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# NORTH CAROLINA MIGRATORY BIRD HUNTERS' AND THE GENERAL PUBLIC'S OPINIONS ON AND ATTITUDES TOWARD THE HUNTING OF MIGRATORY BIRDS ON SUNDAY IN NORTH CAROLINA

Conducted for the North Carolina Wildlife Resources Commission by Responsive Management

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#### 2018

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## **EXECUTIVE SUMMARY**

In 2017, the North Carolina General Assembly enacted legislation to enhance opportunities to hunt on Sundays in the state. The *Outdoor Heritage Enhanced Act* was signed by North Carolina Governor Roy Cooper on July 25, 2017. This law expands the *Outdoor Heritage Act of 2015*, which removed the absolute prohibition on hunting with firearms on Sunday in North Carolina. The 2017 legislation provides immediate changes for hunters on private lands and gives authority to the North Carolina Wildlife Resources Commission (Commission) and other public landowners and land managers to implement new options for Sunday hunting on public lands, although hunters are still prohibited from hunting with a firearm between 9:30 a.m. and 12:30 p.m., hunting deer with the use of dogs, and hunting within 500 yards of a place of worship on Sunday.

Under the new law, hunting of migratory birds on Sunday remains prohibited. However, the legislation gives the Commission the authority to lift the prohibition after March 1, 2018. The Commission was also tasked with completing a research study to examine the biological, economic, and social impacts associated with hunting migratory birds on Sunday. This executive summary provides an overview of the findings of the Commission's research study. Any potential changes in migratory bird hunting in North Carolina, including the longstanding waterfowl hunting season structure and federal compensatory days, must be cautiously considered before determining whether changes should be implemented. This study was conducted for the Commission to examine and better understand the management, economic, and social impacts associated with hunting migratory birds on Sunday and to assist the Commission in its decision-making efforts on whether to permit the hunting of migratory birds on Sunday. The full report details all aspects of the research and the results.

This study entailed four methodological approaches to obtain input from the public and hunters: an online public comment forum, public meetings, focus groups with North Carolina Federal Harvest Information Program (HIP)-certified hunters, and a survey of North Carolina HIP-certified hunters. These four components were utilized to obtain both qualitative and quantitative data on hunting migratory birds on Sunday, to allow maximum opportunity for the public and hunters to provide input, and to comprehensively examine both the breadth and depth of all the issues associated with hunting migratory birds on Sunday.

An overview of the methodologies used and a synopsis of the results of each method immediately follow. For more detailed information about the methodologies and a comprehensive discussion of results, please see the main body of this report.

# METHODOLOGY PUBLIC FORUM

An online public forum was created as a venue for any member of the general population to be able to provide input and engage in open discussion with others also interested in Sunday hunting of migratory birds in North Carolina. The forum was maintained on a dedicated website (www.ncmigratorybirds.org) that included background information on compensatory days and legislation associated with Sunday hunting of migratory birds, as well as some broad discussion questions posed by the researchers.

Commenters could visit the forum as often as they liked and leave comments addressing the questions or any other aspects of migratory bird hunting on Sunday in North Carolina. Commenters also had the opportunity to engage with one another in a typical online discussion format. Responsive Management maintained a moderating presence in the forum but otherwise did not engage with participants in any way.

The forum remained active from December 12, 2017, to January 17, 2018, during which time almost 2,000 comments were posted. All forum comments posted (excluding any comments that were deleted by the moderator due to inappropriate or irrelevant content) were reviewed and considered when developing the summary of results for the public forum. A separate report was issued that includes the verbatim comments.

#### **PUBLIC MEETINGS**

Responsive Management planned, coordinated, and facilitated four regional public meetings with the general public and Commission stakeholders. The purpose of the public meetings was to provide an open forum for input and feedback, an opportunity for two-way dialogue between the agency and its constituents, and a means of identifying issues of interest or concern with regard to migratory bird hunting on Sunday in North Carolina. These meetings were also intended to help reinforce transparency and encourage public investment in decision-making. Commission staff attended each meeting in uniform and participated in a question-and-answer period toward the end of each meeting.

The public meetings were advertised ahead of time, held in a public or publicly accessible site, and allowed anybody who wished to attend to do so. The four public meetings were held in (from west to east) Hickory, Graham, Jacksonville, and Columbia. The public meetings were held between December 12 and 15, 2017.

This study divided the state into three regions meant to represent various areas and topographies of the state: west/mountain, central, and east/coastal. Locations for the public meetings were concentrated in the central and east/coastal areas where there are more migratory bird hunters and more waterfowl hunting opportunities; however, one public meeting was conducted in the west so that hunters and residents from that area could provide input.

#### **FOCUS GROUPS**

Responsive Management planned, coordinated, and facilitated five focus groups. The focus groups entailed in-depth, structured discussions with small groups of HIP-certified North Carolina hunters about their opinions on and attitudes toward the hunting of migratory birds on Sunday in North Carolina.

The use of focus groups is an accepted research technique for the qualitative exploration of attitudes, opinions, perceptions, motivations, constraints, and behaviors. Focus groups provide researchers with insights, new hypotheses, and understanding through the process of interaction. Focus groups allow for extensive open-ended responses to questions; probing; follow-up questions; group discussion; and observation of emotional responses to topics—aspects that cannot be measured in a quantitative survey. Qualitative research provides researchers with a more detailed understanding of the topics or issues of concern in the study. Each focus group was conducted using a discussion guide that allowed for consistency in the data collection. The discussion guide included top-of-mind questions as well as more specific questions addressing

opinions on and attitudes toward hunting migratory birds on Sunday, awareness of compensatory days, and other pertinent topics.

Focus group participants were recruited using a random selection of HIP-certified hunters (from a list provided by the Commission) who were then screened using a brief questionnaire, and, if qualified, confirmed for attendance. The screener ensured that the focus group participants met the criteria established for the focus groups and allowed recruitment of a more representative group of participants. Focus group participants received a monetary incentive for participation. While public meetings and public forums tend to attract only the most vocal and the most avid constituents associated with the research topic, focus groups, although still qualitative in nature, allow the researchers to obtain a more diverse group of participants who represent various levels of interest, knowledge, and participation associated with the issue being explored.

#### **TELEPHONE SURVEY**

While the other three methods offered maximum opportunity for the public and all hunters to provide input, obtained in-depth qualitative data, and provided the researchers with a comprehensive look at the full range of issues and reactions associated with Sunday hunting of migratory birds, a scientific, probability-based survey was conducted to acquire quantitative data for evaluating the true distribution of hunters' awareness, opinions, and attitudes. Surveys are conducted to systematically examine the population being studied using a representative sample so that the results can be replicated and generalized to the population of interest. For this study, a scientific survey was used to examine HIP-certified hunters' opinions on the Sunday hunting issue so that we not only know the range of factors and opinions, but so that we may also accurately quantify hunters' opinions and attitudes.

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones (both landlines and cell phones were called). Telephone surveys allow for a quick turn-around time and are cost-effective.

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Commission, based on the research team's familiarity with migratory bird hunting, the Sunday hunting issue, and the input obtained from the online public forum and during the public meetings and focus groups. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

For the survey, three separate populations were sampled: 1) the statewide population of North Carolina resident HIP-certified hunters, 2) non-resident HIP-certified hunters who hunt migratory birds/waterfowl in North Carolina, and 3) HIP-certified hunters who currently reside in the six-county coastal area of North Carolina, which includes Beaufort, Currituck, Dare, Hyde, Pamlico, and Tyrrell Counties. The six county area was included as a specific subset because of the significant proportion of migratory waterfowl hunting that occurs in those counties.

The samples consisted of North Carolina HIP-certified hunters and was obtained from the Commission's HIP database. The samples each used a probability-based selection process to ensure that each eligible HIP-certified hunter within each designated population listed above had an approximately equal chance of being selected for the survey.

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. 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 the sampling error range for each population. The sampling errors are reported within the body of this report. Please see the section titled, "Methodology" for sampling errors and more information about survey administration.

# RESULTS PUBLIC FORUM

A content analysis of the more than 1,500 unique or primary comments on the online public forum indicates that, overall, there were slightly more commenters who supported Sunday hunting of migratory birds than who opposed it. Among those who self-identified as hunters in the public forum, more supported than opposed Sunday hunting. Among those who self-identified as non-consumptive recreationists, many more opposed than supported it. Among those who self-identified in the forum as landowners, most opposed Sunday hunting. Responsive Management also received 60 notable e-mail responses pertaining to the issues of the online public forum. Among those who chose to e-mail, slightly more opposed than supported Sunday hunting.

Primarily, most supporters of migratory bird hunting on Sunday in North Carolina viewed it as an added opportunity to hunt. The supporters viewed the additional opportunity as offering several benefits: a weekend hunting day on which work does not prevent them from hunting, more family time hunting with children and grandchildren, increased opportunities to pass on the hunting heritage or tradition to children and grandchildren, and increased weekend hunting trips both personally and overall in coastal communities to boost in-state spending and the state economy.

Supporters asserted that the ban on Sunday hunting of migratory birds has remained in place primarily due to its origin as a "blue law" (also known as a "Sunday law") that reinforced religious convictions of the early Twentieth Century. Among some supporters of allowing Sunday hunting, the "day of rest" argument was viewed as illegitimate on the basis of its religious foundation infringing upon the separation of church and state. Furthermore, some perceived that the need for a day of rest is simply not substantiated on any scientific or biological basis as it pertains to migratory bird species. Similarly, supporters pointed out that anyone who does not wish to hunt on Sunday for religious reasons could still choose to abstain.

The issue of compensatory days does have potential, however, for affecting support. If forfeiting compensatory days would result in a restructured season framework that shortened the end of the hunting season when waterfowl hunting is considered best, support decreases. Without accurate information regarding how compensatory days would impact the number of hunting days, some supporters noted in the forum that they would no longer support Sunday hunting if total hunting days decreased as a result.

Opponents to Sunday hunting argued the need for a "day of rest," but the reasons for needing a day of rest varied. Most commonly, those in favor of a day of rest cited increased pressure on migratory birds that would have detrimental effects on the species and, consequently, on North Carolina's economy, hunting tradition, and seasonal flyway. They anticipated a decrease in healthy migratory bird or waterfowl populations due to over-hunting and increased pressure without a day of rest, which, they suggested, will ultimately result in decreased hunting opportunities overall. A number of opponents to Sunday hunting also cited the biblical mandate that there be a day of rest each week. Another reason for the day of rest was for personal and aesthetic reasons, such as having a peaceful day without hearing firearms or a day to walk through the woods without encountering hunters, their dogs, and their guns.

As mentioned above, the potential forfeiture of compensatory days concerned some hunters, prompting them to oppose the season structure change. Exchanging compensatory days for partial days of Sunday hunting was viewed as a net loss of hunting days within the 60-day hunting season. The overall season schedule and any potential loss of hunting days or hunting opportunity was important to hunters, and those who perceived such losses with the change opposed Sunday hunting.

In general, both supporters and opponents on the public forum were interested in maximizing migratory bird hunting opportunities, promoting responsible game management, and passing on the hunting heritage to future generations. Their perspectives on how Sunday hunting would either negatively or positively impact these key areas determined whether they supported or opposed Sunday hunting of migratory birds in North Carolina.

#### **PUBLIC MEETINGS AND FOCUS GROUPS**

While hunters who attended the focus groups and public meetings were generally aware of the current prohibition of hunting migratory birds on Sunday in North Carolina and consider it an important issue, there was a general lack of knowledge or understanding about certain aspects of it. In particular, there was confusion regarding how losing compensatory days for waterfowl hunting would affect the distribution of the hunting season should Sunday hunting for migratory birds be allowed. That is not to imply that a complete lack of knowledge of compensatory days was common; in fact, many participants had some level of awareness of compensatory days and how they work. However, the impact a potential change to allow Sunday hunting would have on compensatory days was a source of both confusion and concern.

A range of hunter attitudes was well represented across the focus groups with opinions ranging from strong support to strong opposition to allowing the hunting of migratory birds on Sunday. There was a fairly discernible difference of opinion based on the region of the state in which the hunters resided, particularly among the public meeting participants. Many participants who resided further west expressed more support for Sunday hunting of migratory birds while those farther east, closer to the coastal plain area, vocalized more concern and opposition.

Similar to the primary factors associated with support among the online public forum comments, most supporters of migratory bird hunting on Sunday in North Carolina among the focus group and public meeting participants focused on the increased opportunities to hunt, particularly for those hunters who work Monday through Friday and often cannot hunt weekdays. Having an extra day to hunt on the weekend was particularly important for many hunters residing farther west, who said they will not often travel to the coast for just one day of duck hunting on a

weekend but that having Sunday for a second day of waterfowl hunting would potentially make them more likely to do so.

The supporters also cited the benefit of increased hunting opportunities with children and grandchildren for both more family time and for passing on the hunting heritage or tradition. When discussed further, some hunters expressed concern that technology has taken a prominent and pervasive place in the lives of the younger generation, making the increased opportunities to get them out hunting and to pass on the hunting heritage to the next generation a welcome prospect.

Another cited benefit of allowing Sunday hunting of migratory birds was the potential positive impact that increased weekend hunting opportunities and trips could have on the state economy. Supporters indicated that some hunters travel outside the state for weekend trips to be able to hunt waterfowl both Saturday and Sunday but that they would prefer to see the money from hunting trips go to North Carolina. The assumption was that those who travel out of state on weekends to hunt waterfowl would actually take more trips in-state if Sunday hunting were allowed.

Finally, supporters attempted to counter the "day of rest" argument opposing Sunday hunting. The separation of church and state was cited as a reason that Sunday hunting should be a personal choice and not a government mandate. Another argument made was that a day of rest for the bird populations is not necessary or, if provided, the day of rest should be a week day.

Opponents to Sunday hunting in the focus groups and public meetings stressed the need for a "day of rest," focusing on their concern that bird populations, particularly waterfowl, would experience increased pressure that would have detrimental effects on the species. Similar to the online public forum commenters, they anticipated a decrease in healthy migratory bird or waterfowl populations due to over-hunting and increased pressure without a day of rest, which, they suggest, would ultimately result in decreased hunting opportunities overall. They were also concerned that over-hunting could disturb the Atlantic Flyway and potentially turn the state of North Carolina into a migratory bird "flyover" state.

There was a particularly high amount of opposition voiced in the public meeting in the eastern/coastal area of North Carolina (i.e., Columbia), with participants expressing their ardent disapproval of hunting migratory birds on Sunday due to the conviction that it would negatively impact the presence and populations of waterfowl in the coastal plain area and would result in an overall negative economic impact for their region and their hunting-related businesses. Those who work as hunting guides, outfitters, or in some other capacity related to waterfowl hunting were adamantly opposed to Sunday hunting for fear that the increased hunting pressure would result in the situation where bird populations decrease in the area and find other places to winter, ultimately hurting their businesses.

Related to the "day of rest" argument for maintaining the prohibition of Sunday hunting, some opponents to Sunday hunting expressed the desire to have a day on which non-consumptive recreationists could engage in their activities without the presence of hunting. For example, many such recreationists would prefer to go hiking or horseback riding without encountering hunters, hearing firearms, or worrying about their safety.

Other opponents of Sunday hunting of migratory birds across the focus groups and public meetings also cited several other reasons, including concern about the hunting season structure, the loss of compensatory days, and the potential exclusion of certain lands. Hunters overall expressed concern that the hunting season would be redistributed in such a way as to disadvantage waterfowl hunters whose best hunting is perceived to be near the end of the season. Many appeared to be unfamiliar with or uniformed regarding the Commission's process for determining the hunting season dates and feared that losing the compensatory days would result in a less desirable hunting season structure. Concern also emerged regarding the potential permanent loss of compensatory days should North Carolina allow Sunday hunting and then revert to the prohibition but fail to reacquire the compensatory days. Another issue of concern among opponents was that Sunday hunting would be allowed only on private land and not public land, particularly public game lands, resulting in a loss of hunting opportunities for them, rather than an increase, should Sunday hunting be allowed.

The primary arguments on both sides of support and opposition in the focus groups and public meetings focused on hunting opportunities as a priority. While supporters viewed Sunday hunting as a source of increased hunting opportunities, opponents tended to have more anxiety or apprehension about whether over-hunting or redistribution of hunting days and hours would ultimately result in decreased or lower quality hunting opportunities.

#### **TELEPHONE SURVEY**

The survey covered a broad range of topics related to hunting. The focus of the Executive Summary is primarily the question of support for or opposition to Sunday hunting of migratory game birds; however, the full report contains findings on many other topics, such as hunting on public or private land, taking day trips or overnight trips, and money spent on migratory game bird hunting, that are related to the primary topic of Sunday hunting but that are not directly covered in the Executive Summary.

The survey asked about support for or opposition to legalizing Sunday hunting for migratory waterfowl and for webless migratory game birds, if hunters had the same number of hunting days. In the beginning of the survey, the questions were asked (the waterfowl question of waterfowl hunters; the webless question of webless migratory game bird hunters), and then the questions were asked again at the end of the survey (of all respondents) after the respondent had heard and considered many other questions about Sunday hunting. This second set of questions are referred to as informed opinion questions in that the respondent has been informed about the issues during the survey. All of the questions are examined among resident hunters before moving to the other samples.

About two-thirds of resident waterfowl hunters (66%) (specifically, those who had hunted migratory waterfowl within the past 5 seasons) support legalizing hunting of migratory waterfowl on Sundays in North Carolina, and 60% of resident webless migratory game bird hunters support legalizing hunting of webless migratory birds on Sundays in North Carolina. Opposition stands at 29% and 31%, respectively.

Near the end of the survey, informed opinion was assessed; the results are shown below. The respondents had received questions up to that time about the topic, and they had been informed of the following:

House Bill 559 gives the Wildlife Resources Commission the authority to allow hunting for migratory game birds on Sundays. If Sunday hunting for migratory game birds is allowed, the following restrictions would apply:

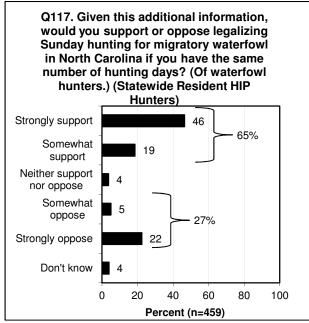
Hunting with a firearm will be prohibited between 9:30 a.m. and 12:30 p.m.
Hunting deer with the use of dogs will be prohibited.
Hunting within 500 yards of a place of worship will be prohibited.
Sunday hunting for migratory game birds will be allowed only on public waters and private lands.

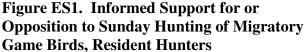
Hunting for migratory game birds on state game lands will be determined later on a case by case basis.

The actual dates of the migratory bird hunting season will still be decided by the Commission on an annual basis, with input from the public.

Compensatory days are currently provided to account for a full 60 days of waterfowl hunting. However, webless migratory bird hunters do not receive compensatory days for the Sundays that cannot be hunted. If Sunday hunting of migratory birds were legalized, compensatory days for waterfowl would no longer be provided.

After the above information was given to respondents, they were again asked if they supported or opposed legalizing Sunday hunting of migratory waterfowl (in one question) or migratory webless game birds (in the other question): 65% of resident waterfowl hunters are in support (Figure ES1), and 62% of resident webless migratory game bird hunters are in support (Figure ES2). Opposition stands at 27% and 32%, respectively.





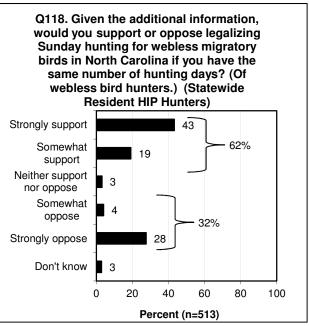


Figure ES2. Informed Support for or Opposition to Sunday Hunting of Migratory Game Birds, Resident Hunters

Another question regarding support for or opposition to legalizing Sunday hunting was directed to webless migratory game bird hunters, gauging their pre-informed opinion, coming at the beginning of the survey. It asked if webless bird hunters would be in support or opposition *if they had more hunting days*. Among resident hunters, 62% are in support, while 27% oppose (Figure ES3). Note that this is not greatly different with the caveat of having the *same* number of days (the question previously asked in which 60% supported and 31% opposed).

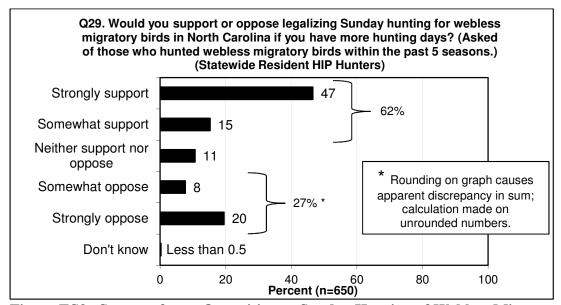


Figure ES3. Support for or Opposition to Sunday Hunting of Webless Migratory Game Birds if More Days Were Available to Hunt, Resident Hunters

A summary of the results among resident hunters is shown in Table ES1.

Table ES1. Summary of Support for/Opposition to Sunday Hunting of Migratory Game Birds, Resident Hunters

	Regarding Waterfowl		Regarding Webless	
	% Support	% Oppose	% Support	% Oppose
Pre-informed, same days	66	29	60	31
Informed, same days	65	27	62	32
Pre-informed with more days	NA	NA	62	27

The preceding survey results were of *resident* migratory game bird hunters. The results of all of these questions are now discussed among *nonresident* migratory game bird hunters. Because the way that the questions were asked and the order in which they were asked have been detailed above, the look at nonresident migratory game bird hunters' views starts with the summary table, followed by the pertinent graphs that make up the summary.

Nonresident migratory game bird hunters generally are in support on the various questions (Table ES2). Figures ES4,ES5, and ES6 show the graphs among nonresident hunters.

Table ES2. Summary of Support for/Opposition to Sunday Hunting of Migratory Game Birds, Nonresident Hunters

	Regarding Waterfowl		Regarding Webless	
	% Support	% Oppose	% Support	% Oppose
Pre-informed, same days	82	13	79	12
Informed, same days	76	18	79	11
Pre-informed with more days	NA	NA	75	14

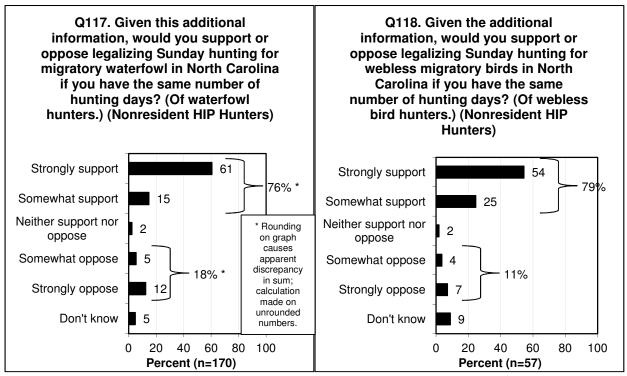


Figure ES4. Informed Support for or Opposition to Sunday Hunting of Migratory Game Birds, Nonresident Hunters

Figure ES5. Informed Support for or Opposition to Sunday Hunting of Migratory Game Birds, Nonresident Hunters

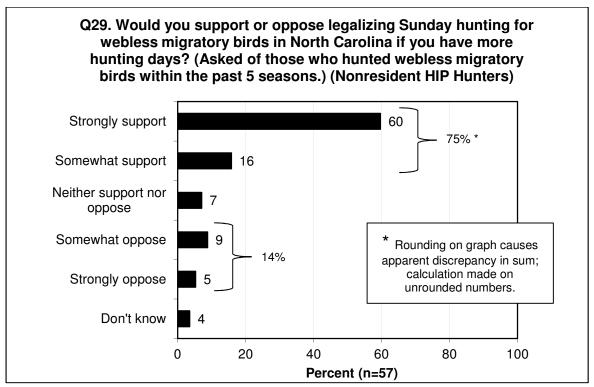


Figure ES6. Support for or Opposition to Sunday Hunting of Webless Migratory Game Birds if More Days Were Available to Hunt, Nonresident Hunters

The report also looks at migratory game bird hunters from the *Northeast Region*. Compared to the other samples, they are more evenly split on the issue, with substantial percentages in support and in opposition. Table ES3 shows the summary among the Northeast Region hunters, and Figures ES7 through ES9 show the graphs of these results.

Table ES3. Summary of Support for/Opposition to Sunday Hunting of Migratory Game Birds, Northeast Region Hunters

	Regarding Waterfowl		Regarding Webless	
	% Support	% Oppose	% Support	% Oppose
Pre-informed, same days	46	49	53	42
Informed, same days	41	52	49	46
Pre-informed with more days	NA	NA	56	39

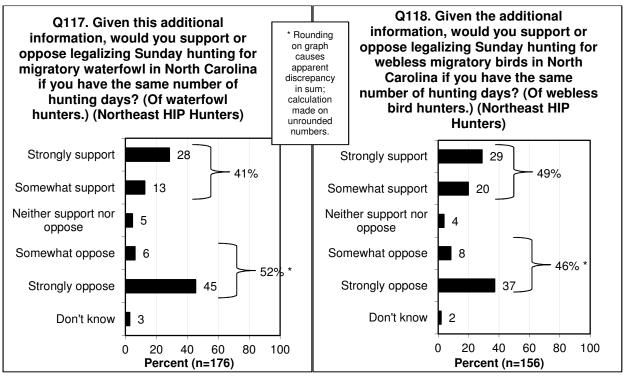


Figure ES7. Informed Support for or Opposition to Sunday Hunting of Migratory Game Birds, NE Region Hunters

Figure ES8. Informed Support for or Opposition to Sunday Hunting of Migratory Game Birds, NE Region Hunters

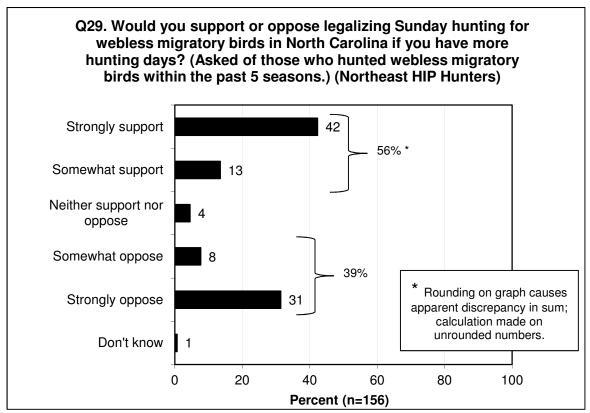


Figure ES9. Support for or Opposition to Sunday Hunting of Webless Migratory Game Birds if More Days Were Available to Hunt, NE Region Hunters

The full analysis shows how resident migratory game bird hunters who support hunting of migratory waterfowl responded to the series of questions about importance of various aspects of hunting. For those resident hunters who supported, having as many weekend days to hunt as possible and having the season end as late as possible were their top concerns.

Contrast this to resident waterfowl hunters who opposed Sunday hunting of waterfowl. Their top two items—by far the most important to them—were having the season end as late as possible and having time for the birds to rest without hunting pressure.

Regarding resident webless bird hunters, their top concerns were having as many weekend days to hunt as possible, having access to hunting areas, and having a full uninterrupted day to hunt—all three having at least 41% rating it extremely important and at least 69% saying extremely or very important.

Finally, resident webless migratory bird hunters who opposed the Sunday hunting of migratory webless birds were examined. Their top concern was having access to hunting areas (42% gave a rating of extremely important, and 82% rated it extremely or very important). Two more concerns were lower down in the level of concern: having time for the birds to rest without hunting pressure, and having a full uninterrupted day to hunt.

Also examined were the characteristics of those who support and those who oppose. Figures ES10 and ES11 show the characteristics of those who support Sunday hunting of migratory waterfowl. On these graphs, the overall percentage of resident migratory game bird hunters who support Sunday hunting of waterfowl (in the informed-opinion question) is shown by the patterned bar. All groups above the patterned bar have a higher rate of support, and all groups below the patterned bar have a lower rate of support. All of the black bars are from the statewide resident HIP hunter sample (the two gray bars will be discussed shortly).

For instance, 74.8% of resident hunters who live in the Raleigh Region support Sunday hunting of waterfowl, which is considerably higher than resident hunters overall (65.0% of who support). Additionally, resident hunters who are 18 to 34 years old support at a higher rate (73.2%) than do resident hunters overall. Rounding out the groups of resident hunters that are markedly higher in support than resident hunters overall are those who reside in the Winston-Salem Region (71.3%). On the other hand, some resident hunter groups have a markedly lower rate of support: female resident hunters (29.5% support), Washington Region resident hunters (51.0%), and resident hunters 55 years old or older (57.4%).

As stated above, all of the black bars are *resident* hunters with the given characteristic. Along with the resident data on this graph, gray bars are included: the overall percentage of nonresident migratory game bird hunters who support is shown (75.3%) in gray, as is the overall percentage of Northeast Region migratory game bird hunters who support (40.9%).

Because of the large number of characteristics that were examined in this analysis, two graphs are necessary of those resident hunters who support Sunday hunting of waterfowl. Likewise, two graphs are included of those who oppose Sunday hunting of waterfowl (Figures ES12 and ES13).

Webless migratory bird hunters' opinions were also examined in a like manner, with two graphs showing those who support Sunday hunting of webless migratory birds (Figures ES14 and ES15) and two graphs of those who oppose (Figures ES16 and ES17).

To interpret these graphs, simply keep in mind that the patterned bar shows the results among resident hunters overall, the groups above the patterned bar have a higher rate (of support in the graph showing support, of opposition in the graphs showing opposition), and the groups below the patterned bar have a lower rate.

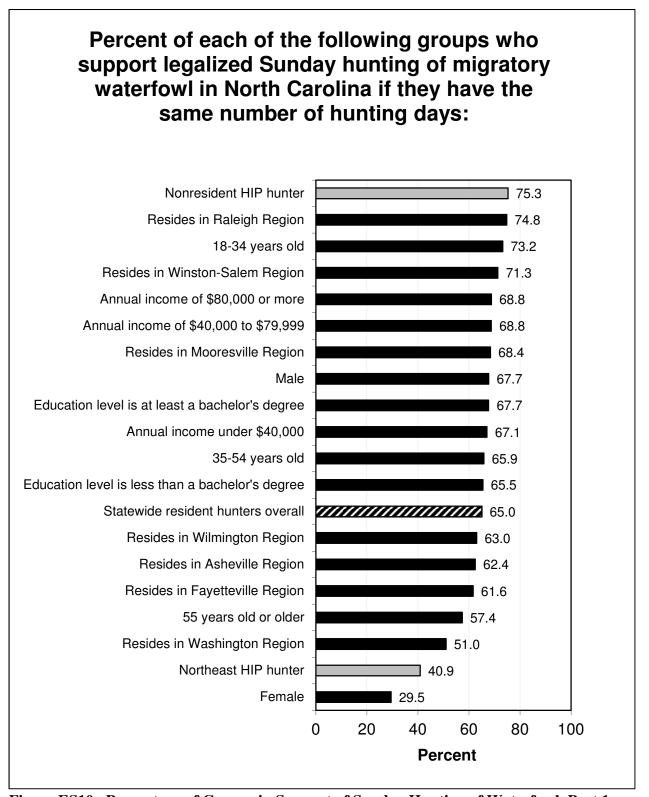


Figure ES10. Percentage of Groups in Support of Sunday Hunting of Waterfowl, Part 1

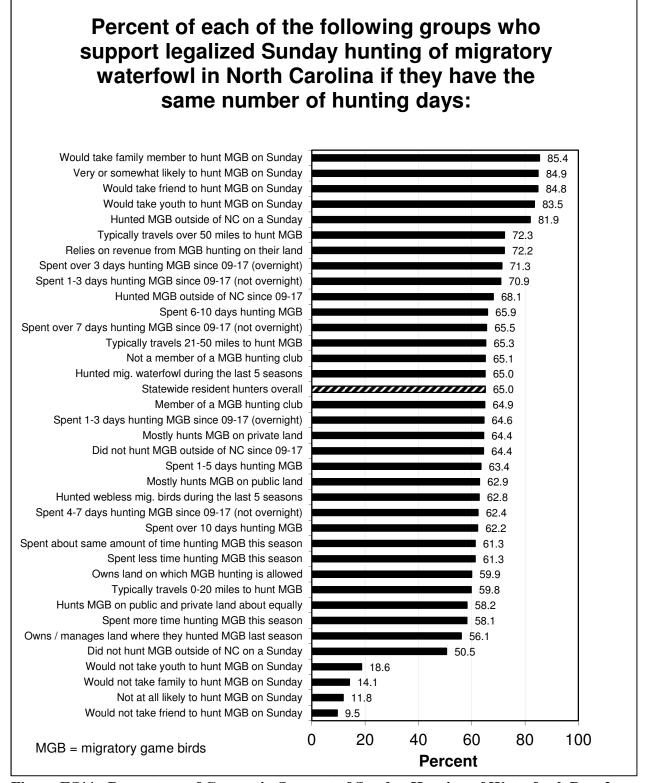


Figure ES11. Percentage of Groups in Support of Sunday Hunting of Waterfowl, Part 2

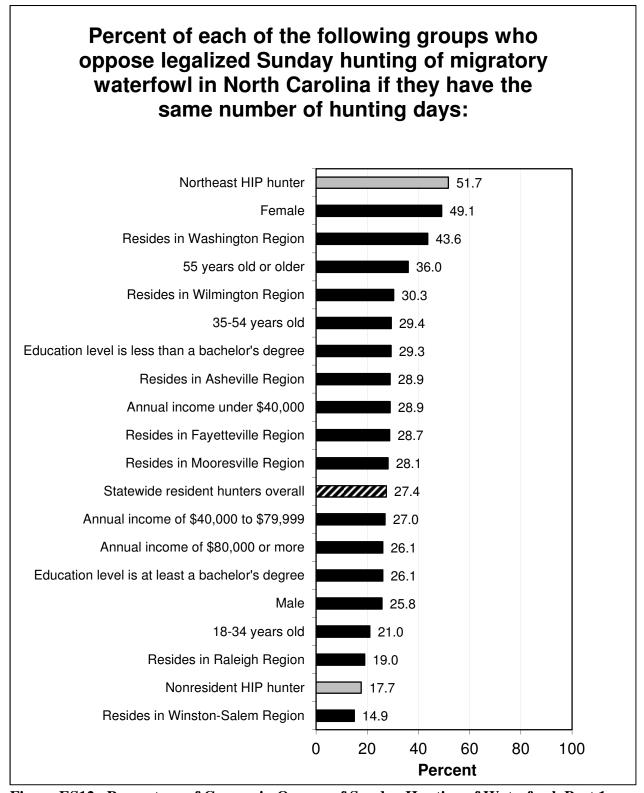


Figure ES12. Percentage of Groups in Oppose of Sunday Hunting of Waterfowl, Part 1

