

ALABAMA HUNTER HARVEST ANNUAL REPORT

This study was conducted for the Alabama Department of Conservation
and Natural Resources by Responsive Management



2019-2020

ALABAMA HUNTER HARVEST 2019-2020

2020

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EXECUTIVE SUMMARY

Responsive Management conducted this survey for the Alabama Department of Conservation and Natural Resources (hereinafter referred to as the Department) to determine hunters' participation in hunting various species, their harvest, their use of game check methods, and other characteristics of their hunting in Alabama in 2019-2020. This follows similar surveys conducted by Responsive Management regarding the 2017-2018 hunting season and 2018-2019 hunting season. The study entailed a scientific, probability-based telephone survey of licensed Alabama hunters.

Telephones were selected as the preferred sampling mode. The primary reason is that past experience on harvest surveys by Responsive Management has shown that license holders who do not actively participate in hunting or who do not successfully harvest an animal are more likely to respond to a telephone survey than to a mail or online survey, as there is more effort involved in responding via mail or online. Hunters who did not hunt or harvest will readily tell an interviewer verbally that they did not do so, but they are much less motivated to answer even a single survey question on paper and mail it or go to a web address and respond online. For this reason, harvest surveys performed via mail or online have an inherent risk of overestimating harvest due to the decreased response from those who did not hunt and/or harvest during the season.

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Department, based on the aforementioned previous surveys administered in 2018 and 2019. The telephone survey was computer coded for Responsive Management's computer-assisted telephone interviewing process. An important aspect of this process is that the computer controls which questions are asked and allows for immediate data entry. Each telephone survey, however, is administered by a live interviewer.

The Department supplied the sample of licensed Alabama hunters for this study. The survey was conducted in July 2020.

HUNTING DEER: PARTICIPATION, LOCATION, TYPES OF LAND, EQUIPMENT, DAYS, HARVEST, AND REPORTING COMPLIANCE

- Nearly 199 thousand licensed hunters hunted deer in Alabama during the 2019-2020 deer seasons, hunting deer for 4.5 million days, and harvesting just over 218 thousand deer.
 - Modern firearms accounts for the most deer hunters, days, and harvest.
 - Most deer hunting was on private lands, as was most harvest.

Deer Hunting: Hunters, Days, and Harvest (2019-2020)

Deer / Equipment / Land / Deer Type	Number of Hunters	Hunter-Days	Number Harvested
Deer-all	198,924	4,494,715	218,358
Archery	80,300	1,210,213	42,221
Modern	180,746	3,154,406	169,497
Primitive	16,909	130,095	6,640
Private land		4,089,566	205,620
WMAs		211,673	6,161
Other public		193,475	6,433
Buck			94,034
Doe			118,418

WMA refers to Wildlife Management Areas.

HUNTING TURKEY: PARTICIPATION, LOCATION, SEASONS, TYPES OF LAND, EQUIPMENT, DAYS, HARVEST, AND REPORTING COMPLIANCE

- Over 61 thousand licensed hunters hunted turkey in Alabama in the 2019-2020 seasons. They hunted turkey for more than 711 thousand hunter-days, harvesting approximately 35 thousand turkeys.
 - The most popular way to hunt turkey was by using modern firearms, accounting for most of the days of turkey hunting.

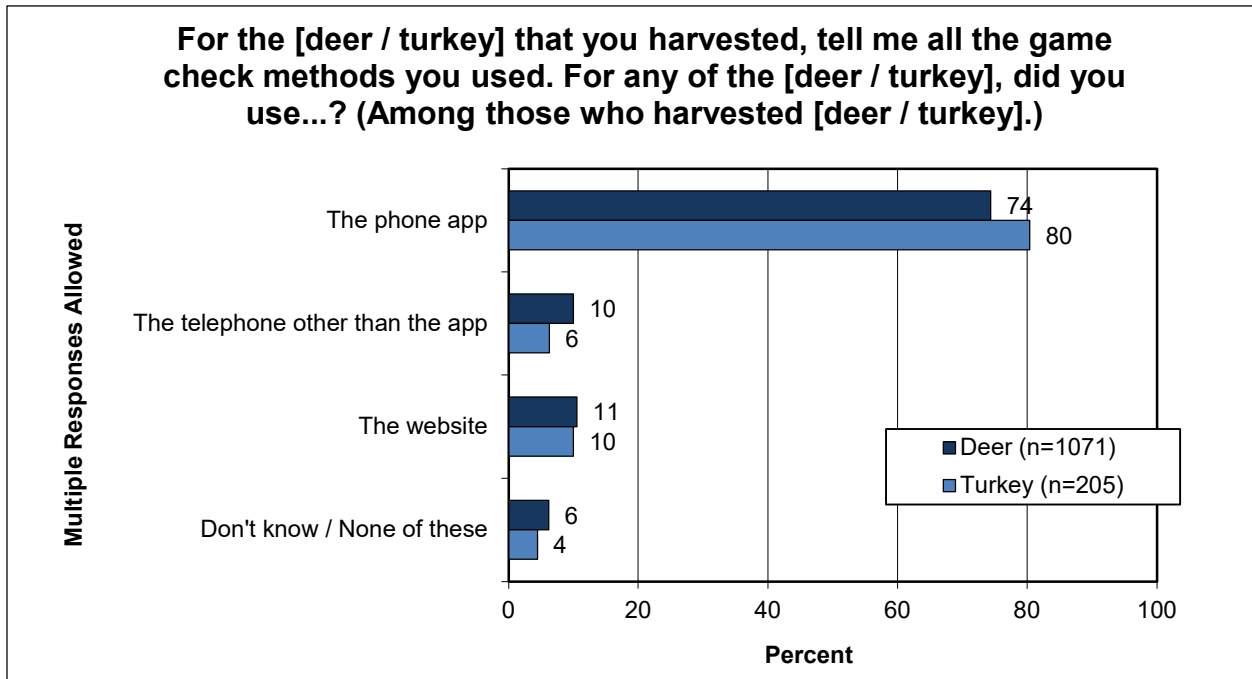
Turkey Hunting: Hunters, Days, and Harvest (2019-2020)

Turkey / Equipment / Season / Turkey Type	Number of Hunters	Hunter-Days	Number Harvested
Turkey-all	61,224	711,202	34,882
Archery		22,759	
Modern		684,115	
Primitive		4,328	
Fall	1,616	6,621	217
Spring	59,946	690,156	34,666
Jakes			1,760
Gobblers			33,122

WMA refers to Wildlife Management Areas.

TYPES USED AND OPINIONS ON GAME CHECK METHODS

- The phone app is the most popular way, by far, to check both deer and turkey: 74% of deer harvesters and 80% of turkey harvesters did so in the 2019-2020 deer and turkey seasons.
 - The phone app had the highest ratings for ease of use, followed by the website, among those hunters who used the various types of methods for checking game.



HUNTING QUAIL: PARTICIPATION, TYPES OF QUAIL HUNTED, DAYS, AND HARVEST

- There were almost 8 thousand quail hunters, and they harvested approximately 154 thousand quail in the 2019-2020 season.

Quail Hunting: Hunters, Days, and Harvest (2019-2020)

Quail / Quail Type	Number of Hunters	Hunter-Days	Number Harvested
Quail-all	7,796	39,541	154,063
Wild	6,218	11,491	21,662
Pen-raised	2,903	27,019	132,379

HUNTING DOVE: PARTICIPATION, SPLIT HUNTED, TYPES OF LAND, DAYS, HARVEST, AND WILLINGNESS TO TRAVEL

- Dove hunting had nearly 56 thousand participants. They hunted more than 233 thousand days, and they harvested approximately 1.3 million dove in the 2019-2020 season.

Dove Hunting: Hunters, Days, and Harvest (2019-2020)

Dove / Split	Number of Hunters	Hunter-Days	Number Harvested
Dove-all	55,800	233,234	1,345,741
First split		162,116	967,728
Remaining splits		57,688	323,922
Unknown splits			54,116

- Dove hunters generally do not use public land for dove hunting (only 12% do). Those who do use public lands are about evenly split between Wildlife Management Areas (WMAs) and non-WMA public land.

HUNTING OTHER SPECIES: PARTICIPATION, DAYS, AND HARVEST

- The table below shows hunting data on other species. Of those other species asked about in the survey, wild hog, duck, squirrel, and coyote were the most popular among hunters in the 2019-2020 season.

Small Game Hunting: Hunters, Days, and Harvest (2019-2020)

Species	Number of Hunters	Hunter-Days	Number Harvested
Bobcat	3,339	4,037	3,028
Coot	1,009	543	10,249
Coyote	19,721	85,173	56,523
Duck	23,603	237,273	431,067
Fox	1,009	5,124	1,553
Goose	6,444	34,939	41,849
Opossum	1,087	17,547	11,025
Rabbit	8,774	55,980	73,139
Raccoon	5,668	144,336	65,685
Snipe	388	311	466
Squirrel	21,429	108,466	276,172
Wild hog	35,094	190,067	255,364
Woodcock	311	543	621

- Hunters who hunt waterfowl on public land (58% of waterfowl hunters hunt on public land) are divided between WMAs and other public lands: 17% hunt exclusively or mostly on WMAs, while 27% hunt exclusively or mostly on other public lands. Meanwhile, 12% hunt both types of public land about equally.

TRENDS

- The trends in deer hunting show that the number of deer hunters in the past season was about the same as in previous years, as was the number of deer harvested. One difference is that other public land hunting (other than WMAs) for deer was up this past year, as measured by the number of hunter days.
- In looking at other species, notably more hunters were hunting bobcat, coyote, dove, goose, opossum, rabbit, squirrel, and turkey. Among quail hunters, there was more hunting of wild quail and less hunting of pen-raised quail.
- Harvest was markedly up for fox, opossum, rabbit, squirrel, and turkey. Meanwhile, harvest was substantially down for duck, and harvest was very much lower for quail—both wild and pen-raised.

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INTRODUCTION AND METHODOLOGY

Responsive Management conducted this survey for the Alabama Department of Conservation and Natural Resources (hereinafter referred to as the Department) to determine hunters' participation in hunting various species, their harvest, their use of game check methods, and other characteristics of their hunting in Alabama in 2019-2020. This follows similar surveys conducted by Responsive Management regarding the 2017-2018 hunting season and 2018-2019 hunting season. The study entailed a scientific, probability-based telephone survey of licensed Alabama hunters. Specific aspects of the research methodology are discussed below.

USE OF TELEPHONES FOR THE SURVEY

Telephones were selected as the preferred sampling mode for several reasons. Past experience on harvest surveys by Responsive Management has shown that license holders who do not actively participate in hunting or who do not successfully harvest an animal are more likely to respond to a telephone survey than to a mail or online survey, as there is more effort involved in responding via mail or online. Hunters who did not hunt or harvest will readily tell an interviewer verbally that they did not do so, but they are much less motivated to answer even a single survey question on paper and mail it or go to a web address and respond online. For this reason, harvest surveys performed via mail or online have an inherent risk of overestimating harvest due to the decreased response from those who did not hunt and/or harvest during the season.

Furthermore, telephone surveys allow respondents who cannot or will not respond to a mail or online survey to participate. Mail and online surveys systematically exclude those who have difficulty reading. In 2016, the U.S. Department of Education's National Institute of Literacy estimated that up to 43% of the general population of the United States cannot read beyond a "basic level," suggesting that many might be reticent to complete a mail or online survey they must read to themselves. In addition, those with poor or limited internet service or who are intimidated by technology may be reticent to complete a survey online. In a telephone survey, however, a live interviewer reads the survey questions, clarifies them if necessary, and assists the respondent with completing the survey, making it an excellent option to reduce bias and increase response to the survey.

Finally, telephone surveys also have fewer negative effects on the environment than do mail surveys because of the reduced use of paper, reduced energy consumption for delivering and returning the questionnaires, and reduced quantity of material to be disposed of after the survey.

