

Responsive Management™



SURVEY OF LANDOWNERS WHO OWN LARGE TRACTS OF LAND CONCERNING DEER MANAGEMENT AND HUNTING

Conducted for the North Carolina Wildlife Resources Commission

by Responsive Management

2009

SURVEY OF LANDOWNERS WHO OWN LARGE TRACTS OF LAND CONCERNING DEER MANAGEMENT AND HUNTING

2009

Responsive Management National Office

Mark Damian Duda, Executive Director
Martin Jones, Senior Research Associate
Tom Beppler, Research Associate
Steven J. Bissell, Ph.D., Qualitative Research Associate
Andrea Criscione, Research Associate
James B. Herrick, Ph.D., Research Associate
Joanne Nobile, Research Associate
Amanda Ritchie, Research Associate
Carol L. Schilli, Research Associate
Megan Wilkes, Research Associate
Tim Winegord, Survey Center Manager
Alison Lanier, Business Manager

130 Franklin Street
Harrisonburg, VA 22801
Phone: 540/432-1888 Fax: 540/432-1892
E-mail: mark@responsivemanagement.com
www.responsivemanagement.com

Acknowledgments

Responsive Management would like to thank Dain Palmer of the North Carolina Wildlife Resources Commission for his input, support, and guidance on this project.

EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the North Carolina Wildlife Resources Commission (hereinafter referred to as the Commission) to determine the opinions of owners of large tracts of land concerning deer management and hunting on their land. The study entailed a telephone survey of owners of tracts of land of at least 5 acres in North Carolina.

For the survey, telephones were selected as the preferred sampling medium because telephone numbers were available for nearly all landowners in the sample. The telephone survey questionnaire was developed cooperatively by Responsive Management and the Commission. Responsive Management conducted a pre-test of the questionnaire to ensure proper wording, flow, and logic in the survey. Interviews were conducted 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. The survey was conducted in December 2008. Responsive Management obtained a total of 1,619 completed interviews. The software used for data collection was Questionnaire Programming Language.

The analysis of data was performed using Statistical Package for the Social Sciences software as well as proprietary software developed by Responsive Management. The survey sampling plan entailed obtaining at least 400 completed interviews in each of four regions in North Carolina. The data were then weighted for statewide results so that the regions were properly proportioned. Throughout this report, findings of the telephone survey are reported at a 95% confidence interval.

USES OF LAND

The overwhelming majority of landowners in the sample (92%) use the land for a residence, either their own or another person. Two other uses (of the five about which the survey asked) are fairly common: 41% use the tract for recreation, and 39% use it for crops. At the bottom of the ranking of uses, but with at least a quarter using it for the purpose, are timber production (26%) and livestock (26%).

OPINIONS ON DEER AND THE DEER POPULATION

The consensus among landowners is that deer populations are increasing: 60% of respondents indicate that the deer population in the general area of their land has increased over the past 5 years; only 10% indicate that it has decreased.

In a follow-up question regarding whether landowners *want* the deer population in their area to increase, stay the same, or decrease, the most common answers are remain the same (38%) or decrease (36%). Meanwhile, 19% want the deer population to increase.

A question related to opinions about the deer population is whether landowners are satisfied or dissatisfied with the Commission's management of deer in North Carolina. For the most part, landowners are satisfied: 65% are satisfied, and only 12% are dissatisfied (the rest giving neutral answers).

The survey also asked landowners about their desired levels of interaction with deer.

Landowners most commonly choose the moderate of the three answers rather than either of the extremes: 46% say that they would prefer that deer would be *sometimes* sighted, even if it means that there would be occasional property damage. Otherwise, a greater percentage of landowners say that they would prefer that deer would be *regularly* sighted, even if it means that there would be regular property damage (32%), than say that they would prefer that deer would be *almost never* sighted, even if it means that there would rarely be property damage (14%). In short, for the most part, landowners are willing to put up with some damage by deer in exchange for knowing that there are deer around.

In follow-up to the above question, the survey asked about how concerned landowners would be if those same situations were to occur. The most concern was expressed for the absence of deer: 52% strongly agree and 70% strongly or moderately agree that they would be concerned if deer were almost never sighted, even given that this would mean almost no property damage would occur. This is more than the percentages who would agree that they would be concerned if deer were regularly sighted with accompanying regular damage (27% strongly agree; 53% strongly or

moderately agree) or if deer were sometimes sighted with occasional damage (18% strongly agree; 46% strongly or moderately agree).

The survey read eight statements to respondents (shown in the text box below) and asked them if they agreed or disagreed with each, and the results were ranked. The results suggest that the opportunity to hunt deer is considered important (80% *strongly* agree that deer hunting is an important tool to manage deer populations, and 75% *strongly* agree that it is important for people to have opportunities to hunt deer in North Carolina), and deer are considered important as part of the ecosystem (76% *strongly* agree that it is important just knowing that deer exist in North Carolina, 73% *strongly* agree that it is important to have a healthy population of deer in North Carolina, and 71% *strongly* agree that deer play an important role in nature). Economic considerations and landowners' personal quality of life are of less importance (at the bottom of the ranking are that the money that people spend to hunt deer in North Carolina is important to the economy—60% strongly agree—and that the presence of deer in North Carolina increases the landowners' overall quality of life—only 43% strongly agree).

- Q120. Deer hunting is an important tool to manage deer populations.
Q121. It is important just knowing that deer exist in North Carolina.
Q122. The presence of deer in North Carolina increases my overall quality of life.
Q123. It is important for people to have opportunities to hunt deer in North Carolina.
Q124. The money that people spend to hunt deer in North Carolina is important to the economy.
Q125. The presence of deer is a sign of a healthy environment.
Q126. It is important to have a healthy population of deer in North Carolina.
Q127. Deer play an important role in nature.

PROBLEMS WITH DEER

The survey explored potential problems with deer that landowners might have had in the past 5 years. Nearly half have had deer damage to ornamental plants or gardens (46%), and nearly half of those who use their land for timber or crops have had deer damage to the timber or crops (45% of those who use their land for either purpose). More than a quarter of respondents (29%) indicated that they or a household member have had a vehicle collision with a deer in the past 5 years.

Another set of six questions (shown in the text box below) asked about problems with deer in the general area of the respondents' property, regardless of whether they personally had problems. The list is topped by deer-vehicle collisions (66% agree that these constitute a general problem). There are three more prominent deer problems, each which has close to half of respondents agreeing that it is a problem: damage to ornamental plants or gardens (49%), deer overpopulation (45%), and damage to timber or crops (43%).

The survey asked if respondents agreed or disagreed that the following deer conflicts are a problem in the general area of their property:

130. Deer overpopulation.
131. Deer being in poor health.
132. Deer-vehicle accidents.
133. Deer damage to crops or timber.
134. Deer damage to ornamental plants or gardens.
135. Diseases in deer being transmitted to humans.

HUNTING OF DEER ON LAND

A substantial percentage of landowners in the survey (40%) had personally hunted deer on their property and/or had allowed household members to hunt deer on their property in the past 5 years. Slightly more (44%) had allowed people other than household members to hunt on their property in the past 5 years. In total, 60% of landowners in the survey had deer hunting occur on their land (themselves personally, household members, or others) in the past 5 years. A small percentage of respondents (5%) had leased part or all of their property for deer hunting in the past 5 years.

In follow-up to one of the above questions, those landowners who did *not* personally hunt or have household members hunt on their land in the past 5 years were asked a series of eleven agree-disagree questions (shown in the text box on the following page) about reasons that there was no personal or household hunting of deer on their land. A majority agree that there was no household hunting of deer simply because no one in the household hunts (74%). Otherwise, no reason was agreed to by a majority. Next on the ranking is that the landowner says his/her

property is too small for deer hunting (43%), distantly followed by that someone outside the household hunts deer on the property (28%). No other reason was agreed to by more than 21%.

The survey asked if respondents agreed or disagreed that the following were reasons that there was no household hunting of deer on their land:

- Q83. My property is too small for deer hunting.
- Q84. There are no deer on my property.
- Q85. No one in my household hunts.
- Q86. Someone outside my household hunts deer on my property.
- Q87. My work commitments limit my time to hunt.
- Q88. My family commitments limit my time to hunt.
- Q89. My health, or my age, limit my hunting.
- Q90. I think hunting regulations are too confusing.
- Q91. I think hunting equipment is too expensive.
- Q92. I think hunting licenses are too expensive.
- Q93. I disapprove of hunting.

Similar to the above, the survey asked a series of nine questions to those who did not allow people outside of their household to hunt deer on their property about possible reasons for not allowing others to hunt deer on their property (shown in the text box below). Four reasons have a majority agreeing that they were reasons for not allowing others to hunt deer on their land: concern about a hunter injuring another person on the property (66% agree), concern about trespassing on their property (64%), concern about liability (59%), and thinking that the property is too small for deer hunting (55%).

The survey asked if respondents agreed or disagreed that the following were reasons that they did not allow others outside of their household hunt deer on their land:

- Q97. My property is too small for deer hunting.
- Q98. There are no deer on my property.
- Q99. Someone in my household already hunts on the property.
- Q100. No one has expressed an interest in deer hunting on my property.
- Q101. I would not be able to make enough money on deer hunting leases.
- Q102. I am concerned about liability.
- Q103. I am concerned about a hunter injuring another person on my property.
- Q104. I am concerned about trespassing on my property.
- Q105. I disapprove of hunting.

A final series of questions asked landowners if they would allow deer hunting on their property under various conditions (shown in the text box below). No condition has more than 31% of landowners saying that they would be very or somewhat likely to allow hunting under that condition. The top conditions are if hunters used only bows and arrows (31%), if hunters had passed a Commission hunter education certification program (31%), if hunters used only shotguns or bows and arrows (whose shots travel a short distance compared to rifles) (26%), and if hunters assisted with planting or maintaining crops, food plots, or wildlife habitat (26%).

The survey asked if respondents about their likelihood to allow deer hunting on their land under the following conditions:

- Q108. The hunters only used bows-and-arrows.
- Q109. The hunters only used muzzleloaders or bows-and-arrows.
- Q110. The hunters used only shot guns or bows-and-arrows.
- Q111. The hunters used any legal weapon.
- Q112. You knew that the hunters had passed a Wildlife Resources Commission hunter certification program.
- Q113. The hunters assisted with planting or maintaining crops, food plots, or wildlife habitat.
- Q114. The hunters assisted with maintenance of buildings, fences, or equipment on your property, or ran errands for you, such as getting groceries.
- Q115. You received a fee from the hunters.
- Q116. The hunters purchased additional liability coverage that would cover hunting activities on your property.
- Q117. You knew that landowners in North Carolina have reduced liability when they allow hunting on their properties, as long as no fees or services are provided by the hunters.

MANAGEMENT OF DEER ON LAND

When asked if any part of their property is managed specifically for deer, 13% of landowners indicate that it is. In follow-up, the survey asked about four specific practices that could be used to manage deer, among those who do so: 80% of those who manage part or all of their land for deer use hunting on their land as a deer management practice, 76% use food plots, 66% use supplemental feeding, and 33% use timber management.

Landowners who have had deer problems on their property were asked a series of questions about things that they may have done to deal with the problems. A majority of those with deer

problems have allowed deer hunting on their property to help deal with the problem (59%). About a third have used fencing to exclude deer from plants and/or gardens (32%). Methods used more sparingly include noisemaking devices to scare deer (15%), chemicals to repel deer (11%), and legal shooting of deer outside of hunting season (7%). Meanwhile, 12% have done nothing.

OPINIONS ON DEER HUNTING REGULATIONS

In perhaps the most basic question pertaining to deer hunting regulations, an overwhelming majority of landowners in the survey (93%) approve of legal, regulated hunting, with most of them saying that they *strongly* approve (77%). Only 4% disapprove.

Following the above question, landowners were asked three questions about hunting in North Carolina. An overwhelming majority (92%) agree that written permission from the landowner should be required to hunt on private land in North Carolina. However, less than a majority agree that hunting deer over bait should be legal (42%) or that hunting deer with dogs should be legal (30%).

Landowners are more likely to say that the current firearms deer hunting season in the county in which their property is located is too short (34%) than to say it is too long (8%). Their most common response is that it is about right (44%).

Landowners whose property is in a part of North Carolina that allows hunters to get an unlimited number of tags to harvest additional does on private land were asked about the current season bag limit for does, which is 6 does (not including those harvested using the additional tags). Those landowners are more likely to say that the current season bag limit for does is too low (28%) than to say it is too high (11%). Their most common response is that it is about right (47%).

Similar to the above, landowners whose property is in a part of North Carolina that does *not* allow hunters to get additional doe tags on private land were asked about the season bag limit for does, which again is 6 does. Their responses differ from those above, as these landowners are

more likely to say that the bag limit for does is too high (25%) than to say it is too low (12%). Nonetheless, their most common response is that it is about right (46%).

Landowners were asked about the current bag limit for bucks in the county in which their property is located. The majority indicate that the buck bag limit is about right (53%), but otherwise they are more likely to say it is too low (24%) than to say it is too high (10%).

PARTICIPATION IN OUTDOOR ACTIVITIES

The survey asked about participation in six outdoor activities. A large majority of landowners in the survey had fed birds and/or other wildlife besides deer in the past 12 months (69%), and a bare majority had watched and/or photographed wildlife (52%). Just under half of landowners in the survey had fished in the past 12 months (48%). Lower percentages had fed deer (32%), gone deer hunting (24%), or hunted for wildlife other than deer (19%).

The survey also asked about eating deer meat (regardless of whether the landowner had hunted or harvested deer): 48% had eaten deer meat.

TABLE OF CONTENTS

Introduction and Methodology	1
Uses of Land	4
Opinions on Deer and Problems With Deer	8
Opinions on Deer and the Deer Population	8
Problems With Deer	27
Management of Deer on Land, Including Hunting.....	35
Hunting of Deer on Land.....	35
Management of Deer on Land.....	67
Opinions on Deer Hunting Regulations.....	74
Participation in Outdoor Activities	88
Demographic Data	91
Appendix: Crosstabulations by Region	106
About Responsive Management	208

INTRODUCTION AND METHODOLOGY

This study was conducted for the North Carolina Wildlife Resources Commission (hereinafter referred to as the Commission) to determine the opinions of owners of large tracts of land concerning deer management and hunting on their land. The study entailed a telephone survey of owners of tracts of land of at least 5 acres in North Carolina. Specific aspects of the research methodology are discussed below.

For the survey, telephones were selected as the preferred sampling medium because telephone numbers were available for nearly all landowners in the sample. In addition, 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 of natural resources and outdoor recreation. The telephone survey questionnaire was developed cooperatively by Responsive Management and the Commission. Responsive Management conducted a pre-test of the questionnaire to ensure proper wording, flow, and logic in the survey.

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 project briefings 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 instrument, reading of the survey instrument, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. 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. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness.

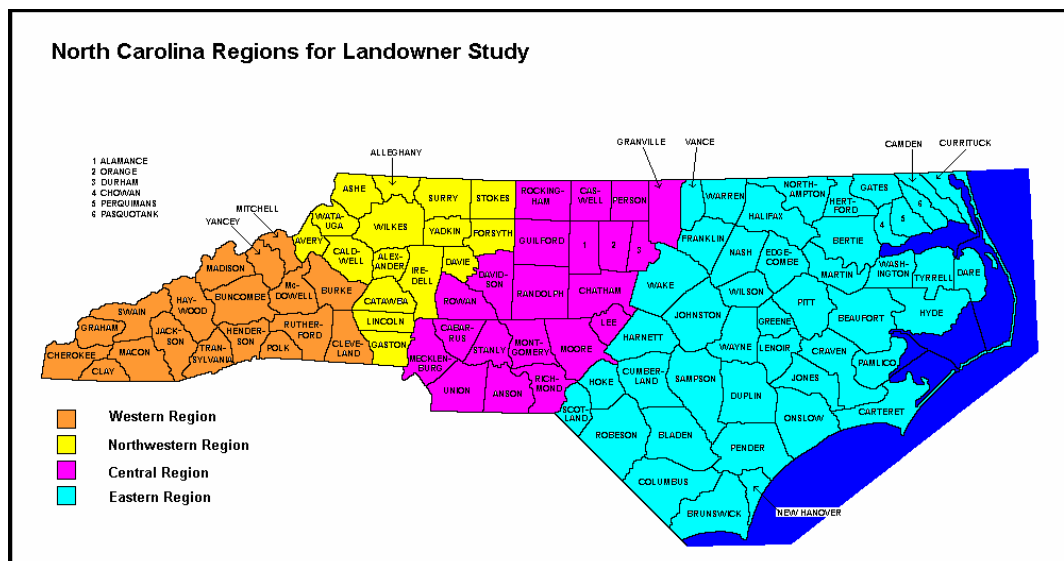
Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design

was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The survey was conducted in December 2008. Responsive Management obtained a total of 1,619 completed interviews.

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 instrument 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 analysis of data was performed using Statistical Package for the Social Sciences software as well as proprietary software developed by Responsive Management. The analysis included many specific crosstabulations (e.g., by size of tract, by farm vs. non-farm), which are included in the body of the text. All questions were also crosstabulated by region; these graphs are included as an appendix.

The survey sampling plan entailed obtaining at least 400 completed interviews in each of four regions in North Carolina. The regions are defined as shown in the map below. The data were then weighted for statewide results so that the regions were properly proportioned.



Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of landowners, the sampling error is estimated to be at most plus or minus 2.42 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within plus or minus 2.42 percentage points of each other. Sampling error was calculated using the formula described below, with a sample size of 1,619 and an estimated population size of 96,226 landowners of large tracts of land. The estimated population size of large landowners was provided by the Commission.

Sampling Error Equation

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

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

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

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

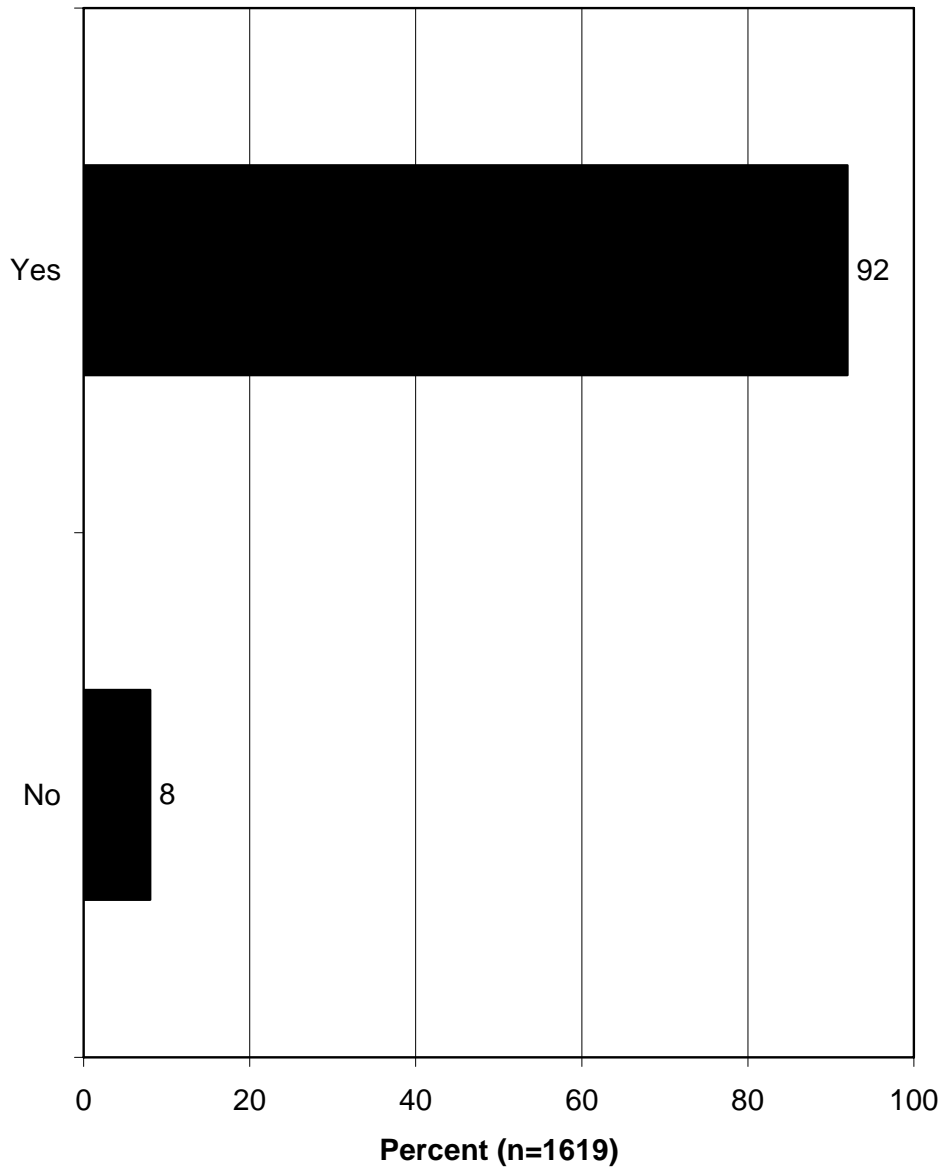
Note that some results may not sum to exactly 100% because of rounding. Additionally, rounding on the graphs may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when “strongly agree” and “moderately agree” are summed to determine the total percentage in agreement).

USES OF LAND

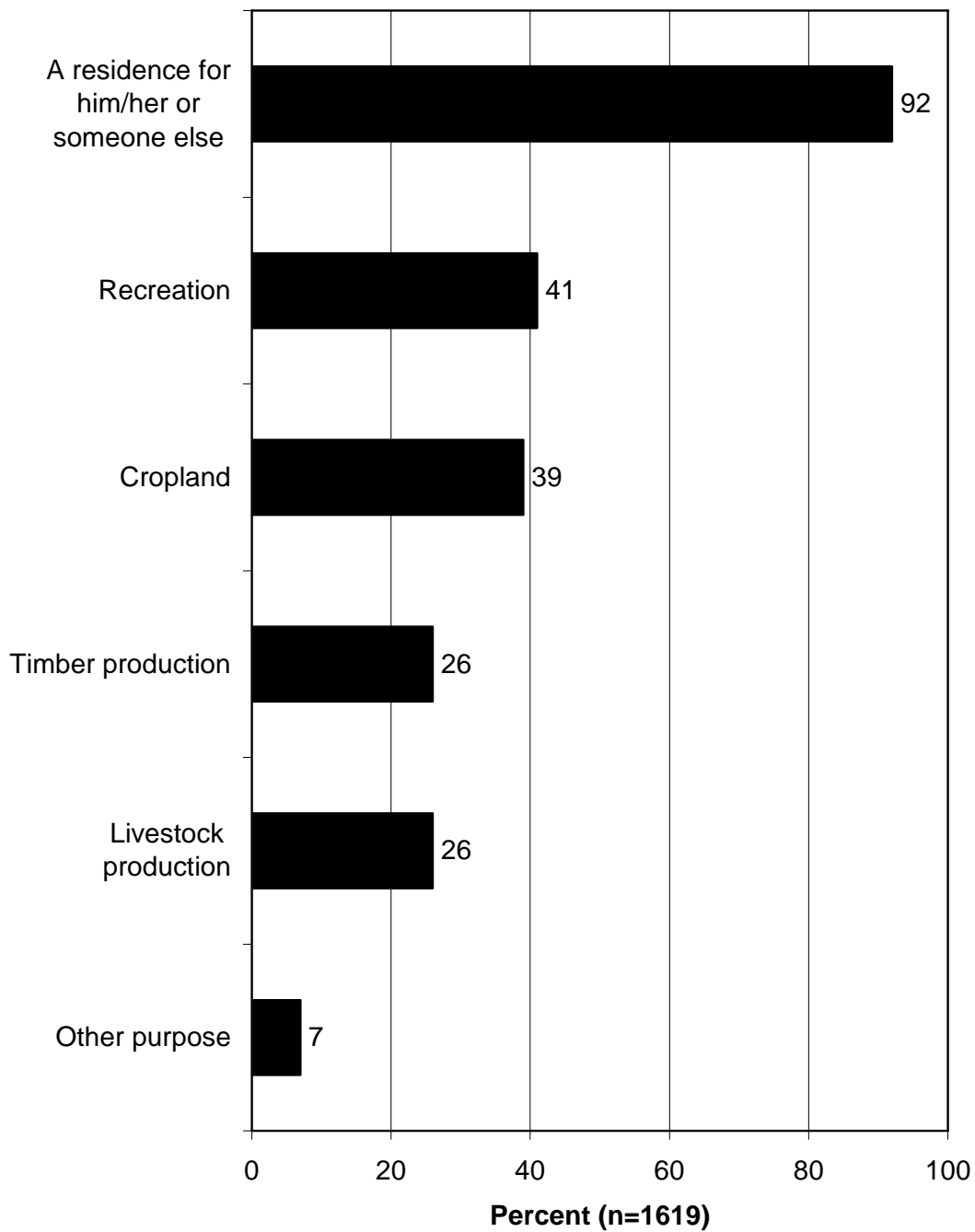
- The overwhelming majority of landowners in the sample live on their largest tract of land (92% live there; less than 1% of those who do not live on that tract indicate that another residence is on that tract; in total, 92% of the landowners indicated that a residence is on their largest tract). Two other uses (of the five about which the survey asked) are fairly common: 41% use the tract for recreation, and 39% use it for crops. At the bottom of the ranking of uses, but with at least a quarter using it for the purpose, are timber production (26%) and livestock (26%).
- A crosstabulation found that farmers appear to be slightly *more* likely to use their land for recreation than are those who are not farmers: 45% of farmers use the land for recreation, compared to 39% of non-farmers. (It was conjectured that farmers, whose lands are highly utilitarian, would perhaps use their largest tract for recreation *less* than would non-farmers; this does not appear to be the case.)

**Q29. Do you live on your property in [county]
County?**

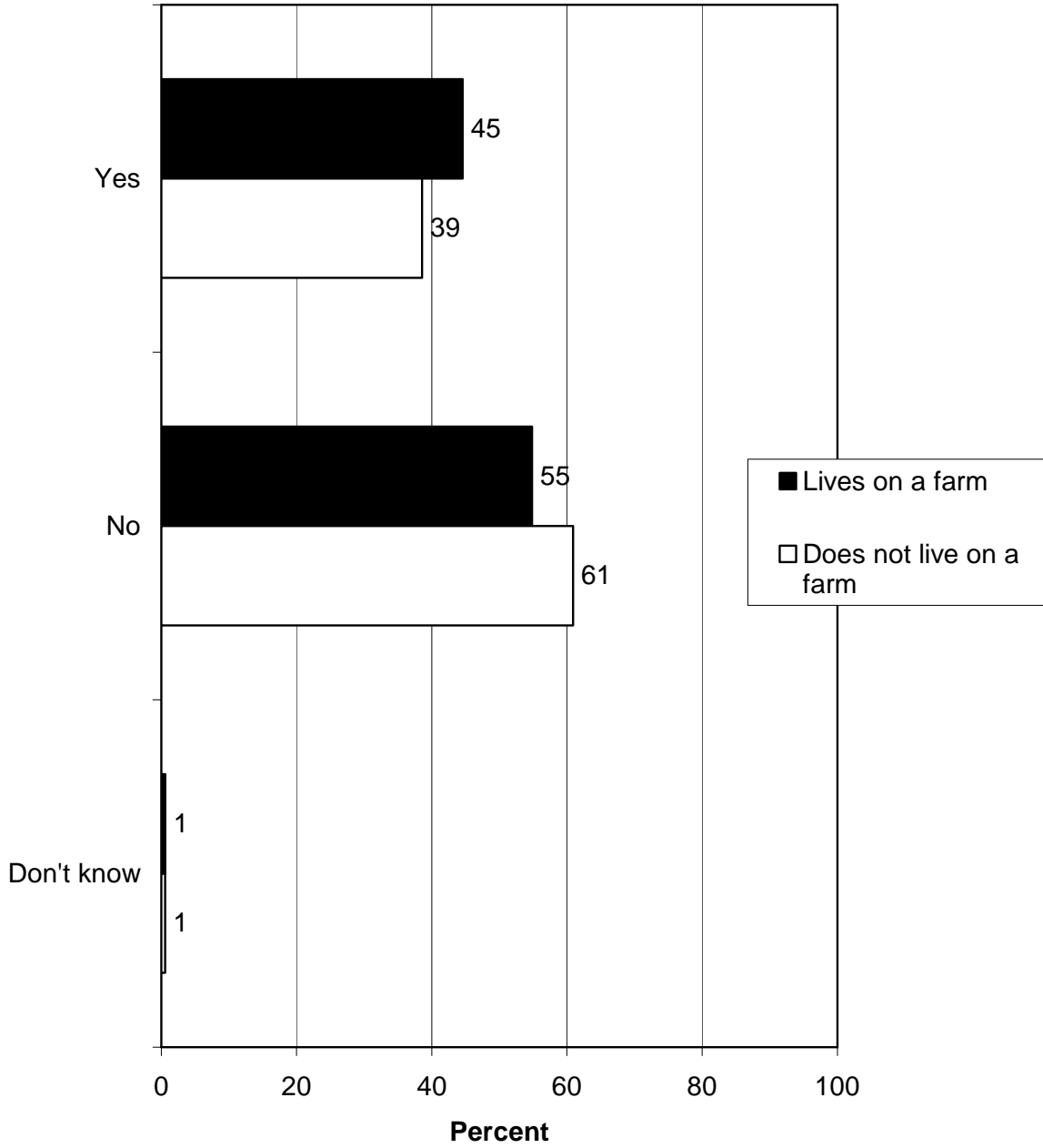
Note: QPL automatically inserted the county name from a previous question in place of [county].



Percent who used his/her property for the following:



Q38. Is your property in [county] County used for recreation?



OPINIONS ON DEER AND PROBLEMS WITH DEER

OPINIONS ON DEER AND THE DEER POPULATION

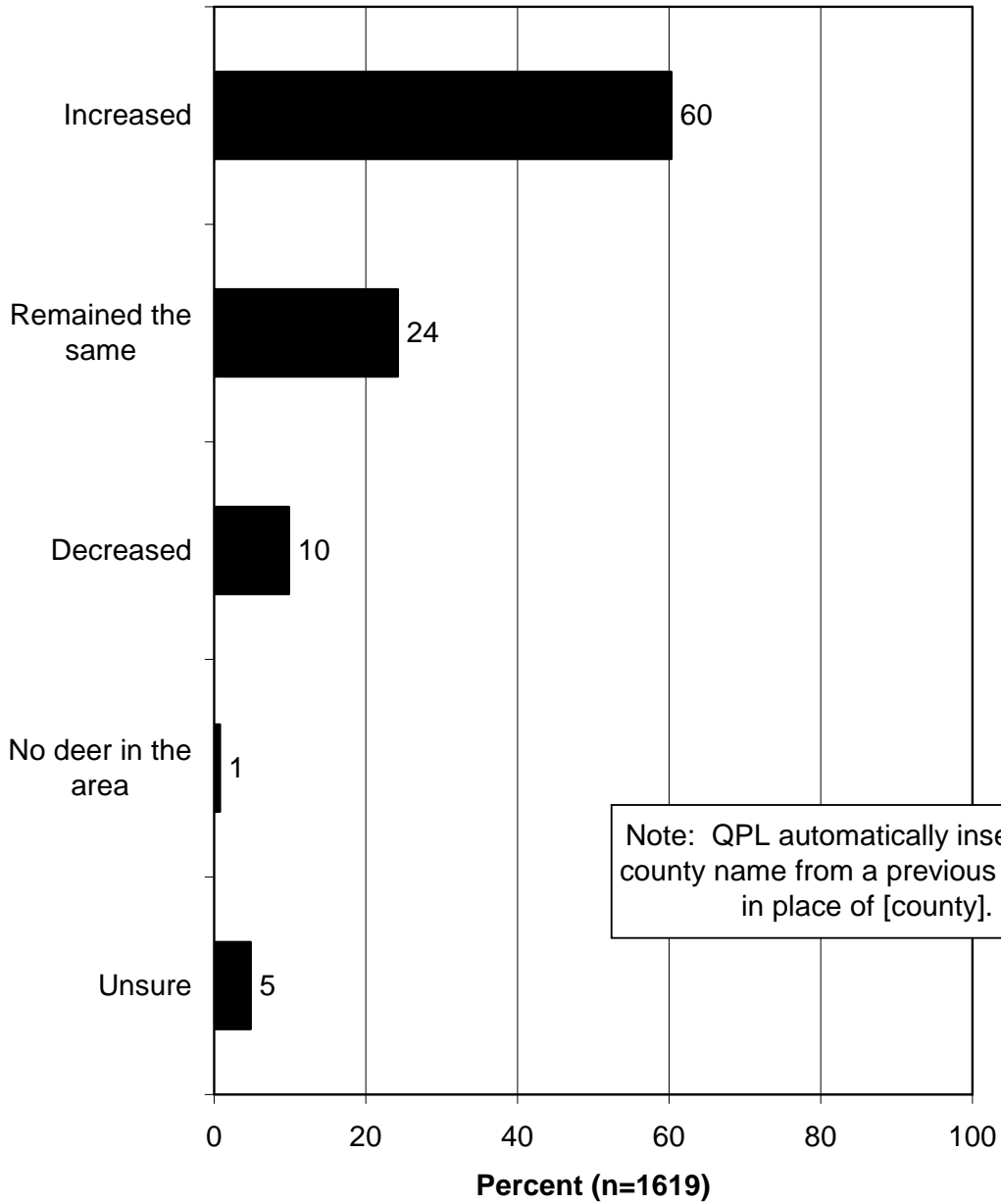
- The consensus among landowners is that deer populations are increasing: 60% of respondents indicate that the deer population in the general area of their land has increased over the past 5 years; only 10% indicate that it has decreased.
 - In a follow-up question regarding whether landowners *want* the deer population in their area to increase, stay the same, or decrease, the most common answers are remain the same (38%) or decrease (36%). Meanwhile, 19% want the deer population to increase.
 - A crosstabulation of the desired deer population by the respondents' perceptions of whether the deer population has increased or decreased over the past 5 years found a strong correlation: those who think the deer population in the area of their land has increased over the past 5 years are more likely to want the population to be decreased in the next 5 years, and vice-versa.
 - A question related to opinions about the deer population is whether landowners are satisfied or dissatisfied with the Commission's management of deer in North Carolina. For the most part, landowners are satisfied: 65% are satisfied, and only 12% are dissatisfied (the rest giving neutral answers).

- The survey also asked landowners about their desired levels of interaction with deer. Landowners most commonly choose the moderate of the three answers rather than either of the extremes: 46% say that they would prefer that deer would be *sometimes* sighted, even if it means that there would be occasional property damage. Otherwise, a greater percentage of landowners say that they would prefer that deer would be *regularly* sighted, even if it means that there would be regular property damage (32%), than say that they would prefer that deer would be *almost never* sighted, even if it means that there would rarely be property damage (14%). In short, for the most part, landowners are willing to put up with some damage by deer in exchange for knowing that there are deer around—78% would prefer that deer be sometimes or regularly sighted, knowing that there would be accompanying damage.
 - A crosstabulation found that farmers are almost exactly the same in their opinions as non-farmers on this question.

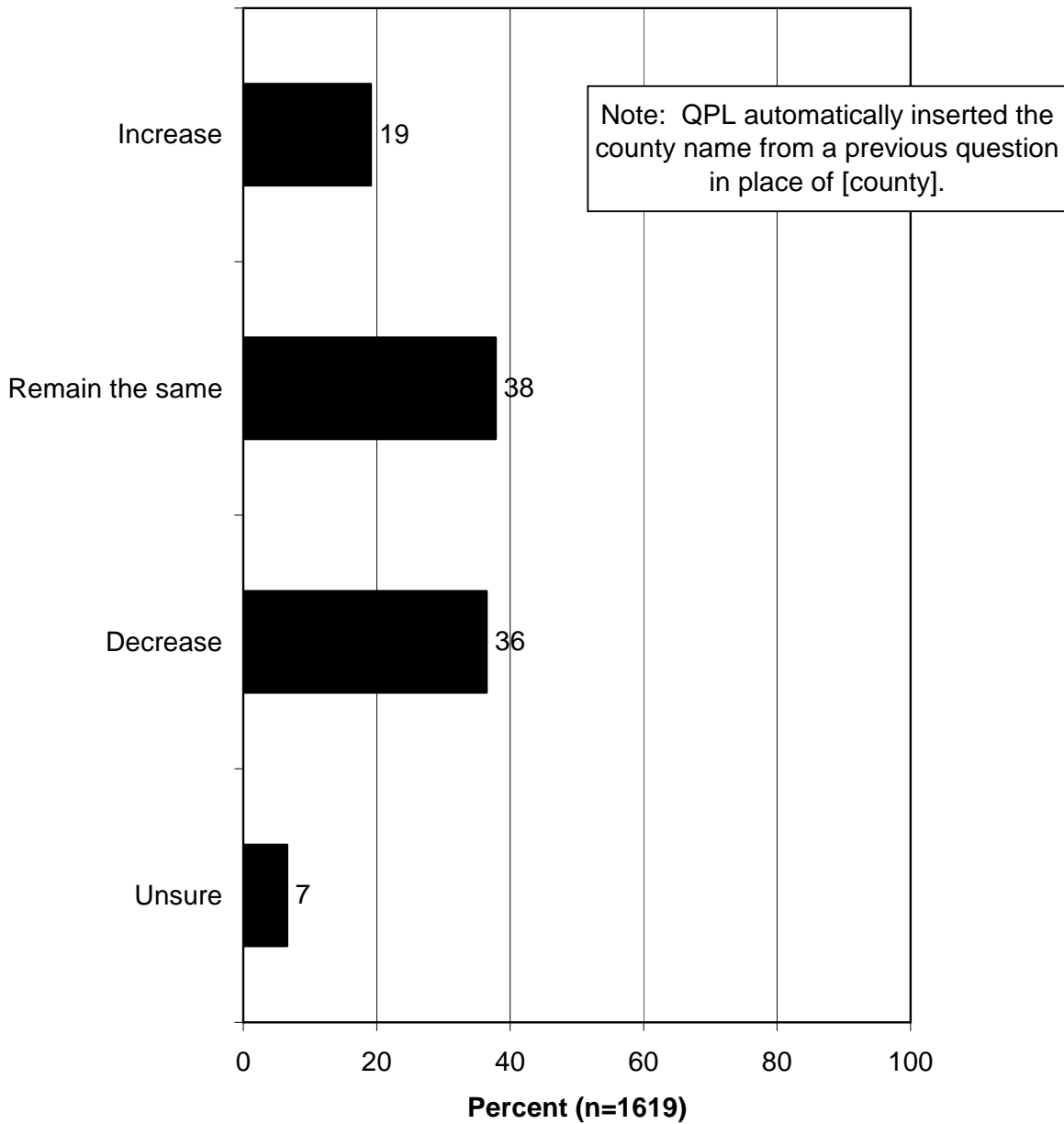
- In follow-up to the above question, the survey asked about how concerned landowners would be if those same situations were to occur. The most concern was expressed for the absence of deer: 52% strongly agree and 70% strongly or moderately agree that they would be concerned if deer were almost never sighted, even given that this would mean almost no property damage would occur. This is more than the percentages who would agree that they would be concerned if deer were regularly sighted with accompanying regular damage (27% strongly agree; 53% strongly or moderately agree) or if deer were sometimes sighted with occasional damage (18% strongly agree; 46% strongly or moderately agree). In short, again landowners are willing to put up with some damage in exchange for knowing that there are deer around.
- The survey read eight statements to respondents (shown in the text box on the following page) and asked them if they agreed or disagreed with each, and the results were ranked. The results suggest that the opportunity to hunt deer is considered important (80% *strongly* agree that deer hunting is an important tool to manage deer populations, and 75% *strongly* agree that it is important for people to have opportunities to hunt deer in North Carolina), and deer are considered important as part of the ecosystem (76% *strongly* agree that it is important just knowing that deer exist in North Carolina, 73% *strongly* agree that it is important to have a healthy population of deer in North Carolina, and 71% *strongly* agree that deer play an important role in nature). Economic considerations and landowners' personal quality of life are of less importance (at the bottom of the ranking are that the money that people spend to hunt deer in North Carolina is important to the economy—60% strongly agree—and that the presence of deer in North Carolina increases the landowners' overall quality of life—only 43% strongly agree).
- Note that in looking at the percentages that *strongly* or *moderately* agree, every statement has a majority in agreement.
 - Regarding whether respondents feel that it is important just knowing that deer exist in North Carolina or whether the presence of deer in North Carolina increases respondents' overall quality of life, farmers and non-farmers have little difference in opinion on these questions. (It was thought that perhaps farmers, who can be affected economically by deer damage, would be less tolerant of deer; they apparently are not.)

- Q120. Deer hunting is an important tool to manage deer populations.
- Q121. It is important just knowing that deer exist in North Carolina.
- Q122. The presence of deer in North Carolina increases my overall quality of life.
- Q123. It is important for people to have opportunities to hunt deer in North Carolina.
- Q124. The money that people spend to hunt deer in North Carolina is important to the economy.
- Q125. The presence of deer is a sign of a healthy environment.
- Q126. It is important to have a healthy population of deer in North Carolina.
- Q127. Deer play an important role in nature.

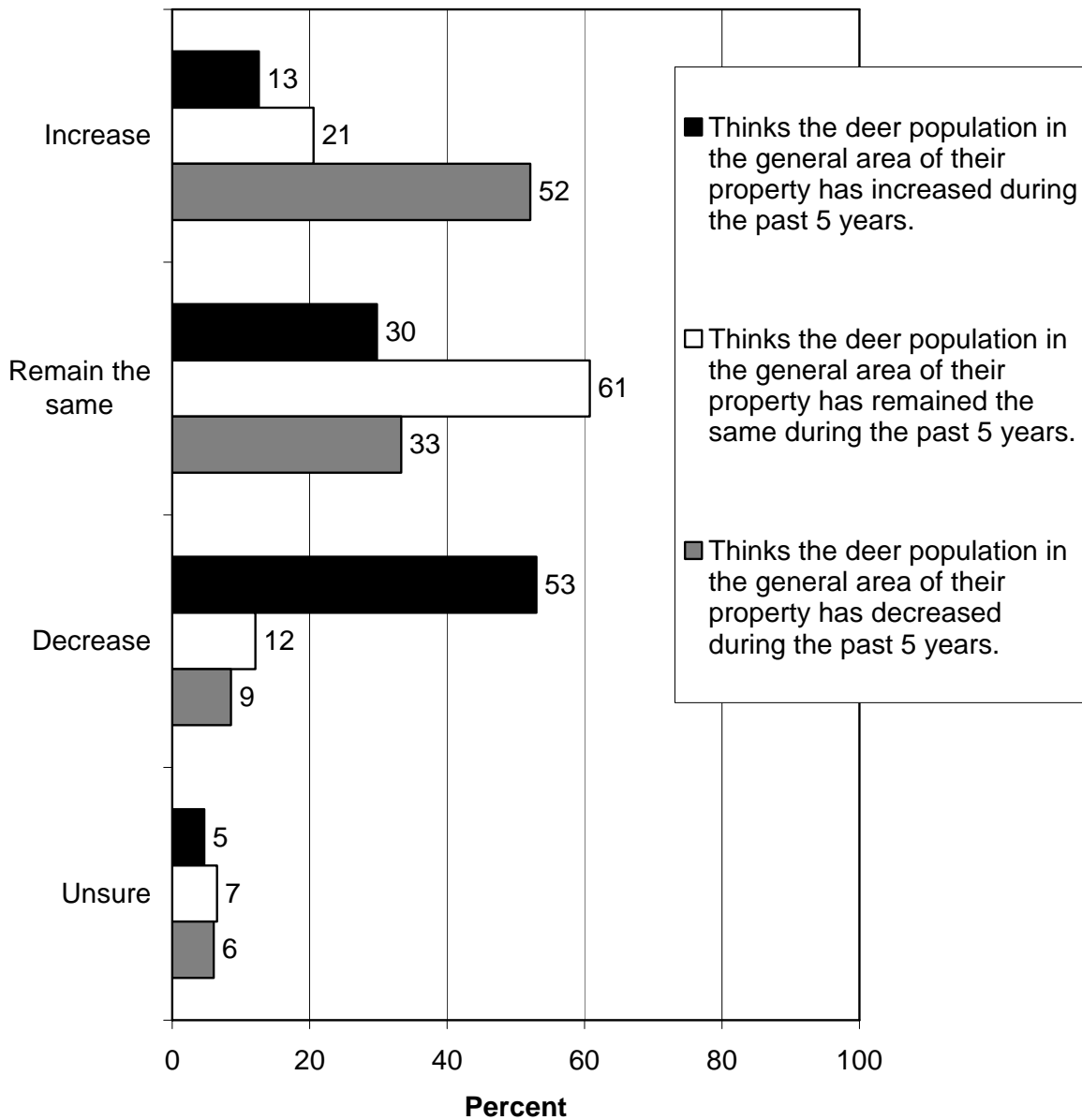
Q63. In your opinion, has the deer population in the general area of your property in [county] County increased, remained the same, or decreased during the past 5 years, or are there no deer in the area?



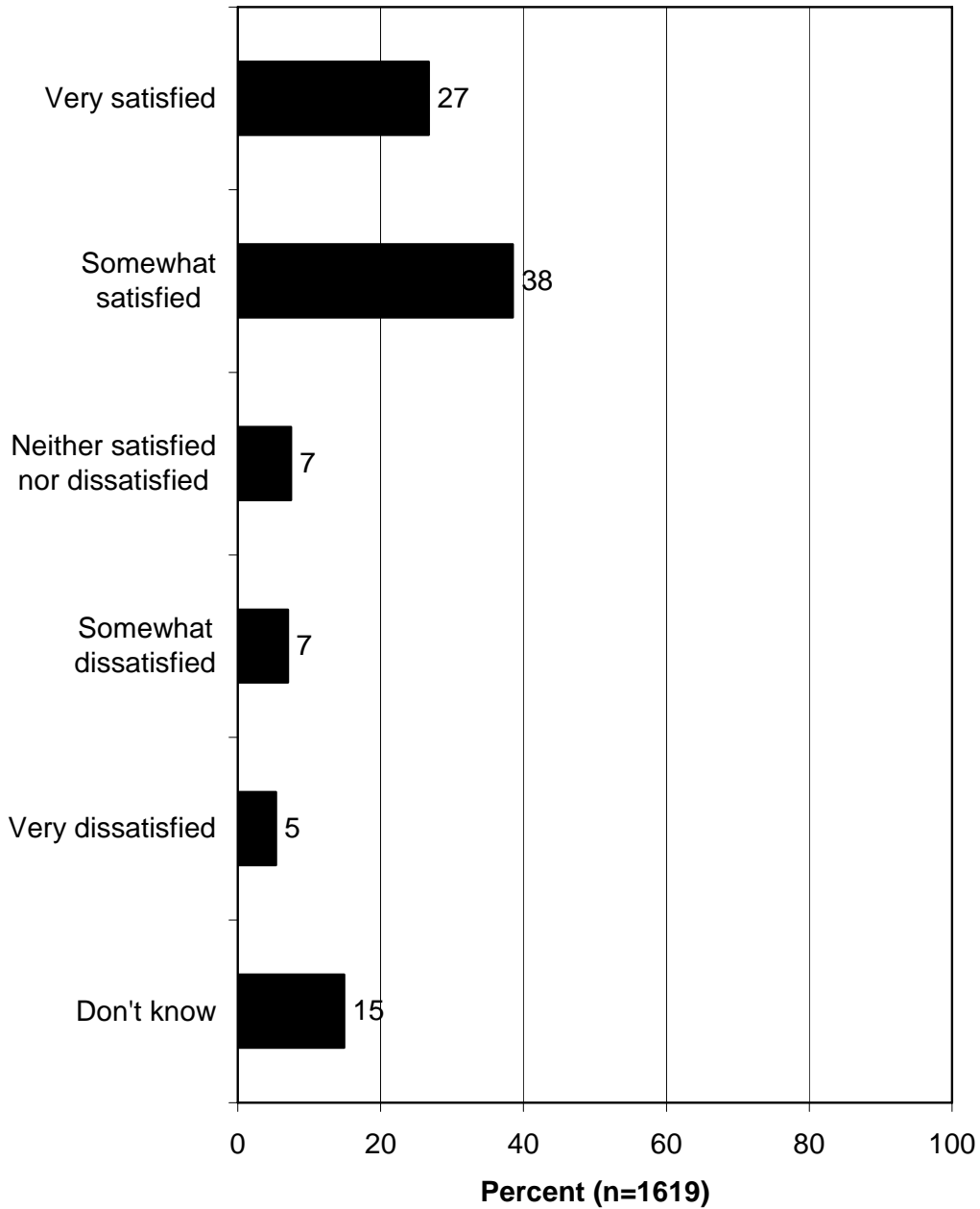
Q64. Wildlife managers would like to know whether or not you want the deer population in the general area of your property in [county] County to change in the next 5 years. Do you want the deer population to increase, remain at its current level, or decrease?



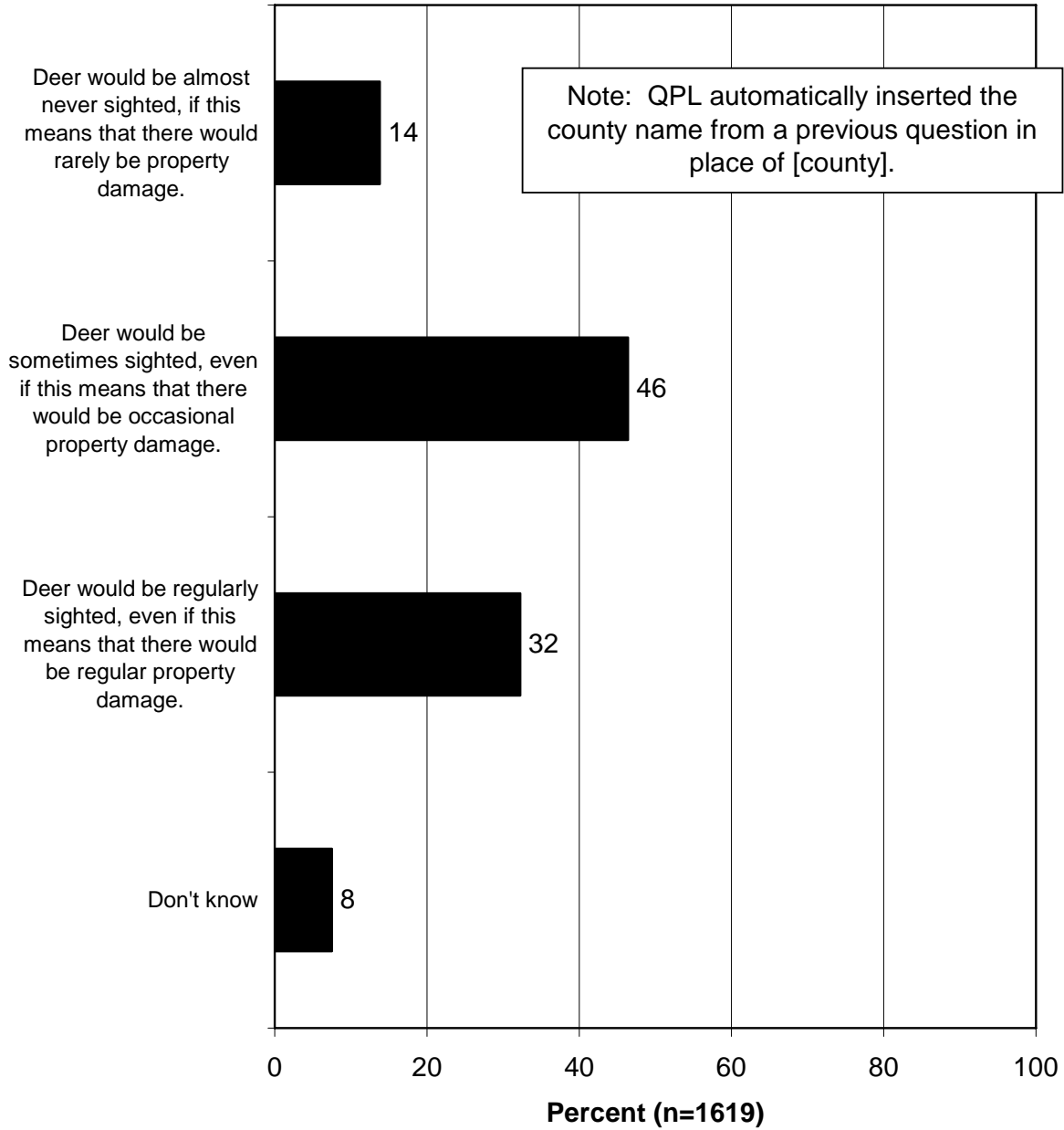
Q64. Wildlife managers would like to know whether or not you want the deer population in the general area of your property in [county] County to change in the next 5 years. Do you want the deer population to increase, remain at its current level, or decrease?



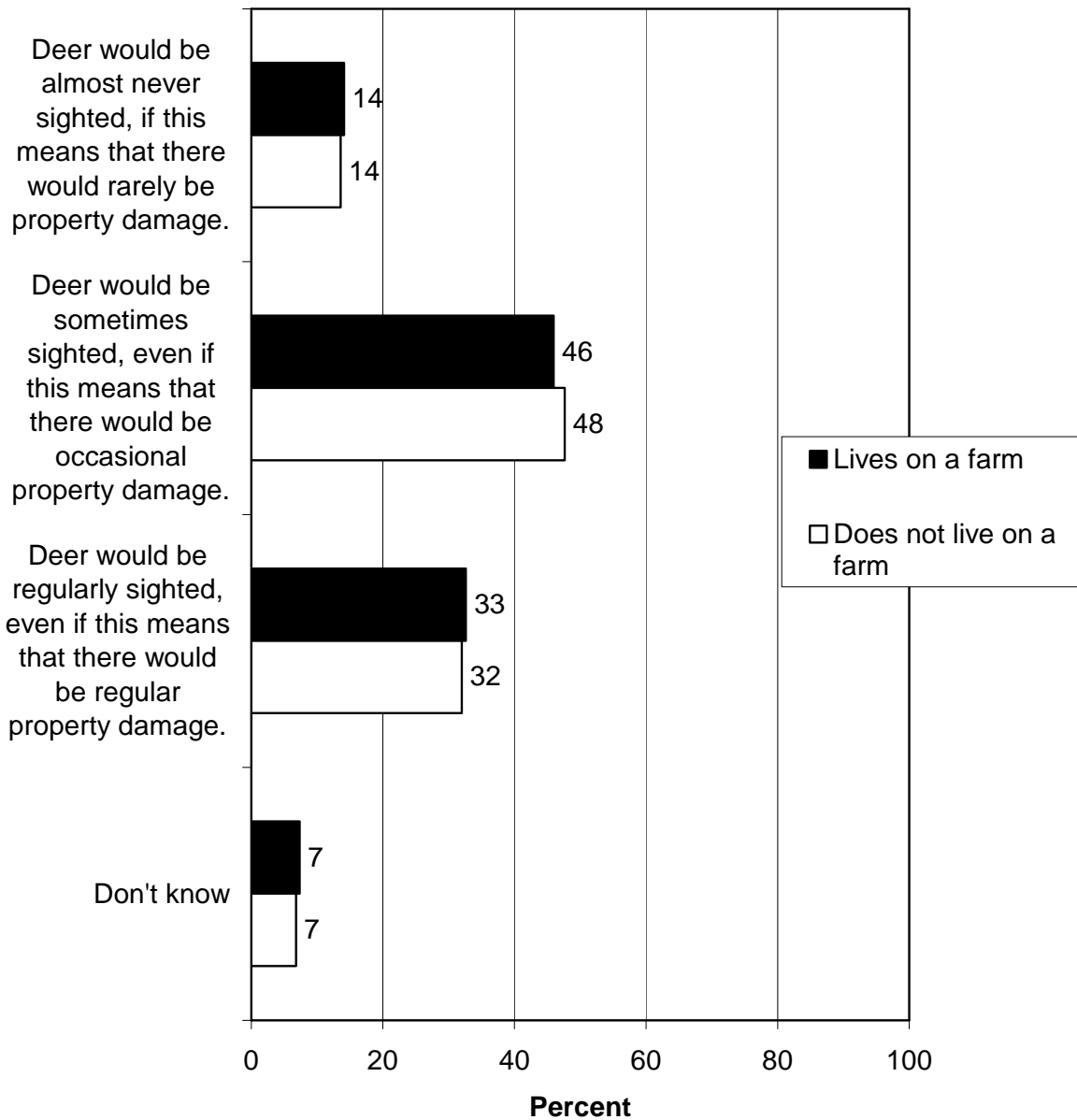
Q128. How satisfied or dissatisfied are you with the North Carolina Wildlife Resources Commission's management of deer in North Carolina?



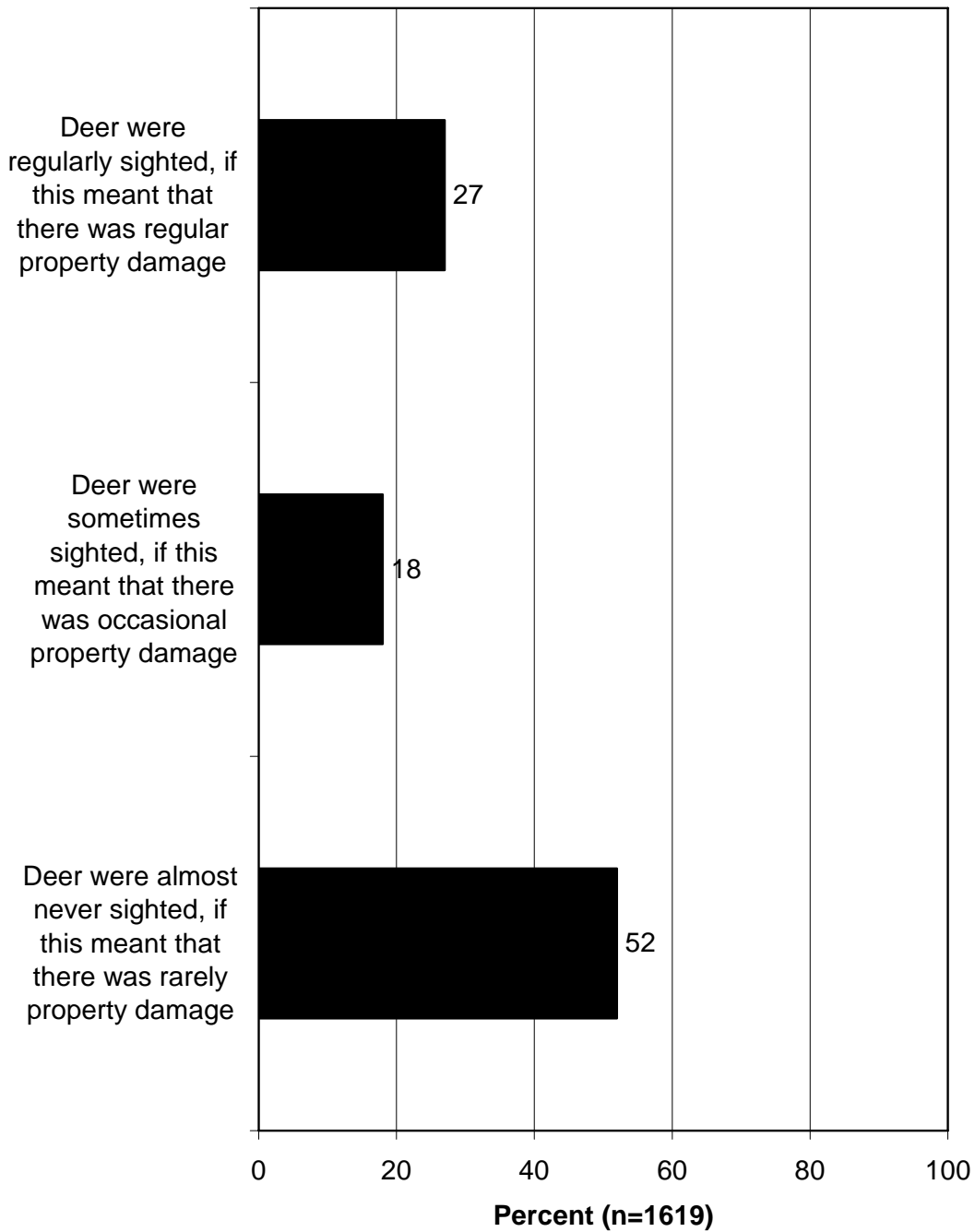
Q136. People prefer different levels of interaction between deer and people. Which of the following situations would you most prefer for the general area of your property in [county] County?