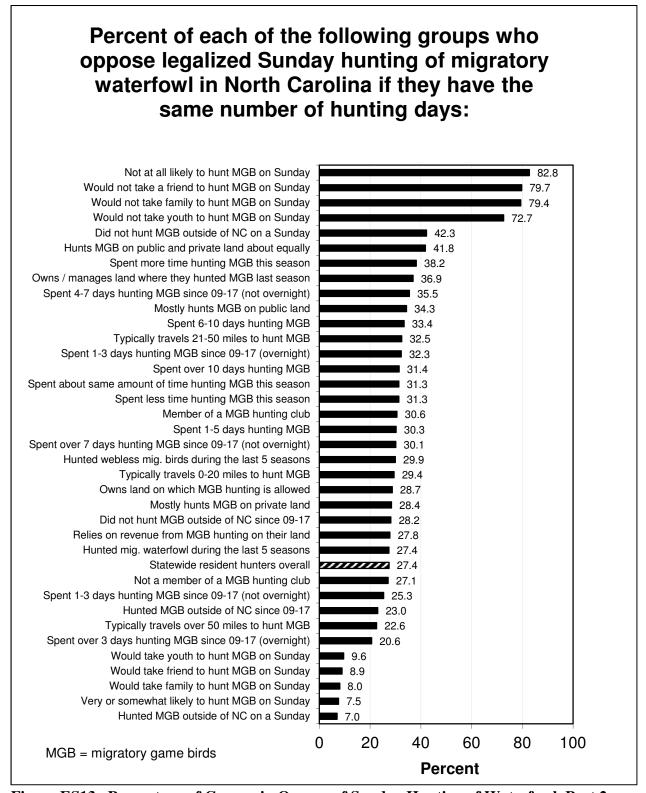


Figure ES13. Percentage of Groups in Oppose of Sunday Hunting of Waterfowl, Part 2

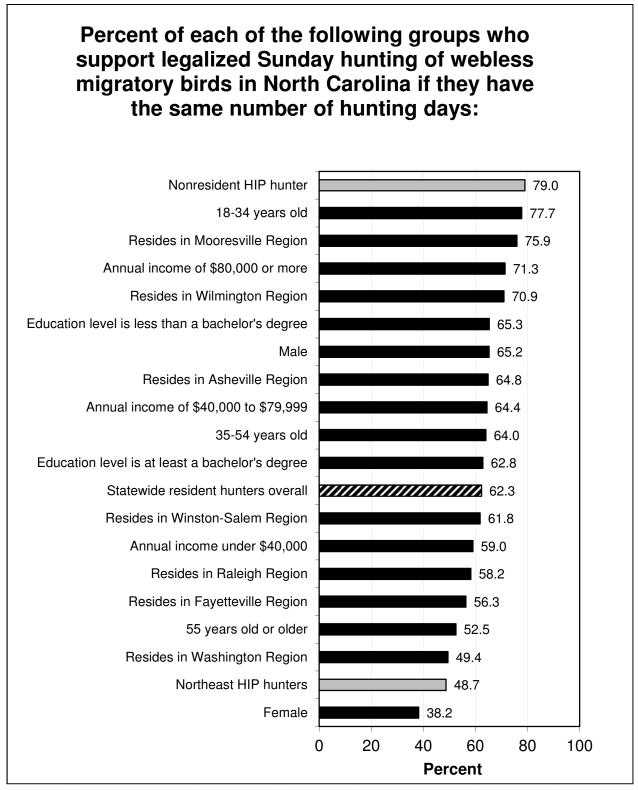


Figure ES14. Percentage of Groups in Support of Sunday Hunting of Webless Birds, Part 1

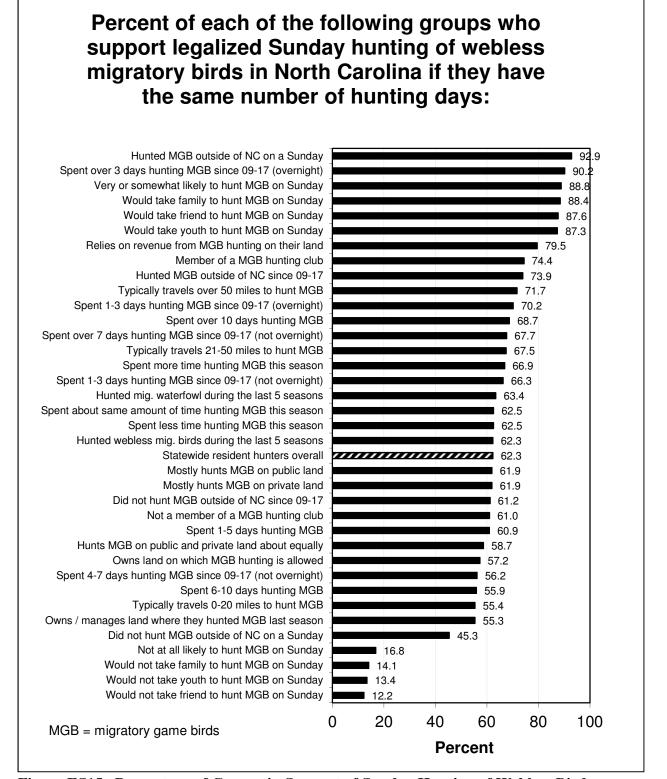


Figure ES15. Percentage of Groups in Support of Sunday Hunting of Webless Birds, Part 2

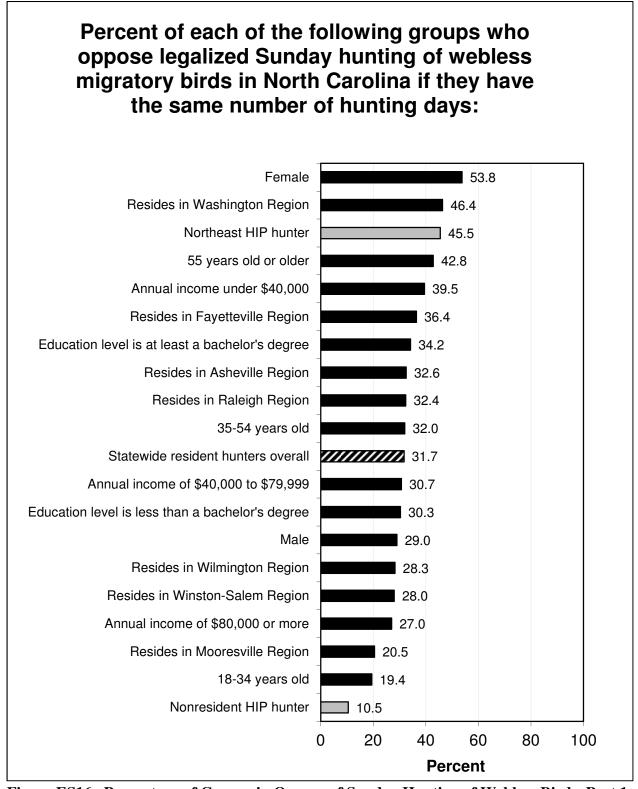


Figure ES16. Percentage of Groups in Oppose of Sunday Hunting of Webless Birds, Part 1

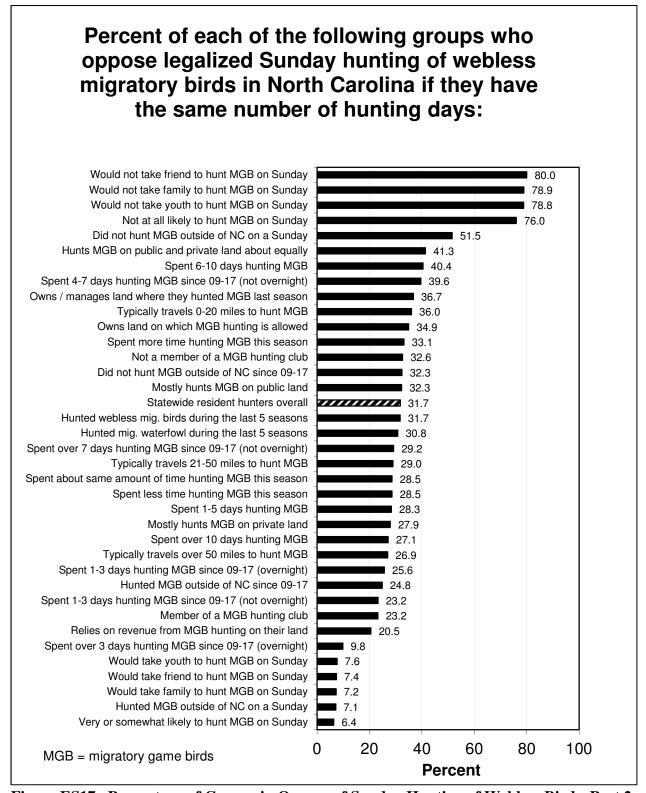


Figure ES17. Percentage of Groups in Oppose of Sunday Hunting of Webless Birds, Part 2

Finally, the survey included some questions on how much waterfowl hunters typically spend each year that they hunt migratory game birds. Waterfowl hunters typically spend in a year that they hunt migratory game birds (based on the mean amounts of all the responses) approximately \$166 per year on lodging, \$211 on vehicle and boat fuel, \$165 on food, \$391 on equipment, and \$100 on guide services.

## **TABLE OF CONTENTS**

Ι.	Introdu	ction	1
2.		Meetings	
	2.1.	Support for or Opposition to Hunting Migratory Birds on Sunday	3
	2.2.	Awareness of, Information on, and Opinions on Compensatory Days	4
	2.3.	Other Factors Impacting the Hunting of Migratory Birds on Sunday	5
3.	Public 1	Forum	6
	3.1.	Forum Content Analysis	6
	3.2.	Support for Sunday Hunting of Migratory Birds	7
	3.3.	Opposition to Sunday Hunting of Migratory Birds	9
		Summary of Forum Findings	
		Comparing Support for and Opposition to Hunting Migratory Birds on Sunday in North Carolina	
		Shared Priorities With Differing Perspectives	
4.		Groups	
		Migratory Bird Hunting Participation.	
		Awareness of and General Attitudes Toward Hunting Migratory Birds on Sunday	
	4.3.	The Perceived Importance of the Issue of Hunting Migratory Birds on Sunday in North Carolina	14
		Awareness and Understanding of Compensatory Days	
		Support for the Hunting of Migratory Birds on Sunday in North Carolina	
	4.6.	Opposition to the Hunting of Migratory Birds on Sunday in North Carolina	17
	4.7.	Impacts Related to Hunting Migratory Birds on Sunday	18
		Hunter Participation if Sunday Hunting of Migratory Birds in North Carolina Were Legalized	
		Frequency of Hunting if Sunday Hunting of Migratory Birds in North Carolina Were Legalized	19
	4.8.	Some Remarks About Compensatory Days	19
5.	Telepho	one Survey	20
	5.1.	Hunting Participation	20
		Participation in General	
		Participation in Waterfowl Hunting and Webless Migratory Bird Hunting	25
		Public-Private	27
		Day Trips and Overnight Stays	31
		Hunting Out of State	33
	5.2.	Importance of Factors Involved in Overall Hunting Experiences	37
	5.3.	Support for or Opposition to Legalizing Sunday Hunting for Migratory Birds	45
	5.4.	Opinions on Aspects of Sunday Hunting	68
	5.5.	Likelihood to Hunt on Sundays and Potential Increased Days of Hunting Activity	76
	5.6.	Spending on Migratory Bird Hunting	86
	5.7.	Travel Distances to Hunt Migratory Birds in North Carolina	101
		Ownership and/or Management of Land	
	5.9.	Loss of Hunting Activity in North Carolina Because of the Ban on Sunday Hunting	109
		). Membership in Hunting Clubs	
	5.11	. Sources of Information	113
	5.12	. Demographic Data	115
6.	Method	ology	119
	6.1.	Public Meeting Methodology	119
		Public Meeting Locations	
		Public Meeting Facilitation and Logistics	119
		Representativeness of the Public Meetings	
		Analysis of Results of the Public Meetings	120
	6.2.	Public Forum Methodology	120
	6.3.	Focus Group Methodology	122
		Focus Group Locations	
		Focus Group Participant Recruiting	
		Focus Group Discussion Guide and Analysis	

## **TABLE OF CONTENTS (continued)**

6. Methodology (continued)	
6.4. Telephone Survey Methodology	124
Questionnaire Design	124
Survey Sample	124
Telephone Interviewing Facilities	125
Interviewing Dates and Times	
Telephone Survey Data Collection and Quality Control	125
Analysis of Telephone Survey Data	126
About Responsive Management	

## 1. INTRODUCTION

This study was conducted for the North Carolina Wildlife Resources Commission (Commission) to obtain qualitative data from North Carolina residents and both qualitative and quantitative data from North Carolina resident and non-resident HIP-certified hunters regarding the hunting of migratory birds on Sunday in North Carolina (HIP refers to the Harvest Information Program). The research is intended to assist the Commission in its decision-making efforts on whether to permit the hunting of migratory birds on Sunday in North Carolina.

The findings discussed in this report encompass four components: public meetings conducted with the general public throughout North Carolina, a public comment forum open to anybody who wished to comment, focus groups conducted with HIP-certified hunters throughout North Carolina, and a telephone survey of HIP-certified hunters who had hunted migratory birds within the previous 5 seasons. A last chapter discusses the methodology used to obtain the public input for the research.

The various methods were chosen to allow the maximum opportunity for the public and hunters to provide input regarding this issue. The way that the public input is analyzed differs from method to method. While the public meetings and public forum provide the maximum opportunity for participating—because they are open to the public—they are best analyzed qualitatively rather than quantitatively. In other words, while their findings are important, they cannot be said to be representative of any group because they are not scientifically representative; anybody could participate, and people could comment multiple times in both the public meetings and on the public forum.

Likewise, focus groups obtain qualitative data. Their small sizes (generally about a dozen participants) allow for in-depth discussion. However, they are not statistically representative of any groups, and, while there were criteria for participation (such as participating in hunting of migratory birds), the focus groups are not meant to be fully representative of the groups defined by those criteria. This approach allows the identification of the full range of issues. In other words, a focus group of migratory bird hunters is not a representative group of migratory bird hunters, nor are they intended to be. Instead, focus groups are analyzed qualitatively.

The final method of obtaining input for this research is the telephone survey. The results of the survey are analyzed quantitatively because the sample is representative of a given group—for this research, HIP-certified resident hunters (in one sample for the survey), HIP-certified nonresident hunters (in the second separate sample for the survey), and HIP-certified hunters from the northeastern coastal area of the state (in the third separate sample, referred to as the Northeast Region sample). All three samples are analyzed quantitatively, but separately from one another. At no point are all three of these groups combined; their results are reported separately. A full description of all these methods for obtaining input are discussed in the last section of this report.

When examining the results in this report, several things should be kept in mind. In the survey, the questionnaire contained several types of questions, as detailed below.

- Open-ended questions are those in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Single or multiple response questions: Some questions allow only a single response, while other questions allow respondents to give more than one response or choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Scaled questions: Many closed-ended questions (but not all) are in a scale, such as excellent-good-fair-poor.
- Series questions: Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

Most graphs show results rounded to the nearest integer; however, all data are stored in decimal format, and all calculations are performed on unrounded numbers. For this reason, some results may not sum to exactly 100% because of this rounding on the graphs. Additionally, rounding may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when "strongly support" and "moderately support" are summed to determine the total percentage in support).

Additionally, the following are acronyms and terms used in this report.

Commission – the North Carolina Wildlife Resources Commission.

HIP – Harvest Information Program.

QPL – Questionnaire Programming Language. It is surveying software that guides the survey flow (a live interviewer, however, actually conducts the survey).

## 2. PUBLIC MEETINGS

This section discusses the results of the four public meetings that were held in Columbia, Graham, Hickory, and Jacksonville (for details of the methodology, see Section 6 of this report). Speakers at the public meetings on migratory bird hunting on Sunday in North Carolina addressed a broad range of topics related to Sunday hunting of migratory game birds. Commission staff attended each meeting and took notes on the concerns raised, and all input was used in the development of this report. Therefore, any comment that is not specifically addressed in this report was, nonetheless, heard and considered by the Commission staff in attendance.

When assessing the results of the public meetings, we noted that public meetings generally attract only the most avid and dedicated constituents, and the meetings convened for this study would appear to be no exception. With the exception of the Columbia public meeting (which had 109 attendees), each meeting was attended by no more than 23 people (Graham, 15; Jacksonville, 12; Hickory, 23), many of whom identified themselves as migratory bird (especially waterfowl) hunters.

Each of the major topics discussed in the meetings are detailed in this section, starting with the broad topic of reasons to support and oppose Sunday hunting, but also including extensive conversation on compensatory days and other factors associated with hunting migratory birds on Sunday in North Carolina.

# 2.1. SUPPORT FOR OR OPPOSITION TO HUNTING MIGRATORY BIRDS ON SUNDAY

Support for and opposition to hunting migratory birds on Sunday was somewhat regionally based in the public meetings (as it was in the focus groups, as well). In particular, the Hickory public meeting (farthest to the west in the state) was overall in support of hunting migratory birds on Sunday, whereas the strongest opposition to the issue came from participants in the Columbia public meeting (farthest to the east in the state).

All participants from both public meetings in Hickory and Columbia were migratory bird hunters who had shown up to voice their support for or opposition to hunting migratory birds on Sunday. Reasons for support (in Hickory and other public meetings) included increased opportunity provided by an extra day on the weekend for hunters who work Monday through Friday, the opportunity to bring younger hunters along and to pass on the hunting heritage, and a perceived positive economic impact for the state of North Carolina. Reasons for opposition (in Columbia and at other public meetings) included the need for birds (and people) to have a "day of rest" in order to avoid unnecessary hunting pressure, potentially negative disturbances with other recreationists and members of the public on Sundays, the possibility that North Carolina would become a "flyover" state for migratory birds (ducks, in particular) that would go farther south to rest, and a perceived negative economic impact that would result from not having access to migratory birds who fly over the state to go farther south.

In the Columbia public meeting—the largest showing of all the public meetings, with 109 in attendance—many voiced their ardent disapproval of hunting migratory birds on Sunday, with many speakers emphasizing that migratory bird hunting on Sunday has the potential to negatively impact their livelihoods as waterfowl hunting outfitters in the region. Many participants in this meeting were fully convinced that allowing hunting migratory birds on Sunday would negatively impact the presence and populations of waterfowl in the coastal plain area. This would result in an overall negative economic impact for their region and for their hunting-related businesses as a whole.

In the Graham public meeting, most of the 15 participants were opposed to hunting migratory birds on Sunday. The main reason for opposing the issue in the Graham public meeting was a concern that additional pressure on bird populations (outside of what they already experience during current hunting seasons) would result in overall fewer ducks in the state, which would lower the quality of duck hunting on a statewide level. Graham participants also opposed the 9:30 a.m. to 12:30 p.m. Sunday hunting restriction, believing that it would end up wasting the entire day and would provide fewer than 60 total hunting days overall.

In the Jacksonville public meeting, all participants who expressed an opinion were in support of hunting migratory birds on Sunday. Support in the Jacksonville public meeting centered on increased hunting opportunity for hunters who work during the weekdays, along with increased family time and quality hunting time with children.

# 2.2. AWARENESS OF, INFORMATION ON, AND OPINIONS ON COMPENSATORY DAYS

Most public meeting participants seemed aware of compensatory days. Many of them seemed uncertain as to how the season would be redistributed if hunting migratory birds on Sunday were allowed. Some in the Graham public meeting seemed to distrust the Commission to choose the most appropriate season dates. Participants in the Graham public meeting suggested allowing a day of rest for the birds on a different day of the week and received initial widespread consensus from other hunters in attendance that this was a good idea. However, after the Commission clarified that doing so would reduce the 60-day hunting season and possibly prevent them from going back to providing compensatory days, participants changed their minds and thought it was no longer a viable option.

In the Hickory public meeting, participants also expressed uneasiness at not knowing ahead of time what the migratory bird hunting season would look like with the allowance of Sunday hunting but without compensatory days. The Commission staff present made them aware that the season would be redistributed to some degree, but the specific framework had yet to be determined. Although this was explained multiple times to the participants, they still seemed reticent to give up current compensatory days in the midst of their uncertainty about the possibility of a season framework that could limit good duck hunting.

# 2.3. OTHER FACTORS IMPACTING THE HUNTING OF MIGRATORY BIRDS ON SUNDAY

Participants at the Graham public meeting brought up some questions as to whether the decision to hunt migratory birds on Sunday related to private lands and public waters, or if it related also to public lands. The Commission staff present clarified that the decision would be applicable to private lands and public waters and that public lands would be a separate decision. The additional information regarding migratory bird hunting being allowed initially only on public waters and private lands seemed to give some attendees pause, particularly those who had assumed that such hunting would immediately be allowed on state game lands. While this clarifying information did not seem to reverse anyone's opinion completely, most agreed that the distinction would be important for people to know in forming their positions on the issue.

## 3. PUBLIC FORUM

To gather additional qualitative data and to provide a further opportunity for North Carolina residents to comment on study topics in addition to the public meetings, the researchers developed an online "Public Forum" featuring open-ended discussion threads.

The forum was maintained on a dedicated website (www.ncmigratorybirds.org) that included background information on compensatory days and legislation associated with Sunday hunting of migratory birds. Additionally, questions were posed at the top of the forum commenting page, including:

What are the MOST important reasons you SUPPORT Sunday hunting of migratory birds?

What are the MOST important reasons you OPPOSE Sunday hunting of migratory birds?

How do COMPENSATORY DAYS affect your SUPPORT or OPPOSITION to Sunday hunting of migratory birds in North Carolina?

Other questions at the top of the comment pertained to potential effects of Sunday hunting of migratory birds, such as any other impacts, challenges, advantages, or disadvantages that they might anticipate with Sunday hunting of migratory birds. The forum remained active for about a month, during which time almost 2,000 comments were posted.

#### 3.1. FORUM CONTENT ANALYSIS

While there were multiple secondary commenters (those who responded—sometimes multiple times—to the initial comments of others on the forum), this report's analysis focuses on all first-time commenters. This avoids the unnecessary repetition of similar thoughts either for or opposed to the issue. Also, when it seemed like someone was commenting repeatedly (i.e., using similar language, the same comment repeated, etc.) or an email that was used more than once (even if a different username was listed), only one of such duplicate comments was counted. Comments were only counted if they indicated a clear support for or opposition to hunting migratory birds on Sunday in North Carolina. Emails on the issue that were received at the Responsive Management National Office have been kept separate from forum comments. Also, only those who specifically self-identified as a hunter, landowner, or non-consumptive recreationist have been listed in the qualitative data. As a result, it is important to note that not all comments included in the online public form thread are included in the analysis, but only those of first-time commenters who indicated clear support for or opposition to the issue and identified themselves as distinctly hunters, landowners, and/or non-consumptive recreationists. However, these parameters encompass most of the commenters on the online public forum. The forum was closed for analysis on January 15, 2018; as such, all observations in this report reflect that end-date.

Within the specified parameters, there were 1,528 primary comments. Of that, 830 supported Sunday hunting of migratory birds, while 698 opposed it. Among those who self-identified as hunters in the public forum (498), 304 supported Sunday hunting of migratory birds, while 194

opposed it. Among those who self-identified as non-consumptive recreationists (43), 1 supported Sunday hunting of migratory birds, while 42 opposed it. Among those who self-identified in the forum as landowners (26), 8 supported Sunday hunting of migratory birds, while 18 opposed it.

Responsive Management received 60 notable email responses pertaining to the issues on the online public forum. Among those who chose to email (60), 28 supported Sunday hunting of migratory birds, while 32 opposed it. Among those who emailed that self-identified as hunters (12), 6 supported and 6 opposed Sunday hunting of migratory birds. One person who emailed self-identified as a non-consumptive recreationist and opposed Sunday hunting of migratory birds. Two who emailed self-identified as landowners and both opposed it.

### 3.2. SUPPORT FOR SUNDAY HUNTING OF MIGRATORY BIRDS

Those who expressed support for hunting migratory birds on Sunday in North Carolina did so primarily because of increased opportunity. All other reasons for supporting Sunday hunting were traced back to this one priority for supporters.

Many of those who expressed support for hunting migratory birds on Sunday in North Carolina primarily did so because they perceived an increase in their opportunity to hunt migratory birds each season, particularly on Sundays. As a whole, these respondents noted the difficulty of hunting Monday through Friday due to work obligations, leaving only Saturday to hunt each week. Therefore, they claimed, the inclusion of Sunday hunting into the 60-day season framework could possibly double their opportunity for hunting migratory birds.

Supporters of Sunday hunting viewed the current restriction as an archaic carryover of the "blue laws" of the early twentieth century that should not play into current hunting season policies. Also, concern for maintaining the "separation of church and state" was expressed by many supporters throughout the forum. Their view on this issue was that the current policy prohibiting the hunting of migratory birds on Sunday exists purely on religious grounds. Multiple supporters expressed their concern in the forum that churchgoers' religious convictions should not be keeping hunters out of the field on Sunday. Some went as far as to say that this blurred the lines between state governance and church matters, which should remain separated. Many respondents who held this line of thinking also emphasized that there is no other legitimate reason for justifying an ongoing restriction of hunting on Sundays in general. Some of these contributors also noted that the 9:30 a.m. to 12:30 p.m. hunting restriction should also be lifted for the same reason. However, others who supported Sunday hunting were more willing to live with the Sunday time restrictions for the opportunity to hunt before and after those times on Sunday.

In response to opponents of Sunday hunting, many supporters noted that a "day of rest" could be provided for birds any of the other weekdays. Some supporters of Sunday hunting acknowledged the need for a day of rest for migratory birds (waterfowl in particular), while others believed it to be totally unnecessary. The latter said that no single hunter hunts each day of the week and that most hunters are not able to hunt Monday through Friday. As such, they imply that migratory birds get plenty of rest throughout the weekdays. To them, adding Sunday hunting may increase pressure, but not detrimentally. Some who supported Sunday hunting on

the forum indicated that they trust Commission biologists and officials to make the right decisions regarding migratory bird populations and hunting season frameworks.

Many supporters of Sunday hunting of migratory birds emphasized that hunters and the general public should be able to make their own decisions about what to do with their Sundays, whether they choose to hunt migratory birds or not. They emphasized that Sunday hunting is being considered as an option: nobody is being required to hunt on Sunday. In this conversation, they again argued that they should not be prohibited from hunting on the basis of others' religious convictions. It appeared that those in favor of hunting migratory birds on Sunday did not see the need for a day of rest for birds (at least on Sunday) and did not think that increased pressure on migratory birds is of concern by allowing Sunday hunting. While some supporters agreed with the need for a day of rest for the birds, many suggested a weekday in place of Sunday for this. Also, those who acknowledged the possibility of increased pressure on the weekend from allowing Sunday hunting often emphasized that there is likely very little pressure Monday through Friday when the majority of hunters are working all day.

In addition to increased opportunity for hunting migratory birds in general, many supporters of Sunday hunting also emphasized on the forum the opportunity to get young hunters—specifically their own sons and daughters—into the field on weekends as a result of allowing Sunday hunting. To bolster this argument, they noted the decreasing hunting culture in today's society as another reason to allow Sunday hunting. These supporters argued for Sunday hunting in terms of providing yet another opportunity for hunters—particularly those that work weekdays—to pass on the hunting heritage to their children and grandchildren.

Some supporters' main sentiment regarding the forfeiture of compensatory days if Sunday hunting is allowed could be summarized in the statement, "60 days is 60 days," which was spoken a few times in the forum comments. The only condition to this general consensus, noted multiple times by supporters of Sunday hunting, was that the late season not be lost as the season framework gets restructured. The best days for waterfowl hunting are later in the 60-day season, so supporters' willingness to forfeit compensatory days was predicated on whether or not the end of the migratory bird season would be shortened. A few supporters indicated conditional support of Sunday hunting on this basis: "as long as the later part of the season is not shortened" as a result of a restructured season framework.

Multiple supporters also cited other states in which they have hunted that allow Sunday hunting of migratory birds (e.g., Virginia, Louisiana, Iowa, Michigan, Tennessee) as examples of the illegitimacy of the arguments that additional hunting pressure will cause birds to leave the state and that Sunday provides a requisite day of rest for migratory birds, whose populations would otherwise decrease with allowing Sunday hunting.

Many who supported Sunday hunting also expected a positive economic impact on North Carolina as a result of allowing Sunday hunting. Their rationale, in general, was that more opportunities would bring in more license purchases and more expenditures for in-state hunting trips (e.g., motels, gas, food, hunting gear), which would provide an overall economic gain for North Carolina.

Also, some supporters of Sunday hunting said it should be legalized on both public and private lands and that the 9:30 a.m. to 12:30 p.m. restriction should be lifted to allow all-day hunting on Sunday. There were variations to these assertions, with some supporters indicating that the Sunday morning time restriction is good and appropriate, especially for churchgoers.

### 3.3. OPPOSITION TO SUNDAY HUNTING OF MIGRATORY BIRDS

Those who expressed opposition to hunting migratory birds on Sunday in North Carolina did so because they anticipated pressure on migratory birds (especially waterfowl) from Sunday hunting. Additionally, those in opposition cited the need for migratory birds to have a "day of rest" from being continuously hunted. In the online forum, opponents' comments centered primarily on waterfowl.

Those who expressed opposition to hunting migratory birds on Sunday in North Carolina primarily did so because they believe that increased pressure on migratory birds would be detrimental to hunters and bird populations across the state. Additionally, many who expressed opposition on the forum cited a need for migratory birds to have a day of rest in which they could regroup and settle in various areas without being hunted. Their argument was that Sundays, in particular, provide this vital day of rest, which also limits the amount of weekend pressure that hunters can place on migratory bird populations. Many in opposition noted that migratory birds are a "limited resource" that requires human protection from overhunting. The concern for over-hunting migratory birds seemed to have originated from a fear that migratory birds would no longer winter in North Carolina, or would not do so in large numbers. As such, many commenters who opposed Sunday hunting but favored hunting in general demonstrated a concern that migratory bird hunting on Sunday could lead to decreased migratory bird (especially waterfowl) populations in North Carolina, which would make for worse—not better—hunting. All other concerns could be traced back to this primary concern.

Those who opposed Sunday hunting explained the assertion that birds need a "day of rest" with at least one of two perspectives: in terms of religious convictions and/or in terms of management concerns. Some opponents to Sunday hunting asserted that, because the Bible teaches that humans need a "day of rest," so do birds and all wildlife species. They interpreted this as a "day of rest" from having to be hunted. These opponents to Sunday hunting approached it from a particularly religious frame of reference that many supporters of Sunday hunting said should not in any way impact the final decision as to whether to legalize Sunday hunting. In addition, some opponents to Sunday hunting who cited religious convictions as a reason to prevent it also stated that hunters should "honor the Sabbath" as a day of rest for themselves as well. From their perspective, nobody should be hunting on Sunday for any reason. Second, the "day of rest" was supported by some opponents of Sunday hunting on the basis of responsible game management. They saw a "day of rest" for the migratory birds as necessary to retain a healthy population within North Carolina on a seasonal basis. Here, the "day of rest" equated to staving off unnecessary and unhealthy levels of hunting pressure on the fragile, seasonal resource of migratory birds.

In terms of promoting responsible game management, many opponents to Sunday hunting regularly concluded that there would be a negative impact in all of the primary areas where supporters of Sunday hunting predicted a positive impact: young hunter participation, season framework, and economics. Similar to proponents of Sunday hunting who saw secondary issues

through the lens of increased hunting opportunity, opponents' perspectives on these issues were informed by their overall emphasis on their central rationale for opposing Sunday hunting: unhealthy levels of hunting pressure and no "day of rest" for migratory birds.

Opponents' basis for anticipating negative results of allowing Sunday hunting surrounded the assumption that fewer migratory birds would equate to fewer opportunities for young people to hunt; fewer opportunities for older hunters to pass on their hunting heritage; fewer opportunities to hunt waterfowl on the east coast; fewer in-state planned hunting trips, which would mean less revenue spent in state on hunting trips (e.g., motels, gas, food, hunting gear); and fewer hunting licenses sold. Also, many opponents to Sunday hunting claimed, the forfeiture of compensatory days in exchange for only partial Sundays would result in a net loss of overall hunting opportunity within the 60-day season framework. Opponents of Sunday hunting, like supporters, also feared the loss or shortening of the later part of the migratory bird season when waterfowl hunting is at its peak. They were concerned that the need to restructure the 60-day framework, with the resulting forfeiture of compensatory days, would result in a reduction of prime waterfowl hunting days near the end of the season.

Of particular concern to many opponents to Sunday hunting of migratory birds was the 9:30 a.m. to 12:30 p.m. hunting restriction that would remain in place if migratory bird hunting on Sunday were legalized. In total, some opponents to Sunday hunting indicated that they would end up with fewer hunting days total with this restriction in place. The forfeiture of compensatory days would result in a restructuring of the season to account for consecutive hunting days, some of which (i.e., Sundays) would only permit hunting for a limited portion of the morning, when duck hunting is perceived (by some hunters) to be the best time of day. Some of these individuals stated that it makes no sense to forfeit perfectly good full days of hunting for partial hunting days that limit hunting during three hours of the best part of the day to hunt. In contrast to supporters of Sunday hunting, opponents seemed to suspect that Sunday hunting would actually provide fewer opportunities over the course of the 60-day season.

Some others in opposition to Sunday hunting identified themselves on the forum as non-consumptive outdoor recreationists, such as hikers, wildlife viewers, and those who walk their dogs. These individuals generally seemed to oppose Sunday hunting because it would limit the places and times they could participate in their outdoor activities without the fear of conflicting with hunters' shooting. Other opponents, including non-consumptive recreationists, hunters, and non-hunters indicated on the forum that they appreciate Sunday as a day to personally rest, have a peaceful day with nobody shooting nearby, and to participate in outdoor activities like walking through the woods. Their sentiment often seemed to be that, during the hunting season, hunters have the other six days of the week for hunting, so non-hunters should have Sundays reserved specifically for those who choose to rest—for religious reasons or simply by personal preference—and to participate in non-consumptive outdoor recreation activities without encountering or having to plan their outdoor activities around hunters on Sunday. Similarly, there were a number of opponents to Sunday hunting who simply stated their desire for a day of rest and peace, but not for religious reasons. Many of these opponents indicated that they live on or near the coast and can hear hunters shooting nearby during the hunting season for most of the week. Thus, they especially appreciate the one day a week where they do not have to hear hunters.

Some opponents also voiced uncertainty and concern on the forum for whether Sunday hunting would be permitted on private or public lands. Regardless of where it would be permitted, many opposed to Sunday hunting of migratory birds were opposed to it on any applicable lands. Some reasserted their position that opening Sundays to hunt would result in unhealthy pressure on migratory birds, which also need a day of rest to not be hunted.

### 3.4. SUMMARY OF FORUM FINDINGS

## COMPARING SUPPORT FOR AND OPPOSITION TO HUNTING MIGRATORY BIRDS ON SUNDAY IN NORTH CAROLINA

The following summary attempts a comparison of the primary concerns and/or points by both those who supported and those who opposed Sunday hunting on the online public forum. The predominating issue for both supporters (i.e., increased opportunity) and opponents (i.e., increased pressure) is compared first.

### **Increased Opportunity Versus Increased Pressure**

Primarily, most supporters of migratory bird hunting on Sunday in North Carolina did so because they view it as an added opportunity to hunt on weekends, when they are not working. Many hunters indicated that their work week runs from Monday through Friday, so they are only left with Saturday to hunt migratory birds (waterfowl in particular) on the weekends. Adding Sunday as an extra hunting option would benefit them in multiple ways. To them, more opportunities for hunting would equate to more family time (to introduce hunting to their children and grandchildren) and more money spent on in-state hunting trips, boosting the economies of coastal communities hosting in-state waterfowl hunters who plan weekend hunting trips.

Most opponents to Sunday hunting demonstrated concern that allowing Sunday hunting of migratory birds would place too much pressure on an already-fragile resource. To alleviate unhealthy levels of hunting pressure, they indicated the need for migratory birds to have a "day of rest" from being hunted. Without this day of rest, opponents to Sunday hunting anticipate increased pressure on migratory birds that, they claimed, will prove detrimental to healthy migratory bird (especially waterfowl) populations, North Carolina's economy, the hunting tradition, and the flyway. Whereas supporters of Sunday hunting did not see this as an issue and often cited other states that allow hunting migratory birds seven days a week to no consequence, opponents to Sunday hunting of migratory birds in North Carolina seemed concerned that Sunday hunting would open the door to permanently decreasing migratory bird populations in the state and could lead to the state becoming a "flyover" state in the Atlantic Flyway.