QUESTIONNAIRE DESIGN

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Department, based on the aforementioned previous surveys administered in 2018 and 2019, with a few added questions for this year's survey. The telephone survey was computer coded for Responsive Management's computer-assisted telephone interviewing (CATI) process. An important aspect of this process is that the computer controls which questions are asked and allows for immediate data entry. Each telephone survey, however, is administered by a live interviewer. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey and to ensure that the survey was updated for the 2019-2020 hunting season.

SURVEY SAMPLE

The Department supplied the sample of licensed Alabama hunters for this study. Note that the sample was used for this survey and another survey regarding compliance with game check regulations, also conducted for the Department. The sample was not used in any other way by Responsive Management, which does not keep and maintain samples of licensed hunters. The sample was stratified based on resident/non-resident and by lifetime license/non-lifetime license (i.e., lifetime versus any other type of hunting license). Within each of these sub-samples, a probability-based selection process ensured that each eligible hunter had an approximately equal chance of being selected for the survey. All groups were then proportioned properly in the data analyses, using the proportions in the entire dataset of license holders (resident vs. non-resident, and lifetime license holder vs. any other license holder).

TELEPHONE INTERVIEWING FACILITIES

For this survey, a combination of in-house and home-based calling was conducted. Responsive Management has a central surveying site that allows for rigorous quality control over the interviews and data collection, staffed by interviewers with experience conducting computer-assisted harvest surveys. Survey Center Managers monitor these in-house calls. Typically, all

calling is done from Responsive Management's in-house telephone interviewing facilities. However, due to coronavirus distancing, some interviewers conducted the surveys from their home locations, as well. Nonetheless, Survey Center Managers were able to remotely monitor these home-based interviews as well in real time and provide rigorous quality control over the interviews and data collection.

To further ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted a conference call briefing with the interviewers prior to the administration of these surveys. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaire.

INTERVIEWING DATES AND TIMES

Telephone surveying times are Monday through Friday from 10:00 a.m. to 9:00 p.m., Saturday from noon to 7:00 p.m., and Sunday from 1:00 p.m. to 8:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The survey was conducted in July 2020.

TELEPHONE SURVEY DATA COLLECTION, QUALITY CONTROL, AND DATA ANALYSIS

As previously mentioned, CATI software was used for data collection. The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey questionnaire was programmed so that CATI branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection. As indicated previously, each telephone survey was

administered by a live interviewer; the CATI software only directs the interviewer to the proper questions, depending on previous responses given in the survey, but the interviewer reads the questions to the respondent.

The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews, to ensure the integrity of the data. The survey questionnaire itself contained error checkers and computation statements to ensure quality and consistent data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. Responsive Management obtained 3,372 completed interviews with Alabama licensed hunters, 2,913 of whom went hunting.

The data were collected and weighted by license type. The sample was divided into three distinct groups:

- Lifetime license holders.
- Resident non-lifetime license holders.
- Non-resident non-lifetime license holders.

Survey interviews from these groups were then obtained in their proper proportions. Once the data were collected, response rates were computed for each of these groups individually, and these were used to estimate the total number of participants and then to weight the final data, as lifetime licensees had a considerably lower rate of participation in hunting than the other license categories. The final weighting was slight: the highest weight (lifetime license holders) being 1.54 and the lowest weight (resident non-lifetime license holders) being 0.93.

The analysis of the data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The results were weighted by the aforementioned stratification variables so that the sample was representative of Alabama licensed hunters as a whole. As indicated, residents and non-residents were in their proper proportions, as were lifetime license holders and non-lifetime license holders.

SAMPLING ERROR

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of Alabama licensed hunters, the sampling error is at most plus or minus 1.68 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within plus or minus 1.68 percentage points of each other. Sampling error was calculated using the standard formula described below, with a sample size of 3,372 and an estimated population size of 265,649.

Sampling Error Equation

$$B = \left(\sqrt{\frac{N_p(.25)}{N_s} - .25} \right) (1.96)$$

Where: B = maximum sampling error (as decimal)
 N_p = population size (i.e., total number who could be surveyed)
 N_s = sample size (i.e., total number of respondents surveyed)

Derived from formula: p. 206 in Dillman, D. A. 2000. *Mail and Internet Surveys*. John Wiley & Sons, NY.

Note: This is a simplified version of the formula that calculates the maximum sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

HUNTING DEER: PARTICIPATION, LOCATION, TYPES OF LAND, EQUIPMENT, DAYS, HARVEST, AND REPORTING COMPLIANCE

- Nearly 199 thousand licensed hunters hunted deer in Alabama during the 2019-2020 deer seasons.
 - These deer hunters spent almost 4.5 million days hunting deer.
 - The harvest of deer in the 2019-2020 season was just over 218 thousand deer.
 - Modern firearms accounts for the most deer hunters, days, and harvest, by far, followed by archery and primitive weapons in that order.
 - Among archery hunters, 36% who hunted deer with archery did so with a crossbow.
 - Most deer hunting was on private lands, as was most harvest.
 - County data are shown, as well.

Deer Hunting: Hunters, Days, and Harvest (2019-2020)

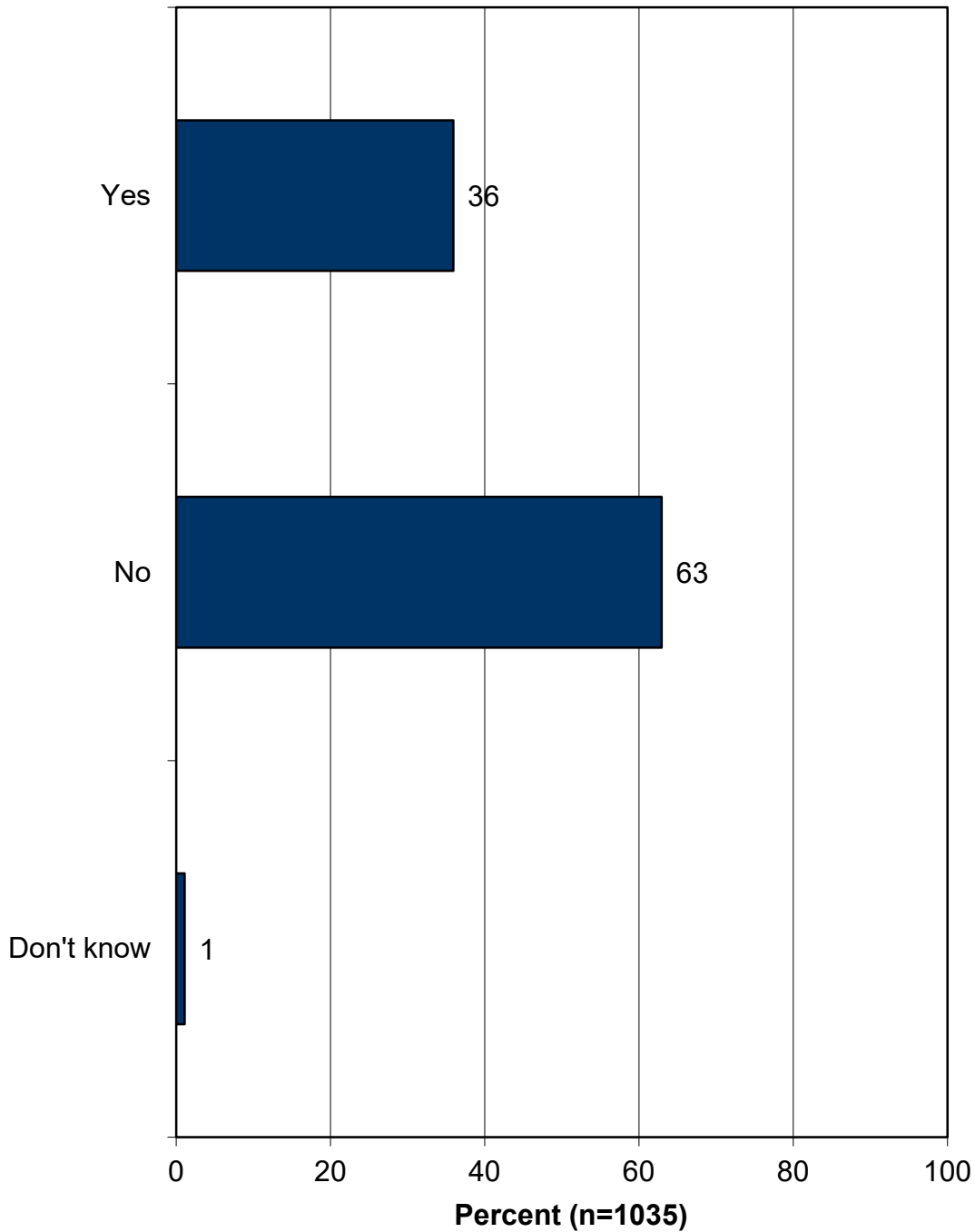
Deer / Equipment / Land / Deer Type	Number of Hunters			Hunter-Days			Number Harvested		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
Deer-all	198,924	196,250	201,598	4,494,715	4,297,203	4,692,227	218,358	204,610	232,106
Archery	80,300	76,369	84,231	1,210,213	1,112,204	1,308,222	42,221	33,491	50,951
Modern	180,746	177,454	184,037	3,154,406	3,012,339	3,296,473	169,497	157,657	181,337
Primitive	16,909	14,748	19,069	130,095	99,502	160,689	6,640	0	15,024
Private land				4,089,566	3,900,094	4,279,038	205,620	191,964	219,275
WMAs				211,673	166,683	256,663	6,161	0	14,442
Other public				193,475	152,203	234,747	6,433	0	13,913
Buck							94,034	87,403	100,664
Doe							118,418	108,184	128,651

WMA refers to Wildlife Management Areas.

Deer Hunting: Mean Days, Deer Harvest per Hunter, Days per Harvest, and Buck-Doe Percentages (2019-2020)

	Mean Days per Hunter	Deer Harvest per Hunter	Days per Harvest	Percentage
Deer Overall	22.6	1.10	20.6	
Archery		0.53	18.6	
Modern		0.94	28.7	
Primitive		0.39	19.6	
Buck				43.1
Doe				56.9

You said you hunted deer with archery equipment during the 2019-2020 season. Did you hunt with a crossbow? (Among those who hunted deer with archery equipment.)