Q136. People prefer different levels of interaction between deer and people. Which of the following situations would you most prefer for the general area of your property in [county] County?



Percent who strongly agree that he/she would be concerned with the following situations in the general area of their property:



Percent who strongly or moderately agree that he/she would be concerned with the following situations in the general area of their property:



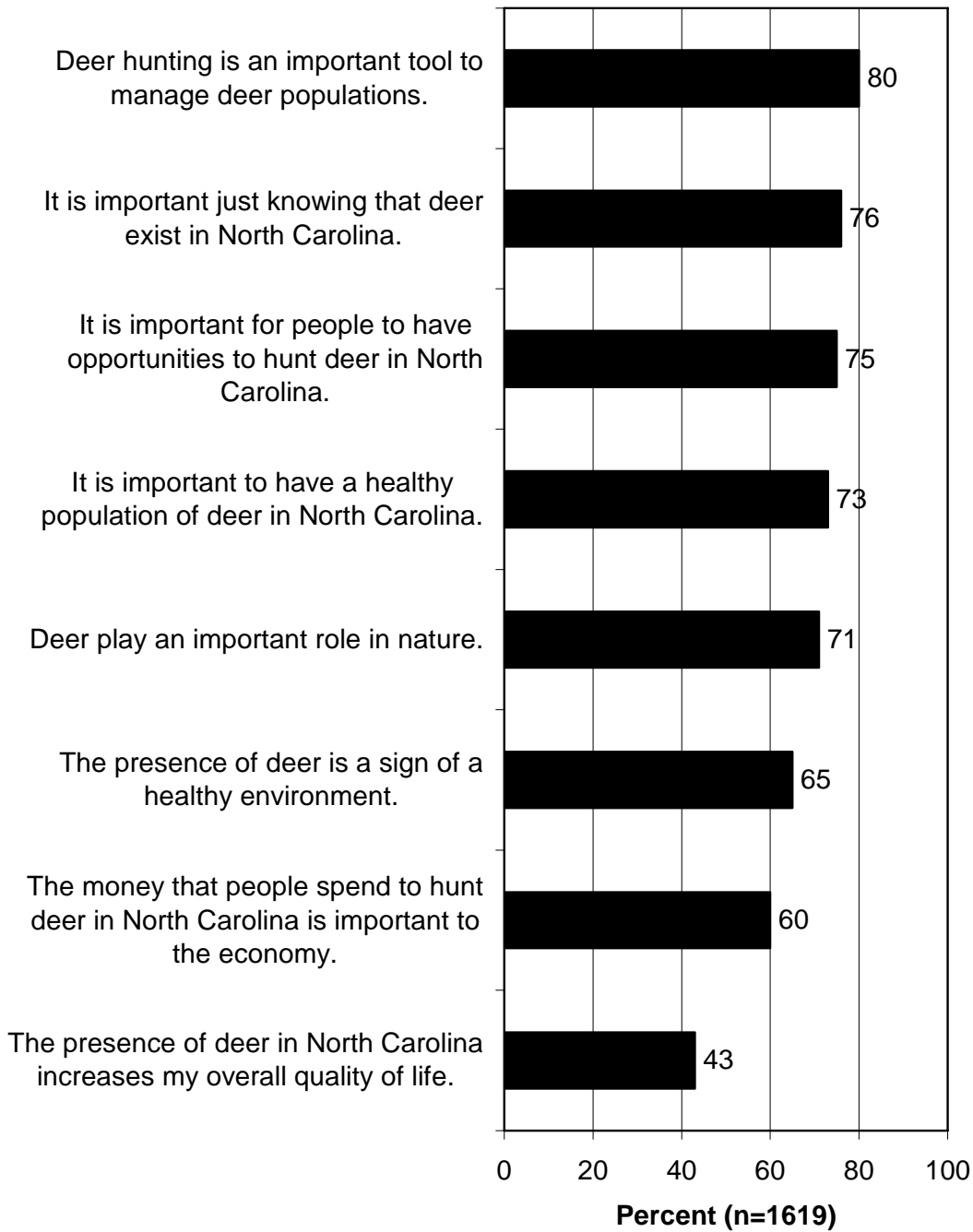
Percent who moderately or strongly disagree that he/she would be concerned with the following situations in the general area of their property:



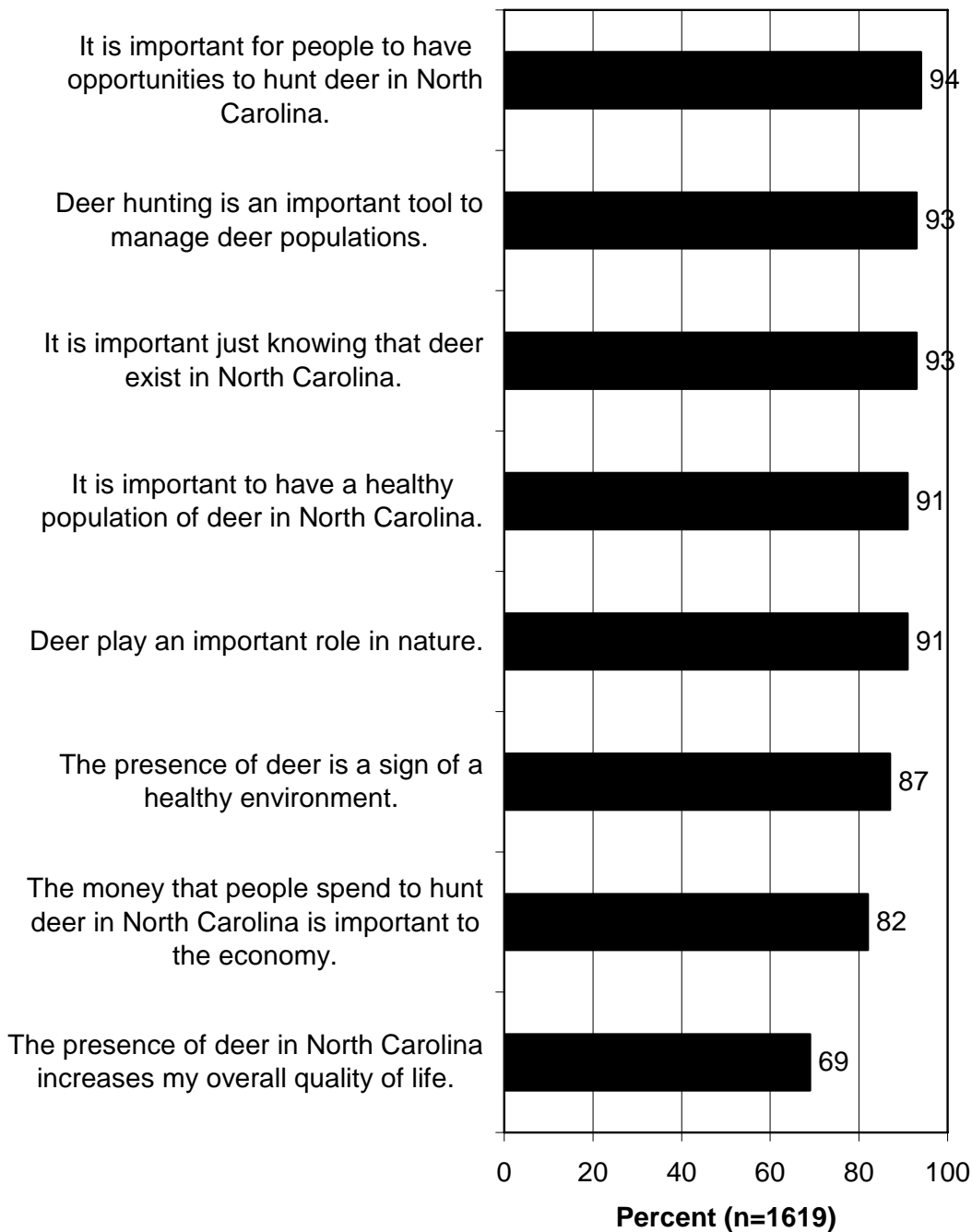
Percent who strongly disagree that he/she would be concerned with the following situations in the general area of their property:



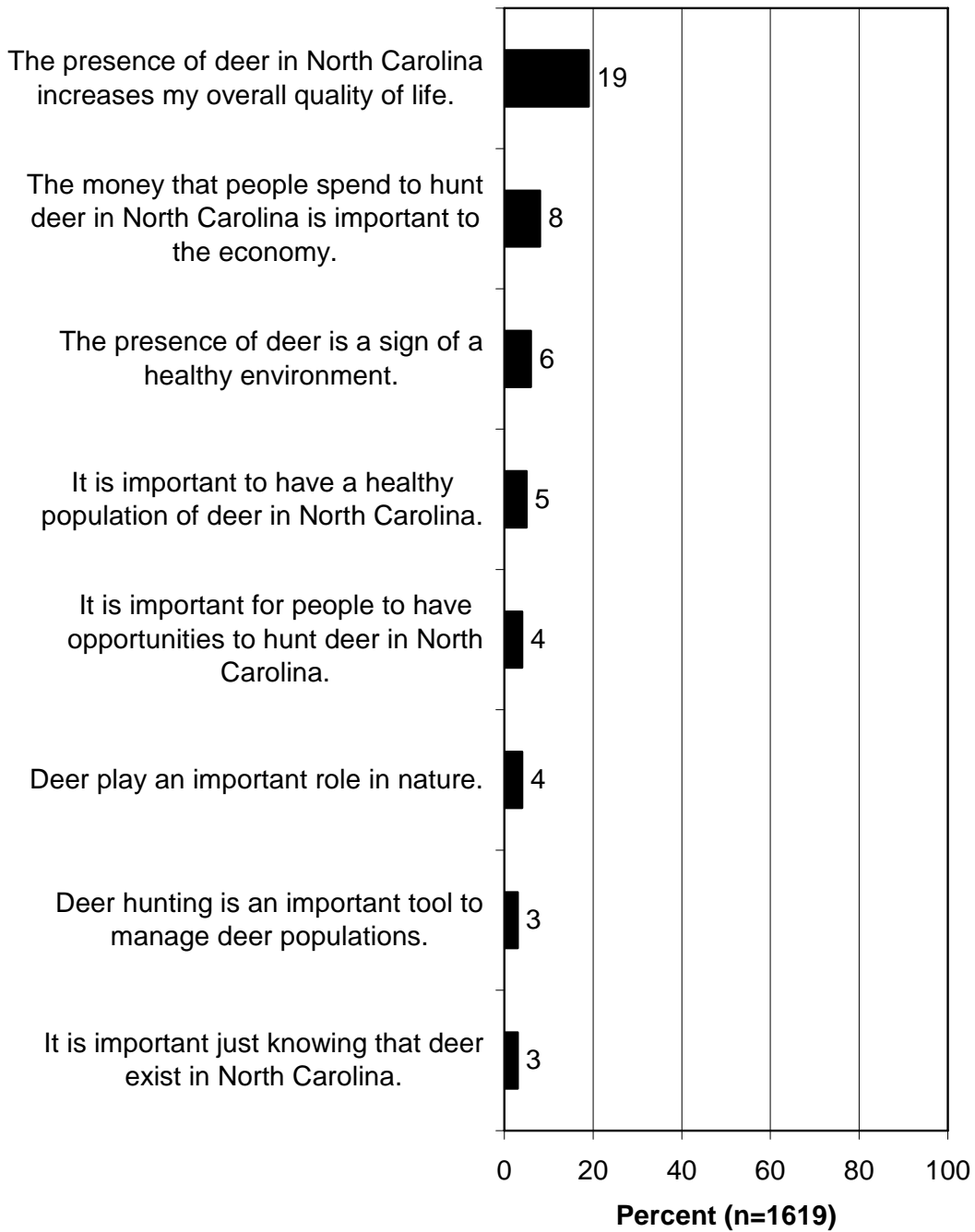
Percent who strongly agree with the following statements concerning deer in North Carolina:



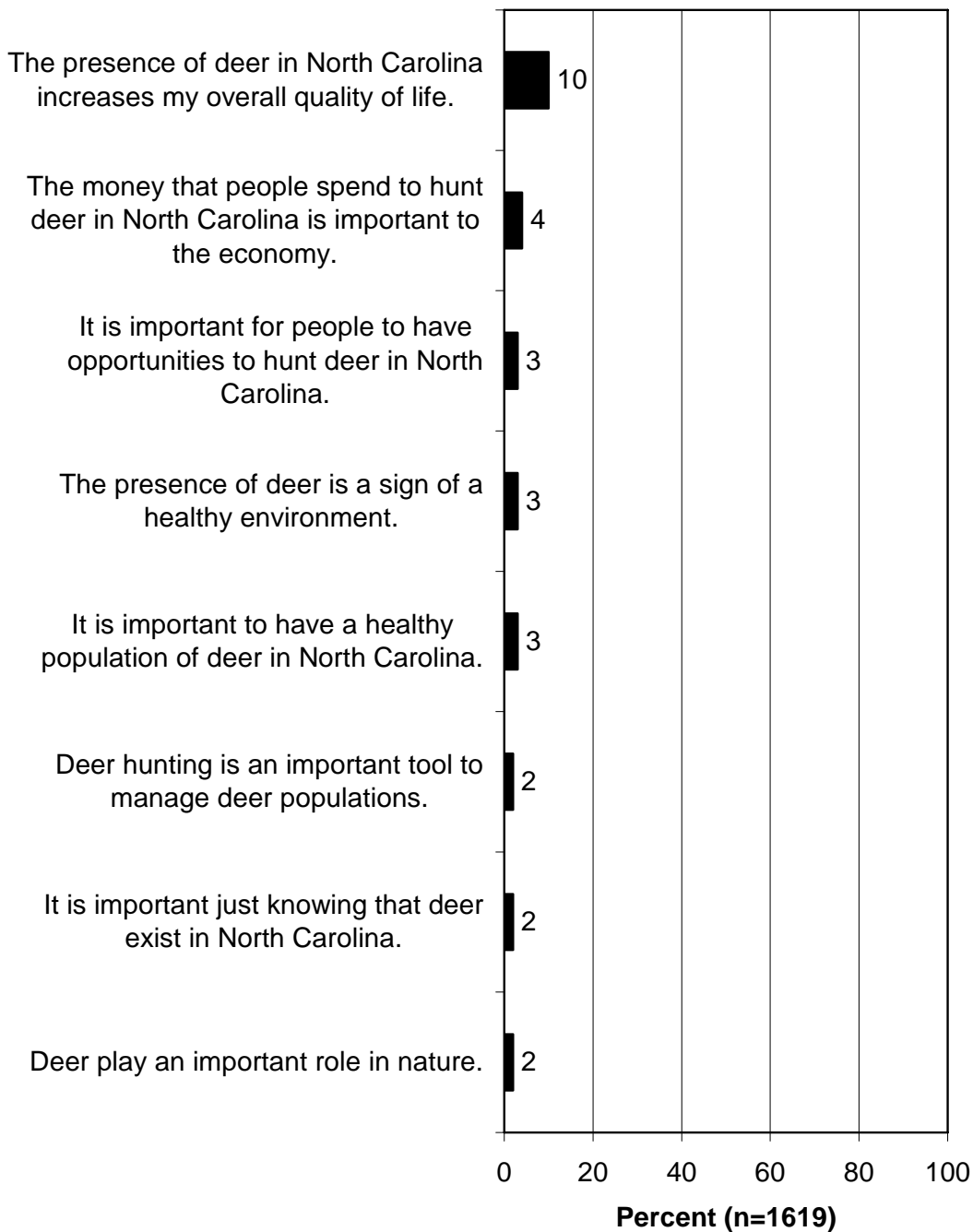
Percent who strongly or moderately agree with the following statements concerning deer in North Carolina:



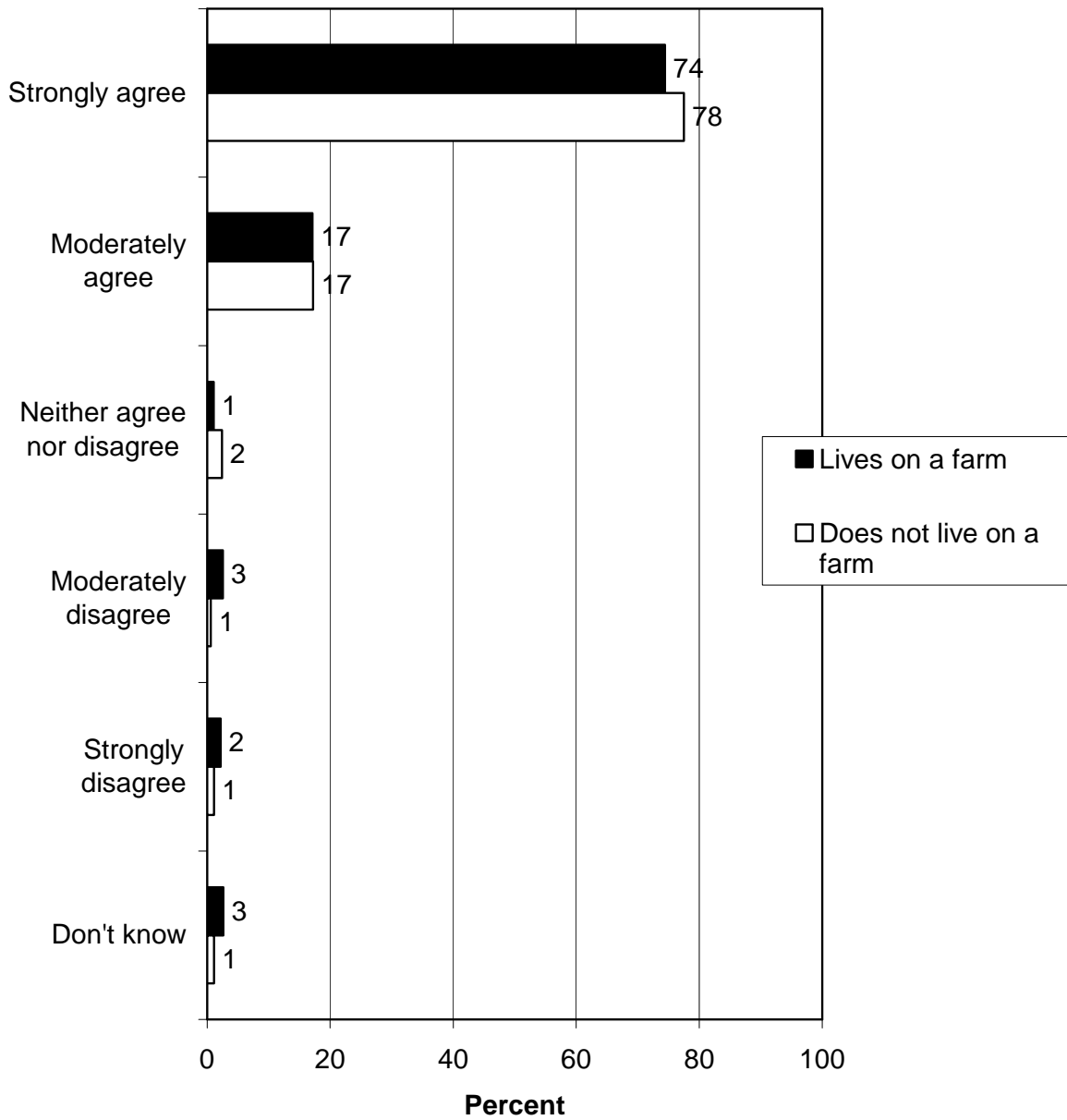
Percent who moderately or strongly disagree with the following statements concerning deer in North Carolina:



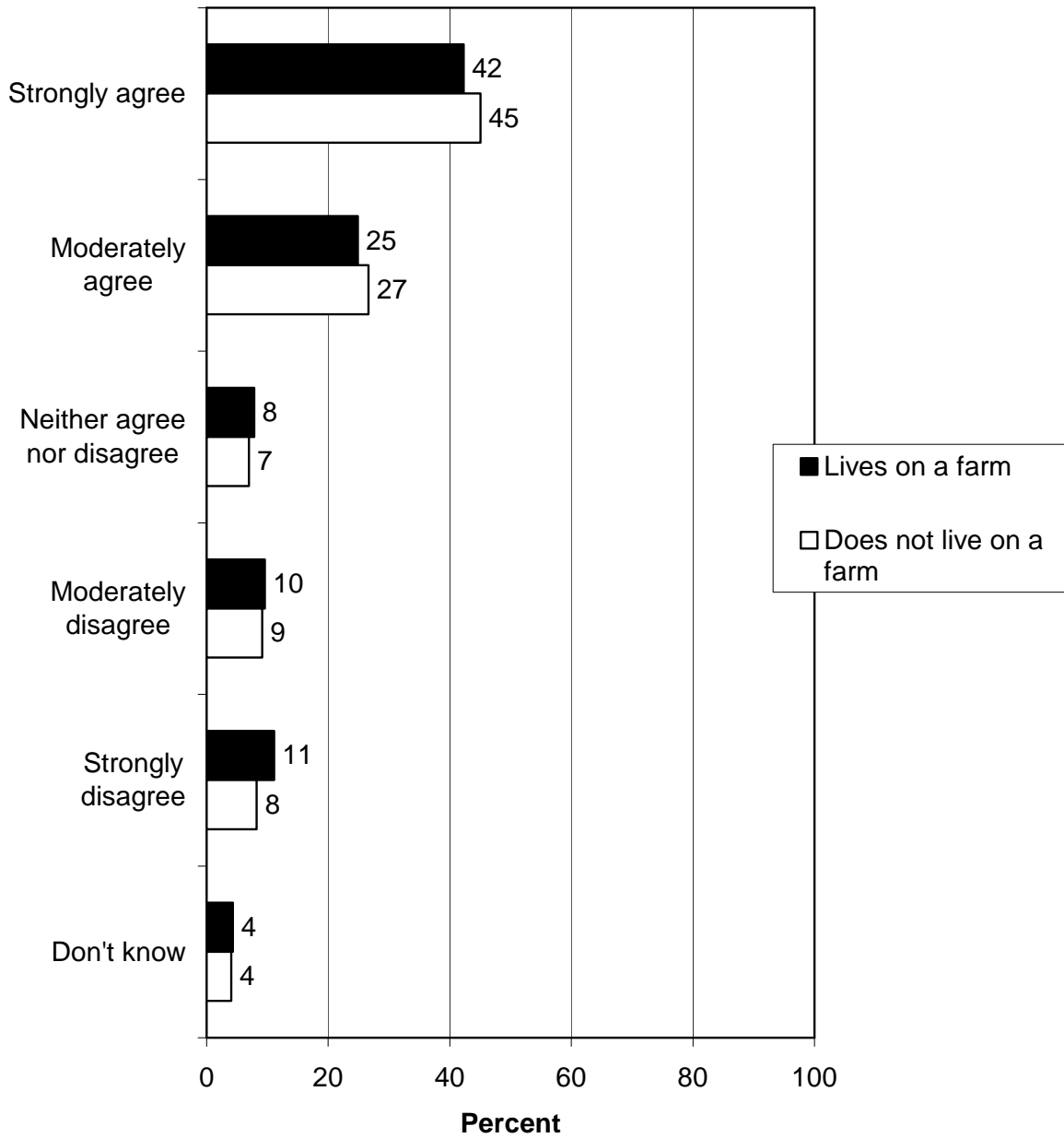
Percent who strongly disagree with the following statements concerning deer in North Carolina:



Q121. Do you agree or disagree that it is important just knowing that deer exist in North Carolina?



Q122. Do you agree or disagree that the presence of deer in North Carolina increases your overall quality of life?



PROBLEMS WITH DEER

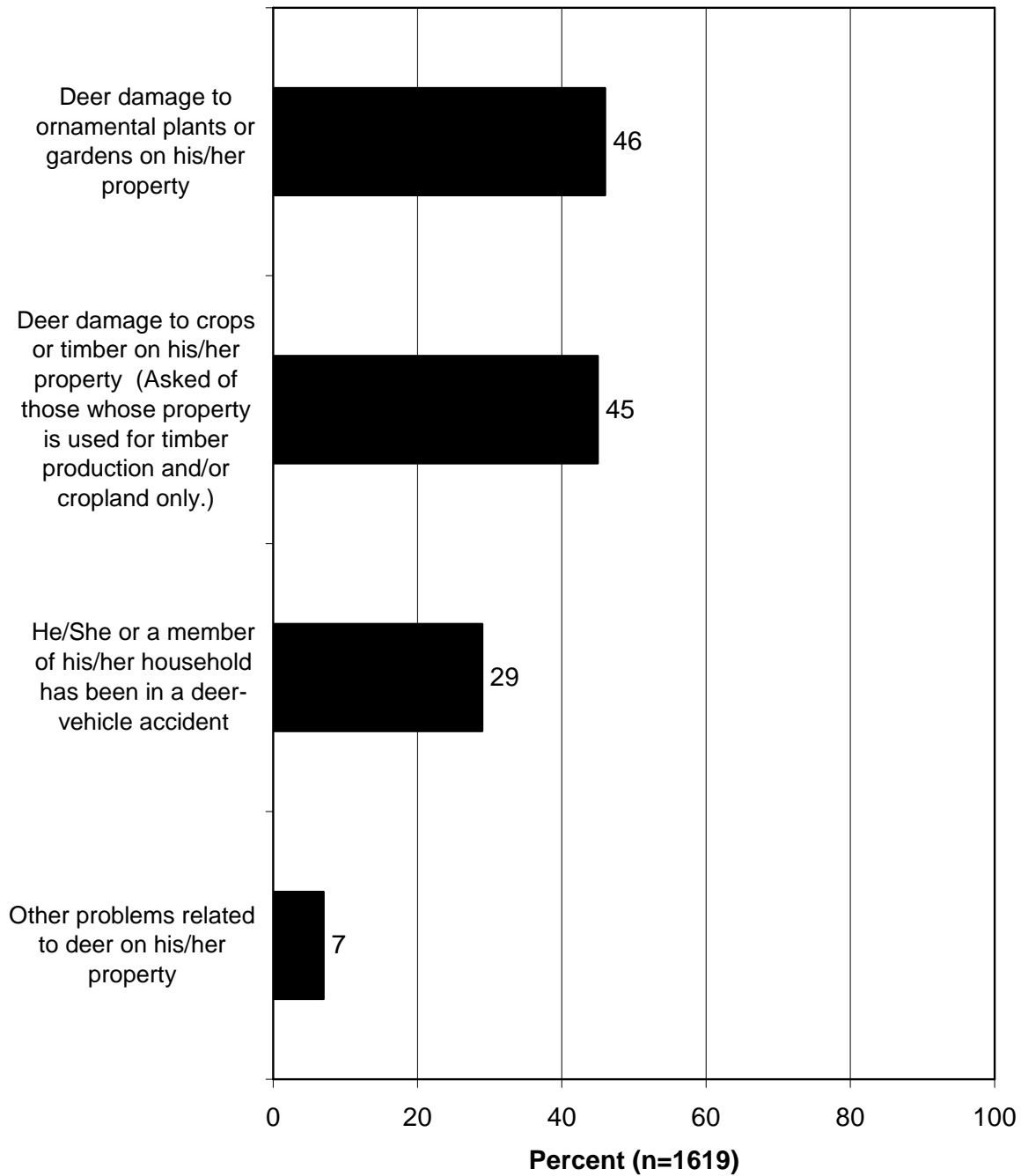
- The survey explored potential problems with deer that landowners might have had in the past 5 years. Nearly half have had deer damage to ornamental plants or gardens (46%), and nearly half of those who use their land for timber or crops have had deer damage to the timber or crops (45% of those who use their land for either purpose). More than a quarter of respondents (29%) indicated that they or a household member have had a vehicle collision with a deer in the past 5 years.
 - A small percentage (7%) named other types of damage. Damaged fencing is the most common of those other types of damage related to deer.

- Another set of six questions (shown in the text box immediately below) asked about problems with deer in the general area of the respondents' property, regardless of whether they personally had problems. The list is topped by deer-vehicle collisions (66% agree that these constitute a general problem). There are three more prominent deer problems, each which has close to half of respondents agreeing that it is a problem: damage to ornamental plants or gardens (49%), deer overpopulation (45%), and damage to timber or crops (43%).
 - A crosstabulation found that farmers are only slightly more likely than are non-farmers to view deer overpopulation as a problem in the general area of their property: 48% of farmers, compared to 43% of non-farmers, agree that deer are overpopulated in the general area of their property. It was conjectured that farmers, whose incomes can be adversely affected by deer damage, would perhaps be much more likely to view deer overpopulation as a problem, but they do not appear to be greatly different.

The survey asked if respondents agreed or disagreed that the following deer conflicts are a problem in the general area of their property:

130. Deer overpopulation.
131. Deer being in poor health.
132. Deer-vehicle accidents.
133. Deer damage to crops or timber.
134. Deer damage to ornamental plants or gardens.
135. Diseases in deer being transmitted to humans.

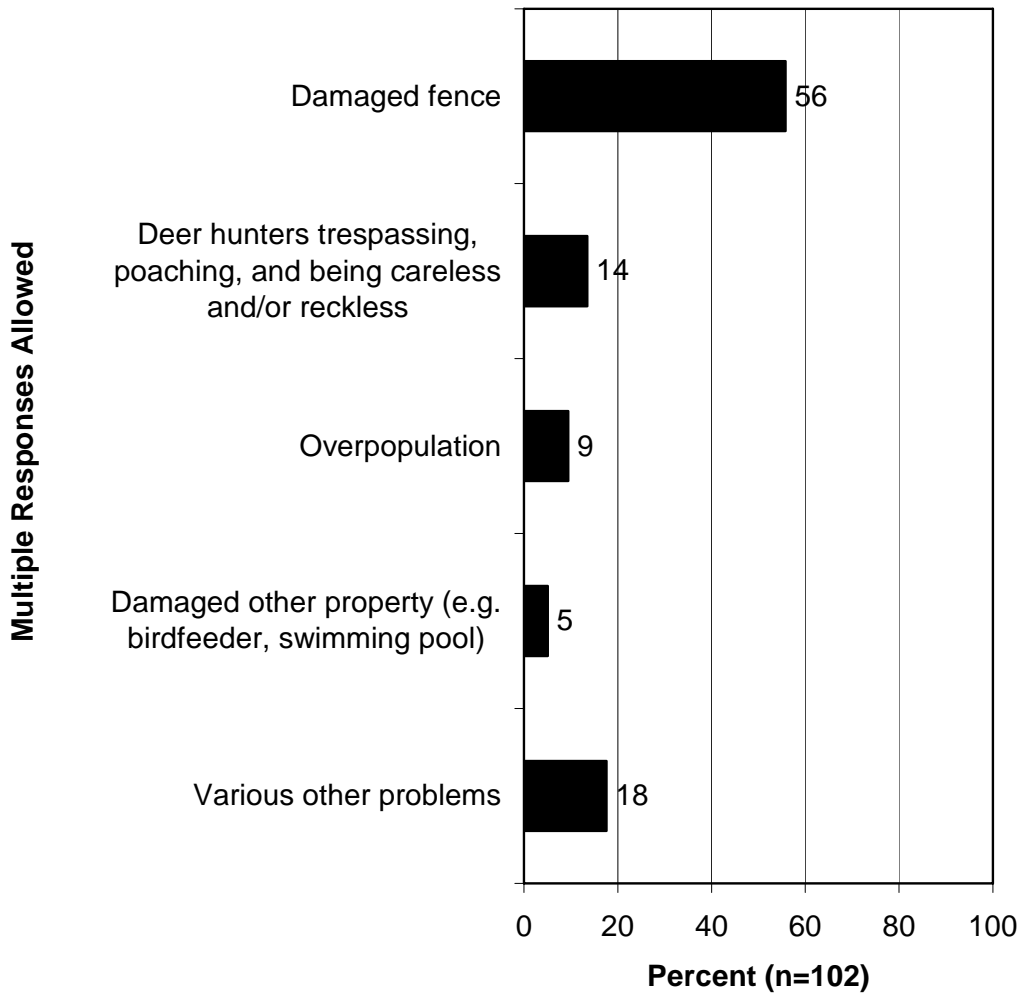
Percent who have had the following types of damage or problems related to deer in the past 5 years:



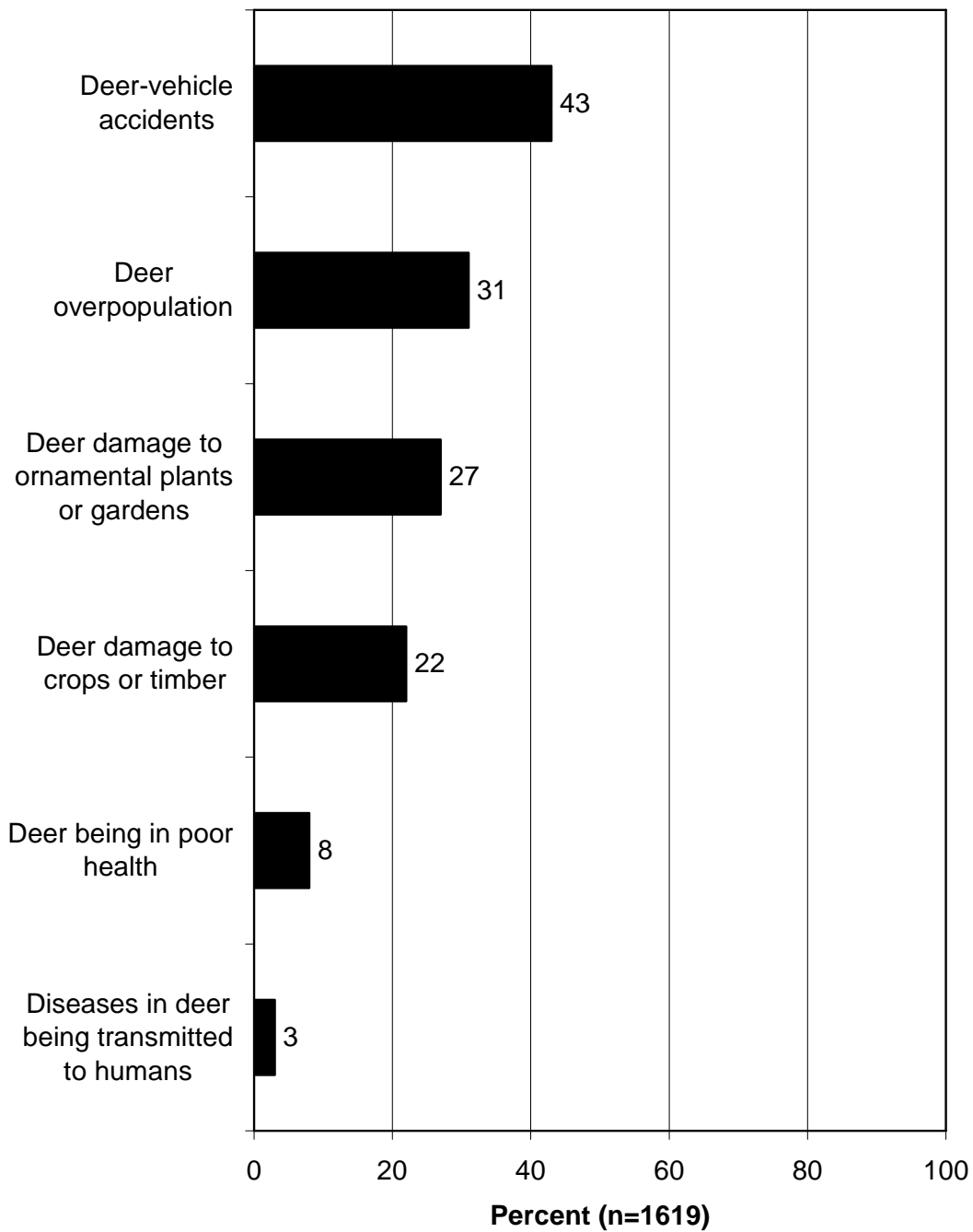
Note that the percentages below are among only those who had experienced “other” damage.

Q52. What are the problems you have had related to deer on your property in [county] County? (Asked of those who have had problems other than deer damage to ornamental plants or gardens or damage to crops or timber in the past 5 years related to deer on their property in [county] County.)

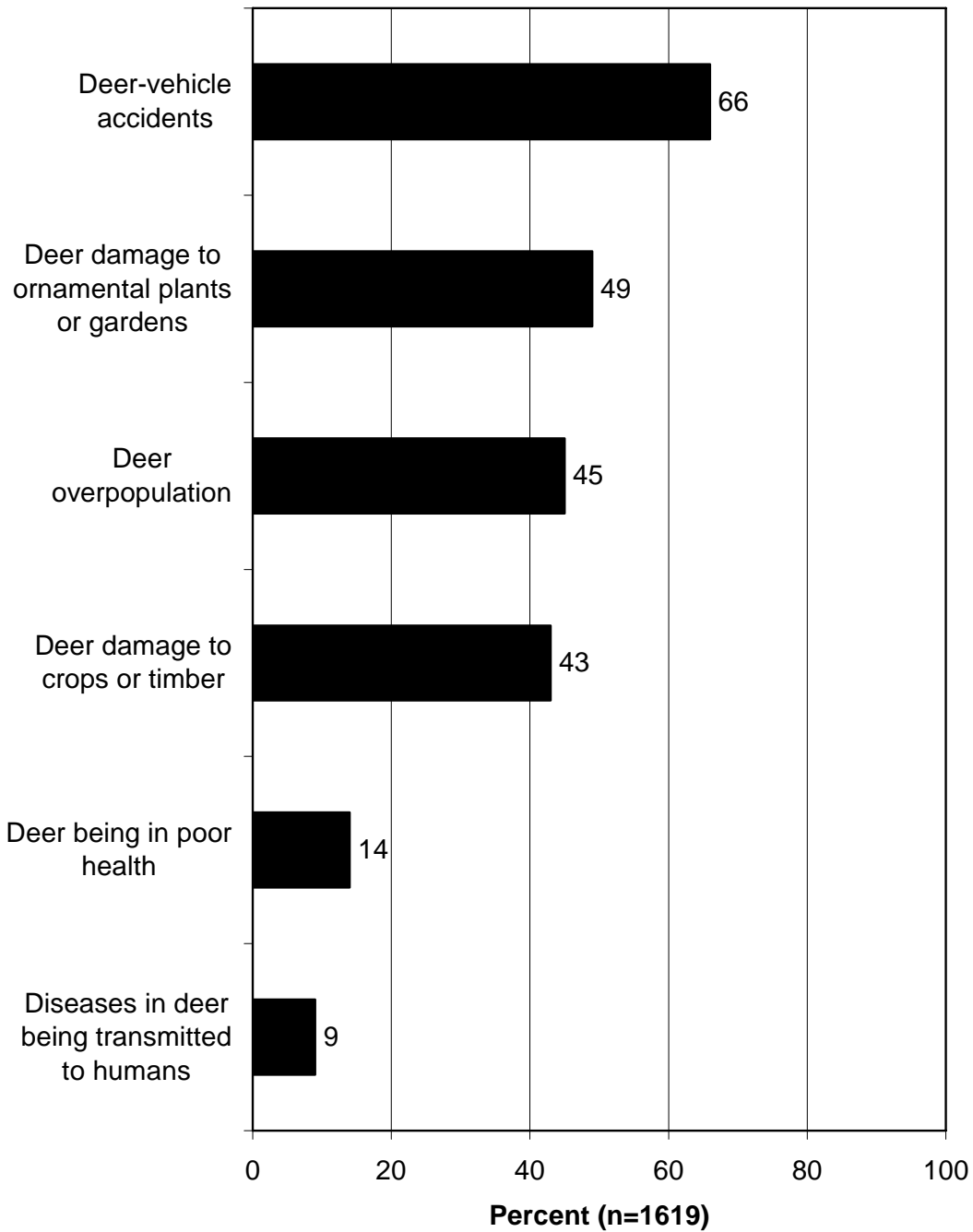
Note: QPL automatically inserted the county name from a previous question in place of [county].



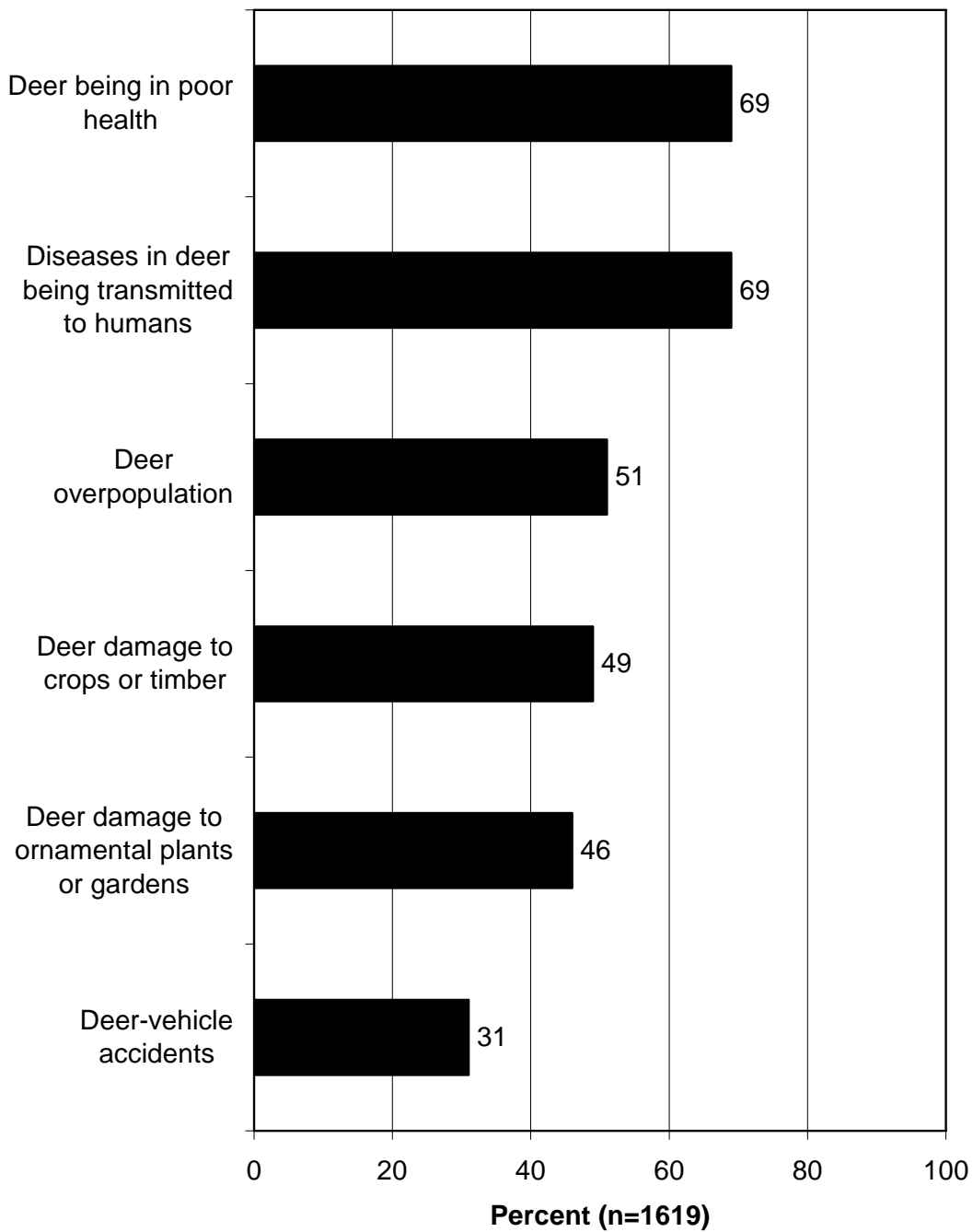
Percent who strongly agree that the following conflicts are a problem in the general area of his/her property:



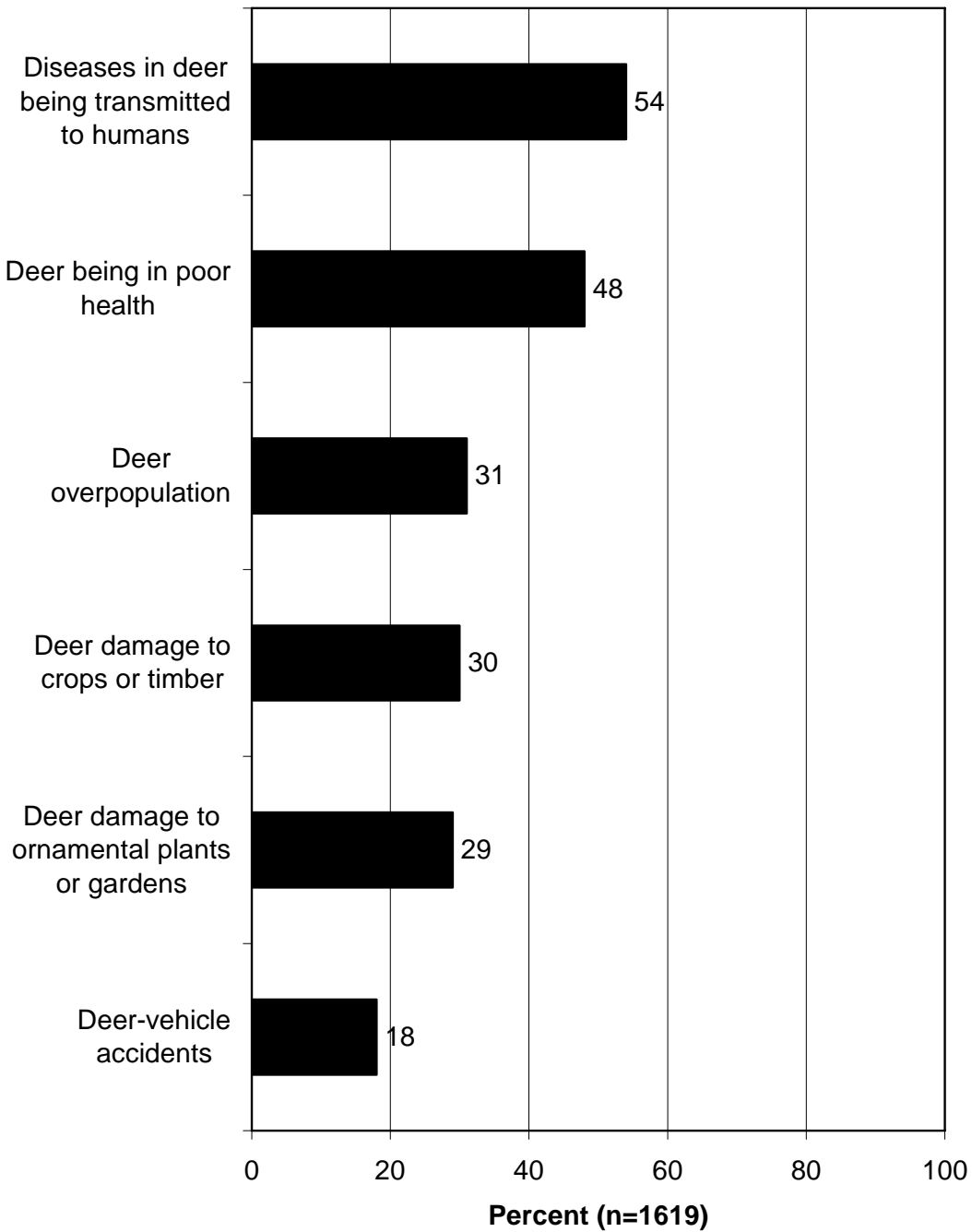
Percent who strongly or moderately agree that the following conflicts are a problem in the general area of his/her property:



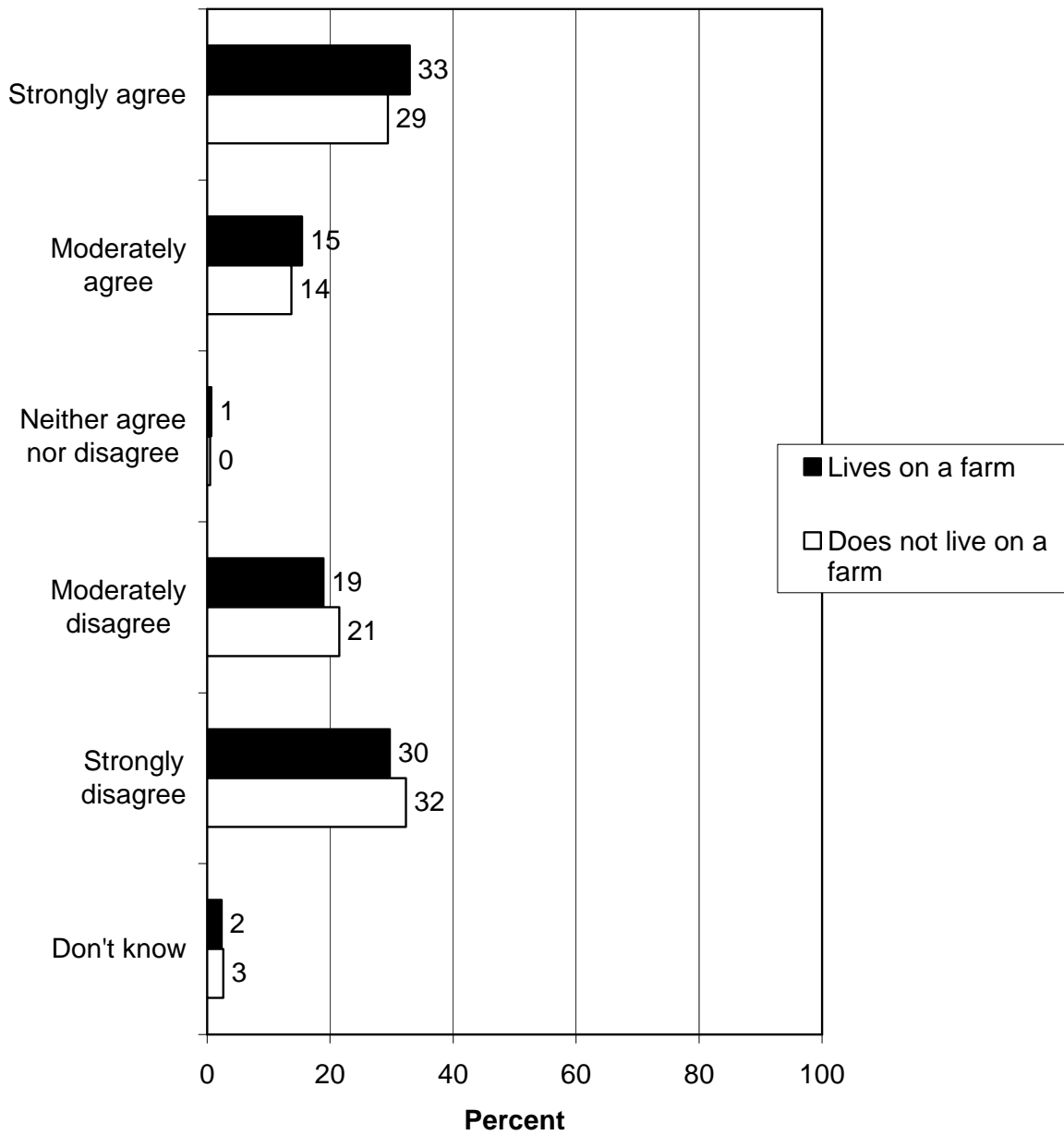
Percent who moderately or strongly disagree that the following conflicts are a problem in the general area of his/her property:



Percent who strongly disagree that the following conflicts are a problem in the general area of his/her property:



Q130. Do you agree or disagree that deer overpopulation is a problem in the general area of your property in [county] County?



MANAGEMENT OF DEER ON LAND, INCLUDING HUNTING

HUNTING OF DEER ON LAND

- A substantial percentage of landowners in the survey (40%) had personally hunted deer on their property and/or had allowed household members to hunt deer on their property in the past 5 years. Slightly more (44%) had allowed people other than household members to hunt on their property in the past 5 years.
 - In total, 60% of landowners in the survey had deer hunting occur on their land (themselves personally, household members, or others) in the past 5 years.
 - There is a strong correlation between the size of the tract and whether the respondent or a household member had hunted on it: 32% of those whose largest tract is from 5 to 20 acres, versus 51% of those whose largest tract is more than 20 acres, had personally hunted and/or had a household member hunt on the tract. A similar result is found when the question regarding allowing non-household members to hunt on the land is crosstabulated by the size of the tract: 32% of those whose largest tract is from 5 to 20 acres, versus 60% of those whose largest tract is more than 20 acres, had allowed non-household members to hunt on the tract.
 - A small percentage of respondents (5%) had leased part or all of their property for deer hunting in the past 5 years. A crosstabulation found that those with larger tracts (more than 20 acres) are more likely to have leased part or all of their property for deer hunting.

- In follow-up to one of the above questions, those landowners who did *not* personally hunt or have household members hunt on their land in the past 5 years were asked a series of eleven agree-disagree questions (shown in the text box on the following page) about reasons that there was no personal or household hunting of deer on their land. A majority agree that there was no household hunting of deer simply because no one in the household hunts (74%). Otherwise, no reason was agreed to by a majority. Next on the ranking is that the landowner says his/her property is too small for deer hunting (43%), distantly followed by that someone outside the household hunts deer on the property (28%). No other reason was agreed to by more than 21%.
 - Two crosstabulations by the size of the tract sought to determine a threshold of the size of tract necessary to be considered large enough for deer hunting. The first crosstabulation

was based on a 10-acre threshold, and the second tabulation was based on a 20-acre threshold. Both crosstabulations showed a marked difference between owners of large tracts and owners of small tracts on agreement with the statement, "My property is too small for deer hunting," as a reason that nobody in the household hunted deer on it. Those whose largest tract is from 5 to 10 acres are more likely to strongly agree with the statement (46%) than are those whose largest tract is more than 10 acres (21%). Likewise, those whose largest tract is from 5 to 20 acres are more likely to strongly agree with the statement (41%) than are those whose largest tract is more than 20 acres (12%). These findings suggest that there is little difference between a 10-acre or 20-acre threshold, but both of these thresholds are markedly different than a 5-acre threshold.

The survey asked if respondents agreed or disagreed that the following were reasons that there was no household hunting of deer on their land:

- Q83. My property is too small for deer hunting.
- Q84. There are no deer on my property.
- Q85. No one in my household hunts.
- Q86. Someone outside my household hunts deer on my property.
- Q87. My work commitments limit my time to hunt.
- Q88. My family commitments limit my time to hunt.
- Q89. My health, or my age, limit my hunting.
- Q90. I think hunting regulations are too confusing.
- Q91. I think hunting equipment is too expensive.
- Q92. I think hunting licenses are too expensive.
- Q93. I disapprove of hunting.

- Similar to the above, the survey asked a series of nine questions to those who did not allow people outside of their household to hunt deer on their property about possible reasons for not allowing others to hunt deer on their property (shown in the text box on the following page). Four reasons have a majority agreeing that they were reasons for not allowing others to hunt deer on their land: concern about a hunter injuring another person on the property (66% agree), concern about trespassing on their property (64%), concern about liability (59%), and thinking that the property is too small for deer hunting (55%).
- A crosstabulation of one of these questions by farmer vs. non-farmer found almost no difference between the groups in their concern about a hunter injuring another person on the property (67% of farmers agree; 65% of non-farmers agree). A different crosstabulation, this time by whether the respondent lives on the property or not, found that those who live on the property are more likely to agree that they are concerned about a hunter injuring another person on the property (66% of those who live on the property agree versus 56% of those who do *not* live on the property).
 - Crosstabulations by the same two groups found only a small difference between farmers and non-farmers regarding their concern about trespassing on their property (68% of farmers agree; 62% of non-farmers agree) and little difference according to whether the respondent lives on the property or not (64% of those who live on the property agree; 60% of those who do not live on the property agree).
 - Similar to the above series, in which a crosstabulation was run of the statement, “My property is too small for deer hunting,” two crosstabulations by the size of the tract sought to determine a threshold of the size of tract necessary to be considered large enough to allow non-household members to deer hunt. The first crosstabulation was based on a 10-acre threshold, and the second tabulation was based on a 20-acre threshold. Both crosstabulations showed a marked difference of opinion on agreement among owners of larger tracts, relative to owners of smaller tracts, with the statement, “My property is too small for deer hunting,” as a reason that nobody outside of the household hunted deer on it. Those whose largest tract is from 5 to 10 acres are more likely to strongly agree with the statement (55%) than are those whose largest tract is more than 10 acres (36%). Likewise, those whose largest tract is from 5 to 20 acres are more likely to strongly agree with the statement (51%) than are those whose largest tract is more than

20 acres (28%). Again, these findings suggest that there is little difference between a 10-acre or 20-acre threshold, but both of these thresholds are markedly different than a 5-acre threshold.

The survey asked if respondents agreed or disagreed that the following were reasons that they did not allow others outside of their household hunt deer on their land:

Q97. My property is too small for deer hunting.

Q98. There are no deer on my property.

Q99. Someone in my household already hunts on the property.

Q100. No one has expressed an interest in deer hunting on my property.

Q101. I would not be able to make enough money on deer hunting leases.

Q102. I am concerned about liability.

Q103. I am concerned about a hunter injuring another person on my property.

Q104. I am concerned about trespassing on my property.

Q105. I disapprove of hunting.

- A final series of questions asked landowners if they would allow deer hunting on their property under various conditions (shown in the text box immediately below). No condition has more than 31% of landowners saying that they would be very or somewhat likely to allow hunting under that condition. The top conditions are if hunters used only bows and arrows (31%), if hunters had passed a Commission hunter education certification program (31%), if hunters used only shotguns or bows and arrows (whose shots travel a short distance compared to rifles) (26%), and if hunters assisted with planting or maintaining crops, food plots, or wildlife habitat (26%).

The survey asked if respondents about their likelihood to allow deer hunting on their land under the following conditions:

Q108. The hunters only used bows-and-arrows.

Q109. The hunters only used muzzleloaders or bows-and-arrows.

Q110. The hunters used only shot guns or bows-and-arrows.

Q111. The hunters used any legal weapon.

Q112. You knew that the hunters had passed a Wildlife Resources Commission hunter certification program.

Q113. The hunters assisted with planting or maintaining crops, food plots, or wildlife habitat.

Q114. The hunters assisted with maintenance of buildings, fences, or equipment on your property, or ran errands for you, such as getting groceries.

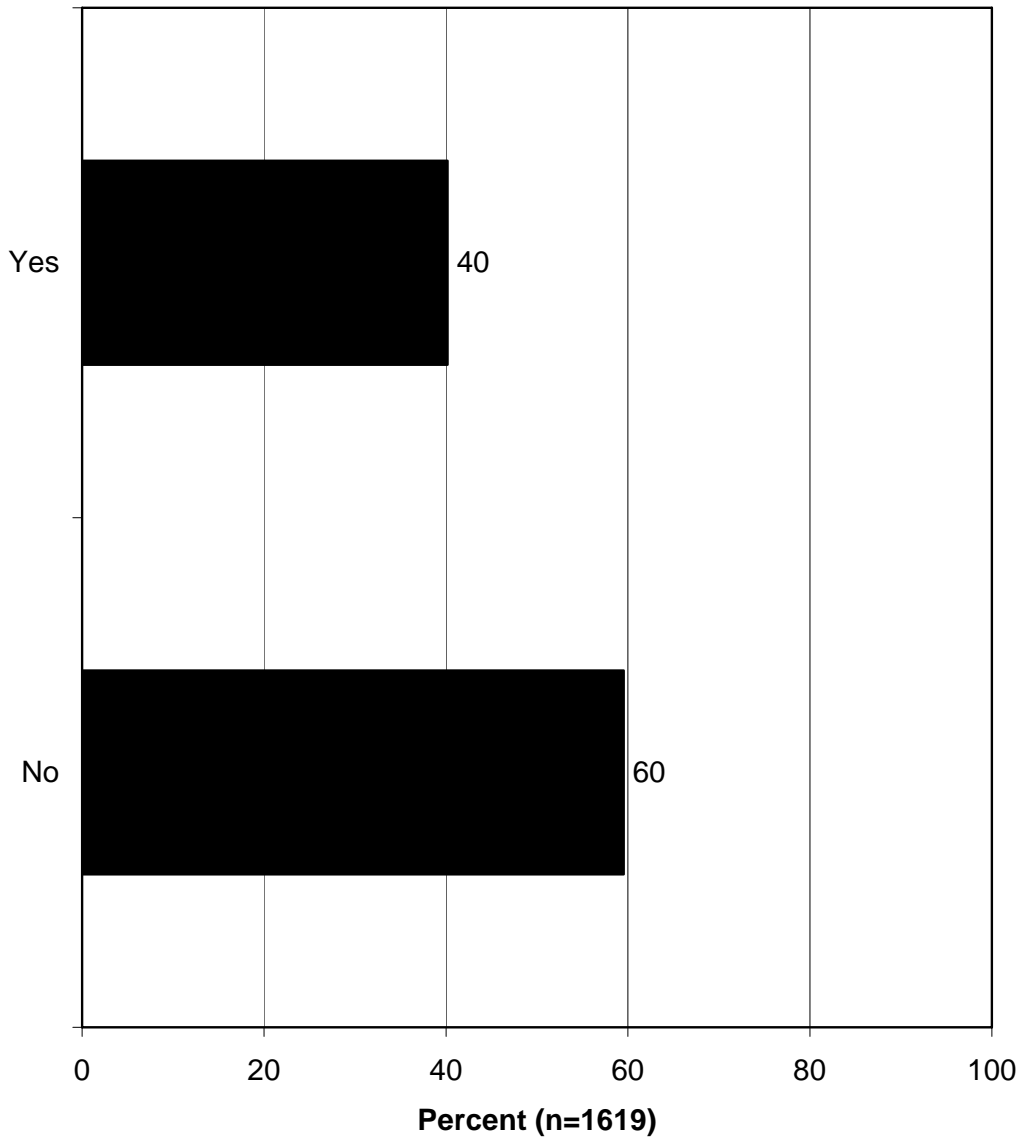
Q115. You received a fee from the hunters.