Some supporters asserted that increased pressure, resulting in low populations of migratory birds as a result of allowing Sunday hunting, is simply not viable. For this argument, some emphasized that nobody would be *required* to hunt on Sunday: it would simply present another option for those who find hunting during weekdays to be difficult or impossible. Additionally, they noted, although weekend pressure may increase for migratory birds, it would not do so to an unhealthy level, given that there is less weekday pressure because many hunters work Monday through Friday.

Many supporters of Sunday hunting asserted that the "day of rest" argument a) is illegitimate on the basis of its religious foundations and, discounting that, b) is simply not substantiated on any scientific or biological basis as it pertains to migratory bird species. Therefore, they claimed, the "day of rest" is not needed; all people—hunters included—should be able to determine what to do with their Sundays.

### **Blue Laws and Religious Convictions**

Some supporters of Sunday hunting asserted that the ban on Sunday hunting of migratory birds has remained on the books singularly because of its origin in the state as a "blue law" that supported religious convictions of the early Twentieth Century in North Carolina. As such, there should no longer be a ban on Sunday hunting. Some supporters indicated there should be no restrictions in any form on Sunday hunting, but all of Sunday should be open to hunting as it is for many other activities such as boating, hiking, etc.

A number of opponents to Sunday hunting cited the biblical mandate that there be a "day of rest" for people each week. In this light, their religious convictions, rooted in tradition, seemed to play into their opposition to hunting on Sunday. However, not everyone who was opposed to Sunday hunting and who advocated a "day of rest" for people was doing so on the basis of religious convictions. These opponents to Sunday hunting advocated a "day of rest" more as a personal preference: a day to rest and have a peaceful day without hearing shooting; or a day to walk through the woods without the fear of encountering hunters and their dogs.

### **Compensatory Days**

Concerning the forfeiture of compensatory days and a restructuring of the season framework, some supporters simply emphasized that "60 days is 60 days," regardless of which days they get to hunt migratory birds. A number of supporters of Sunday hunting did mention a condition for supporting Sunday hunting as it concerns compensatory days. If forfeiting compensatory days would result in a restructured season framework that shortened the end of the hunting season, a number of supporters noted that they would no longer support Sunday hunting. Many, both supporters of and opponents to Sunday hunting, noted that the best waterfowl days are at the end of the season. Together, most hunters, regardless of their support of or opposition to the issue, indicated an unwillingness to lose hunting days near the end of the 60-day season. Some who opposed the idea of Sunday hunting did so because of their uncertainty as to how the season would be restructured without compensatory days being included.

Opponents to Sunday hunting also expressed concern in the forum that the forfeiture of compensatory days in exchange for partial days of Sunday hunting would result in a net loss of hunting days within the 60-day migratory bird hunting season. In these terms, they say that it does not make sense for hunters who want increased hunting opportunities. Supporters of Sunday hunting were looking at the increased opportunity to hunt on weekends in particular, whereas opponents to Sunday hunting seemed to look more at the overall season schedule to determine an overall loss of hunting opportunity. In this way, hunting "opportunity" was being defined through two different perspectives in the discussion of hunting migratory birds on Sunday in North Carolina.

### **Young Hunters and Family Time**

Of great importance to supporters of Sunday hunting was the increased opportunity not just for their own hunting pursuits, but the increased opportunity to introduce their children and grandchildren to migratory bird hunting. Many supporters indicated their intention to take their families out into the field on the weekends, especially with an added day for hunting on the weekend, when they have more opportunity to get out. To these supporters, Sunday hunting seemed to be equally about their personal hunting opportunities and the opportunity of passing on their hunting heritage, both of which they indicated will serve the economic and conservation interests of North Carolina well into the future.

Opponents to Sunday hunting saw an overall decrease in opportunities for young hunters and family members to be exposed to migratory bird hunting if Sunday hunting is legalized. Because they anticipate a decrease in healthy migratory bird populations due to increased pressure and no day of rest for the birds, opponents likewise anticipated decreased opportunities for hunters in general. Many opponents to Sunday hunting argued consistently that, if there are fewer birds in the state, it does not matter how much opportunity one has to hunt. To opponents, the only way to guarantee healthy migratory bird populations in the state is to retain the prohibition on Sunday hunting, which provides the birds a day of rest and prevents increased pressure on what they view as a fragile and transient wildlife resource.

#### SHARED PRIORITIES WITH DIFFERING PERSPECTIVES

Some of the most commonly-used words in the online public forum discussion thread included the following: activities, church, enjoy, family, hunt, land, pressure, public, religious, rest, Saturday, time, waterfowl, weeks, and work. These words seemed to summarize the primary concerns of both supporters of and opponents to Sunday hunting of migratory birds in North Carolina. In general, both supporters and opponents were interested in 1) maximizing migratory bird hunting opportunities, 2) promoting responsible game management, and 3) passing on the hunting heritage to future generations. Their methods for accomplishing such ends were based on the way they perceived and negotiated the two key issues of managing hunting pressure on migratory birds and promoting the needed increases in hunting opportunities for those who work weekdays.

### 4. FOCUS GROUPS

This section discusses the focus group findings. A full discussion of the methodology of focus groups is included in Section 6 of this report. Focus groups are discussions among a small group of people, led by a moderator through a discussion guide, but allowed to give any input that they wanted. These focus groups with hunters were conducted in geographically diverse areas across North Carolina: Concord, Morganton, Raleigh, Washington, and Wilmington.

### 4.1. MIGRATORY BIRD HUNTING PARTICIPATION

Participants across all focus groups participated in migratory bird hunting in North Carolina every season. There were few in attendance who did not hunt duck, and dove was the most commonly-hunted of the webless migratory birds.

Many participants in all focus groups ranked the importance of their migratory bird hunting to their overall hunting participation as moderately to very important. It seemed that many in groups further west in the state ranked it slightly lower; some participants in those groups indicated that they hunt other game regularly throughout the year when they cannot take trips east for waterfowl hunting.

The most commonly hunted migratory bird in all focus groups was duck. Dove was clearly the bird most commonly hunted other than waterfowl across each focus group. Nonetheless, the discussion about legalizing the hunting of migratory birds on Sunday was more focused on waterfowl than on dove.

# 4.2. AWARENESS OF AND GENERAL ATTITUDES TOWARD HUNTING MIGRATORY BIRDS ON SUNDAY

Hunters in all focus groups were generally aware of the issue of the possibility of hunting migratory birds on Sunday in North Carolina. Attitudes ranged from strong opposition to strong support for allowing the hunting of migratory birds on Sunday. Of particular importance, the degree of hunters' support for or opposition to hunting migratory birds on Sunday seemed to be related to the region of the state in which those focus group hunters resided. Generally, those focus groups farther west (all in Morganton, some in Concord, some in Raleigh) were more in favor of allowing the hunting of migratory birds on Sunday, particularly for waterfowl, than those hunters in focus groups farther east, closer to the coastal plain area (Wilmington and Washington).

# 4.3. THE PERCEIVED IMPORTANCE OF THE ISSUE OF HUNTING MIGRATORY BIRDS ON SUNDAY IN NORTH CAROLINA

Many hunters indicated that Sunday hunting of migratory birds was of great importance to the state of North Carolina. Reasons cited for why it is important included its economic implications, its social implications, the possibility of over-hunting a species, and disturbance of the Atlantic Flyway to the detriment of North Carolina migratory bird hunting in general. The importance of the topic is evidenced by the fact that many hunters who opposed hunting migratory birds on Sunday seemed concerned that allowing such Sunday hunting could negatively influence migratory bird hunting *as a whole* in North Carolina, causing migratory birds to fly over the state instead of wintering there in the long-term. However, many hunters in

favor of hunting migratory birds on Sunday anticipated a notable increase in revenue in the state as a result of legalizing it. Both groups—those opposed and those in favor (as well as those who were somewhere in the middle on the issue)—viewed it as a highly important issue that needed a decisive resolution.

# 4.4. AWARENESS AND UNDERSTANDING OF COMPENSATORY DAYS

While many hunters were aware of the current prohibitions of hunting migratory birds on Sunday in North Carolina, and while they viewed it as an important issue to address, there was a general lack of understanding about an important aspect of the issue: compensatory days that are provided for hunting waterfowl. Specifically, there seemed to be an overall lack of understanding of how removing compensatory days would affect the redistribution of the hunting season.

Many hunters in the Wilmington group did not really know about compensatory days until it was explained to them. Overall, some hunters knew that compensatory days have been provided for waterfowl hunting to hunters in North Carolina because hunting waterfowl on Sundays has been prohibited. Some hunters were also aware of the 60-day season that compensatory days accounted for in terms of hunting waterfowl. There was some confusion about when the migratory bird hunting season would begin and end in North Carolina if Sunday hunting of migratory birds were allowed and compensatory days were withdrawn as a result.

Many hunters who expressed some support for Sunday hunting of migratory birds also expressed some opposition to Sunday hunting because of a lack of communication about how the hunting season would be redistributed as a result of forfeiting compensatory days (and gaining Sundays). Many hunters in Concord and Raleigh were concerned that the Commission would end the season earlier than usual if Sunday hunting were permitted, thereby possibly eliminating what they perceived to be the best waterfowl hunting (near the season's end).

The Concord focus group was particularly emphatic about wanting to see a specific, concrete redistributed season schedule prior to deciding whether they would support or oppose hunting migratory birds (especially waterfowl) on Sunday. To them, the uncertainty of the redistribution of the season resulting from the removal of compensatory days outweighed the potential increase in both weekend hunting opportunities and the perceived positive economic impact resulting from allowing Sunday hunting. Some individuals in the Concord group, at the end of the meeting, indicated that the only thing that could change their minds from opposing Sunday hunting was to first see a concrete season schedule.

## 4.5. SUPPORT FOR THE HUNTING OF MIGRATORY BIRDS ON SUNDAY IN NORTH CAROLINA

Across all focus groups, those hunters who supported the legalization of hunting migratory birds on Sunday in North Carolina cited several primary reasons. Before getting to these reasons, it is first worth noting that general support was stronger in focus groups in the west (particularly in Morganton and Concord, and some focus group participants in Raleigh), whereas opposition seemed to grow stronger in focus groups farther east (some participants in Raleigh, some in Wilmington, and most in Washington).

One important reason for support is the perception that it would increase hunting opportunities for hunters who work Monday through Friday and cannot go out to hunt during the weekdays. Hunters from focus groups farther west who were in support said that they will not travel to the North Carolina coast for just one day (i.e., Saturday) of duck hunting but that having Sunday as an extra day to hunt waterfowl would potentially have a substantial impact on their participation. A corollary to this increased opportunity as a reason that hunters supported the legalization of migratory bird hunting on Sunday was the increased opportunity to spend family time together in the outdoors and to introduce children or grandchildren specifically to migratory bird hunting. When probed for further explanation, numerous hunters (especially in Morganton and Concord) expressed the need to pass on their hunting heritage to the next generation. According to participants, it is harder than ever to get kids outdoors and into hunting due to the increasingly technology-driven society in which we live. In these terms, their support of Sunday hunting was not just for increasing their own hunting opportunities, but was also for increasing opportunities to pass on the hunting heritage to the next generation of hunters and wildlife conservationists—their children and grandchildren.

One reason discussed in multiple focus groups that supports the hunting of migratory birds on Sunday was the separation of church and state. As some participants explained it, if people's religious convictions require them to take a day of rest on Sunday, then they should do so. However, that rationale (supporters said) should not be applied to all hunters; instead, residents of North Carolina should be able to choose what they want to do with their Sundays, which should include the option to hunt. This perspective was further illustrated by hunters who noted a lack of restrictions on driving, hiking, horseback riding, wildlife viewing, and other kinds of hunting on Sundays, none of which support the "day of rest" argument for people.

Similarly, hunters supported hunting migratory birds on Sunday by downplaying the perception that birds also need a "day of rest." Some opined, "Why should this day be on Sunday?" or "What hunter hunts seven full days a week?" These questions seem to imply that birds will still be getting the rest they need—more hunting opportunities on the weekends does not necessarily mean that birds (waterfowl, in particular) will be less rested. Others simply downplayed the "day of rest for the birds" argument, saying that it was not needed because birds would not be "overworked" as a result of being hunted on Sunday and that the birds would be hunted for 60 days regardless of the season structure.

There were some economic reasons provided for supporting Sunday hunting of migratory birds. Some hunters from both the Morganton and Concord focus groups indicated that they travel to other states that allow Sunday hunting when they hunt waterfowl. As a result, multiple participants lamented that those states are getting their hunting dollars. This led to a conversation in both of these focus groups (Morganton and Concord) of the potential economic advantages of allowing the hunting of migratory birds on Sunday in North Carolina. Those who travel out of state to hunt waterfowl said that their money on those planned trips unfortunately goes into other states' revenue streams. This is only because these hunters cannot plan 2-day weekend hunting trips within North Carolina, which they would rather do. They indicated that hunting-related purchases or expenditures for these 2-day trips should be going to North Carolina. For this to happen, Sunday waterfowl hunting would need to be permitted. Hunters who supported hunting migratory birds on Sunday in North Carolina (from other neighboring states) if hunting migratory birds on Sunday in North Carolina were legalized. Their reason for doing this

was mainly due to a perceived economic boost to North Carolina (and to state conservation efforts) as a result.

## 4.6. OPPOSITION TO THE HUNTING OF MIGRATORY BIRDS ON SUNDAY IN NORTH CAROLINA

Across all focus groups, those opposed to the legalization of hunting migratory birds on Sunday in North Carolina cited that Sunday hunting introduces additional and unneeded hunting pressure on duck populations, especially given that people would likely hunt both Saturday and Sunday consecutively. This was often the first and most prominent reason provided by hunters in each focus group across the state who opposed the hunting of migratory birds on Sunday. It is noteworthy that opposition was strongest from hunters in focus groups farther east regarding the issue of putting undue pressure on birds. There was concern that increased and unnecessary pressure on the birds could potentially turn North Carolina into a migratory bird "flyover" state. There was concern for the effect Sunday hunting of waterfowl would have on the flyway.

Some participants in Raleigh and Concord voiced opposition for Sunday hunting of migratory birds because they did not want to lose days in the later part of the season to hunt duck. Hunters in both groups seemed to assume that if Sundays are opened up earlier in the season, the season would end sooner. Because most hunters seemed to perceive that the better duck hunting is toward the end of the season, they assumed that the required redistribution of days would severely limit the amount of prime waterfowl hunting days within the 60-day season. Under these terms, the Washington group in particular did not think that allowing the hunting of migratory birds on Sunday would actually provide any real increase in opportunities for hunters outside the immediate waterfowl hunting areas in the coastal plain region. In fact, when hunters in the Concord, Washington, and Wilmington focus groups realized they would forfeit compensatory days and would possibly not have the option to get them back if North Carolina allowed Sunday hunting but then reverted back to no Sunday hunting, they were less willing to support Sunday hunting altogether. Although the permanent removal of compensatory days from the season schedule remains uncertain if North Carolina reverted back to banning Sunday hunting, is worth noting that other hunters were not concerned about the loss of compensatory days to begin with; some hunters in Morganton simply replied that "60 days is 60 days, either way."

Although the Commission has an annual process for deciding the exact season dates, many participants seemed to equate a newly-distributed migratory bird hunting season with a resulting loss of prime waterfowl hunting near the end of the season. This misinformed perception is likely the result of misunderstanding the process of and specific considerations given to determining the annual 60-day season, whether with or without compensatory days. It is also likely that many hunters were not aware or did not recall that the season's end date for hunting migratory birds is not determined by the Commission but by the U.S. Fish and Wildlife Service.

One aspect of Sunday hunting that was discussed was the hours during which hunting would be allowed on Sunday. Participants discussed that perhaps Sunday hunting should remain prohibited from 9:30 a.m. to 12:30 p.m. even if migratory bird hunting on Sunday were permitted. However, some other focus group participants saw this as restricting hunting during some of the best hours to hunt duck. After the moderator clarified that the Commission was not reconsidering the prohibition on hunting from 9:30 a.m. to 12:30 p.m. on Sunday at this time,

some participants moved on in their discussion while others re-emphasized their opinion that the best duck hunting on Sunday is during those restricted hours. Some shared the similar concern that taking three hours away from hunting each Sunday, in addition to no longer having compensatory days, would equate to losing an entire hunting day over the course of the season, thereby not providing a full 60 days to hunt.

Participants also discussed whether Sunday hunting would be allowed only on some types of land, such as only on private land. In the Wilmington focus group in particular, this issue of public versus private lands became an important topic of discussion. It seemed to matter especially to those who were in support of Sunday hunting. They were concerned that hunting migratory birds on Sunday would be allowed only on private land and that public game lands would be excluded. Were this the case, they indicated that Sunday hunting would not really help them anyway. This discussion arose in Concord as well, with some confusion as to whether the current issue would apply to both public and private lands, or only to one of the two. Regardless, the issue was of concern particularly if public game lands would be excluded from the hunting of migratory birds on Sunday.

Another noteworthy reason for opposing the hunting of migratory birds on Sunday was the concern (in Raleigh and Concord) for the safety of other recreationists such as hikers and equestrians. Some felt that permitting the hunting of migratory birds on Sunday would further conflict with recreationists' use of land for hiking, horseback riding, and other related non-consumptive activities. These participants felt that their safety could become an issue if sharing the same land with migratory bird hunters on Sunday and emphasized that hunters have access six out of seven days of the week; therefore, it was only fair to keep Sunday open for non-consumptive outdoor recreation by not permitting Sunday hunting.

# 4.7. IMPACTS RELATED TO HUNTING MIGRATORY BIRDS ON SUNDAY

This section that relates to potential increases or decreases in participation has two aspects that need to be examined: hunters' participation in Sunday hunting, and hunters' frequency of participation regardless of day.

## HUNTER PARTICIPATION IF SUNDAY HUNTING OF MIGRATORY BIRDS IN NORTH CAROLINA WERE LEGALIZED

Participant responses were mixed as to who would participate if hunting migratory birds on Sunday in North Carolina were permitted. Generally, those who strongly supported Sunday hunting indicated that they would hunt on Sunday and those who strongly opposed it indicated that they would not, with a few exceptions in both cases. There were multiple hunters (especially in Morganton but also in other groups) who said that they support Sunday hunting because it should be a personal choice, but they would still choose to not hunt on Sunday because of church attendance, needing a day of rest, wanting the birds to have a day of rest, or wanting to spend time with family doing things other than hunting.

## FREQUENCY OF HUNTING IF SUNDAY HUNTING OF MIGRATORY BIRDS IN NORTH CAROLINA WERE LEGALIZED

Hunters who generally supported hunting migratory birds on Sunday seemed to indicate that their hunting frequency would increase due to increased hunting opportunity. Some hunters, particularly those who currently have options to hunt some weekdays, indicated that their hunting frequency would likely stay the same, but they would be able to consider Sundays as an additional option for planning to hunt. They were not definitively going to hunt Sundays if it were allowed, but they seemed to appreciate an additional option. Hunters who currently opposed Sunday hunting—for a wide variety of reasons including the need of a day of rest for the birds and increased pressure on the birds—generally said they would *not* hunt more (because they would not hunt on Sundays).

### 4.8. SOME REMARKS ABOUT COMPENSATORY DAYS

Hunters opposed to losing compensatory days who wanted to retain current Sunday hunting restrictions on hunting migratory birds did generally support having compensatory days available for all migratory birds. Hunters who supported Sunday hunting of migratory birds also supported opening compensatory days for all migratory birds if Sunday hunting restrictions remained in place. It is noteworthy that most hunters in each focus group primarily hunted waterfowl, with some exceptions.

There was little to no concern that Sunday hunting could negatively impact other migratory bird species other than waterfowl. This perspective is likely due to the possibility that the term "hunting migratory birds on Sunday" equates to "getting to hunt duck on Sunday" for many hunters who were present for the focus groups.

### 5. TELEPHONE SURVEY

The results of the telephone survey are presented thematically rather than in the order of the survey, particularly because certain questions that were related to each other were asked in disparate parts of the survey by design. The discussion starts with various aspects of respondents' hunting participation before discussing the opinions of hunters on Sunday hunting of migratory game birds. Some of the hunting participation questions were primarily used to determine survey flow and skips, and those as well as other participation questions are used in crosstabulations throughout the results, but they are presented here on their own. Results are shown of resident HIP hunters statewide, nonresident HIP hunters, and Northeast Region HIP hunters (these samples are discussed in detail in Section 6, "Methodology"). The counties of Beaufort, Currituck, Dare, Hyde, Pamlico, and Tyrrell make up the Northeast Region. The six county area was included as a specific subset because of the significant proportion of migratory waterfowl hunting that occurs in those counties.

### 5.1. HUNTING PARTICIPATION

#### **PARTICIPATION IN GENERAL**

The Commission provided a database to Responsive Management of 493,675 HIP-certified hunters (within the past 5 years). Of this group, 48% passed the screener question in the questionnaire, which ensured that all hunters in the survey had hunted migratory game birds at least once in the previous 5 years; they are referred to as "migratory game bird hunters." They also are differentiated between the sample of resident hunters and nonresident hunters. Of these resident migratory game bird hunters, 58% had hunted in the past season in North Carolina (2016-2017) (Figure 5.1.1). Among nonresident migratory game bird hunters, 56% had hunted in the past season (Figure 5.1.2), while 69% of Northeast Region migratory game bird hunters had done so (Figure 5.1.3).

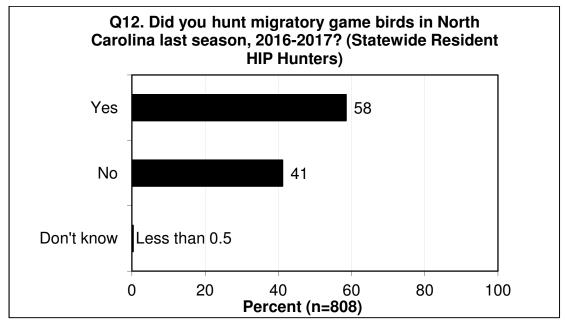


Figure 5.1.1. Participation in Migratory Bird Hunting in the 2016-2017 Season, Among Resident Hunters

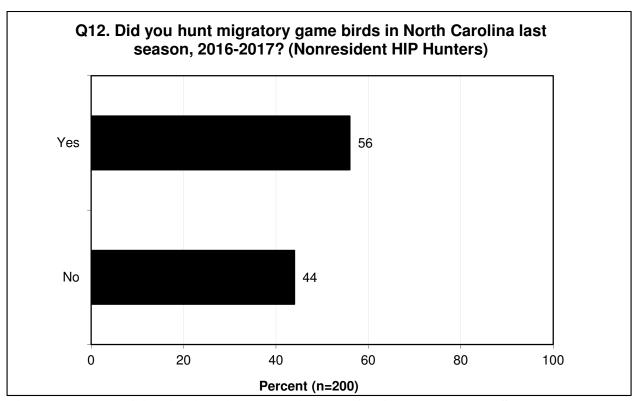


Figure 5.1.2. Participation in Migratory Bird Hunting in the 2016-2017 Season, Among Nonresident Hunters

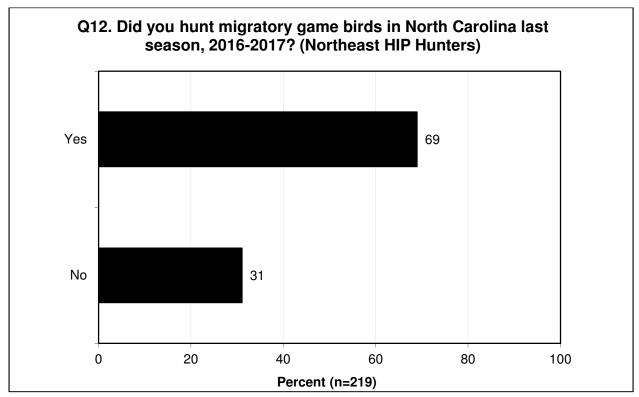


Figure 5.1.3. Participation in Migratory Bird Hunting in the 2016-2017 Season, Among Northeast Region Hunters

The mean amount of time spent hunting migratory game birds in the past season (among those who hunted in that season) is 7.83 days among resident hunters (Figure 5.1.4), 5.80 days among nonresident hunters (Figure 5.1.5), and 14.31 days among Northeast Region hunters (Figure 5.1.6).

Most commonly, migratory game bird hunters' level of participation in the past season was about the same as previous seasons; otherwise, a higher percentage say their level of participation has gone down than say it has gone up (Figures 5.1.7 through 5.1.9). Nonresident migratory game bird hunters have the most even percentages in the "more time" and "less time" camps, with a difference of only 2%; the other two groups—resident and Northeast Region hunters—have a higher percentage in the "less time" response than in the "more time" response.

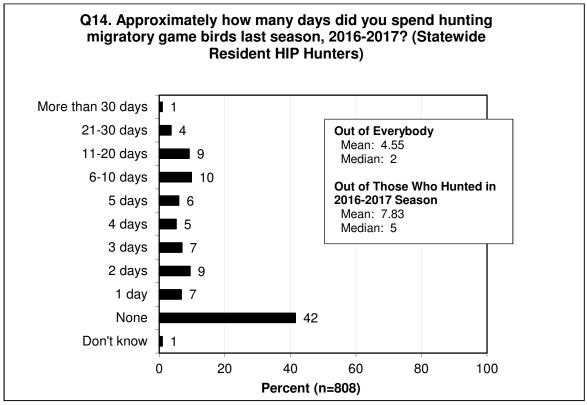


Figure 5.1.4. Days Spent Hunting Migratory Game Birds in the 2016-2017 Season, Among Resident Hunters

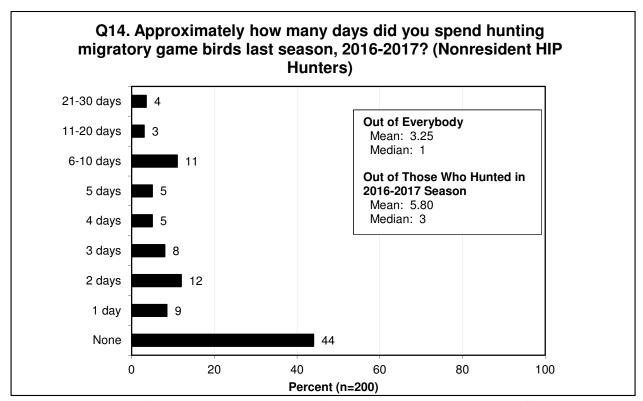


Figure 5.1.5. Days Spent Hunting Migratory Game Birds in the 2016-2017 Season, Among Nonresident Hunters

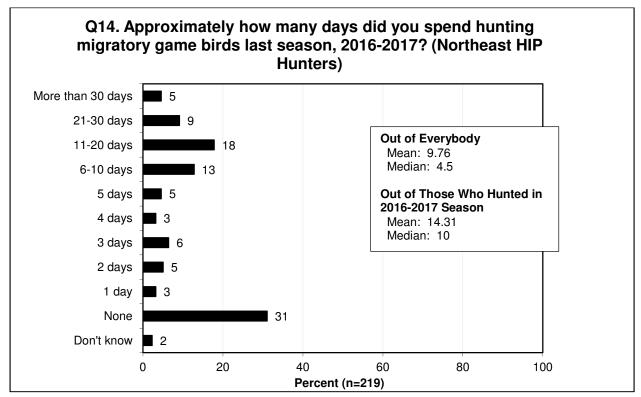


Figure 5.1.6. Days Spent Hunting Migratory Game Birds in the 2016-2017 Season, Among Northeast Region Hunters

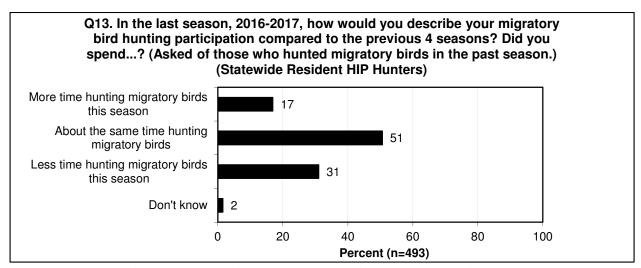


Figure 5.1.7. Participation Now Compared to Previous Among Resident Hunters

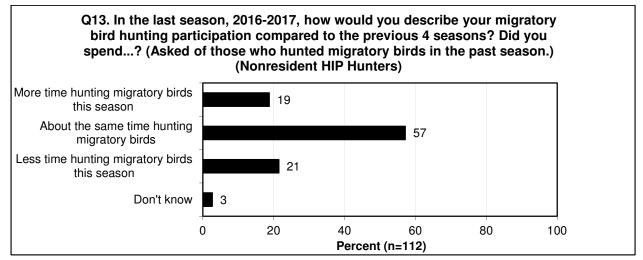


Figure 5.1.8. Participation Now Compared to Previous Among Nonresident Hunters

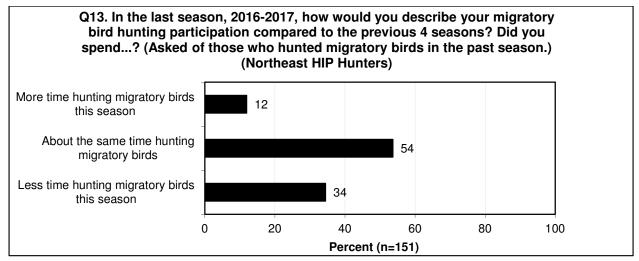


Figure 5.1.9. Participation Now Compared to Previous Among Northeast Region Hunters

### PARTICIPATION IN WATERFOWL HUNTING AND WEBLESS MIGRATORY BIRD HUNTING

About half of resident migratory game bird hunters (51%) hunted migratory waterfowl in the past 5 seasons (Figure 5.1.10). Participation in hunting webless migratory game birds is higher (81%) among resident hunters (Figure 5.1.11). Although the primary use of these questions was for determination of survey flow and skipouts, the results are presented on their own.

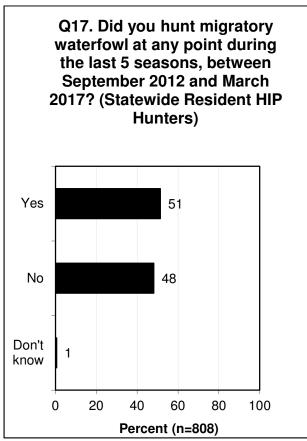


Figure 5.1.10. Participation in Waterfowl Hunting in the Past 5 Seasons, Among Resident Hunters

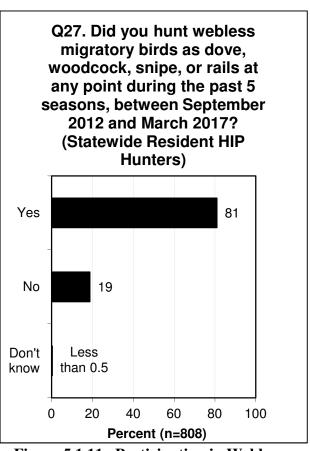


Figure 5.1.11. Participation in Webless Bird Hunting in the Past 5 Seasons, Among Resident Hunters

The results appear to be different among the other two samples, with waterfowl being predominant. Among nonresident migratory game bird hunters, 85% hunted waterfowl in North Carolina, while 29% hunted webless migratory game birds (Figures 5.1.12 and 5.1.13). In the Northeast Region, 80% of migratory game bird hunters hunted waterfowl, and 71% of them hunted webless migratory game birds (Figures 5.1.14 and 5.1.15).

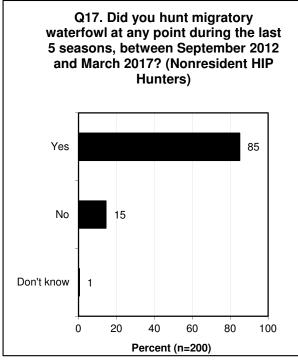


Figure 5.1.12. Participation in Waterfowl Hunting in the Past 5 Seasons, Among Nonresident Hunters

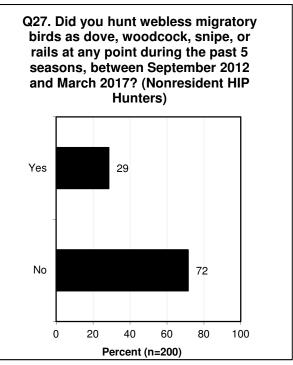


Figure 5.1.13. Participation in Webless Bird Hunting in the Past 5 Seasons, Among Nonresident Hunters

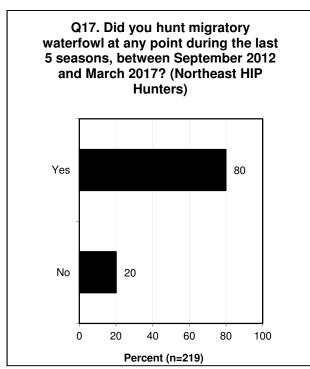


Figure 5.1.14. Participation in Waterfowl Hunting in the Past 5 Seasons, Among Northeast Region Hunters

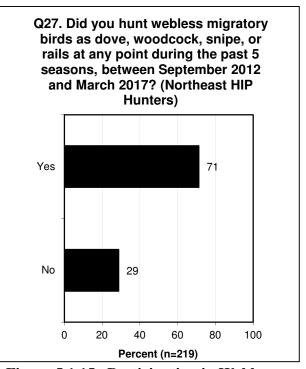


Figure 5.1.15. Participation in Webless Bird Hunting in the Past 5 Seasons, Among Northeast Region Hunters

#### **PUBLIC-PRIVATE**

The survey also asked about hunting on public and private lands and waters. Hunting for migratory game birds among resident hunters was overwhelmingly done on private lands, among those who hunted migratory game birds in the past season. Figure 5.1.16 shows the results regarding public land; Figure 5.1.17 shows results regarding private land among resident hunters. Extrapolations based on those questions found that 46% of resident migratory game bird hunters (who hunted in the past season) hunted migratory game birds on public land at least some of the time in the past season, and 84% hunted them on private lands at least some of the time in the past season.

Results for nonresident migratory game bird hunters, who hunt fairly evenly on public and private lands, are shown in Figures 5.1.18 and 5.1.19. Among nonresident hunters, 64% hunted on public land at least part of the time in the past season, and 60% hunted on private land at least part of the time in the past season (among those who hunted in the past season). Also, results for Northeast Region migratory game bird hunters are shown in Figures 5.1.20 and 5.1.21; they had slightly more hunting on private land than public: 62% of them hunted on public land at least part of the time in the past season, while 77% hunted on private land at least part of the time in the past season (among those who hunted in the past season).

