other" responses regarding the factors influencing their decision to hunt wild turkeys in Nebraska during the spring 2016 season.

If other, please provide further details.

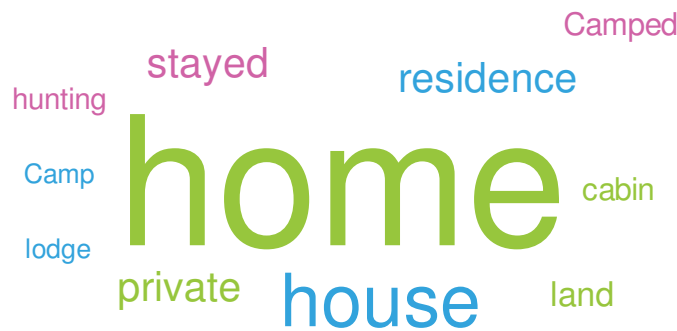


Table 21. Type of lodging resident, non-resident, and total hunters used when hunting turkeys in Nebraska during the 2016 spring season.

Respondents	Resident	Non-resident	Total
	2132	2197	4329
Hotel/motel	96 5%	698 32%	794 18%
Commercial campground (e.g., KOA)	3 0%	29 1%	32 1%
Public camping site (e.g., state parks)	75 4%	230 10%	305 7%
Private residence of family or friends	1419 67%	914 42%	2333 54%
Other	539 25%	326 15%	865 20%

Figure 9. Word cloud of hunters' "Other" responses regarding the type of lodging resident and non-resident hunters used while hunting wild turkeys in Nebraska during the spring 2016 season.

Other locations where resident hunters stayed while hunting



Other locations where non-resident hunters stayed while hunting