Deer Hunting: Harvest of Bucks, Does, and Fawns by County (2019-2020)

County	Harvest of Bucks			Harvest of Does			Harvest of Fawns		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
Autauga	1,446	542	2,349	3,660	1,416	5,904	120	0	308
Baldwin	2,485	1,298	3,671	3,463	1,736	5,190	0	0	0
Barbour	2,372	1,389	3,355	3,023	1,698	4,347	147	0	357
Bibb	1,442	589	2,296	652	123	1,182	72	0	219
Blount	888	207	1,570	647	0	1,318	120	0	308
Bullock	1,915	1,014	2,816	3,582	1,122	6,042	0	0	0
Butler	1,399	535	2,263	3,370	1,746	4,995	144	0	352
Calhoun	289	0	648	1,057	194	1,920	0	0	0
Chambers	1,475	564	2,386	1,132	419	1,845	144	0	352
Cherokee	1,321	399	2,243	721	99	1,343	72	0	219
Chilton	1,177	485	1,868	2,042	713	3,371	0	0	0
Choctaw	1,205	420	1,989	2,688	1,170	4,205	75	0	225
Clarke	2,503	1,383	3,623	2,475	608	4,342	72	0	219
Clay	1,132	450	1,815	942	279	1,605	0	0	0
Cleburne	839	213	1,465	292	0	652	0	0	0
Coffee	1,527	521	2,532	552	0	1,132	192	0	431
Colbert	649	45	1,254	985	272	1,698	72	0	219
Conecuh	1,907	950	2,864	2,573	272	4,874	72	0	219
Coosa	1,108	351	1,864	2,184	784	3,585	508	0	1,148
Covington	1,449	646	2,252	1,424	500	2,349	361	0	847
Crenshaw	1,101	421	1,781	1,362	379	2,344	0	0	0
Cullman	1,396	603	2,190	841	98	1,583	0	0	0
Dale	1,154	325	1,983	1,010	263	1,757	0	0	0
Dallas	1,899	1,000	2,797	3,128	1,429	4,827	0	0	0
DeKalb	985	303	1,667	1,298	372	2,225	0	0	0
Elmore	865	280	1,451	1,752	578	2,925	144	0	352
Escambia	844	161	1,527	867	149	1,584	0	0	0
Etowah	505	0	1,073	600	85	1,114	72	0	219
Fayette	552	97	1,008	1,201	390	2,012	72	0	219
Franklin	1,255	409	2,102	2,112	586	3,639	289	0	875
Geneva	1,136	363	1,909	652	123	1,182	0	0	0
Greene	1,873	956	2,790	2,401	631	4,171	0	0	0
Hale	1,966	621	3,312	1,224	334	2,114	0	0	0
Henry	1,678	832	2,524	1,806	700	2,912	144	0	352
Houston	1,082	349	1,814	1,298	372	2,225	216	0	656
Jackson	2,002	991	3,014	1,613	667	2,558	72	0	219
Jefferson	505	19	991	913	247	1,579	0	0	0
Lamar	841	261	1,420	3,152	1,436	4,868	0	0	0
Lauderdale	985	272	1,698	1,366	408	2,325	361	0	749
Lawrence	1,010	355	1,665	505	65	945	0	0	0
Lee	1,132	390	1,875	1,064	428	1,699	0	0	0
Limestone	888	297	1,480	2,090	366	3,813	72	0	219
Lowndes	1,332	486	2,178	819	326	1,313	192	0	431
Macon	1,088	384	1,792	2,519	879	4,158	144	0	438
Madison	1,301	447	2,156	1,951	568	3,333	0	0	0
Marengo	1,591	649	2,533	1,904	951	2,858	216	0	656
Marion	1,731	325	3,137	2,308	982	3,634	216	0	470
Marshall	624	63	1,186	144	0	352	0	0	0
Mobile	624	26	1,223	1,296	394	2,198	144	0	438
Monroe	1,249	493	2,004	2,032	935	3,129	72	0	219
Montgomery	1,691	827	2,555	3,541	1,906	5,176	0	0	0
Morgan	841	42	1,639	600	20	1,179	0	0	0
Perry	1,277	377	2,176	1,829	865	2,793	72	0	219
Pickens	1,431	630	2,231	3,187	1,674	4,699	72	0	219
Pike	850	306	1,394	1,193	417	1,968	75	0	225
Randolph	1,132	334	1,931	844	228	1,460	0	0	0
Russell	1,158	503	1,814	3,532	1,793	5,272	72	0	219

Deer Hunting: Harvest of Bucks, Does, and Fawns by County (2019-2020) (continued)

County	Harvest of Bucks			Harvest of Does			Harvest of Fawns		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
St. Clair	1,105	429	1,781	913	215	1,610	0	0	0
Shelby	1,778	893	2,664	1,970	849	3,091	72	0	219
Sumter	1,749	823	2,676	2,068	931	3,205	0	0	0
Talladega	1,418	594	2,242	1,057	100	2,015	144	0	352
Tallapoosa	1,668	729	2,608	655	124	1,187	216	0	544
Tuscaloosa	3,145	1,927	4,363	3,746	2,196	5,297	0	0	0
Walker	2,137	1,202	3,073	1,562	617	2,507	144	0	438
Washington	2,092	987	3,197	1,010	234	1,785	0	0	0
Wilcox	1,604	755	2,453	3,117	813	5,422	72	0	219
Winston	1,731	578	2,884	1,562	594	2,530	216	0	544
Unknown	3,356	2,204	4,507	3,040	1,821	4,260	75	0	225

Deer Hunting: Days by County (2019-2020)

County	Days		
	Estimate	Lower Bound	Upper Bound
Autauga	96,556	62,521	130,590
Baldwin	110,425	78,208	142,643
Barbour	99,837	67,452	132,222
Bibb	79,819	50,458	109,180
Blount	55,249	25,014	85,484
Bullock	70,417	44,436	96,398
Butler	80,844	49,879	111,809
Calhoun	45,325	25,213	65,436
Chambers	47,573	25,106	70,040
Cherokee	32,700	18,709	46,692
Chilton	88,345	49,190	127,501
Choctaw	55,598	33,049	78,146
Clarke	92,670	59,165	126,176
Clay	52,448	29,236	75,661
Cleburne	64,427	31,897	96,957
Coffee	56,798	31,637	81,958
Colbert	45,208	24,246	66,171
Conecuh	61,630	32,699	90,561
Coosa	100,753	65,811	135,695
Covington	58,567	35,519	81,616
Crenshaw	46,708	25,894	67,522
Cullman	47,447	27,627	67,267
Dale	41,684	22,399	60,968
Dallas	84,582	56,857	112,308
DeKalb	53,792	28,061	79,523
Elmore	47,756	26,060	69,451
Escambia	56,928	34,285	79,570
Etowah	33,776	12,199	55,352
Fayette	40,609	24,049	57,168
Franklin	50,075	27,938	72,211
Geneva	40,110	19,373	60,847
Greene	52,587	29,751	75,422
Hale	39,618	22,417	56,819
Henry	42,130	22,990	61,269
Houston	54,599	27,951	81,248
Jackson	106,873	69,737	144,009
Jefferson	58,377	32,783	83,971
Lamar	58,340	31,705	84,975
Lauderdale	62,618	25,986	99,249
Lawrence	55,943	31,648	80,238
Lee	70,667	41,532	99,801
Limestone	61,765	35,084	88,446
Lowndes	47,159	29,429	64,889

Deer Hunting: Days by County (2019-2020) (continued)

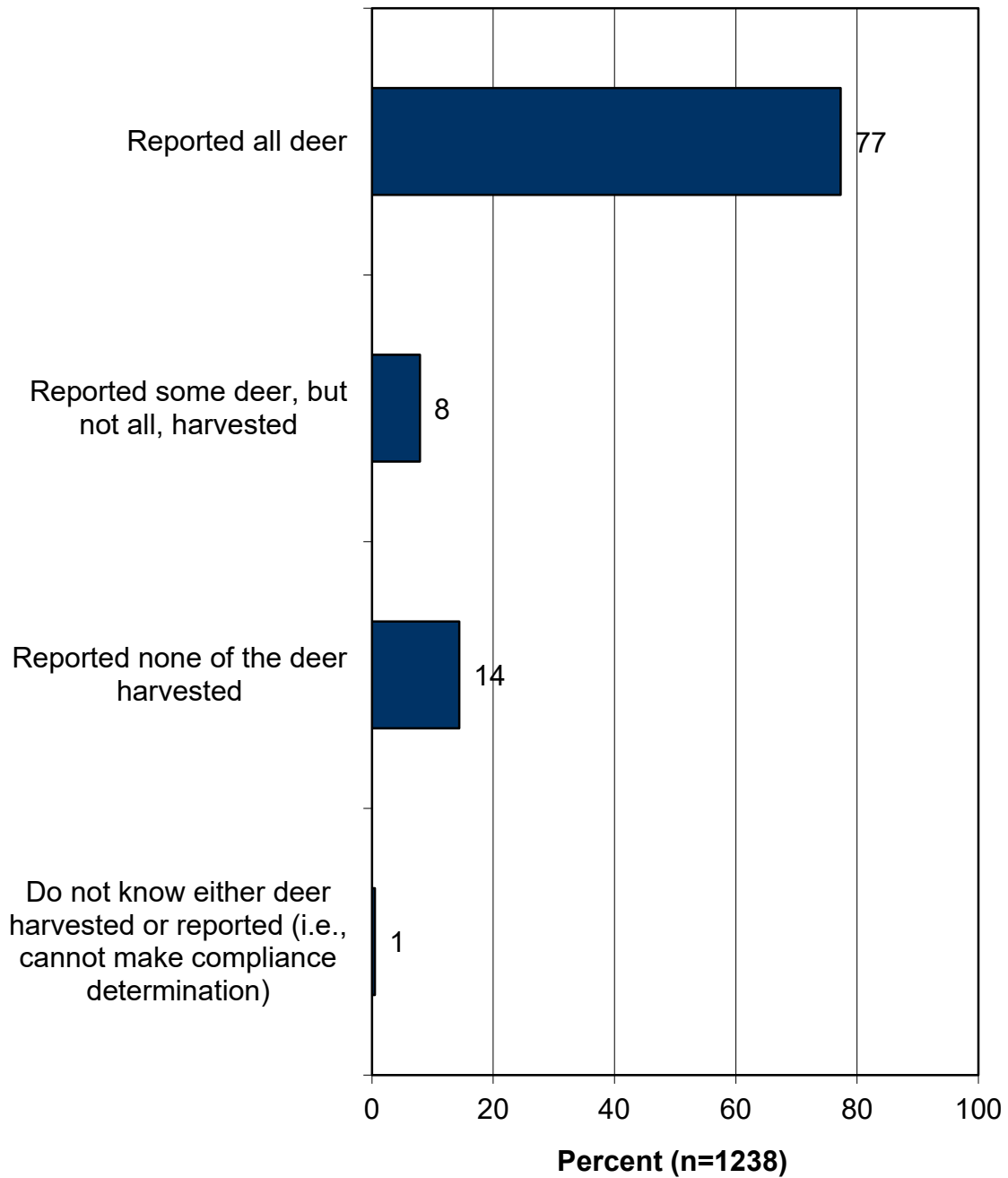
County	Days		
	Estimate	Lower Bound	Upper Bound
Macon	56,006	33,019	78,993
Madison	45,662	27,382	63,942
Marengo	54,669	35,161	74,177
Marion	53,419	31,482	75,356
Marshall	37,563	20,261	54,865
Mobile	74,862	43,845	105,880
Monroe	94,478	59,013	129,943
Montgomery	85,572	54,147	116,997
Morgan	51,552	28,355	74,749
Perry	72,932	44,251	101,613
Pickens	80,928	55,745	106,112
Pike	36,426	23,282	49,571
Randolph	55,674	32,398	78,951
Russell	86,069	51,033	121,106
St. Clair	30,895	14,350	47,439
Shelby	120,459	84,989	155,930
Sumter	70,840	45,489	96,190
Talladega	74,279	44,439	104,119
Tallapoosa	60,718	34,195	87,241
Tuscaloosa	190,594	131,848	249,340
Walker	87,101	54,101	120,102
Washington	94,985	62,764	127,207
Wilcox	54,386	30,357	78,415
Winston	83,728	53,971	113,485
Unknown	88,761	60,536	116,985

- Compliance data among those who harvested deer are shown in the matrix below and the graph on the following page; the matrix excludes “don’t know” responses. The majority of deer hunters indicated that they reported all of their harvested deer (green-shaded cells).