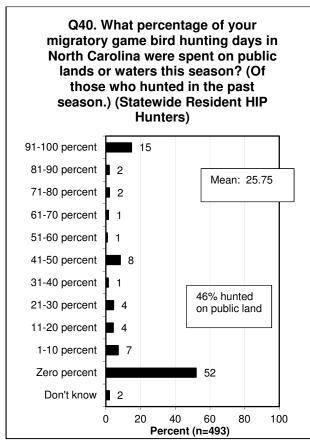


Figure 5.1.16. Percentage of Migratory Bird Hunting Done on Public Lands, Among Resident Hunters

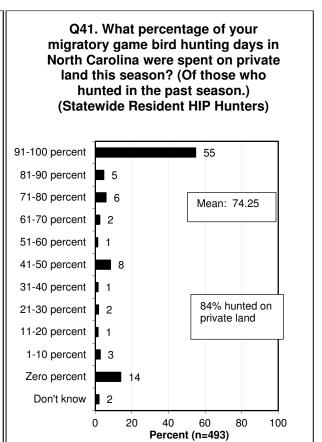


Figure 5.1.17. Percentage of Migratory Bird Hunting Done on Private Lands, Among Resident Hunters

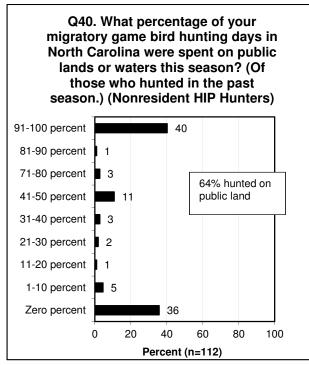


Figure 5.1.18. Percentage of Migratory Bird Hunting Done on Public Lands, Among Nonresident Hunters

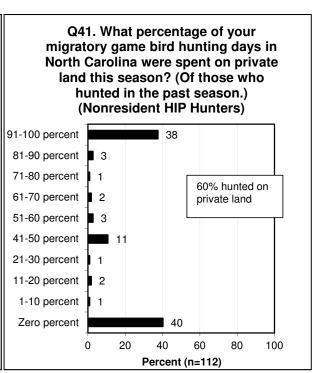


Figure 5.1.19. Percentage of Migratory Bird Hunting Done on Private Lands, Among Nonresident Hunters

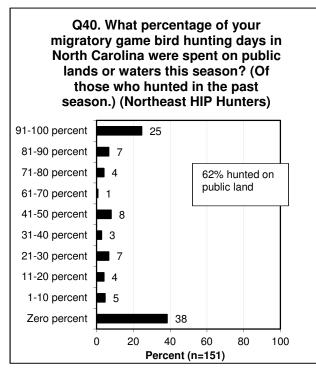


Figure 5.1.20. Percentage of Migratory Bird Hunting Done on Public Lands, Among Northeast Region Hunters

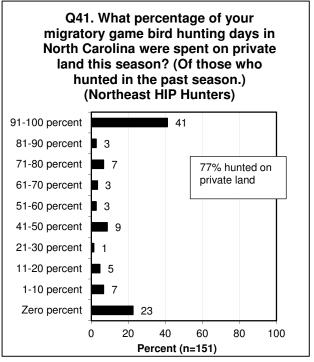


Figure 5.1.21. Percentage of Migratory Bird Hunting Done on Private Lands, Among Northeast Region Hunters

The survey looked into the types of public and private lands and waters hunted (among those who hunted on each type of land/water in the past season). Among resident migratory game bird hunters, game lands and lakes predominate in the public realm (Figure 5.1.22), while farm fields predominate in the private realm (Figure 5.1.23).

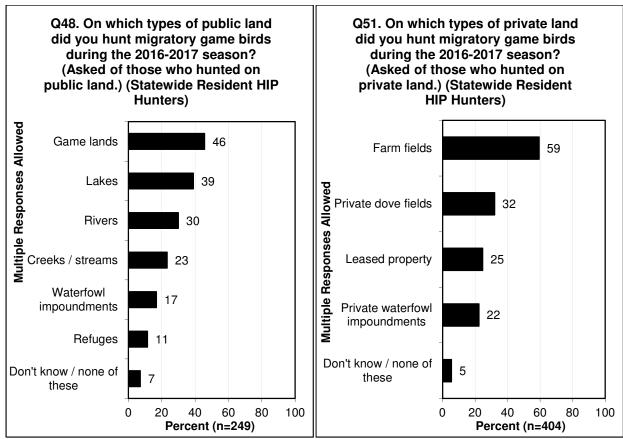


Figure 5.1.22. Types of Public Lands and Waters Used by Resident Hunters

Figure 5.1.23. Types of Private Lands and Waters Used by Resident Hunters

Nonresident migratory game bird hunters also rely on game lands, as well as rivers and lakes, as the most common types of public land/water used (Figure 5.1.24). Private waterfowl impoundments are nonresident hunters' most commonly used type of private land (differing markedly from resident hunters) (Figure 5.1.25).

Finally, regarding types of land/water hunted on among Northeast Region hunters, rivers and game lands predominate in the public realm (Figure 5.1.26), while private waterfowl impoundments and farm fields predominate in the private realm (Figure 5.1.27).

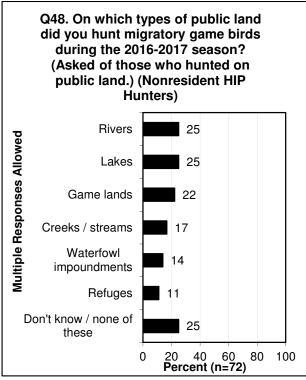


Figure 5.1.24. Types of Public Lands and Waters Used by Nonresident Hunters

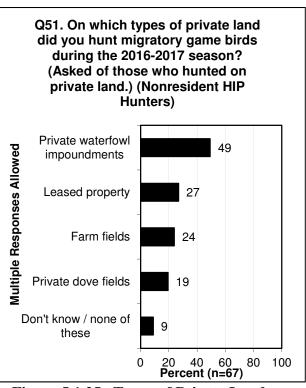


Figure 5.1.25. Types of Private Lands and Waters Used by Nonresident Hunters

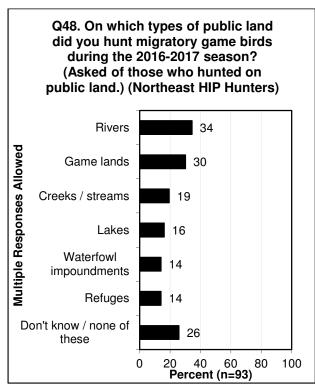


Figure 5.1.26. Types of Public Lands and Waters Used by Northeast Hunters

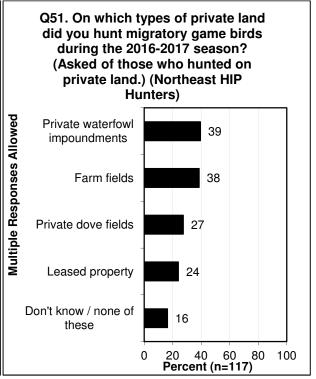


Figure 5.1.27. Types of Private Lands and Waters Used by Northeast Hunters

#### DAY TRIPS AND OVERNIGHT STAYS

The survey asked hunters to indicate the number of days, since September 2017, spent hunting migratory game birds in North Carolina that involved overnight stays and that did not involve an overnight stay (Figures 5.1.28 and 5.1.29 for residents, Figures 5.1.30 and 5.1.31 for nonresidents, and Figures 5.1.32 and 5.1.33 for Northeast Region hunters).

Half of resident migratory game bird hunters (50%) spent some days hunting migratory game birds that did not involve an overnight trip, and 14% spent some days hunting migratory game birds that involved an overnight stay since September 2017. Meanwhile, 20% of nonresident migratory game bird hunters spent some days hunting migratory game birds that did not involve an overnight trip, and 33% spent some days hunting migratory game birds that involved an overnight stay since September 2017. Among Northeast Region hunters, 52% spent some days hunting migratory game birds that did not involve an overnight trip, and 17% spent some days hunting migratory game birds that involved an overnight stay since September 2017.

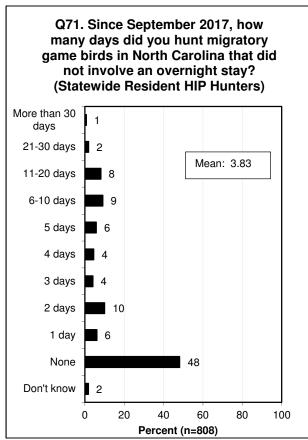


Figure 5.1.28. Days Spent Hunting Migratory Birds Not Entailing an Overnight Stay, Residents

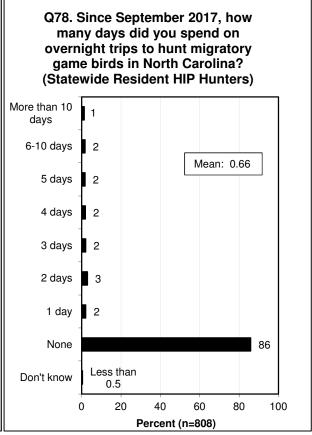
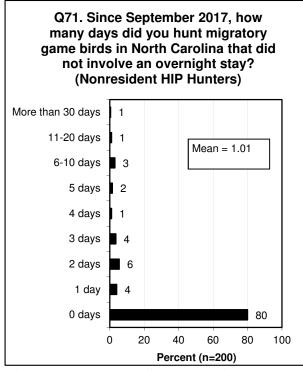


Figure 5.1.29. Days Spent Hunting Migratory Birds That Entailed an Overnight Stay, Residents



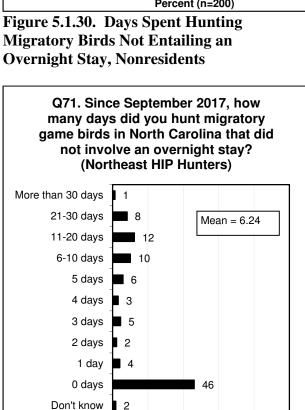


Figure 5.1.32. Days Spent Hunting Migratory Birds Not Entailing an Overnight Stay, Northeast Region

20

4٥

Percent (n=219)

60

80

100

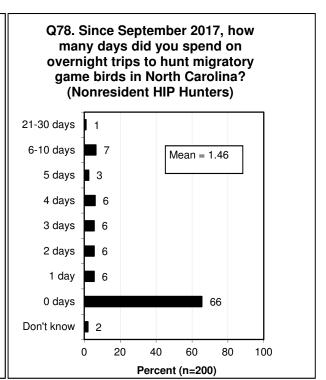


Figure 5.1.31. Days Spent Hunting Migratory Birds That Entailed an Overnight Stay, Nonresidents

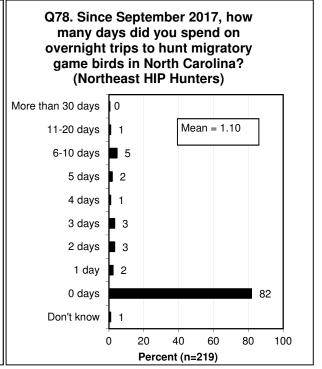


Figure 5.1.33. Days Spent Hunting Migratory Birds That Entailed an Overnight Stay, Northeast Region

#### **HUNTING OUT OF STATE**

Less than 1 in 10 resident migratory game bird hunters (9%) hunted migratory game birds outside of North Carolina since September 2017, with 4% doing so on a Sunday (Figure 5.1.34). The percentage is higher among nonresident hunters: 76% of nonresident migratory game bird hunters hunted outside of North Carolina since September 2017, with 53% doing so on a Sunday (Figure 5.1.35). Finally, 12% of Northeast Region migratory game bird hunters went out of North Carolina to hunt migratory game birds since September 2017, and 3% did so on a Sunday (Figure 5.1.36).

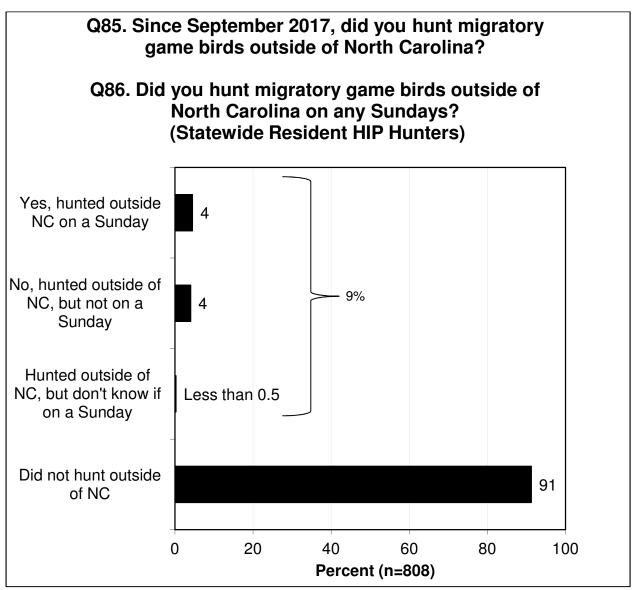


Figure 5.1.34. Hunting Outside of North Carolina, Resident Hunters

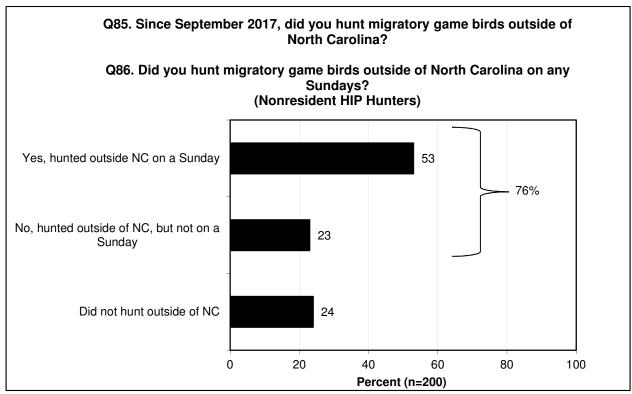


Figure 5.1.35. Hunting Outside of North Carolina, Nonresident Hunters

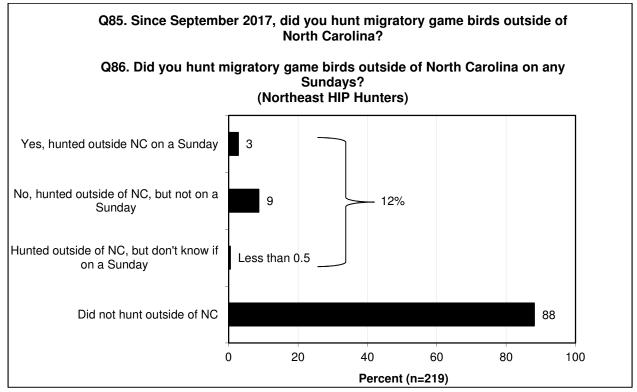


Figure 5.1.36. Hunting Outside of North Carolina, Northeast Region Hunters

If not hunting in North Carolina, respondents most often hunted in South Carolina, Arkansas, and Virginia among resident hunters (Figure 5.1.37). Two of these border North Carolina; Arkansas, on the other hand, is not an adjacent state but has a considerable percentage of respondents hunting migratory game birds there. Figure 5.1.38 then shows other states in which resident hunters went to hunt *on Sunday* (out of those who hunted out of state). For this latter graph, most people did not hunt on Sunday; the most common Sunday hunting states are Arkansas and South Carolina.

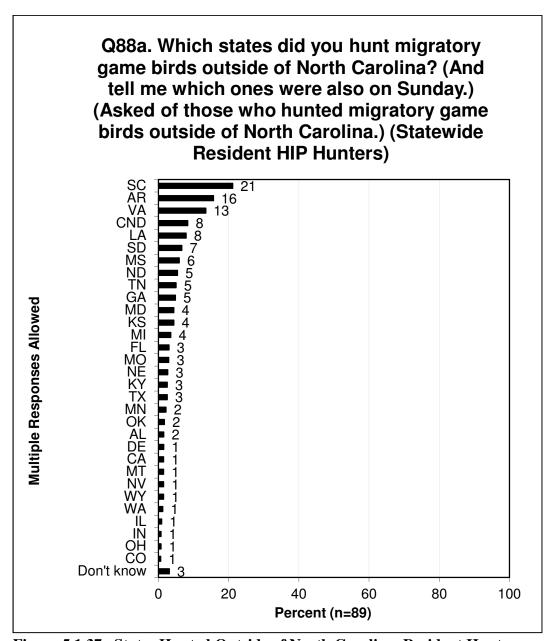


Figure 5.1.37. States Hunted Outside of North Carolina, Resident Hunters

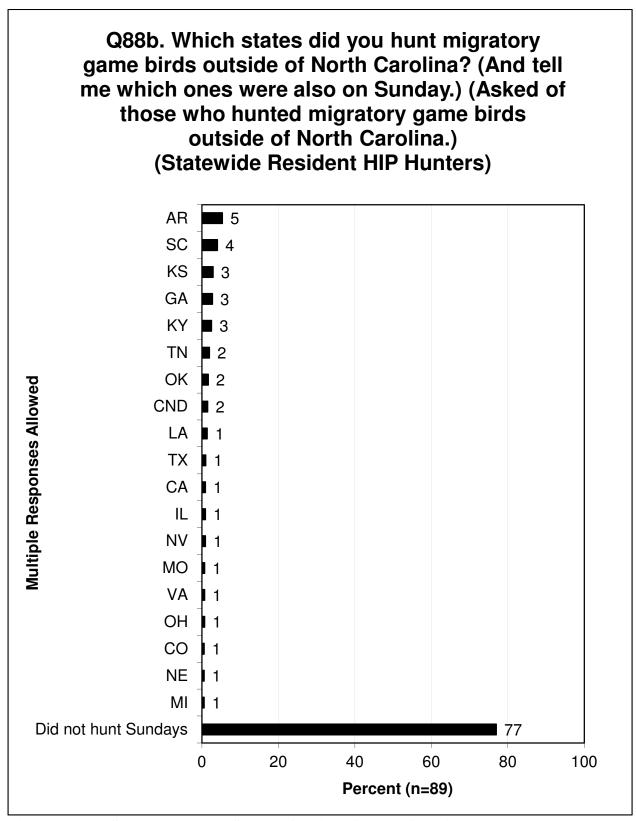


Figure 5.1.38. States Hunted on Sunday Outside of North Carolina, Resident Hunters

# 5.2. IMPORTANCE OF FACTORS INVOLVED IN OVERALL HUNTING EXPERIENCES

The survey presented six factors that play into hunting experiences. For each item, hunters were asked to rate its importance to them. Among resident waterfowl hunters, their top item of importance is having the season end as late as possible: for this item, 38% rated it *extremely* important, and 70% rate it *extremely* or *very* important (Figure 5.2.1). The next tier down has three items with from 58% to 63% saying it is *extremely* or *very* important, with some conflict in the items, as one is "having as many weekend days to hunt as possible" (58% rating it *extremely* or *very* important) and another is "having time for birds to rest without hunting pressure" (63%). Obviously, these two items conflict with one another.

Among resident webless migratory game bird hunters, "having access to hunting areas" is alone in the top tier of items, with 43% saying it is *extremely* important and 78% saying it is *extremely* or *very* important (Figure 5.2.2). The next tier has two that concern having plenty of time to hunt: 62% give a rating of *extremely* or *very* important to "having a full uninterrupted day to hunt," and 61% to "having as many weekend days to hunt as possible." Webless bird hunters show much less concern about having a day of rest for the birds, with 53% rating it *extremely* or *very* important (which compares to 63% giving those ratings regarding waterfowl).

Note that hunters who hunted both waterfowl and webless migratory game birds received both sets of questions and, therefore, were included in both sets of figures. These results among nonresident migratory game bird hunters and Northeast Region migratory game bird hunters are discussed following the graphs for resident hunters.

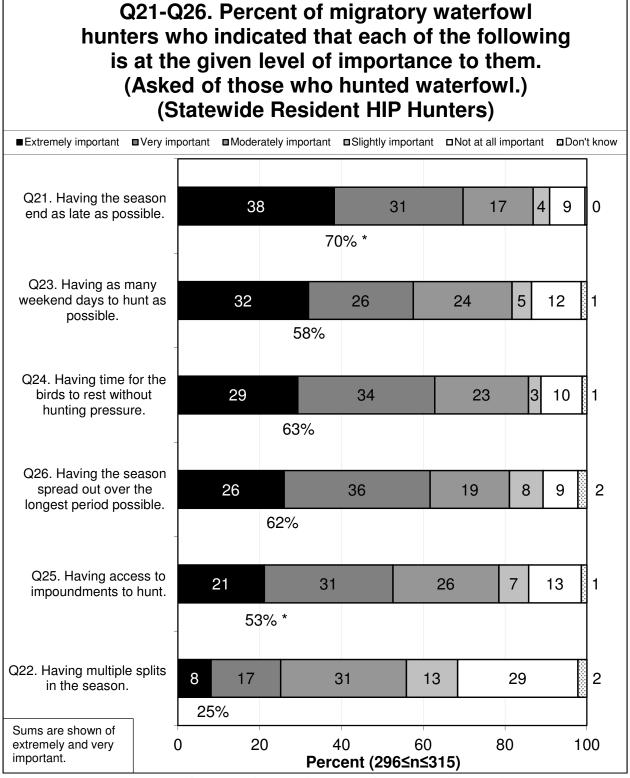


Figure 5.2.1. Importance of Factors in Hunting Experiences, Resident Migratory Waterfowl Hunters

<sup>\*</sup>Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.

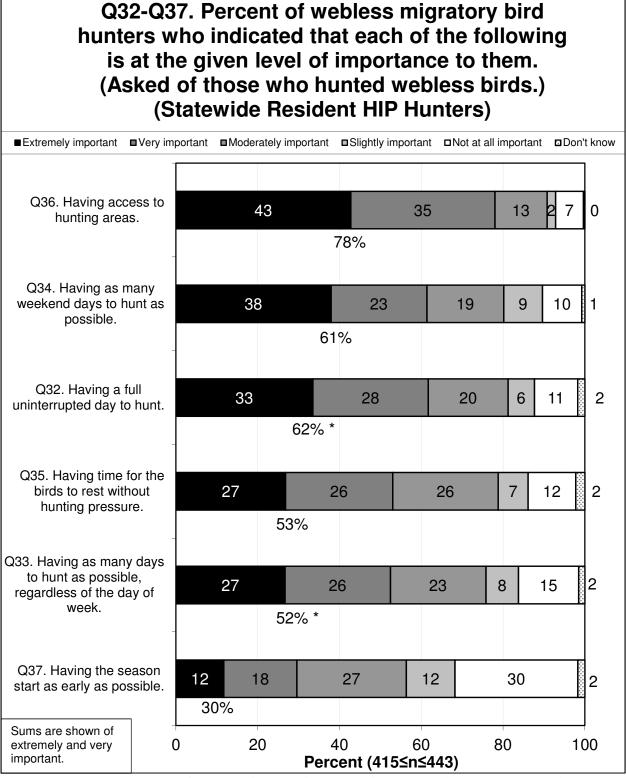


Figure 5.2.2. Importance of Factors in Hunting Experiences, Resident Webless Migratory Bird Hunters

<sup>\*</sup>Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.

Among nonresident migratory game bird hunters, the ratings of importance of various factors are somewhat different than the ratings among resident hunters. Figure 5.2.3 shows the results among nonresident waterfowl hunters. The top item, with half of nonresident waterfowl hunters saying it is *extremely* important and 70% saying *extremely* or *very* important, is "having as many weekend days to hunt as possible." Next in their ranking is "having the season end as late as possible."

Nonresident webless migratory game bird hunters' top items are having access to hunting areas and having as many weekend days to hunt as possible; on both of these, more than half rate it *extremely* important (Figure 5.2.4). Interestingly, nonresident webless bird hunters' results and residents' results have the same ranking, but nonresidents have a higher percentage saying *extremely* important to the top two items.

Finally, in this section is a look at Northeast Region hunters. Among this group who hunted waterfowl, the top items are "having the season end as late as possible" and "having time for the birds to rest without hunting pressure" (Figure 5.2.5). Compared to statewide resident hunters, Northeast Region waterfowl hunters place much less importance on "having as many weekend days to hunt as possible."

Among Northeast Region webless bird hunters, the items at the top are "having access to hunting area" and then "having time for the birds to rest without hunting pressure" (Figure 5.2.6). That second item in their ranking is seen as more important by Northeast Region webless bird hunters than among statewide webless bird hunters.

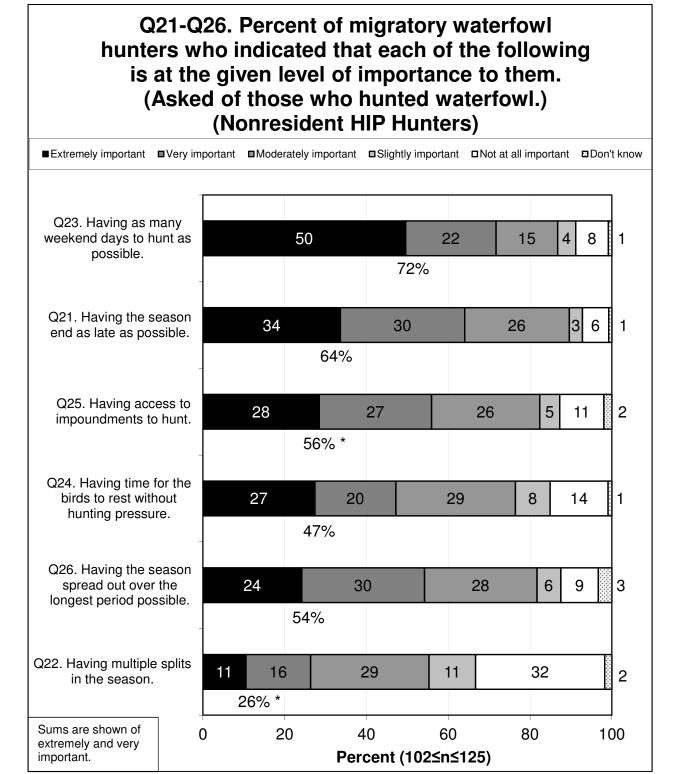
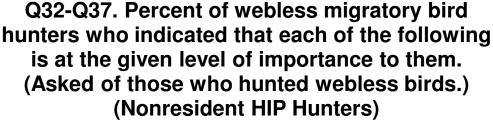


Figure 5.2.3. Importance of Factors in Hunting Experiences, Nonresident Migratory Waterfowl Hunters

<sup>\*</sup>Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.



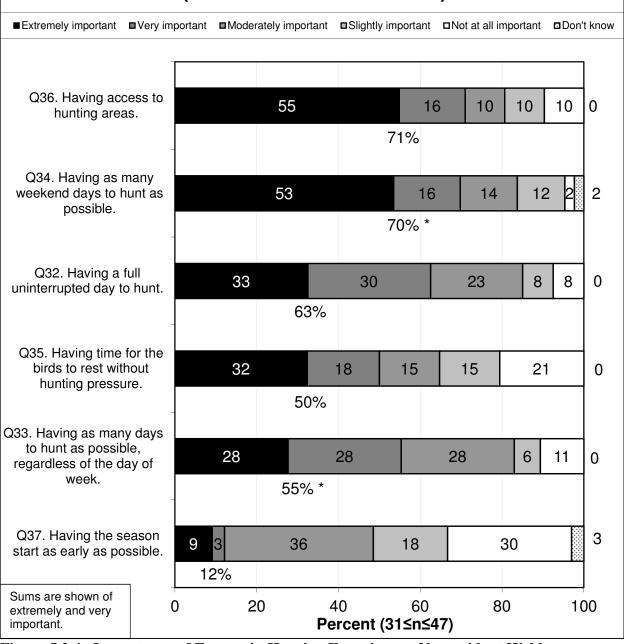


Figure 5.2.4. Importance of Factors in Hunting Experiences, Nonresident Webless Migratory Bird Hunters

<sup>\*</sup>Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.

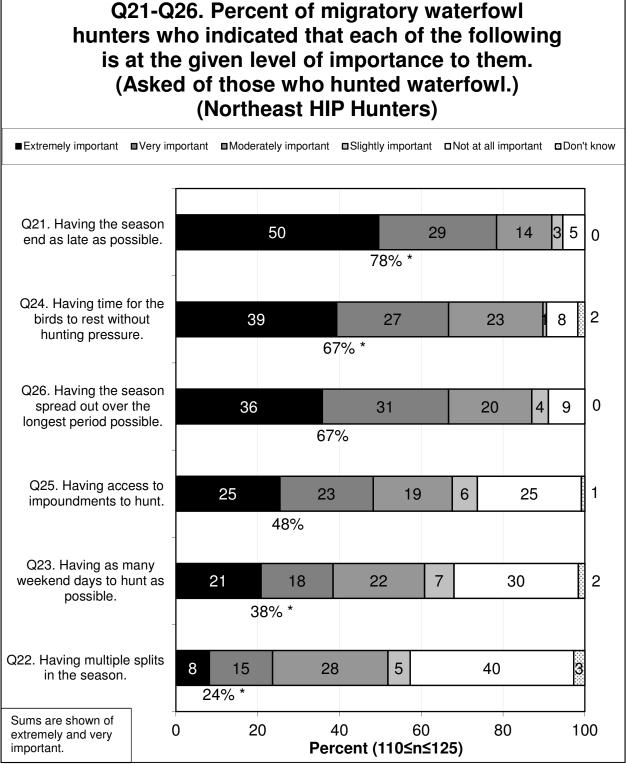
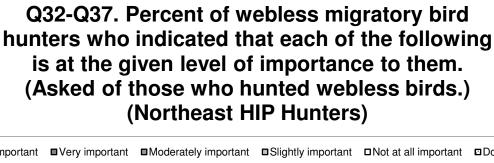


Figure 5.2.5. Importance of Factors in Hunting Experiences, Northeast Region Migratory Waterfowl Hunters

<sup>\*</sup>Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.



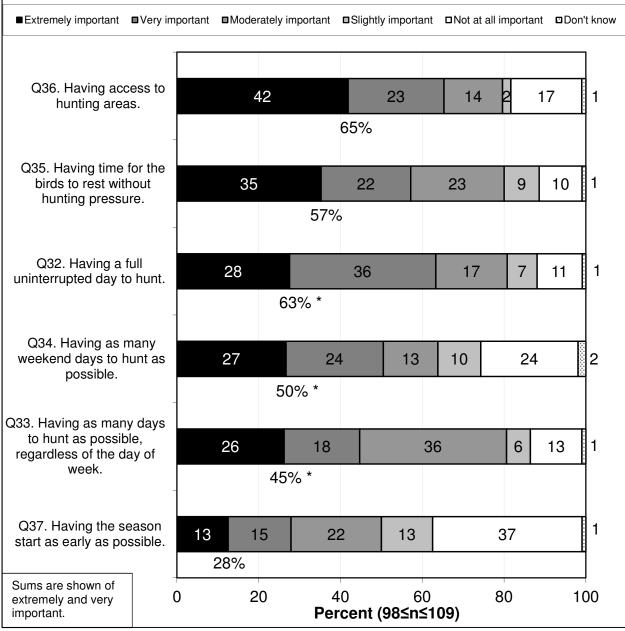


Figure 5.2.6. Importance of Factors in Hunting Experiences, Northeast Region Webless Migratory Bird Hunters

<sup>\*</sup>Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.

## 5.3. SUPPORT FOR OR OPPOSITION TO LEGALIZING SUNDAY HUNTING FOR MIGRATORY BIRDS

The survey asked about support for or opposition to legalizing Sunday hunting for migratory waterfowl and for webless migratory game birds, if hunters had the same number of hunting days. In the beginning of the survey, the questions were asked (the waterfowl question of waterfowl hunters; the webless question of webless migratory game bird hunters), and then the questions were asked again at the end of the survey (of all respondents) after the respondent had heard and considered many other questions about Sunday hunting. This second set of questions are referred to as informed opinion questions in that the respondent has been informed about the issues during the survey. All of the questions are examined among resident hunters before moving to the other samples.

The first results shown are from the initial round of questions among resident migratory game bird hunters. About two-thirds of resident waterfowl hunters (66%) (specifically, those who had hunted migratory waterfowl within the past 5 seasons) support legalizing hunting of migratory waterfowl on Sundays in North Carolina (Figure 5.3.1), and 60% of resident webless migratory game bird hunters support legalizing hunting of webless migratory birds on Sundays in North Carolina (Figure 5.3.2). Opposition stands at 29% and 31%, respectively.

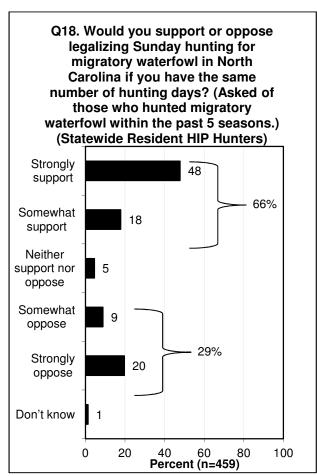


Figure 5.3.1. Initial Support for or Opposition to Sunday Hunting of Migratory Waterfowl, Resident Hunters

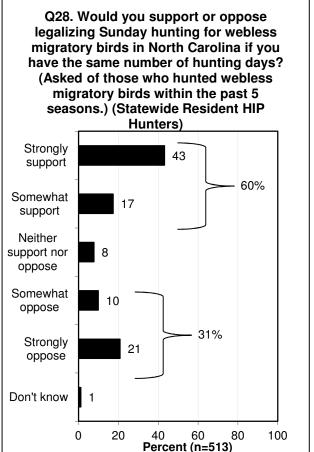


Figure 5.3.2. Initial Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, Resident Hunters

Near the end of the survey, informed opinion was assessed. The respondents had received questions up to that time about the topic, and they had been informed of the following:

House Bill 559 gives the Wildlife Resources Commission the authority to allow hunting for migratory game birds on Sundays. If Sunday hunting for migratory game birds is allowed, the following restrictions would apply:

Hunting with a firearm will be prohibited between 9:30 a.m. and 12:30 p.m.
Hunting deer with the use of dogs will be prohibited.
Hunting within 500 yards of a place of worship will be prohibited.
Sunday hunting for migratory game birds will be allowed only on public waters and private lands.

Hunting for migratory game birds on state game lands will be determined later on a case by case basis.

The actual dates of the migratory bird hunting season will still be decided by the Commission on an annual basis, with input from the public.

Compensatory days are currently provided to account for a full 60 days of waterfowl hunting. However, webless migratory bird hunters do not receive compensatory days for the Sundays that cannot be hunted. If Sunday hunting of migratory birds were legalized, compensatory days for waterfowl would no longer be provided.

After the above information was given to respondents, they were again asked if they supported or opposed legalizing Sunday hunting of migratory waterfowl (in one question) or migratory webless game birds (in the other question): 65% of resident waterfowl hunters are in support (Figure 5.3.3), and 62% of resident webless migratory game bird hunters are in support (Figure 5.3.4). Opposition stands at 27% and 32%, respectively.

Another way that these questions are analyzed is to look at the change from the pre-informed to the informed opinion among resident hunters. Figures 5.3.5 and 5.3.6 show that the change was negligible, going from 66% support to 65% support regarding waterfowl, and going from 60% to 62% support regarding webless birds. Opposition changes by no more than 2%, as well.

Table 5.3.1 shows a further analysis of change in opinion. The above compared the final percentages, but Table 5.3.1 shows the percentage who went from support to oppose and from oppose to support regarding waterfowl, in which 7.7% changed opinion, but most of whom cancelled each other out because 4.2% went from support to oppose, while 3.5% went from oppose to support. Similarly, regarding webless birds, 7.3% changed in total, but 3.2% went from support to oppose, while 4.1% went from oppose to support.