Q116. The hunters purchased additional liability coverage that would cover hunting activities on your property.

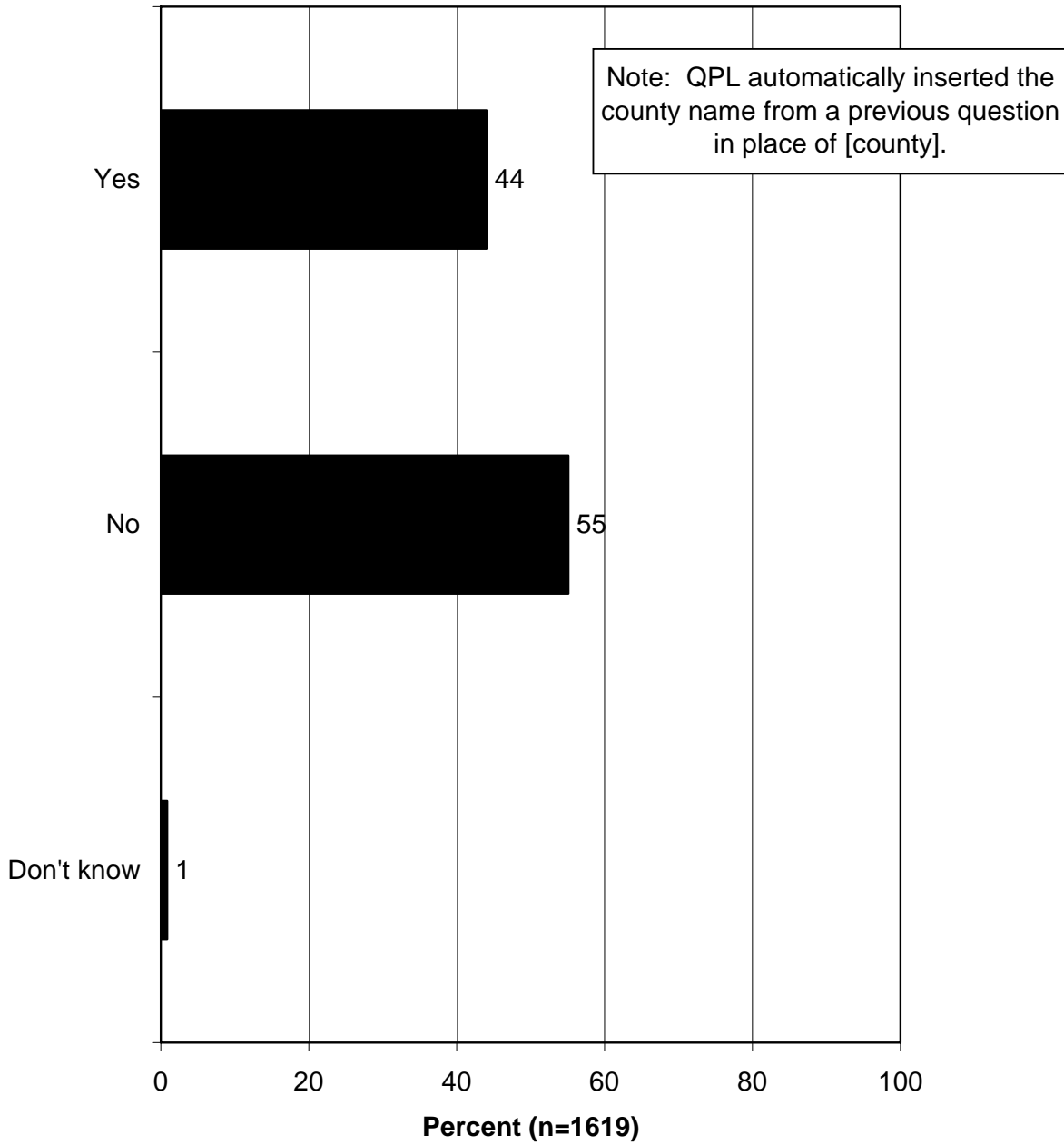
Q117. You knew that landowners in North Carolina have reduced liability when they allow hunting on their properties, as long as no fees or services are provided by the hunters.

Q81. Have you or other members of your household hunted deer on your property in [county] county in the past 5 years?

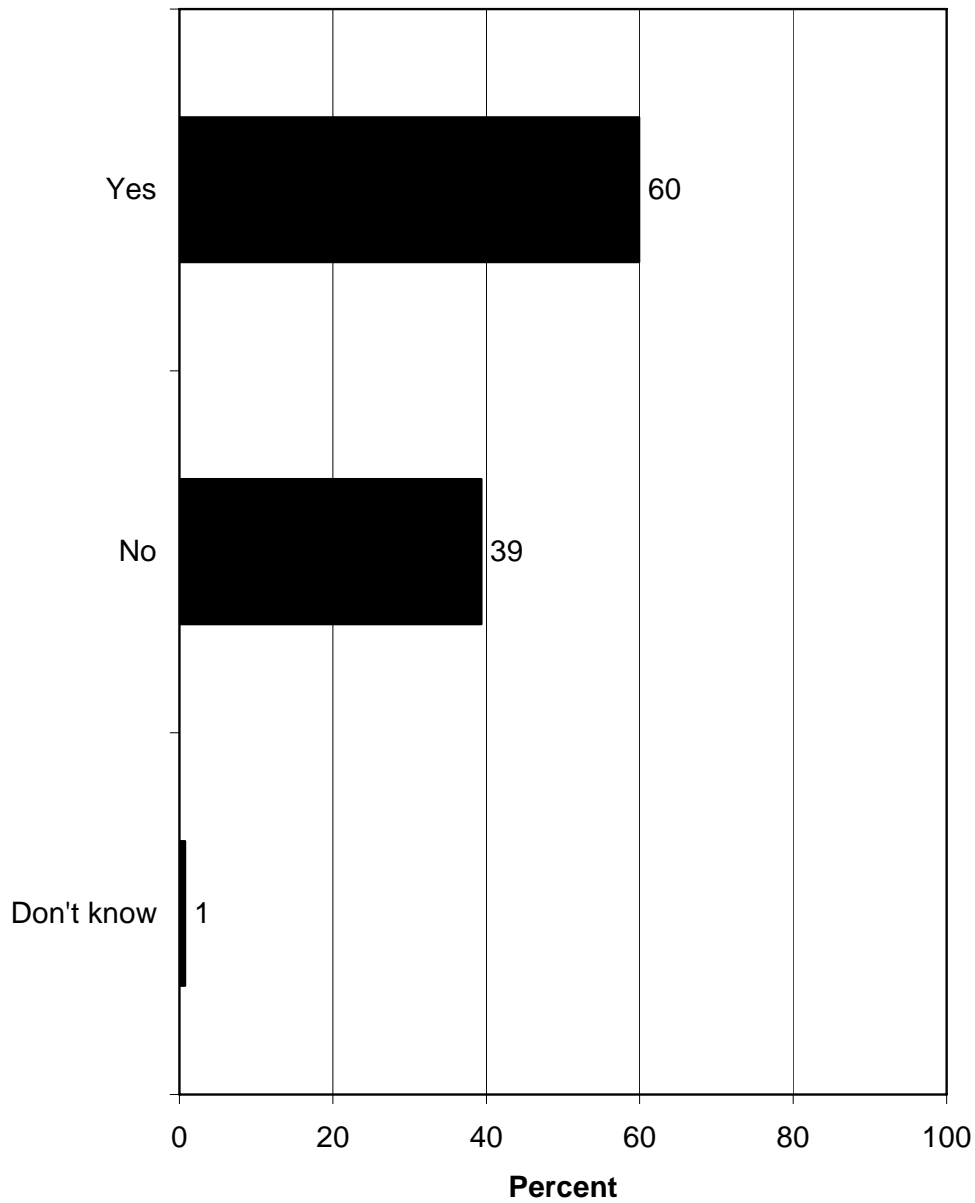
Note: QPL automatically inserted the county name from a previous question in place of [county].



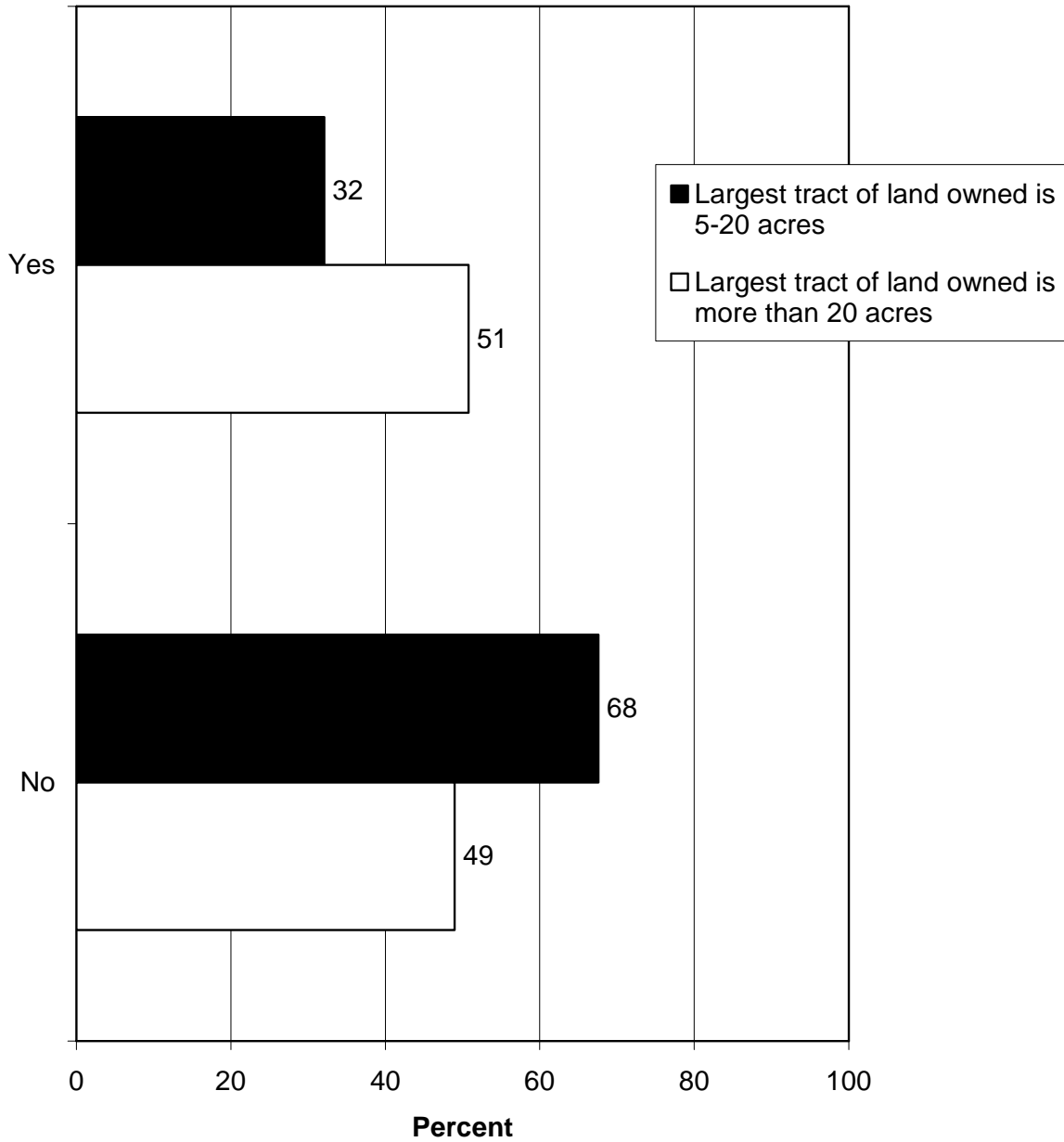
Q95. Have you allowed people other than members of your household to hunt deer on your property in [county] County in the past 5 years?



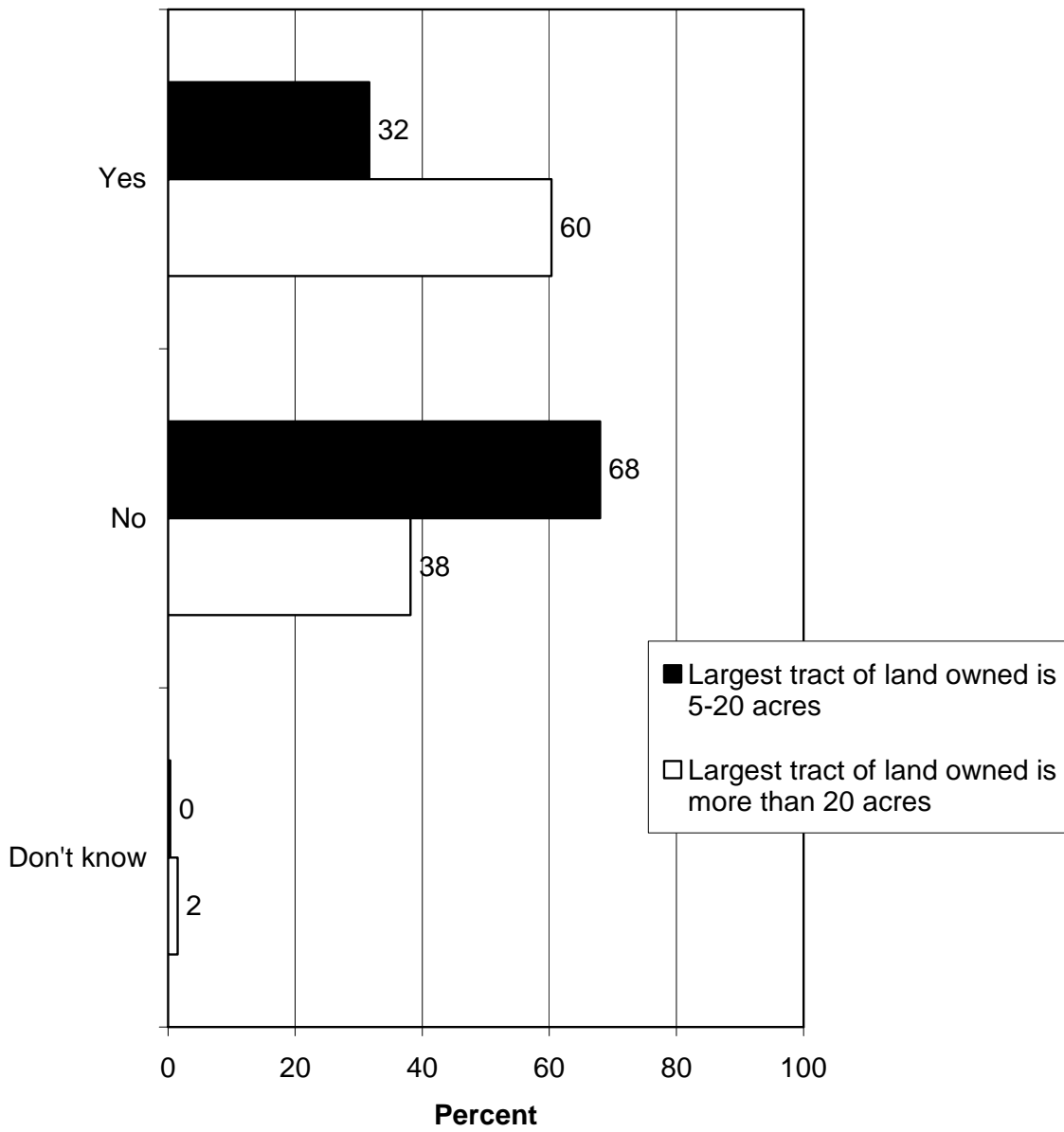
Q81 and 95. Has personally hunted, had a household member hunt, or has had somebody outside of household hunt on property in the past 5 years.



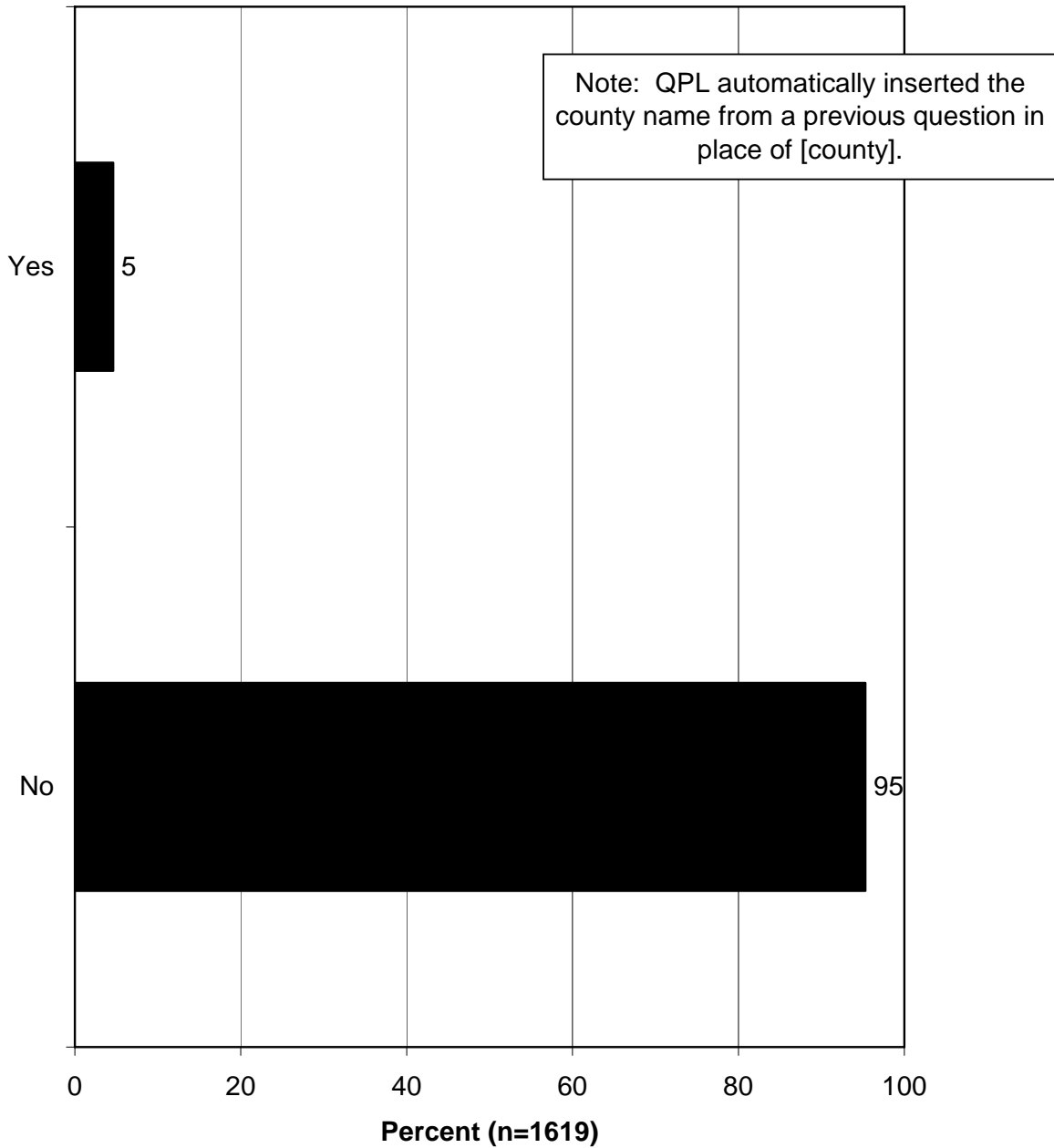
Q81. Have you or other members of your household hunted deer on your property in [county] County in the past 5 years?



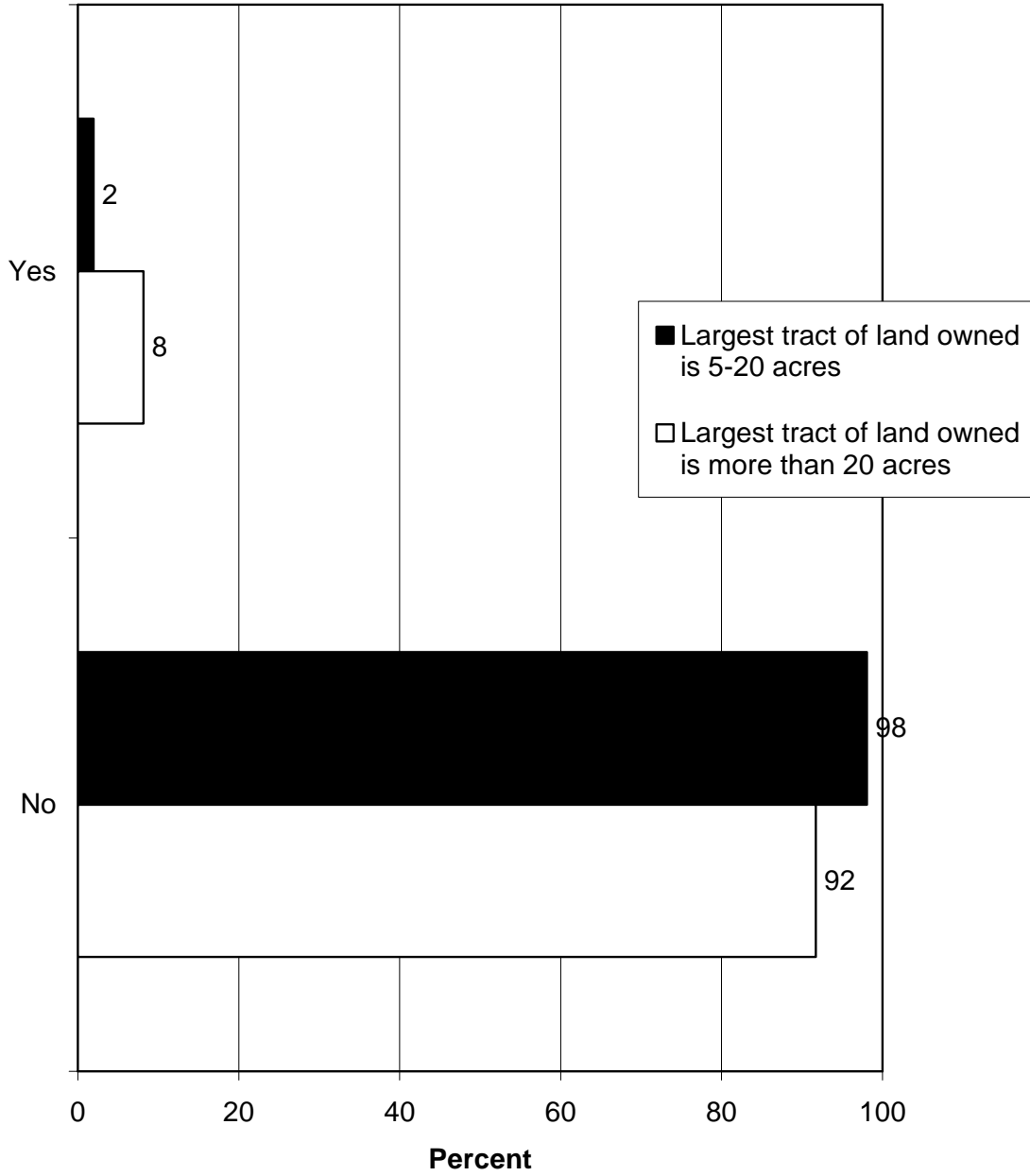
Q95. Have you allowed people other than members of your household to hunt deer on your property in [county] County in the past 5 years?



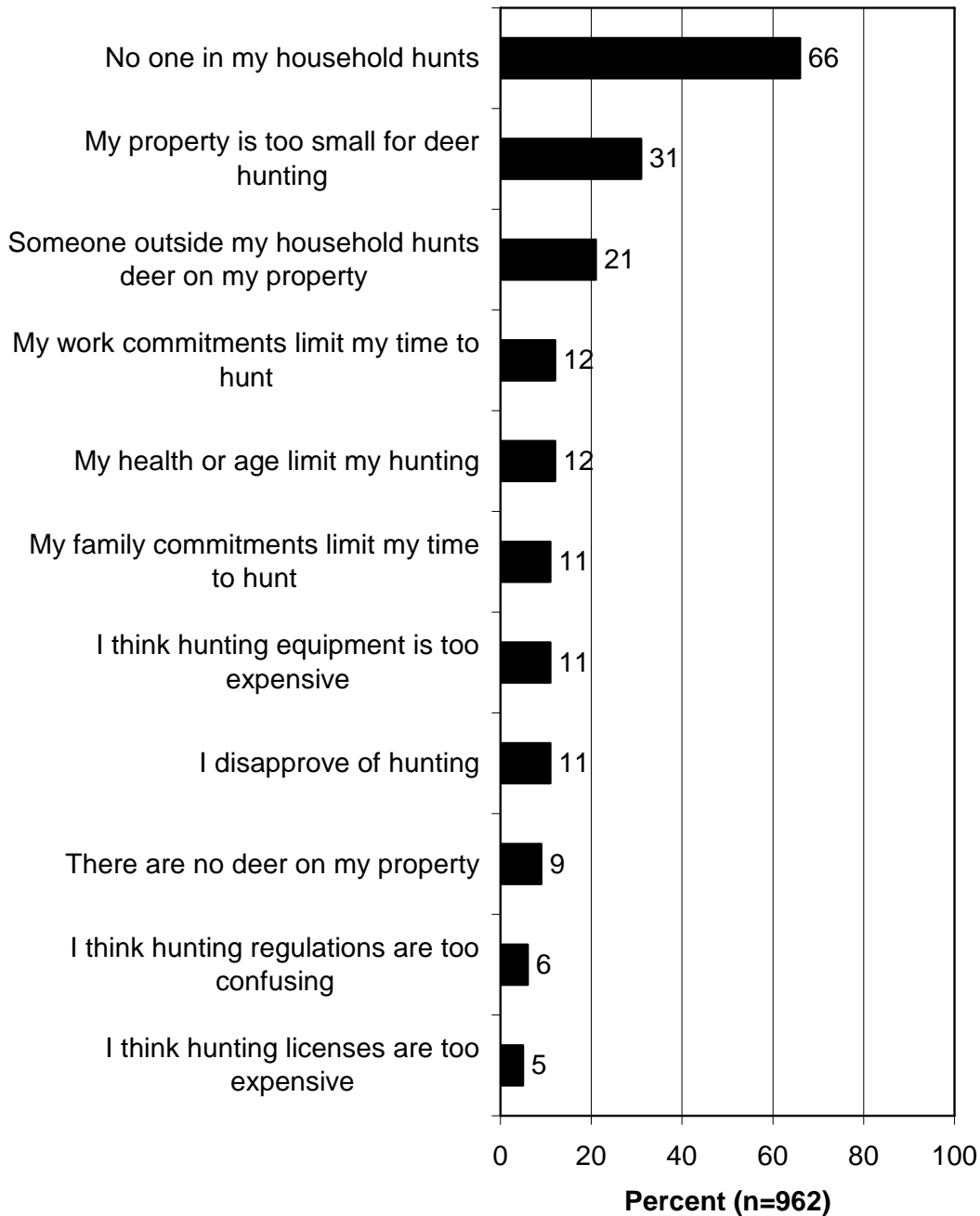
Q40. Have you leased part or all of your property in [county] County for deer hunting in the past 5 years?



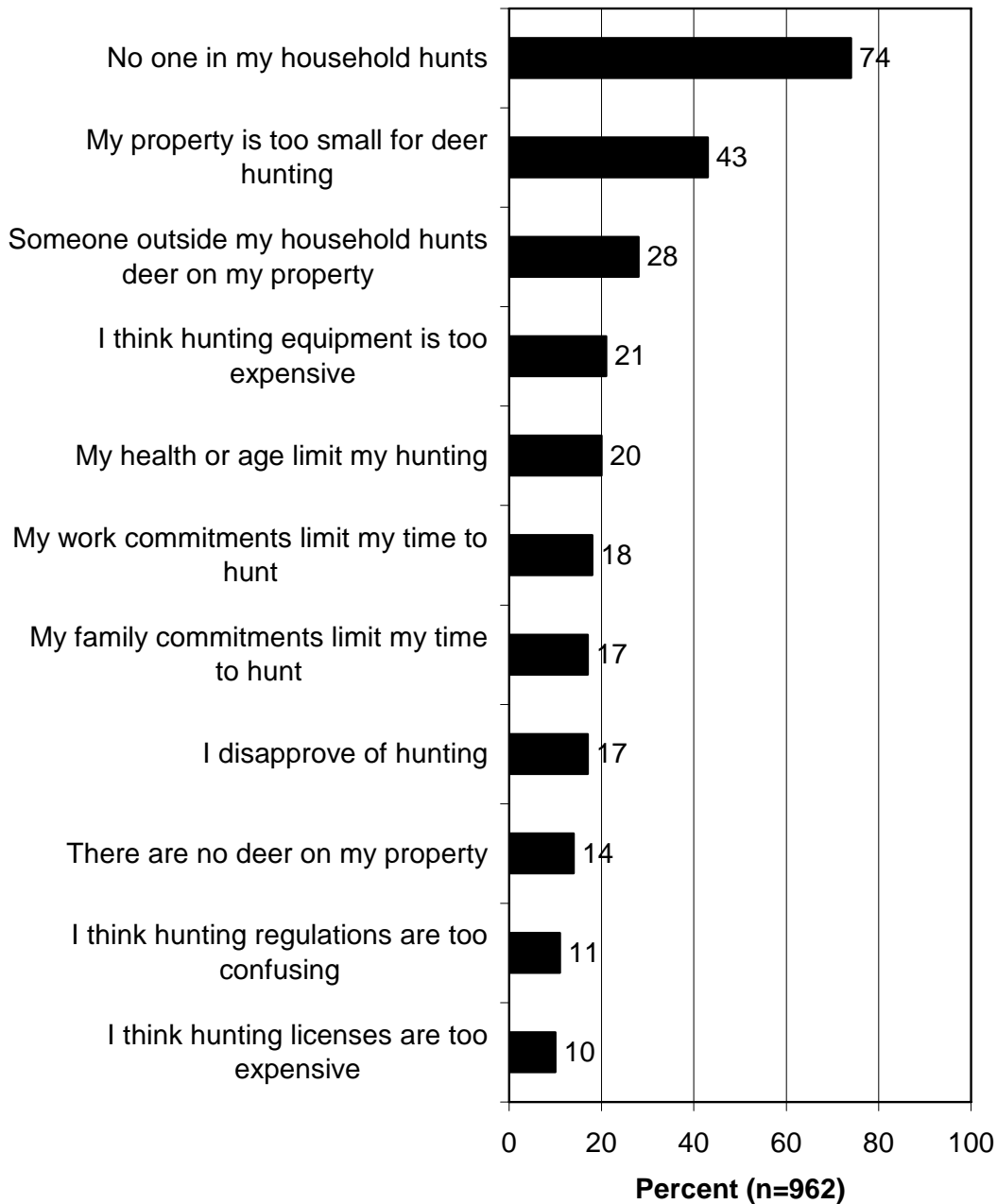
Q40. Have you leased part or all of your property in [county] County for deer hunting in the past 5 years?



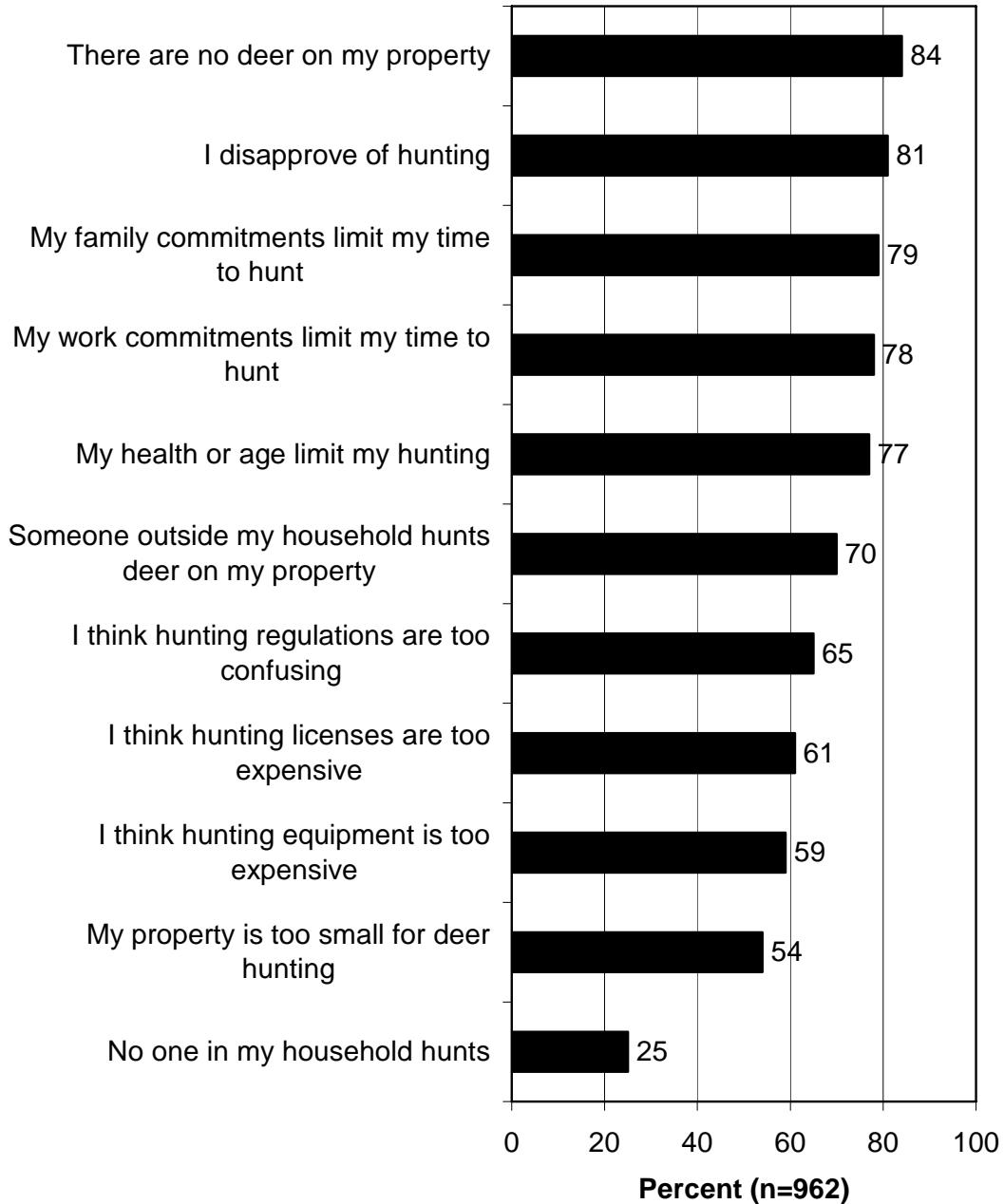
Percent who strongly agree that the following reasons influenced him/her or other members of his/her household to not hunt deer in the past 5 years on his/her property:



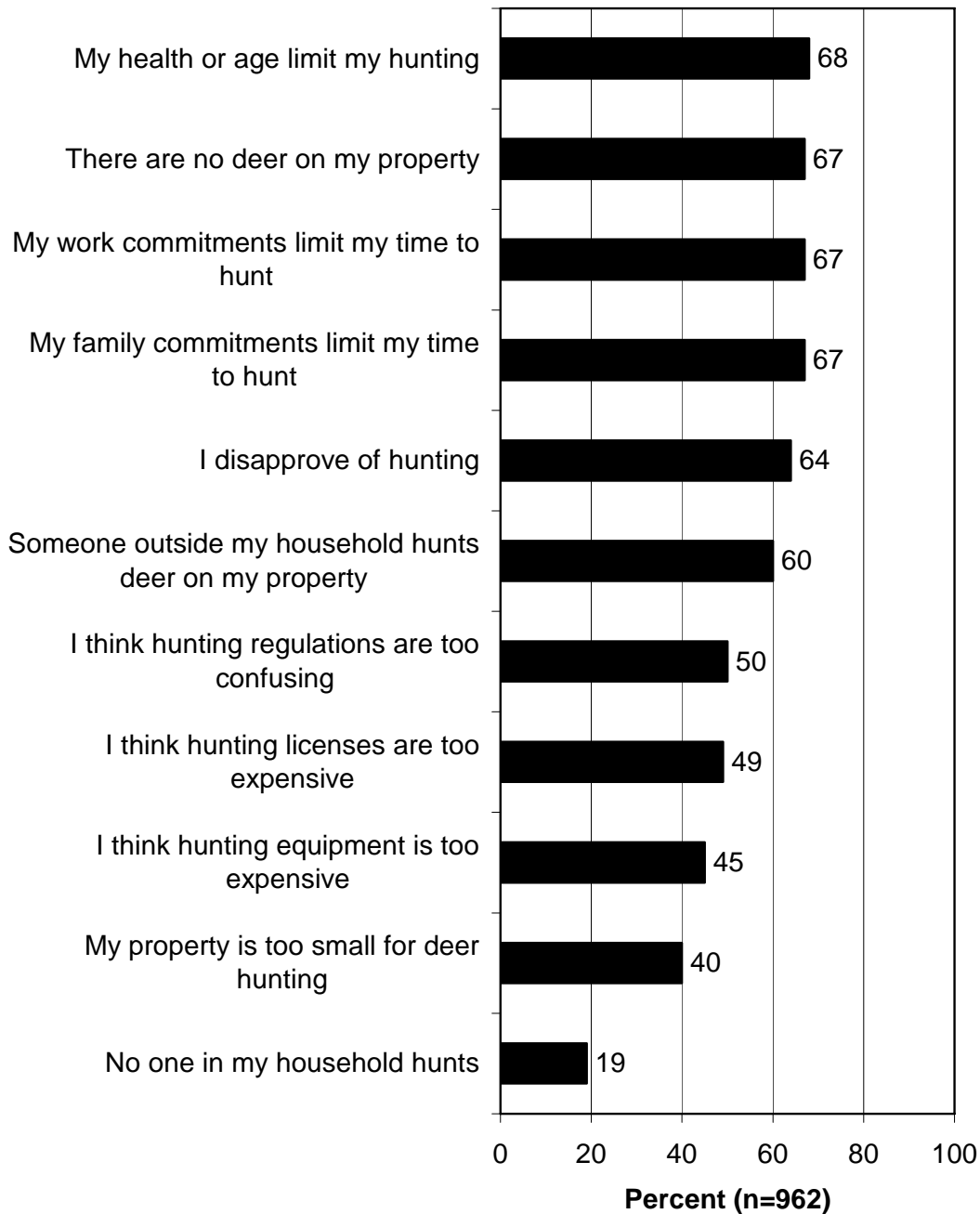
Percent who strongly or moderately agree that the following reasons influenced him/her or other members of his/her household to not hunt deer in the past 5 years on his/her property:



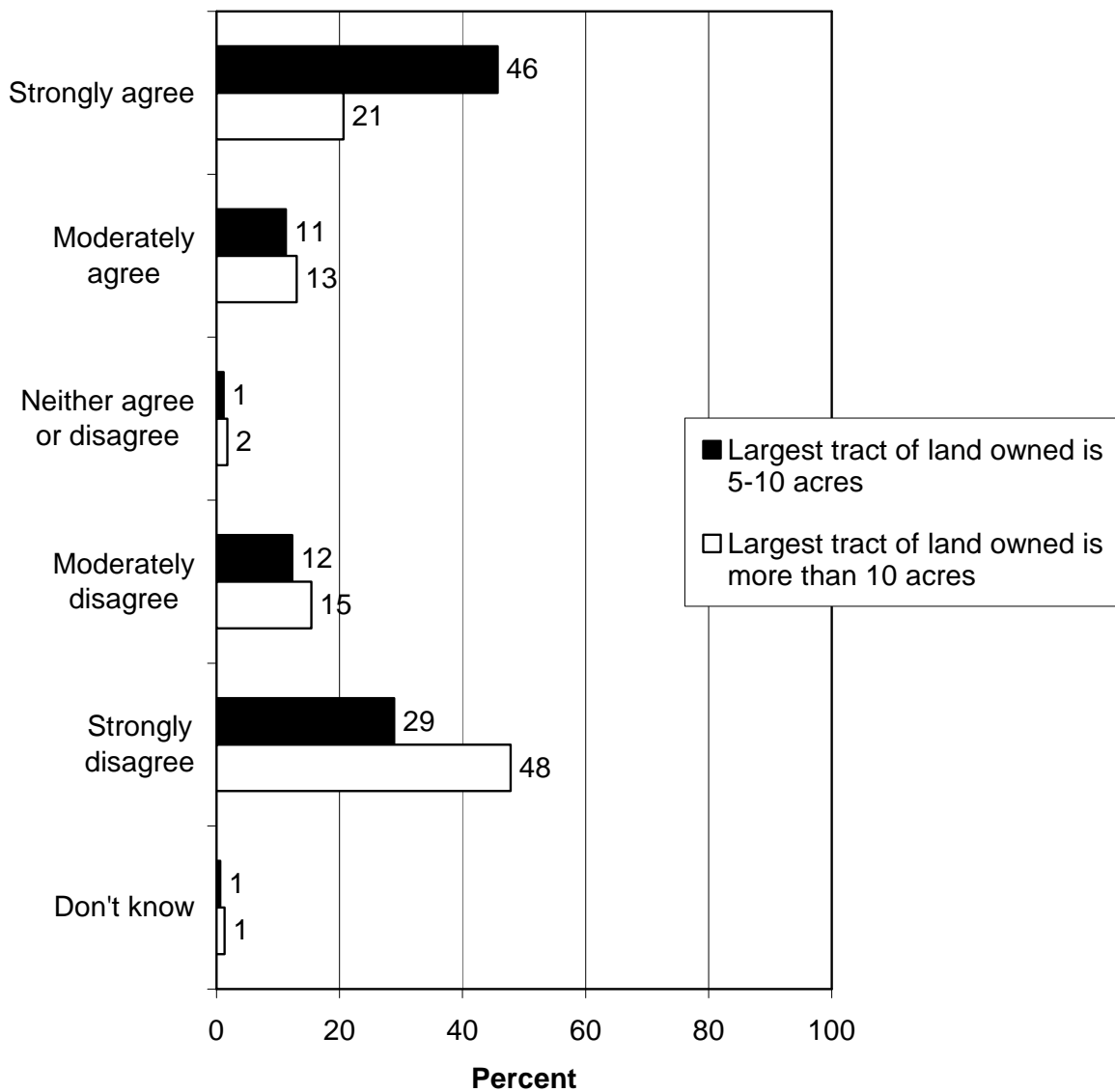
Percent who moderately or strongly disagree that the following reasons influenced him/her or other members of his/her household to not hunt deer in the past five years on his/her property:



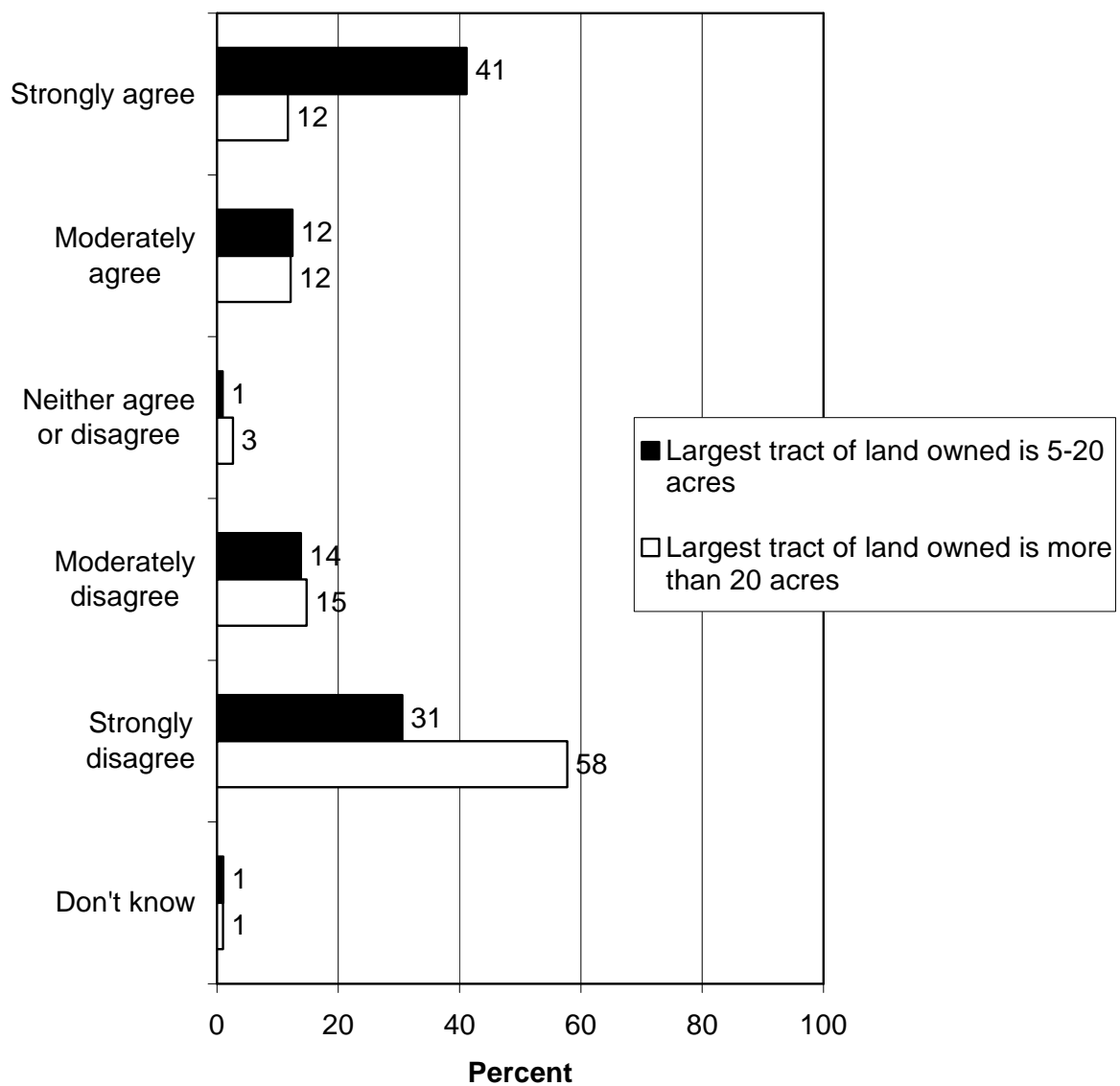
Percent who strongly disagree that the following reasons influenced him/her or other members of his/her household to not hunt deer in the past five years on his/her property:



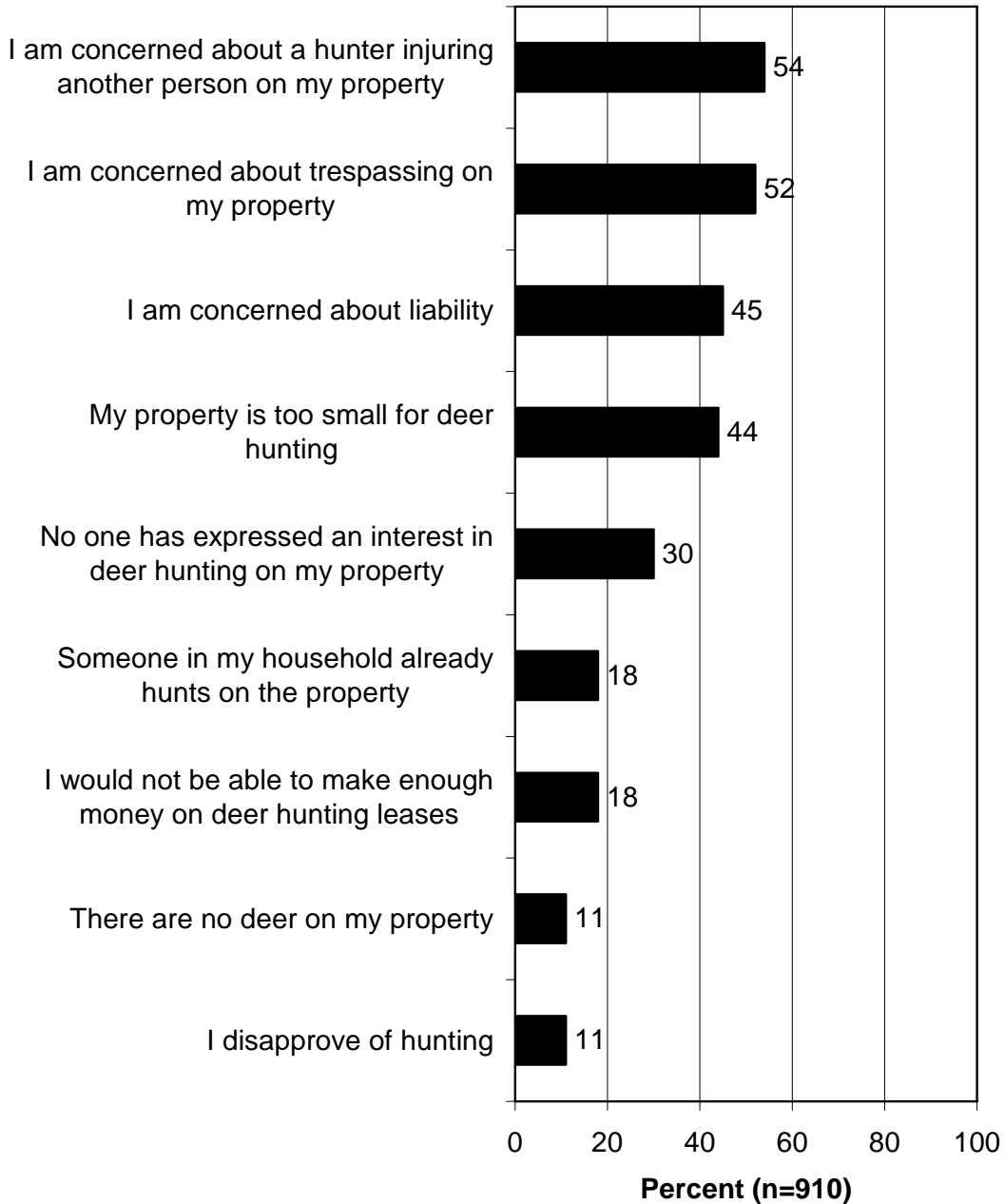
Q83. My property is too small for deer hunting. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property.)



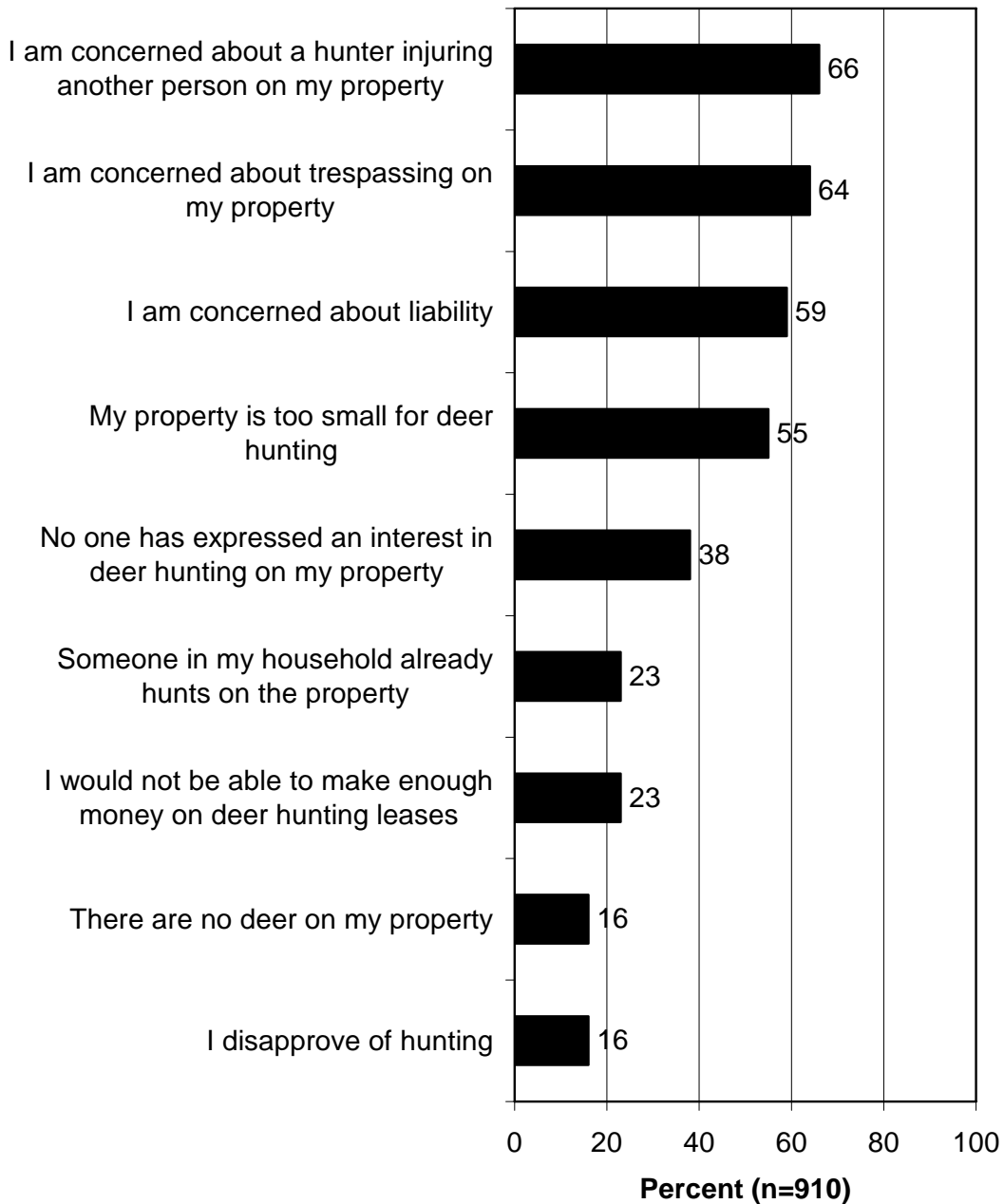
Q83. My property is too small for deer hunting. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property.)