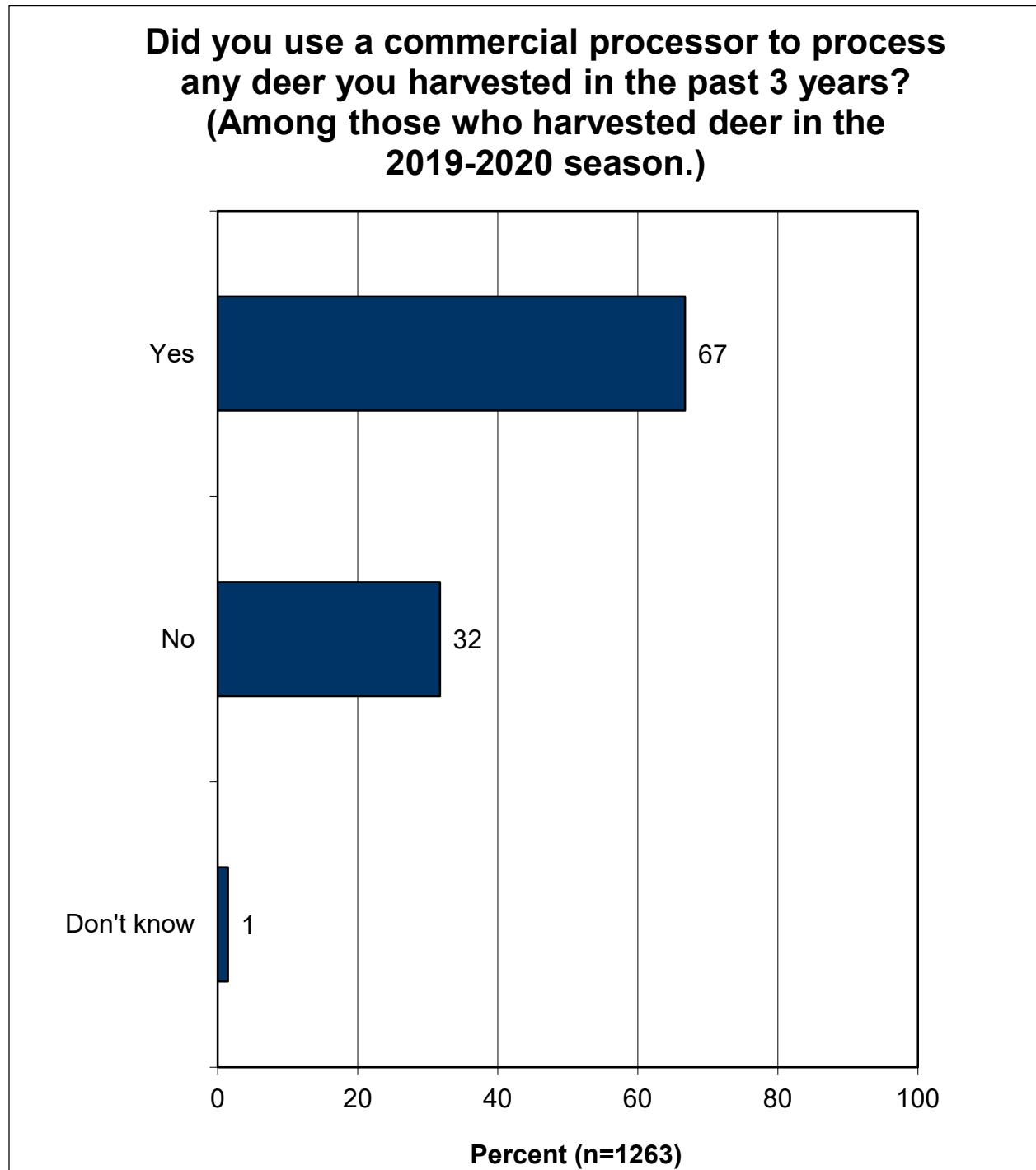
Compliance With Deer Reporting Requirements (Cells Show Percentage Out of All Those Who Harvested Excluding “Don’t Know” Responses)

Deer	Reported 0	Reported 1	Reported 2	Reported 3	Reported 4	Reported 5	Reported 6
Harvested 1	8.1%	36.5%					
Harvested 2	2.6%	1.5%	20.9%				
Harvested 3	1.5%	0.9%	0.7%	11.8%			
Harvested 4	1.0%	0.2%	0.6%	1.3%	3.6%		
Harvested 5	0.5%	0.0%	0.2%	0.3%	0.5%	2.6%	
Harvested 6	0.2%	0.0%	0.0%	0.2%	0.2%	0.1%	1.1%
	Reported all	Reported some	Reported none				
Harvested more than 6	1.1%	1.4%	0.5%				

How many of the deer you harvested during the season did you report using the Alabama Game Check System?



- A new question in the 2020 survey asked about commercial processing of deer. It was asked of those who harvested in the 2019-2020 season, but the timeframe used in the question was 3 years. Among those who harvested, two thirds (67%) used a commercial processor for deer in any of the past 3 years.



HUNTING TURKEY: PARTICIPATION, LOCATION, SEASONS, TYPES OF LAND, EQUIPMENT, DAYS, HARVEST, AND REPORTING COMPLIANCE

- Over 61 thousand licensed hunters hunted turkey in Alabama in the 2019-2020 seasons.
 - Their days of hunting turkey in 2019-2020 was more than 711 thousand hunter-days.
 - They harvested approximately 35 thousand turkeys.
 - The most popular way to hunt turkey was by using modern firearms, accounting for most of the days of turkey hunting.
 - Among turkey hunters who used archery equipment, 15% used a crossbow.
 - The spring season far exceeded the fall season in participation and harvest.
 - County data are also shown.

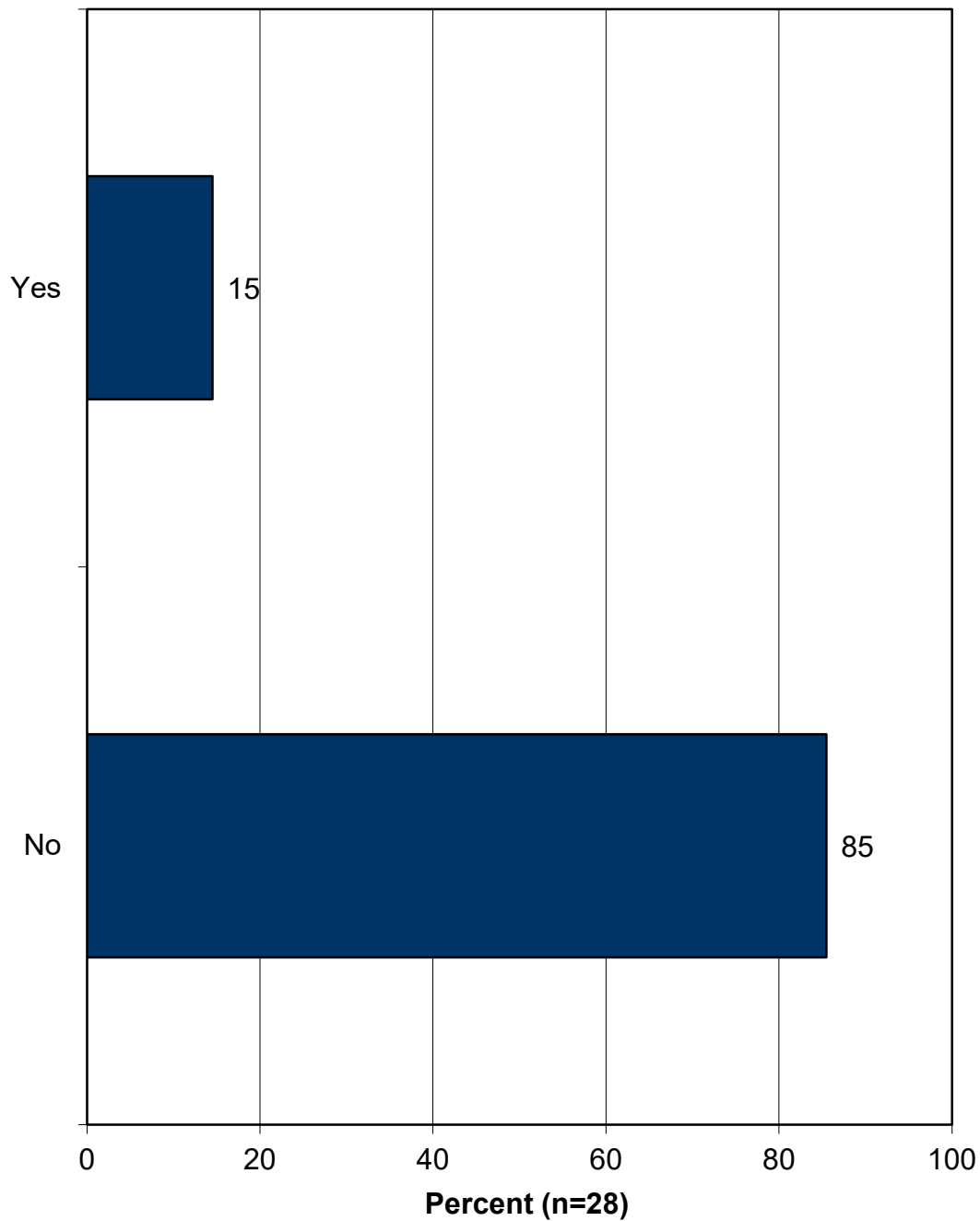
Turkey Hunting: Hunters, Days, and Harvest (2019-2020)

Turkey / Equipment / Season / Turkey Type	Number of Hunters			Hunter-Days			Number Harvested		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
Turkey-all	61,224	57,574	64,874	711,202	599,870	822,534	34,882	29,756	40,008
Archery				22,759	0	110,050			
Modern				684,115	572,500	795,731			
Primitive				4,328	0	42,045			
Fall	1,616	924	2,308	6,621	3,125	10,117	217	0	3,142
Spring	59,946	56,321	63,572	690,156	625,273	755,039	34,666	25,567	43,764
Jakes							1,760	1,009	2,511
Gobblers							33,122	28,101	38,143

Turkey Hunting: Mean Days, Turkey Harvest per Hunter, and Days per Harvest (2019-2020)

	Mean Days per Hunter	Turkey Harvest per Hunter	Days per Harvest
Turkey Overall	11.6	0.57	20.4
Fall	4.1	0.13	30.6
Spring	11.5	0.58	19.9

You said you hunted turkey with archery equipment during the 2019-2020 season. Did you hunt with a crossbow? (Among those who hunted turkey with archery equipment.)



Turkey Hunting: Harvest and Days by County (2019-2020)

County	Harvest of Turkeys			Days of Turkey Hunting		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
Autauga	649	0	1,352	16,144	4,944	27,344
Baldwin	580	31	1,130	18,325	8,756	27,893
Barbour	1,303	330	2,276	24,642	12,305	36,978
Bibb	361	0	965	8,078	2,210	13,946
Blount	289	0	582	6,555	1,804	11,307
Bullock	559	101	1,016	10,624	5,470	15,777
Butler	216	0	656	10,049	4,348	15,749
Calhoun	590	0	1,288	8,212	3,758	12,666
Chambers	624	103	1,146	11,757	4,705	18,809
Cherokee	841	191	1,490	10,540	3,957	17,122
Chilton	192	0	431	21,935	0	53,072
Choctaw	1,226	179	2,273	16,869	4,617	29,121
Clarke	577	0	1,199	12,093	5,826	18,360
Clay	1,045	186	1,904	14,566	1,593	27,539
Cleburne	292	0	652	15,324	3,069	27,579
Coffee	446	24	867	14,606	5,824	23,388
Colbert	0	0	0	5,216	771	9,660
Conecuh	264	0	613	6,706	0	13,910
Coosa	697	155	1,238	15,111	7,270	22,952
Covington	0	0	0	5,600	1,621	9,578
Crenshaw	220	0	475	2,616	28	5,203
Cullman	192	0	431	3,211	0	6,425
Dale	1,535	183	2,888	20,889	7,974	33,805
Dallas	655	48	1,263	8,818	1,946	15,689
DeKalb	662	0	1,405	9,323	2,876	15,770
Elmore	216	0	470	8,457	2,131	14,783
Escambia	147	0	357	6,823	1,716	11,931
Etowah	383	45	721	1,583	0	3,209
Fayette	289	0	648	2,572	0	5,889
Franklin	960	26	1,895	4,977	12	9,942
Geneva	147	0	357	3,393	429	6,357
Greene	1,463	296	2,630	21,321	7,708	34,934
Hale	192	0	431	5,498	486	10,510
Henry	292	0	652	7,815	1,536	14,093
Houston	72	0	219	5,455	191	10,719
Jackson	580	165	996	19,362	10,390	28,334
Jefferson	216	0	544	4,688	972	8,404
Lamar	442	0	911	5,271	870	9,672
Lauderdale	216	0	544	8,439	2,471	14,406
Lawrence	72	0	219	5,047	0	10,603
Lee	292	0	756	6,444	1,715	11,173
Limestone	0	0	0	4,130	0	8,949
Lowndes	361	0	965	8,387	1,864	14,910
Macon	289	0	752	8,135	155	16,115
Madison	505	0	1,073	6,648	1,970	11,326
Marengo	289	0	648	10,582	1,988	19,177
Marion	120	0	308	6,853	1,082	12,624
Marshall	361	0	889	3,678	0	7,448
Mobile	0	0	0	5,482	129	10,836
Monroe	223	0	480	12,285	4,665	19,905
Montgomery	985	110	1,860	23,619	9,277	37,961
Morgan	120	0	308	480	0	1,114
Perry	577	0	1,163	7,596	1,943	13,249
Pickens	1,535	565	2,506	26,272	13,725	38,818
Pike	1,270	127	2,413	15,966	3,468	28,464
Randolph	239	0	617	8,497	3,180	13,815
Russell	917	260	1,575	13,867	7,203	20,531