Table 5.3.1. Change in Support for or Opposition to Sunday Hunting, Resident Hunters

	Waterfowl		Webless			
	Percent Change	Total Percent Who Changed	Net Change	Percent Change	Total Percent Who Changed	Net Change
Support to Oppose	4.2	7.7	0.7	3.2	7.2	0.9
Oppose to Support	3.5	1.1	0.7	4.1	1.3	0.9

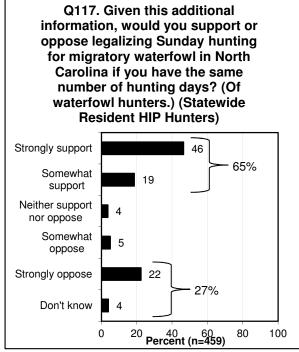


Figure 5.3.3. Informed Support for or Opposition to Sunday Hunting of Migratory Waterfowl, Resident Hunters

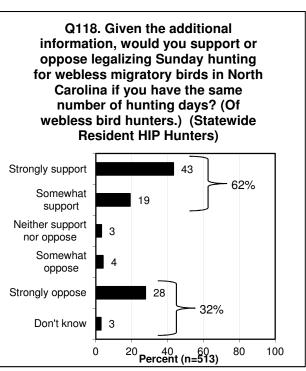


Figure 5.3.4. Informed Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, Resident Hunters

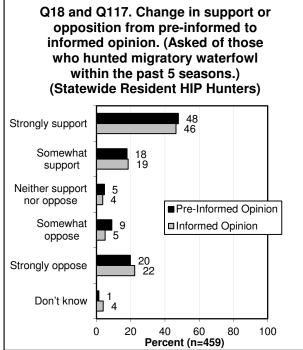


Figure 5.3.5. Change in Support for or Opposition to Sunday Hunting of Migratory Waterfowl, Resident Hunters

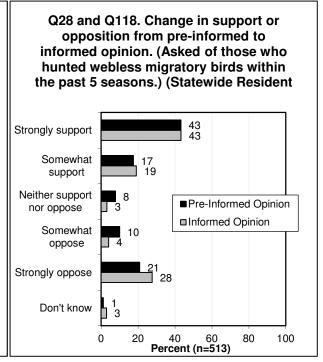


Figure 5.3.6. Change in Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, Resident Hunters

Another question regarding support for or opposition to legalizing Sunday hunting was directed to webless migratory game bird hunters, gauging their pre-informed opinion, coming at the beginning of the survey. It asked if webless bird hunters would be in support or opposition *if they had more hunting days*. Among resident hunters, 62% are in support, while 27% oppose (Figure 5.3.7). Note that this is not greatly different with the caveat of having the *same* number of days (the question previously asked in which 60% supported and 31% opposed—see Figure 5.3.2).

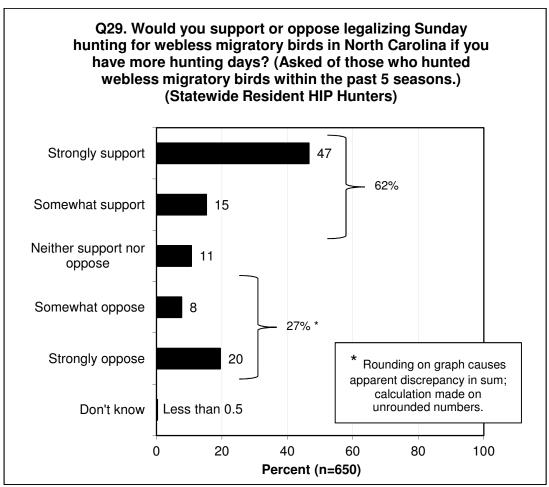


Figure 5.3.7. Support for or Opposition to Sunday Hunting of Webless Migratory Game Birds if More Days Were Available to Hunt, Resident Hunters

A summary of the results among resident hunters is shown in Table 5.3.2.

Table 5.3.2. Summary of Support for/Opposition to Sunday Hunting of Migratory Game Birds, Resident Hunters

	Regarding Waterfowl		Regarding Webless	
	% Support	% Oppose	% Support	% Oppose
Pre-informed, same days	66	29	60	31
Informed, same days	65	27	62	32
Pre-informed with more days	NA	NA	62	27

The previous results in this section were of *resident* migratory game bird hunters. The results of all of these questions are now shown among *nonresident* migratory game bird hunters. Because the way that the questions were asked and the order in which they were asked have been detailed above, a look at nonresident migratory game bird hunters' views starts with the summary table, followed by the pertinent graphs that make up the summary.

Nonresident migratory game bird hunters generally are in support on the various questions (Table 5.3.3). Figures 5.3.8 through 5.3.14 show the graphs among nonresident hunters.

Table 5.3.3. Summary of Support for/Opposition to Sunday Hunting of Migratory Game Birds, Nonresident Hunters

	Regarding Waterfowl		Regarding Webless	
	% Support	% Oppose	% Support	% Oppose
Pre-informed, same days	82	13	79	12
Informed, same days	76	18	79	11
Pre-informed with more days	NA	NA	75	14

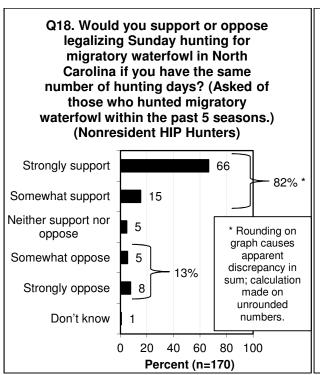


Figure 5.3.8. Initial Support for or Opposition to Sunday Hunting of Migratory Waterfowl, Nonresident Hunters

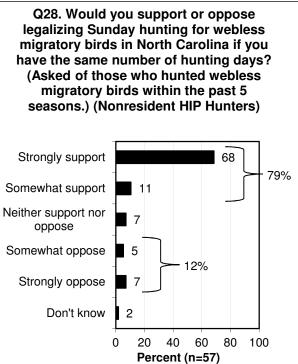


Figure 5.3.9. Initial Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, Nonresident Hunters

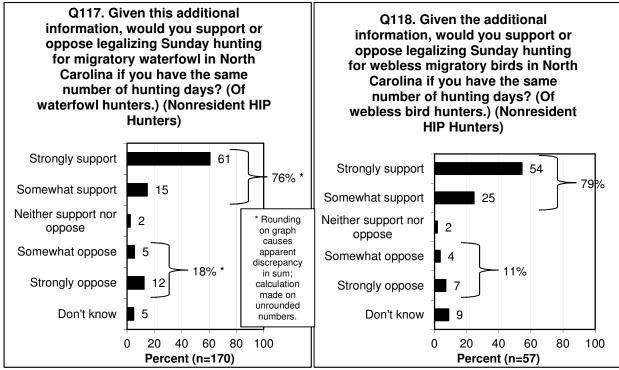


Figure 5.3.10. Informed Support for or Opposition to Sunday Hunting of Migratory Waterfowl, Nonresident Hunters

Figure 5.3.11. Informed Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, Nonresident Hunters

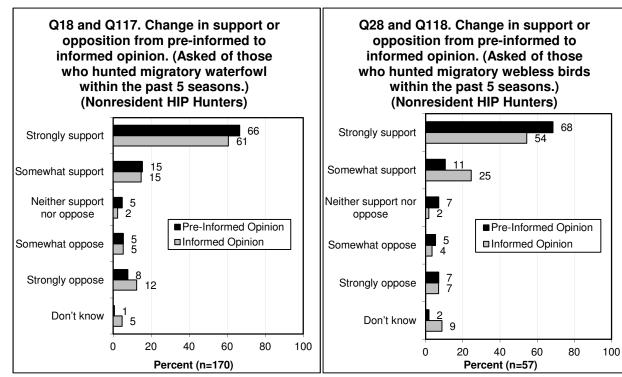


Figure 5.3.12. Change in Support for or Opposition to Sunday Hunting of Migratory Waterfowl, Nonresident Hunters

Figure 5.3.13. Change in Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, Nonresident Hunters

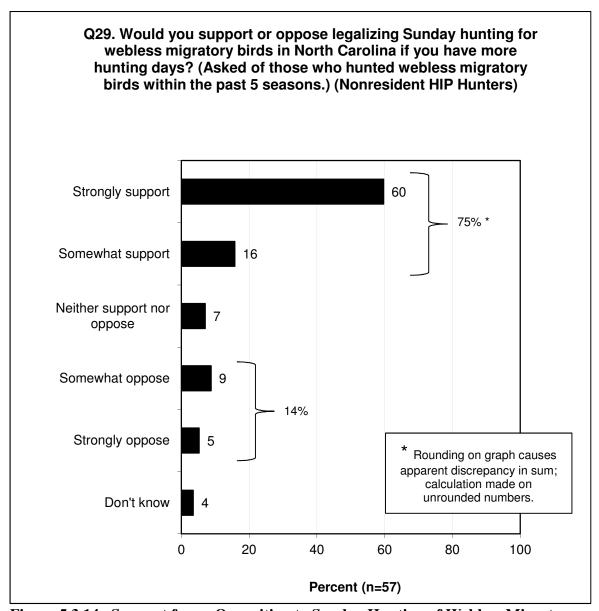


Figure 5.3.14. Support for or Opposition to Sunday Hunting of Webless Migratory Game Birds if More Days Were Available to Hunt, Nonresident Hunters

Finally in this section, the report looks at migratory game bird hunters from the *Northeast Region*. Compared to the other samples, they are more evenly split on the issue, with substantial percentages in support and in opposition. Table 5.3.4 shows the summary among the Northeast Region hunters, and Figures 5.3.15 through 5.3.21 show the graphs of these results.

Table 5.3.4. Summary of Support for/Opposition to Sunday Hunting of Migratory Game Birds, Northeast Region Hunters

	Regarding Waterfowl		Regarding Webless	
	% Support	% Oppose	% Support	% Oppose
Pre-informed, same days	46	49	53	42
Informed, same days	41	52	49	46
Pre-informed with more days	NA	NA	56	39

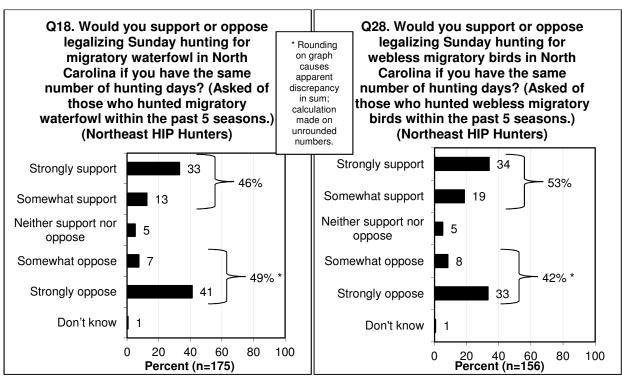


Figure 5.3.15. Initial Support for or Opposition to Sunday Hunting of Migratory Waterfowl, NE Region Hunters

Figure 5.3.16. Initial Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, NE Region Hunters

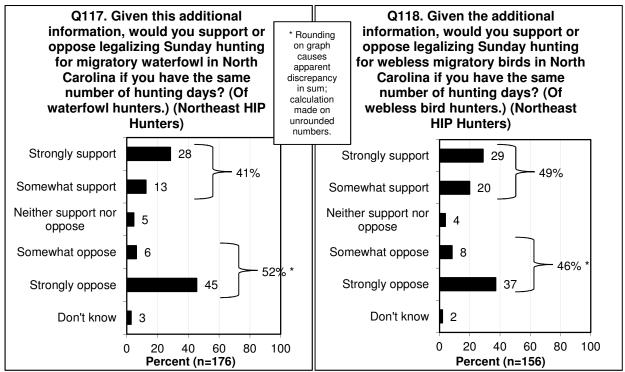


Figure 5.3.17. Informed Support for or Opposition to Sunday Hunting of Migratory Waterfowl, NE Region Hunters

Figure 5.3.18. Informed Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, NE Region Hunters

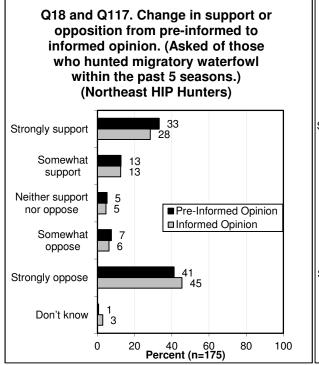


Figure 5.3.19. Change in Support for or Opposition to Sunday Hunting of Migratory Waterfowl, NE Region Hunters

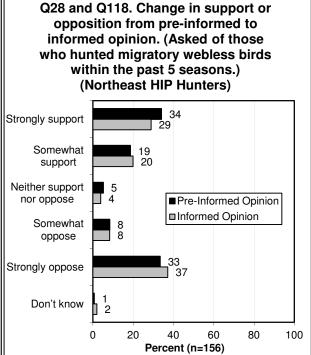


Figure 5.3.20. Change in Support for or Opposition to Sunday Hunting of Migratory Webless Game Birds, NE Region Hunters

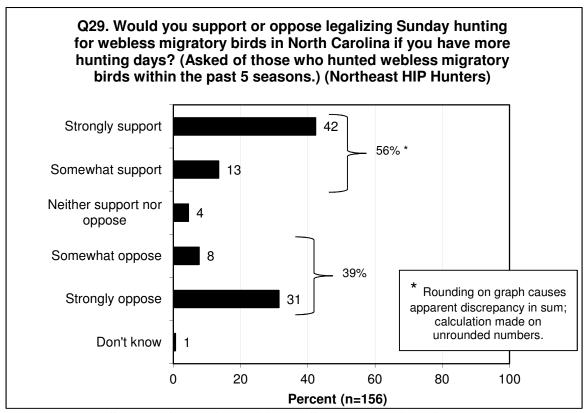


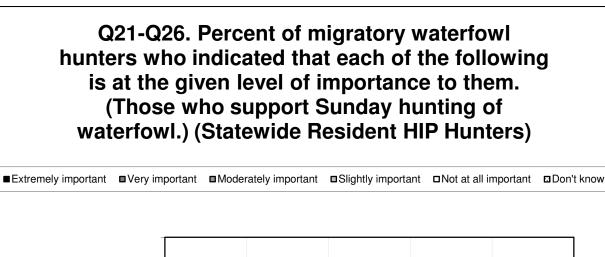
Figure 5.3.21. Support for or Opposition to Sunday Hunting of Webless Migratory Game Birds if More Days Were Available to Hunt, NE Region Hunters

Figure 5.3.22 shows how resident migratory game bird hunters who support hunting of migratory waterfowl responded to the series of questions about importance of various aspects of hunting. For those resident hunters who support, having as many weekend days to hunt as possible and having the season end as late as possible are their top concerns.

Contrast this to resident waterfowl hunters who oppose Sunday hunting of waterfowl. Their top two items—by far the most important to them—are having the season end as late as possible and having time for the birds to rest without hunting pressure (Figure 5.3.23).

Regarding resident webless bird hunters, their top concerns are having as many weekend days to hunt as possible, having access to hunting areas, and having a full uninterrupted day to hunt—all three having at least 41% rating it *extremely* important and at least 69% saying *extremely* or *very* important (Figure 5.3.24).

Finally in this analysis, resident webless migratory bird hunters who oppose the Sunday hunting of migratory webless birds are examined. Their top concern is having access to hunting areas (42% giving a rating of *extremely* important, and 82% rating it *extremely* or *very* important) (Figure 5.3.25). Two more concerns were lower down in the level of concern: having time for the birds to rest without hunting pressure, and having a full uninterrupted day to hunt.



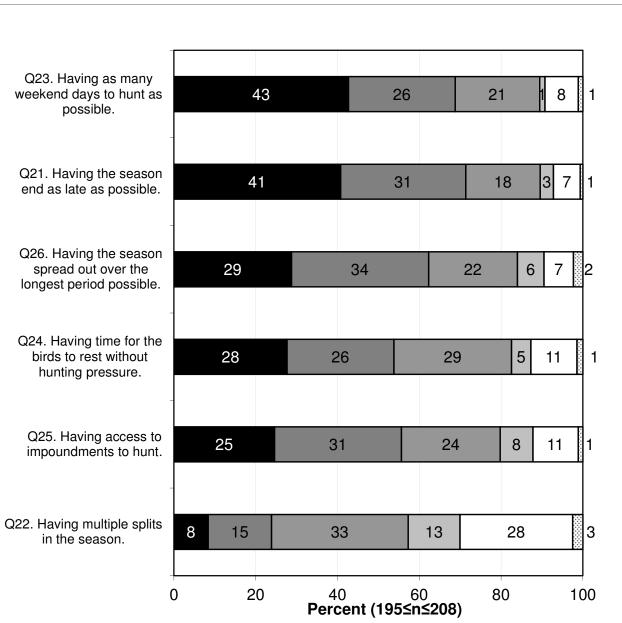


Figure 5.3.22. Importance of Factors in Hunting Experiences, Resident Migratory Waterfowl Hunters Who Support Sunday Hunting of Waterfowl

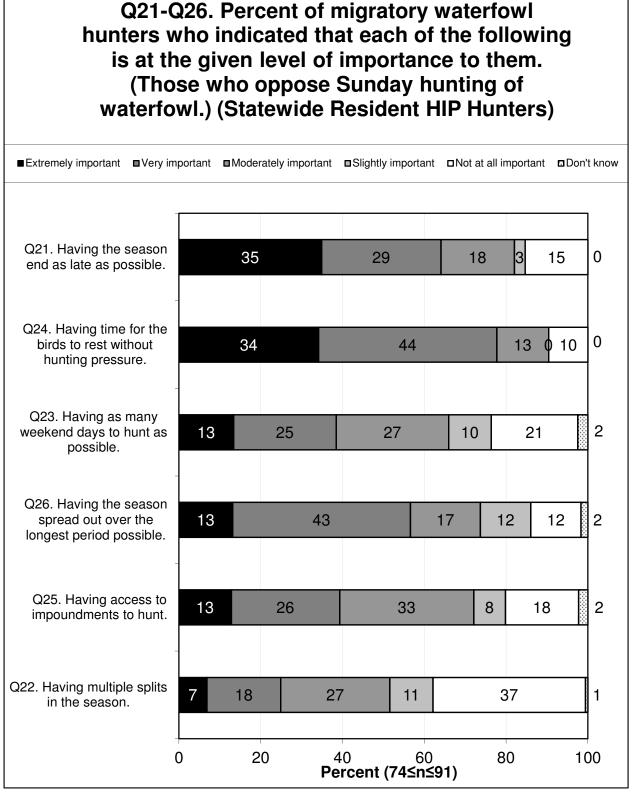


Figure 5.3.23. Importance of Factors in Hunting Experiences, Resident Migratory Waterfowl Hunters Who Oppose Sunday Hunting of Waterfowl

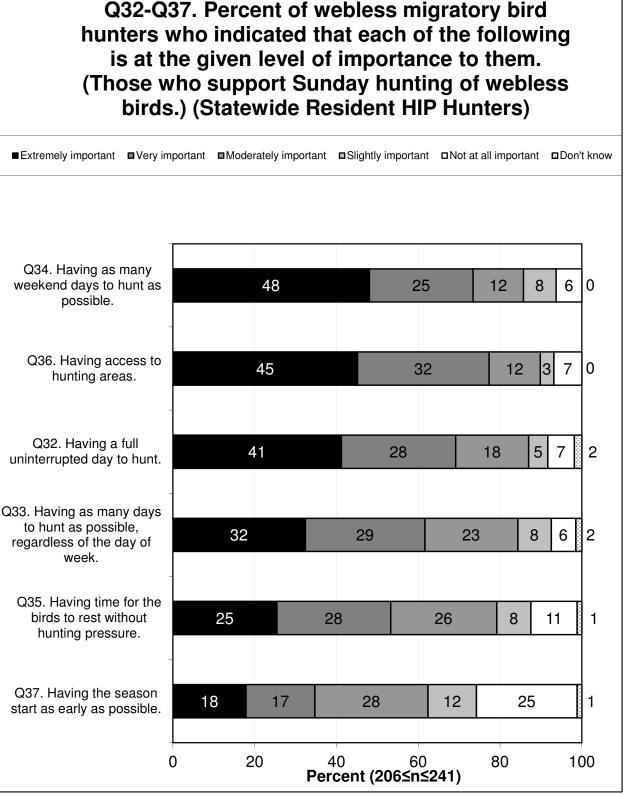


Figure 5.3.24. Importance of Factors in Hunting Experiences, Resident Webless Migratory Bird Hunters Who Support Sunday Hunting of Webless Birds

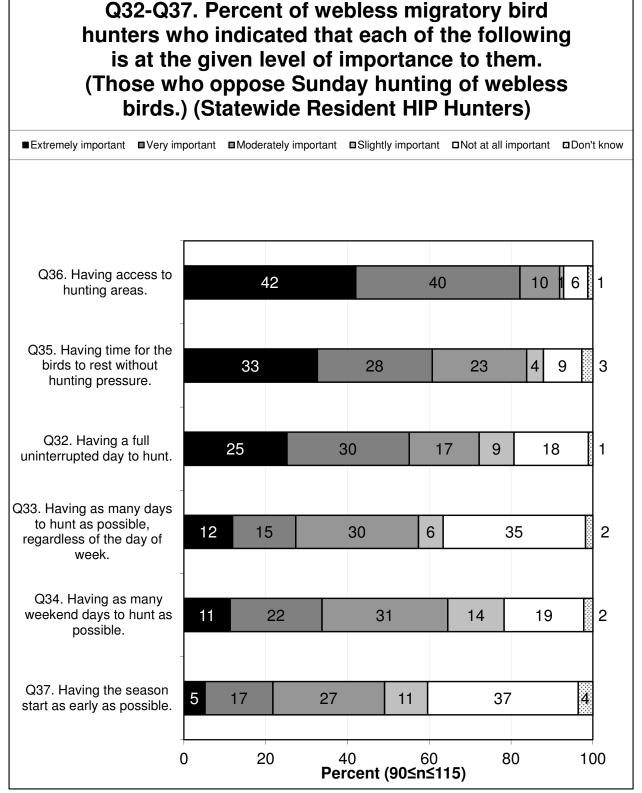


Figure 5.3.25. Importance of Factors in Hunting Experiences, Resident Webless Migratory Bird Hunters Who Oppose Sunday Hunting of Webless Birds

Also examined were the characteristics of those who support and those who oppose. Figures 5.3.26 and 5.3.27 show the characteristics of those who support Sunday hunting of migratory waterfowl. On these graphs, the overall percentage of resident migratory game bird hunters who support Sunday hunting of waterfowl (in the informed-opinion question) is shown by the patterned bar. All the groups above the patterned bar have a higher rate of support, and all groups below the patterned bar have a lower rate of support. All of the black bars are from the statewide resident HIP hunter sample (the two gray bars will be discussed shortly).

For instance, 74.8% of resident hunters who live in the Raleigh Region support Sunday hunting of waterfowl, which is considerably higher than resident hunters overall (65.0% of whom support). Additionally, resident hunters who are 18 to 34 years old support at a higher rate (73.2%) than do resident hunters overall. Rounding out the groups of resident hunters that are markedly higher in support than resident hunters overall are those who reside in the Winston-Salem Region (71.3%). On the other hand, some resident hunter groups have a markedly lower rate of support: female resident hunters (29.5% support), Washington Region resident hunters (51.0%), and resident hunters 55 years old or older (57.4%).

As stated above, all of the black bars are *resident* hunters with the given characteristic. Along with the resident data on this graph, gray bars are included: the overall percentage of nonresident migratory game bird hunters who support is shown (75.3%) in gray, as is the overall percentage of Northeast Region migratory game bird hunters who support (40.9%).

Because so many characteristics were examined in this analysis, two graphs are necessary of those resident hunters who support Sunday hunting of waterfowl. Likewise, two graphs are included of those who oppose Sunday hunting of waterfowl (Figures 5.3.28 and 5.3.29).

Webless migratory bird hunters' opinions were also examined in a like manner, with two graphs showing those who support Sunday hunting of webless migratory birds (Figures 5.3.30 and 5.3.31) and two graphs of those who oppose (Figures 5.3.32 and 5.3.33).

To interpret these graphs, simply keep in mind that the patterned bar shows the results among resident hunters overall, the groups above the patterned bar have a higher rate (of support in the graph showing support, of opposition in the graphs showing opposition), and the groups below the patterned bar have a lower rate.

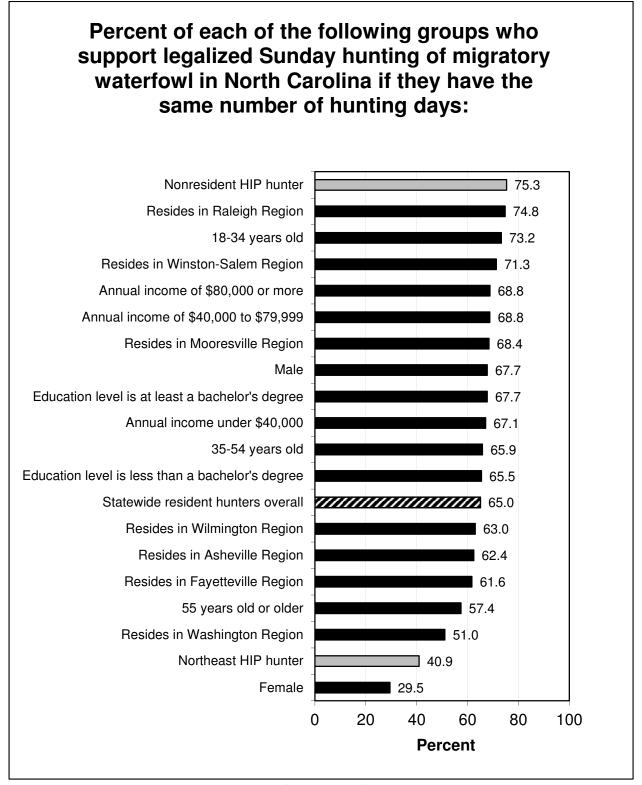


Figure 5.3.26. Percentage of Groups in Support of Sunday Hunting of Waterfowl, Part 1

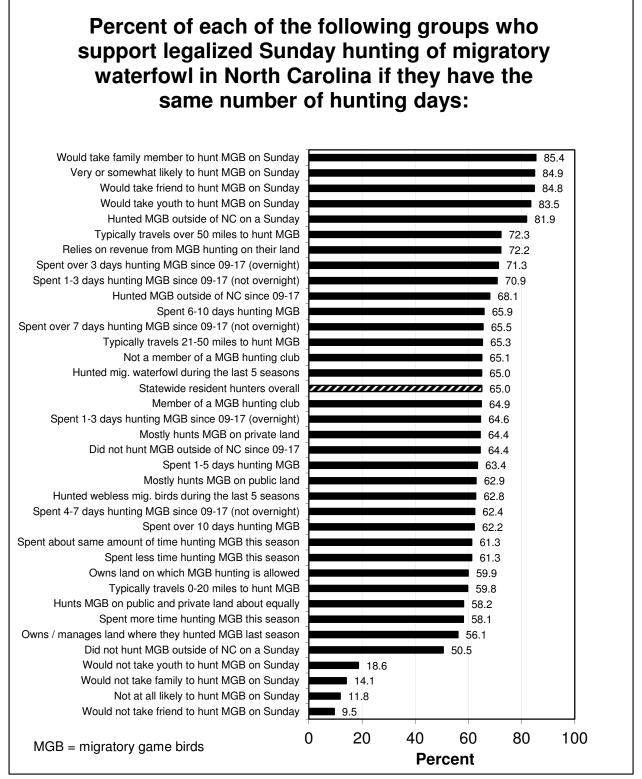


Figure 5.3.27. Percentage of Groups in Support of Sunday Hunting of Waterfowl, Part 2

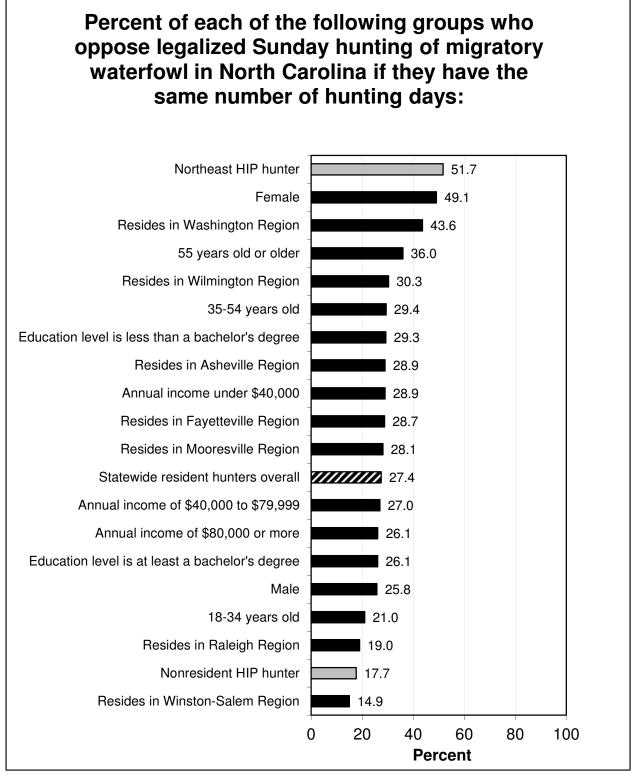


Figure 5.3.28. Percentage of Groups in Opposition of Sunday Hunting of Waterfowl, Part 1

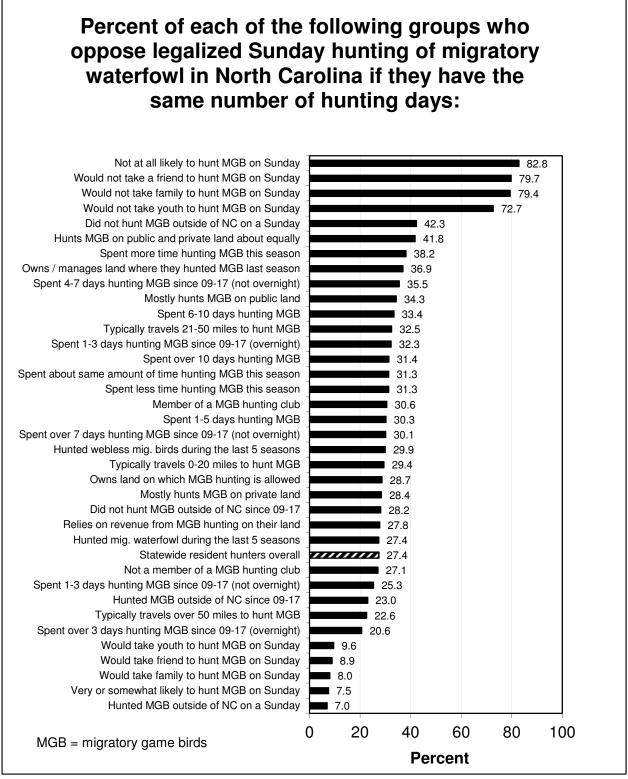


Figure 5.3.29. Percentage of Groups in Opposition of Sunday Hunting of Waterfowl, Part 2

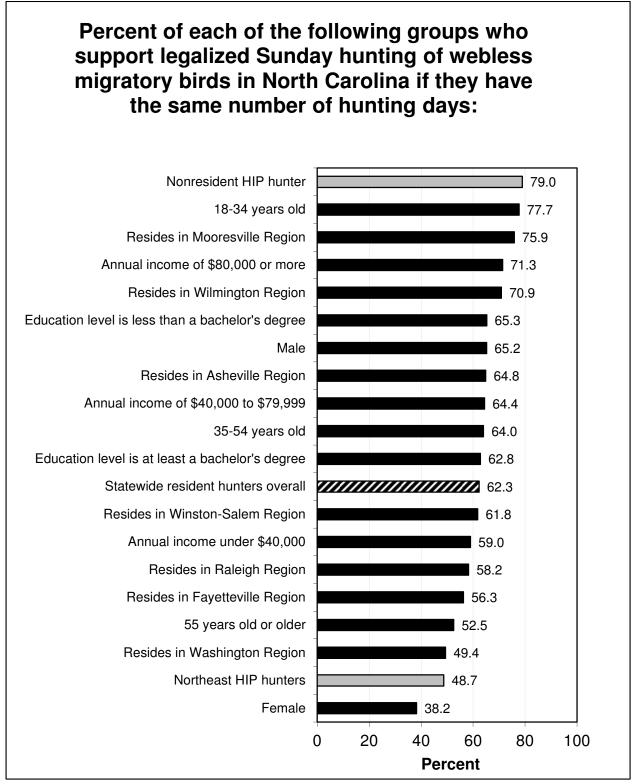


Figure 5.3.30. Percentage of Groups in Support of Sunday Hunting of Webless Birds, Part 1

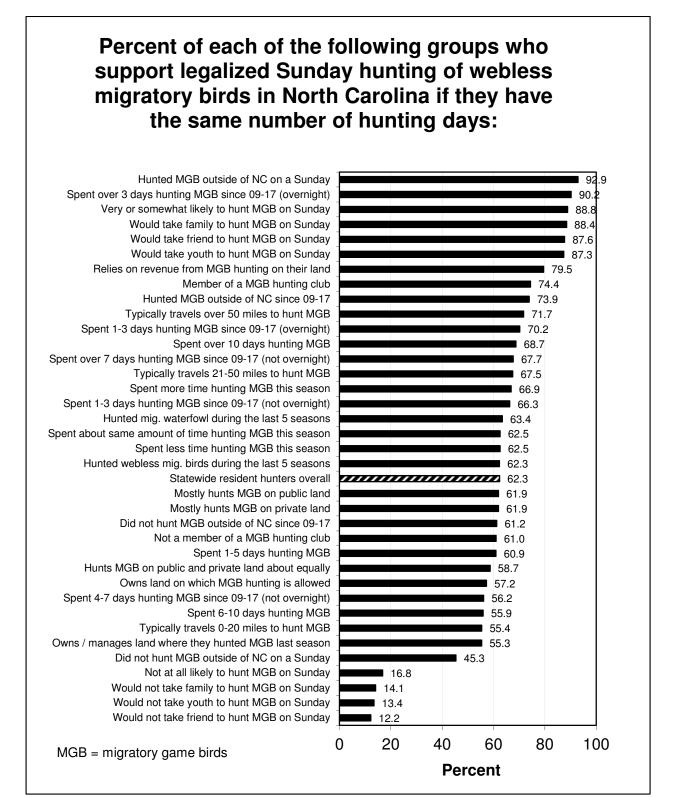


Figure 5.3.31. Percentage of Groups in Support of Sunday Hunting of Webless Birds, Part 2

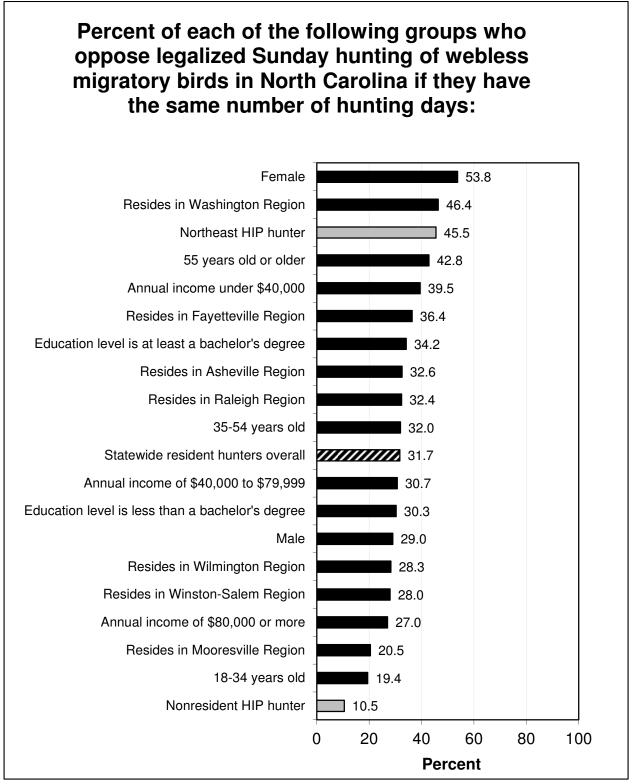


Figure 5.3.32. Percentage of Groups in Opposition of Sunday Hunting of Webless Birds, Part 1

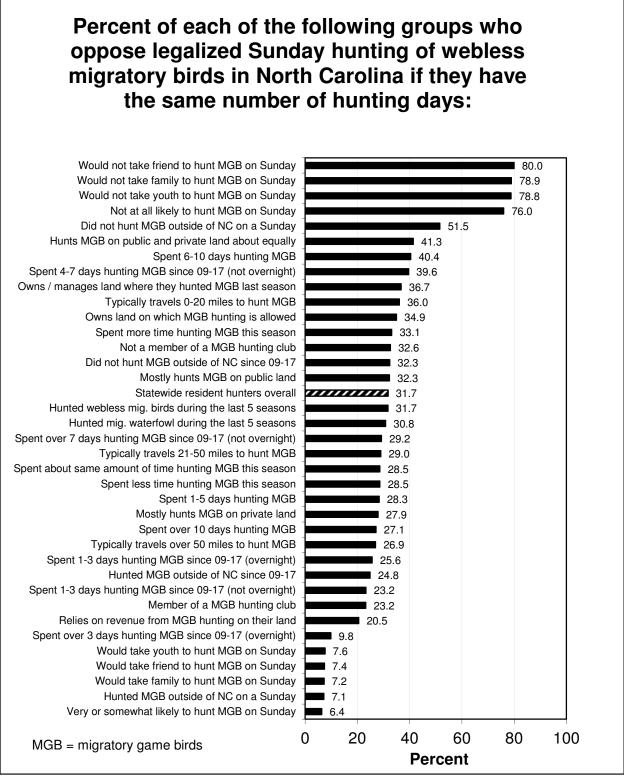


Figure 5.3.33. Percentage of Groups in Opposition of Sunday Hunting of Webless Birds, Part 2

## 5.4. OPINIONS ON ASPECTS OF SUNDAY HUNTING

The survey asked webless migratory game bird hunters to choose one of two options, shown below.