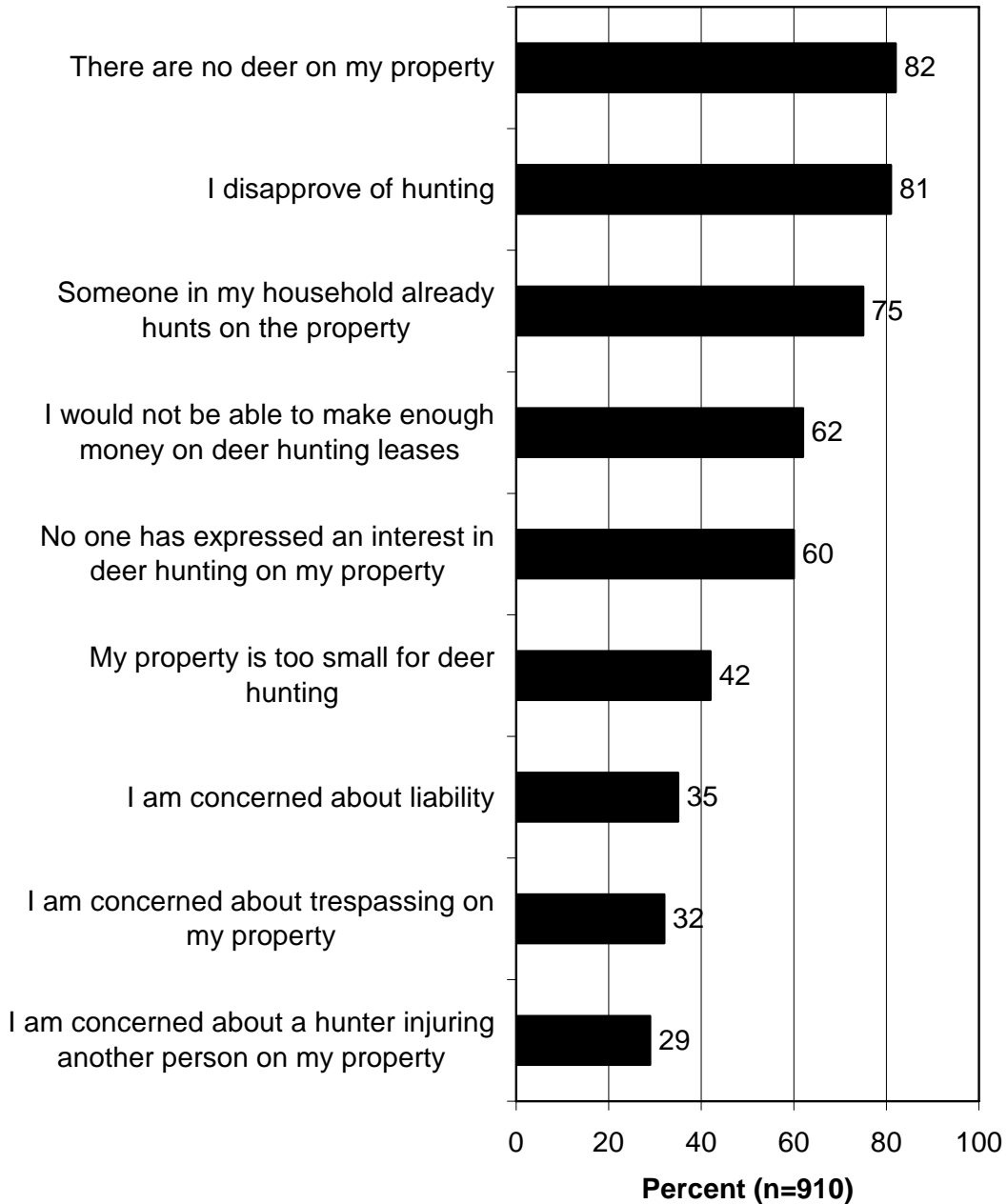
Percent who strongly agree that the following reasons influenced him/her to not allow people outside of his/her household to hunt deer in the past 5 years on his/her property:



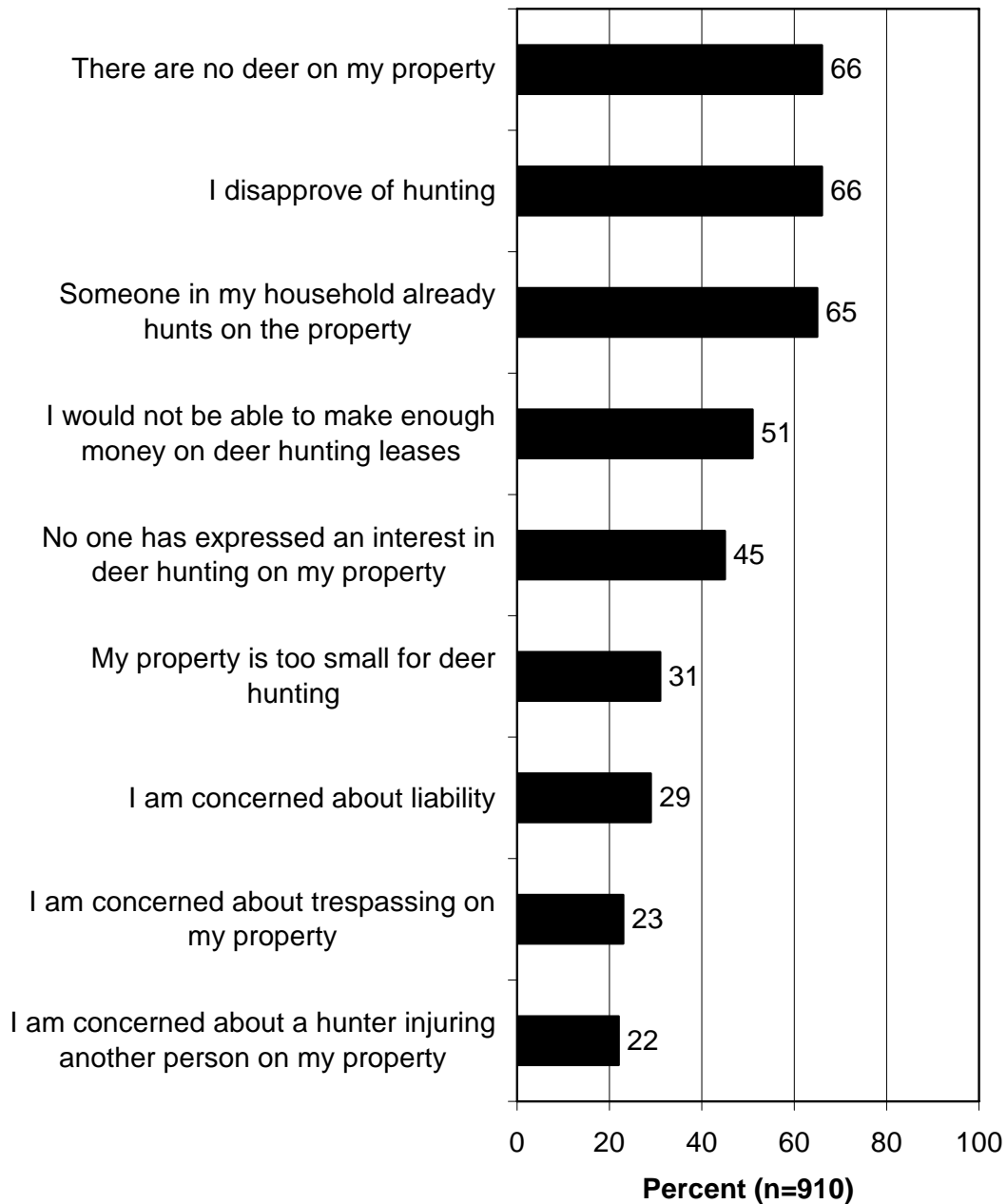
Percent who strongly or moderately agree that the following reasons influenced him/her to not allow people outside of his/her household to hunt deer in the past 5 years on his/her property:



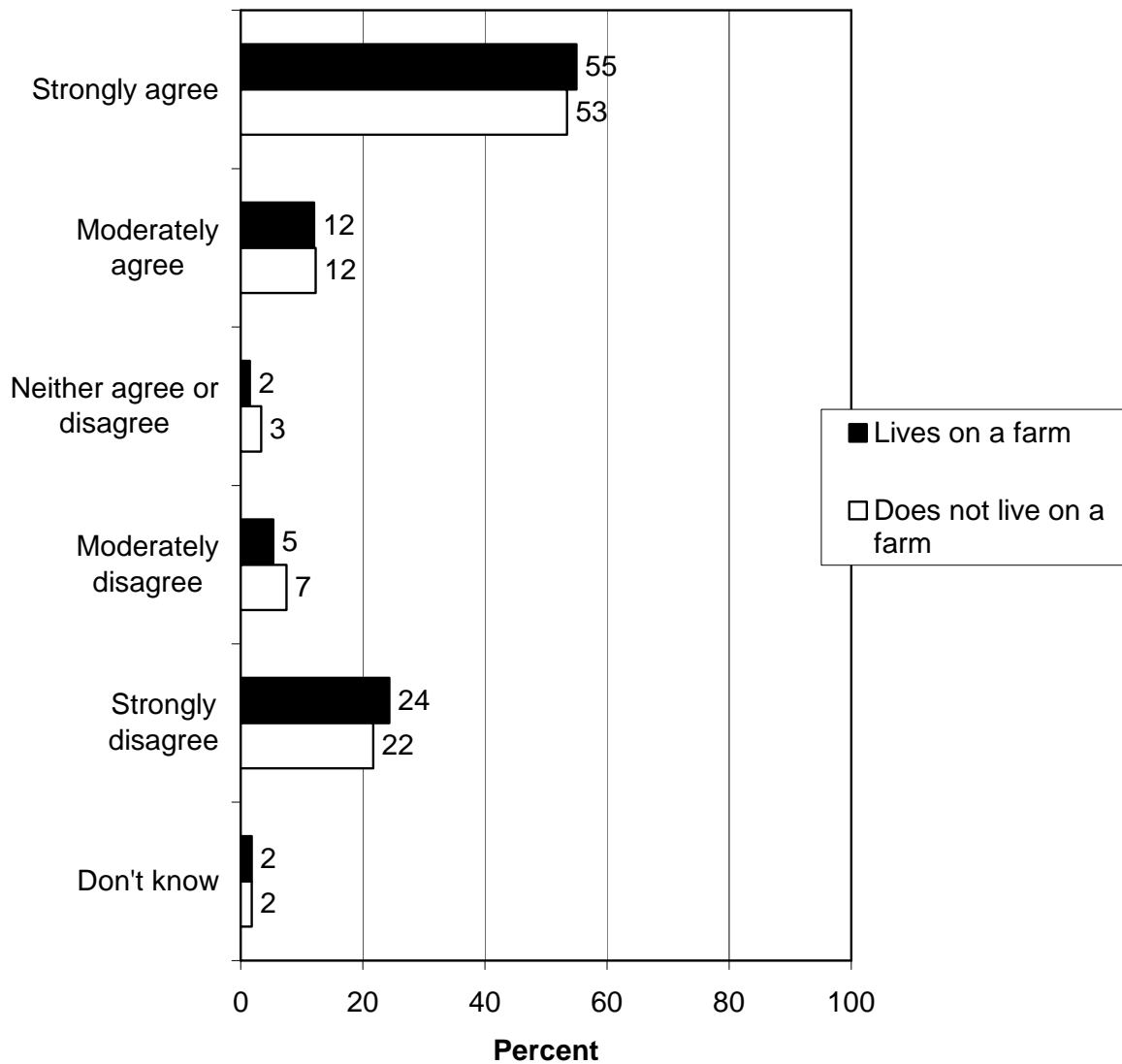
Percent who moderately or strongly disagree that the following reasons influenced him/her to not allow people outside of his/her household to hunt deer in the past 5 years on his/her property:



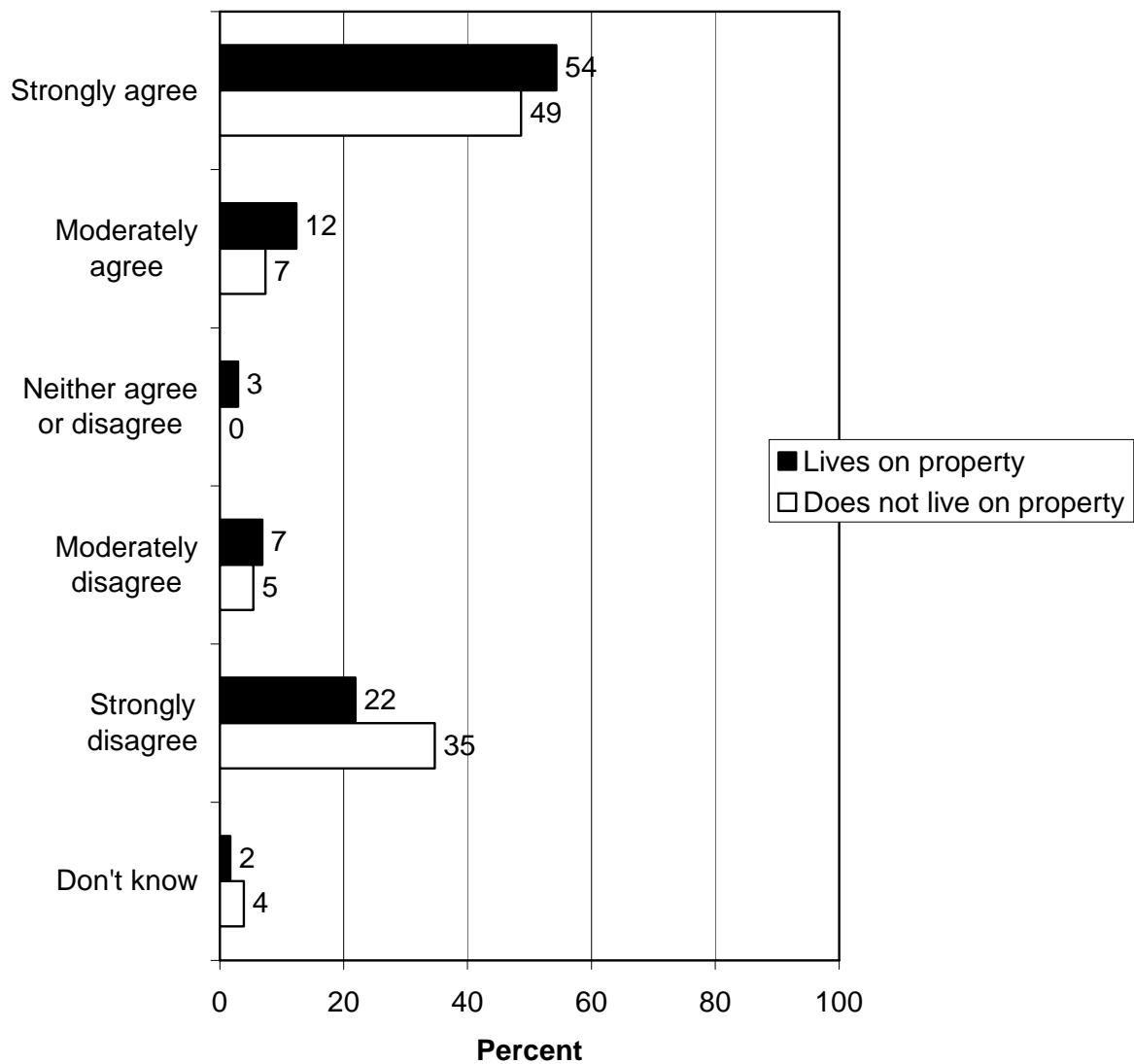
Percent who strongly disagree that the following reasons influenced him/her to not allow people outside of his/her household to hunt deer in the past 5 years on his/her property:



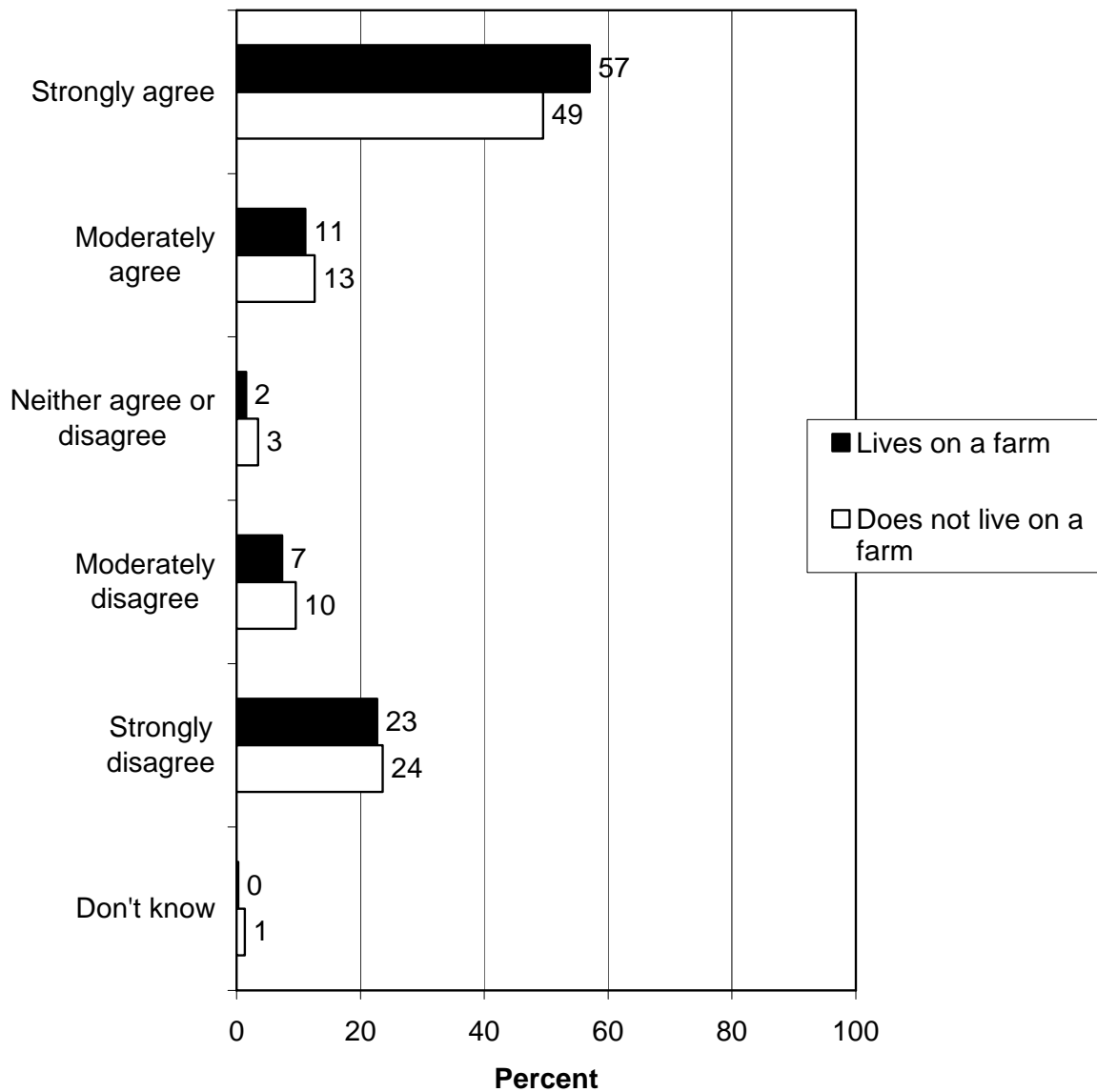
Q103. I am concerned about a hunter injuring another person on my property. Do you agree or disagree that this was a reason that you did not allow people outside of your household to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people outside of their household to hunt deer in the past 5 years on their property.)



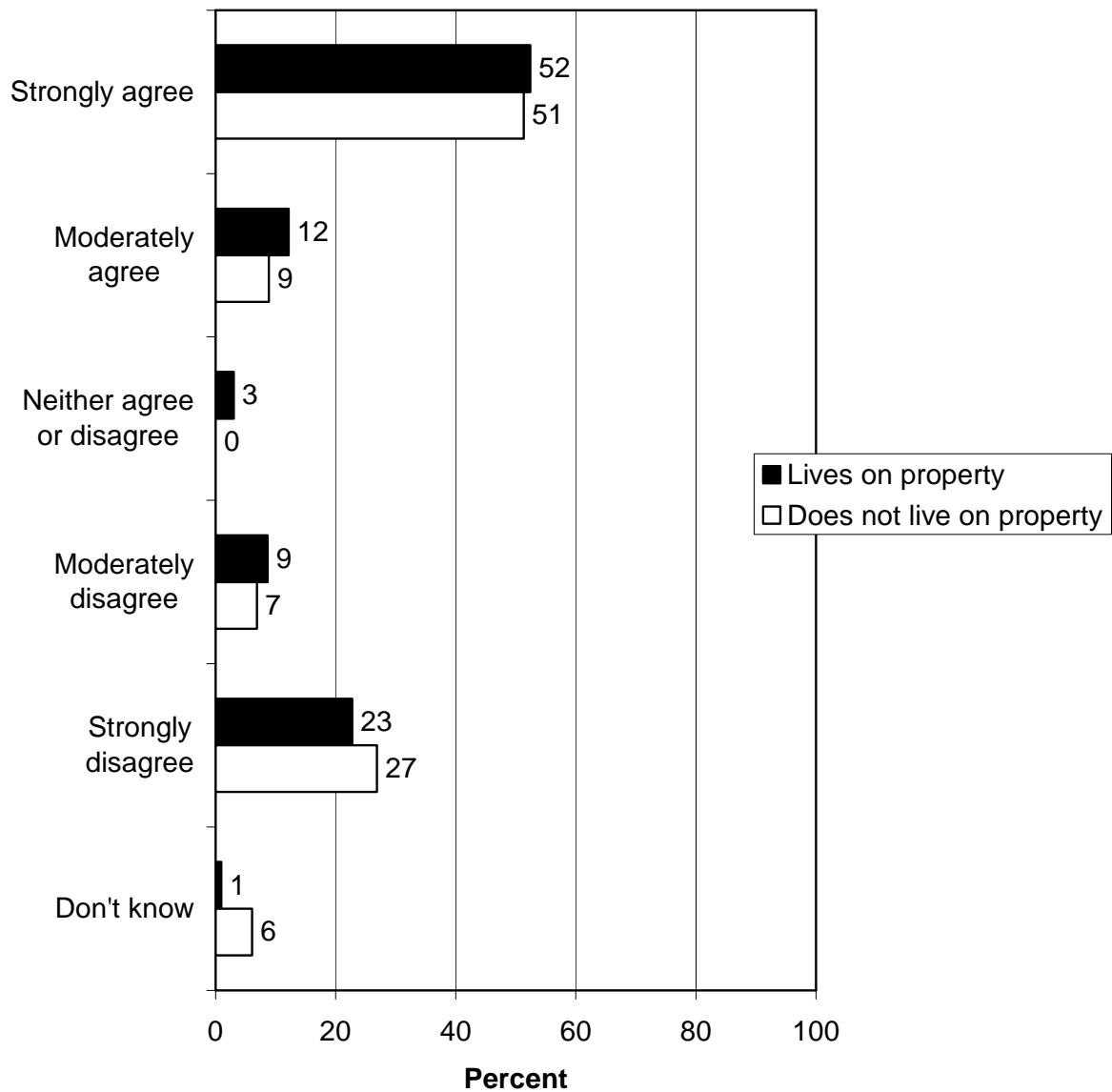
Q103. I am concerned about a hunter injuring another person on my property. Do you agree or disagree that this was a reason that you did not allow people outside of your household to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people outside of their household to hunt deer in the past 5 years on their property.)



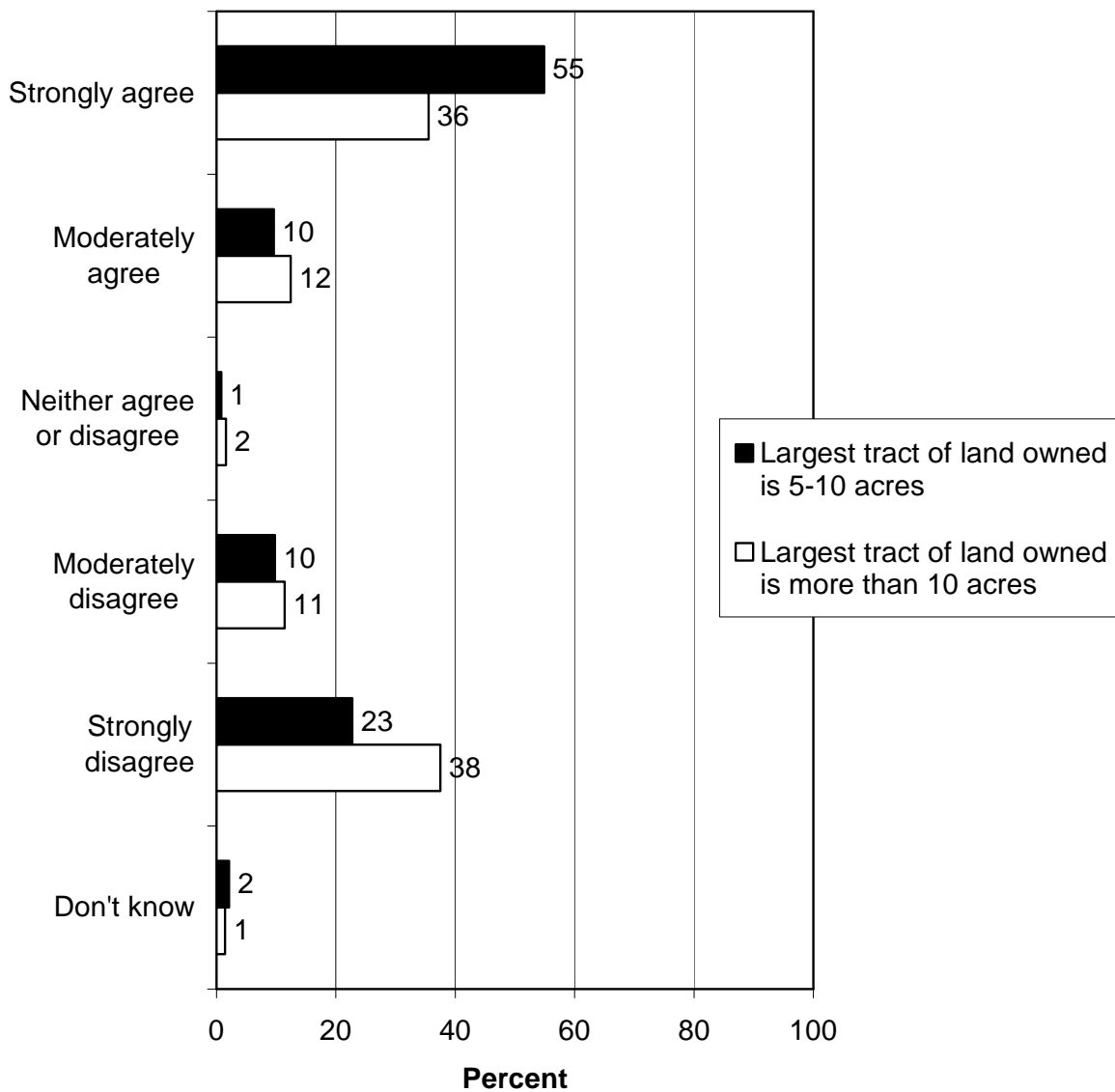
Q104. I am concerned about trespassing on my property. Do you agree or disagree that this was a reason that you did not allow people outside of your household to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people outside of their household to hunt deer in the past 5 years on their property.)



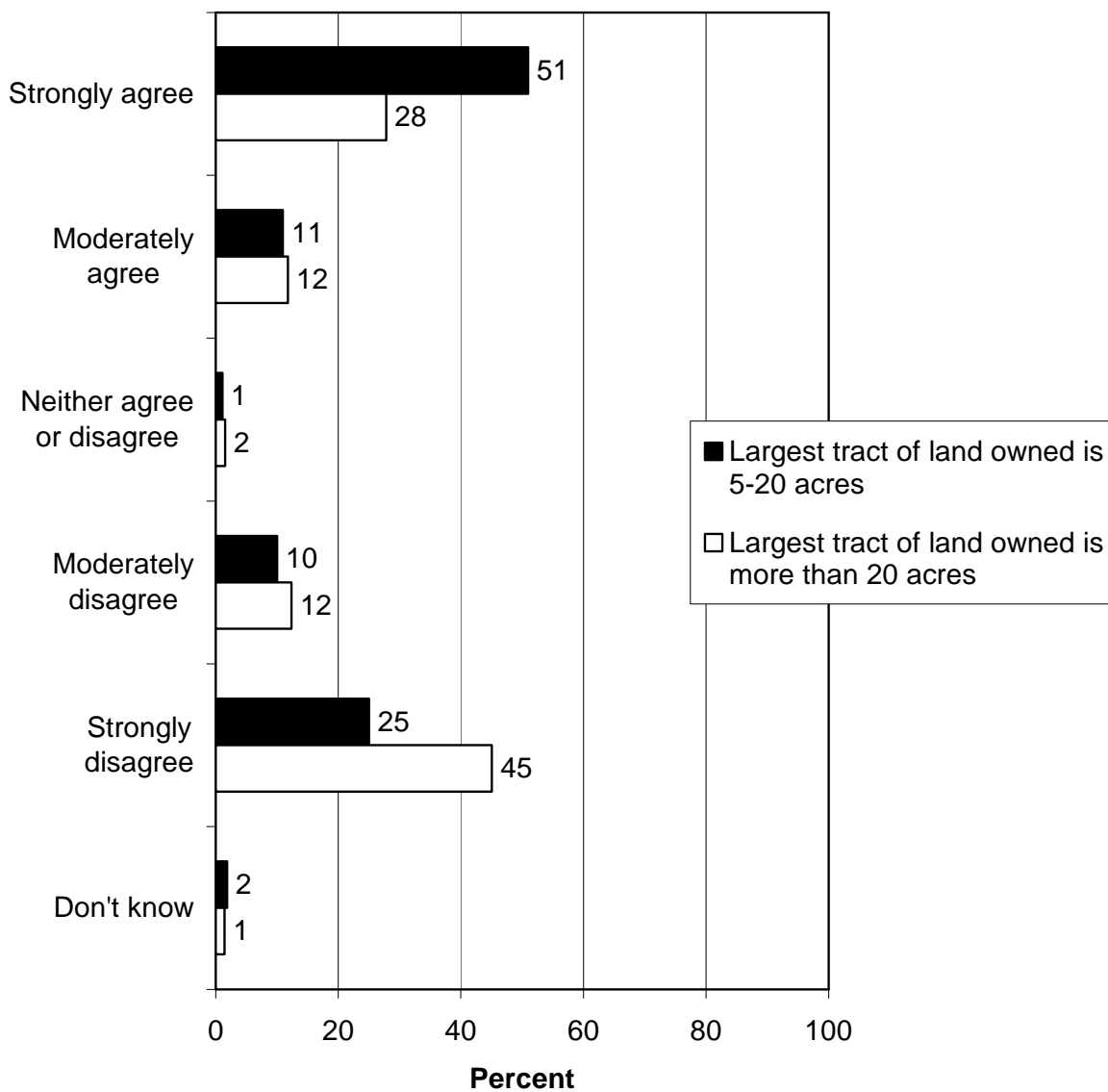
Q104. I am concerned about trespassing on my property. Do you agree or disagree that this was a reason that you did not allow people outside of your household to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people outside of their household to hunt deer in the past 5 years on their property.)



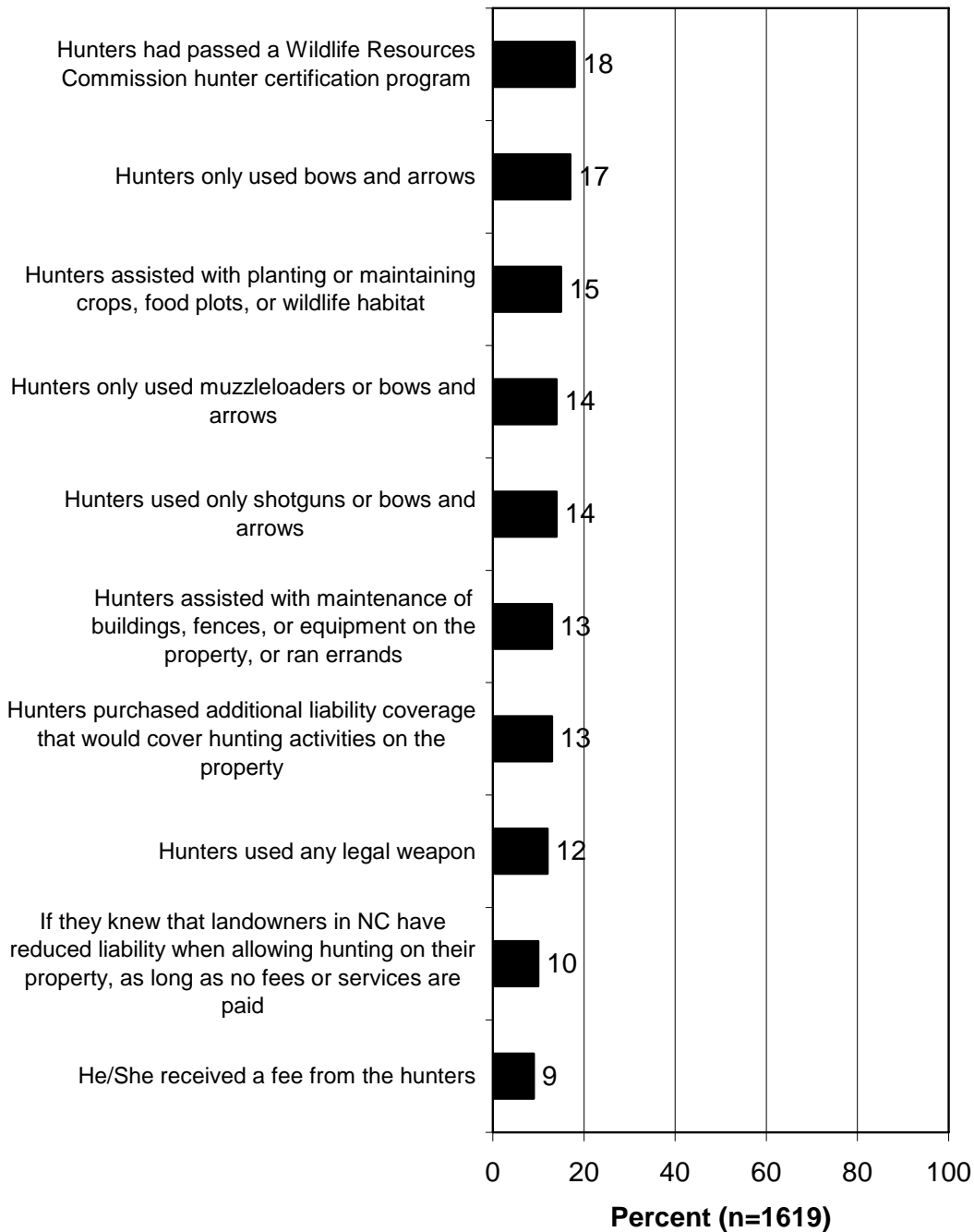
Q97. My property is too small for deer hunting. Do you agree or disagree that this was a reason that you did not allow people outside of your household to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people outside of their household to hunt deer in the past 5 years on their property.)



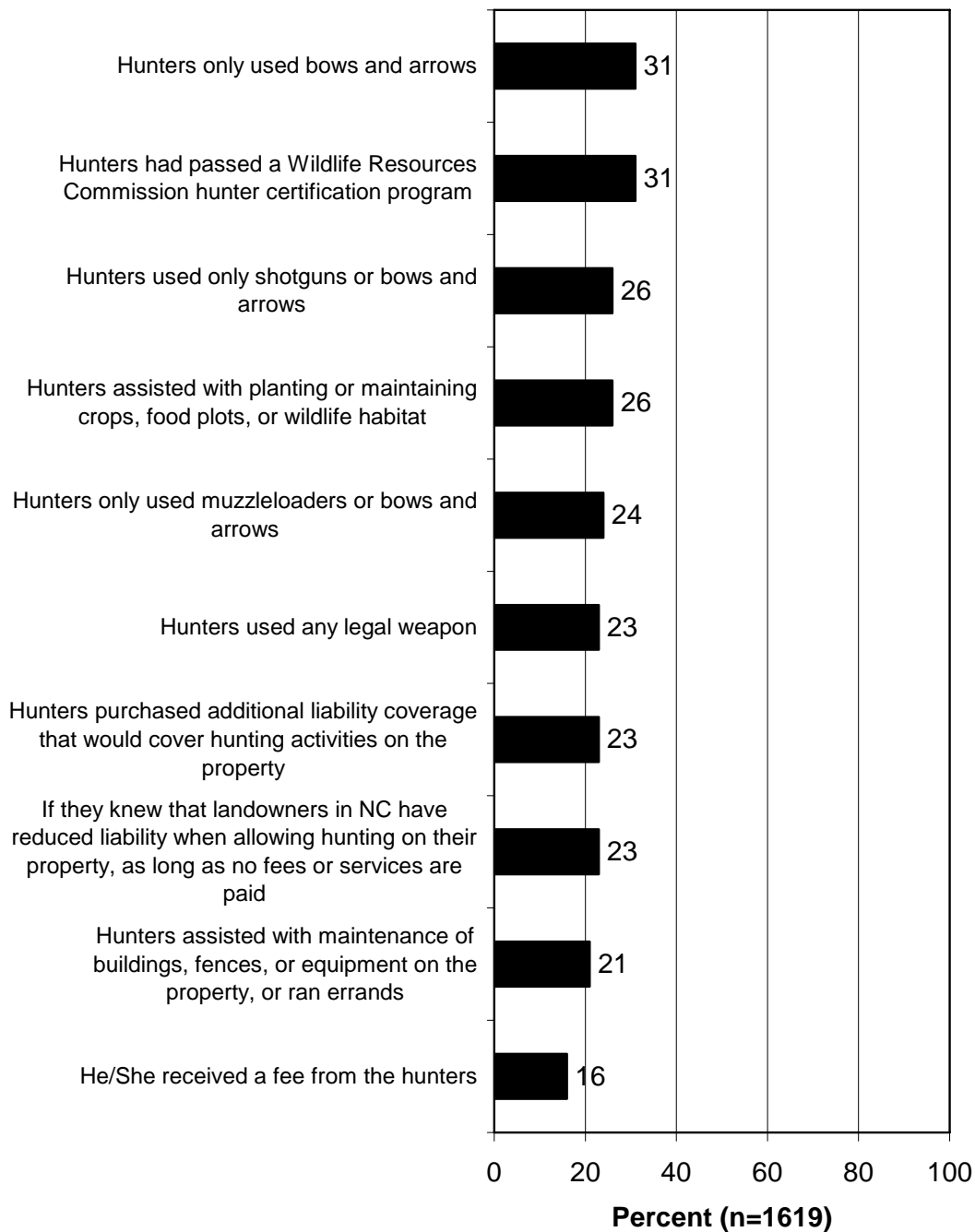
Q97. My property is too small for deer hunting. Do you agree or disagree that this was a reason that you did not allow people outside of your household to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people outside of their household to hunt deer in the past 5 years on their property.)



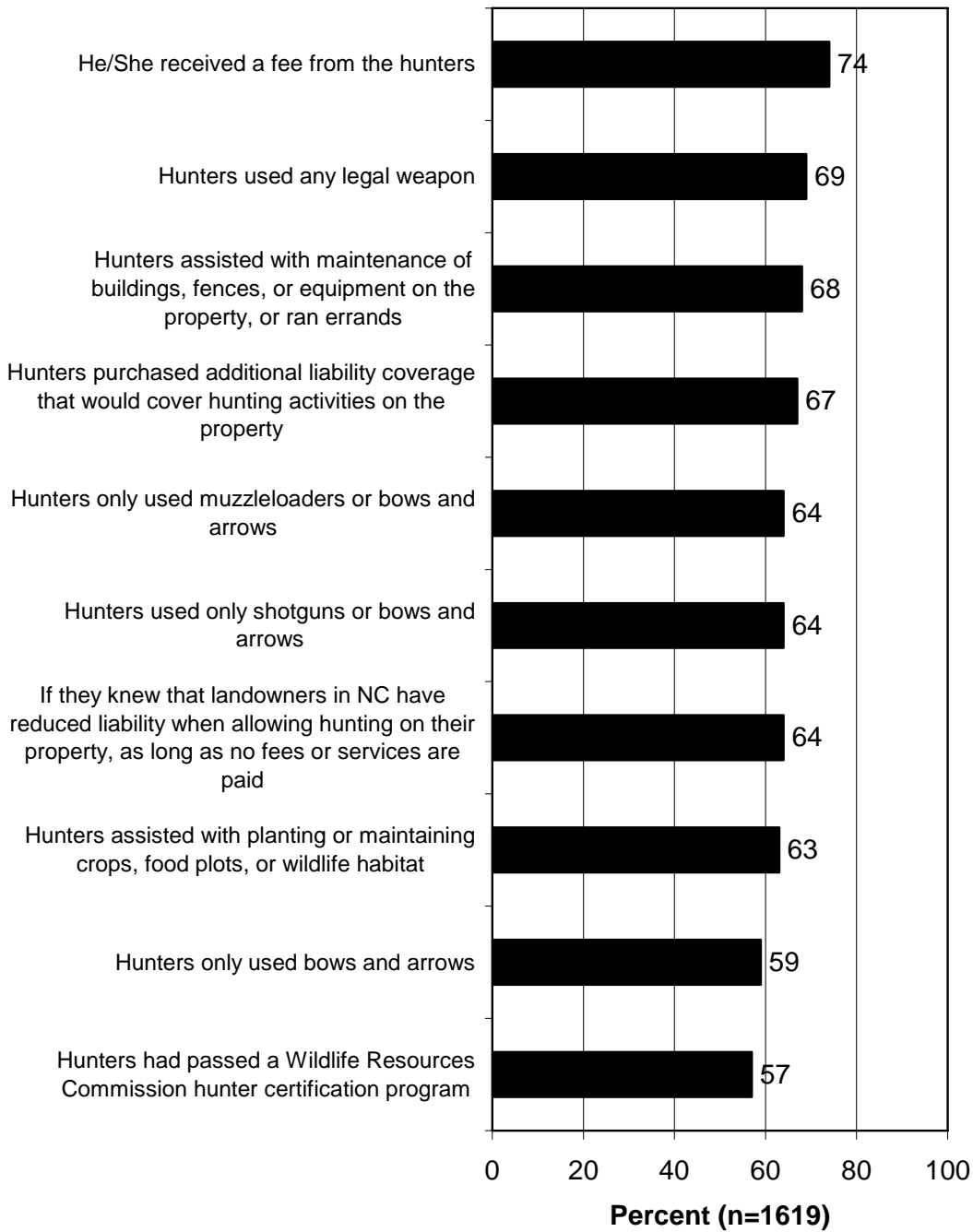
Percent who would be very likely to allow deer hunting on his/her property for the following conditions:



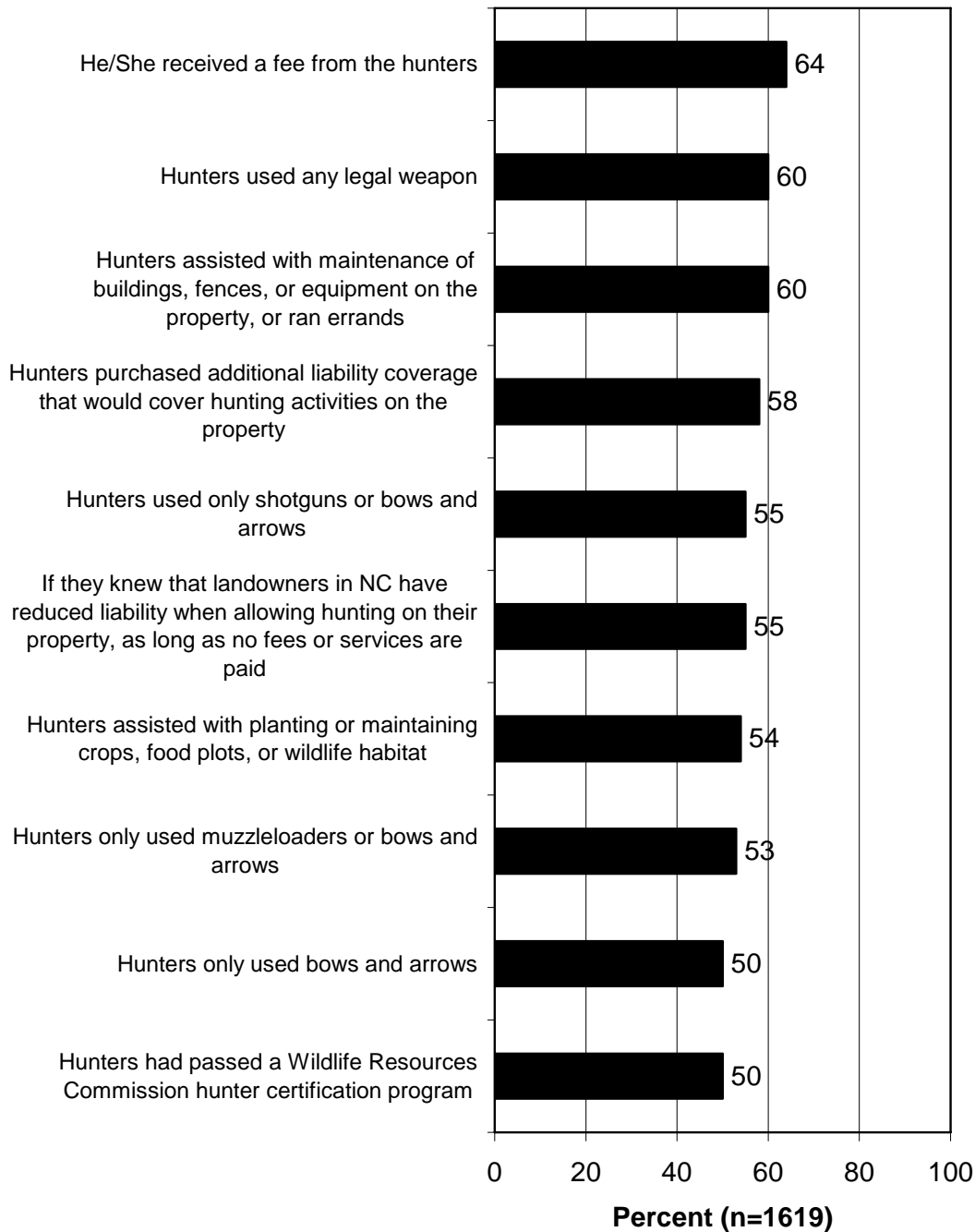
Percent who would be very or somewhat likely to allow deer hunting on his/her property for the following conditions:



Percent who would be somewhat or very unlikely to allow deer hunting on his/her property for the following conditions:



Percent who would be very unlikely to allow deer hunting on his/her property for the following conditions:

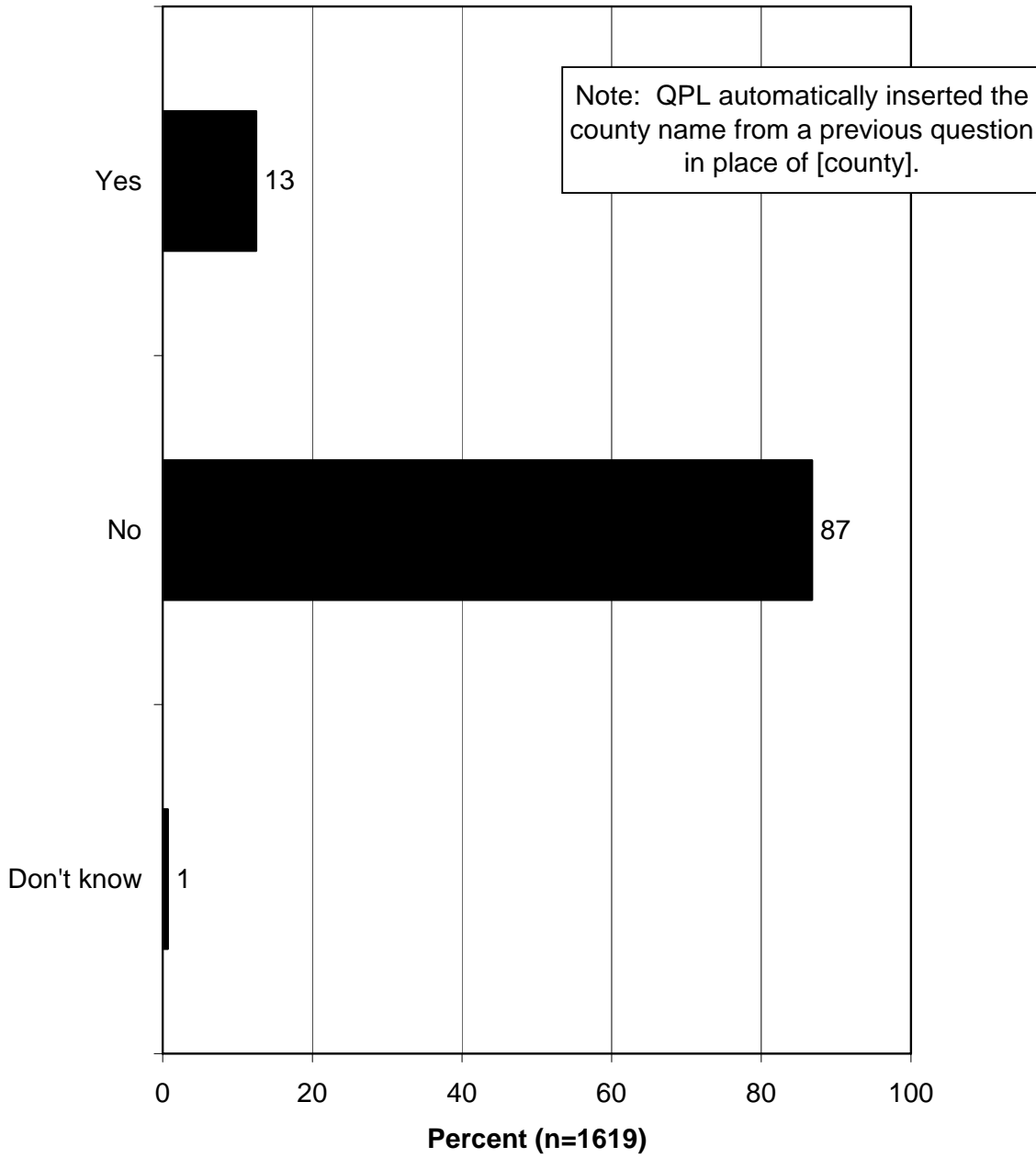


MANAGEMENT OF DEER ON LAND

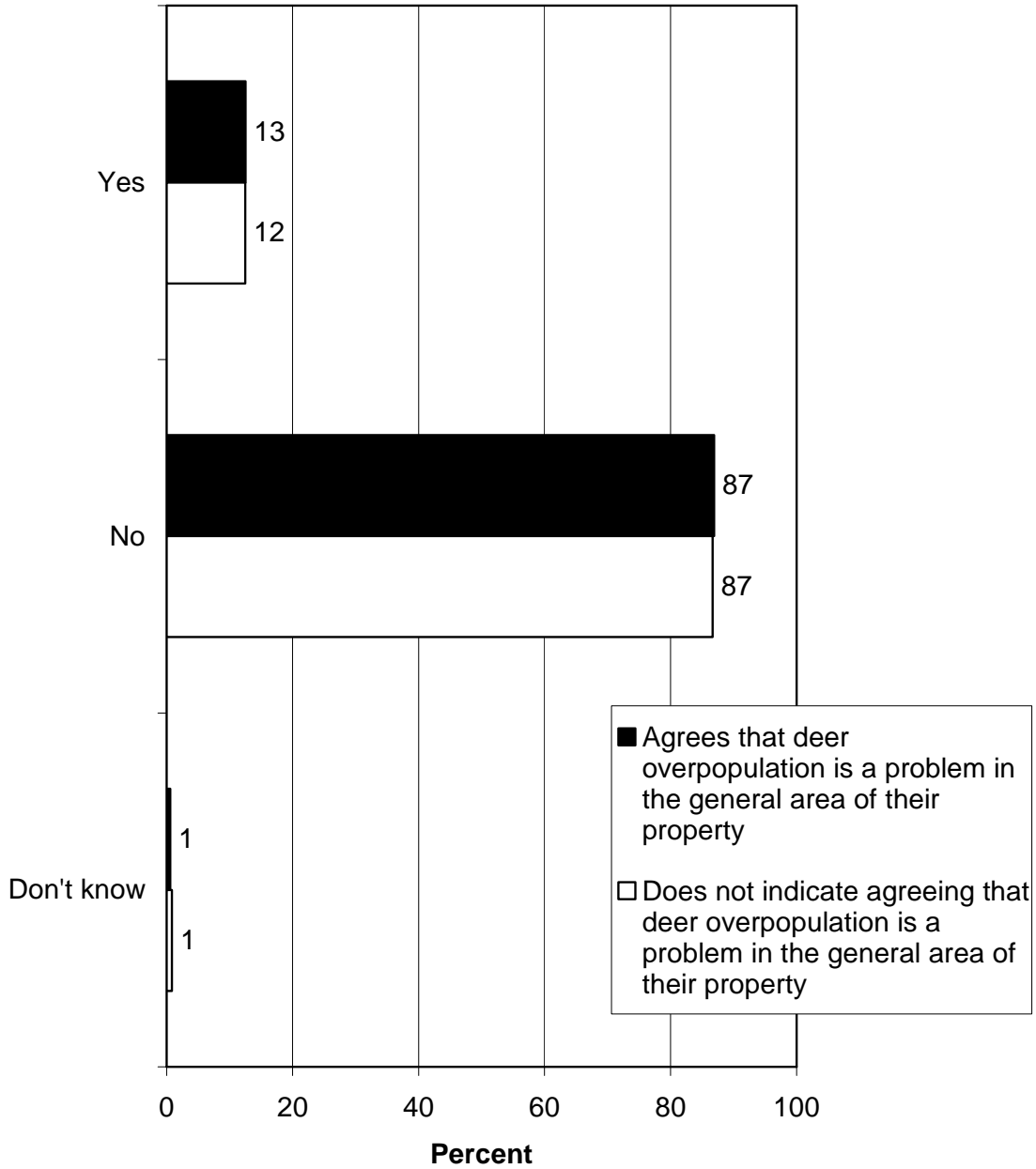
- When asked if any part of their property is managed specifically for deer, 13% of landowners indicate that it is. In follow-up, the survey asked about four specific practices that could be used to manage deer, among those who do so: 80% of those who manage part or all of their land for deer use hunting on their land as a deer management practice, 76% use food plots, 66% use supplemental feeding, and 33% use timber management.
 - A crosstabulation by whether the respondent agrees or does not indicate agreeing (the latter including neutral answers and disagree) that deer overpopulation is a problem found almost no difference in these groups on this question: 13% of those who agree that deer overpopulation is a problem manage all or a portion of their land for deer, compared to 12% of those who do not indicate agreeing that deer overpopulation is a problem.
 - Another crosstabulation, this time by the size of the tract, found that those with larger tracts appear to be just slightly more likely to manage all or part of their land for deer: 10% of those whose tract is from 5 to 20 acres, compared to 16% of those whose tract is greater than 20 acres, manage for deer.

- Landowners who have had deer problems on their property were asked a series of questions about things that they may have done to deal with the problems. A majority of those with deer problems have allowed deer hunting on their property to help deal with the problem (59%). About a third have used fencing to exclude deer from plants and/or gardens (32%). Methods used more sparingly include noisemaking devices to scare deer (15%), chemicals to repel deer (11%), and legal shooting of deer outside of hunting season (7%). Meanwhile, 12% have done nothing.
 - Other methods not discussed above were used by 11% of those with deer problems. These include using dogs to drive deer away, using soap to repel deer, using a human-scented object or other way of delivering a human scent to repel deer, and personally chasing deer away.

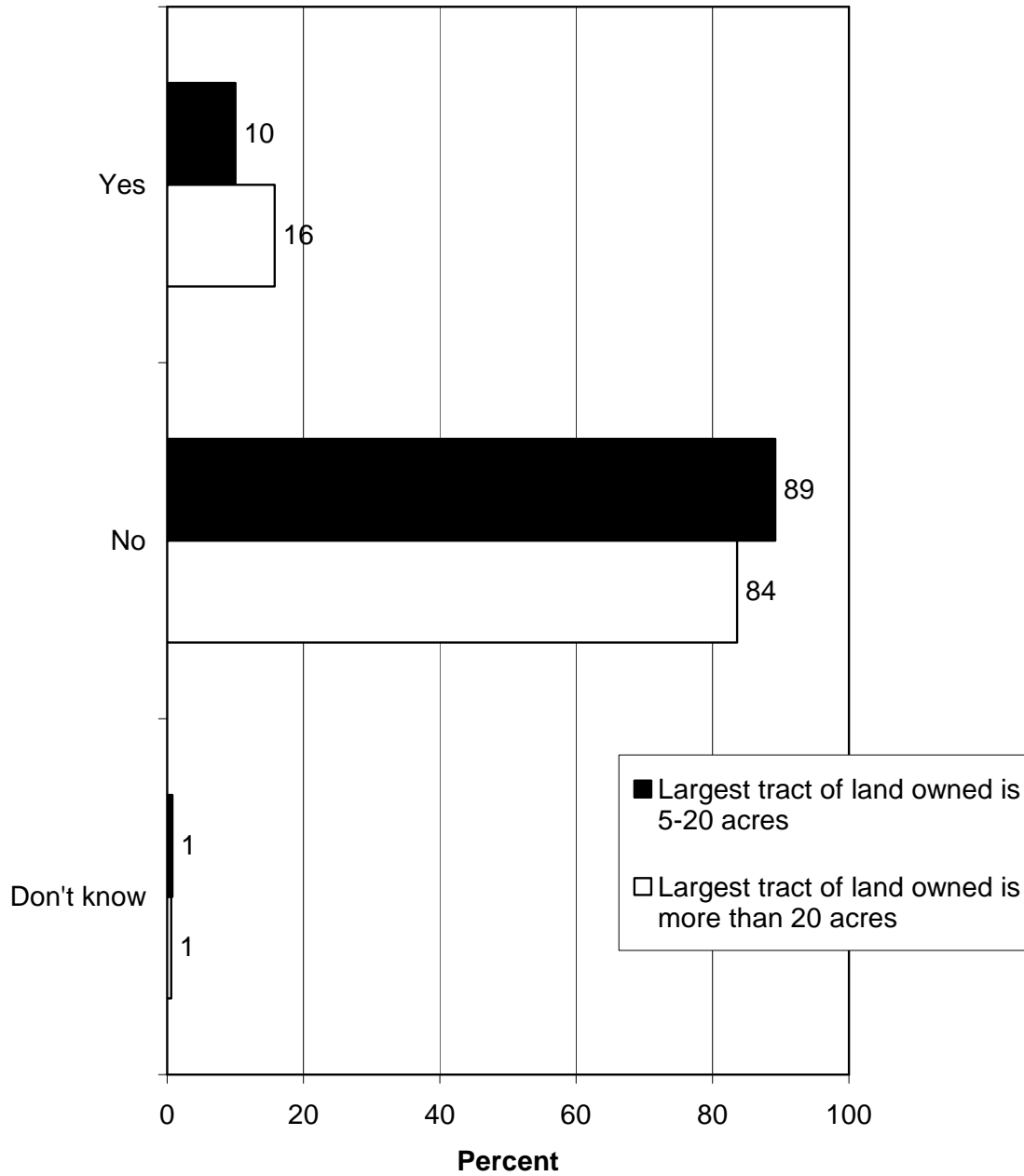
Q41. Is any part of your property in [county] County managed specifically for deer?



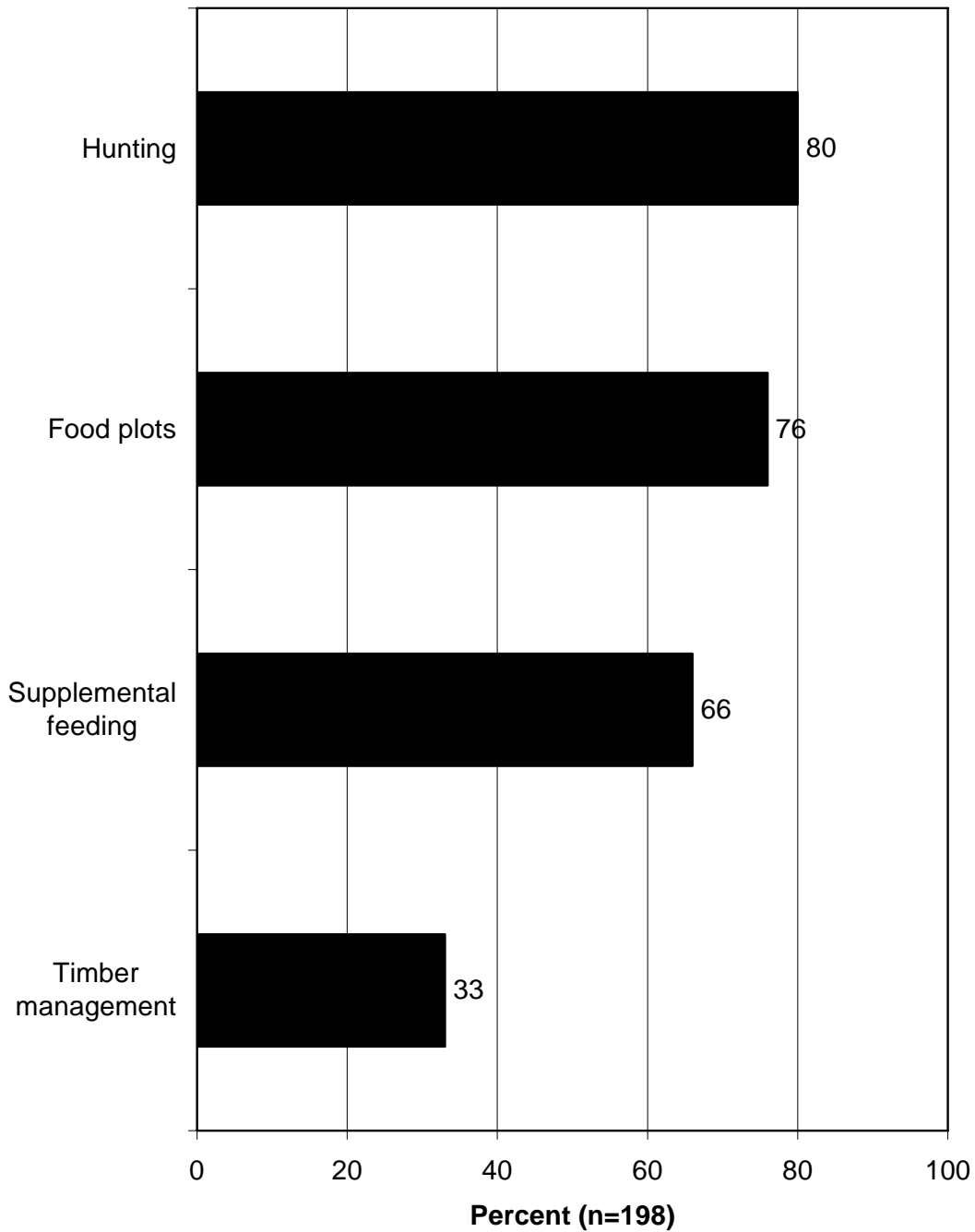
Q41. Is any part of your property in [county] County managed specifically for deer?