Turkey Hunting: Harvest and Days by County (2019-2020) (continued)

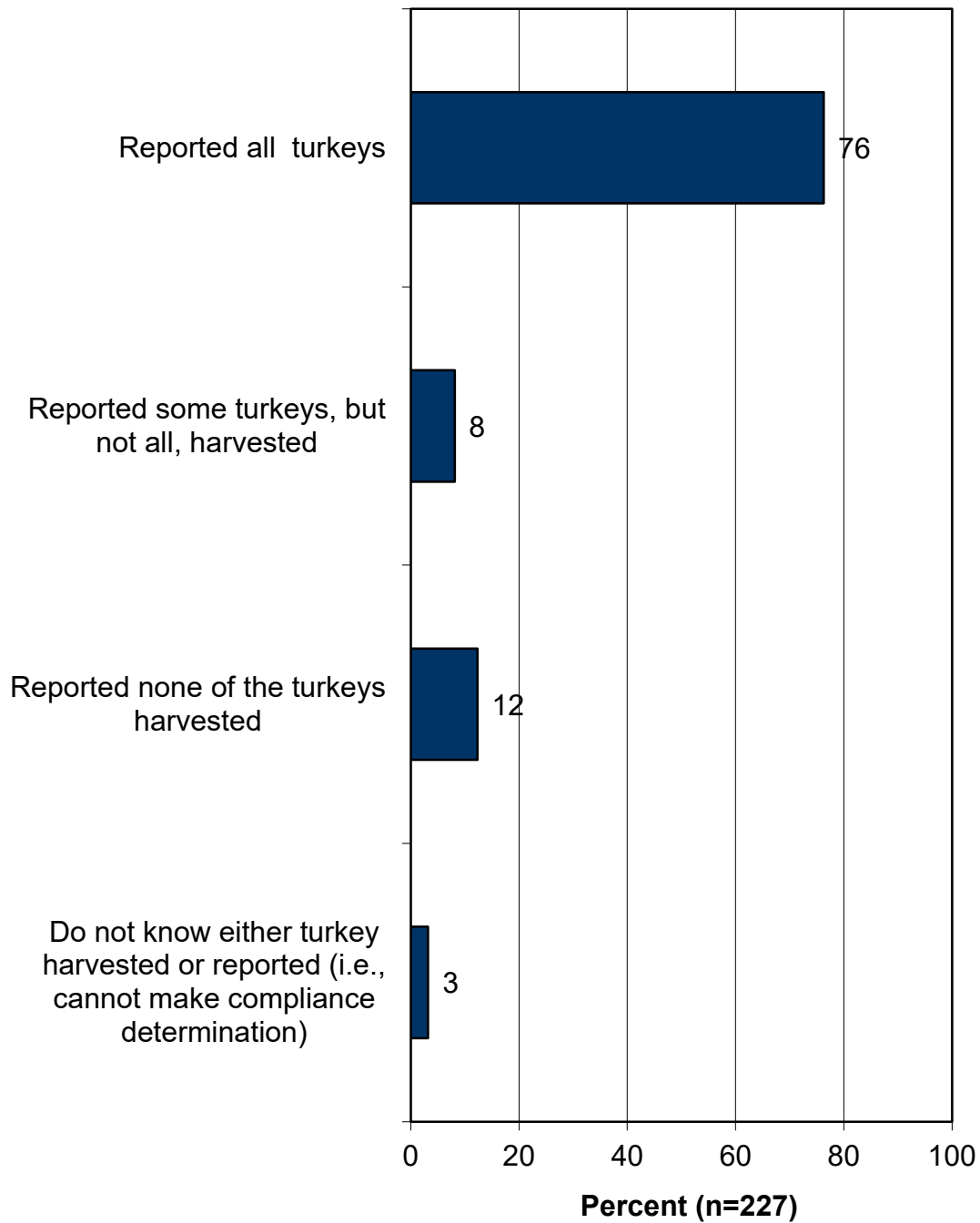
County	Harvest of Turkeys			Days of Turkey Hunting		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
St. Clair	791	0	1,650	6,671	705	12,637
Shelby	433	18	847	14,519	6,959	22,079
Sumter	1,224	366	2,082	13,047	5,771	20,324
Talladega	336	20	652	9,637	3,970	15,305
Tallapoosa	721	135	1,307	12,683	4,352	21,014
Tuscaloosa	1,127	321	1,933	25,910	13,923	37,898
Walker	144	0	438	6,963	458	13,469
Washington	624	103	1,146	15,616	3,166	28,067
Wilcox	264	0	544	9,635	2,344	16,926
Winston	433	0	1,181	6,848	2,973	10,723

- Compliance data among those who harvested turkey are shown in the matrix below and the graph on the following page; the matrix excludes “don’t know” responses. The majority of turkey hunters indicated that they reported all of their harvest (green-shaded cells).

Compliance With Turkey Reporting Requirements (Cells Show Percentage Out of All Those Who Harvested Excluding “Don’t Know” Responses)

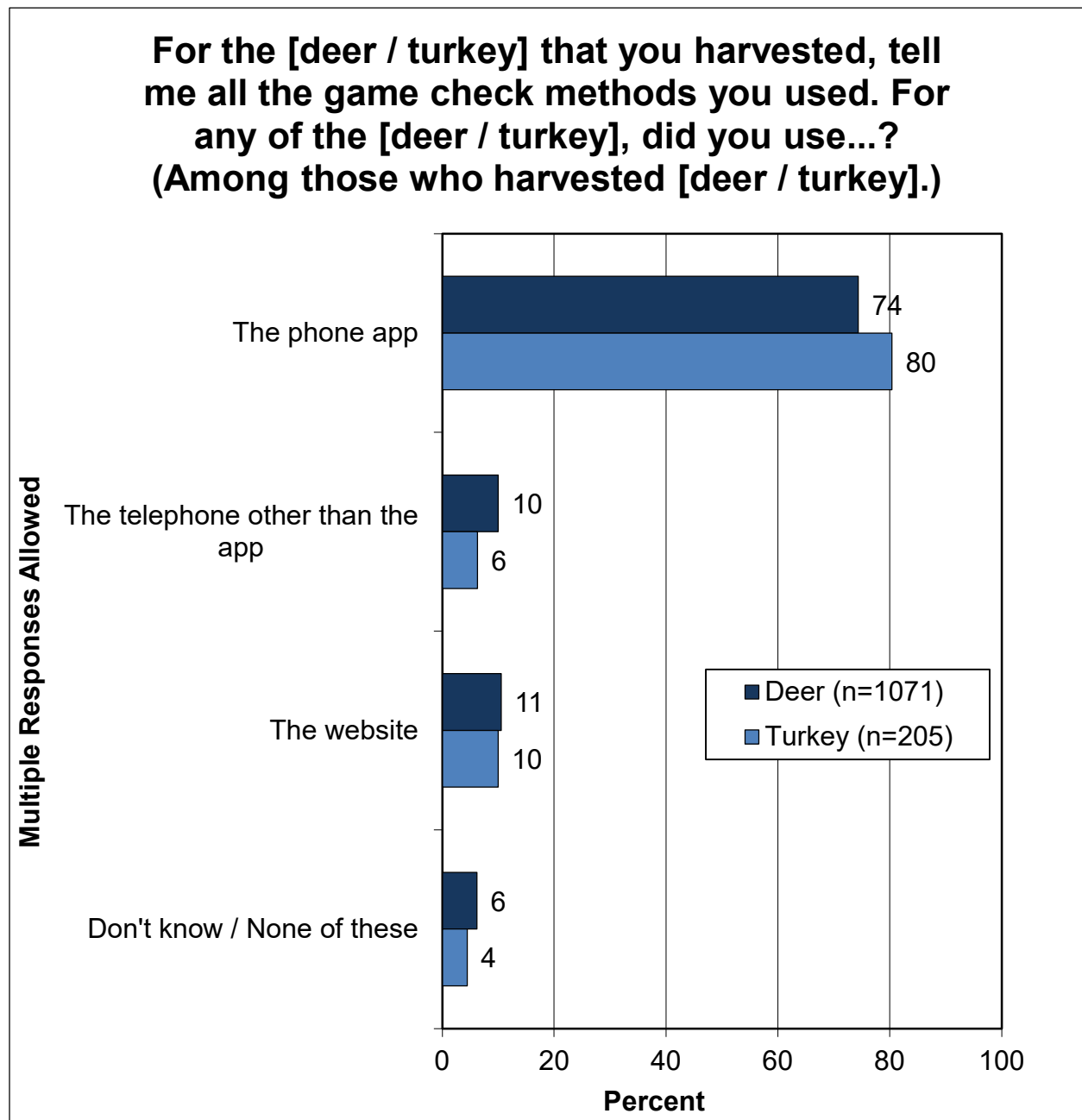
	Reported 0	Reported 1	Reported 2	Reported 3	Reported 4	Reported 5	Reported 6	Reported 7
Harvested 1	6.2%	45.8%						
Harvested 2	5.4%	3.2%	17.6%					
Harvested 3	0.7%	0.4%	1.2%	8.0%				
Harvested 4	0.0%	0.0%	0.0%	1.5%	5.4%			
Harvested 5	0.4%	0.0%	0.0%	0.0%	0.4%	2.1%		
Harvested 6	0.0%	0.0%	0.0%	0.4%	0.0%	0.8%	0.0%	
Harvested 7	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%

How many of the turkeys you harvested during the season did you report using the Alabama Game Check System?