First option: being able to hunt on Sundays before 9:30 a.m. and after 12:30 p.m. Second option: not being able to hunt on Sundays, but receiving days to compensate for the lost Sundays.

As Figure 5.4.1 shows, resident webless bird hunters are nearly evenly split, with 47% choosing the first option and 48% choosing the second option. Among nonresident webless bird hunters, the first option is the majority choice (Figure 5.4.2). Finally, among Northeast Region webless bird hunters, the second option has the majority favoring it (Figure 5.4.3).

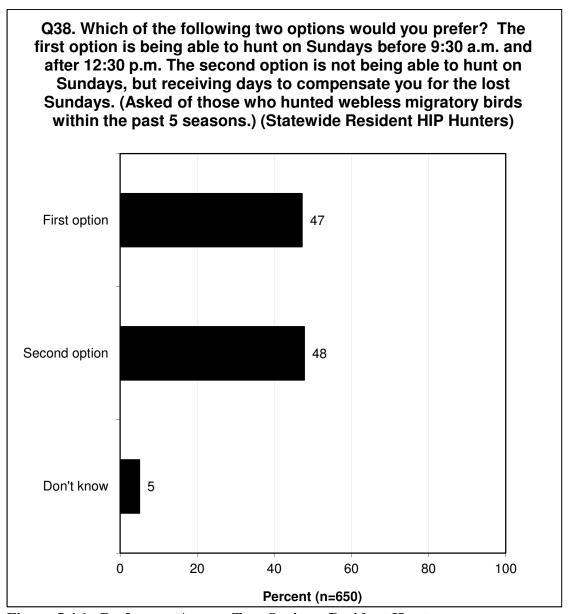


Figure 5.4.1. Preference Among Two Options, Resident Hunters

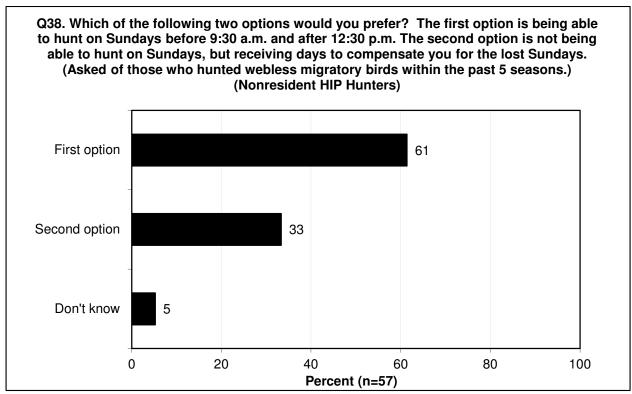


Figure 5.4.2. Preference Among Two Options, Nonresident Hunters

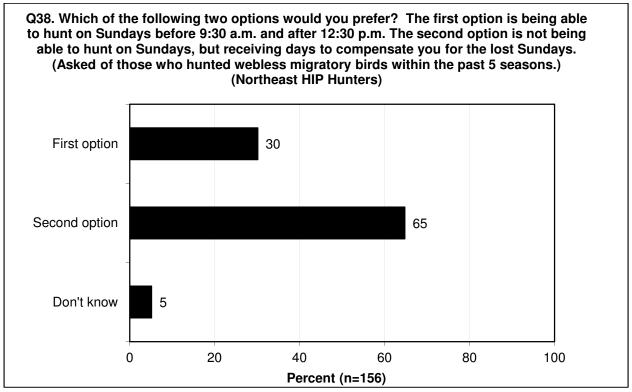


Figure 5.4.3. Preference Among Two Options, Northeast Region Hunters

The survey then presented eight statements to all respondents, for each statement asking respondents to say whether they agreed or disagreed with it. Some of the statements are reasons to allow Sunday hunting, and some are reasons to keep the ban on Sunday hunting. This series of questions shows the agreement or disagreement regarding various reasons to allow or ban Sunday hunting; green is used for agree, and red is used for disagree, and the darker hues are used for the *strongly* responses. In both the tables and the graphs, results are ranked by the percentage who *strongly* agreed.

Among resident hunters, their highest priorities are on three items, all with at least 46% *strongly* agreeing and at least 70% *strongly* or *moderately* agreeing (Table 5.4.1 and Figure 5.4.4). At the top is that to hunt on Sunday should be a *personal*, *not governmental decision*. This is closely followed by that the ban *harms those who must work the other six days* and that allowing Sunday hunting would *increase youth participation*. The next tier has one item; it relates to *economic benefits*.

The results suggest that *possible harm to migratory game bird populations* and that *birds need a day of rest* are not well received as reasons to ban Sunday hunting. These items have relatively large percentages disagreeing, meaning that large percentages are in favor of allowing Sunday hunting in those cases.

The most equivocating is regarding *allowing other recreationists a day* without hunting and the item concerned with *migratory game bird management*.

**Table 5.4.1.** Agreement or Disagreement on Allowing or Banning Sunday Hunting, Resident Hunters

	Percent	Percent
	Wanting To	Wanting To
	Allow Sunday	Ban Sunday
	Hunting	Hunting
Q65. Personal not govt. decision (agree=allow)	72	22
Q68. Limits opps. for those working other days (agree=allow)	70	25
Q63. Increase youth hunting (agree=allow)	70	23
Q64. Economic benefits (agree=allow)	60	30
Q61. Other recreationists given a day (agree=ban)	56	39
Q62. Help manage migratory game birds (agree=allow)	44	45
Q67. Birds need day of rest (agree=ban)	66	29
Q66. Possible harm to bird populations (agree=ban)	77	15

## Q61-Q68. Percent of migratory bird hunters who [agree / disagree] with each of the following statements. (Statewide Resident HIP Hunters)

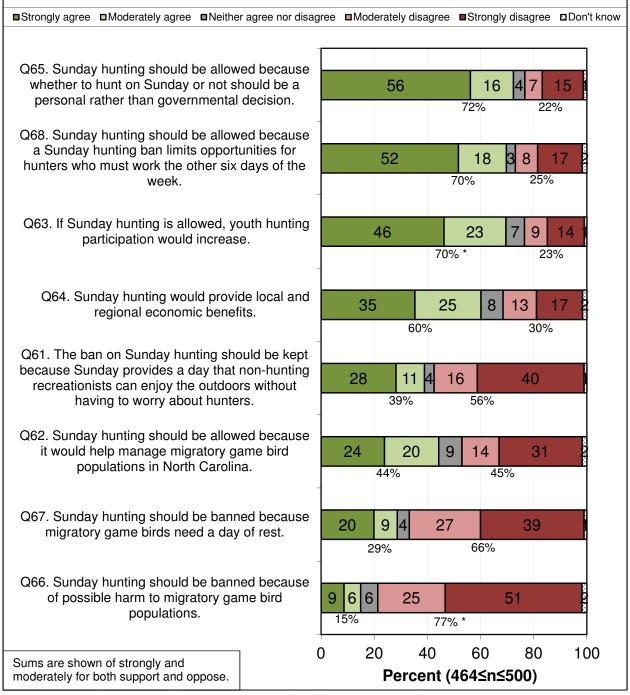


Figure 5.4.4. Agreement/Disagreement With Statements, Resident Hunters

<sup>\*</sup>Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.

Among nonresident hunters, their highest priorities are on four items, all with a majority *strongly* agreeing and at least 70% *strongly* or *moderately* agreeing (Table 5.4.2 and Figure 5.4.5). The top items are that to hunt on Sunday should be a *personal*, *not governmental decision*, followed by that the ban *harms those who must work the other six days*, that allowing Sunday hunting would *increase youth participation*, and the *economic benefits*.

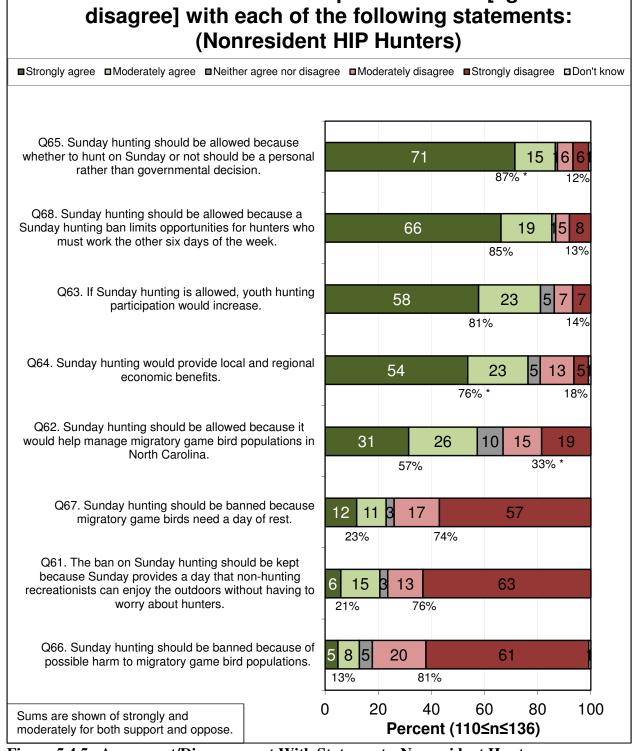
Meanwhile, *possible harm to migratory game bird populations*, that *birds need a day of rest*, and that *other recreationists need a day* are not well received as reasons to ban Sunday hunting. These items have relatively large percentages disagreeing, meaning that large percentages are in favor of allowing Sunday hunting in those cases.

The most equivocating is the item concerned with *migratory game bird management*.

Table 5.4.2. Opinion on Allowing or Banning Sunday Hunting, Nonresident Hunters

	Percent	Percent
	Wanting To	Wanting To
	Allow Sunday	Ban Sunday
	Hunting	Hunting
Q65. Personal not govt. decision (agree=allow)	87	12
Q68. Limits opps. for those working other days (agree=allow)	85	13
Q63. Increase youth hunting (agree=allow)	81	14
Q64. Economic benefits (agree=allow)	76	18
Q62. Help manage migratory game birds (agree=allow)	57	33
Q67. Birds need day of rest (agree=ban)	74	23
Q61. Other recreationists given a day (agree=ban)	76	21
Q66. Possible harm to bird populations (agree=ban)	81	13

Q61-Q68. Percent of respondents who [agree /



**Figure 5.4.5. Agreement/Disagreement With Statements, Nonresident Hunters**\*Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on

\*Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.

All across the board, Northeast Region hunters are split on the issues (Table 5.4.3 and Figure 5.4.6). They respond the most strongly to increasing youth hunting participation as a reason to allow Sunday hunting.

Table 5.4.3. Opinion on Allowing or Banning Sunday Hunting, Northeast Region Hunters

		9 0	0/	0
			Percent	Percent
			Wanting To	Wanting To
			Allow Sunday	Ban Sunday
			Hunting	Hunting
Q65. Personal n	ot govt. decision (agree=allow)		60	35
Q63. Increase ye	outh hunting (agree=allow)		63	29
Q67. Birds need	l day of rest (agree=ban)		45	51
Q64. Economic	benefits (agree=allow)		60	37
Q68. Limits opp	os. for those working other days	(agree=allow)	53	45
Q66. Possible ha	arm to bird populations (agree=	ban)	61	34
Q61. Other recre	eationists given a day (agree=ba	ın)	45	48
Q62. Help mana	nge migratory game birds (agree	=allow)	26	66

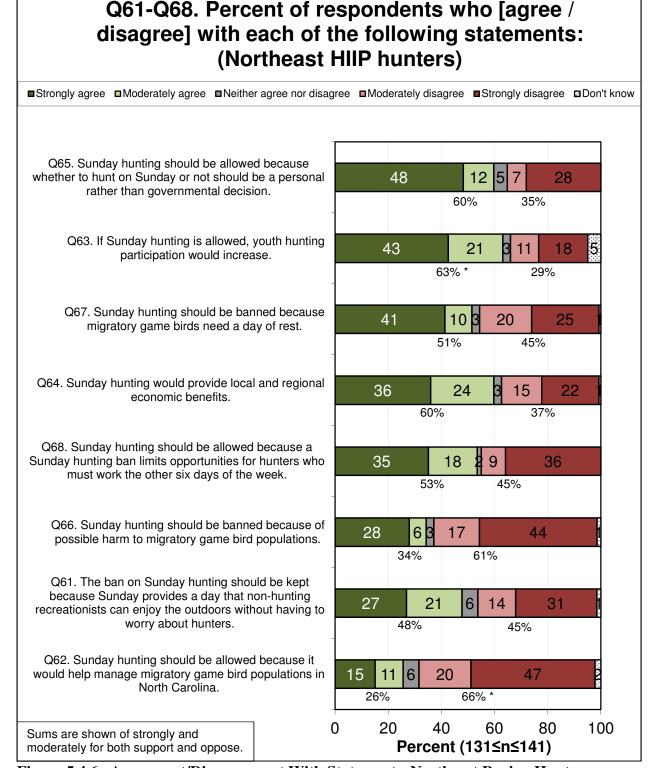


Figure 5.4.6. Agreement/Disagreement With Statements, Northeast Region Hunters \*Rounding on the graph to the integer causes the apparent discrepancy in the sum; the sum was calculated on unrounded numbers.

## 5.5. LIKELIHOOD TO HUNT ON SUNDAYS AND POTENTIAL INCREASED DAYS OF HUNTING ACTIVITY

A bit more than a third of resident migratory game bird hunters (39%) indicate being *very* likely to hunt migratory game birds on Sunday in North Carolina, if it is made legal to do so (Figure 5.5.1). In all, 68% indicate some likelihood, although prudent planning might count on only those who said that they would be *very* likely.

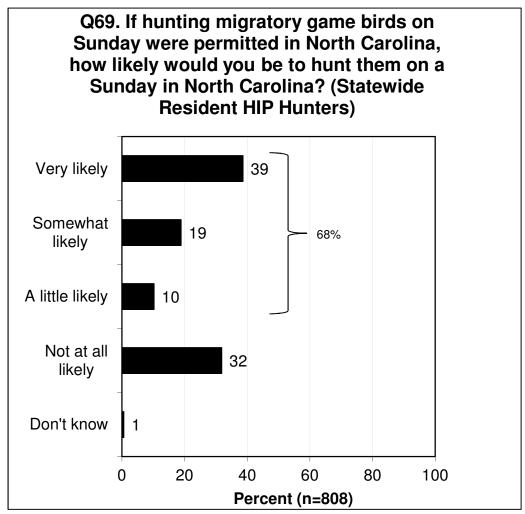


Figure 5.5.1. Likelihood to Hunt Migratory Game Birds on Sundays, Resident Hunters

Likewise, among nonresidents, 60% indicate being *very* likely to hunt migratory game birds on Sunday in North Carolina, if it is made legal to do so, and 87% indicate some likelihood (Figure 5.5.2). Meanwhile, among Northeast Region hunters, 35% indicate being *very* likely to hunt migratory game birds on Sunday in North Carolina, if it is made legal to do so, and 63% indicate some likelihood (Figure 5.5.3).

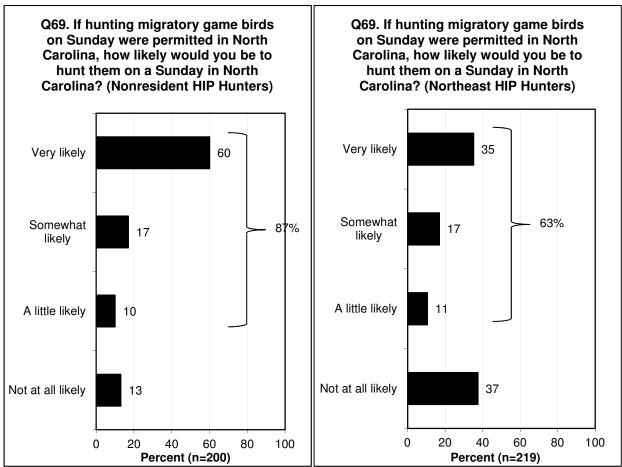


Figure 5.5.2. Likelihood to Hunt Migratory Game Birds on Sundays, Nonresident Hunters

Figure 5.5.3. Likelihood to Hunt Migratory Game Birds on Sundays, Northeast Region Hunters

In a way to assess whether hunters would be likely to increase their hunting activity if Sunday hunting were allowed, the survey asked if they would hunt more days if it were allowed, and, if so, approximately how many more days. The first question along this line asked about more or fewer days overall: 34% of resident migratory game bird hunters say that they would hunt more days if Sunday hunting were allowed (Figure 5.5.4). Most commonly, they say that they would hunt about the same number of days (63%), with only 2% saying that they would hunt fewer.

Hunters were then asked to think in terms of hunting that involved day trips and hunting that involved overnight stays. Nearly a third of all resident migratory game bird hunters (32%) indicate that they would hunt more days that were day trips (i.e., did *not* involve an overnight stay) (Figure 5.5.5), and about a fifth of resident hunters (21%) would hunt more days involving an overnight stay (Figure 5.5.6).

Follow-up questions, which were asked those who said that they would hunt more days, had hunters estimate how many more days that they would hunt involving day trips and involving overnight stays, as shown for resident migratory game bird hunters in Figures 5.5.7 and 5.5.8.

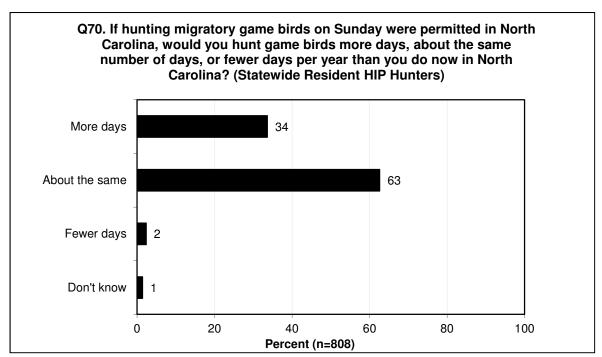


Figure 5.5.4. Hunting More Days if Sunday Hunting Were Allowed, Resident Hunters

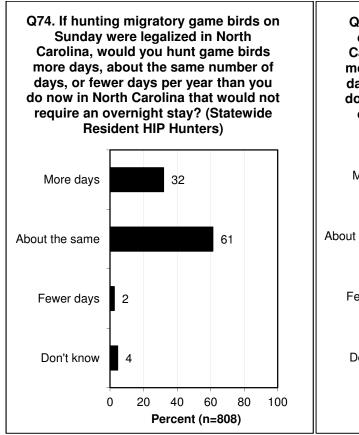


Figure 5.5.5. More Day Trip Days, Among Resident Hunters

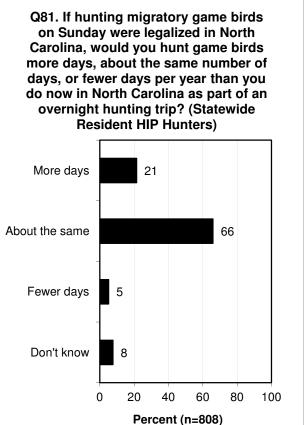


Figure 5.5.6. More Overnight Stays, Among Resident Hunters

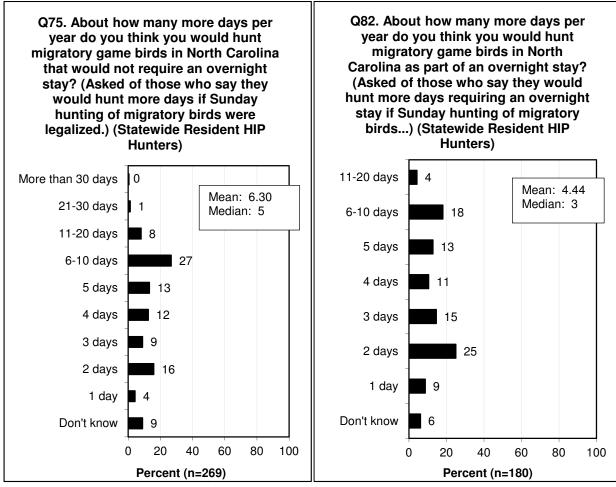


Figure 5.5.7. Additional Days for Day Trips Among Resident Hunters

Figure 5.5.8. Additional Days for Overnight Stays Among Resident Hunters

The results as presented above are also shown for nonresident hunters and Northeast Region hunters. Among nonresident hunters, 45% of them say that they would hunt more days if Sunday hunting is legalized (Figure 5.5.9).

These respondents were then asked to think in terms of hunting that involved day trips and hunting that involved overnight stays. Nearly a third of all nonresident migratory game bird hunters (31%) indicate that they would hunt more days that were day trips (i.e., did *not* involve an overnight stay) (Figure 5.5.10), and more than half of nonresident hunters (53%) would hunt more days involving an overnight stay (Figure 5.5.11).

Follow-up questions, which were asked those who said that they would hunt more days, had hunters estimate how many more days that they would hunt involving day trips and involving overnight stays, as shown for resident migratory game bird hunters in Figures 5.5.12 and 5.5.13.

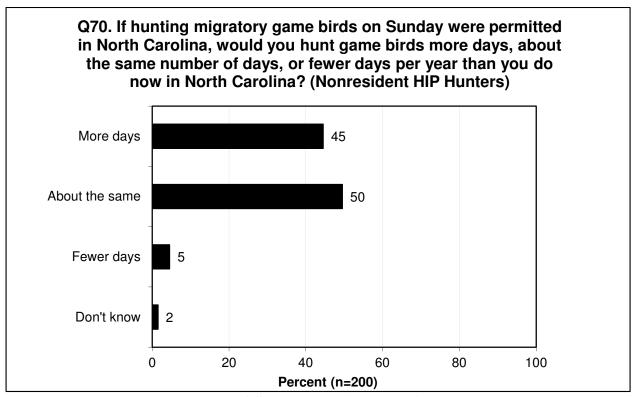


Figure 5.5.9. Hunting More Days if Sunday Hunting Were Allowed, Nonresident Hunters

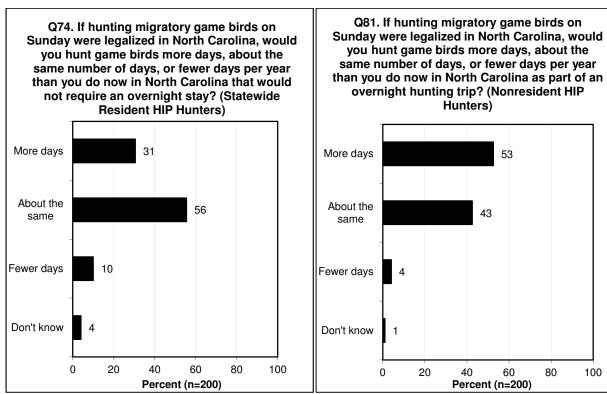
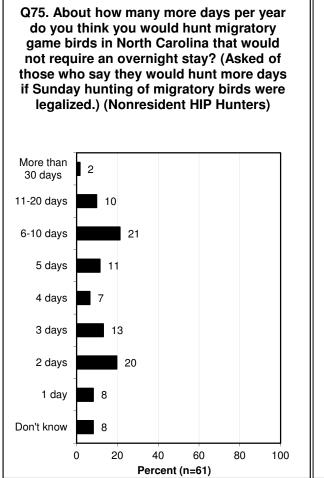


Figure 5.5.10. More Day Trip Days, Among Nonresident Hunters

Figure 5.5.11. More Overnight Stays, Among Nonresident Hunters



Q82. About how many more days per year do you think you would hunt migratory game birds in North Carolina as part of an overnight stay? (Asked of those who say they would hunt more days requiring an overnight stay if Sunday hunting of migratory birds were legalized.)

(Nonresident HIP Hunters)

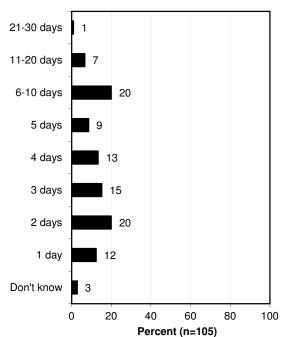


Figure 5.5.12. Additional Days for Day Trips Among
Nonresident Hunters

Figure 5.5.13. Additional Days for Overnight Stays Among Nonresident Hunters

The last group examined in this line of questioning is Northeast Region hunters. Among the Northeast hunters, 28% of them say that they would hunt more days if Sunday hunting is legalized (Figure 5.5.14). However, a majority (62%) say that they would hunt about the same number of days.

They too were asked to think in terms of hunting that involved day trips and hunting that involved overnight stays. About a fifth of all Northeast Region migratory game bird hunters (22%) indicate that they would hunt more days that were day trips (i.e., did *not* involve an overnight stay) (Figure 5.5.15), while only 13% would hunt more days involving an overnight stay (Figure 5.5.16).

Follow-up questions, which were asked those who said that they would hunt more days, had hunters estimate how many more days that they would hunt involving day trips and involving overnight stays, as shown for Northeast Region migratory game bird hunters in Figures 5.5.17 and 5.5.18.

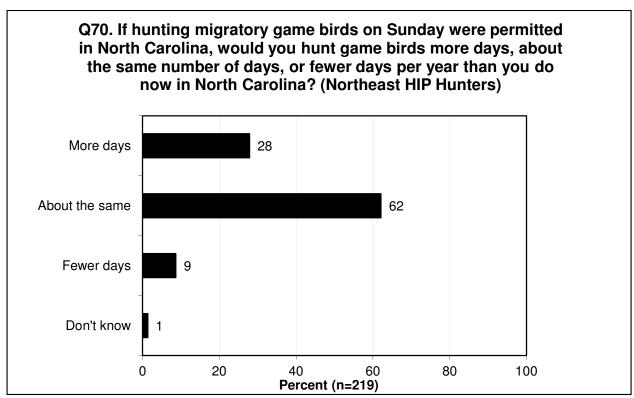


Figure 5.5.14. Hunting More Days if Sunday Hunting Were Allowed, NE Region Hunters

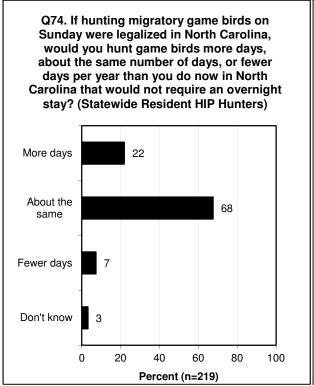


Figure 5.5.15. More Day Trip Days, Among Northeast Region Hunters

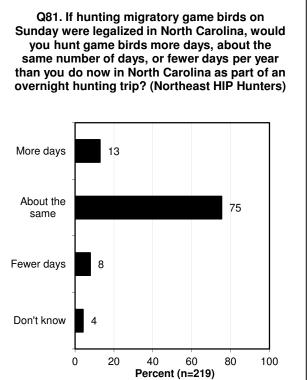


Figure 5.5.16. More Overnight Stays, Among Northeast Region Hunters

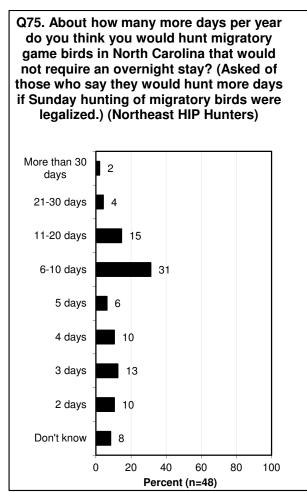


Figure 5.5.17. Additional Days for Day Trips Among NE Region Hunters

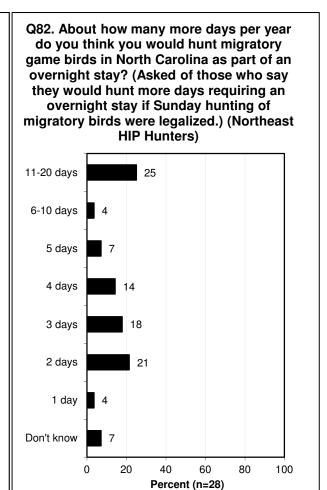


Figure 5.5.18. Additional Days for Overnight Stays Among NE Region Hunters

The final questions examined in this section asked hunters if they would take family, friends, or youth hunting specifically on Sunday, if Sunday hunting were allowed (in three separate questions, but shown together in Figure 5.5.19). About two-thirds of hunters would take family, friends, or youths hunting on Sunday, if it were allowed.

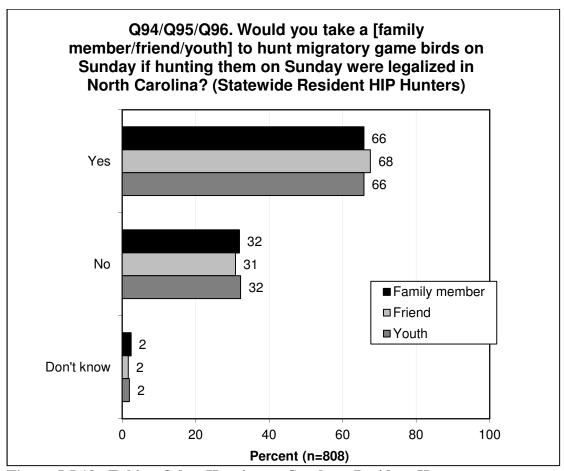


Figure 5.5.19. Taking Other Hunting on Sundays, Resident Hunters

Results are shown of this question among nonresident hunters and Northeast Region hunters (Figures 5.5.20 and 5.5.21). While Northeast Region migratory game bird hunters are much like statewide residents on these questions, nonresidents are notably different. Among nonresidents, from 82% to 86% would take others with them to hunt migratory game birds in North Carolina on a Sunday—the highest percentage for taking a friend (86%).

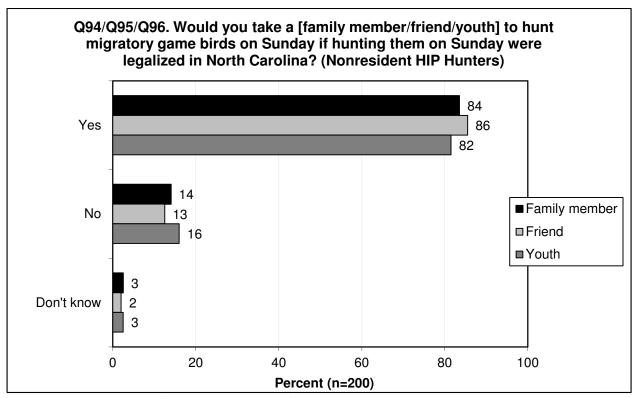


Figure 5.5.20. Taking Other Hunting on Sundays, Resident Hunters

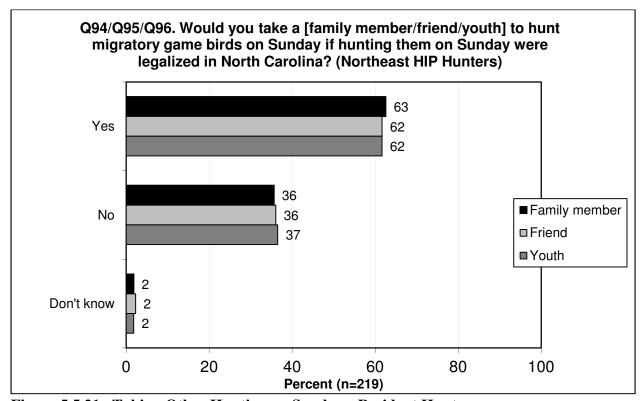


Figure 5.5.21. Taking Other Hunting on Sundays, Resident Hunters

## 5.6. SPENDING ON MIGRATORY BIRD HUNTING

Spending on five categories of items are shown among statewide resident migratory game bird hunters (Figures 5.6.1 through 5.6.5), nonresident migratory game bird hunters (Figures 5.6.6 through 5.6.10), and Northeast Region migratory game bird hunters (Figures 5.6.11 through 5.6.15).