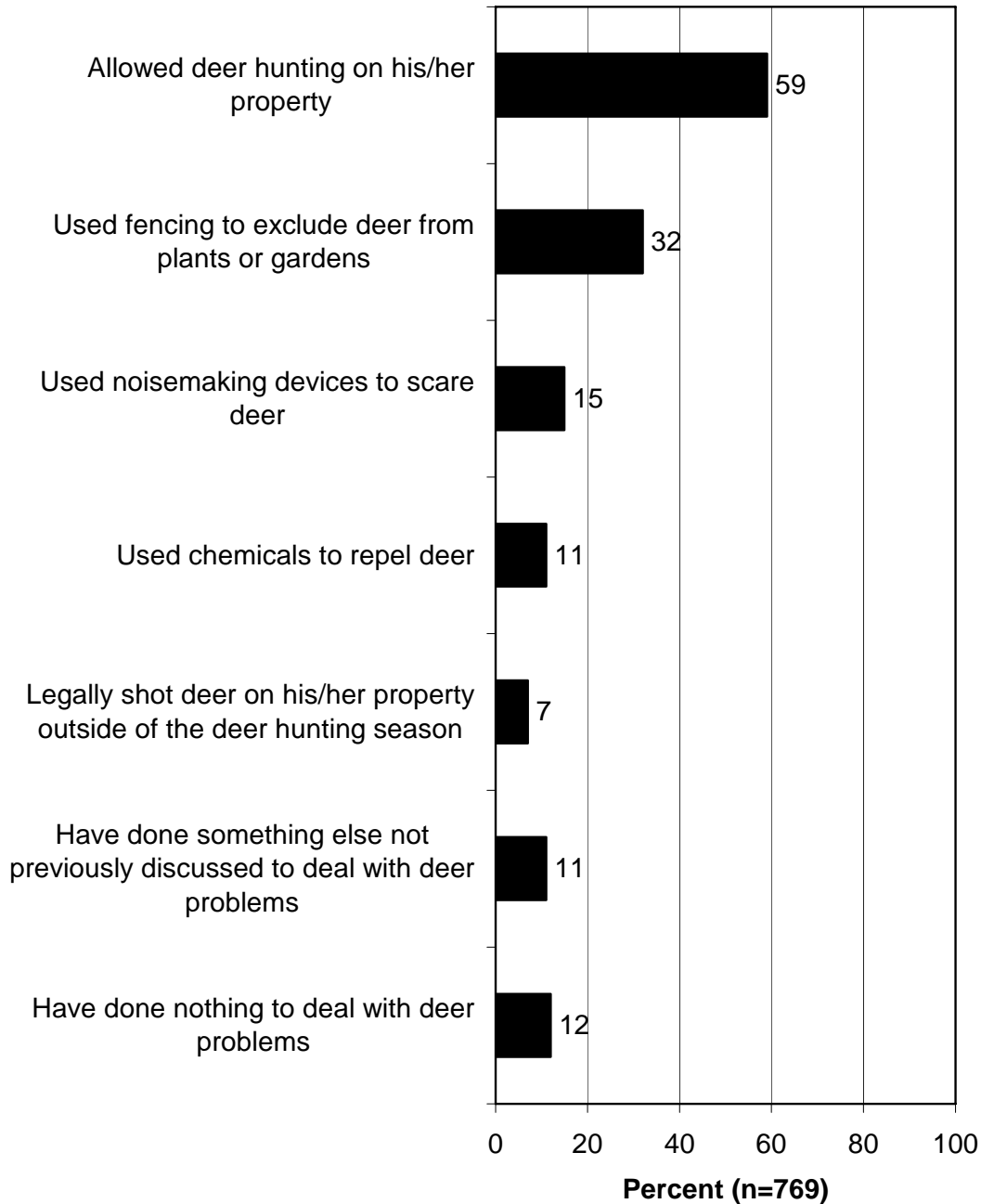
Q41. Is any part of your property in [county] County managed specifically for deer?



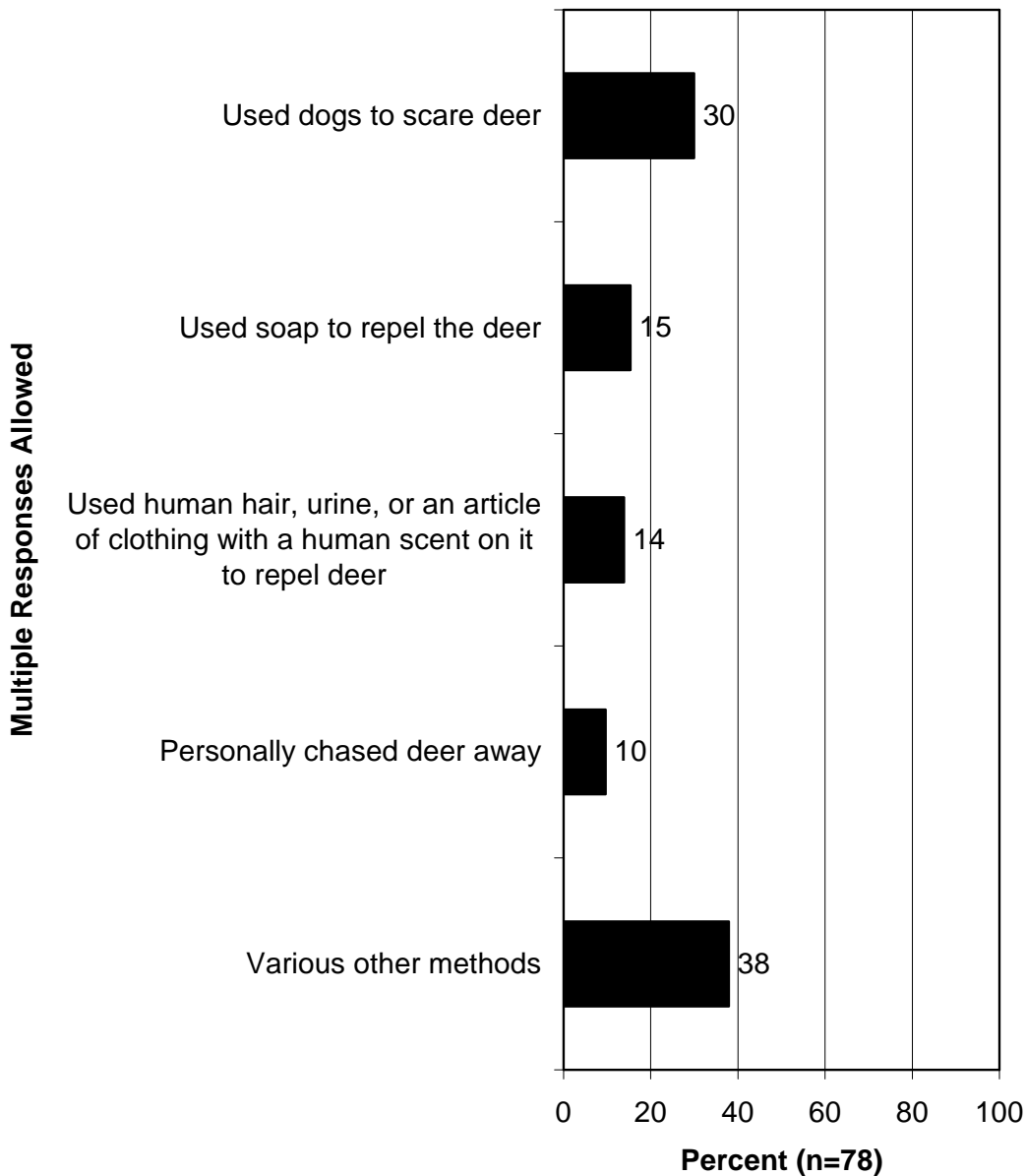
Percent who use the following practices to manage deer on his/her property, which is managed specifically for deer:



Percent who have had damage or other problems related to deer in the past 5 years and have done the following to deal with the problems on his/her property:



Q61. What else have you done to deal with deer problems in the past five years? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property and have done something other than, but not necessarily excluding, using chemicals, noisemaking devices, fencing, hunting, or shooting as a way to deal with the deer problem.)



OPINIONS ON DEER HUNTING REGULATIONS

- In perhaps the most basic question pertaining to deer hunting regulations, an overwhelming majority of landowners in the survey (93%) approve of legal, regulated hunting, with most of them saying that they *strongly* approve (77%). Only 4% disapprove.

- Following the above question, landowners were asked three questions about hunting in North Carolina. An overwhelming majority (92%) agree that written permission from the landowner should be required to hunt on private land in North Carolina (see the sub-bullet below for the section of the hunting regulations digest that apply to this issue). However, less than a majority agree that hunting deer over bait should be legal (42%) or that hunting deer with dogs should be legal (30%).
 - The hunting regulations digest for North Carolina states the following concerning hunting on private land: “The establishment of open seasons does not obligate the private landowner to allow hunting on his property, nor does it eliminate the ethical requirement for obtaining permission from the landowner before hunting. In some counties, hunters are required to obtain permission to hunt on private property.”
 - A crosstabulation found that farmers are almost exactly the same as non-farmers on their opinion regarding whether written permission from the landowner should be required to hunt on private land: 93% of both groups agree.

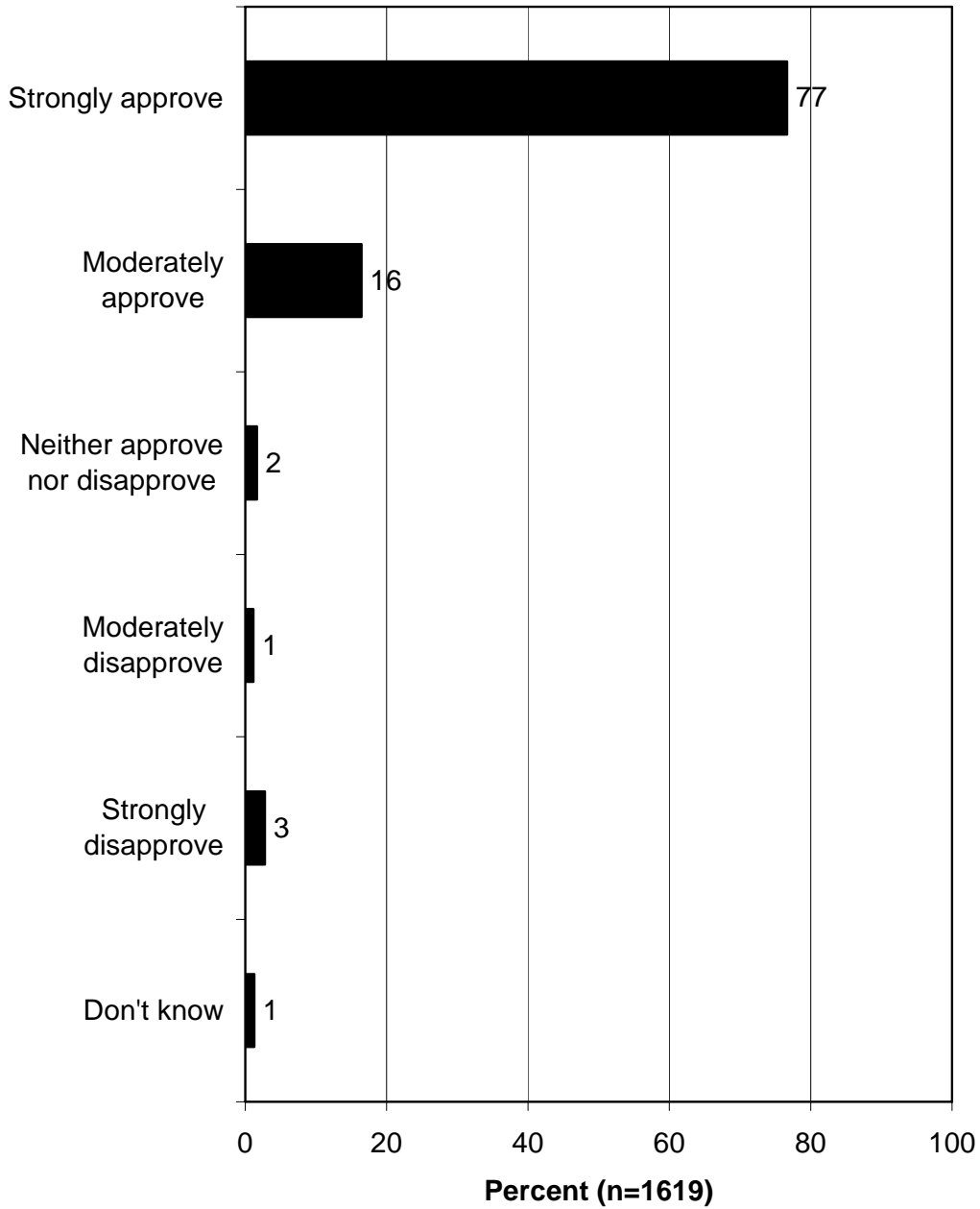
- Landowners are more likely to say that the current firearms deer hunting season in the county in which their property is located is too short (34%) than to say it is too long (8%). Their most common response is that it is about right (44%).
 - A crosstabulation shows the results according to the actual length of the firearm season in the county in which the tract of land under discussion is located, with no consistent trend by number of days (i.e., the shortest season—18 days—and the longest season—65 days—have higher percentages saying that the season length is about right compared to the seasons lengths in the middle—25 days and 41 days). It was conjectured that perhaps the shorter the season, the greater the percentage wanting to lengthen the season; this is not the case.

- Landowners whose property is in a part of North Carolina that allows hunters to get an unlimited number of tags to harvest additional does on private land were asked about the current season bag limit for does, which is 6 does (not including those harvested using the additional tags). Those landowners are more likely to say that the current season bag limit for does is too low (28%) than to say it is too high (11%). Their most common response is that it is about right (47%).

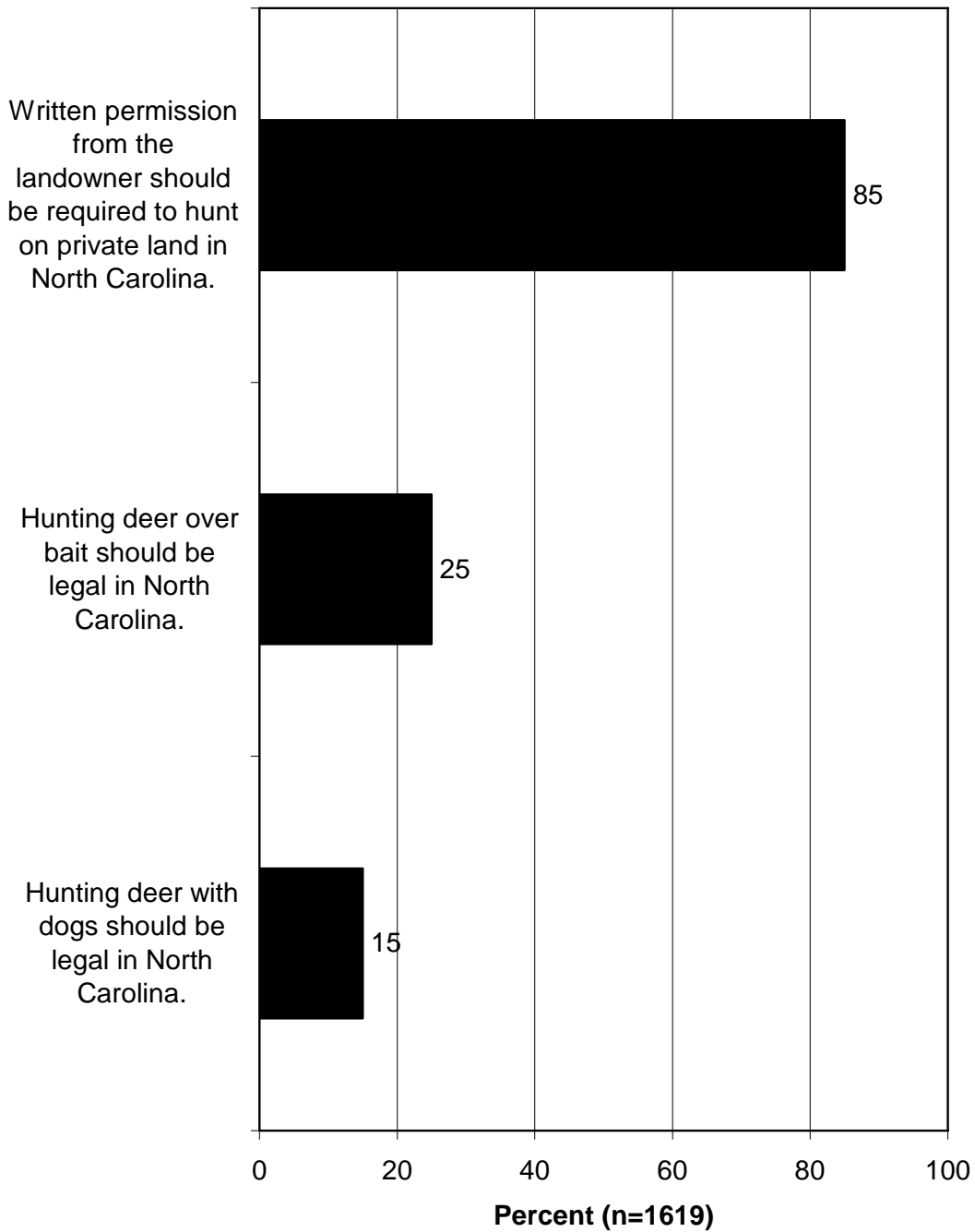
- Similar to the above, landowners whose property is in a part of North Carolina that does *not* allow hunters to get additional doe tags on private land were asked about the season bag limit for does, which again is 6 does. Their responses differ from those above, as these landowners are more likely to say that the bag limit for does is too high (25%) than to say it is too low (12%). Nonetheless, their most common response is that it is about right (46%).

- Landowners were asked about the current bag limit for bucks in the county in which their property is located (the QPL surveying software automatically inserted the buck bag limit into the question, depending on the county in which the property is located). The majority indicate that the buck bag limit is about right (53%), but otherwise they are more likely to say it is too low (24%) than to say it is too high (10%).
 - A crosstabulation found that those in a part of the state with a 4-buck bag limit are more likely to say that the bag limit is too high, compared to those in a part of the state with a 2-buck bag limit: 8% of respondents with the 2-buck limit say it is too high, compared to 16% of respondents with a 4-buck limit.

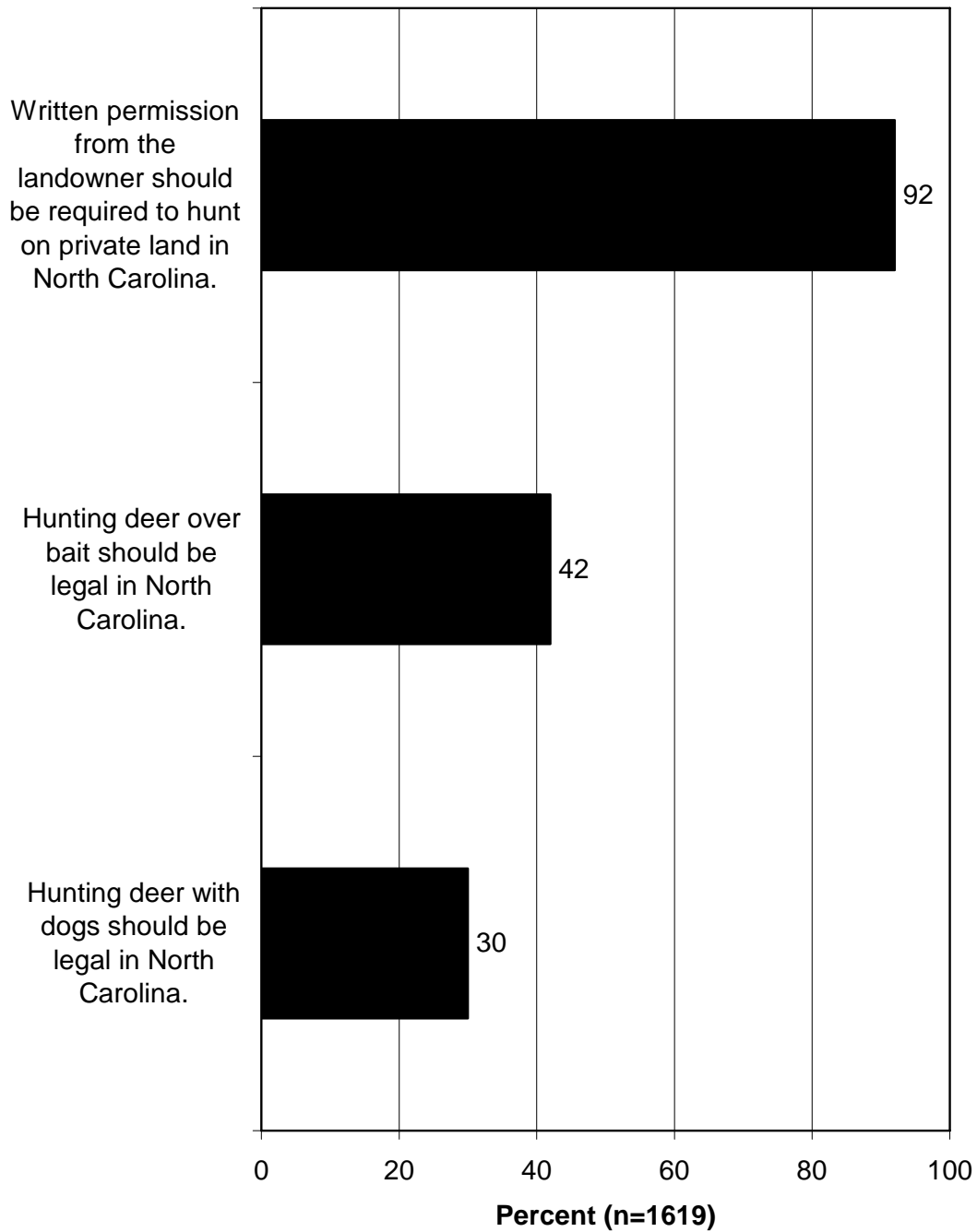
Q141. In general, do you approve or disapprove of legal, regulated hunting?



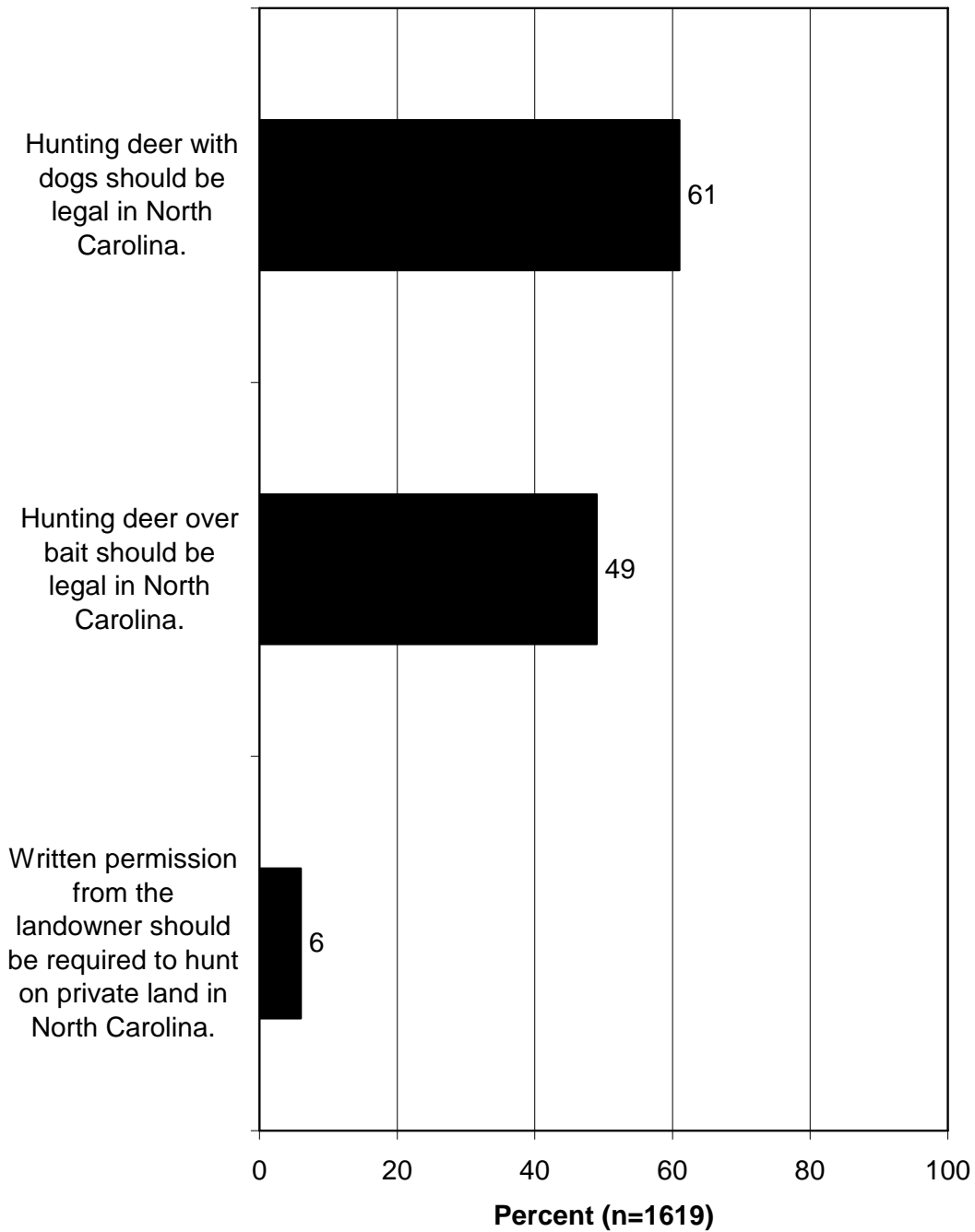
Percent who strongly agree with the following statements concerning hunting:



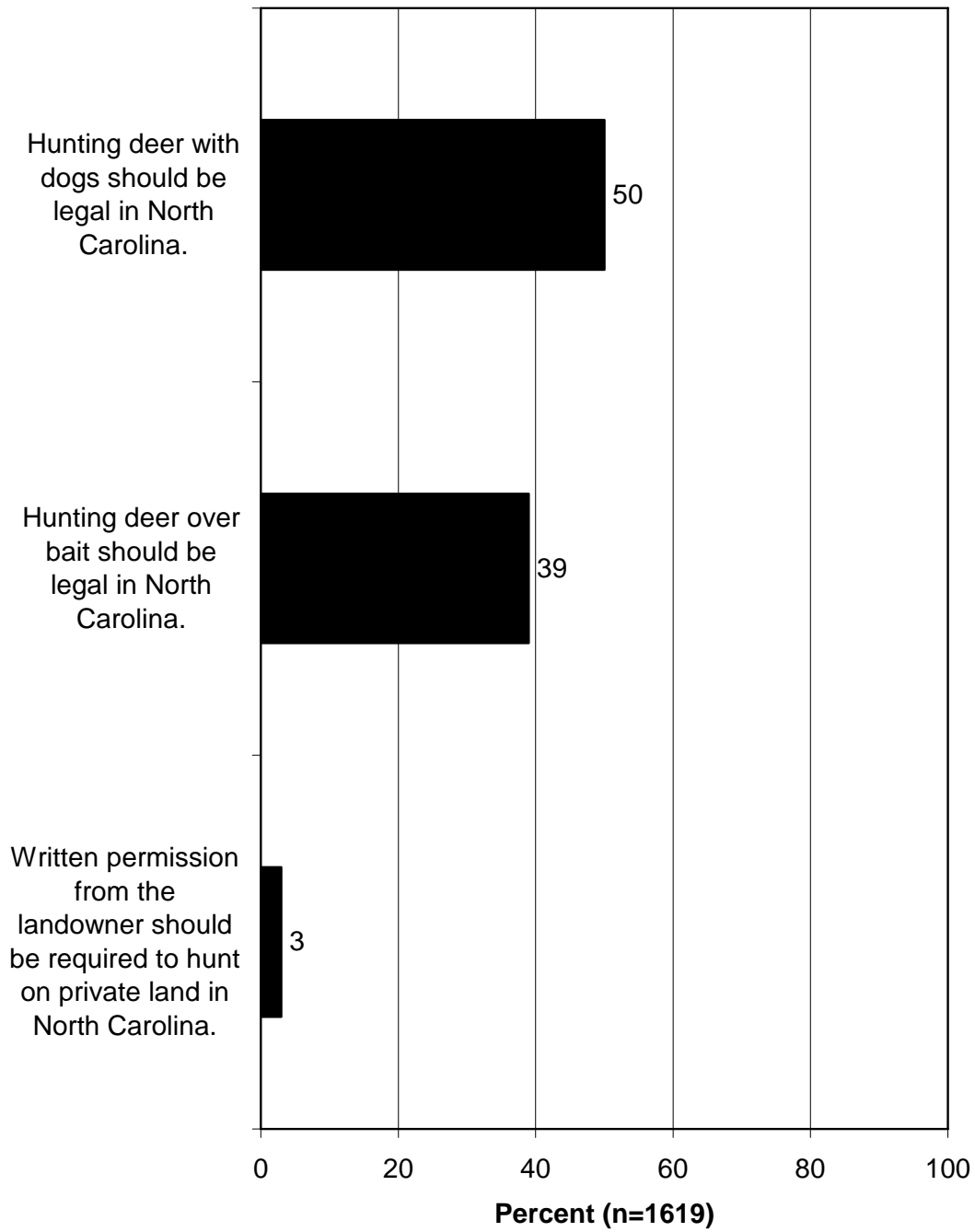
Percent who strongly or moderately agree with the following statements concerning hunting:



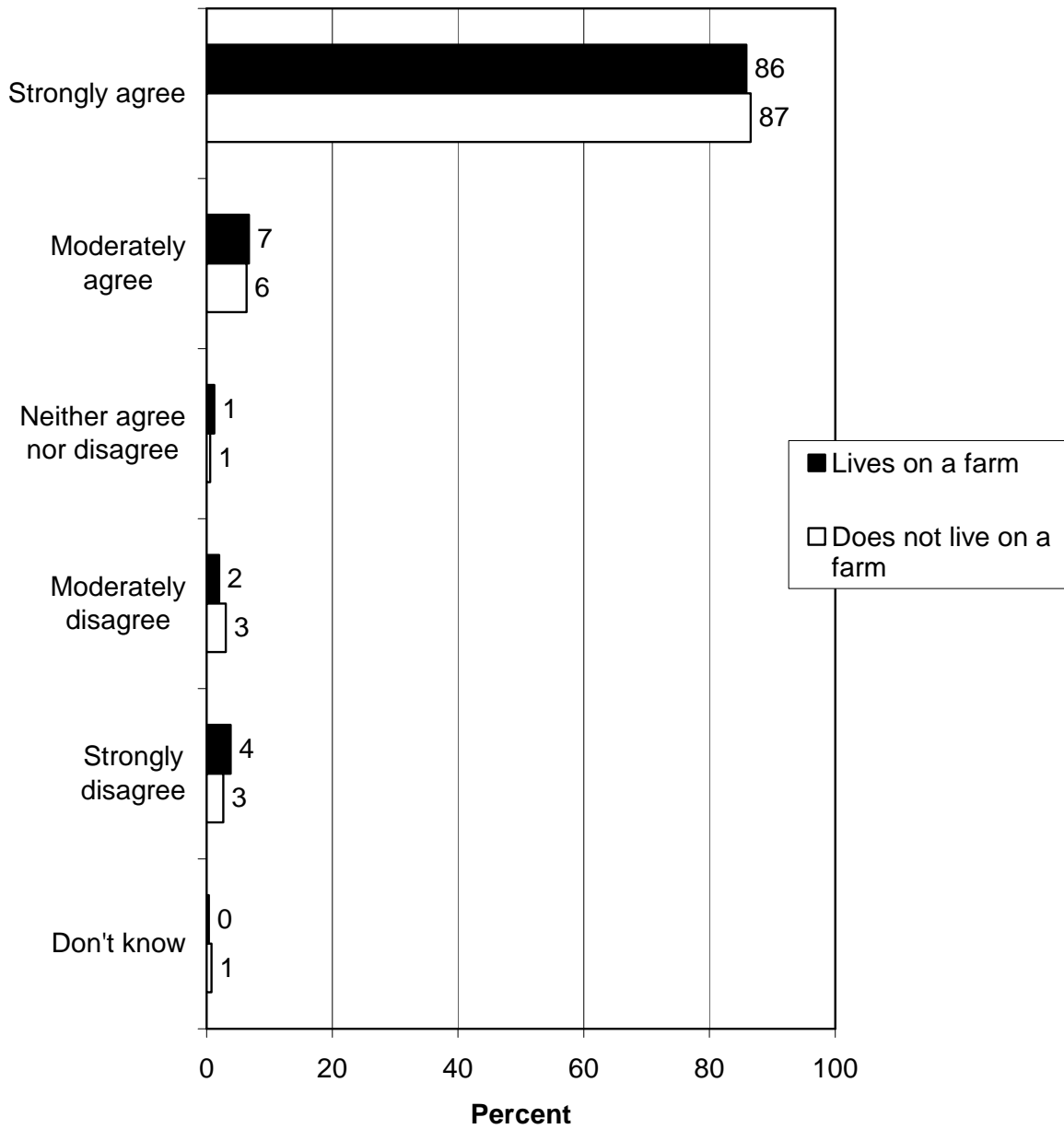
Percent who moderately or strongly disagree with the following statements concerning hunting:



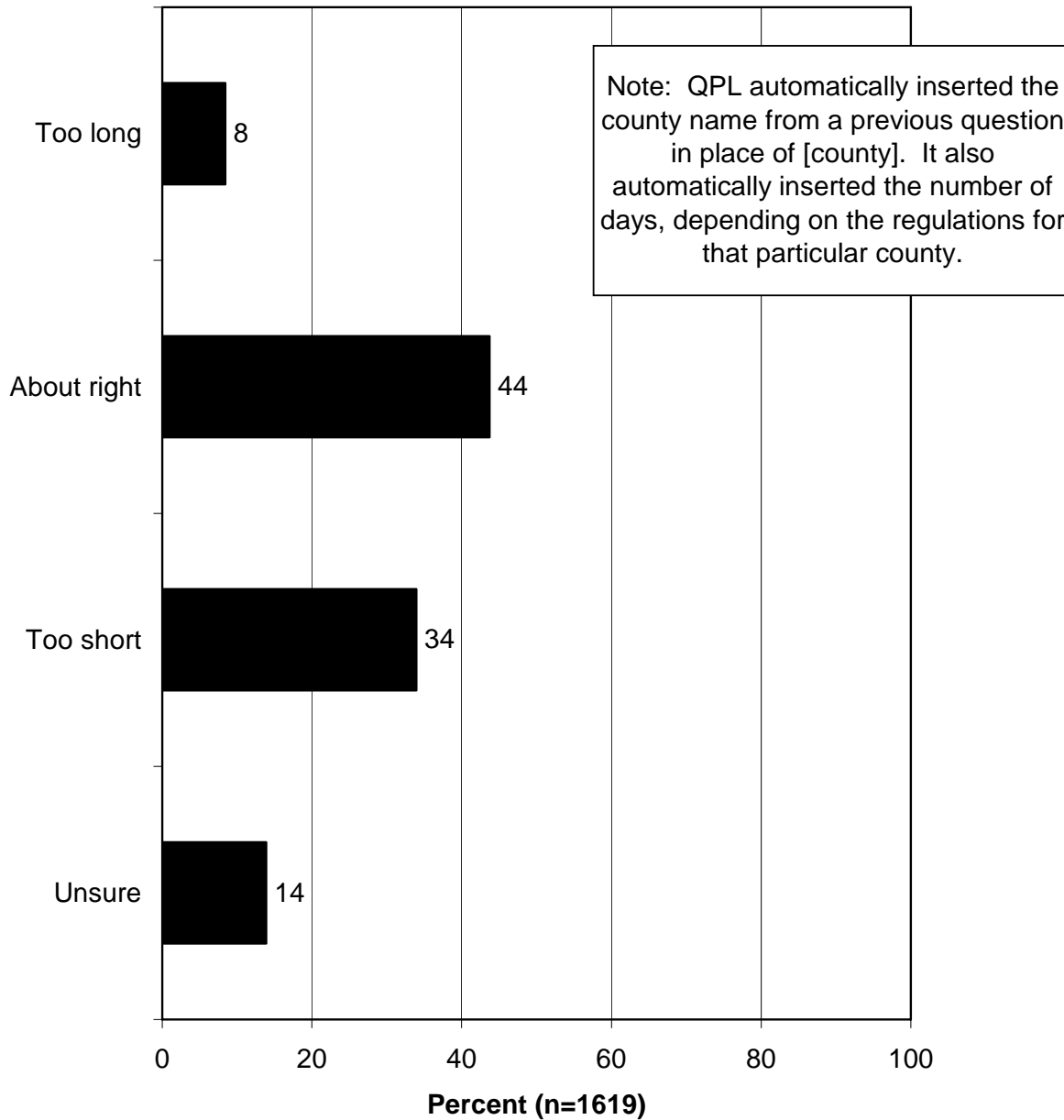
Percent who strongly disagree with the following statements concerning hunting:



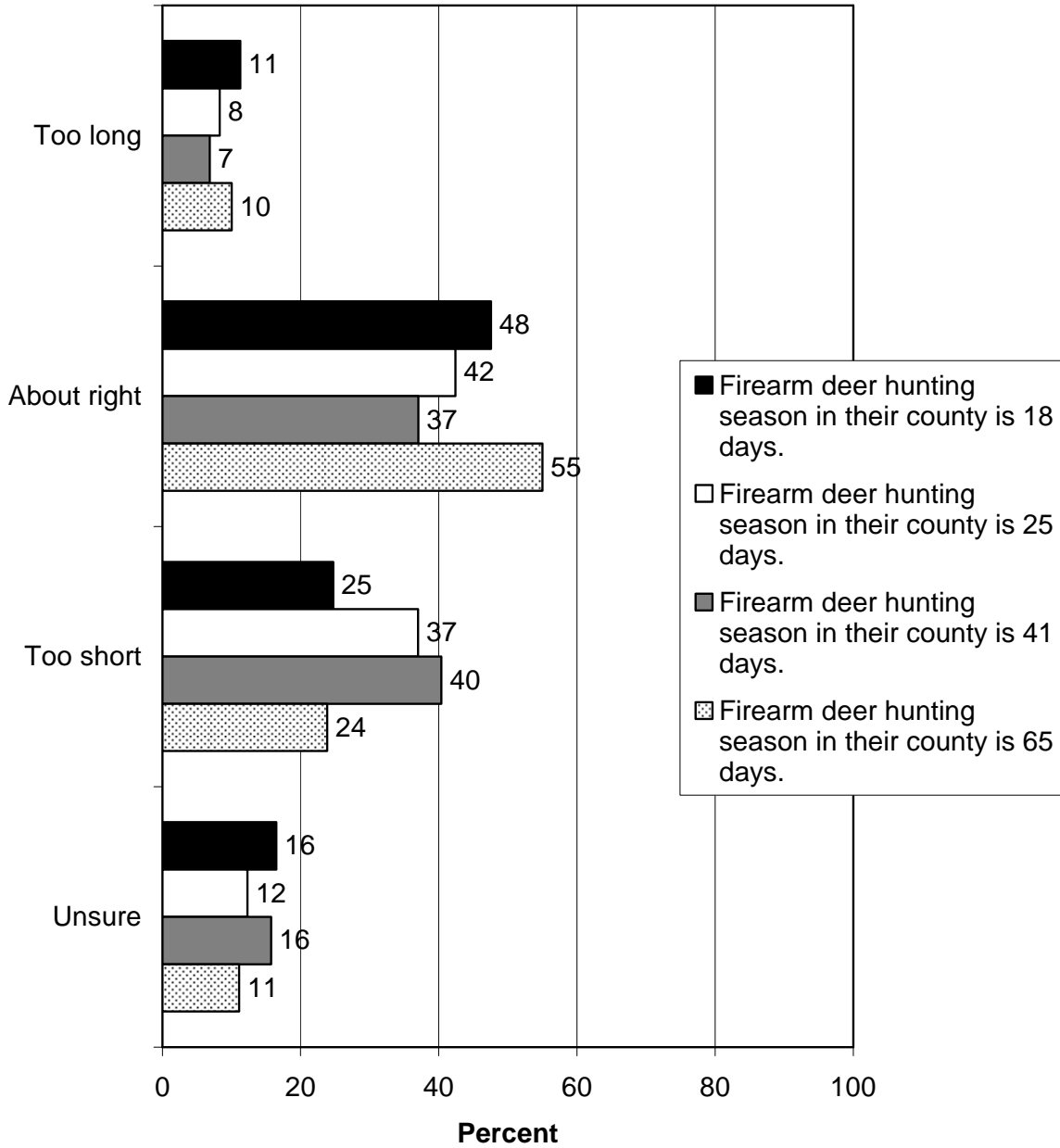
Q143. Do you agree or disagree that written permission from the landowner should be required to hunt on private land in North Carolina?



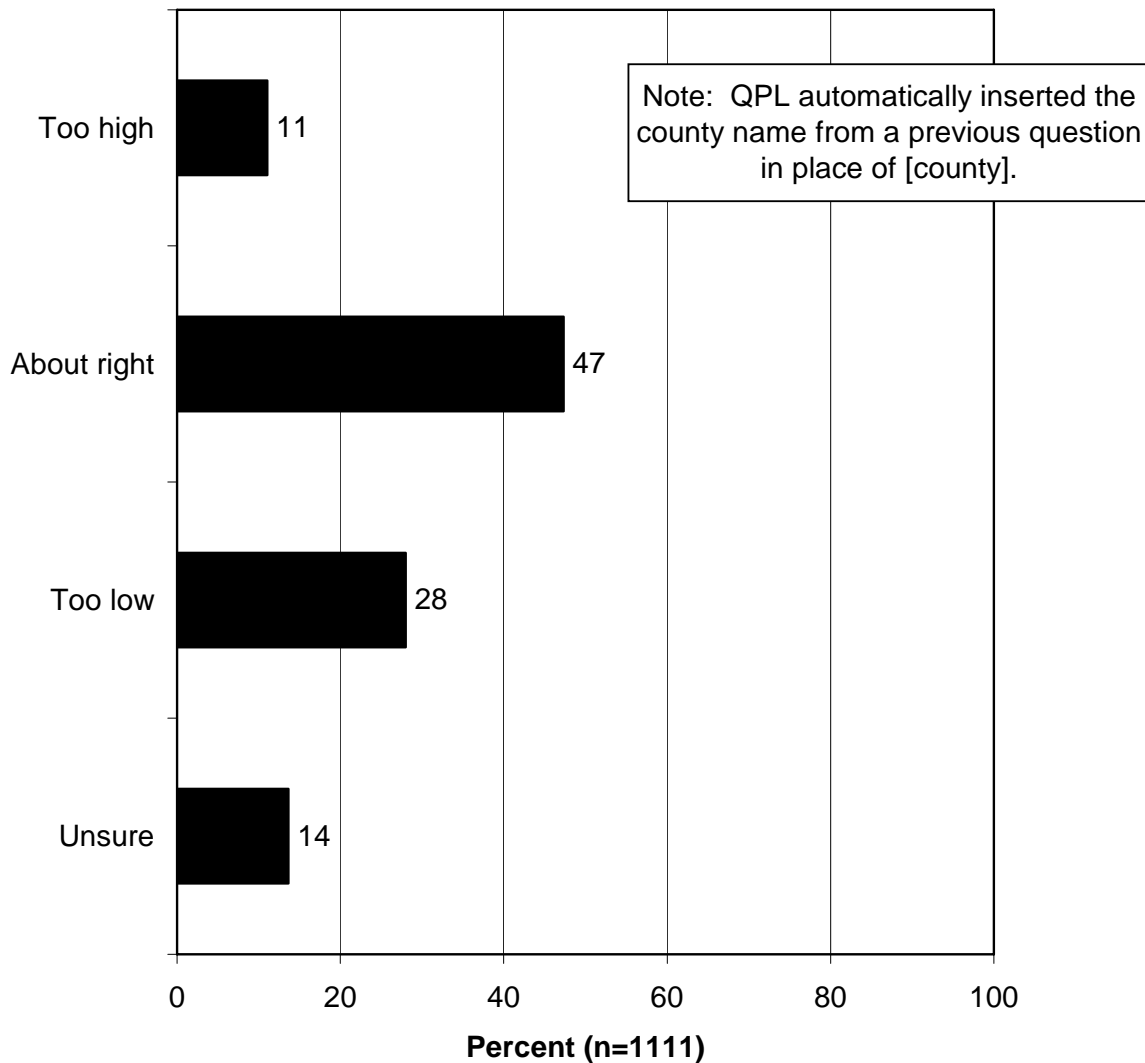
Q67. Currently the firearm deer hunting season in [county] County is [days]. In your opinion, is the length of the firearm deer hunting season in [county] County too long, about right or too short?



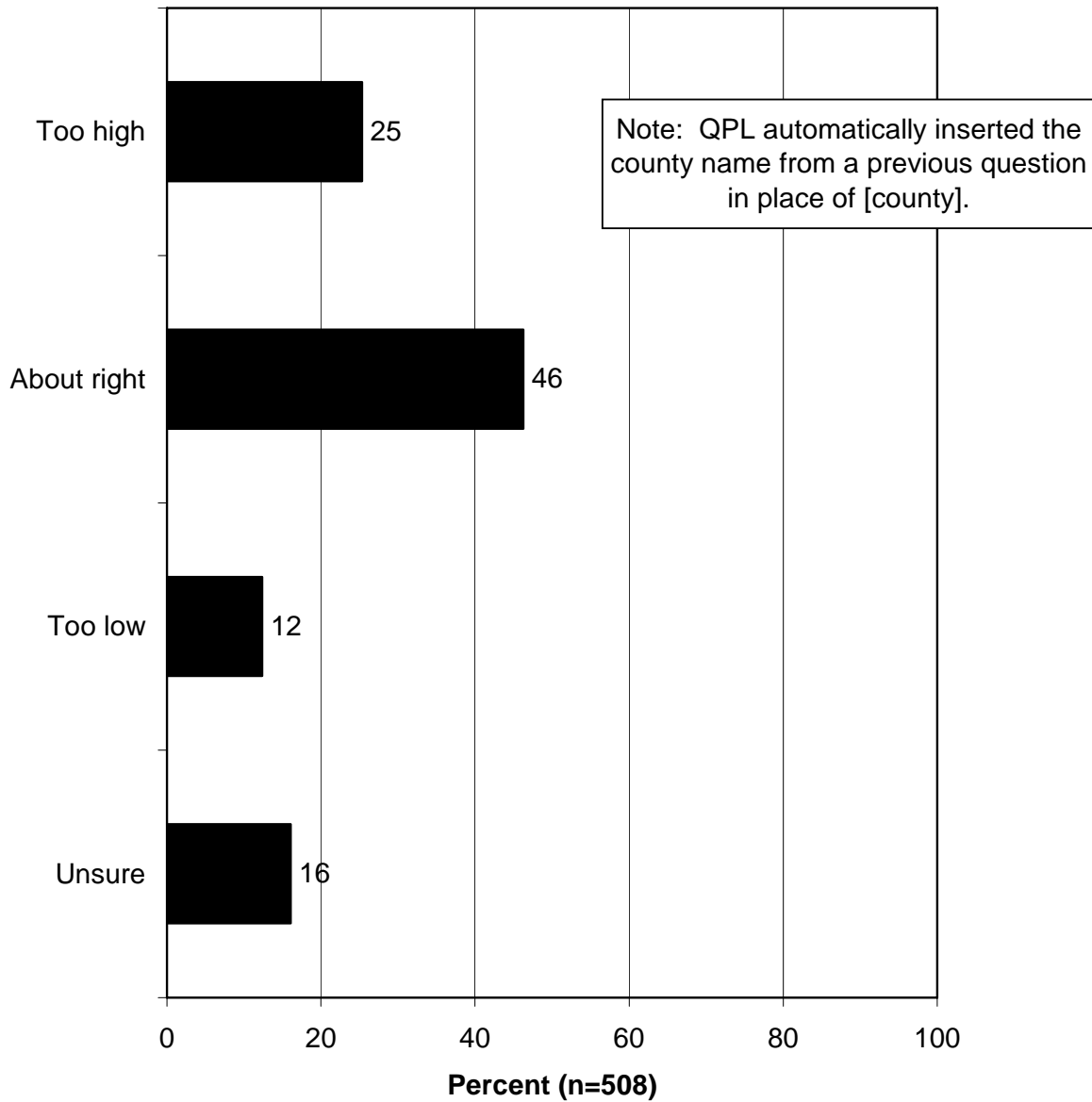
Q67. In your opinion, is the length of the firearm deer hunting season in [county] County too long, about right, or too short?



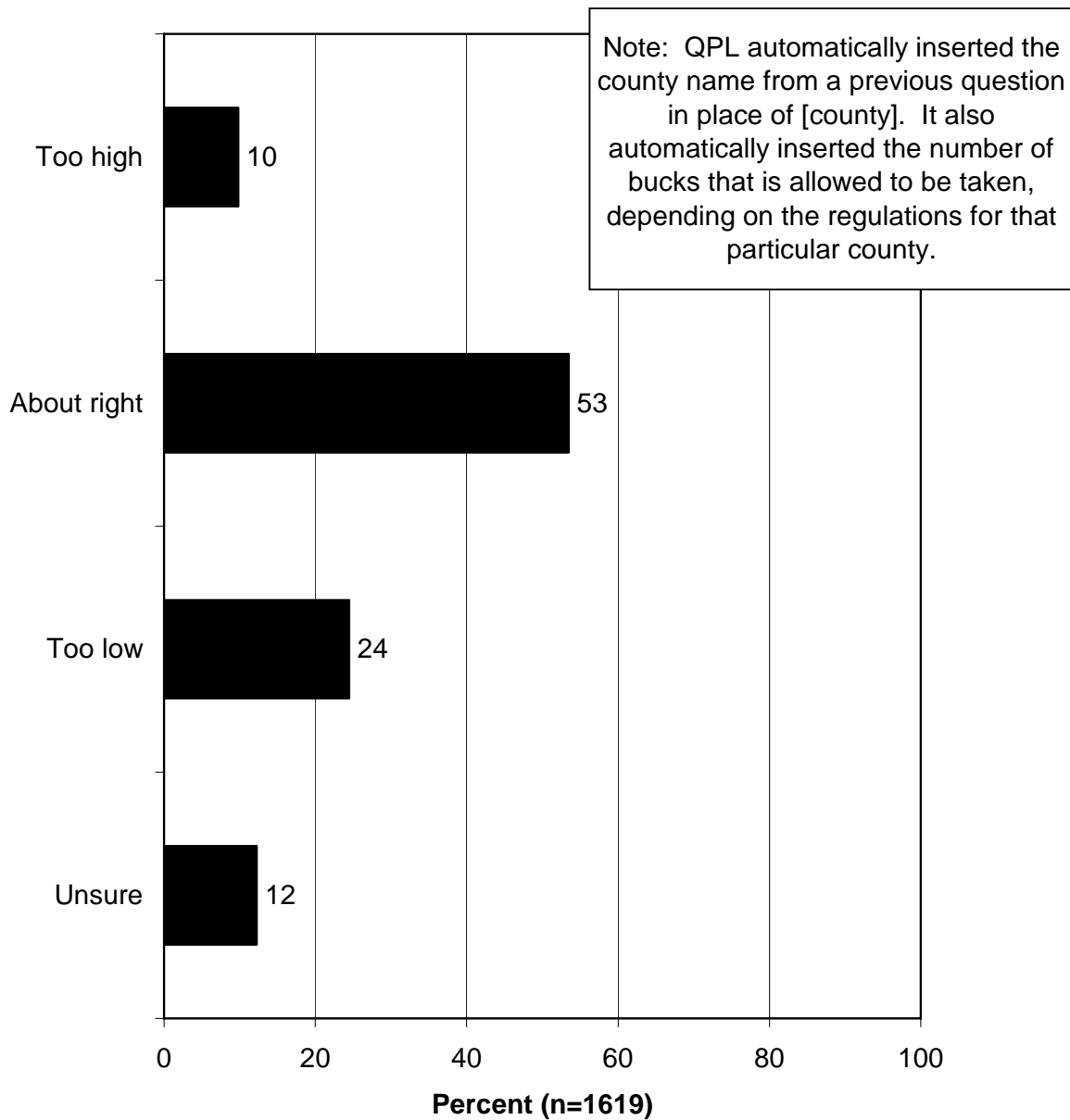
Q69. Currently, the season bag limit for does in [county] County is 6 does, although hunters can get an unlimited number of tags to harvest additional does on private lands. In your opinion, is the current season bag limit for does in [county] County too high, about right, or too low? (Asked of those whose property is in a county that allows hunters to get an unlimited number of tags to harvest additional does on private land.)



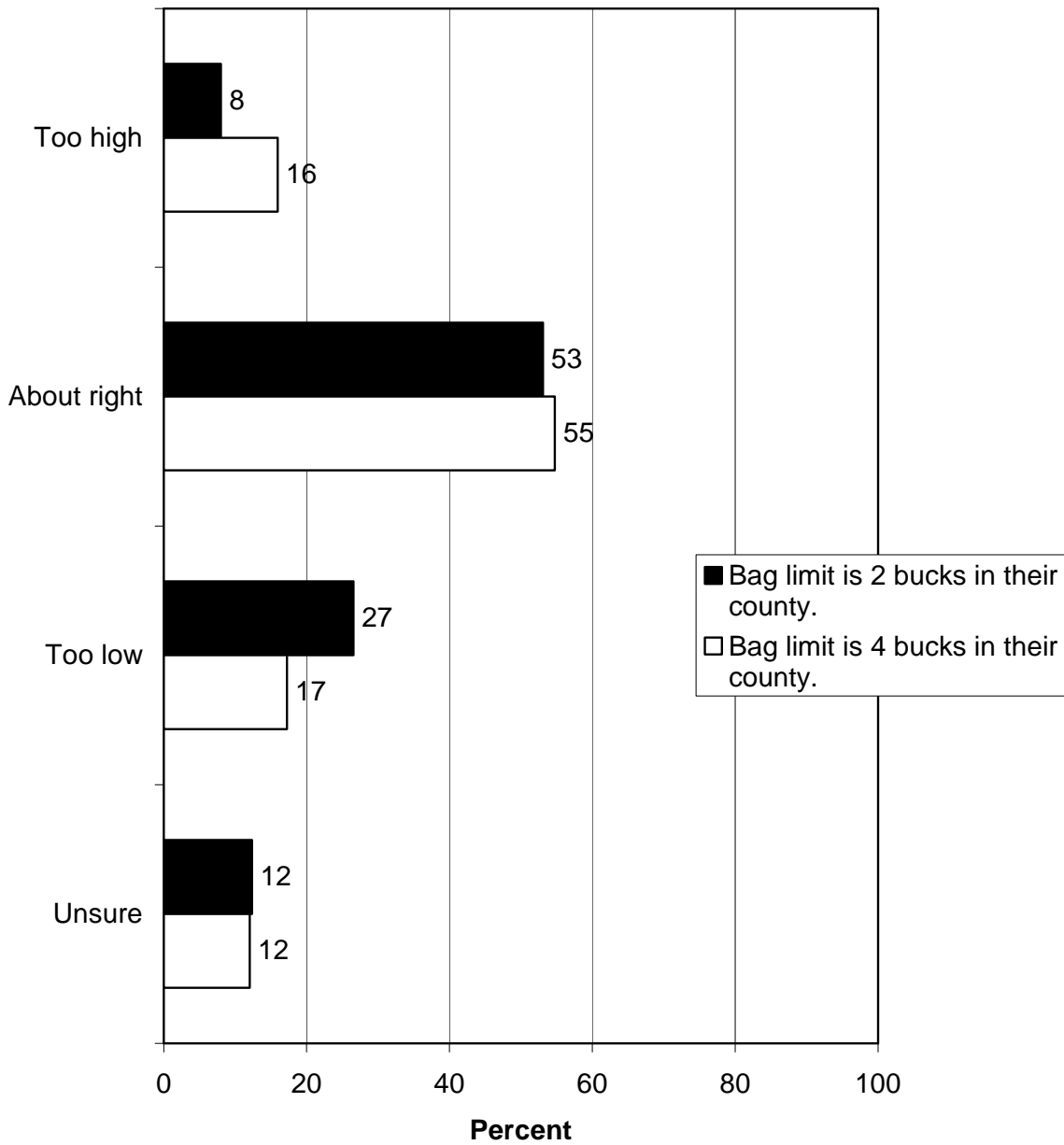
Q70. Currently, the season bag limit for does in [county] County is 6 does. In your opinion, is the current season bag limit for does in [county] County too high, about right, or too low? (Asked of those whose property is not in a county that allows hunters to get an unlimited number of tags to harvest additional does on private land.)



Q72. Currently, the season bag limit for bucks in [county] County is [number of bucks]. In your opinion, is the current season bag limit for bucks in [county] County too high, about right, or too low?



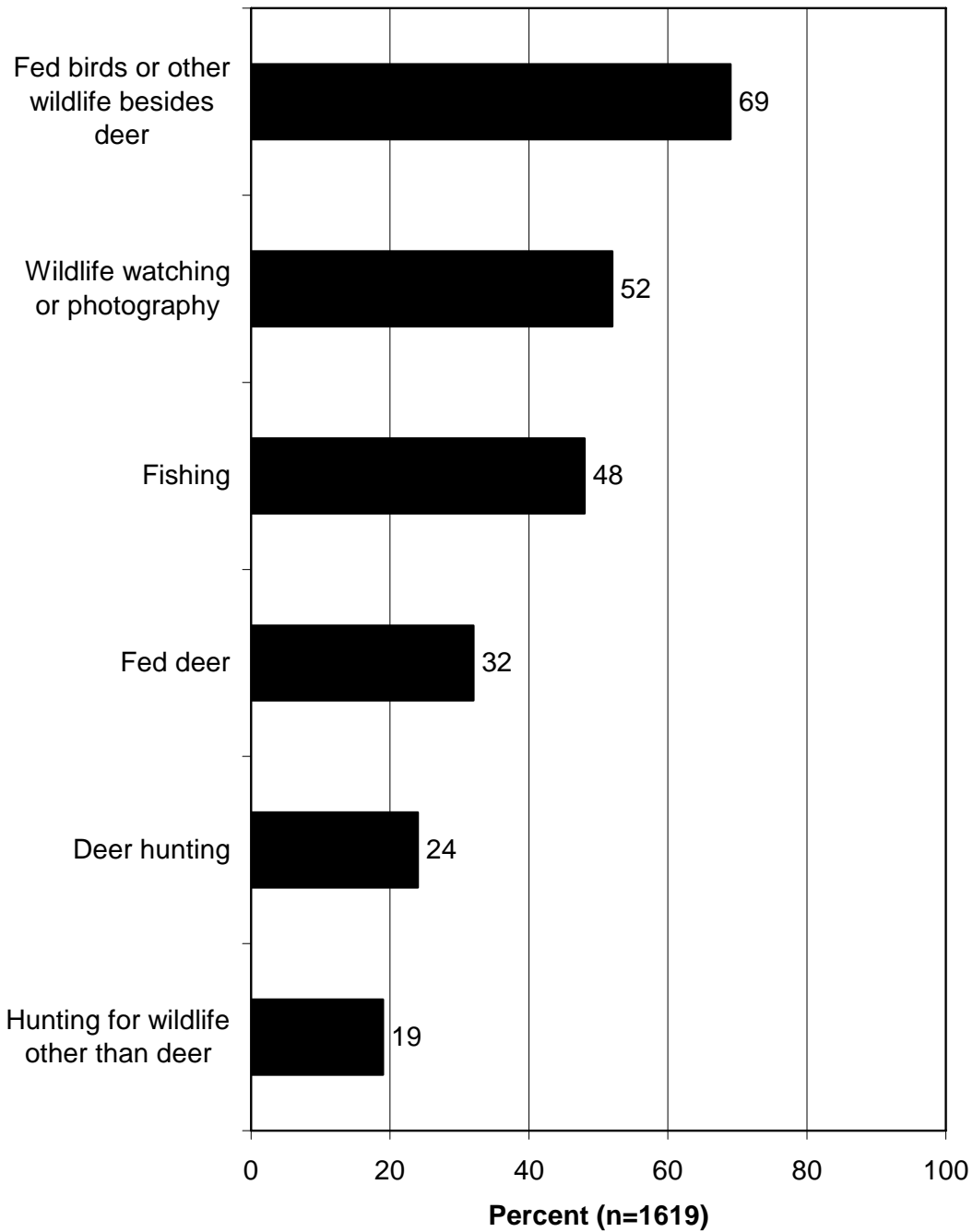
Q72. In your opinion, is the current season bag limit for bucks in [county] County too high, about right, or too low?