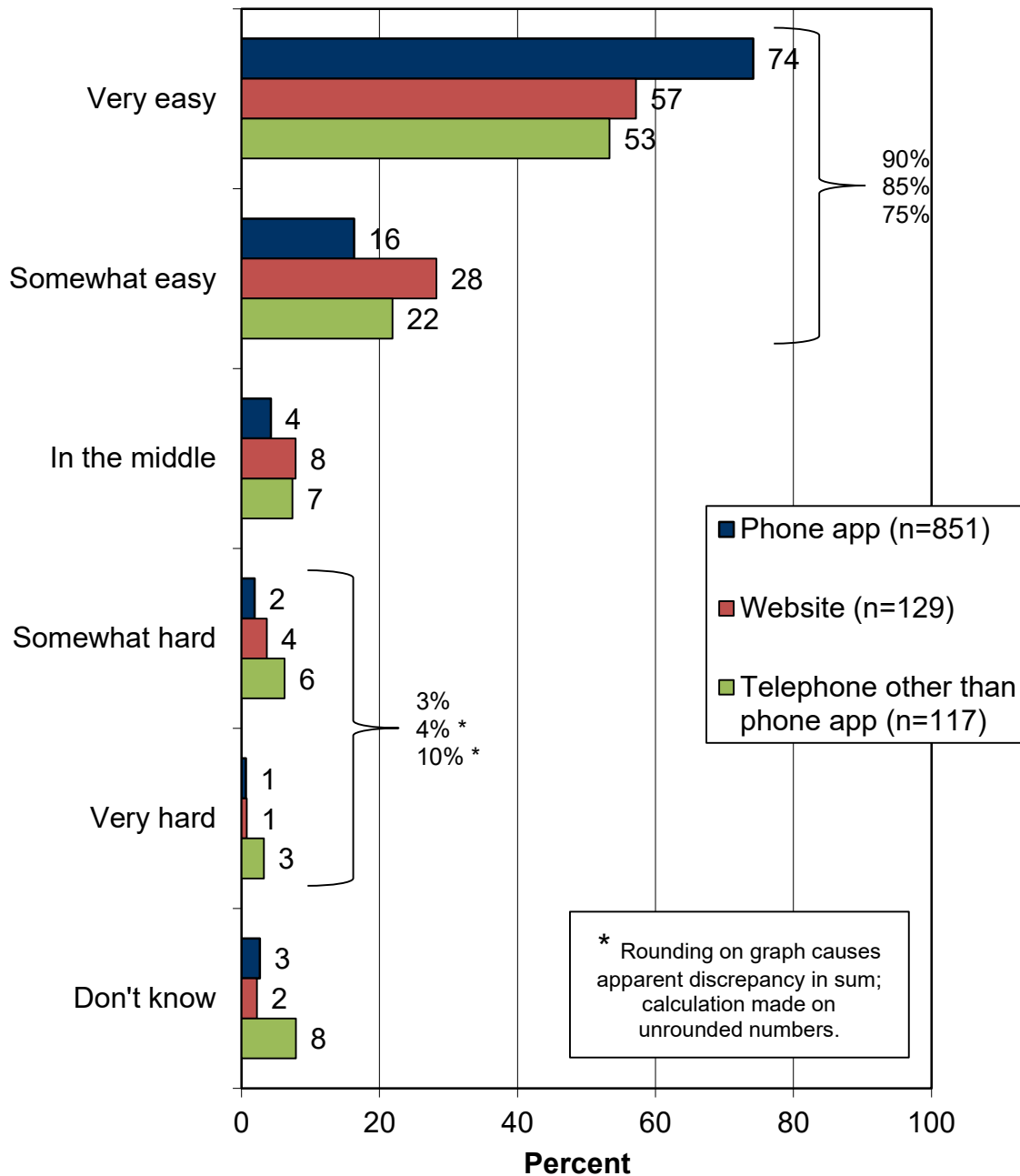


TYPES USED AND OPINIONS ON GAME CHECK METHODS

- The phone app is the most popular way, by far, to check both deer and turkey: 74% of deer harvesters and 80% of turkey harvesters did so in the 2019-2020 deer and turkey seasons.
 - The phone app had the highest ratings for ease of use, followed by the website, among those hunters who used the various types of methods for checking game.



How easy or hard was it to use the [phone app / website / telephone other than the phone app] for checking game? Was it...? (Among those who harvested deer or turkey and checked at least some of their game.)



HUNTING QUAIL: PARTICIPATION, TYPES OF QUAIL HUNTED, TYPES OF LAND, DAYS, AND HARVEST

- There were almost 8 thousand quail hunters, and they harvested approximately 154 thousand quail in the 2019-2020 season.

Quail Hunting: Hunters, Days, and Harvest (2019-2020)

Quail / Quail Type	Number of Hunters			Hunter-Days			Number Harvested		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
Quail-all	7,796	6,297	9,295	39,541	26,809	52,274	154,063	113,736	194,390
Wild	6,218	4,875	7,562	11,491	4,633	18,349	21,662	11,371	31,953
Pen-raised	2,903	1,978	3,828	27,019	17,549	36,489	132,379	0	272,705

Quail Hunting: Avg. Days and Days per Harvest (2019-2020)

Quail	
Avg. Days per Hunter	Days per Harvest
5.1	0.3

HUNTING DOVE: PARTICIPATION, SPLIT HUNTED, TYPES OF LAND, DAYS, HARVEST, AND WILLINGNESS TO TRAVEL

- Dove hunting had nearly 56 thousand participants. They hunted more than 233 thousand days, and they harvested approximately 1.3 million dove in the 2019-2020 season.

Dove Hunting: Hunters, Days, and Harvest (2019-2020)

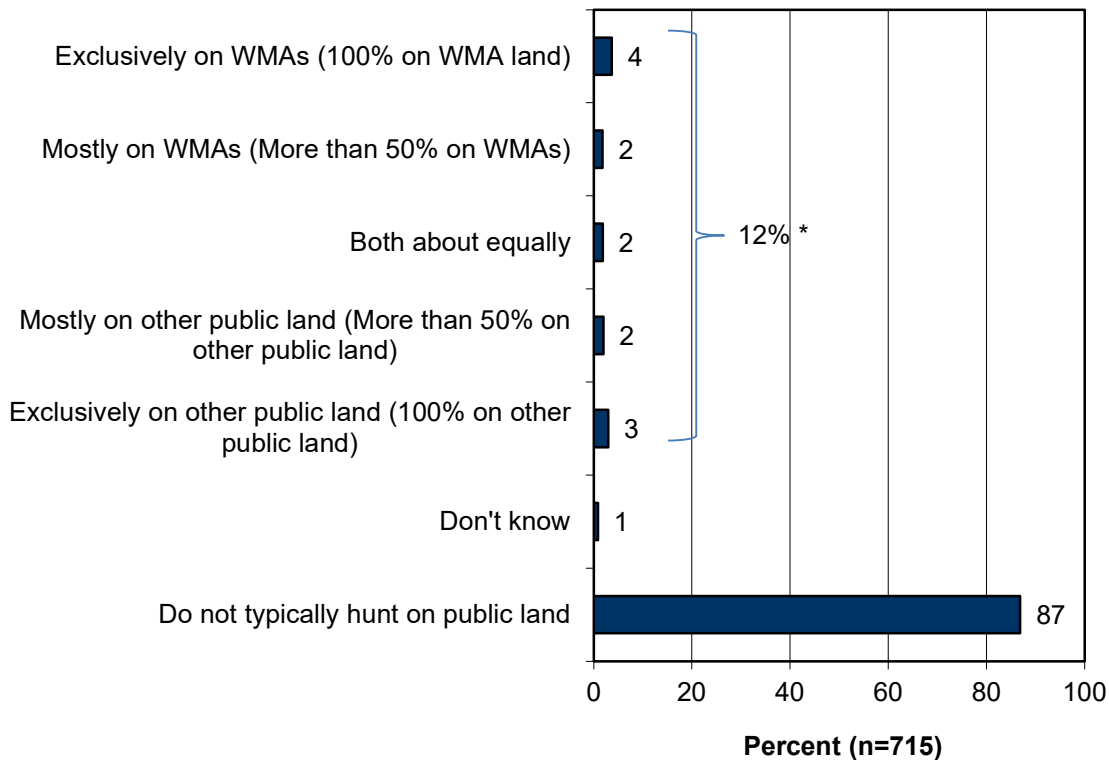
Dove / Split	Number of Hunters			Hunter-Days			Number Harvested		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
Dove-all	55,800	52,258	59,341	233,234	201,457	265,011	1,345,741	1,186,593	1,504,890
First split				162,116	142,371	181,861	967,728	861,841	1,073,615
Remaining splits				57,688	43,692	71,683	323,922	252,860	394,984
Unknown splits							54,116	28,310	79,923

Dove Hunting: Avg. Days and Days per Harvest (2019-2020)

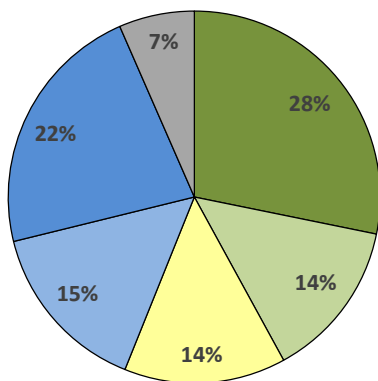
Dove	
Avg. Days per Hunter	Days per Harvest
4.2	0.2

- Dove hunters generally do not use public land for dove hunting (only 12% do). Those who do use public lands are about evenly split between Wildlife Management Areas (WMAs) and non-WMA public land, as shown in the pie graph that shows only public land dove hunters.
- Acceptable travel distances to participate in a public lands limited quota dove hunt are shown in a graph that ends this section on doves.

In a typical year, if you hunt dove on public land, would you say your dove hunting on public land occurs exclusively on WMAs, mostly on WMAs, on both WMAs and other public land, mostly on other public land, or exclusively on other public land? (Asked of those who hunted dove.)



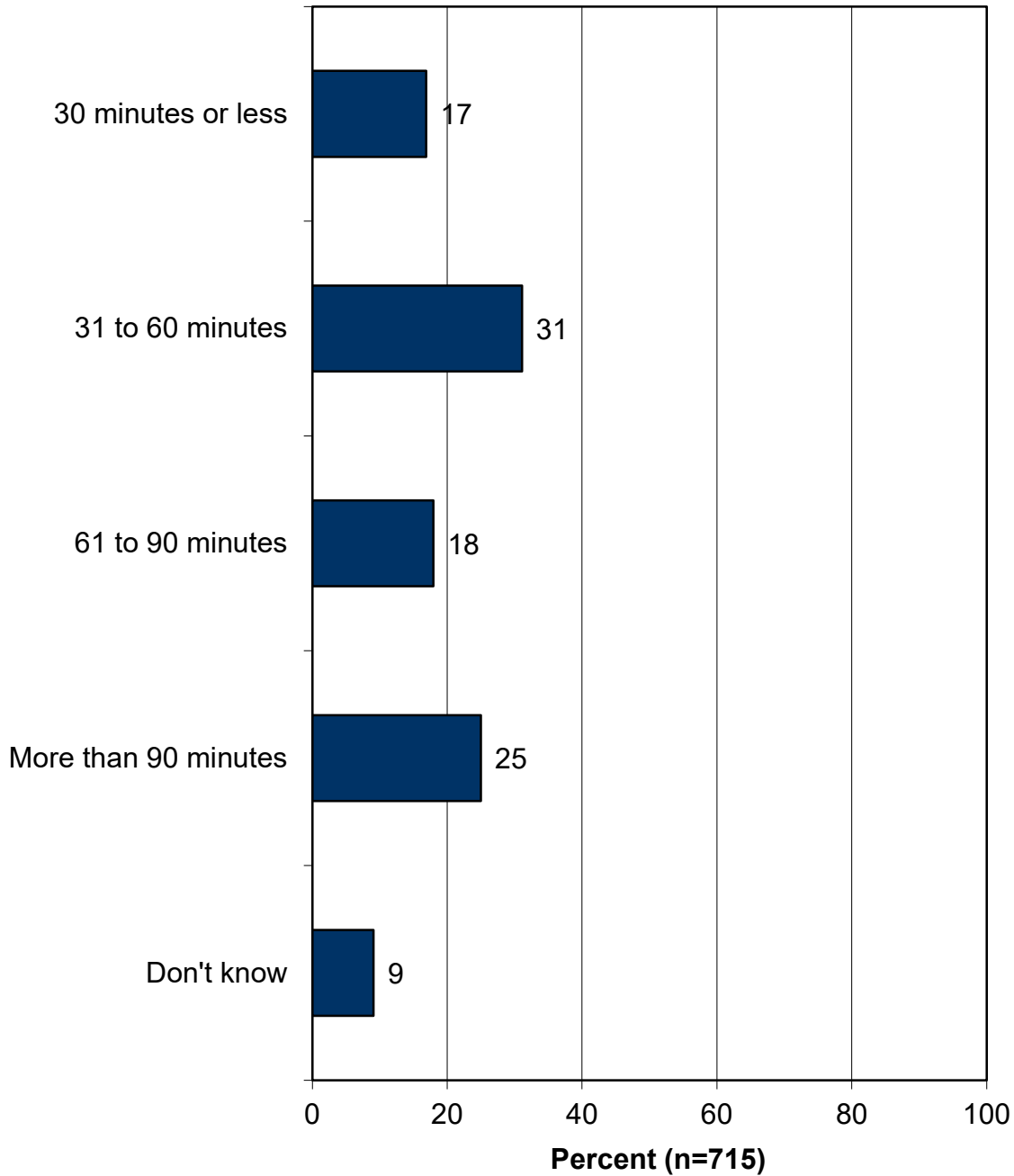
Breakdown of WMA versus other public land dove hunting. (Among those who typically hunt dove on public land.)