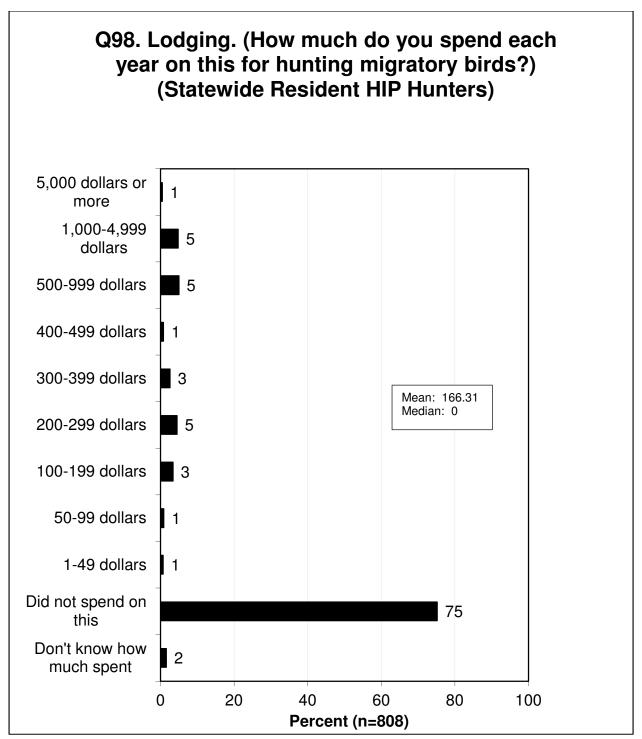


Figure 5.6.1. Spending on Lodging, Resident Hunters

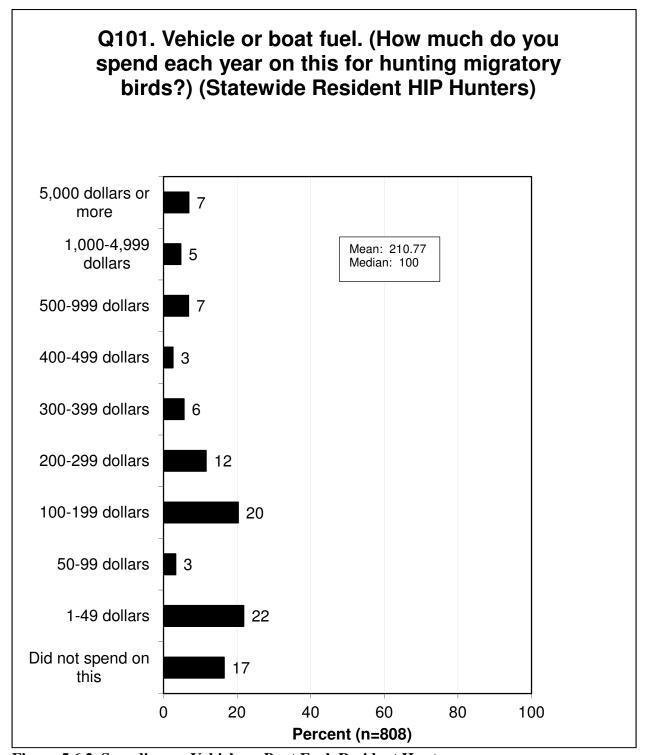


Figure 5.6.2. Spending on Vehicle or Boat Fuel, Resident Hunters

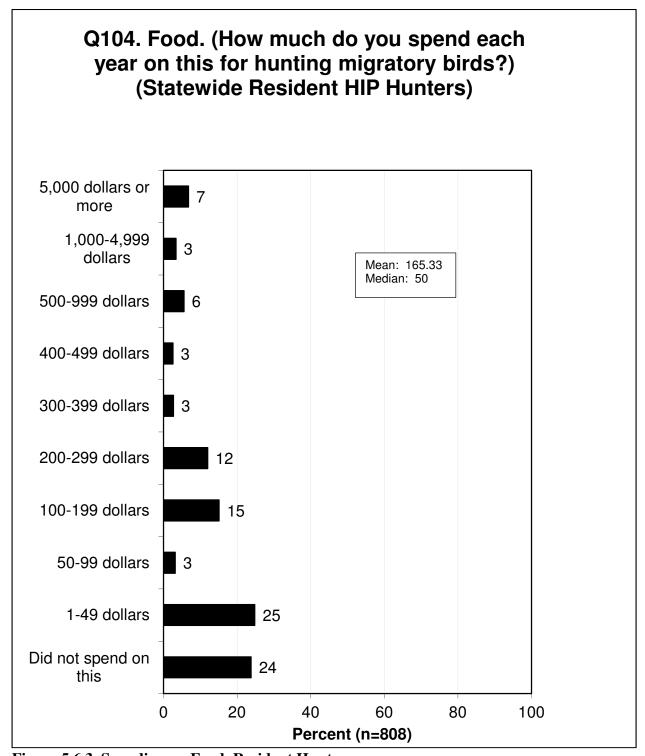


Figure 5.6.3. Spending on Food, Resident Hunters

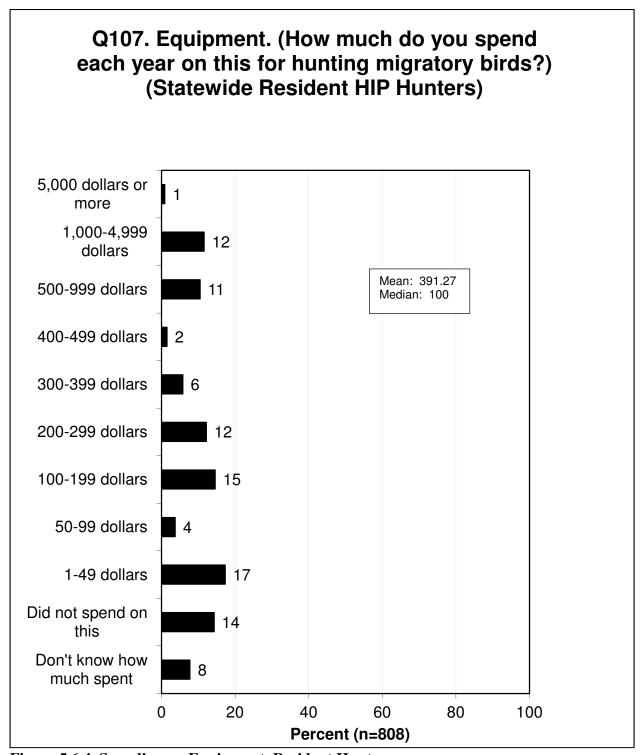


Figure 5.6.4. Spending on Equipment, Resident Hunters

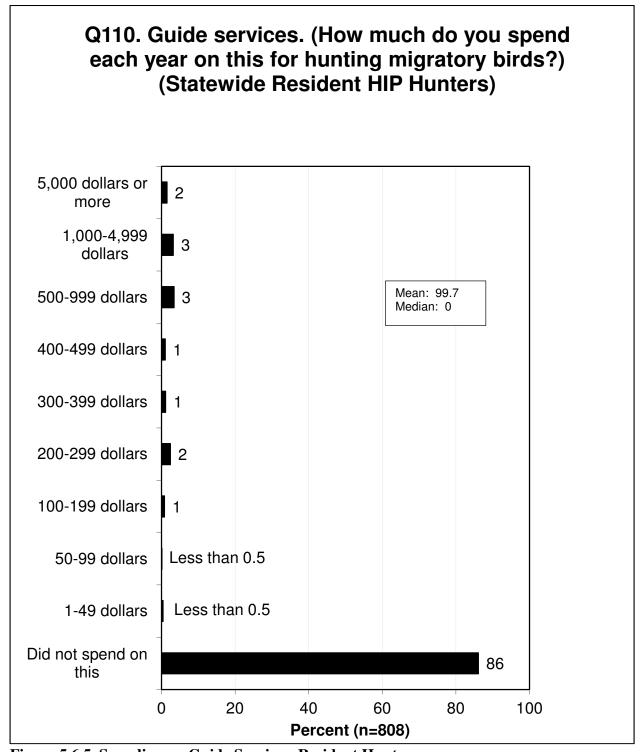


Figure 5.6.5. Spending on Guide Services, Resident Hunters

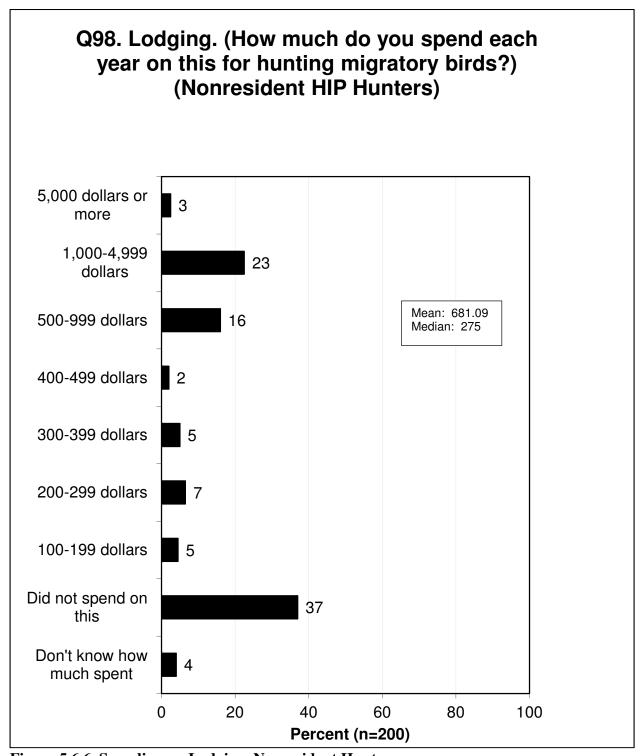


Figure 5.6.6. Spending on Lodging, Nonresident Hunters

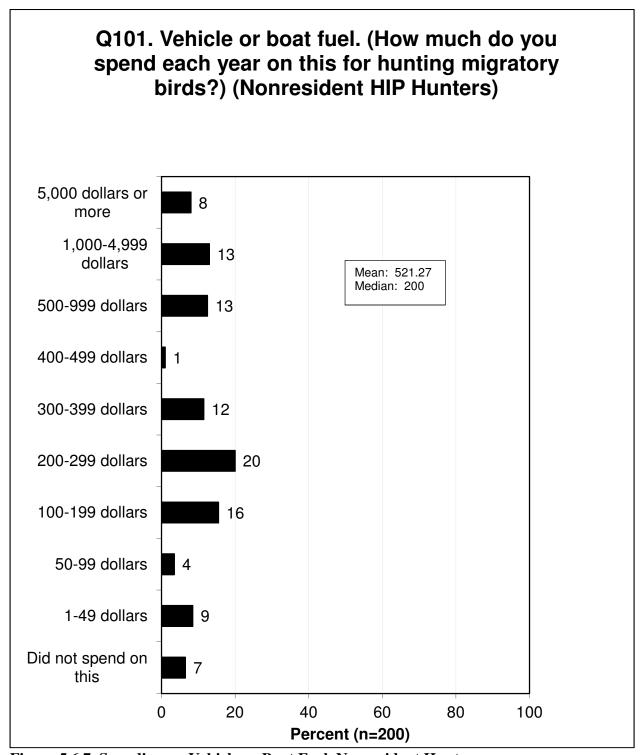


Figure 5.6.7. Spending on Vehicle or Boat Fuel, Nonresident Hunters

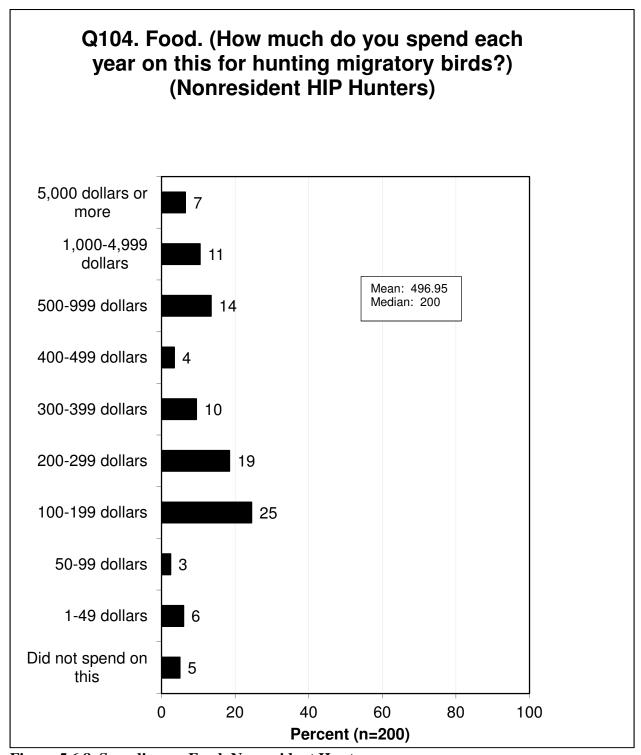


Figure 5.6.8. Spending on Food, Nonresident Hunters

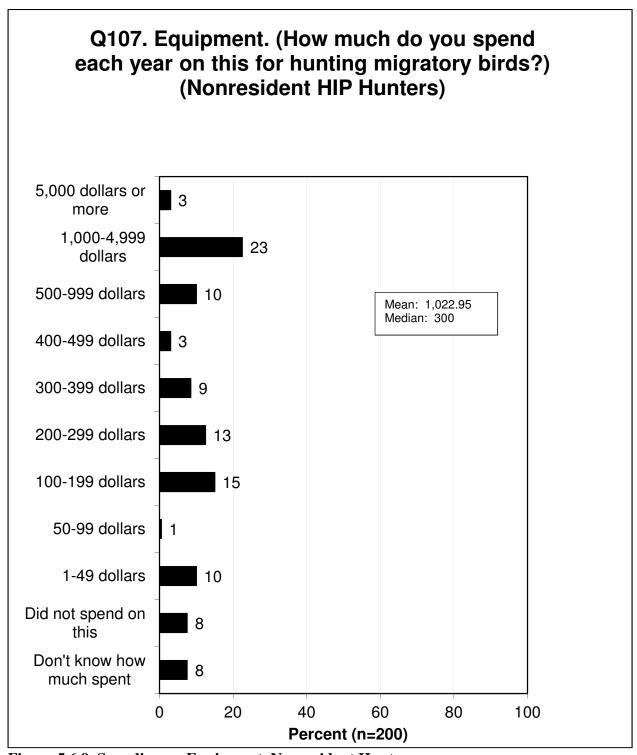


Figure 5.6.9. Spending on Equipment, Nonresident Hunters

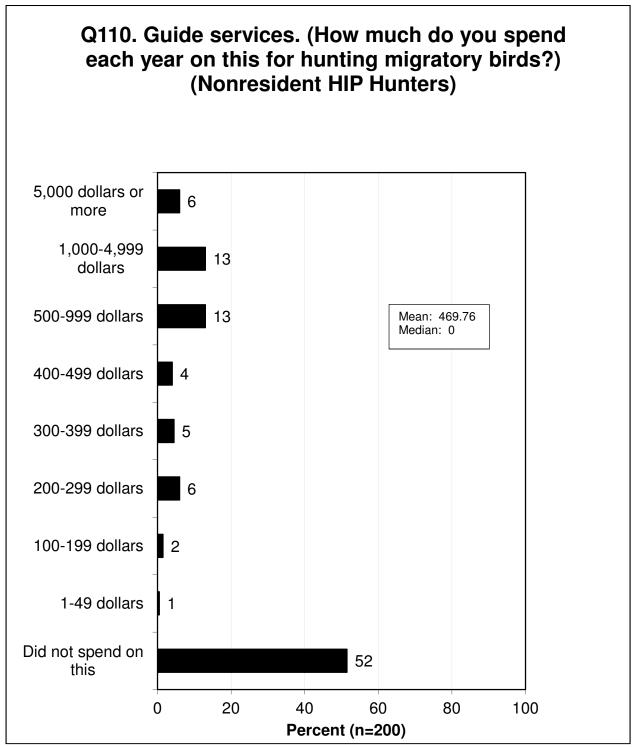


Figure 5.6.10. Spending on Guide Services, Nonresident Hunters

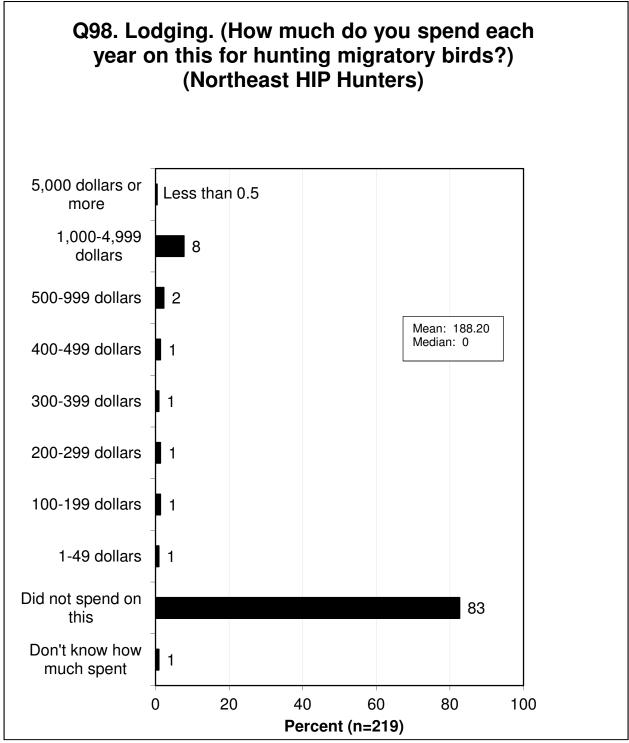


Figure 5.6.11. Spending on Lodging, Northeast Region Hunters

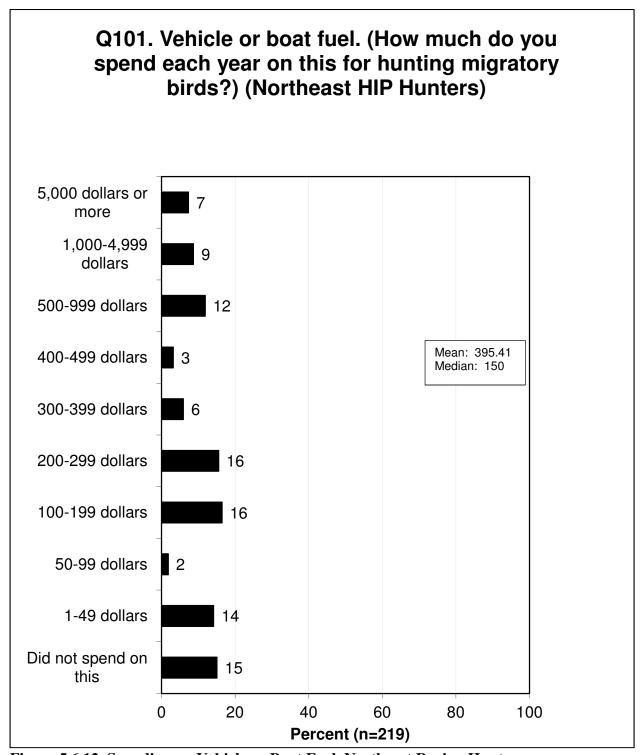


Figure 5.6.12. Spending on Vehicle or Boat Fuel, Northeast Region Hunters

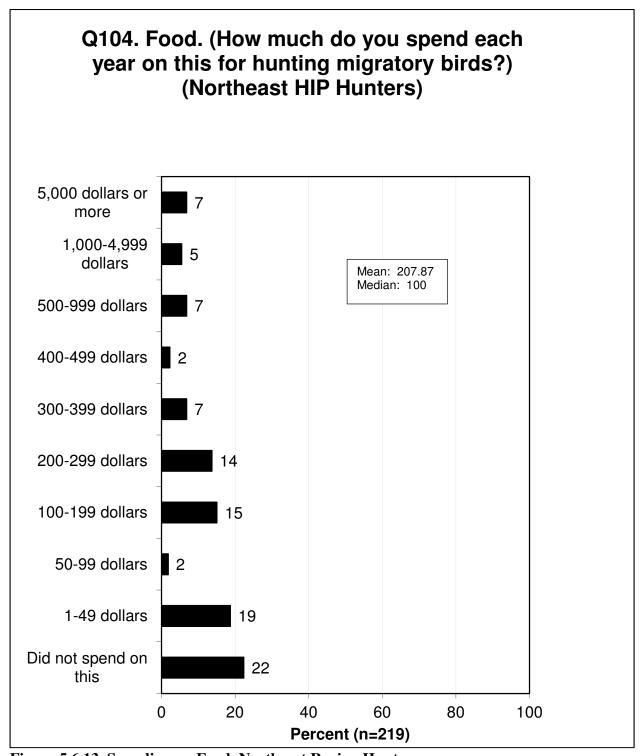


Figure 5.6.13. Spending on Food, Northeast Region Hunters

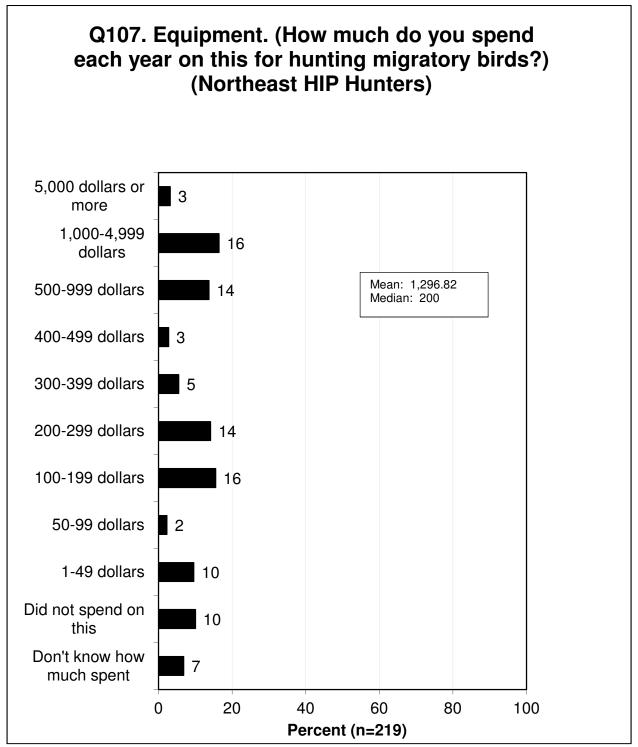


Figure 5.6.14. Spending on Equipment, Northeast Region Hunters

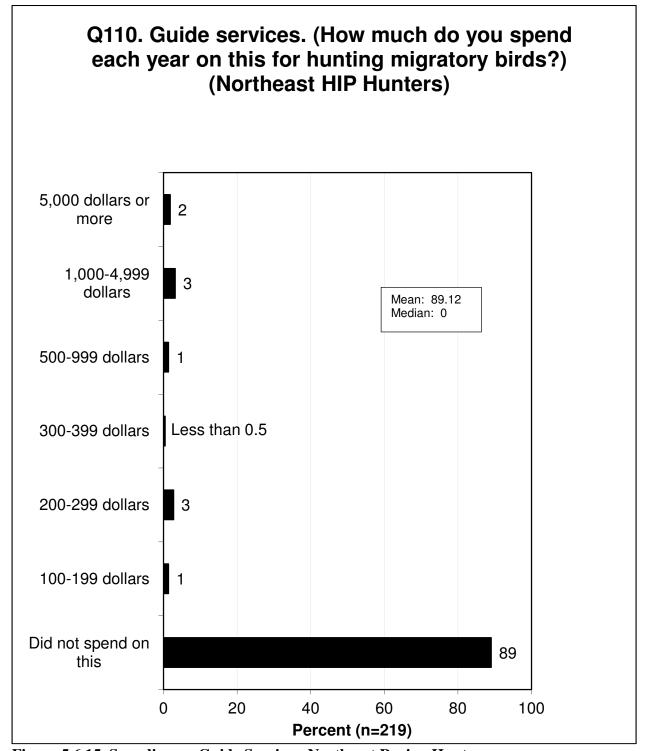


Figure 5.6.15. Spending on Guide Services, Northeast Region Hunters

# 5.7. TRAVEL DISTANCES TO HUNT MIGRATORY BIRDS IN NORTH CAROLINA

Resident migratory game bird hunters travel a mean distance of 58.58 miles, one-way, to hunt migratory game birds in North Carolina, and 20% of them travel 100 miles or more to do so (Figure 5.7.1). The median is 25 miles among resident hunters. Nonresident migratory game bird hunters, not surprisingly, typically travel much further: their mean is 323.49 miles, and 66% travel 100 miles or more (Figure 5.7.2). Finally, Northeast Region hunters typically travel a bit less: their mean is 39.07 miles, and only 10% travel 100 miles or more (Figure 5.7.3).

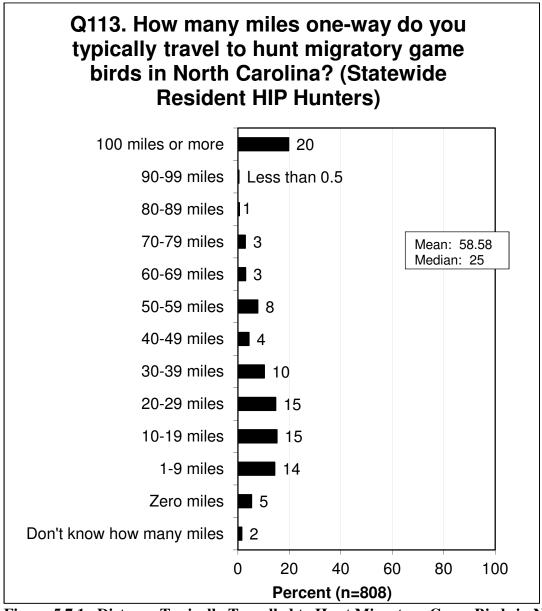


Figure 5.7.1. Distance Typically Travelled to Hunt Migratory Game Birds in North Carolina, Resident Hunters

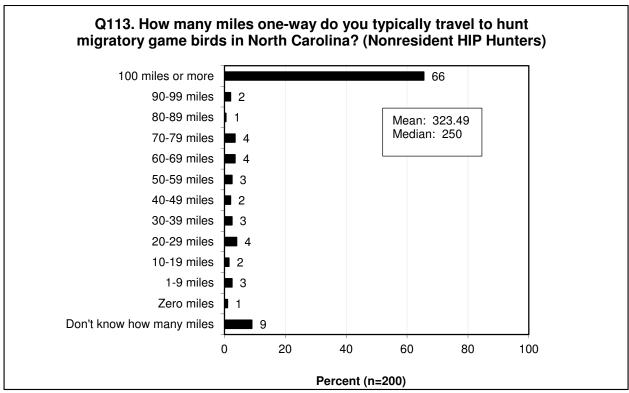


Figure 5.7.2. Distance Typically Travelled to Hunt Migratory Game Birds in North Carolina, Nonresident Hunters

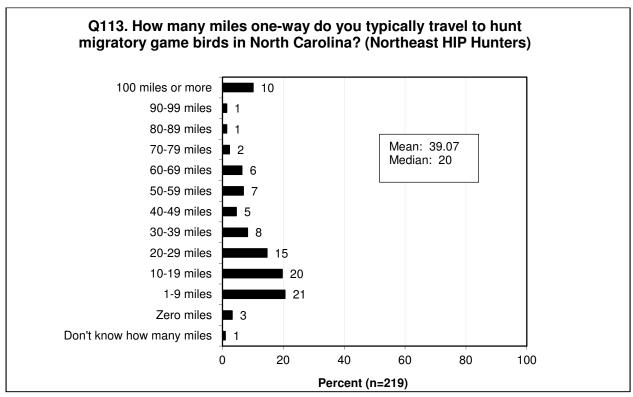


Figure 5.7.3. Distance Typically Travelled to Hunt Migratory Game Birds in North Carolina, Northeast Region Hunters

## 5.8. OWNERSHIP AND/OR MANAGEMENT OF LAND

Those who hunted on private land in the 2016-2017 season were asked if they owned or managed any of the private lands on which they hunted: 42% of resident migratory game bird hunters indicated that they own and/or manage some of those private lands (Figure 5.8.1). Among nonresident migratory game bird hunters, 10% indicated that they own and/or manage some of those private lands (Figure 5.8.2), and 38% of Northeast Region hunters who got the question indicated that they own and/or manage some of those private lands (Figure 5.8.3).

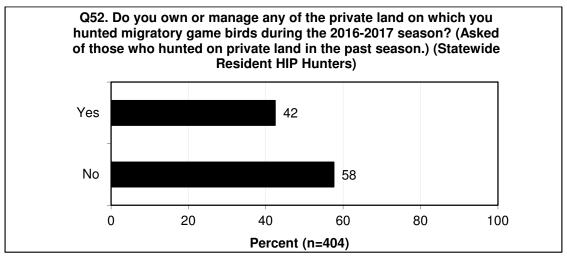


Figure 5.8.1. Ownership or Leasing of Private Lands Used for Hunting, Resident Hunters

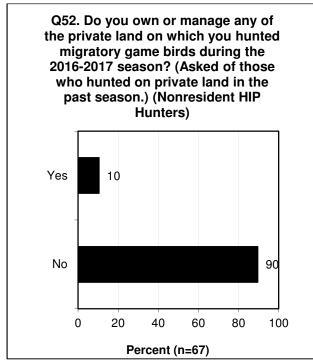


Figure 5.8.2. Ownership or Leasing of Private Lands Used for Hunting, Nonresident Hunters

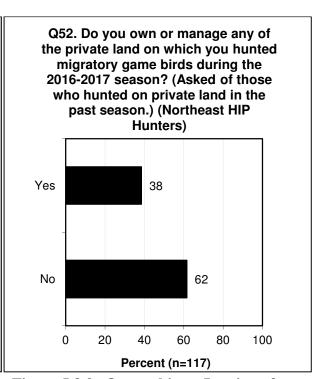


Figure 5.8.3. Ownership or Leasing of Private Lands Used for Hunting, Northeast Region Hunters

Those who owned or managed some of the land on which they hunted migratory game birds in the past season were asked about the extent that they relied on revenue from migratory game bird hunting for habitat improvements to the land: 14% of resident hunters who received this question indicated some reliance, with 3% relying a great deal (Figure 5.8.4). The results are shown for nonresident hunters by number of respondents rather than percentages because only 7 respondents met the criteria to be questioned (Figure 5.8.5). Northeast Region hunters are shown in Figure 5.8.6.

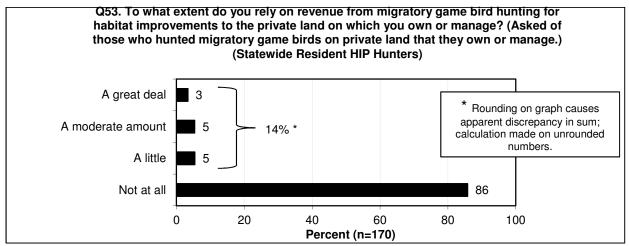


Figure 5.8.4. Reliance on Revenue From Migratory Game Bird Hunting for Habitat Improvements, Resident Hunters

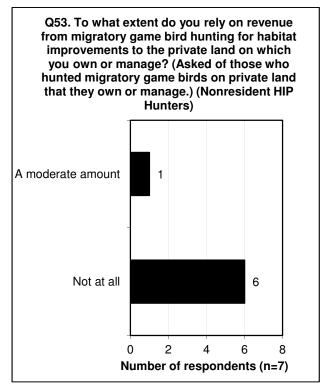


Figure 5.8.5. Reliance on Revenue From Hunting for Habitat Improvements, Nonresident Hunters

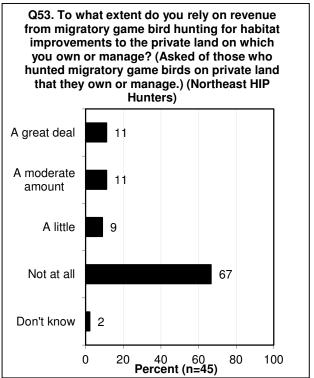


Figure 5.8.6. Reliance on Revenue From Hunting for Habitat Improvements, Northeast Region Hunters

Those who hunted migratory game birds in the past season on private land were asked to what extent that they relied on that private land for migratory game bird hunting opportunities: 63% of resident hunters who got the question rely *a great deal*, and 88% rely at least *a little* on this land (Figure 5.8.7). The results are shown for nonresident hunters (Figure 5.8.8) and Northeast Region hunters (Figure 5.8.9).

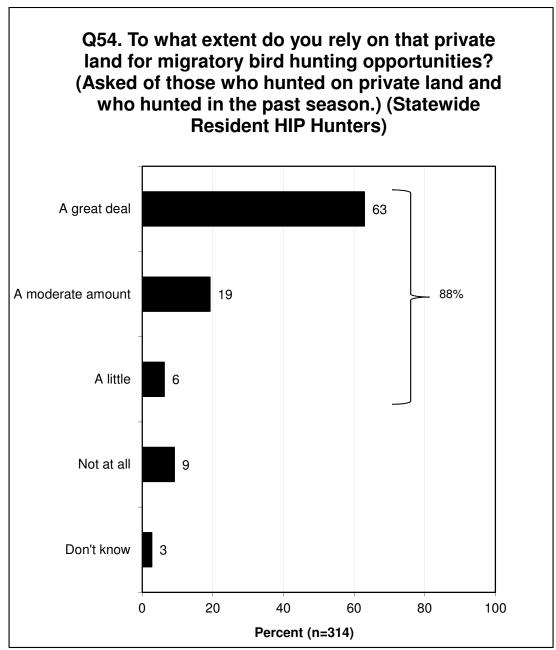


Figure 5.8.7. Reliance on Their Private Land for Migratory Game Bird Hunting Opportunities, Resident Hunters

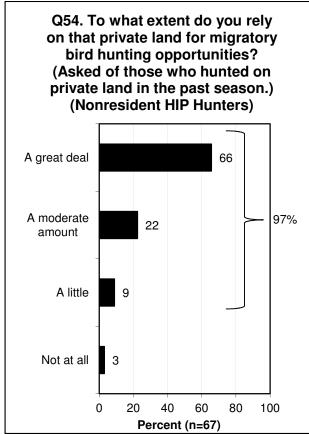


Figure 5.8.8. Reliance on Their Private Land for Migratory Game Bird Hunting Opportunities, Nonresident Hunters

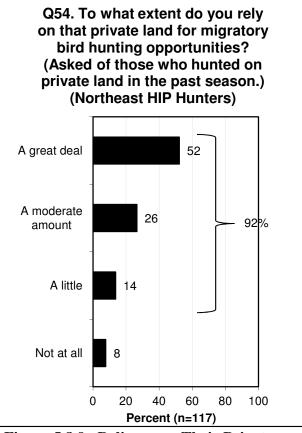


Figure 5.8.9. Reliance on Their Private Land for Migratory Game Bird Hunting Opportunities, Northeast Region Hunters

Finally in this section, the survey asked hunters if they owned land in North Carolina on which they currently allow migratory game bird hunting. Just over a fourth of resident hunters do have such land (28%) (Figure 5.8.10). Of those who do have such land on which they allow hunting, 63% say that they would allow Sunday hunting of migratory game birds, if it were legal to do so (Figure 5.8.11).

Nonresident results are shown in Figures 5.8.12 and 5.8.13. Only 7% of nonresidents own land on which they allow migratory game bird hunting. This small group who own land, however, almost universally would allow Sunday hunting (93% would do so).

Results are also shown among Northeast Region hunters (Figures 5.8.14 and 5.8.15). More than a quarter (26%) own land on which they allow migratory game bird hunting. Of these, just more than half would allow Sunday hunting.

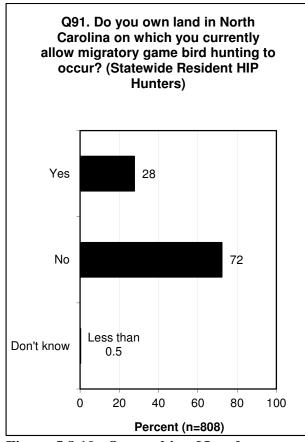


Figure 5.8.10. Ownership of Land on Which Hunting Is Allowed, Resident Hunters

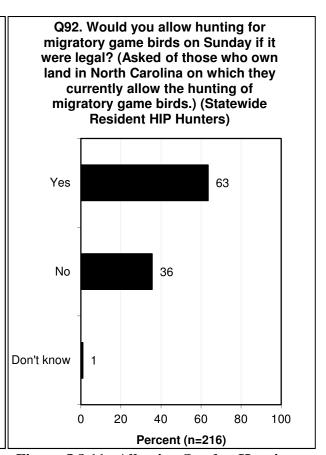


Figure 5.8.11. Allowing Sunday Hunting on Land Owned on Which Hunting Is Allowed, Resident Hunters

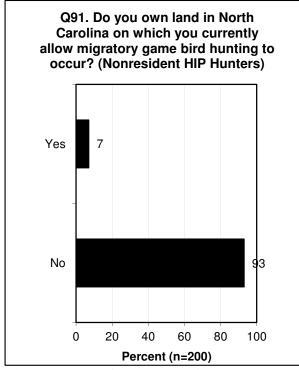


Figure 5.8.12. Ownership of Land on Which Hunting Is Allowed, Nonresident Hunters

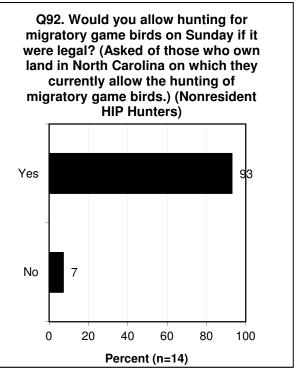


Figure 5.8.13. Allowing Sunday Hunting on Land Owned on Which Hunting Is Allowed, Nonresident Hunters

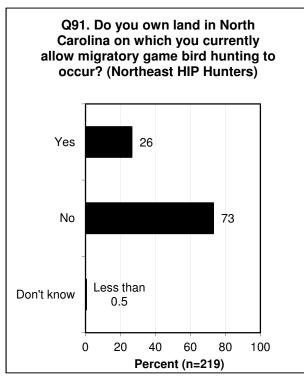


Figure 5.8.14. Ownership of Land on Which Hunting Is Allowed, Northeast Region Hunters

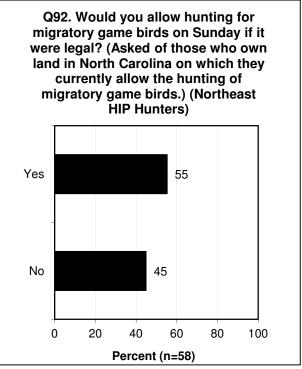


Figure 5.8.15. Allowing Sunday Hunting on Land Owned on Which Hunting Is Allowed, Northeast Region Hunters

# 5.9. LOSS OF HUNTING ACTIVITY IN NORTH CAROLINA BECAUSE OF THE BAN ON SUNDAY HUNTING

One of the previous sections, which is titled, "Hunting Out of State," showed the states that North Carolina hunters are going to for hunting opportunities on Sundays (see Figures 5.1.37 and 5.2.38). Collectively, resident hunters who hunted migratory game birds out of state have a majority placing some importance on the fact that they could hunt on Sunday as a reason for hunting out of state, with 21% of these resident hunters saying it was *extremely* important, and another 14% saying it was *very* important (a sum of 36%) (Figure 5.9.1). Results are shown among nonresidents (Figure 5.9.2) and Northeast Region residents (Figure 5.9.3). The latter place little importance on it.