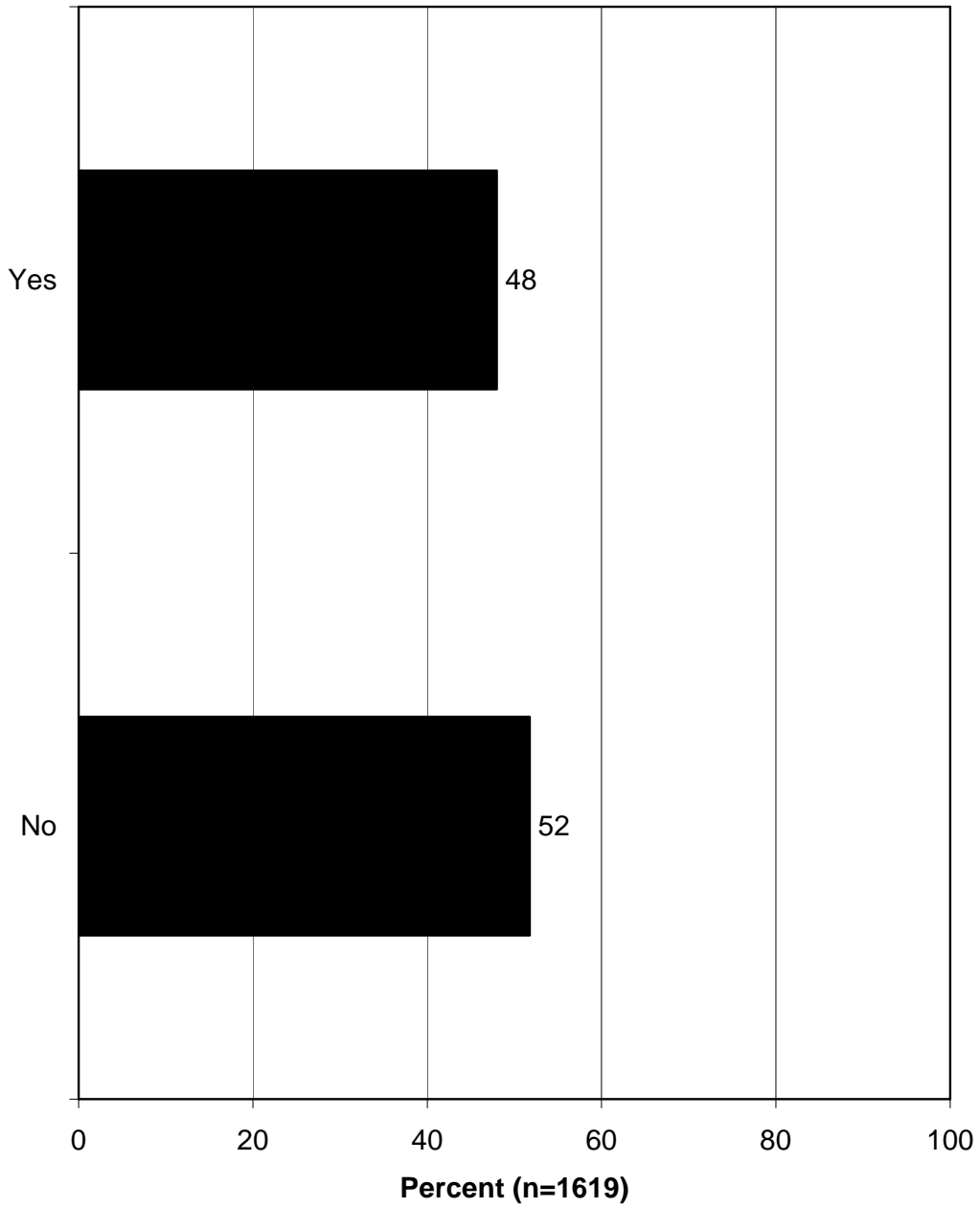
PARTICIPATION IN OUTDOOR ACTIVITIES

- The survey asked about participation in six outdoor activities. A large majority of landowners in the survey had fed birds and/or other wildlife besides deer in the past 12 months (69%), and a bare majority had watched and/or photographed wildlife (52%). Just under half of landowners in the survey had fished in the past 12 months (48%). Lower percentages had fed deer (32%), gone deer hunting (24%), or hunted for wildlife other than deer (19%).
- The survey also asked about eating deer meat (regardless of whether the landowner had hunted or harvested deer): 48% had eaten deer meat.

Percent who have participated in the following activities related to wildlife in the past 12 months:



Q80. Have you eaten deer meat in the past 12 months?



DEMOGRAPHIC DATA

- One of the “screener” questions asked landowners to indicate the size of their largest tract of land (only those with a tract of 5 acres or more were kept in the survey). The sample is generally divided into thirds: 33% of the landowners own a tract of 5 to 10 acres, 36% own a tract of 11 to 30 acres, and the remaining own a tract of more than 30 acres.
 - The top counties in which the tracts of land are located among landowners in the sample are Union, Randolph, Chatham, Orange, Wilkes, and Rockingham.
 - As previously shown in the section of this report titled, “Uses of Land,” 92% of the landowners in the sample live on their property about which the survey asked. Those who do not live on that largest tract of land about which the survey asked were asked how far they live from that tract: 63% live within 10 miles, and the median distance is 8 miles.

- Counties of residence are shown. Note that these do not exactly coincide with the counties in which the properties about which the survey asked are located, as some of the landowners do not live on their largest tract of land.

- A graph shows the length of time that respondents have lived in their community, well distributed among responses. The mean amount of time that they have lived in their community is 34 years.

- The landowners in the survey are overwhelmingly rural (85% live in a rural area, whether on a farm or not).

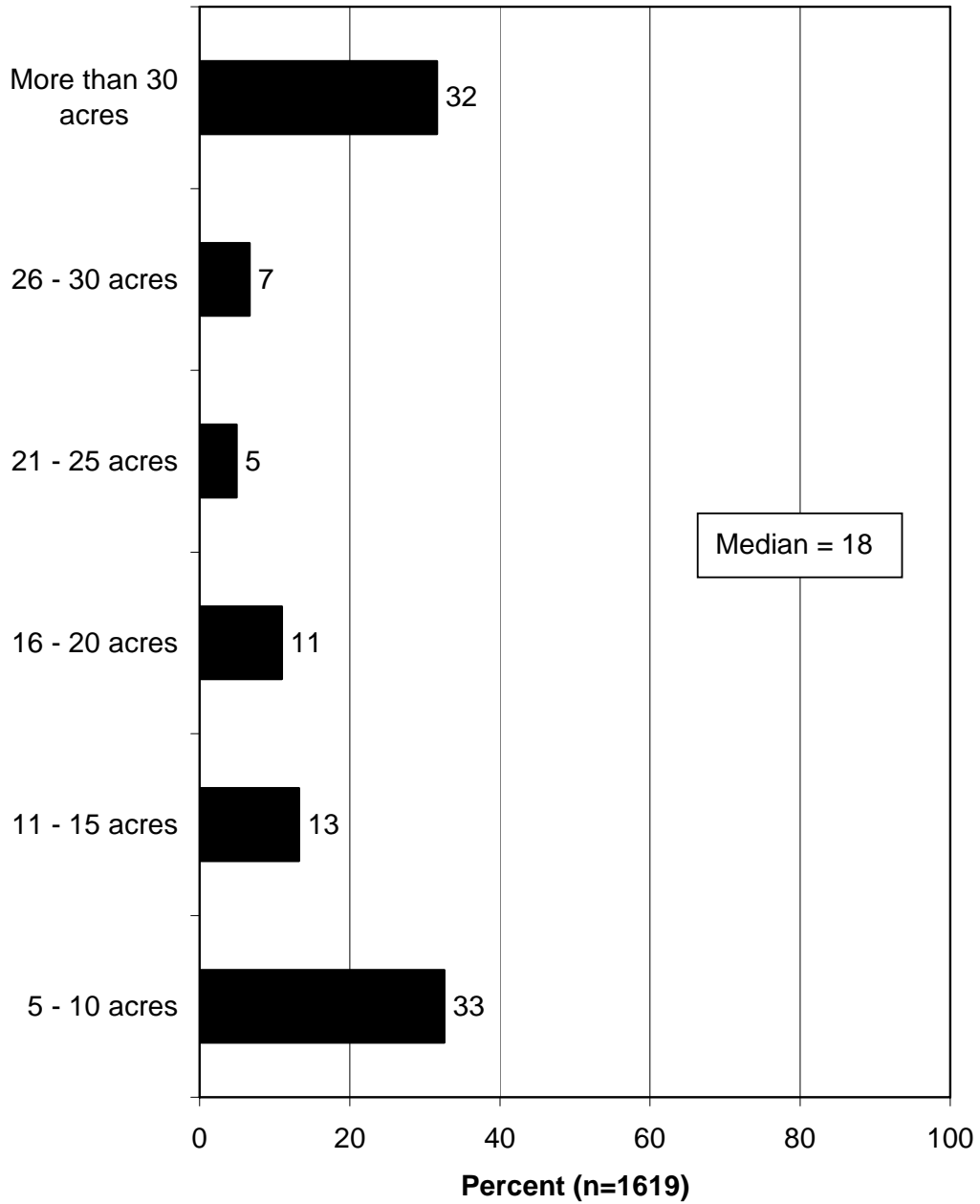
- Educational status of respondents is shown.

- Household incomes are shown, well distributed among responses.

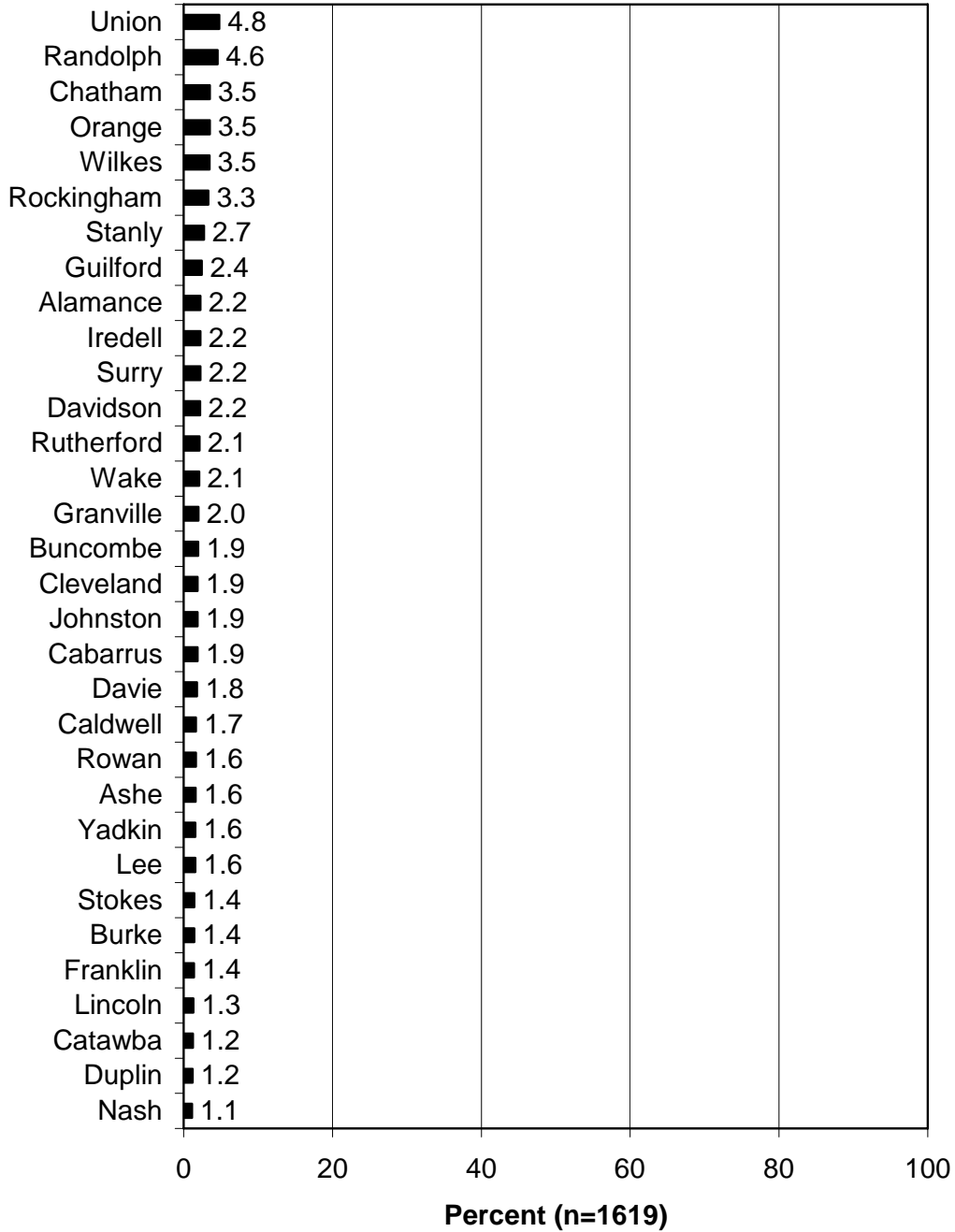
- The ages of respondents are shown; the mean age is 60 years.

- The gender breakdown is shown: 70% are male. Note that this represents the people to whom the interviewers spoke, not necessarily the gender of owners, as many properties are jointly owned by a husband and wife.

Q13. How many acres is the largest tract of land you own in North Carolina?



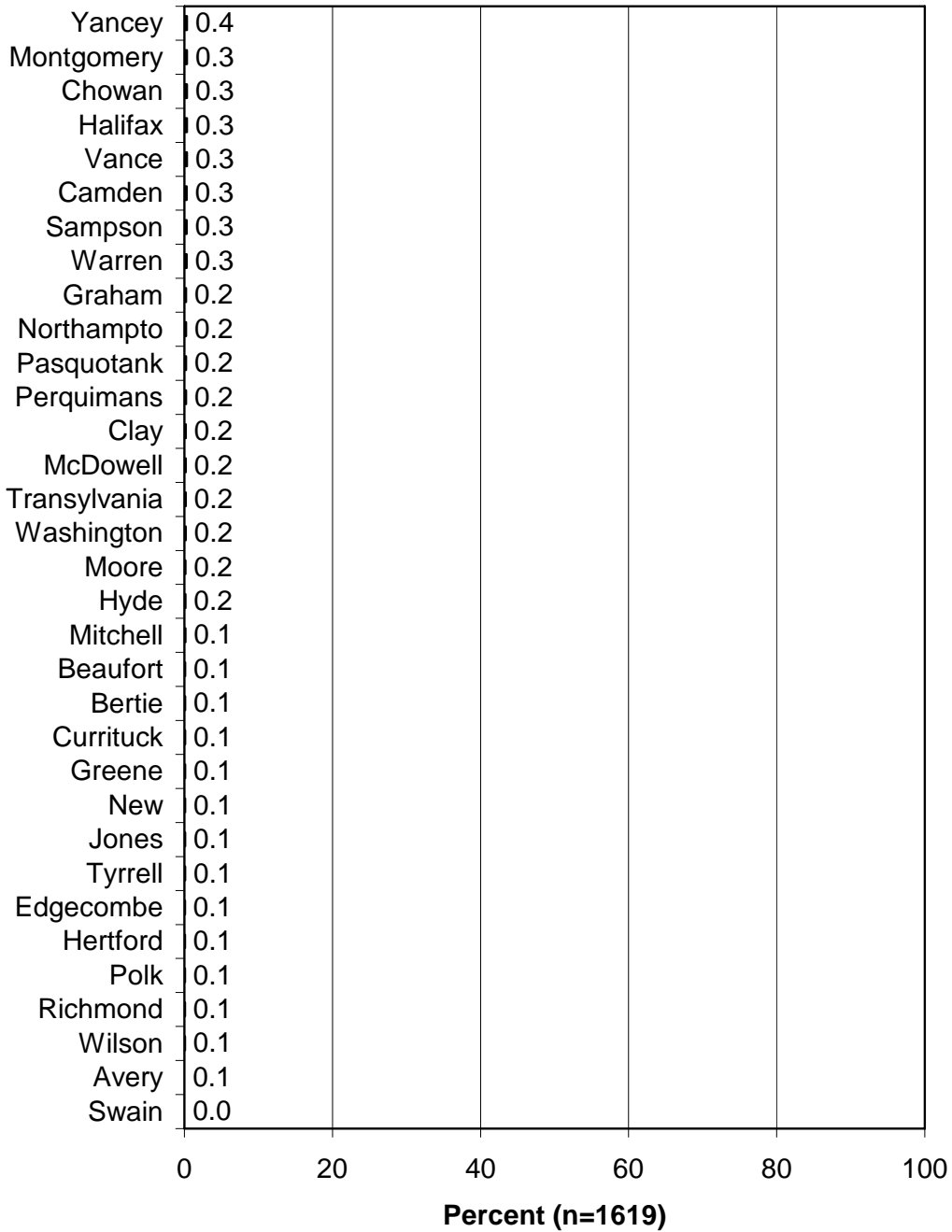
**Q18. In which county in North Carolina is the largest tract of land you own?
(Part 1)**



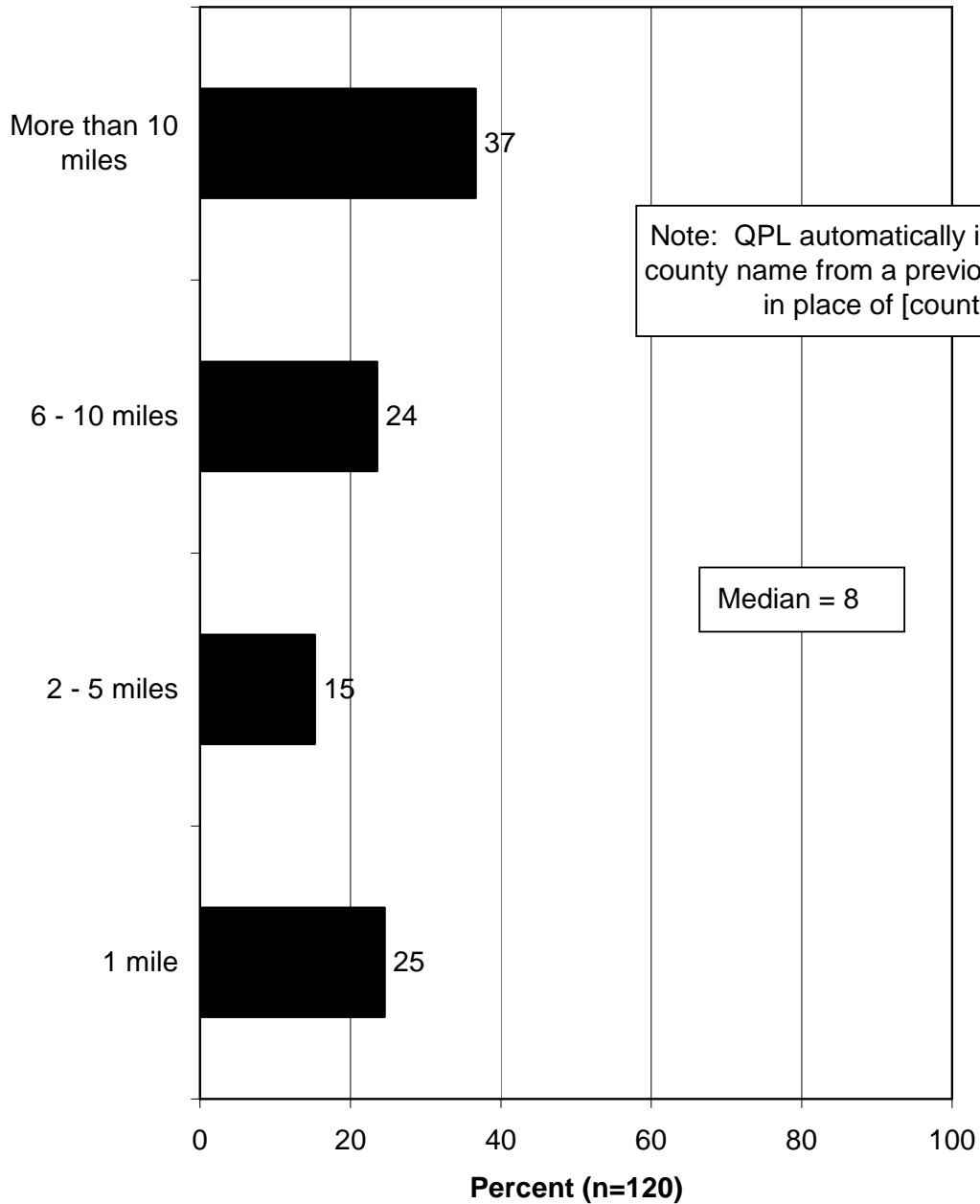
**Q18. In which county in North Carolina is the largest tract of land you own?
(Part 2)**



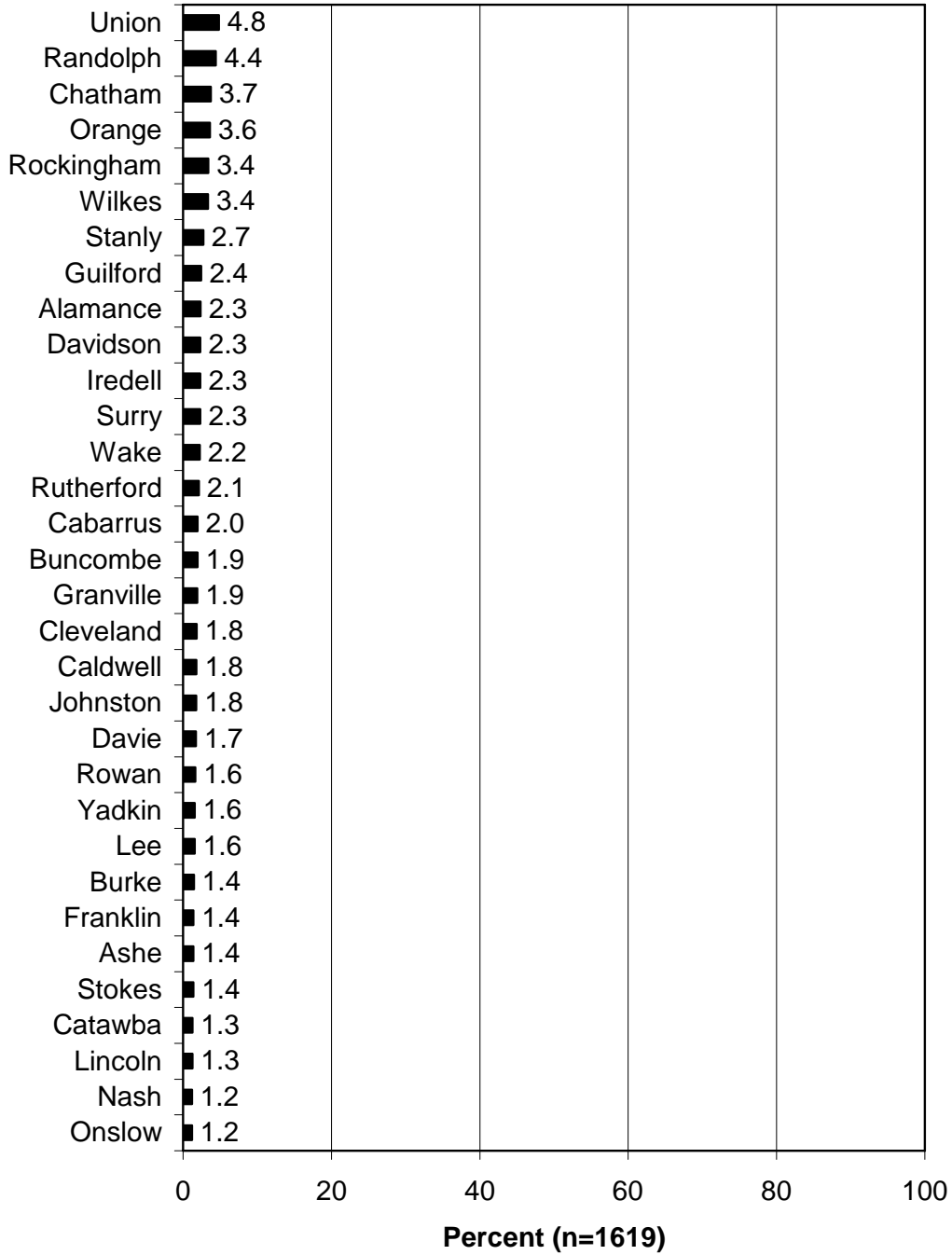
**Q18. In which county in North Carolina is the largest tract of land you own?
(Part 3)**



Q30. Approximately how many miles do you live from your property in [county] County? (Asked of those who do not live on their property in [county] County.)



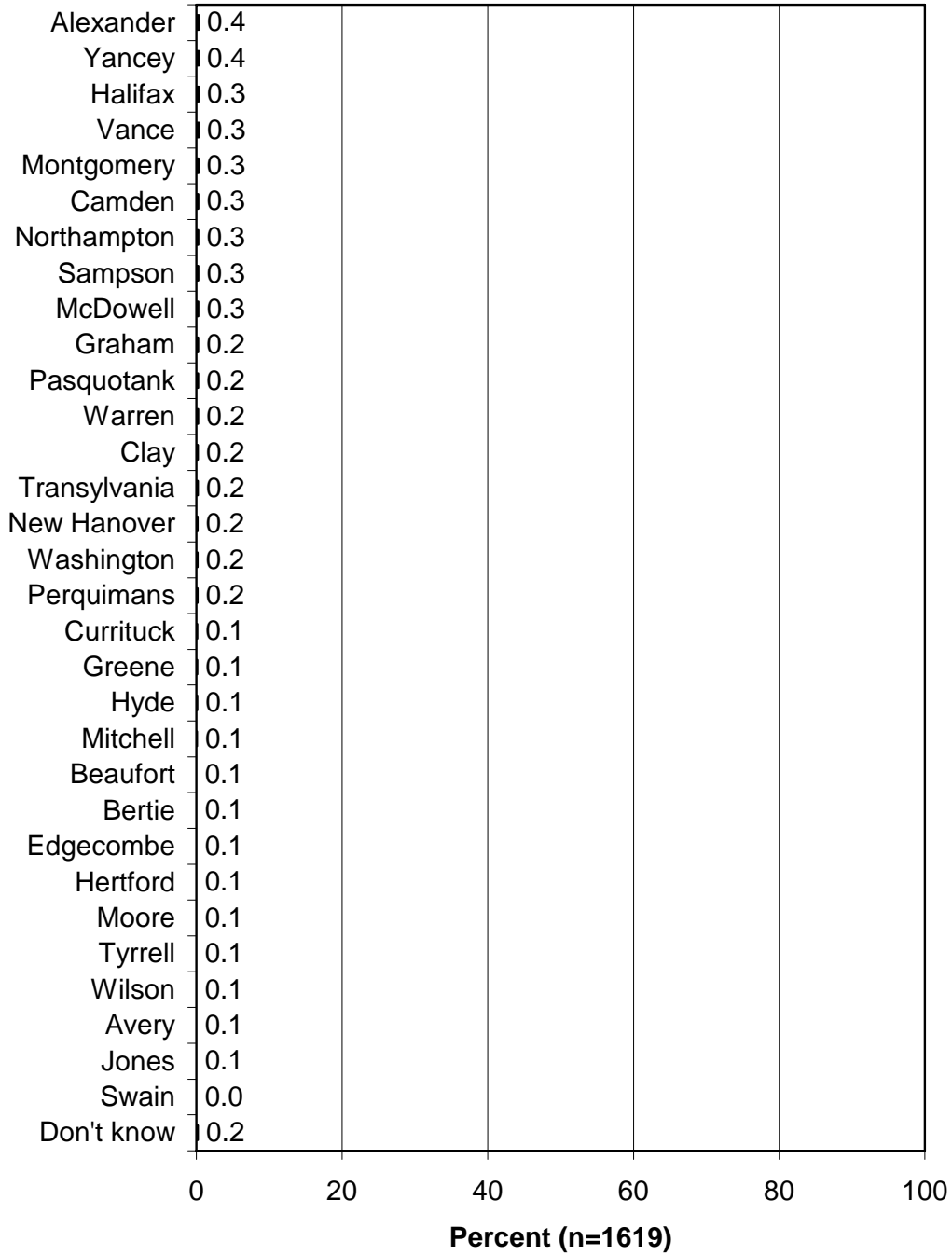
**Q147. In what county do you live?
(Part 1)**



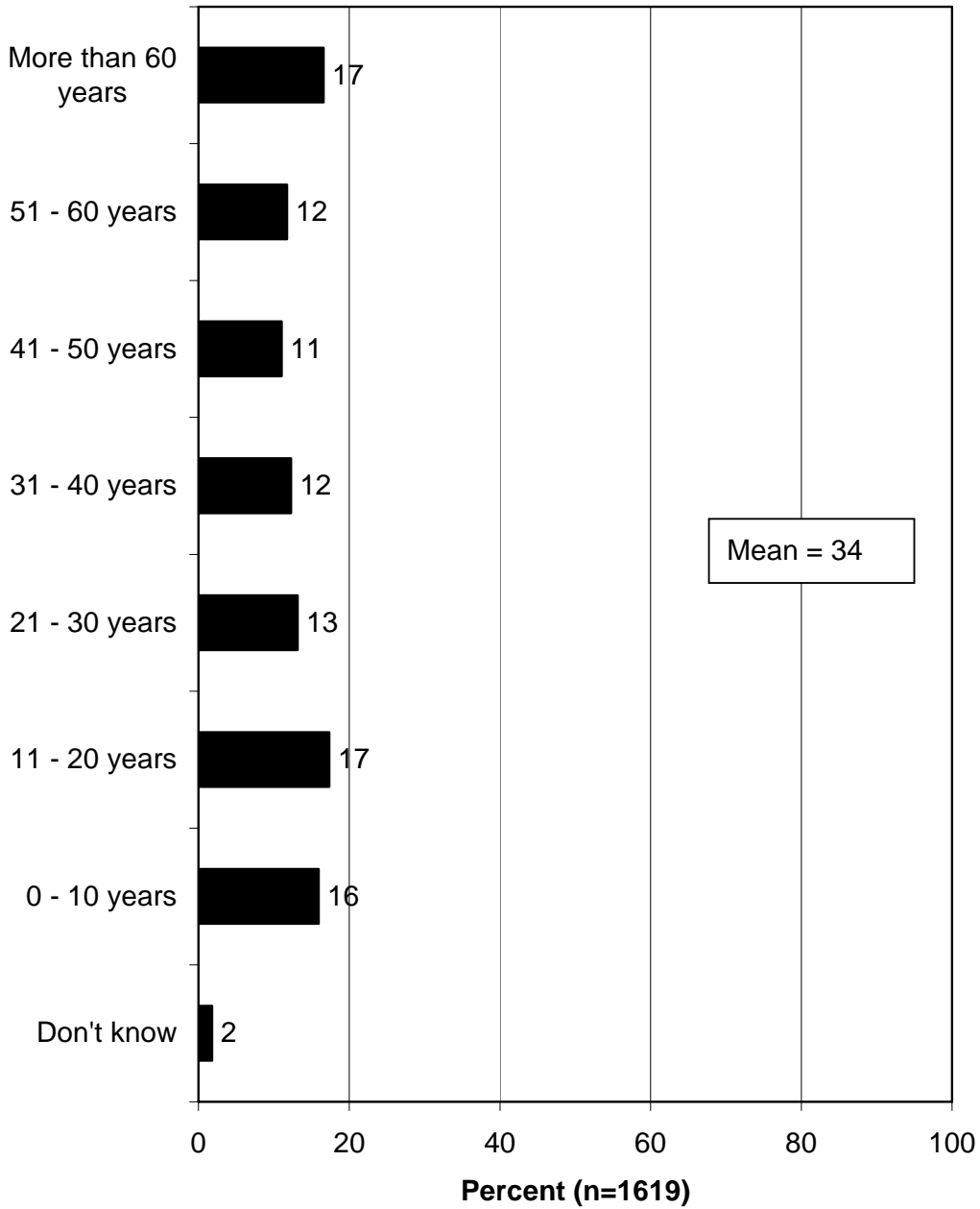
**Q147. In what county do you live?
(Part 2)**



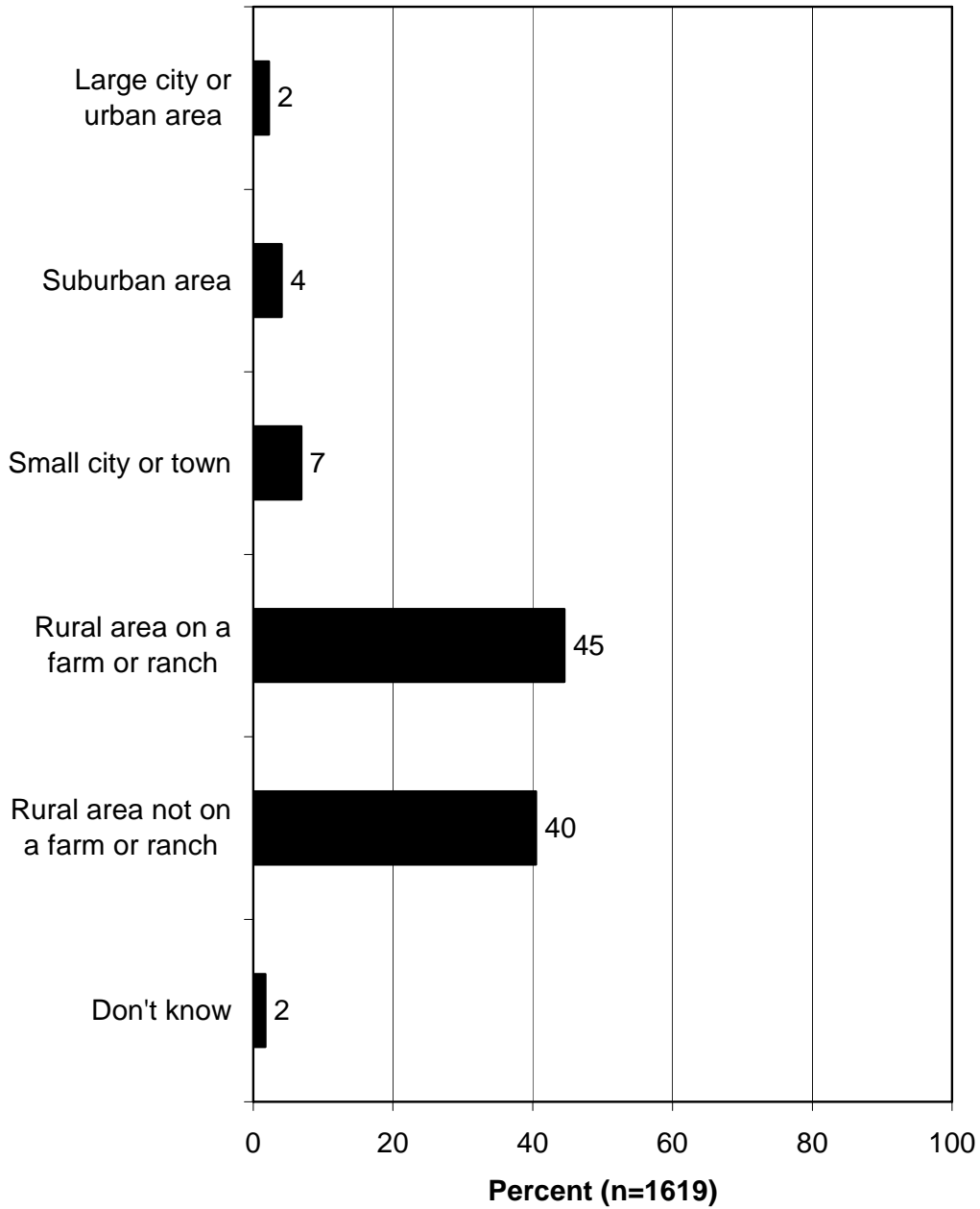
**Q147. In what county do you live?
(Part 3)**



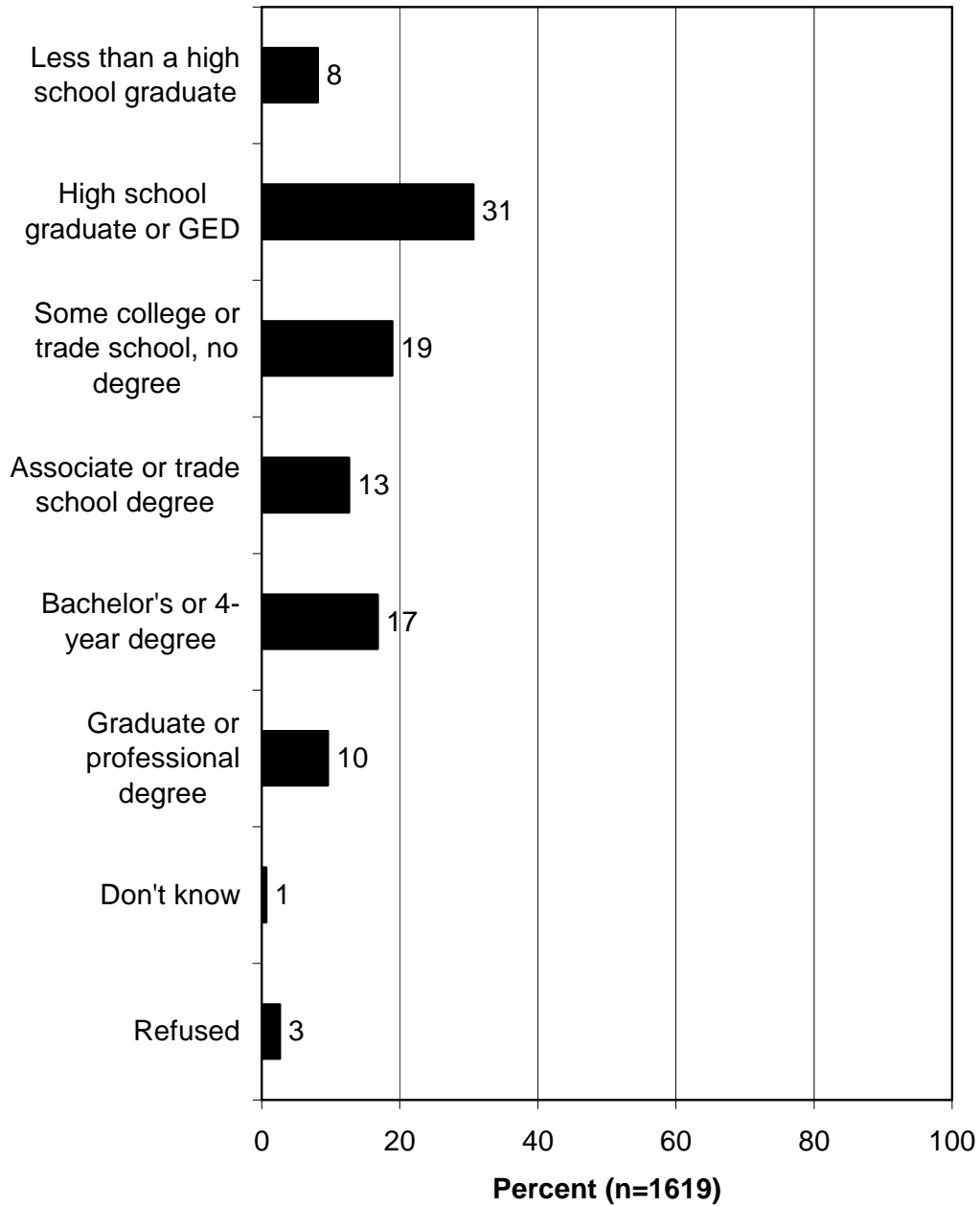
Q148. How many years have you lived in your community?



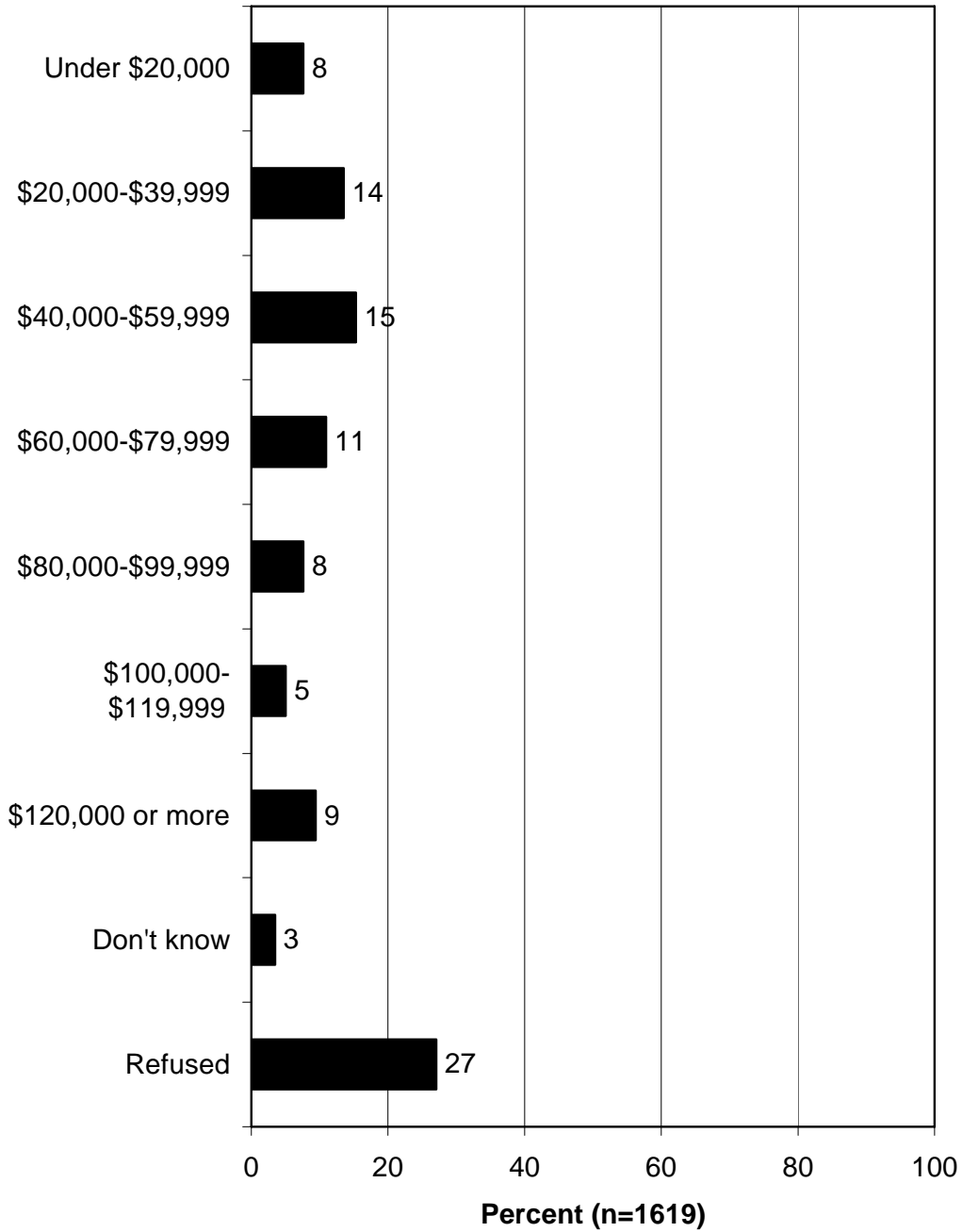
Q150. Which of the following statements best describes where you currently live?

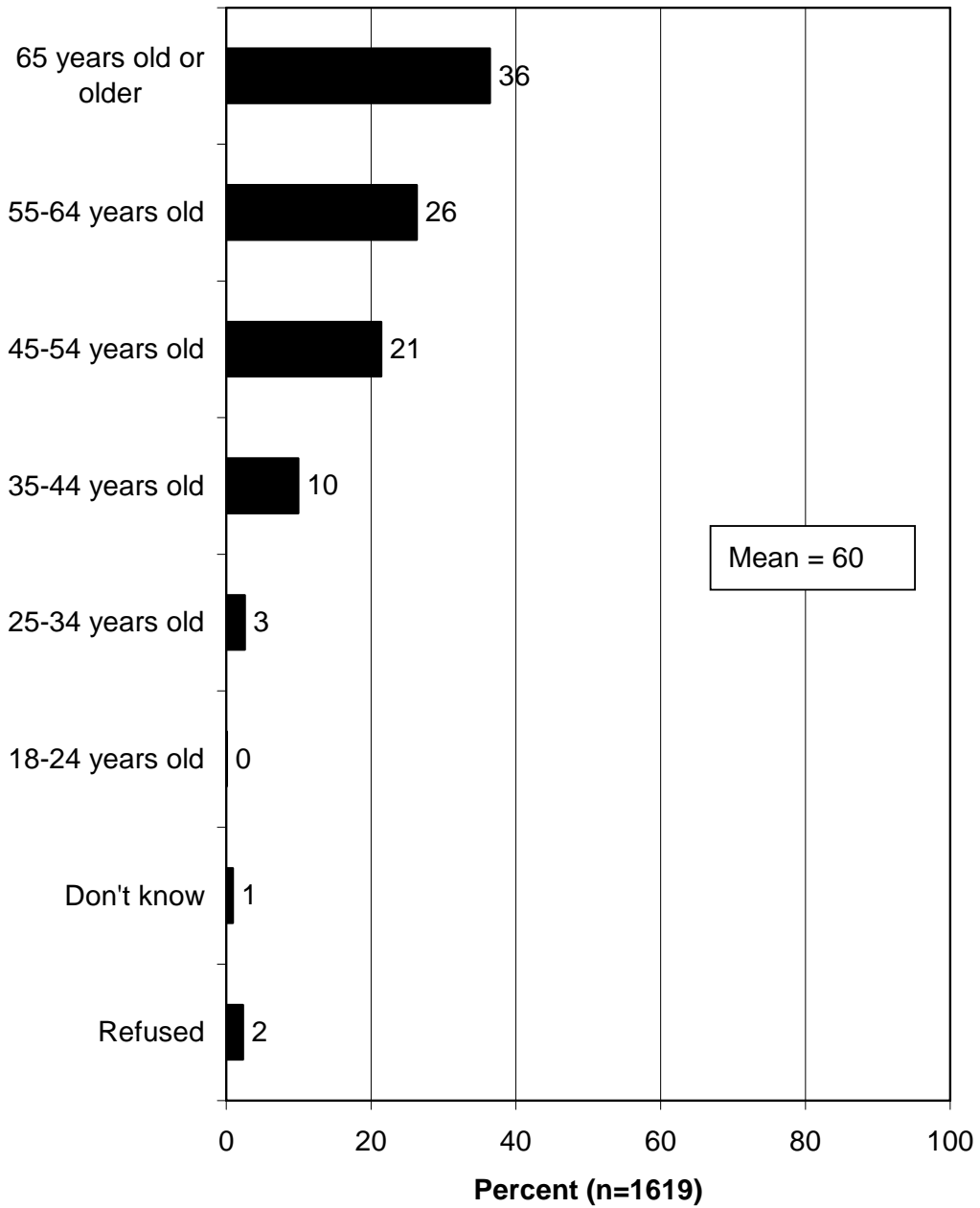


Q151. Which of the following statements best describes the highest level of formal education you have completed?

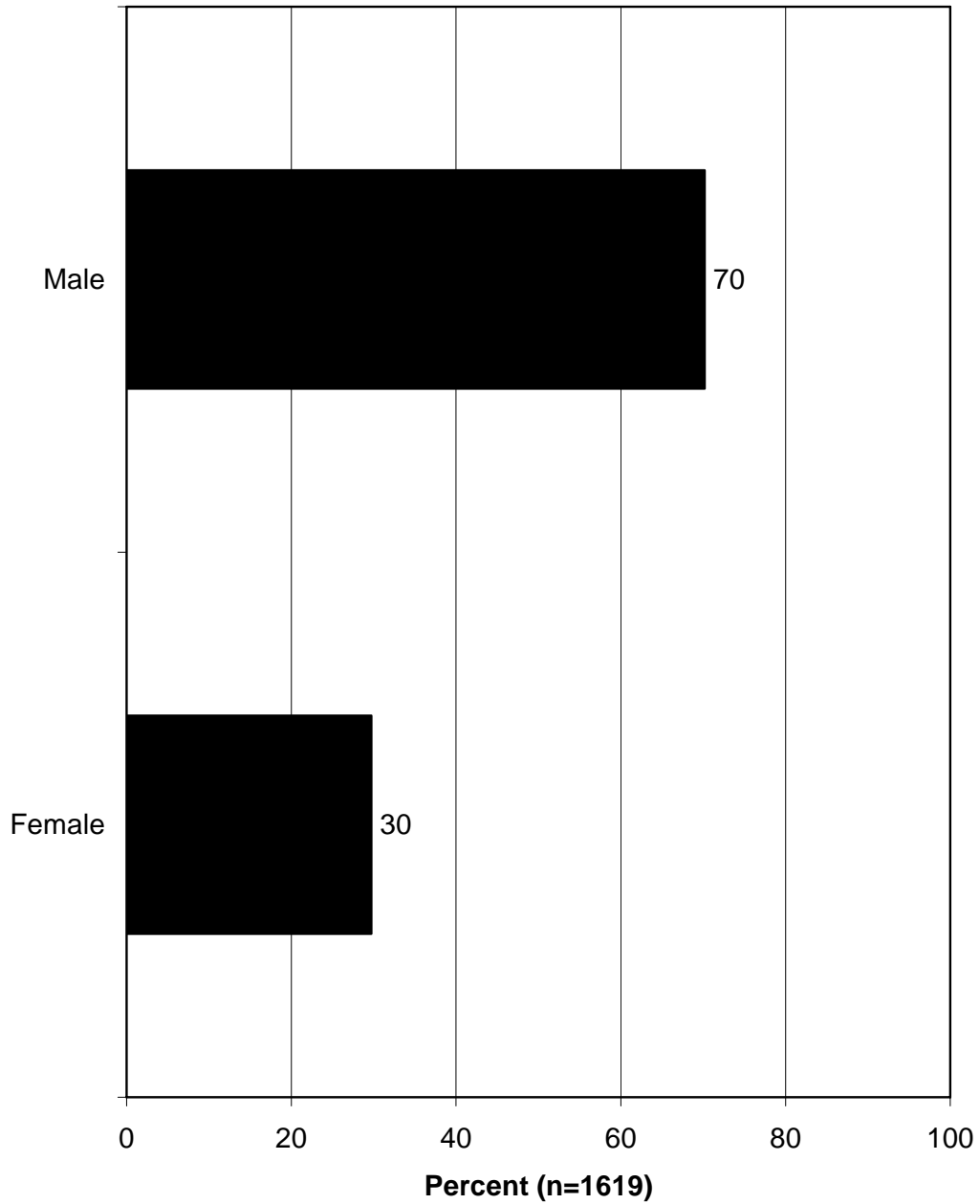


Q152. Which of these categories best describes your total household income before taxes last year?



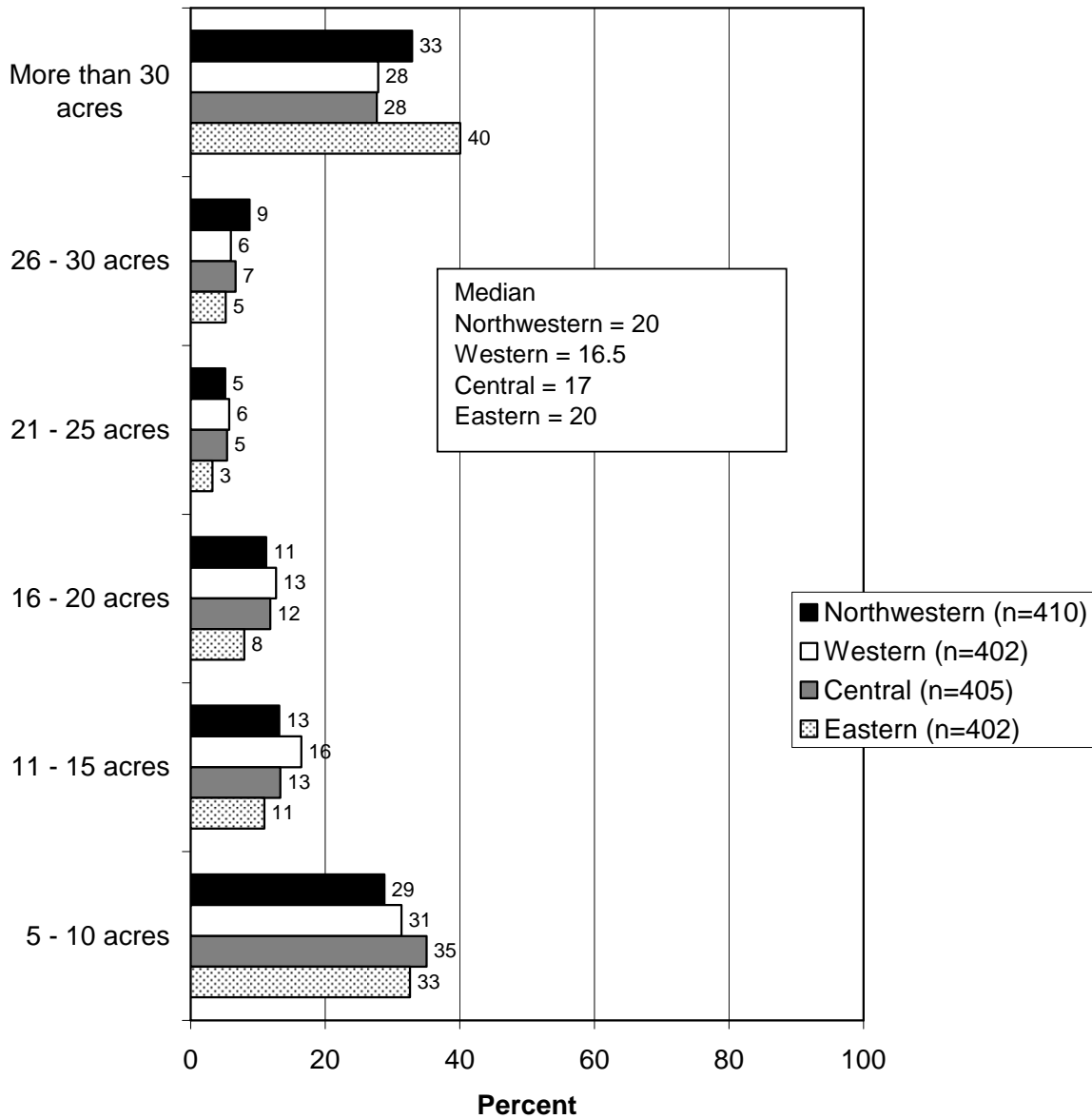
Q153. Respondent's age.

Q159. Respondent's gender (observed, not asked, by interviewer).

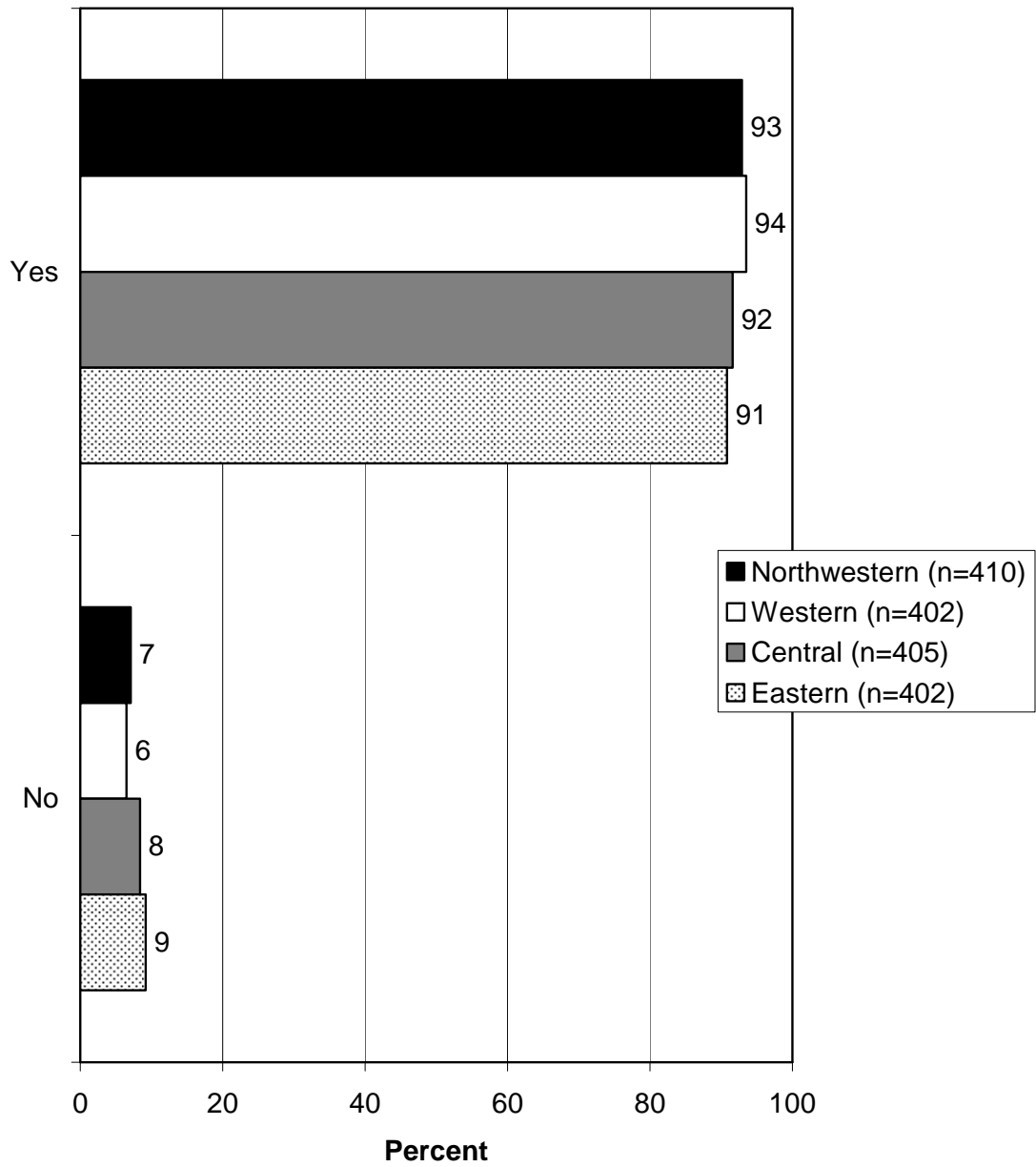


APPENDIX: CROSSTABULATIONS BY REGION

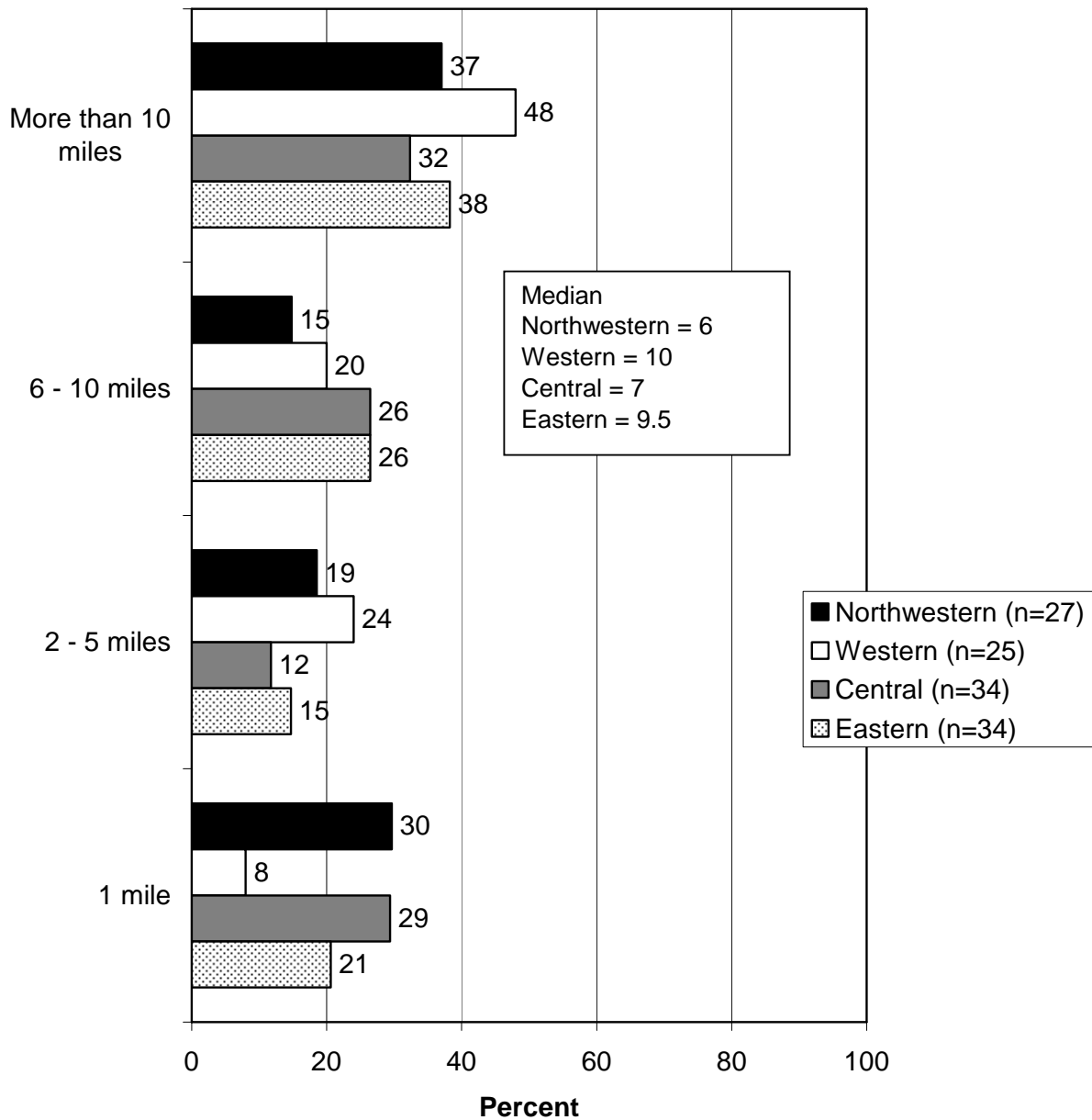
Q13. How many acres is the largest tract of land you own in North Carolina?