- Exclusively on WMAs (100% on WMA land)
- Mostly on WMAs (More than 50% on WMAs)
- Both about equally
- Mostly on other public land (More than 50% on other public land)
- Exclusively on other public land (100% on other public land)
- Don't know

* Rounding on graph causes apparent discrepancy in sum; calculation made on unrounded numbers.

**How long, in minutes, would you be willing to travel to participate in a public lands limited quota dove hunt? Would you be willing to travel...?
(Asked of those who hunted dove.)**



HUNTING OTHER SPECIES: PARTICIPATION, TYPES OF LAND, DAYS, AND HARVEST

- The tables below show hunting data on other species. Of those other species asked about in the survey, wild hog, duck, squirrel, and coyote were the most popular among hunters in the 2019-2020 season. (The survey asked about rail and gallinule. No hunters reported hunting rail. Only a single hunter reported hunting gallinule, harvested only a single bird, and indicated primarily hunting for it for 0 days—in other words, it was a harvest of convenience while the hunter primarily hunted something else. For this reason, they are not shown in the tables.)

Small Game Hunting: Hunters, Days, and Harvest (2019-2020)

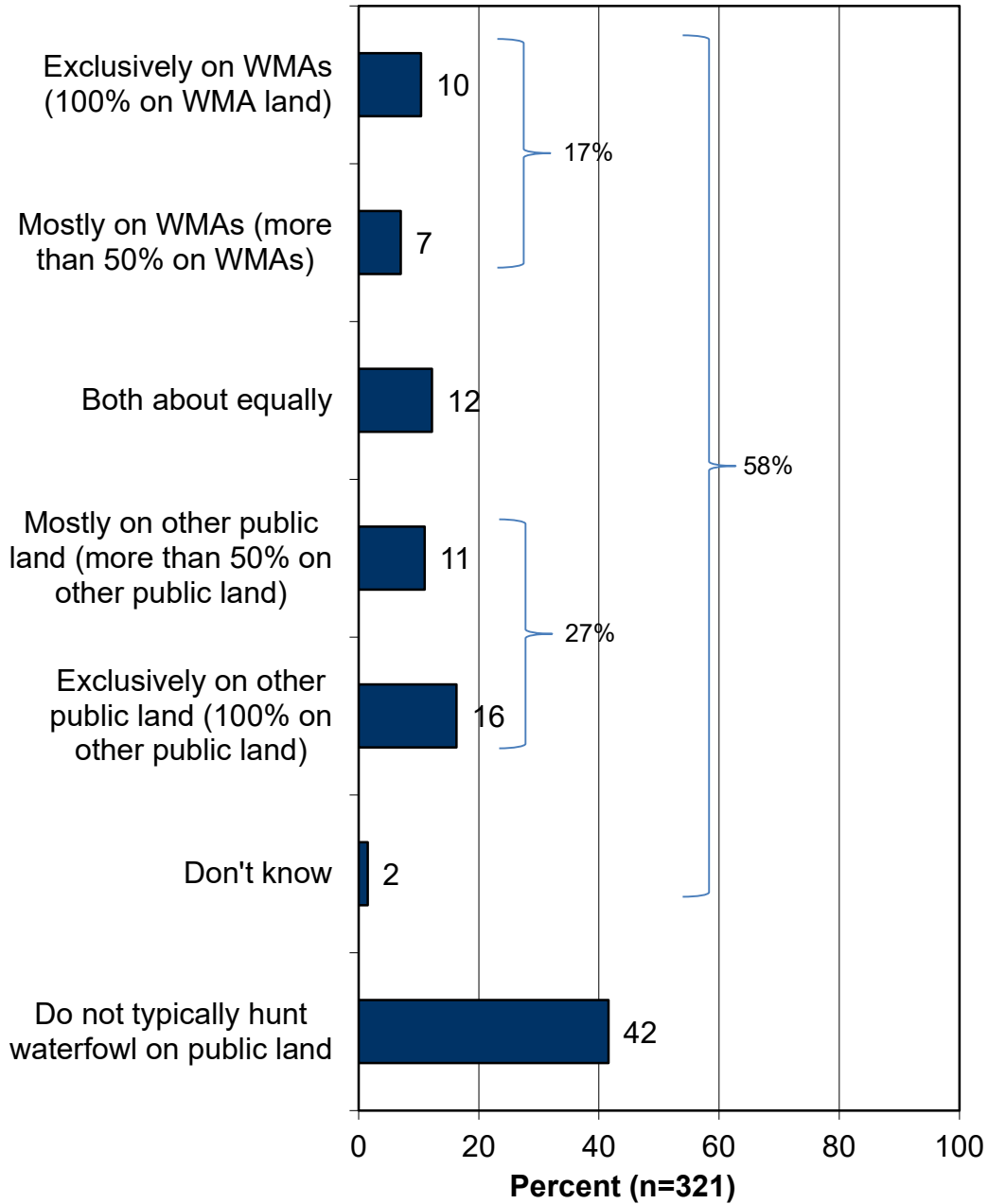
Species	Number of Hunters			Hunter-Days			Number Harvested		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
Bobcat	3,339	2,353	4,324	4,037	0	8,612	3,028	1,878	4,178
Coot	1,009	459	1,560	543	59	1,028	10,249	2,290	18,207
Coyote	19,721	17,405	22,037	85,173	0	180,038	56,523	44,474	68,572
Duck	23,603	21,090	26,116	237,273	198,400	276,147	431,067	332,950	529,185
Fox	1,009	467	1,551	5,124	0	10,956	1,553	329	2,777
Goose	6,444	5,081	7,808	34,939	22,307	47,571	41,849	26,063	57,635
Opossum	1,087	520	1,654	17,547	0	38,499	11,025	0	24,996
Rabbit	8,774	7,188	10,359	55,980	37,787	74,172	73,139	46,733	99,545
Raccoon	5,668	4,387	6,949	144,336	77,685	210,988	65,685	35,419	95,951
Snipe	388	60	717	311	0	705	466	0	975
Squirrel	21,429	19,023	23,836	108,466	87,407	129,525	276,172	211,106	341,238
Wild hog	35,094	34,798	35,390	190,067	135,941	244,193	255,364	176,573	334,155
Woodcock	311	0	3,284	543	0	1,258	621	0	1,295

Small Game Hunting: Mean Days and Days per Harvest (2019-2020)

	Mean Days per Hunter	Days per Harvest
Bobcat	1.2	1.3
Coot	0.5	0.1
Coyote	4.3	1.5
Duck	10.1	0.6
Fox	5.1	3.3
Goose	5.4	0.8
Opossum	16.1	1.6
Rabbit	6.4	0.8
Raccoon	25.5	2.2
Snipe	0.8	0.7
Squirrel	5.1	0.4
Wild hog	5.4	0.7
Woodcock	1.8	0.9

- Hunters who hunt waterfowl on public land (58% of waterfowl hunters hunt on public land) are divided between WMAs and other public lands: 17% hunt exclusively or mostly on WMAs, while 27% hunt exclusively or mostly on other public lands. Meanwhile, 12% hunt both types of public land about equally.

**In a typical year, if you hunt waterfowl on public land, would you say your waterfowl hunting in general on public land occurs...?
(Asked of those who hunted waterfowl.)**



TRENDS

- The trends in deer hunting show that the number of deer hunters in the past season was about the same as in previous years, as was the number of deer harvested. One difference is that other public land hunting (other than WMAs) for deer was up this past year, as measured by the number of hunter days.

Deer Hunting: Hunters, Days, and Harvest Trends

Deer / Equipment / Land / Deer Type	Number of Hunters			Hunter-Days			Number Harvested		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
Deer-all	202,540	191,054	198,924	4,749,691	4,093,081	4,494,715	212,444	203,040	218,358
Archery	80,979	75,815	80,300	1,370,848	1,121,685	1,210,213	49,206	39,086	42,221
Modern	179,102	171,293	180,746	3,201,076	2,848,141	3,154,406	154,746	157,433	169,497
Primitive	20,454	16,895	16,909	177,767	123,254	130,095	8,460	6,522	6,640
Private land				4,438,114	3,731,519	4,089,566	201,433	192,142	205,620
WMAs				205,341	217,415	211,673	6,433	6,650	6,161
Other public				106,238	144,147	193,475	4,549	4,248	6,433
Buck							94,471	83,162	94,034
Doe							114,116	114,553	118,418

WMA refers to Wildlife Management Areas.

Deer Hunting: Mean Days, Deer Harvest per Hunter, Days per Harvest, and Buck-Doe Percentages Trends

	Mean Days per Hunter		
	2017-2018	2018-2019	2019-2020
Deer Overall	23.5	21.4	22.6

Deer Hunting: Mean Days, Deer Harvest per Hunter, Days per Harvest, and Buck-Doe Percentages Trends

	Deer Harvest per Hunter		
	2017-2018	2018-2019	2019-2020
Deer Overall	1.05	1.06	1.10
Archery	0.61	0.52	0.53
Modern	0.86	0.92	0.94
Primitive	0.41	0.39	0.39

Deer Hunting: Mean Days, Deer Harvest per Hunter, Days per Harvest, and Buck-Doe Percentages Trends

	Days per Harvest		
	2017-2018	2018-2019	2019-2020
Deer Overall	22.4	20.2	20.6
Archery	20.7	18.1	18.6
Modern	27.9	28.7	28.7
Primitive	21.0	18.9	19.6

Deer Hunting: Mean Days, Deer Harvest per Hunter, Days per Harvest, and Buck-Doe Percentages Trends

	Percentage		
	2017-2018	2018-2019	2019-2020
Buck	44.5	41.0	43.1
Doe	55.5	59.0	56.9

- In looking at other species, notably more hunters were hunting bobcat, coyote, dove, goose, opossum, rabbit, squirrel, and turkey. Among quail hunters, there was more hunting of wild quail and less hunting of pen-raised quail.
- Harvest was markedly up for fox, opossum, rabbit, squirrel, and turkey. Meanwhile, harvest was substantially down for duck, and harvest was very much lower for quail—both wild and pen-raised.

Turkey Hunting: Hunters, Days, and Harvest Trends

Turkey / Equipment / Season / Turkey Type	Number of Hunters			Hunter-Days			Number Harvested		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
Turkey-all	48,626	49,878	61,224	510,907	521,678	711,202	28,093	25,750	34,882
Archery				17,858	14,700	22,759			
Modern				477,067	494,233	684,115			
Primitive				15,982	12,744	4,328			
Fall	1,563	1,833	1,616	11,645	9,497	6,621	619	98	217
Spring	47,488	48,194	59,946	499,261	512,181	690,156	27,474	25,652	34,666
Jakes							2,236	1,208	1,760
Gobblers							25,858	24,542	33,122

Turkey Hunting: Mean Days, Turkey Harvest per Hunter, and Days per Harvest Trends

	Mean Days per Hunter		
	2017-2018	2018-2019	2019-2020
Turkey Overall	10.5	10.5	11.6
Fall	7.4	5.2	4.1
Spring	10.5	10.6	11.5

Turkey Hunting: Mean Days, Turkey Harvest per Hunter, and Days per Harvest Trends

	Turkey Harvest per Hunter		
	2017-2018	2018-2019	2019-2020
Turkey Overall	0.58	0.52	0.57
Fall	0.40	*	0.13
Spring	0.58	0.53	0.58

* Sample size too small for calculations.