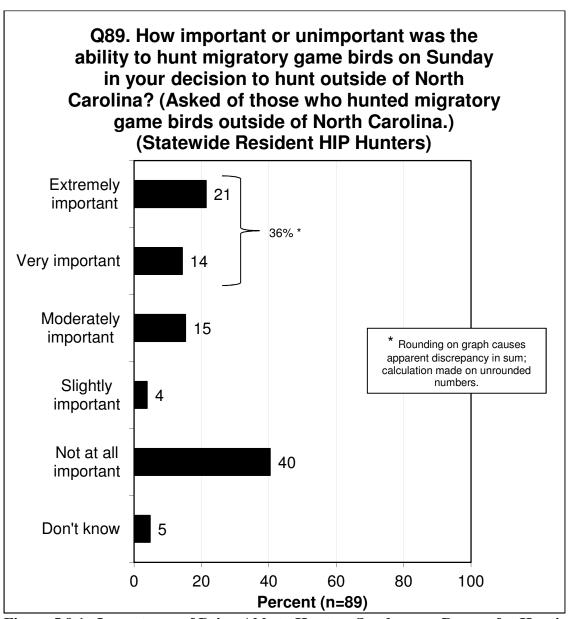


Figure 5.9.1. Importance of Being Able to Hunt on Sunday as a Reason for Hunting Outside of North Carolina, Resident Hunters

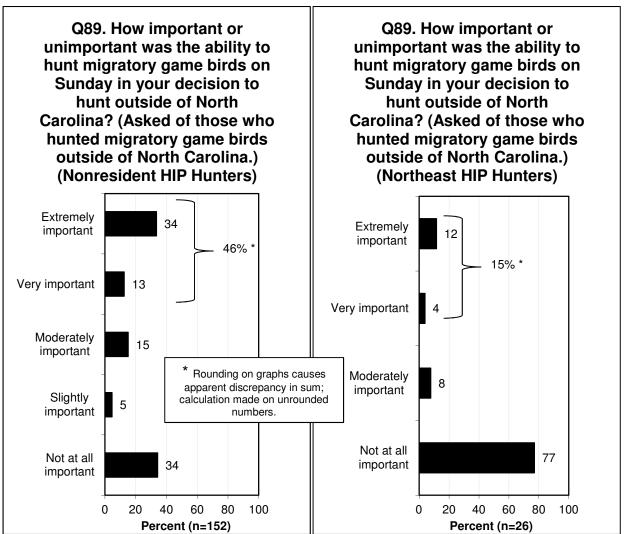


Figure 5.9.2. Importance of Being Able to Hunt on Sunday as a Reason for Hunting Outside of North Carolina, Nonresident Hunters

Figure 5.9.3. Importance of Being Able to Hunt on Sunday as a Reason for Hunting Outside of North Carolina, Northeast Region Hunters

Hunters were asked if they personally know a North Carolina resident who hunts migratory game birds on Sundays in other states: 22% of resident hunters do, 42% of nonresident hunters do, and 23% of Northeast Region hunters do (Figures 5.9.4 through 5.9.6).

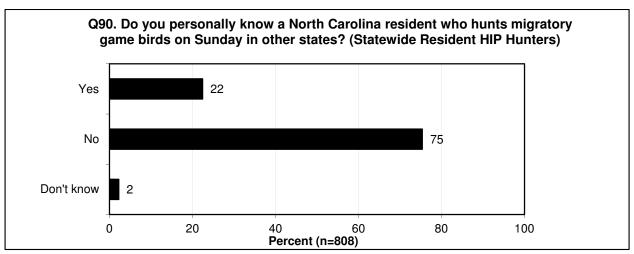


Figure 5.9.4. Knowing a North Carolina Hunter Who Hunts on Sunday Outside of North Carolina, Resident Hunters

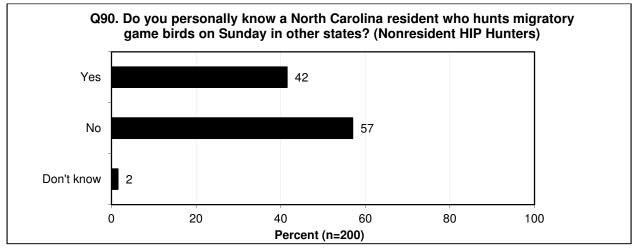


Figure 5.9.5. Knowing a North Carolina Hunter Who Hunts on Sunday Outside of North Carolina, Nonresident Hunters

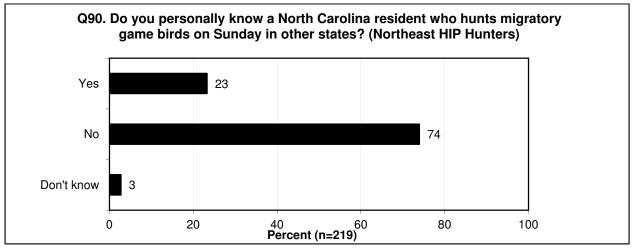


Figure 5.9.6. Knowing a North Carolina Hunter Who Hunts on Sunday Outside of North Carolina, Northeast Region Hunters

## 5.10. MEMBERSHIP IN HUNTING CLUBS

Rate of membership in a migratory game bird hunting club in North Carolina is at 9% among resident hunters, 6% among nonresident hunters, and 12% among Northeast Region hunters, as shown in Figures 5.10.1 through 5.10.3.

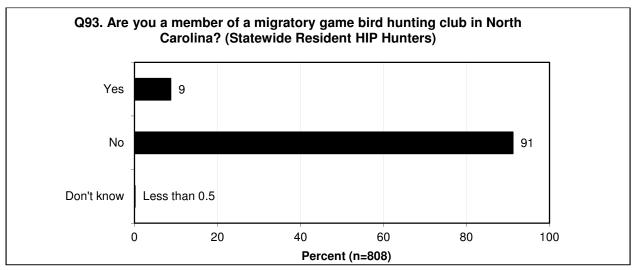


Figure 5.10.1. Ownership in Clubs, Resident Hunters

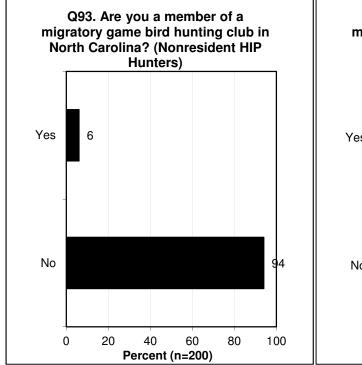


Figure 5.10.2. Ownership in Clubs, Nonresident Hunters

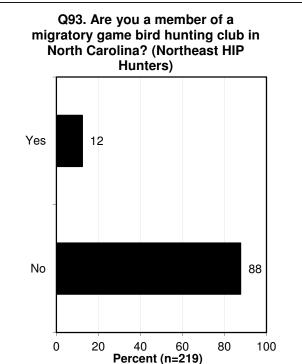


Figure 5.10.3. Ownership in Clubs, Northeast Region Hunters

## 5.11. SOURCES OF INFORMATION

State agencies are the top source of information regarding migratory game bird issues among resident hunters, with 42% of resident hunters using this source (Figure 5.11.1). This leads all sources, followed by the Internet in general (32%).

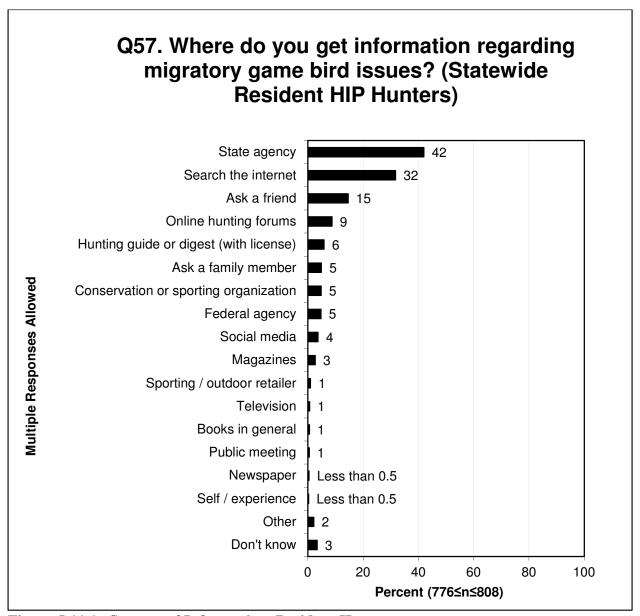


Figure 5.11.1. Sources of Information, Resident Hunters

Among nonresident hunters, the most commonly used sources are the Internet in general and state agencies (Figure 5.11.2). Finally, among Northeast Region hunters, the most popular sources are state agencies followed by the Internet (Figure 5.11.3).

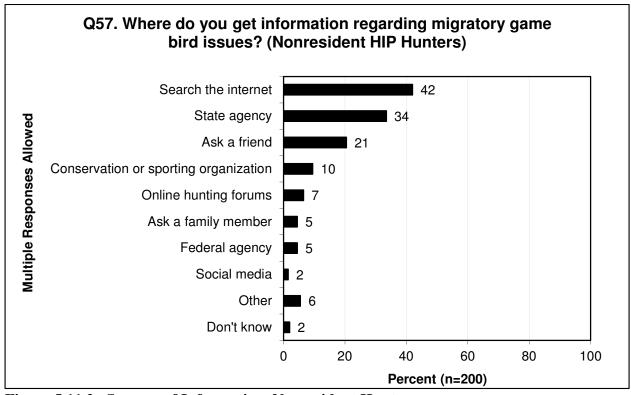


Figure 5.11.2. Sources of Information, Nonresident Hunters

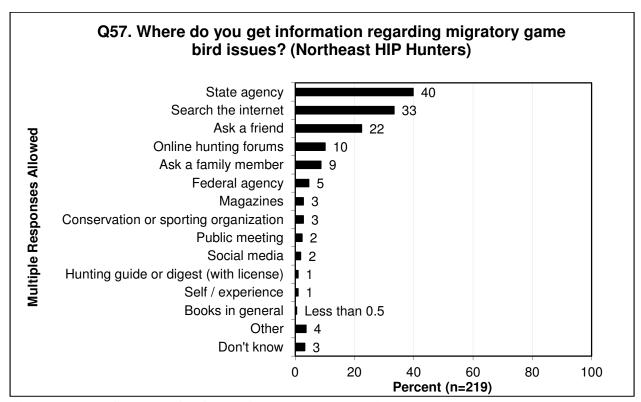


Figure 5.11.3. Sources of Information, Northeast Region Hunters

# 5.12. DEMOGRAPHIC DATA

The following demographic data are shown: gender, age, education, and household income (Figures 5.12.1 through 5.12.12).

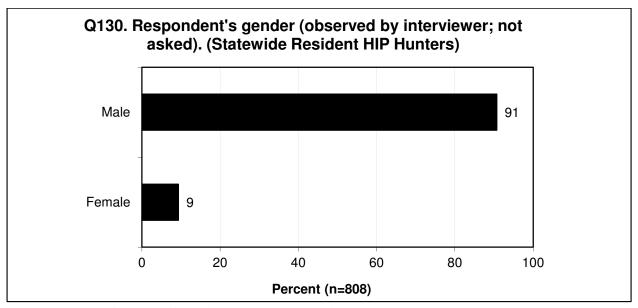


Figure 5.12.1. Gender of Resident Migratory Bird Hunters

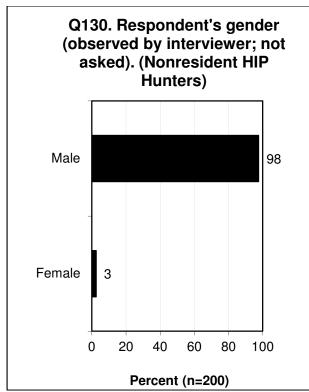


Figure 5.12.2. Gender of Nonresident Migratory Bird Hunters

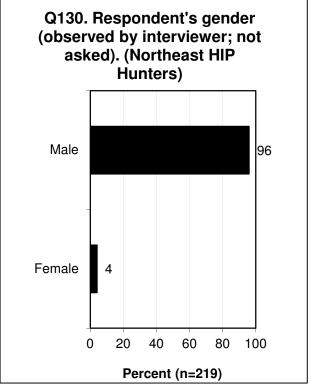


Figure 5.12.3. Gender of Northeast Region Migratory Bird Hunters

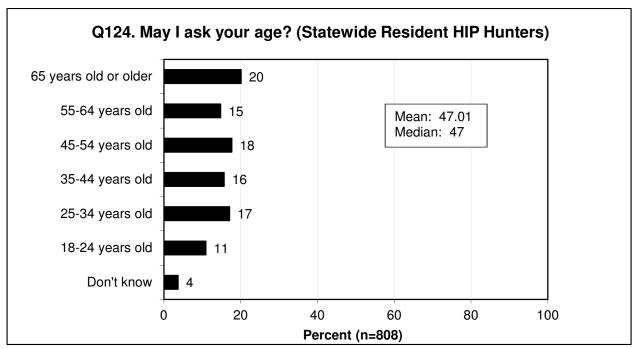


Figure 5.12.4. Age of Resident Migratory Bird Hunters

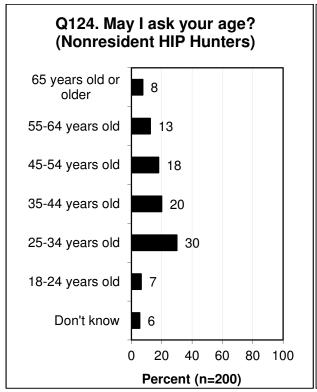


Figure 5.12.5. Age of Nonresident Migratory Bird Hunters

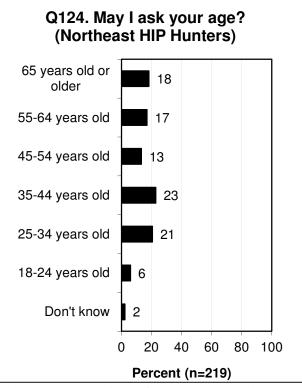


Figure 5.12.6. Age of Northeast Region Migratory Bird Hunters

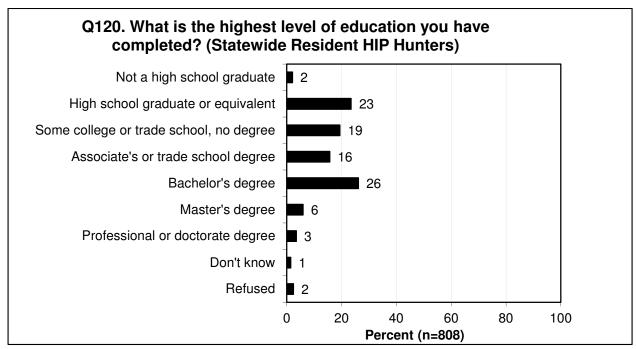


Figure 5.12.7. Education Level of Resident Migratory Bird Hunters

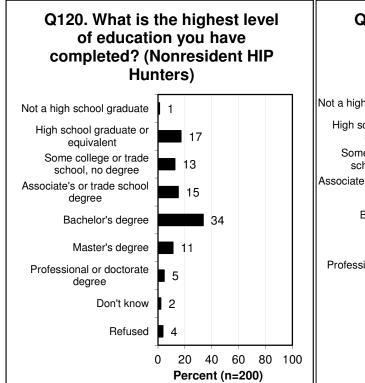


Figure 5.12.8. Education Level of Nonresident Migratory Bird Hunters

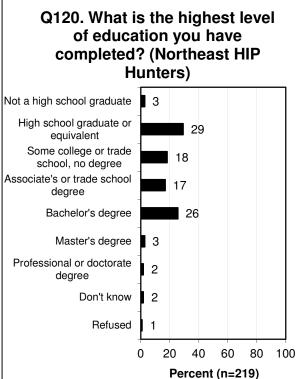


Figure 5.12.9. Education Level of Northeast Region Migratory Bird Hunters

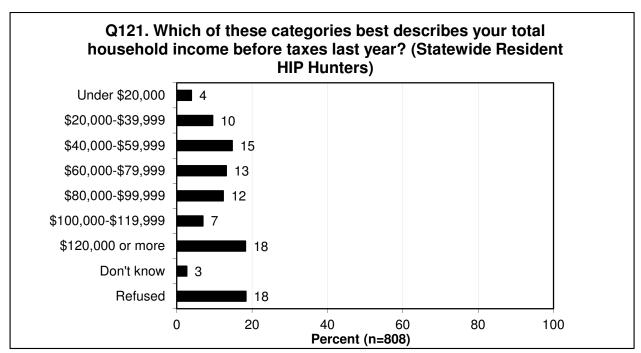


Figure 5.12.10. Income of Resident Migratory Bird Hunters

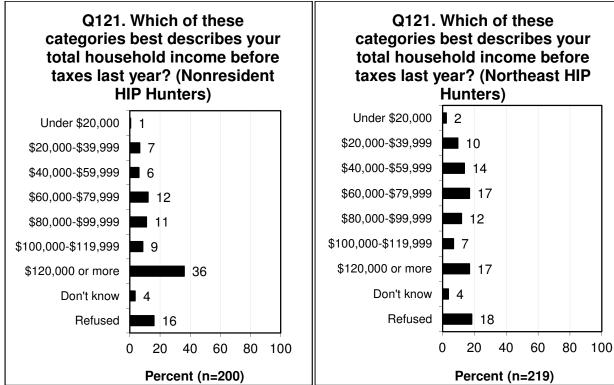


Figure 5.12.11. Income of Nonresident Migratory Bird Hunters

Figure 5.12.12. Income of Northeast Region Migratory Bird Hunters

# 6. METHODOLOGY

This section discusses each of the four methods of obtaining public input: public meetings, the public forum, focus groups, and the telephone survey. The way that each method is analyzed is included as well.

# 6.1. PUBLIC MEETING METHODOLOGY

For this study, Responsive Management planned, coordinated, and facilitated four regional public meetings with the general public and Commission stakeholders. The purpose of the public meetings was to provide an open forum for input and feedback, an opportunity for two-way dialogue between the agency and its constituents, and a means of identifying issues of interest or concern with regard to migratory bird hunting on Sunday in North Carolina. These meetings were also intended to help reinforce transparency and encourage public investment in decision-making. Commission biologists attended each meeting in uniform and participated in a question-and-answer period toward the end of each meeting.

## **PUBLIC MEETING LOCATIONS**

The public meetings were advertised ahead of time, held in a public or publically accessible site, and allowed anybody who wished to attend to do so. The four public meetings were held in (moving west-to-east) Hickory, Graham, Jacksonville, and Columbia. The public meetings were held between December 12 and 15, 2017.

This study divided the state into three regions meant to represent various areas and topographies of the state: west/mountain, central, and east/coastal. Locations for the public meetings were concentrated in the central and east/coastal areas where there are more migratory bird hunters and more waterfowl hunting opportunities; yet one public meeting was conducted in the west so that hunters and residents from that area could provide input.

### PUBLIC MEETING FACILITATION AND LOGISTICS

Each meeting was facilitated by Responsive Management staff and began with a brief presentation that included an overview of the research being conducted for the Commission by Responsive Management, guidelines for conducting public meetings, an explanation of compensatory days as they relate to hunting migratory birds on Sunday, and a list of questions intended to guide the flow of public input during the meeting. Rules for public input were then explained to the attendees, which included the requirement that only one person speak at a time, a time limit for speaking during the meeting, the restriction of open debate and challenges to other members of the audience, and adherence to the established topic of the meeting. Some comments from attendees were followed by responses from Commission personnel who were present at each public meeting.

Two of the public meetings were held at event centers, a third was held at a cooperative extension county center, and a fourth was held at a community college. The public meetings generally lasted about two hours. The public meeting schedule was distributed around the state several weeks prior to the meetings. The public meeting schedule was posted on the Commission's website and was included in an e-mail blast based on the Commission's e-mail list to all North Carolina HIP-certified hunting license holders with a valid e-mail address.

Responsive Management also publicized the meeting schedule via the online public forum devoted to the feasibility of hunting migratory birds on Sunday in North Carolina.

## REPRESENTATIVENESS OF THE PUBLIC MEETINGS

In considering the findings of the public meetings, it is important to note that these opportunities for public input generally appeared to attract only the most avid and dedicated Commission constituents. For instance, consider that many meeting attendees self-identified as longtime or particularly avid migratory bird—and in many cases, duck—hunters. Also note that the public meetings had 23 or fewer people in attendance (with the exception of Columbia, which had 109), despite advanced advertisement through e-mail blasts to Commission license holders, on the Commission's website, and on the public online discussion forum. However, the amount of avid migratory bird hunters attracted to these public meetings represents a common occurrence with public meetings and does not indicate any deviation for this particular study from what is to be expected when conducting public meetings in general.

Likewise, it is important to note that, unlike the random selection process that determined participation in the focus groups and surveys with HIP-certified hunters, the public meetings were open to anyone. It was possible for the same individuals to make multiple comments throughout each public meeting.

As such, while the issues and concerns raised in the public meetings are certainly worth noting, it would be incorrect to extrapolate the degree of concern or insistence voiced in some of these public meetings onto the wider population. Remarks in the public meetings may only represent the opinions of a particularly engaged subset of North Carolina's general population, both hunters and those engaged in non-consumptive outdoor activities.

## **ANALYSIS OF RESULTS OF THE PUBLIC MEETINGS**

This report was not intended to record every single comment or concern relating to issues that were raised in the public meetings. Rather, this report's goal was to convey the general feelings of the public meetings and to discuss some of the broad topics raised to help the Commission in its decision-making process regarding hunting migratory birds on Sunday in North Carolina.

As discussed above, it would be inappropriate to draw any kind of *quantitative* conclusions based on the comments made in the public meetings, as these remarks represent only the interests and opinions of a particularly engaged subset of North Carolina's hunting population. At the same time, the comments are worth considering because they reflect the positions of potentially influential opinion leaders in the community.

# 6.2. PUBLIC FORUM METHODOLOGY

To gather additional qualitative data and to provide a further opportunity for North Carolina residents to comment on study topics, in addition to the public meetings, the researchers developed an online "Public Forum" featuring open-ended discussion threads.

The forum was maintained on a dedicated website (<a href="www.ncmigratorybirds.org">www.ncmigratorybirds.org</a>) that included background information on the project, the research process and team, and pertinent study topics; its home page is shown in Figure 6.1. It was advertised in two ways. First, Responsive Management emailed a news release to all HIP-certified hunters on the list provided by the

Commission for this study. Second, the Commission undertook a social media campaign via Facebook and Instagram to invite the general public to participate in the online public forum. Responsive Management's analysis of the forum content includes consideration of the number of comments overall, the number of unique participants contributing to the discussion, and the most frequently discussed topics addressed in the comments.



Figure 6.2.1. Forum Homepage

Contributors were free to comment within the forum, either posting their initial or subsequent thoughts or responding to the comments of other contributors. In the introduction to the online forum, a set of basic questions regarding the feasibility of hunting migratory birds on Sunday in North Carolina was posed. These questions encouraged respondents to consider reasons for their support for or opposition to Sunday hunting of migratory birds in North Carolina, including the issue of compensatory days; how permitting the hunting of migratory birds on Sunday would possibly alter their weekly routines, hunting and related expenditures, businesses, and social commitments; and how it could impact wildlife populations, habitat, and conservation efforts. Online contributors were not limited to these questions and could provide any comment that they wished.

In addition to the online public forum portion of this study, Responsive Management conducted focus groups and public meetings in December 2017 for the Commission. Similar to the public forum, these qualitative components were intended to assist the Commission in its effort to

further inform the decision on whether to permit the hunting of migratory birds on Sunday in North Carolina. Although all three components are qualitative, there are methodological differences among them. The focus groups were conducted with specifically recruited HIP-certified hunters for small, moderated group discussions on the issue, whereas the public meetings were advertised to the general public in North Carolina in advance and were open to anyone who chose to attend. Detailed findings of the public meetings and focus groups are located in Chapters 2 and 4, respectively, of this report.

While the focus groups specifically recruited 10-12 individual HIP-certified hunters, the public meetings were all attended by a particularly engaged hunting subset of the general population. Apart from one public meeting (in Columbia, NC), there were no more than 23 participants in any of the other public meetings across the state. In contrast, the online public forum received nearly 2,000 comments (in total), with at least 1,528 individual contributors of primary comments as of January 15, 2018, when the forum was closed.

The online public forum was monitored by Responsive Management. A number of comments from anti-hunting and animal rights contributors—including offensive and/or derogatory comments from various contributors—were deleted from the thread due to their irrelevancy to the purpose of the online public forum. For example, the comment, "Ban duck hunting period. Duck lives matter. Especially to the duck being shot at. Give the duck a gun and let them shoot back," is from an animals rights contributor and does not pertain to the study topic at hand. Similarly, "Killing poor defenseless animals is cruel and unusual punishment..." is clearly an animal rights stance that does not relate to the current considerations of the Commission and certainly does not adhere to the purpose of the online public forum. These and all similar comments were deleted from the forum thread and have not been considered in any part of the subsequent analysis of the online public forum in this report. Also, the overall efficacy of any relevant suggestions made in contributors' comments is not discussed in this report, only that a suggestion was made. The results are discussed in the following sections.

# 6.3. FOCUS GROUP METHODOLOGY

The focus groups entailed in-depth, structured discussions with small groups of HIP-certified North Carolina hunters about their opinions on and attitudes toward the hunting of migratory birds on Sunday in North Carolina. The use of focus groups is an accepted research technique for the qualitative exploration of attitudes, opinions, perceptions, motivations, constraints, and behaviors. Focus groups provide researchers with insights, new hypotheses, and understanding through the process of interaction. Focus groups allow for extensive open-ended responses to questions; probing; follow-up questions; group discussion; and observation of emotional responses to topics—aspects that cannot be measured in a quantitative survey. Qualitative research provides researchers with a more detailed understanding of the topics or issues of concern in the study.

The focus groups were conducted using a discussion guide. Each focus group was moderated by one of Responsive Management's trained moderators. The moderators, through the use of the discussion guide, kept the discussions within design parameters without exerting a strong influence on the discussion content. In this sense, the focus groups were non-directive group discussions that exposed the spontaneous attitudes, insights, and perceptions of HIP-certified hunters in North Carolina regarding their participation in migratory bird hunting, their attitudes

and awareness of hunting migratory birds on Sunday, their understanding of and opinions on compensatory days, factors associated with their support for or opposition to hunting migratory birds on Sunday, and other perceived issues and related impacts. All focus group discussions were recorded for analysis.

# **FOCUS GROUP LOCATIONS**

The focus groups were conducted in geographically diverse areas across North Carolina: Concord, Morganton, Raleigh, Washington, and Wilmington. Host facilities and reservations were coordinated by Responsive Management in consultation with the Commission; facilities included hotel conference rooms. Responsive Management ensured that each focus group room was set up appropriately, including seating, recording equipment, and food arrangements. Dinner was provided to focus group participants, and each group lasted approximately 2 hours.

## FOCUS GROUP PARTICIPANT RECRUITING

Responsive Management recruited a random selection of HIP-certified hunters for each focus group. Responsive Management recruiters contacted potential participants by telephone, e-mail, and mail. Those who expressed interest in taking part in the study were given a brief summary of the focus group topic, screened using a screener questionnaire, and, if qualified, confirmed for attendance. The screener ensured that the focus group participants met the criteria established for each specific group, as well as applicable age requirements. HIP-certification was confirmed by each screener as well.

Confirmed participants were e-mailed or mailed (by personal preference) a confirmation that included the date, time, and location of the focus group, as well as a map and directions to the focus group facility. Each participant was offered a reminder call the day before the focus group and provided a telephone number for directions or last minute questions. To encourage participation, a monetary incentive was given to participants.

During the recruiting process, the recruiting manager maintained a progress table for each focus group that included participant name, address, contact telephone number, and essential participant characteristics. Each focus group's target was 10 to 12 people. The recruiting manager ensured that all confirmation e-mails or letters were sent promptly to participants and that reminder telephone calls were made, as necessary, the day before the focus group. Reminder calls and interaction with potential participants helped ensure their attendance, resulting in quality participation.

### FOCUS GROUP DISCUSSION GUIDE AND ANALYSIS

Each focus group was conducted using a discussion guide that allowed for consistency in the data collection. The discussion guide included salient questions as well as more specific questions addressing opinions on and attitudes toward hunting migratory birds on Sunday, awareness of compensatory days, and other pertinent topics.

Responsive Management conducted qualitative analyses of the focus groups through direct observation of the discussions by the moderators. A second stage of the analysis was the subsequent observation and analysis of the recordings by other researchers. The organization and development of findings entailed a third review of the focus groups as part of the qualitative analyses.

# 6.4. TELEPHONE SURVEY METHODOLOGY

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among North Carolina hunters (both landlines and cell phones were called).

### **QUESTIONNAIRE DESIGN**

The telephone survey questionnaire was developed cooperatively by the Commission and Responsive Management, based on the research team's familiarity with hunting, as well as natural resources in general. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey. One questionnaire was used for all samples.

### **SURVEY SAMPLE**

The samples of hunters were obtained from the Commission. Within each sample, a probability-based selection process was used to ensure that each eligible respondent had an approximately equal chance of being selected for the survey. One sample was of migratory bird hunters statewide, a second sample was of nonresident migratory game bird hunters, and a third sample was of migratory game bird hunters from six counties referred to in the report as the Northeast Region. The six counties included are Beaufort, Currituck, Dare, Hyde, Pamlico, and Tyrrell, shaded gray in Figure 6.4.1. The six county area was included as a specific subset because of the significant proportion of migratory waterfowl hunting that occurs in those counties.

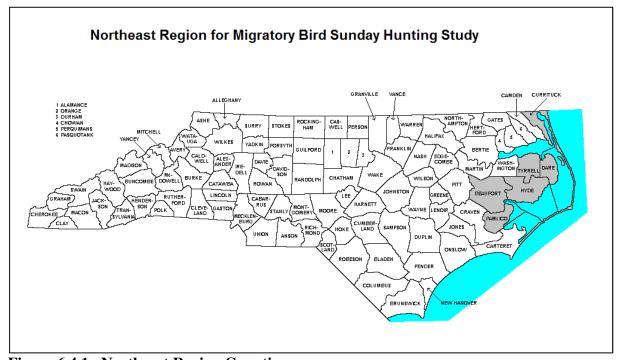


Figure 6.4.1. Northeast Region Counties

### TELEPHONE INTERVIEWING FACILITIES

A central polling site at the Responsive Management office allowed for rigorous quality control over the interviews and data collection. Responsive Management maintains its own in-house telephone interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects hunting, outdoor recreation, and natural resources.

To 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 project briefing with the interviewers prior to the administration of this survey. 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 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of each sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a hunter 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 surveys were conducted in December 2017 and January 2018.

#### TELEPHONE SURVEY DATA COLLECTION AND QUALITY CONTROL

The software used for data collection was Questionnaire Programming Language (QPL). 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 QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection.

The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and 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 a total of 808 completed interviews with statewide resident HIP hunters, 200 completed interviews with nonresident HIP hunters, and 219 completed interviews with Northeast Region HIP hunters.

### **ANALYSIS OF TELEPHONE SURVEY DATA**

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The three groups were analyzed separately; they were never combined into one group.

On questions that asked respondents to provide a number (e.g., amount of money spent), the graph shows ranges of numbers rather than the precise numbers. Nonetheless, in the survey each respondent provided a precise number, and the dataset includes this precise number, even if the graph only shows ranges of numbers. Note that the calculation of means and medians used the precise numbers that the respondents provided.

One part of the analysis looked at the various regions of the state, as shown in Figure 6.4.2.

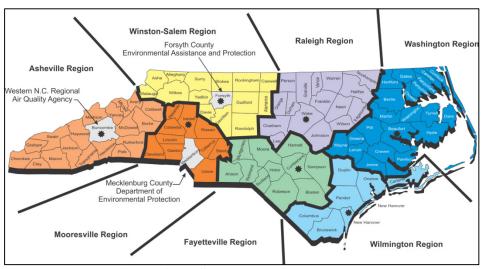


Figure 6.4.2. Regions of the State

# ABOUT RESPONSIVE MANAGEMENT

Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing our in-house, full-service telephone, mail, and web-based survey facilities with 50 professional interviewers, we have conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communication plans, needs assessments, and program evaluations.

Clients include the federal natural resource and land management agencies, most state fish and wildlife agencies, state departments of natural resources, environmental protection agencies, state park agencies, tourism boards, most of the major conservation and sportsmen's organizations, and numerous private businesses. Responsive Management also collects attitude and opinion data for many of the nation's top universities.

Specializing in research on public attitudes toward natural resource and outdoor recreation issues, Responsive Management has completed a wide range of projects during the past 27 years, including dozens of studies of hunters, anglers, wildlife viewers, boaters, park visitors, historic site visitors, hikers, birdwatchers, campers, and rock climbers. Responsive Management has conducted studies on endangered species; waterfowl and wetlands; and the reintroduction of large predators such as wolves, grizzly bears, and the Florida panther.

Responsive Management has assisted with research on numerous natural resource ballot initiatives and referenda and has helped agencies and organizations find alternative funding and increase their membership and donations. Additionally, Responsive Management has conducted major organizational and programmatic needs assessments to assist natural resource agencies and organizations in developing more effective programs based on a solid foundation of fact.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management has also conducted focus groups and personal interviews with residents of the African countries of Algeria, Cameroon, Mauritius, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe.

Responsive Management routinely conducts surveys in Spanish and has conducted surveys in Chinese, Korean, Japanese, and Vietnamese and has completed numerous studies with specific target audiences, including Hispanics; African-Americans; Asians; women; children; senior citizens; urban, suburban, and rural residents; large landowners; and farmers.

Responsive Management's research has been upheld in U.S. District Courts; used in peer-reviewed journals; and presented at major natural resource, fish and wildlife, and outdoor recreation conferences across the world. Company research has been featured in most of the nation's major media, including CNN, *The New York Times*, *The Wall Street Journal*, and on the front pages of *USA Today* and *The Washington Post*. Responsive Management's research has also been highlighted in *Newsweek* magazine.

Visit the Responsive Management website at:

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