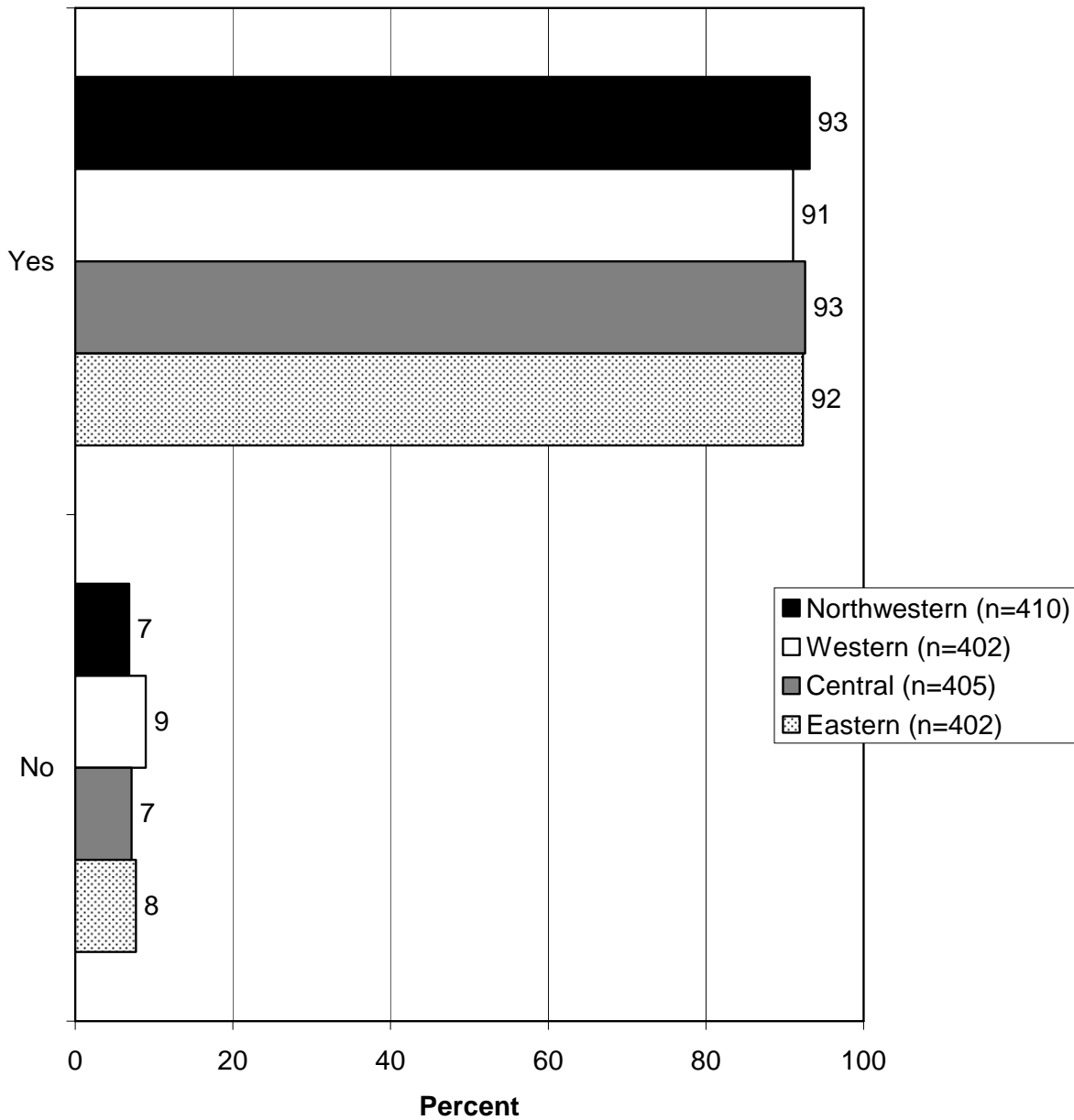
Q29. Do you live on your property in [county] County?



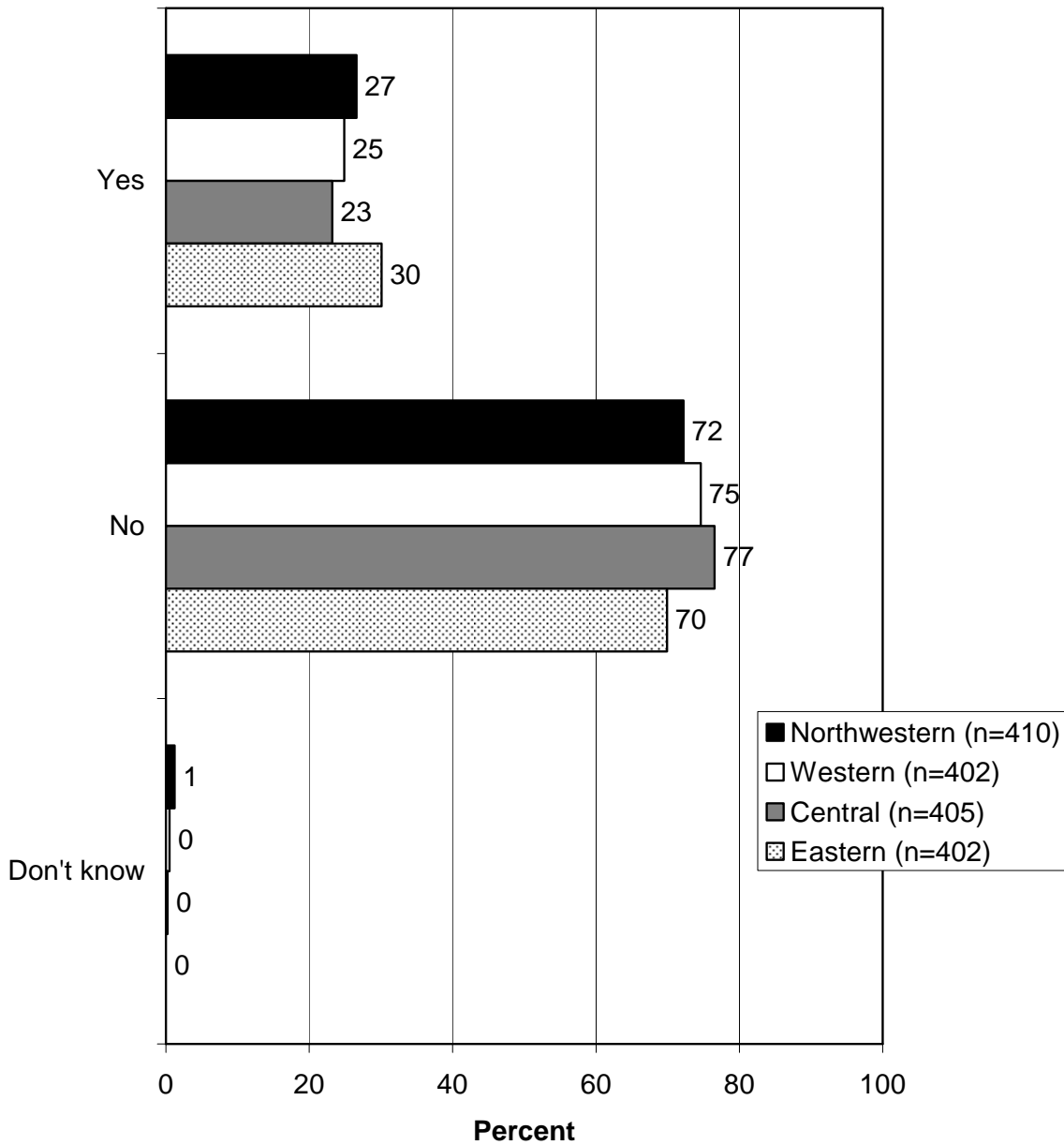
Q30. Approximately how many miles do you live from your property in [county] County? (Asked of those who do not live on their property in [county] County.)



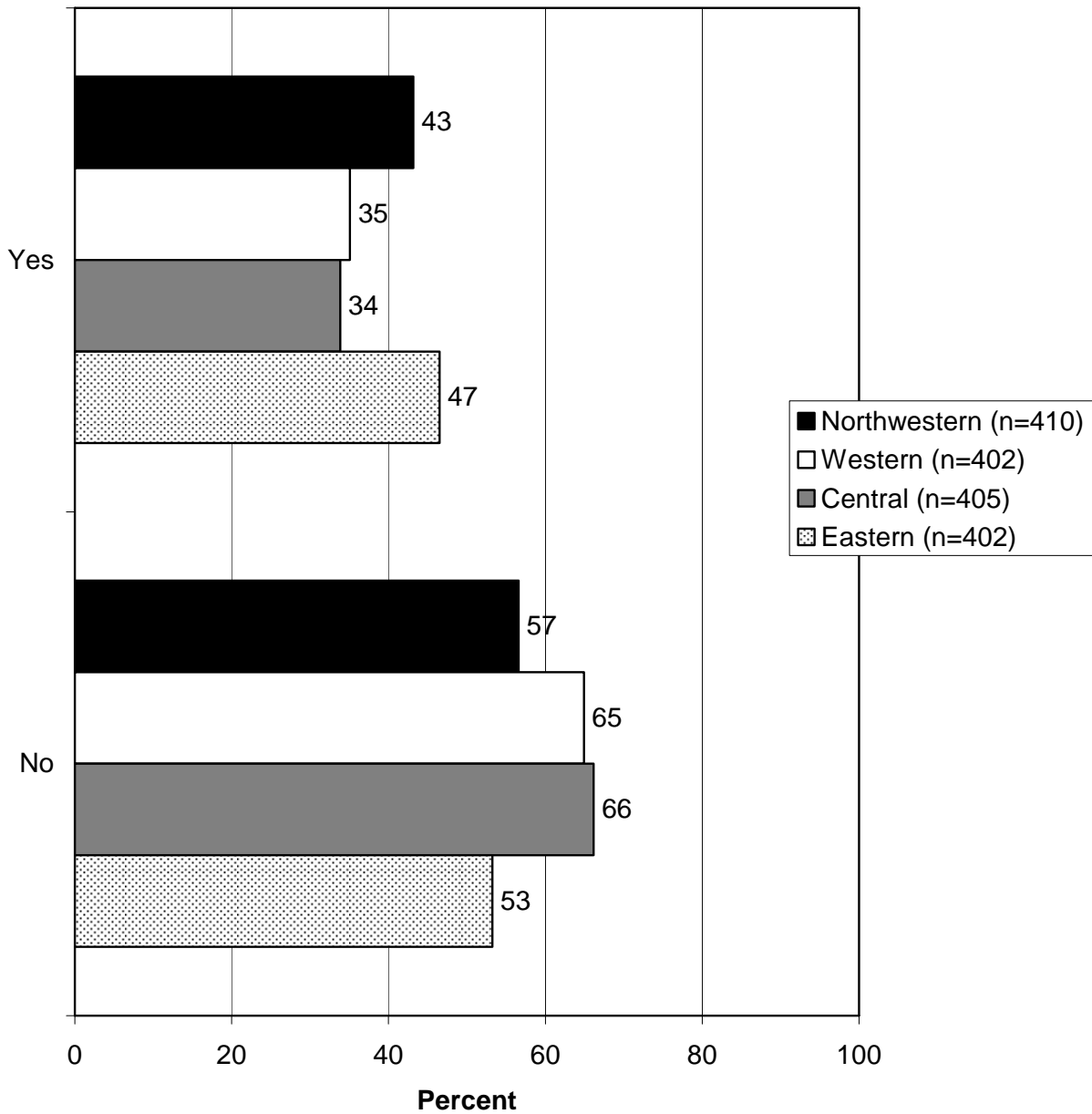
Q34. Is your property in [county] County used as a residence for you or someone else?



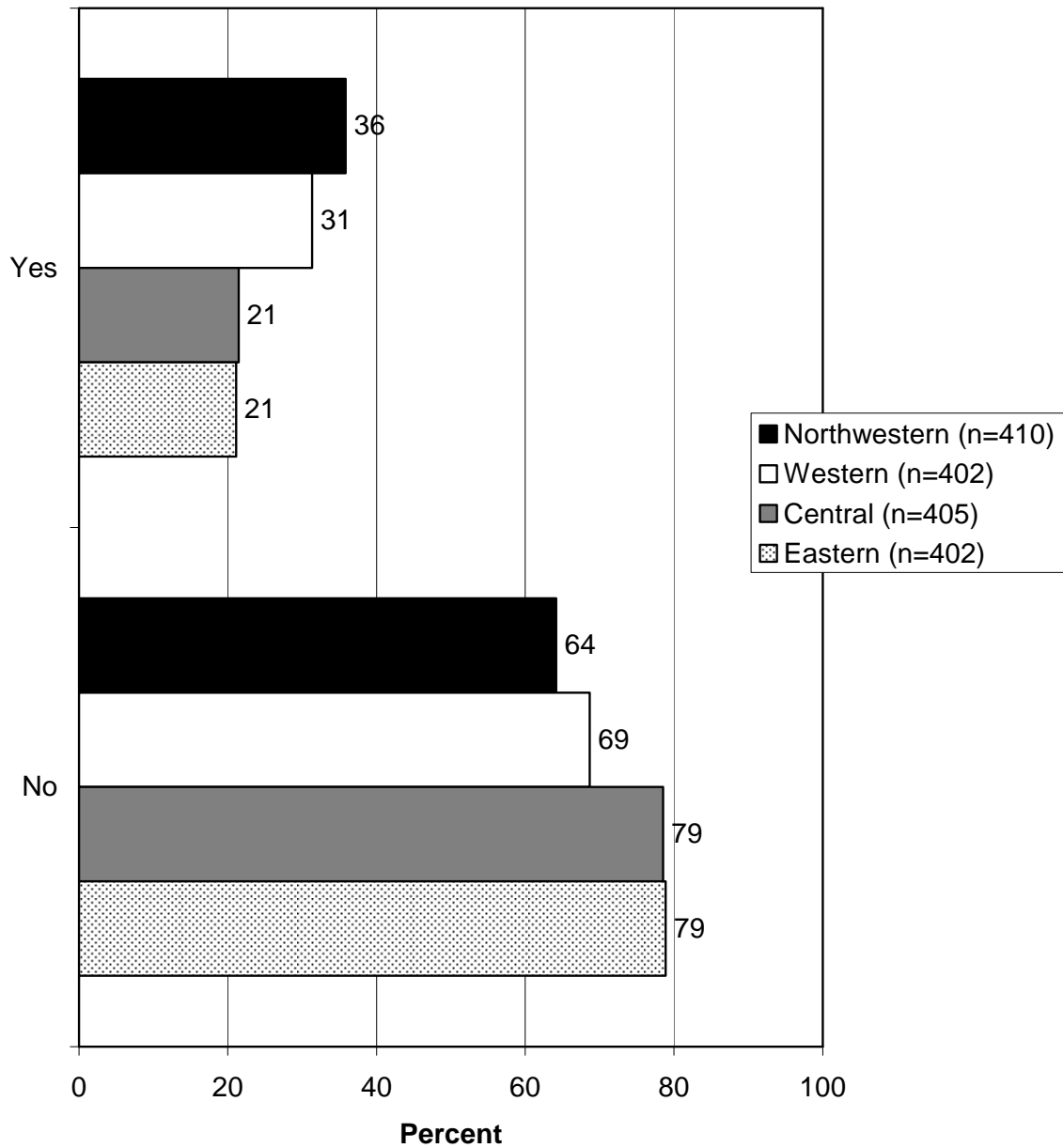
Q35. Is your property in [county] County used for timber production?



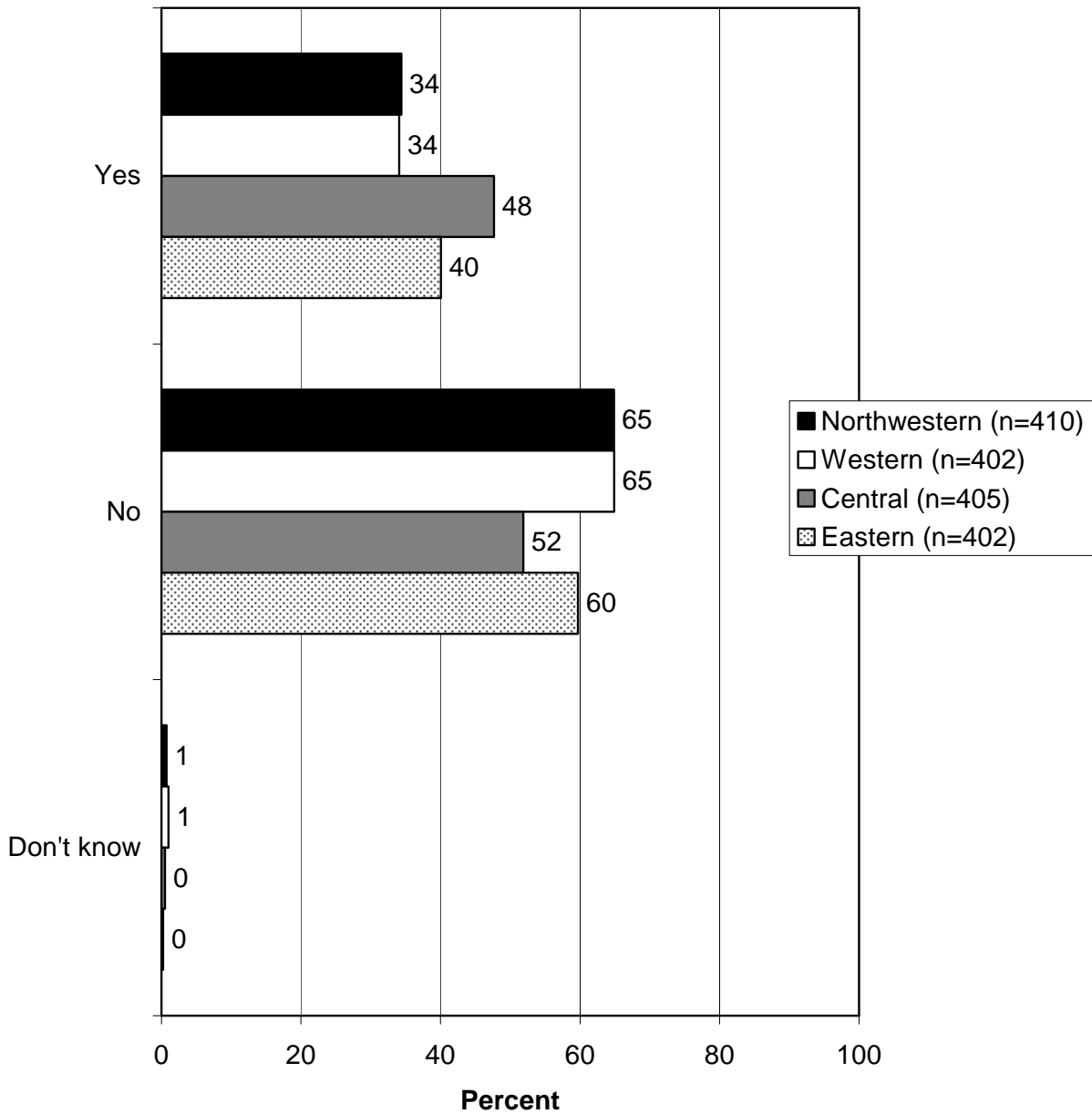
Q36. Is your property in [county] County used for cropland?



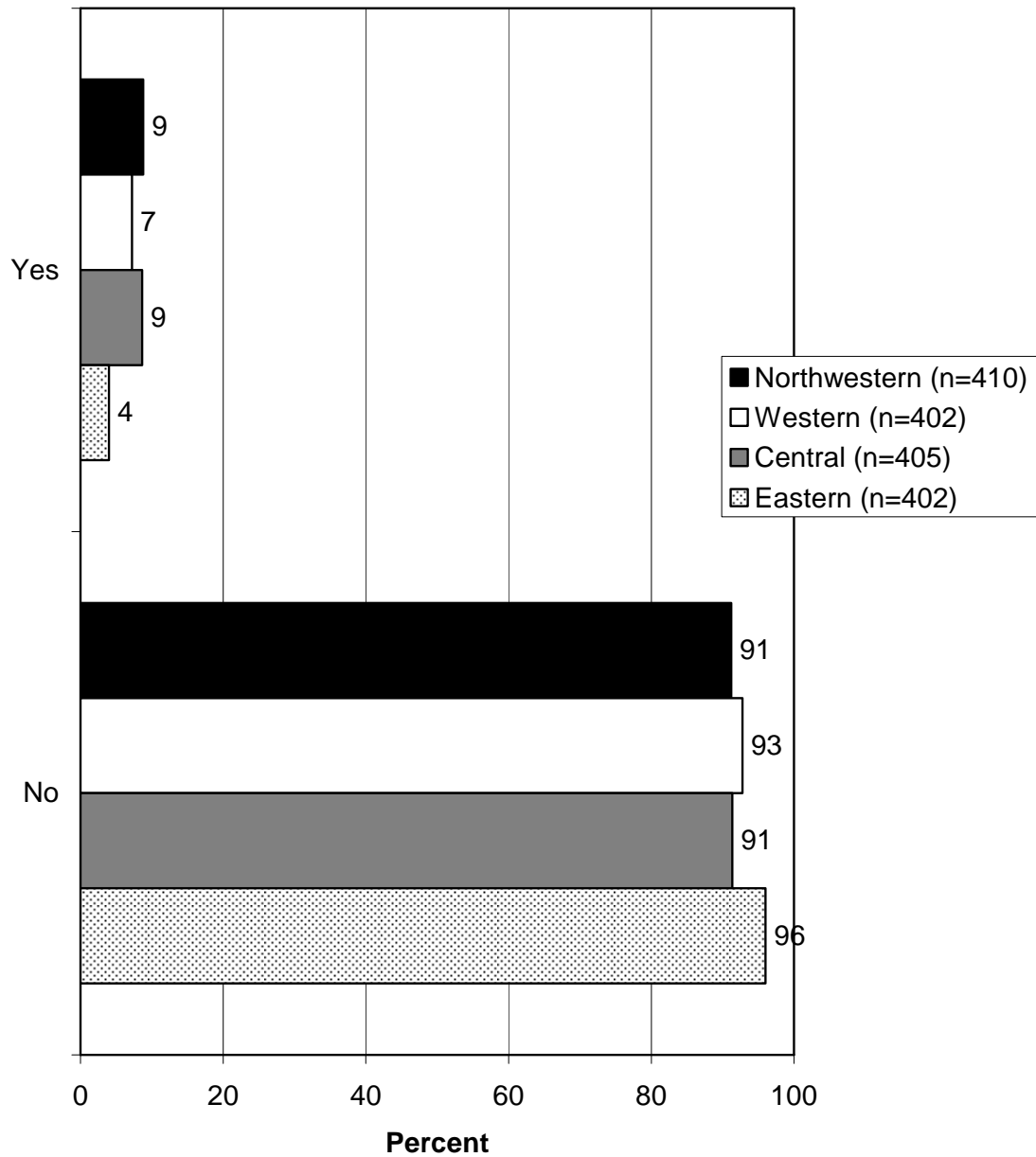
Q37. Is your property in [county] County used for livestock production?



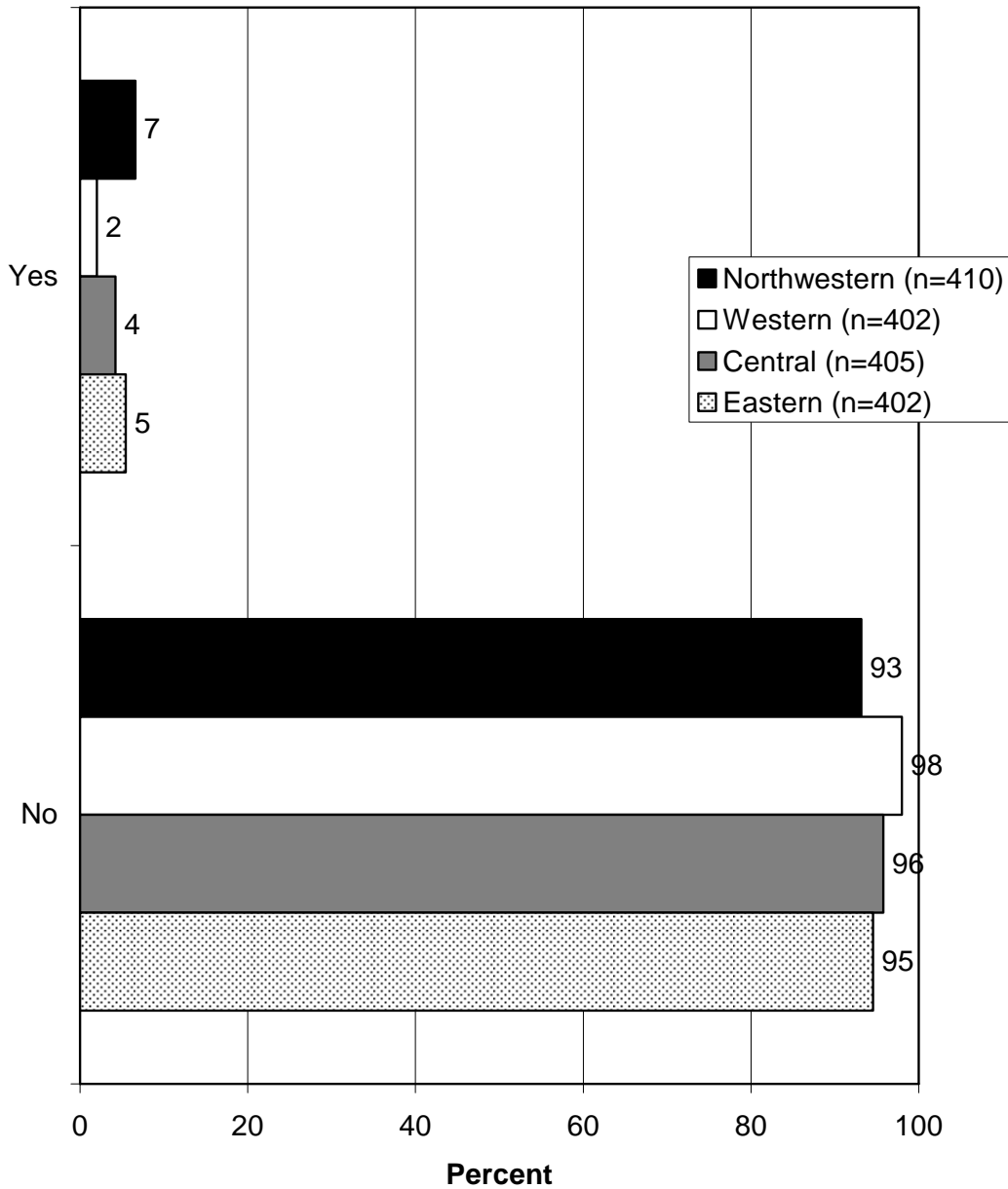
Q38. Is your property in [county] County used for recreation?



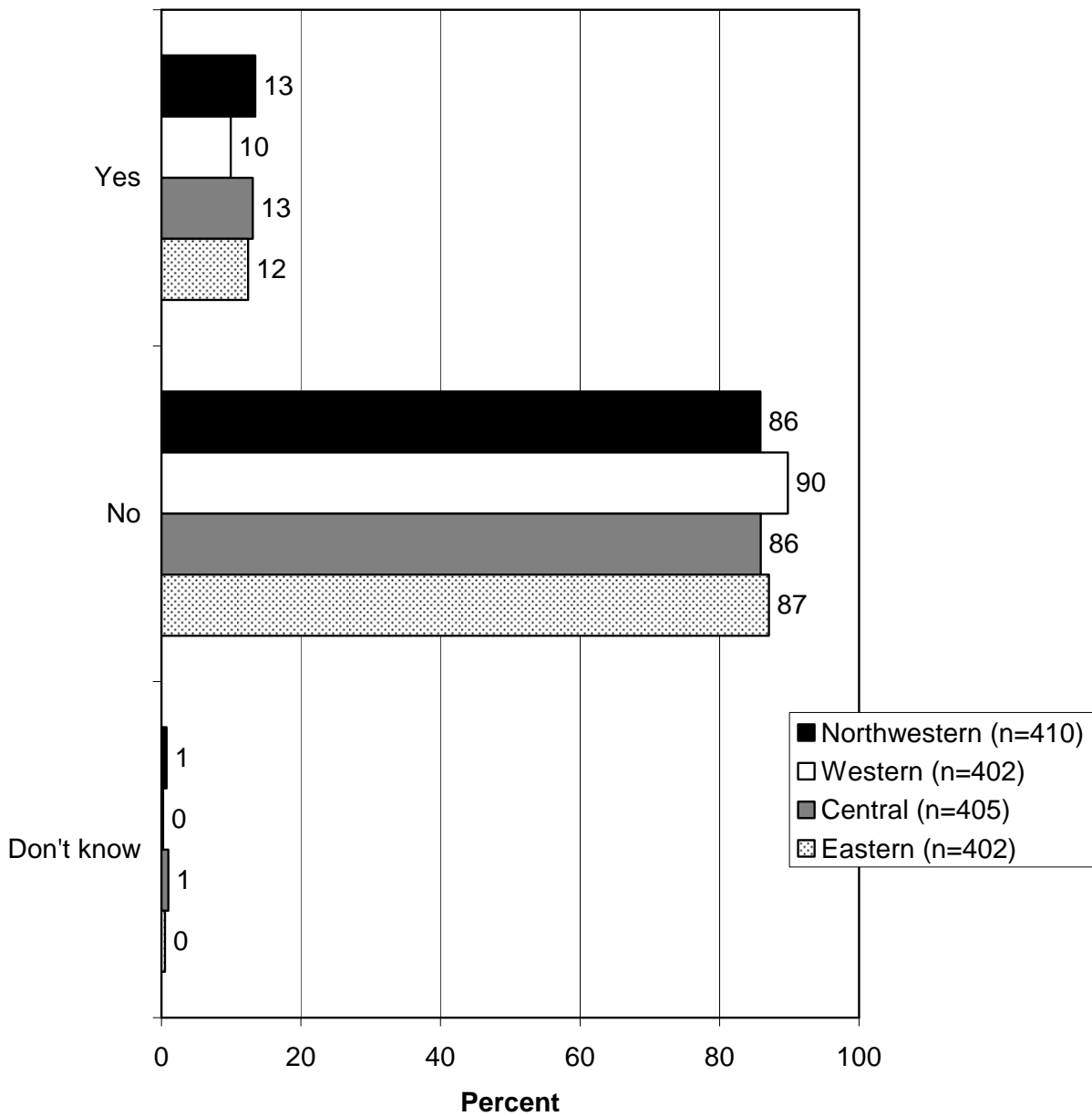
Q39. Do you have another purpose for your property in [county] County?



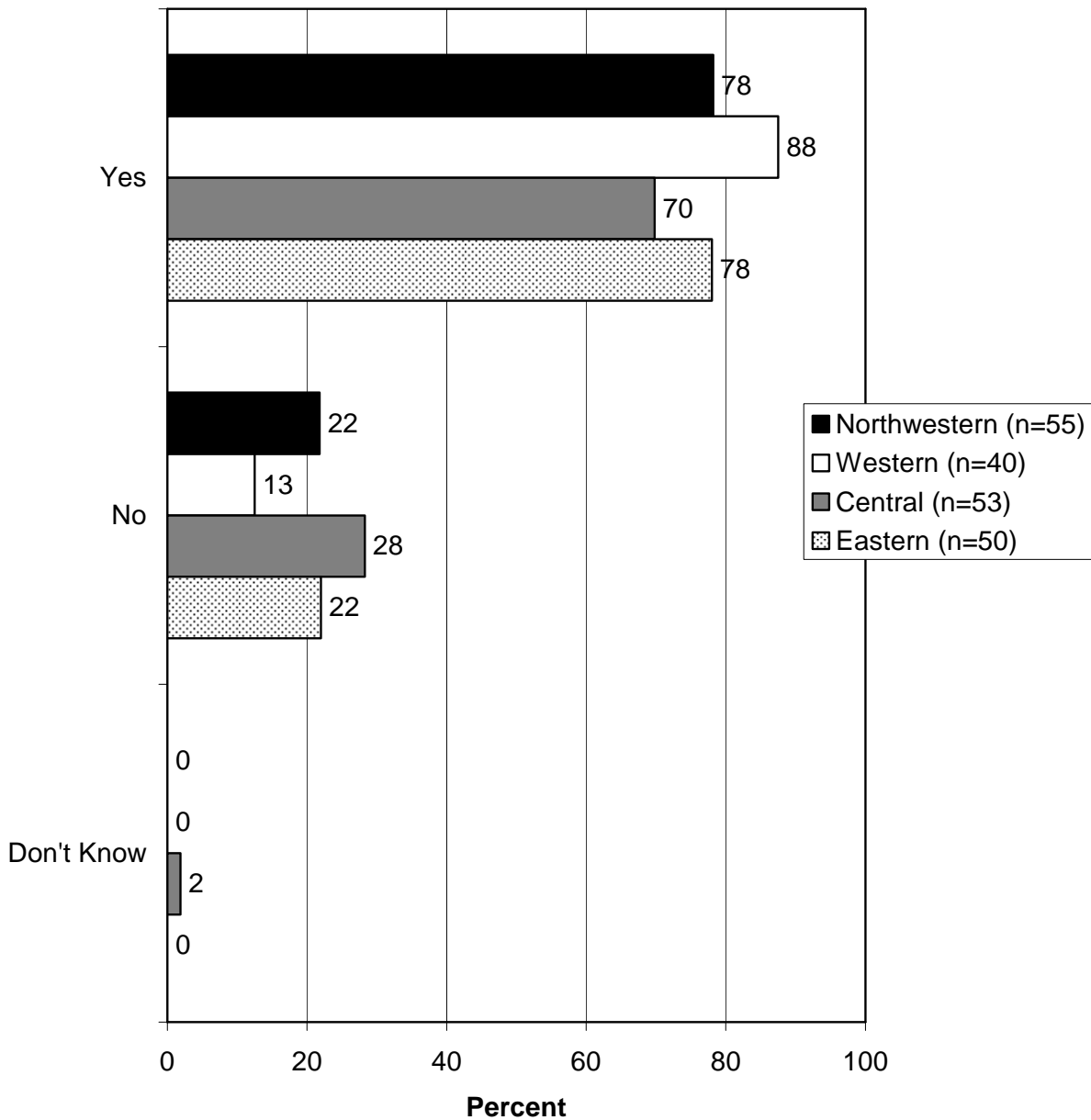
Q40. Have you leased part or all of your property in [county] County for deer hunting in the past 5 years?



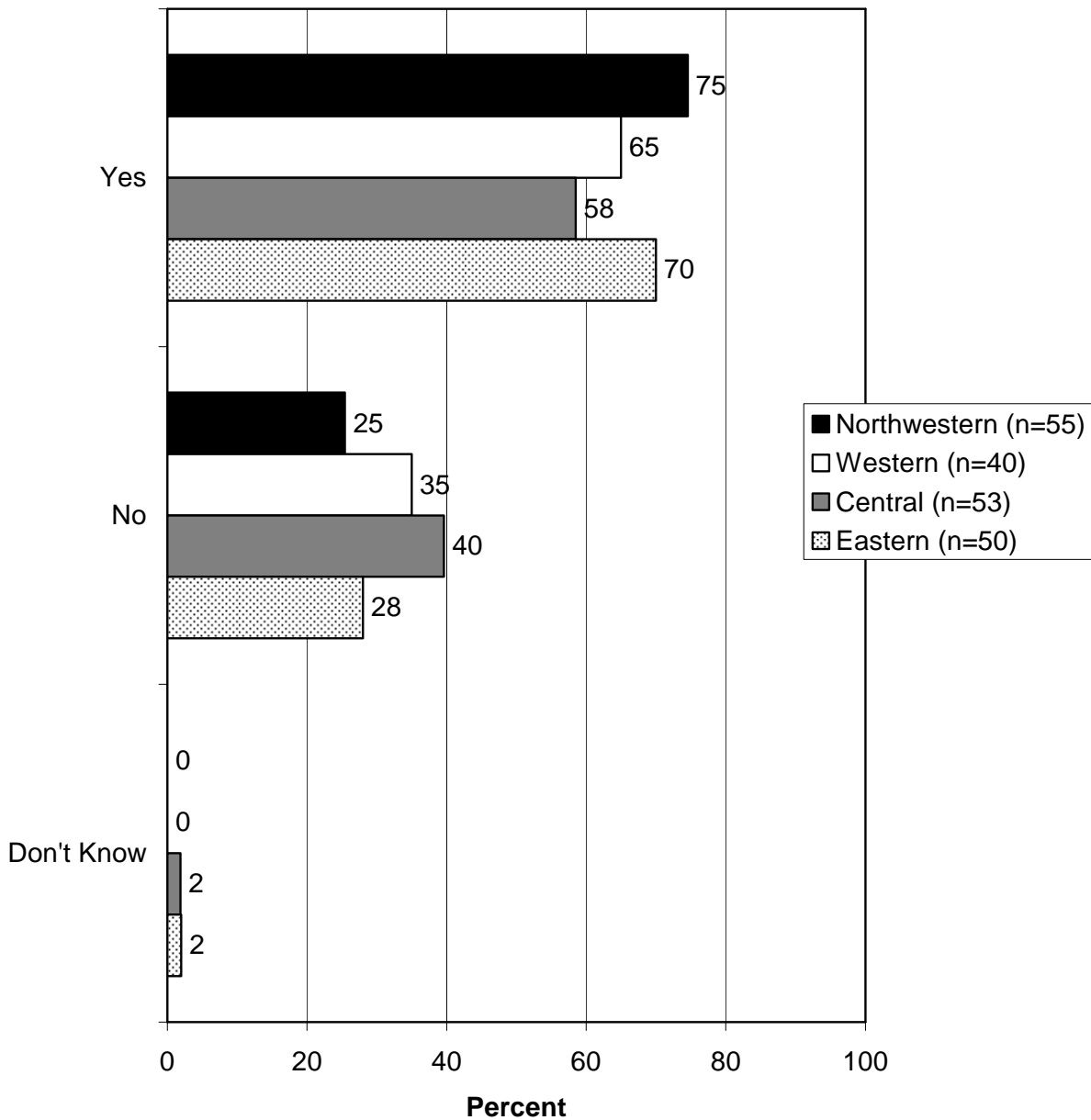
Q41. Is any part of your property in [county] County managed specifically for deer?



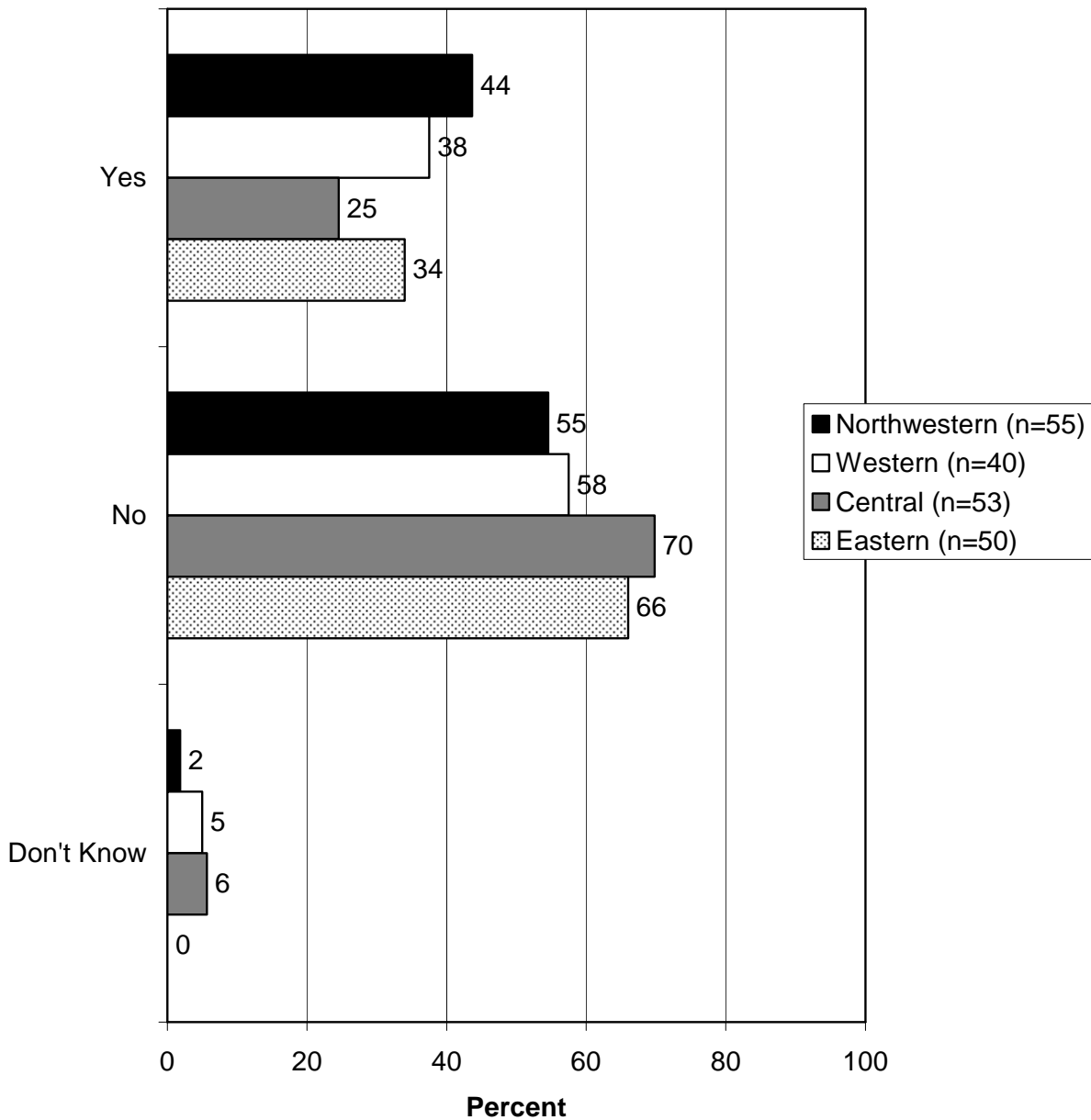
Q43. Are food plots used to manage deer on your property in [county] County? (Asked of those whose property in [county] County is managed specifically for deer.)



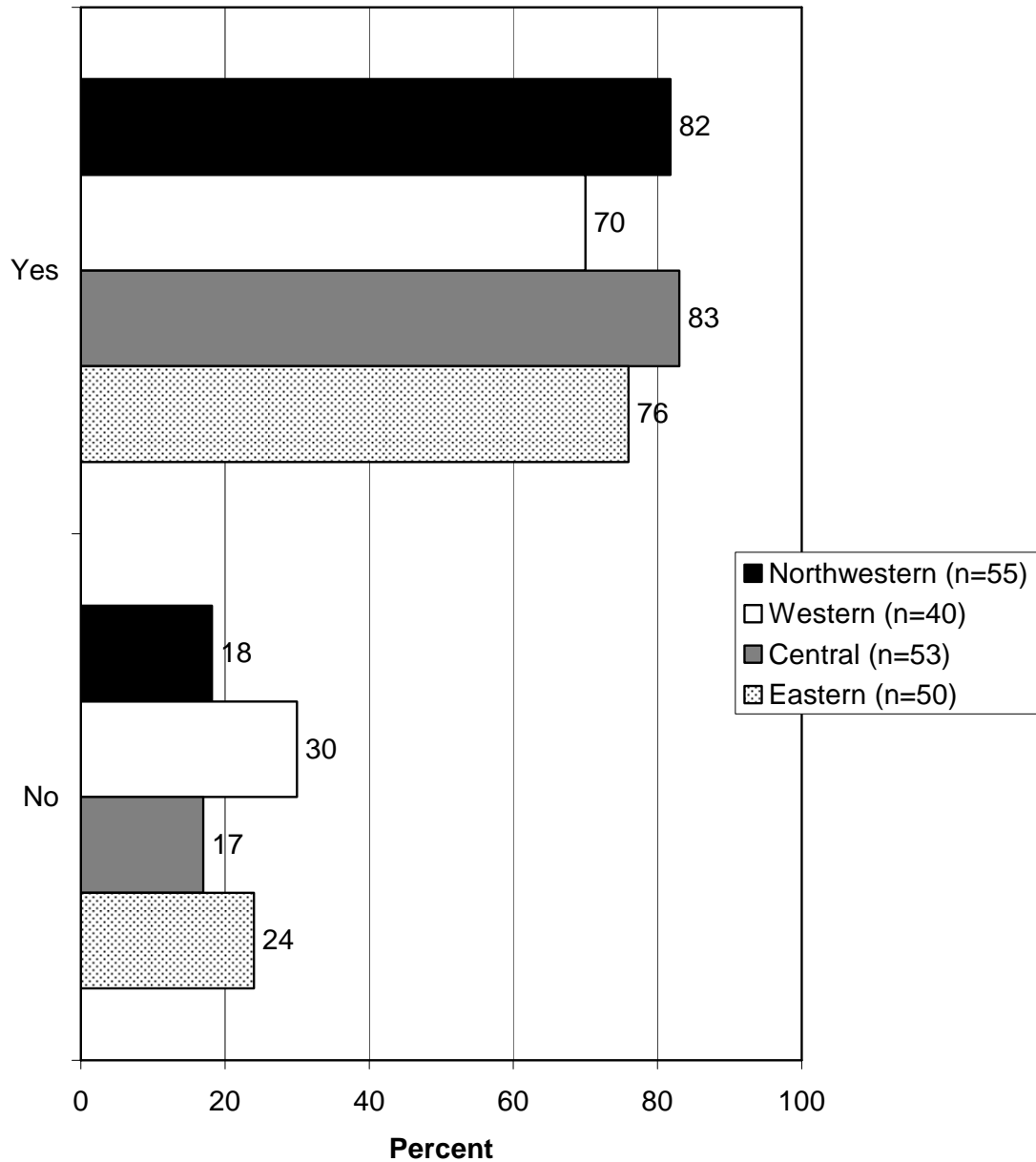
Q44. Is supplemental feeding used to manage deer on your property in [county] County? (Asked of those whose property in [county] County is managed specifically for deer.)



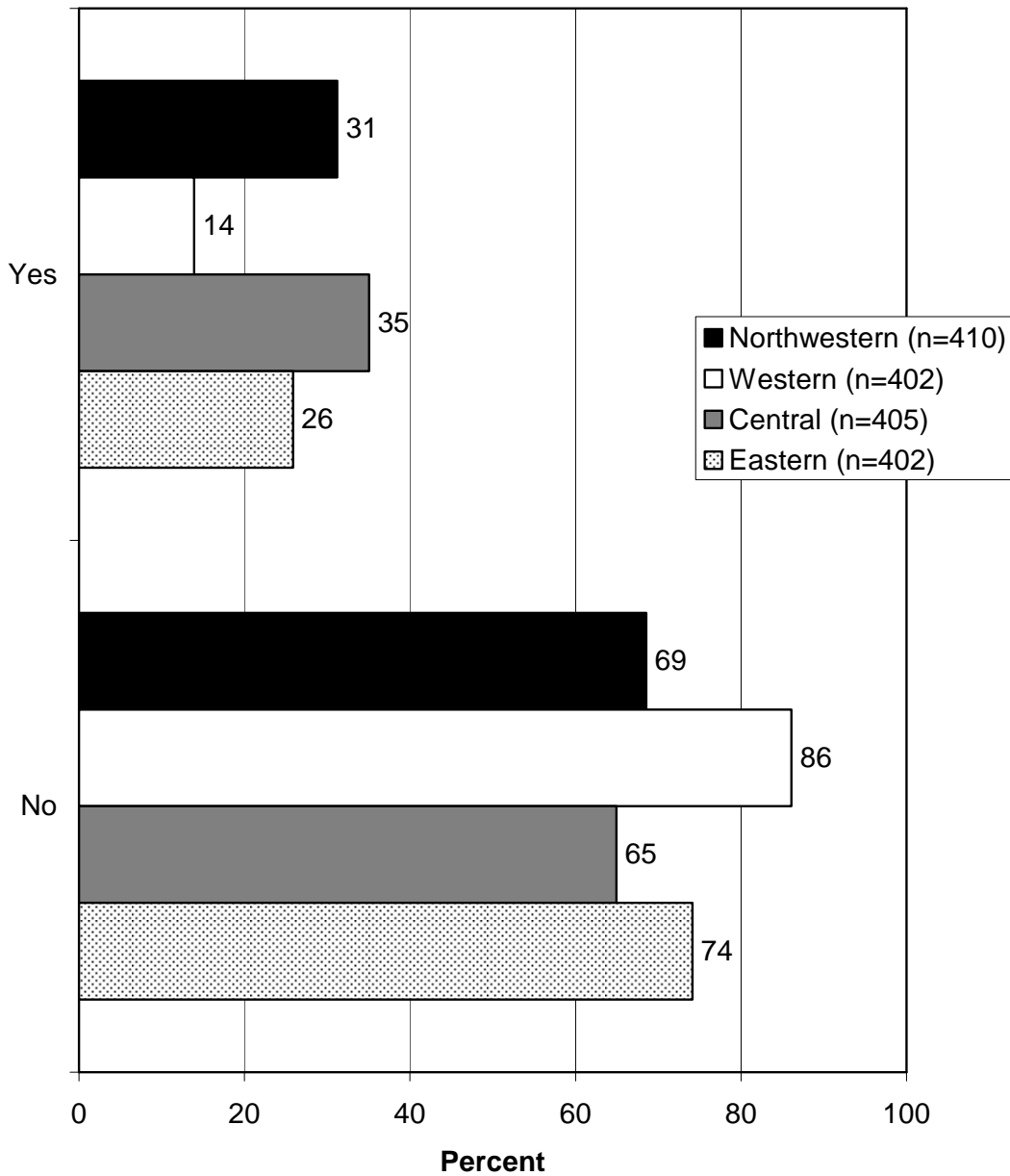
Q45. Is timber management used to manage deer on your property in [county] County? (Asked of those whose property in [county] County is managed specifically for deer.)



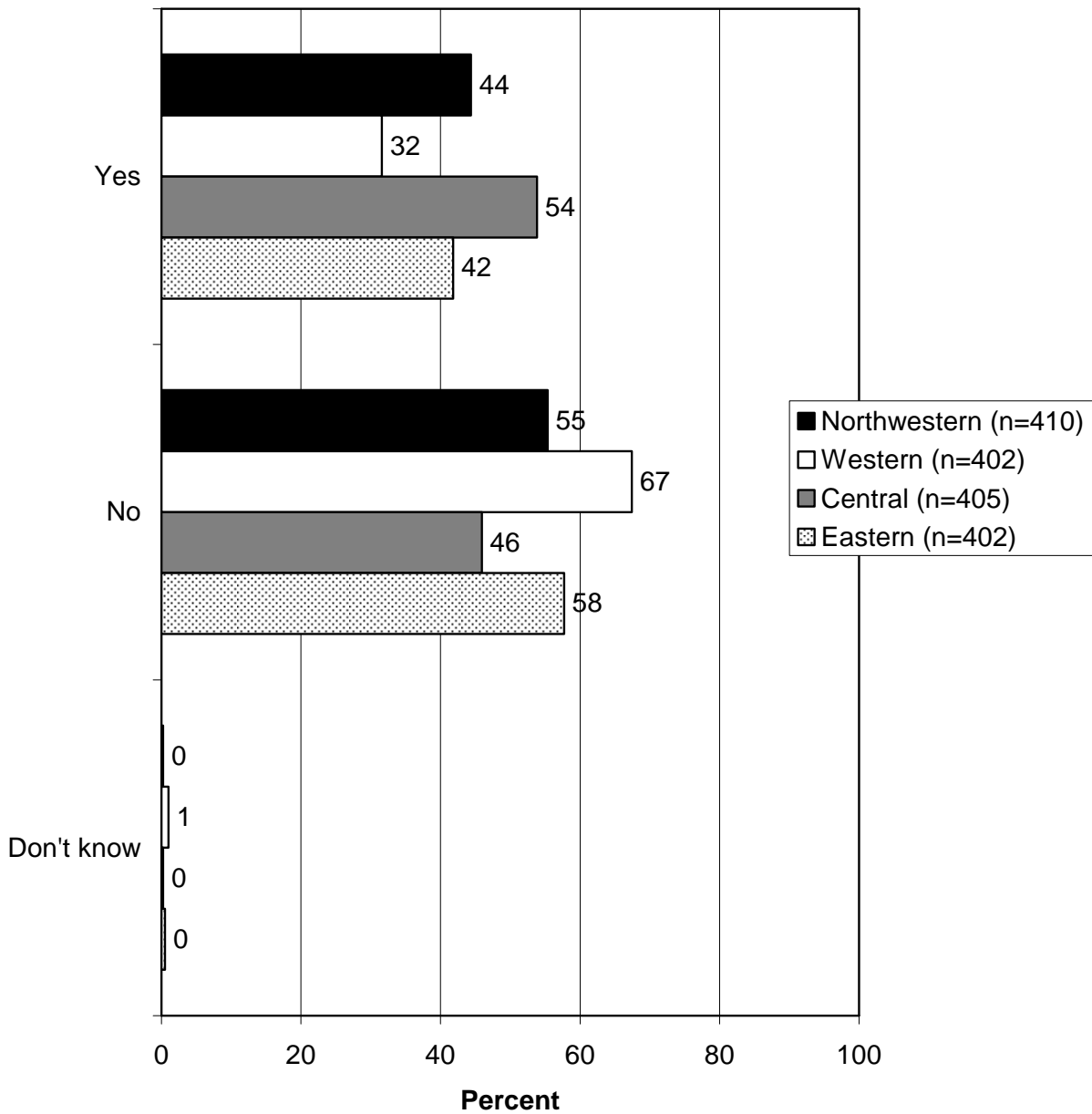
Q46. Is hunting used to manage deer on your property in [county] County? (Asked of those whose property in [county] County is managed specifically for deer.)



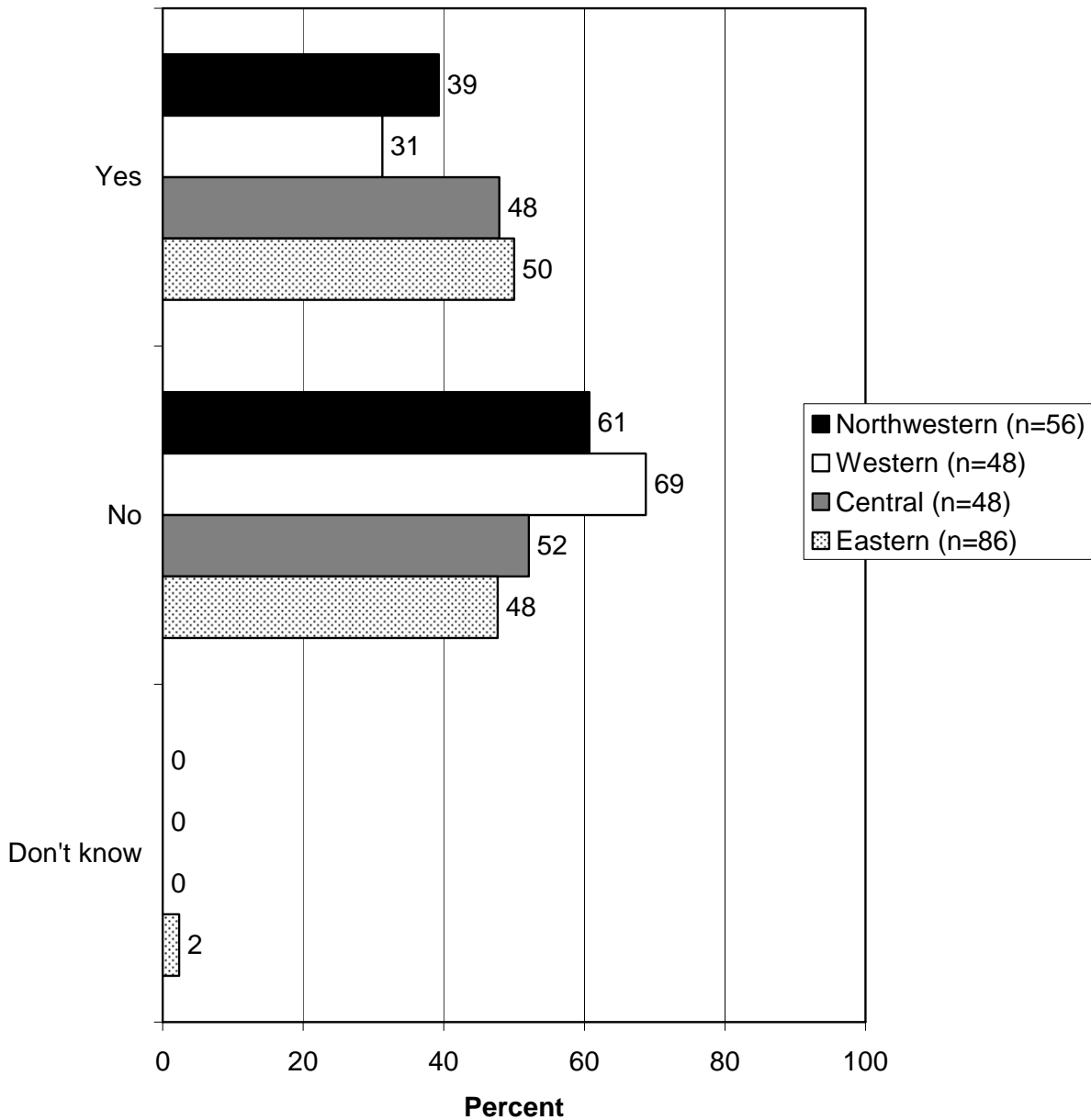
Q47. In the past 5 years, have you or a member of your household been in a deer-vehicle accident?



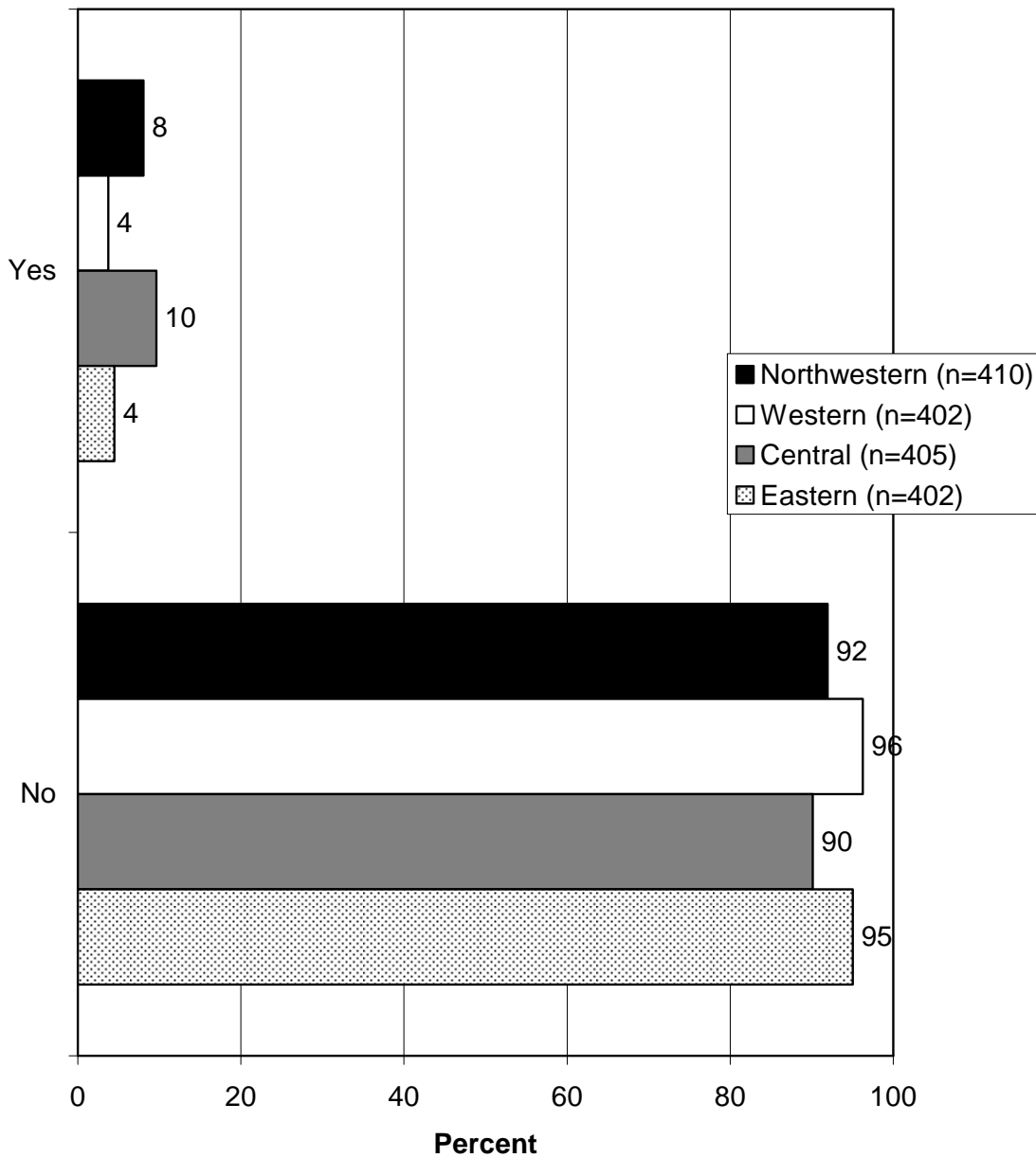
Q49. In the past 5 years, have you had deer damage to ornamental plants or gardens on your property in [county] County?