Turkey Hunting: Mean Days, Turkey Harvest per Hunter, and Days per Harvest Trends

	Days per Harvest		
	2017-2018	2018-2019	2019-2020
Turkey Overall	18.2	20.3	20.4
Fall	18.8	*	30.6
Spring	18.2	20.0	19.9

* Sample size too small for calculations.

Quail Hunting: Hunters, Days, and Harvest

Quail / Quail Type	Number of Hunters			Hunter-Days			Number Harvested		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
Quail-all	8,821	8,953	7,796	***	52,336	39,541	347,308	321,589	154,063
Wild	3,004	2,144	6,218	39,696	12,710	11,491	67,889	37,851	21,662
Pen-raised	8,094	8,087	2,903	53,740	39,603	27,019	279,418	283,738	132,379

*** Not determined for the 2018-2018 season.

Quail Hunting: Avg. Days and Days per Harvest

	Avg. Days per Hunter			Days per Harvest		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
	10.6	5.8	5.1	0.3	0.2	0.3

Dove Hunting: Hunters, Days, and Harvest

Dove / Split	Number of Hunters			Hunter-Days			Number Harvested		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
Dove-all	38,837	35,955	55,800	213,107	194,068	233,234	1,567,042	1,257,006	1,345,741
First split				153,102	143,766	162,116	1,118,151	884,211	967,728
Remaining splits				59,747	49,601	57,688	397,517	317,444	323,922
Unknown splits							51,375	55,351	54,116

Dove Hunting: Avg. Days and Days per Harvest

	Avg. Days per Hunter			Days per Harvest		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
	5.5	5.4	4.2	0.1	0.2	0.2

Small Game Hunting: Hunters, Days, and Harvest Trends

Species	Number of Hunters			Hunter-Days			Number Harvested		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
Bobcat	2,760	2,594	3,339	11,365	14,493	4,037	3,071	3,109	3,028
Coot	649	895	1,009	2,029	7,053	543	5,070	24,660	10,249
Coyote	15,667	14,117	19,721	114,299	60,219	85,173	61,108	65,668	56,523
Duck	27,114	22,421	23,603	307,016	227,003	237,273	674,362	540,023	431,067
Fox	893	296	1,009	893	2,296	5,124	943	148	1,553
Goose	5,277	4,927	6,444	32,796	25,653	34,939	47,012	40,148	41,849
Opossum	487	718	1,087	649	1,163	17,547	1,418	2,194	11,025
Rabbit	5,439	4,527	8,774	34,988	41,386	55,980	41,897	45,403	73,139
Raccoon	5,601	4,199	5,668	98,469	74,479	144,336	80,732	37,783	65,685
Snipe	81	148	388	244	1,628	311	884	2,222	466
Squirrel	17,210	14,549	21,429	122,417	90,910	108,466	240,929	179,245	276,172
Wild hog	28,737	27,076	35,094	241,343	174,767	190,067	344,407	258,924	255,364
Woodcock	162	74	311	2,029	**0	543	534	222	621

**No hunters in the survey *specifically* hunted woodcock (i.e., 0 days hunting woodcock) but there was reported harvest in that season.

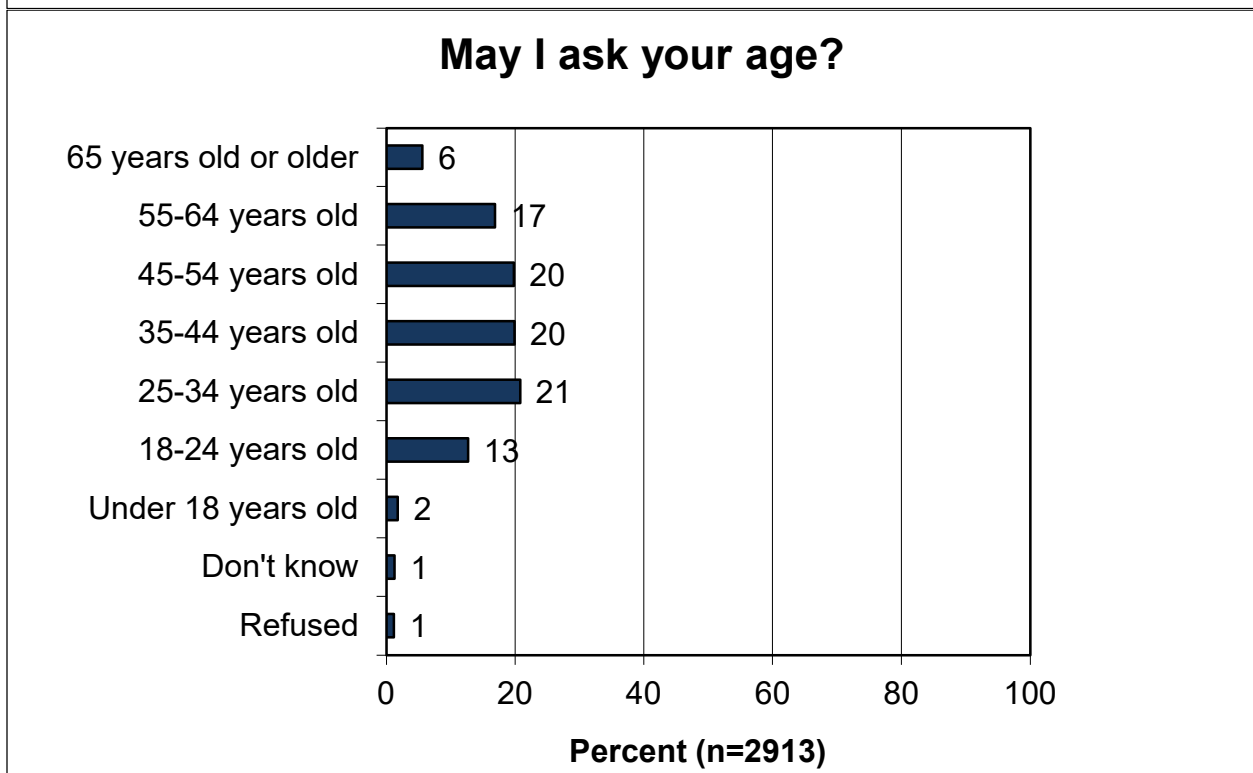
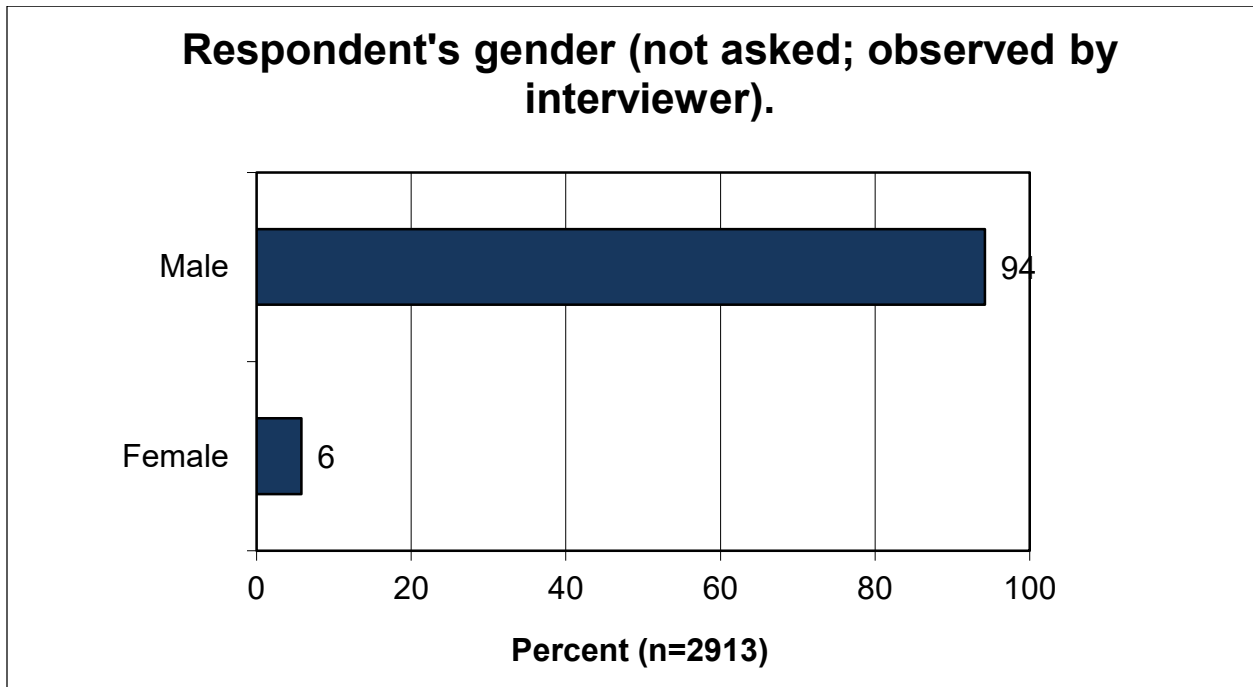
Small Game Hunting: Mean Days and Days per Harvest Trends

	Mean Days per Hunter			Days per Harvest		
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020
Bobcat	4.1	5.6	1.2	3.7	4.7	1.3
Coot	3.1	7.9	0.5	0.4	0.3	0.1
Coyote	7.3	4.3	4.3	1.9	0.9	1.5
Duck	11.3	10.1	10.1	0.5	0.4	0.6
Fox	1.0	7.8	5.1	0.9	15.5	3.3
Goose	6.2	5.2	5.4	0.7	0.6	0.8
Opossum	1.3	1.6	16.1	0.5	0.5	1.6
Rabbit	6.4	9.1	6.4	0.8	0.9	0.8
Raccoon	17.6	17.7	25.5	1.2	2.0	2.2
Snipe	3.0	11.0	0.8	0.3	0.7	0.7
Squirrel	7.1	6.2	5.1	0.5	0.5	0.4
Wild hog	8.4	6.5	5.4	0.7	0.7	0.7
Woodcock	12.5	0.0	1.8	3.8	**	0.9

**No hunters in the survey *specifically* hunted woodcock (i.e., 0 days hunting woodcock) but there was reported harvest.

DEMOGRAPHIC DATA

➤ Age and gender of licensed hunters in the 2019-2020 seasons is shown below.



ABOUT RESPONSIVE MANAGEMENT

Responsive Management is an internationally recognized survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies, businesses, and organizations better understand and work with their constituents, customers, and the public. Focusing only on natural resource and outdoor recreation issues, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of human dimensions research measuring how people relate to the natural world for more than 30 years. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 human dimensions projects *only* on natural resource and outdoor recreation issues.

Responsive Management has conducted research for every state fish and wildlife agency and every federal natural resource agency, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, Bureau of Land Management, U.S. Coast Guard, and the National Marine Fisheries Service. Additionally, we have also provided research for all the major conservation NGOs including the Archery Trade Association, the American Sportfishing Association, the Association of Fish and Wildlife Agencies, Dallas Safari Club, Ducks Unlimited, Environmental Defense Fund, the Izaak Walton League of America, the National Rifle Association, the National Shooting Sports Foundation, the National Wildlife Federation, the Recreational Boating and Fishing Foundation, the Rocky Mountain Elk Foundation, Safari Club International, the Sierra Club, Trout Unlimited, and the Wildlife Management Institute.

Other nonprofit and NGO clients include the American Museum of Natural History, the BoatUS Foundation, the National Association of Conservation Law Enforcement Chiefs, the National Association of State Boating Law Administrators, and the Ocean Conservancy. As well, Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others. Responsive Management also provides data collection for the nation's top universities, including Auburn University, Clemson University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University of California-Davis, University of Florida, University of Montana, University of New Hampshire, University of Southern California, Virginia Tech, West Virginia University, Yale University, and many more.

Our research has been upheld in U.S. Courts, used in peer-reviewed journals, and presented at major wildlife and natural resource conferences around the world. Responsive Management's research has also been featured in many of the nation's top media, including *Newsweek*, *The Wall Street Journal*, *The New York Times*, CNN, National Public Radio, and on the front pages of *The Washington Post* and *USA Today*.

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