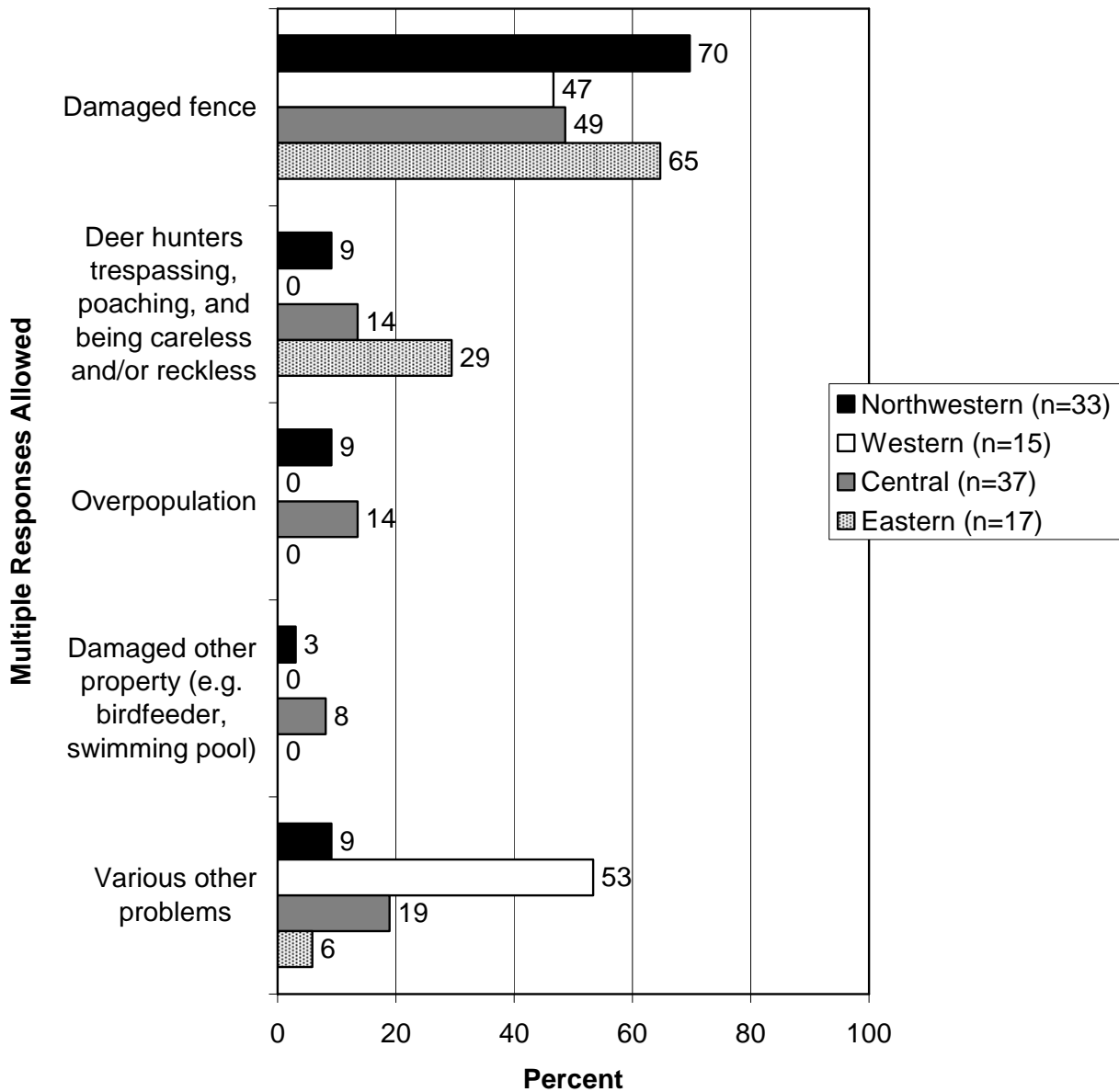
Q50. In the past 5 years, have you had deer damage to crops or timber on your property in [county] County? (Asked of those whose property in [county] County is used for timber production and/or cropland.)



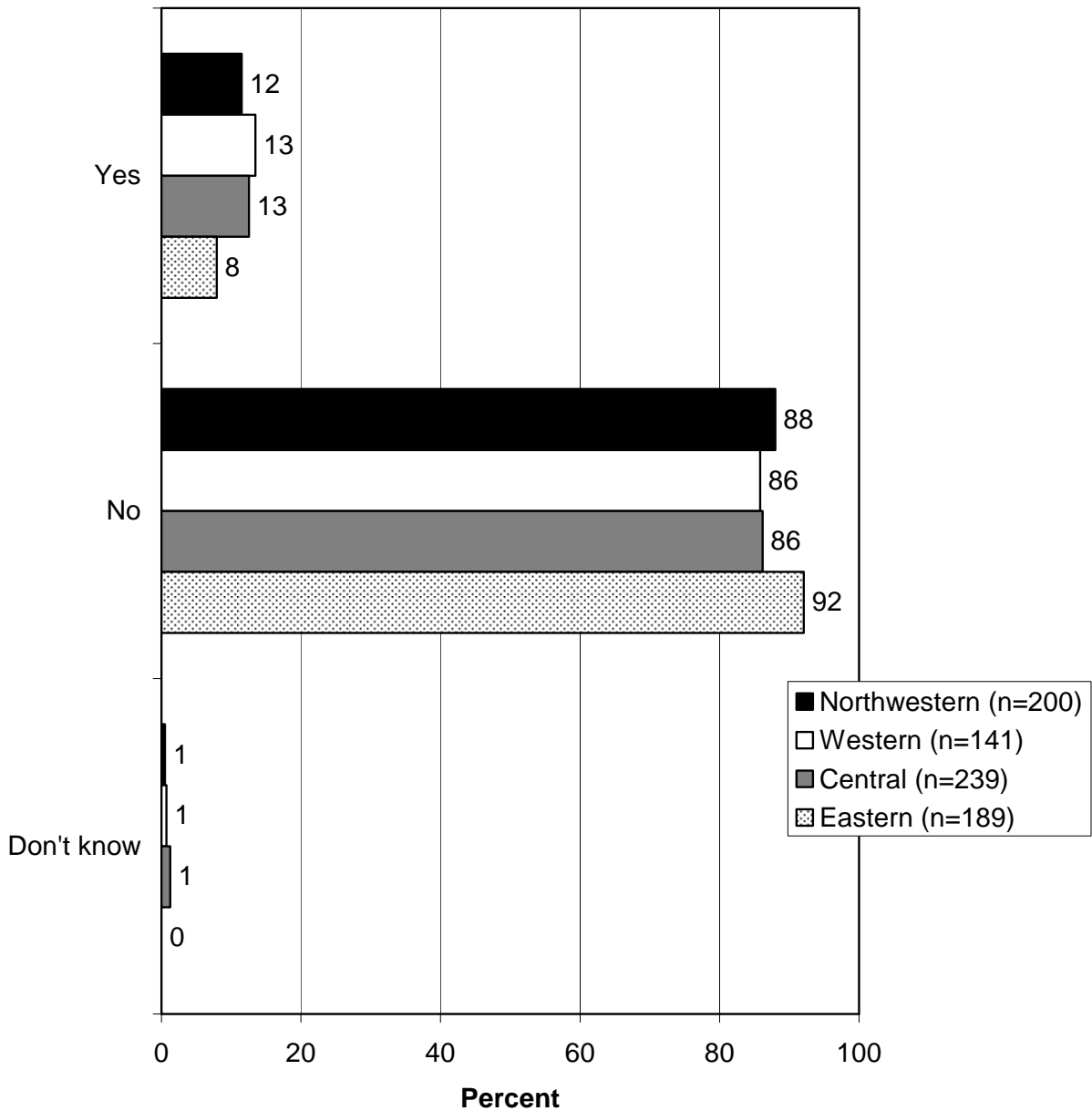
Q51. In the past 5 years, have you had any other problems related to deer on your property in [county] County?



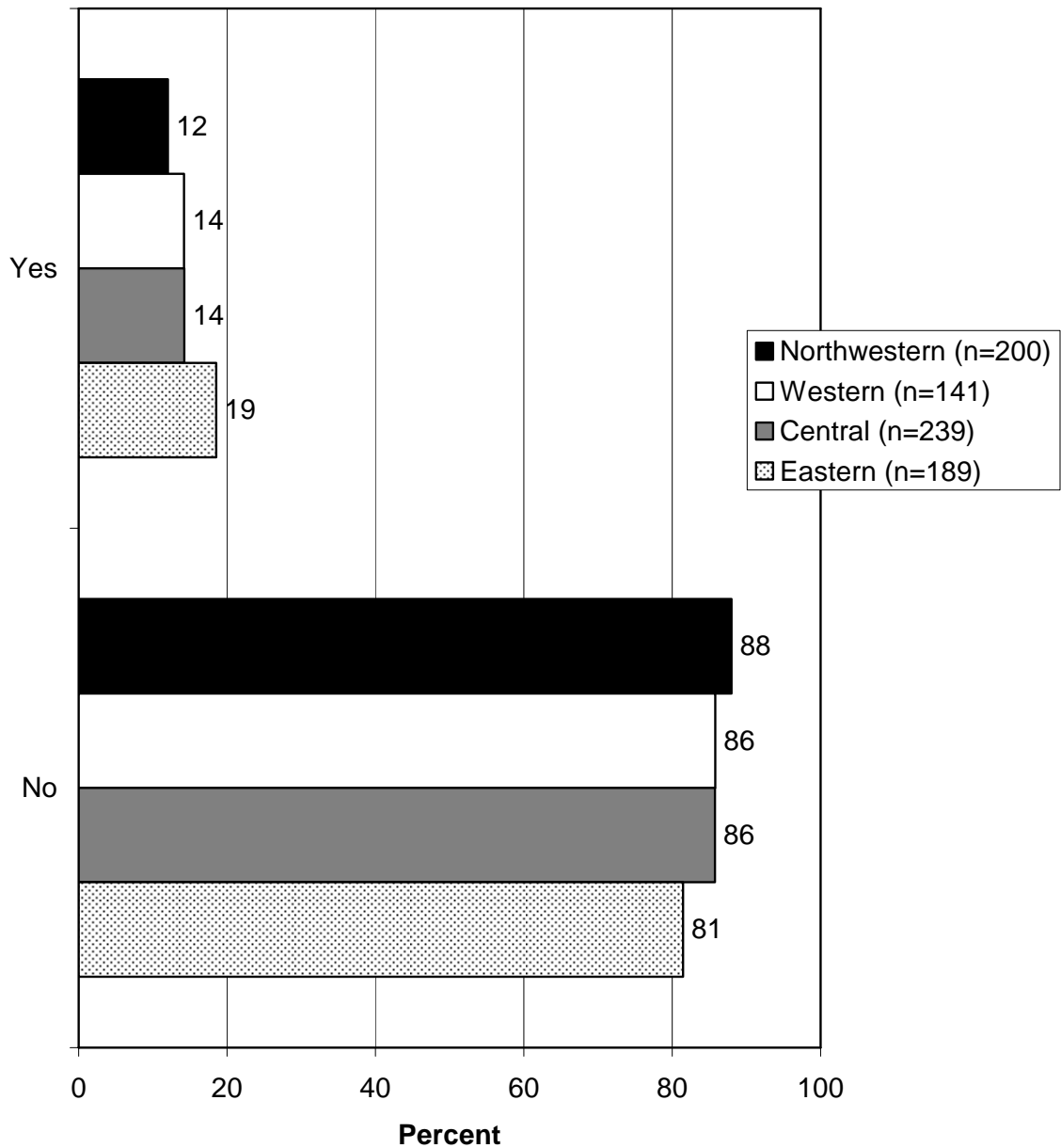
Q52. What are the problems you had related to deer on your property in [county] County? (Asked of those who had other problems in the past 5 years related to deer on his/her property in [county] County.)



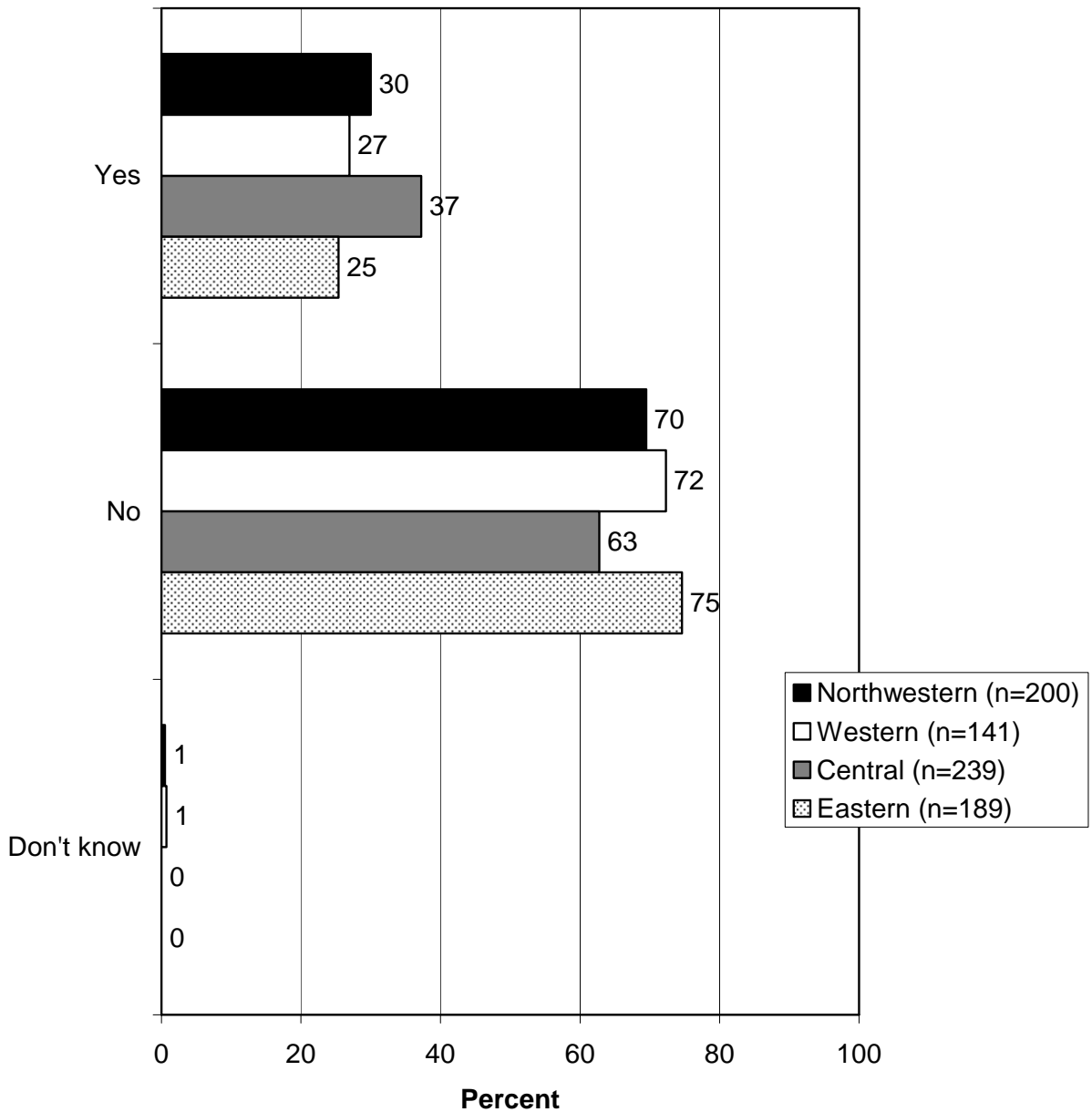
Q54. In the past 5 years, have you used chemicals to repel deer? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property in [county] County.)



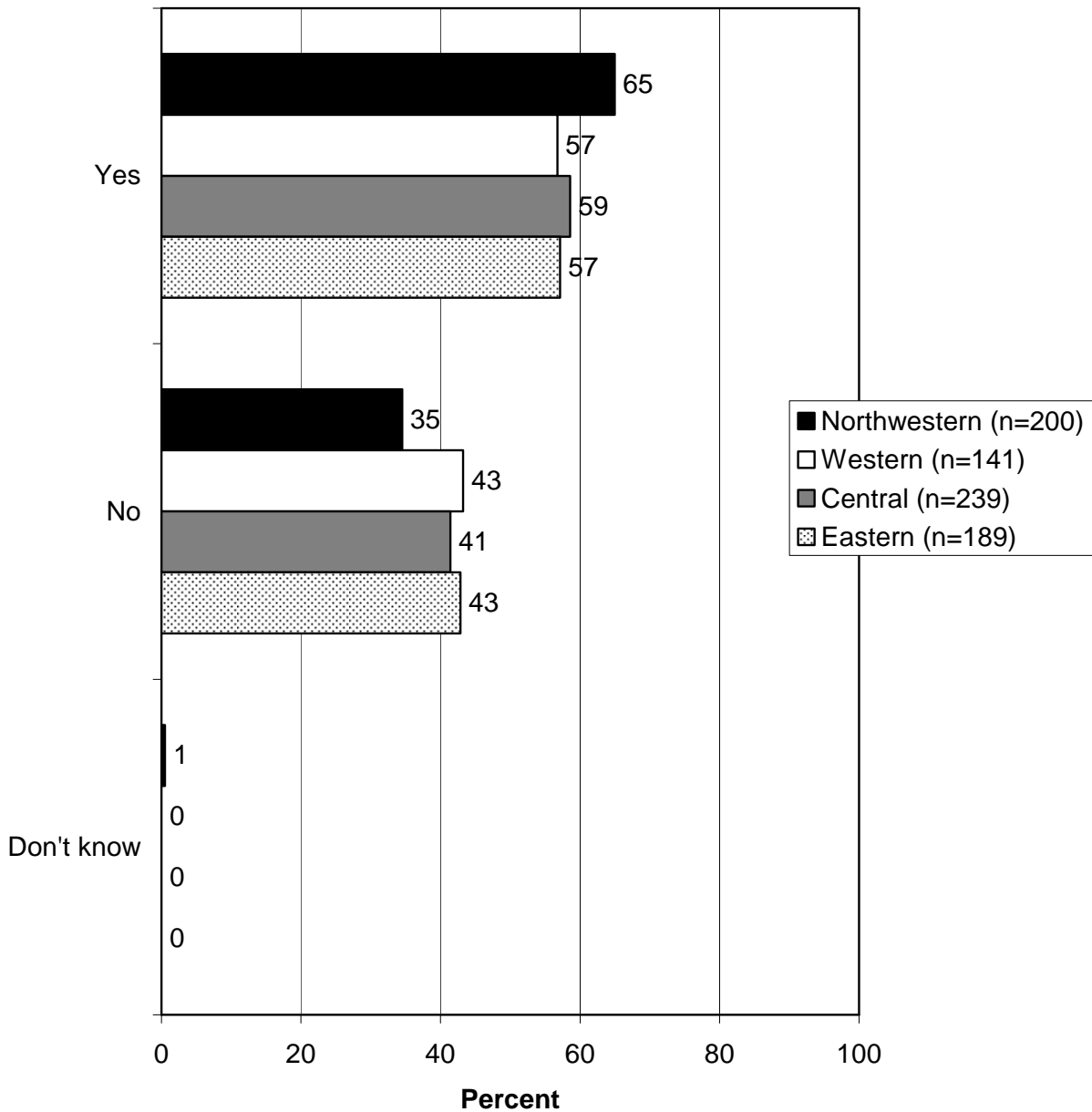
Q55. In the past 5 years, have you used noisemaking devices to scare deer? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property in [county] County.)



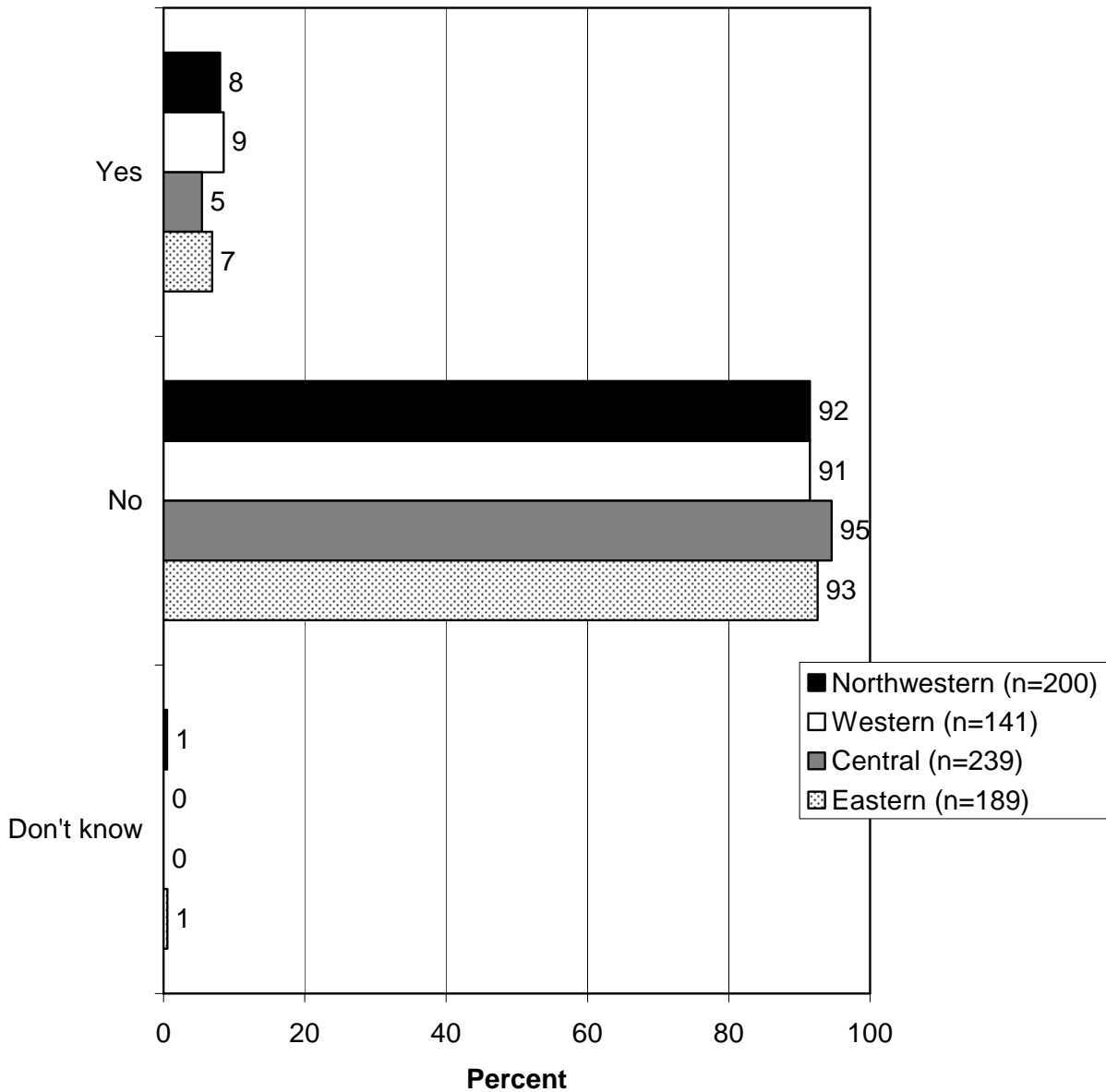
Q56. In the past 5 years, have you used fencing to exclude deer from plants or gardens? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property in [county] County.)



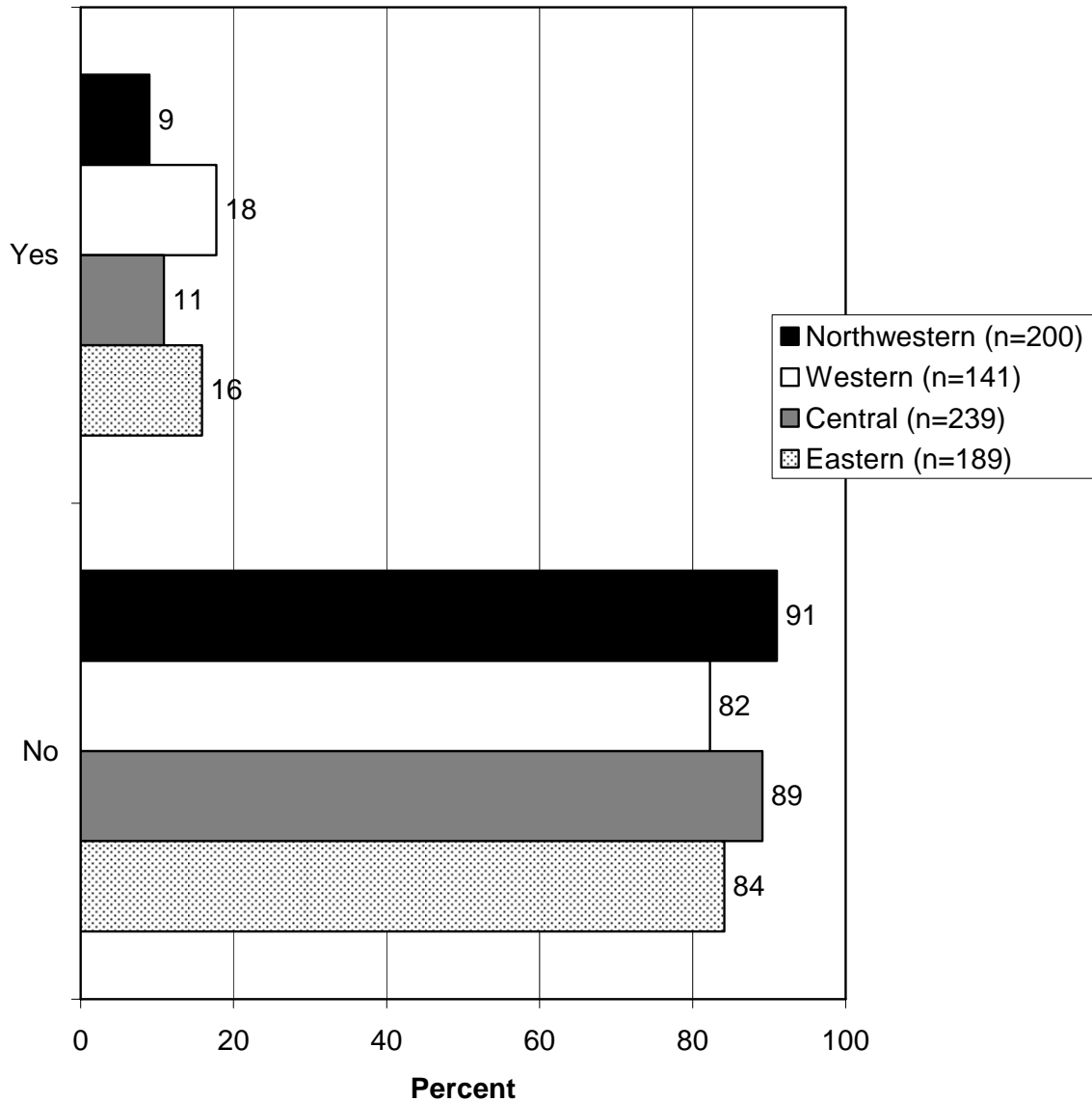
Q57. In the past 5 years, have you allowed deer hunting on your property? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property in [county] County.)



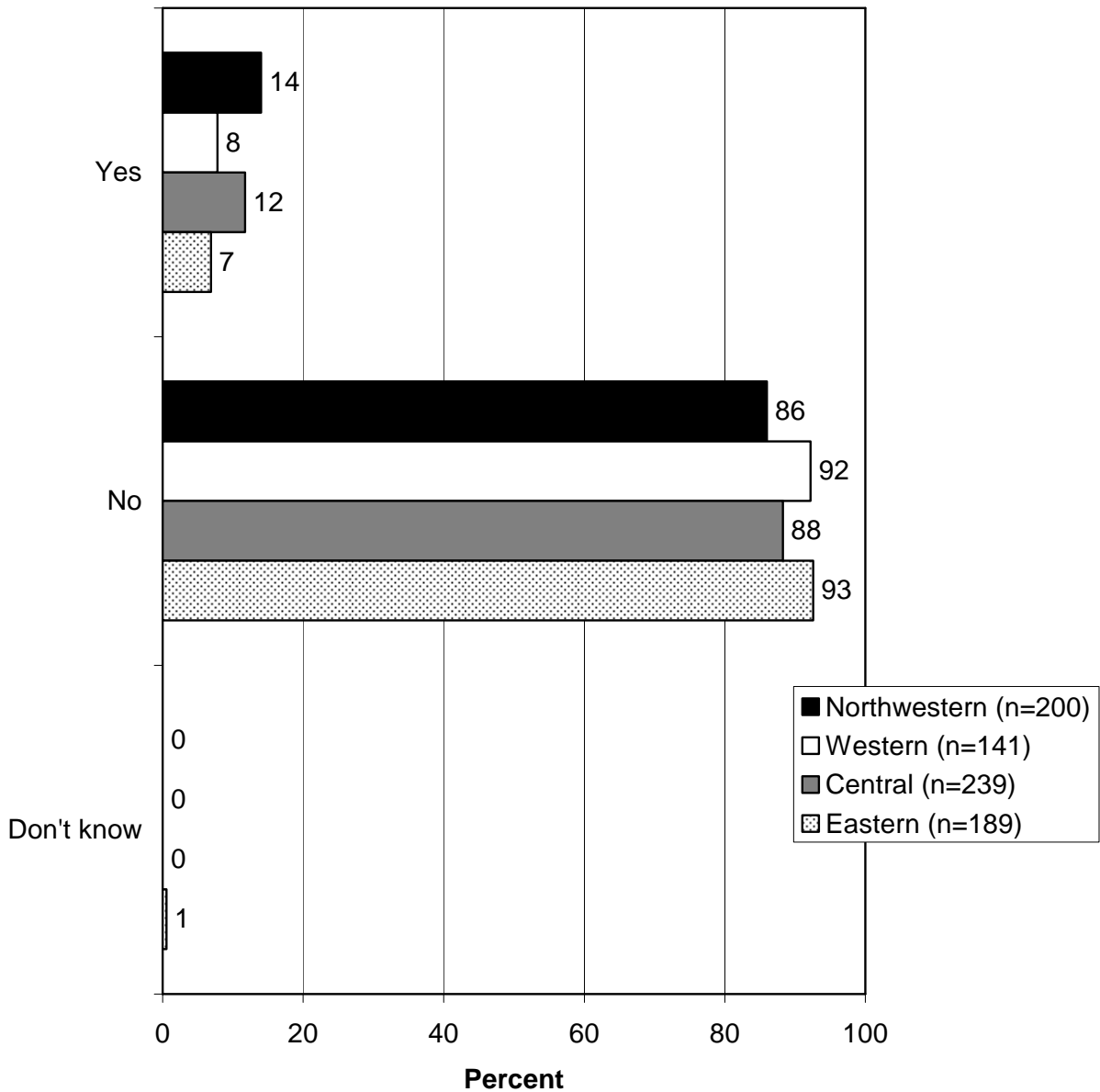
Q58. In the past 5 years, have you legally shot deer on your property in [county] County outside of the deer hunting season? (Asked of those who have had deer damage/other problems related to deer in past 5 years on their property in [county] County.)



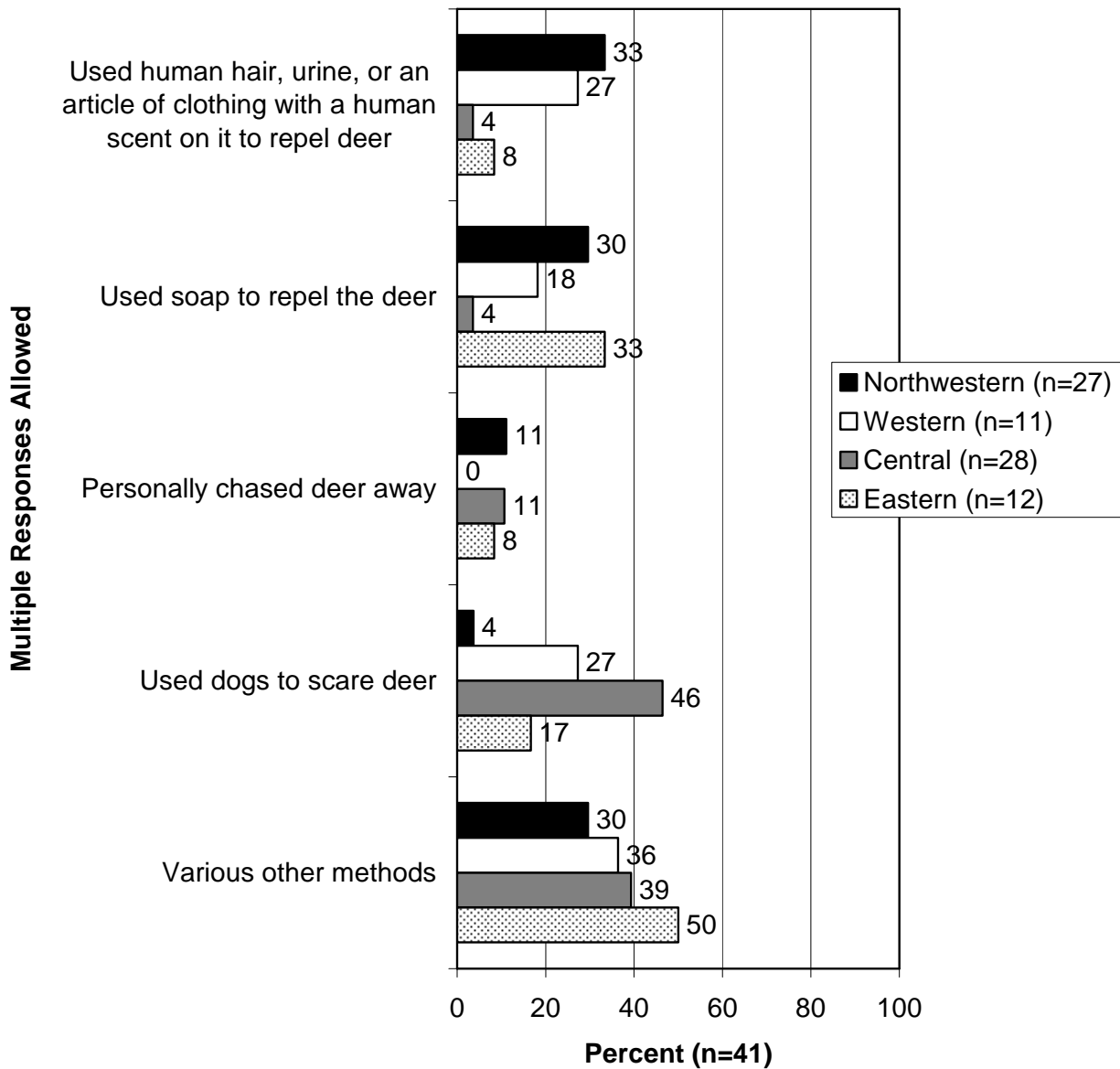
Q59. In the past 5 years, have you done nothing to deal with deer problems? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property in [county] County, but have not used chemicals, noisemaking devices, fencing, hunting, or shooting as a way to exclude or eliminate deer from the property.)



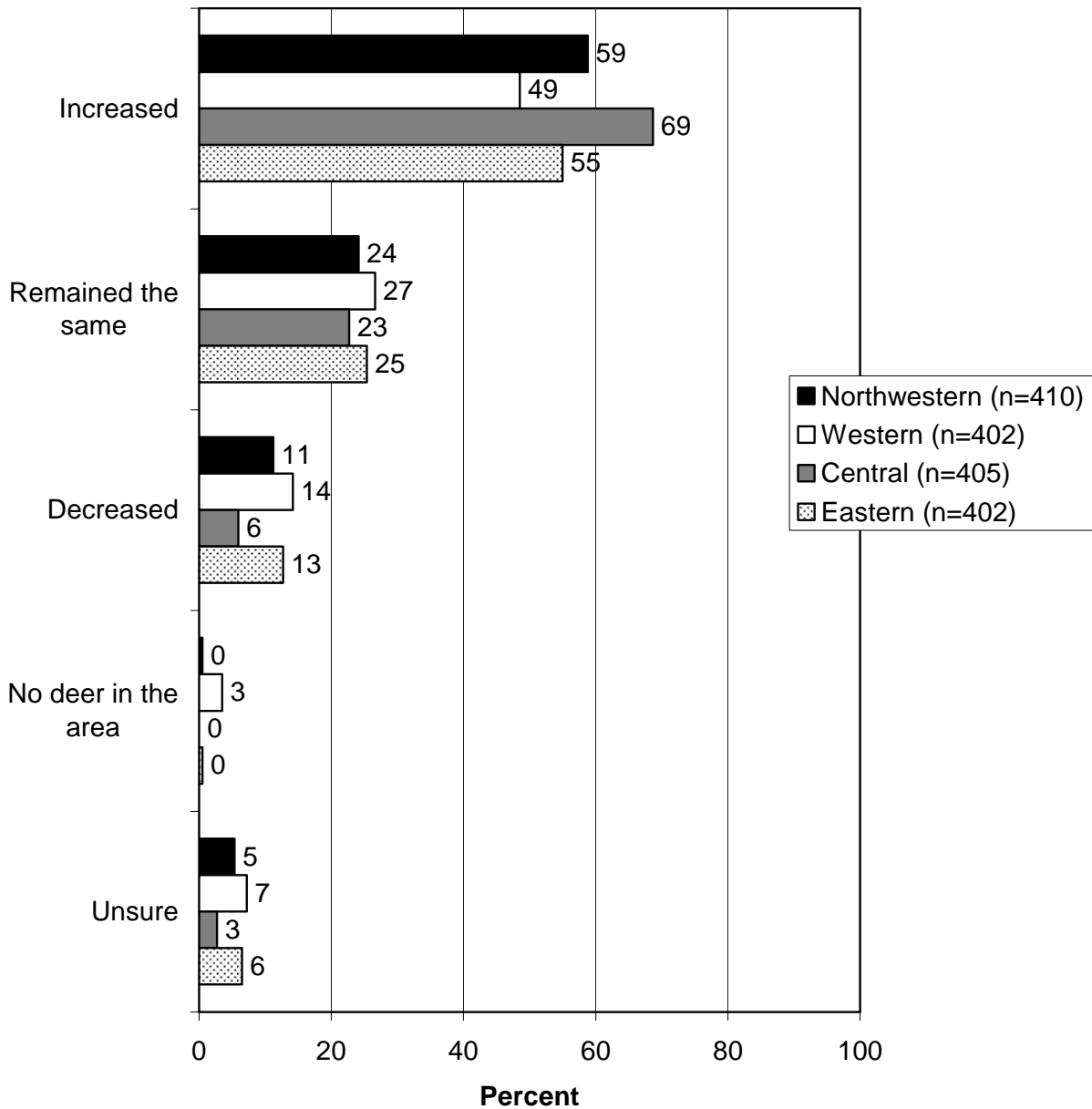
Q60. In the past 5 years, have you done something else not previously discussed to deal with deer problems? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property in [county] County, and have done something to deal with the problems.)



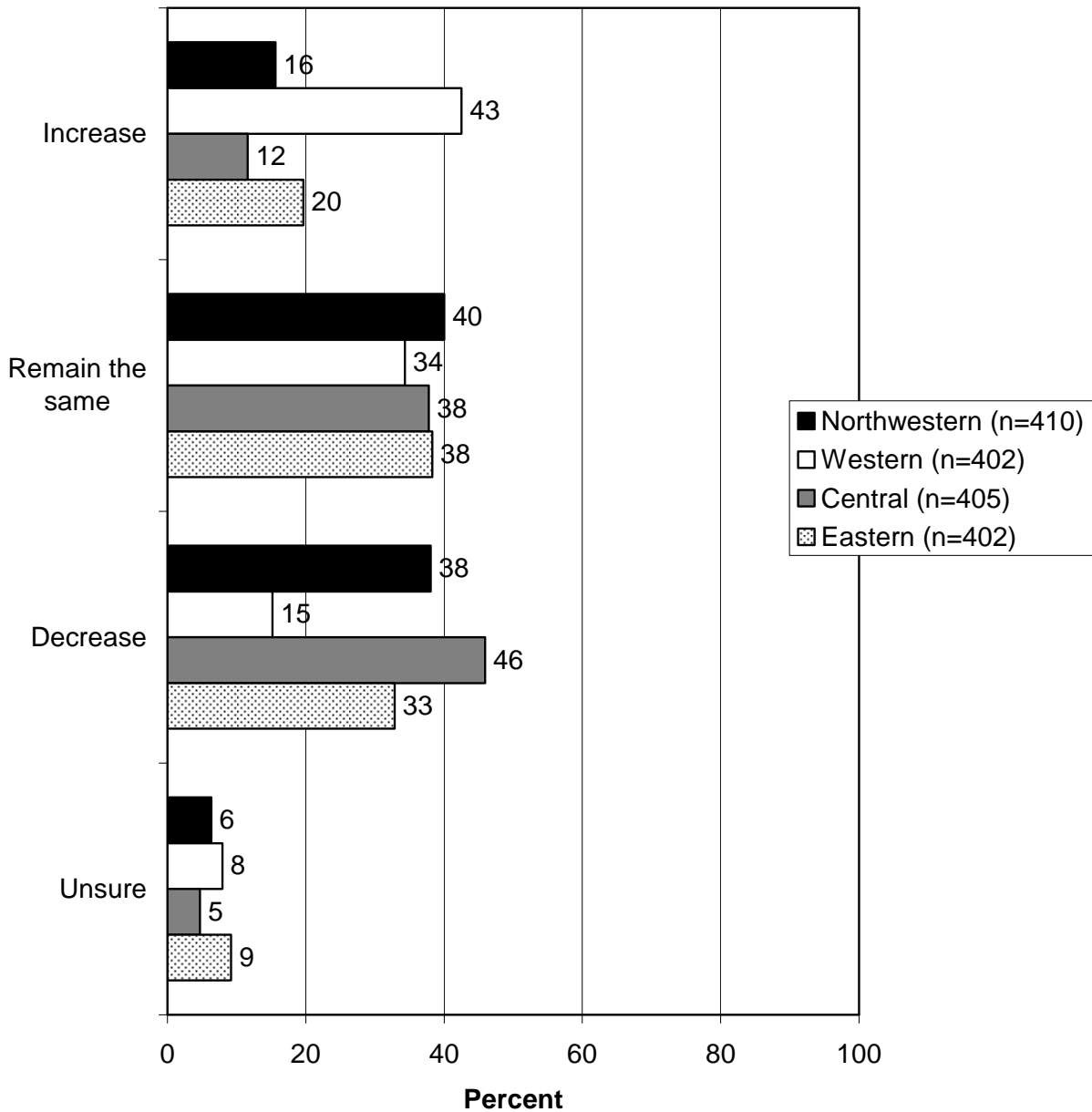
Q61. What else have you done to deal with deer problems in the past 5 years? (Asked of those who have had deer damage or other problems related to deer in the past 5 years on their property in [county] County, and have done something other than, but not necessarily excluding, using chemicals, noisemaking devices, fencing, hunting, or shooting as a way to deal with the deer problem.)



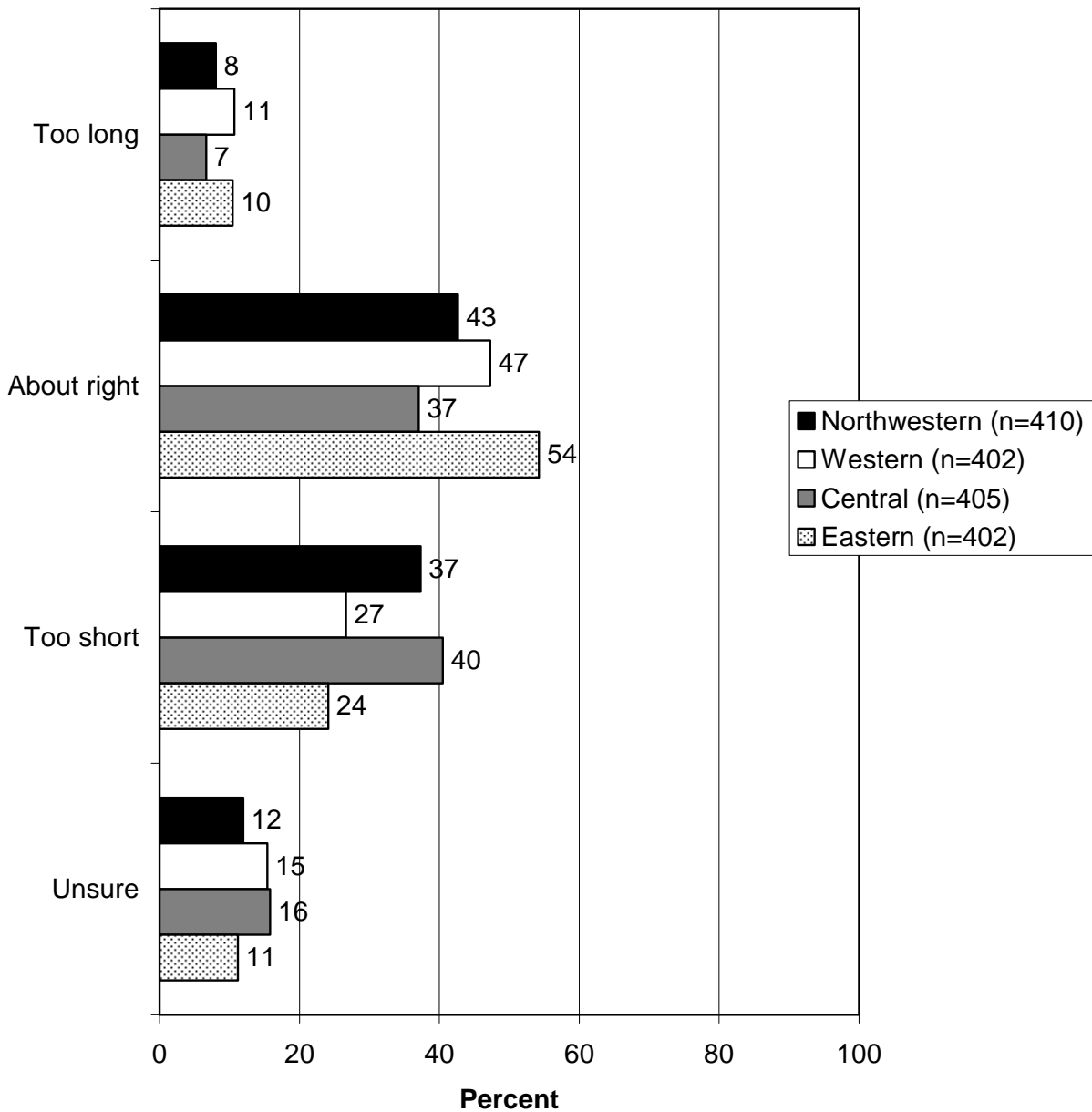
Q63. In your opinion, has the deer population in the general area of your property in [county] County increased, remained the same, or decreased during the past 5 years, or are there no deer in the area?



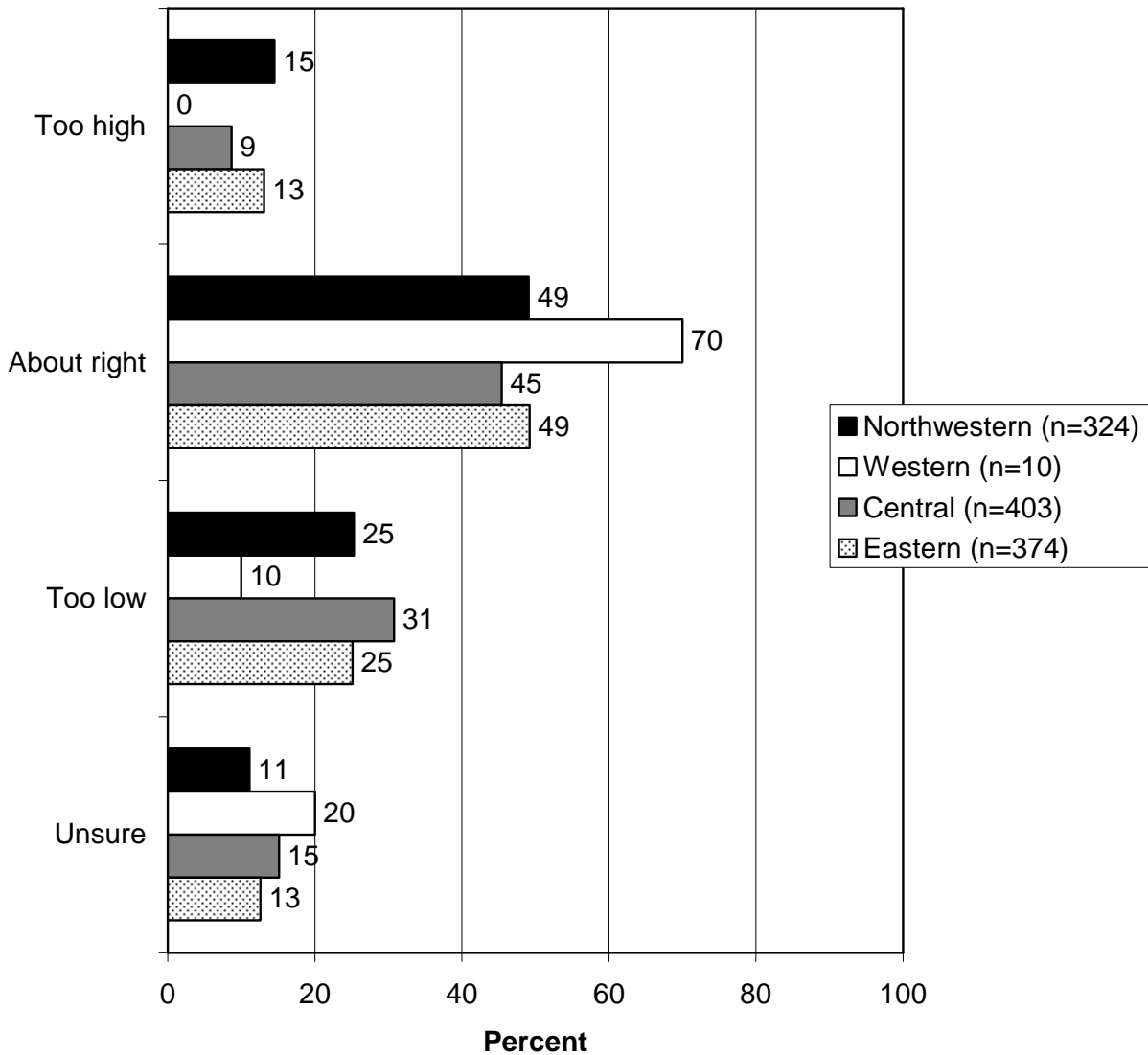
Q64. Wildlife managers would like to know whether or not you want the deer population in the general area of your property in [county] County to change in the next 5 years. Do you want the deer population to increase, remain at its current level, or decrease?



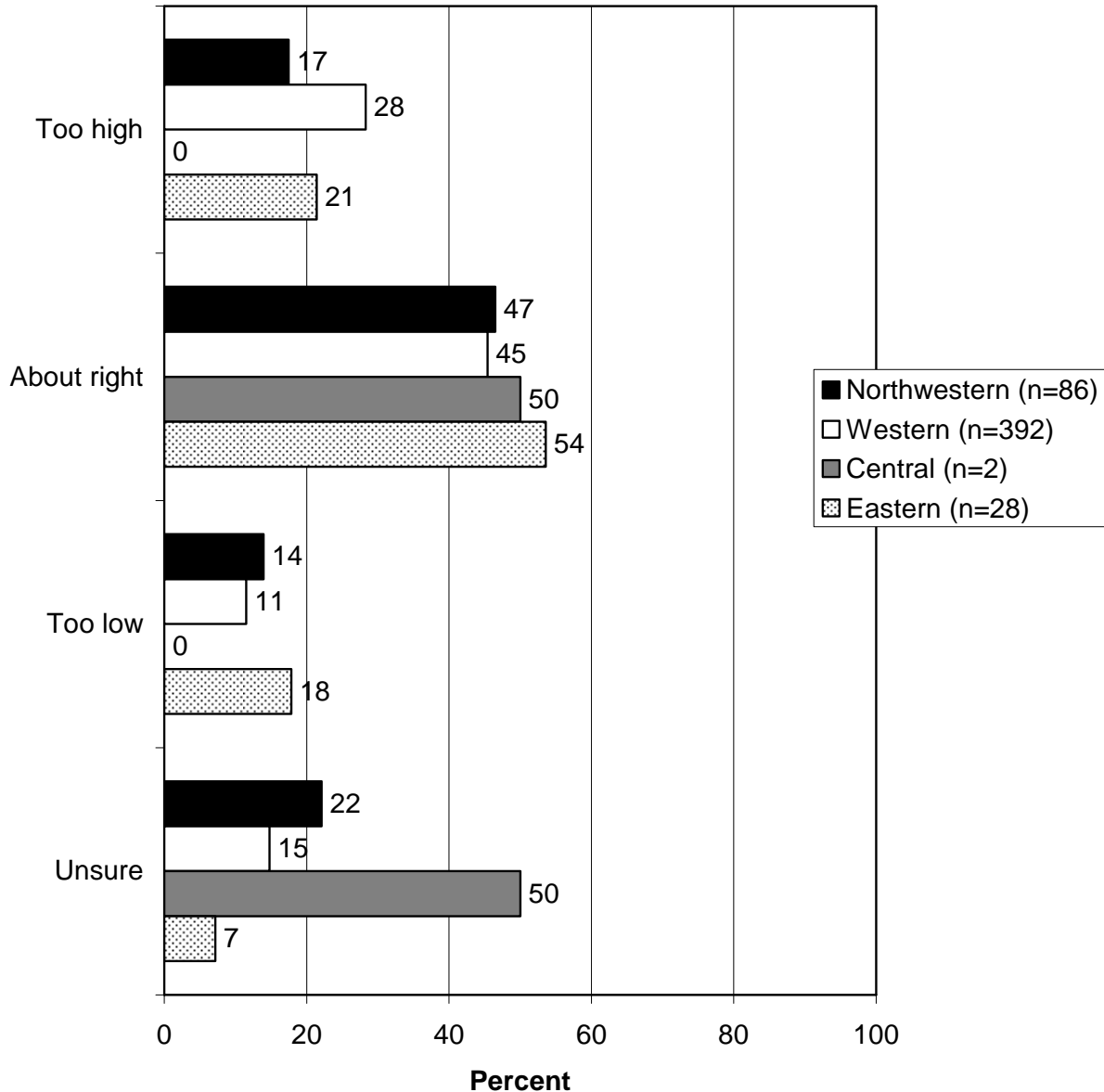
Q67. Currently the firearm deer hunting season in [county] County is [days]. In your opinion, is the length of the firearm deer hunting season in [county] County too long, about right or too short?



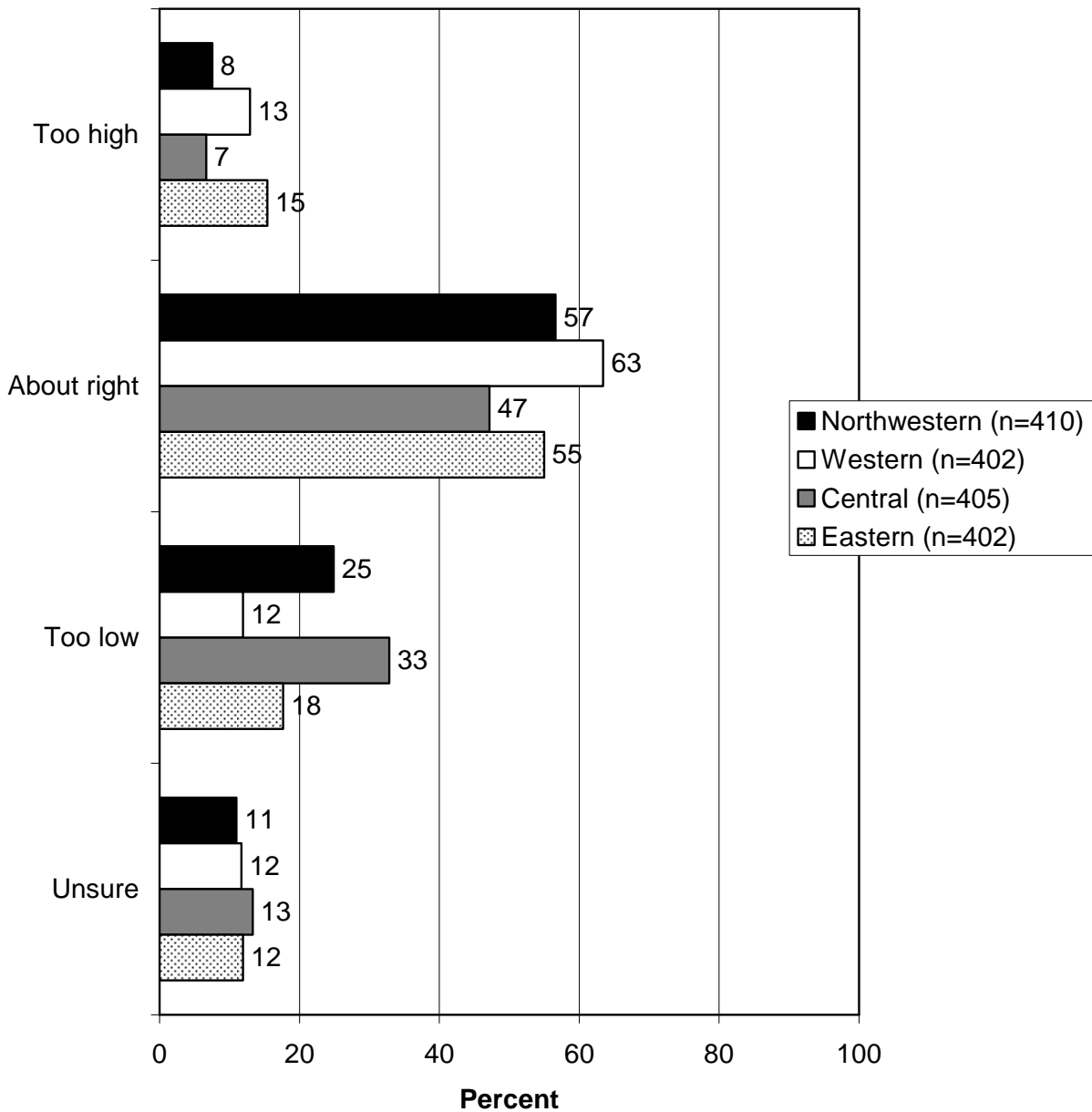
Q69. Currently, the season bag limit for does in [county] County is 6 does, although hunters can get an unlimited number of tags to harvest additional does on private lands. In your opinion, is the current season bag limit for does in [county] County too high, about right, or too low? (Asked of those whose property is in a county that allows hunters to get an unlimited number of tags to harvest additional does on private land.)



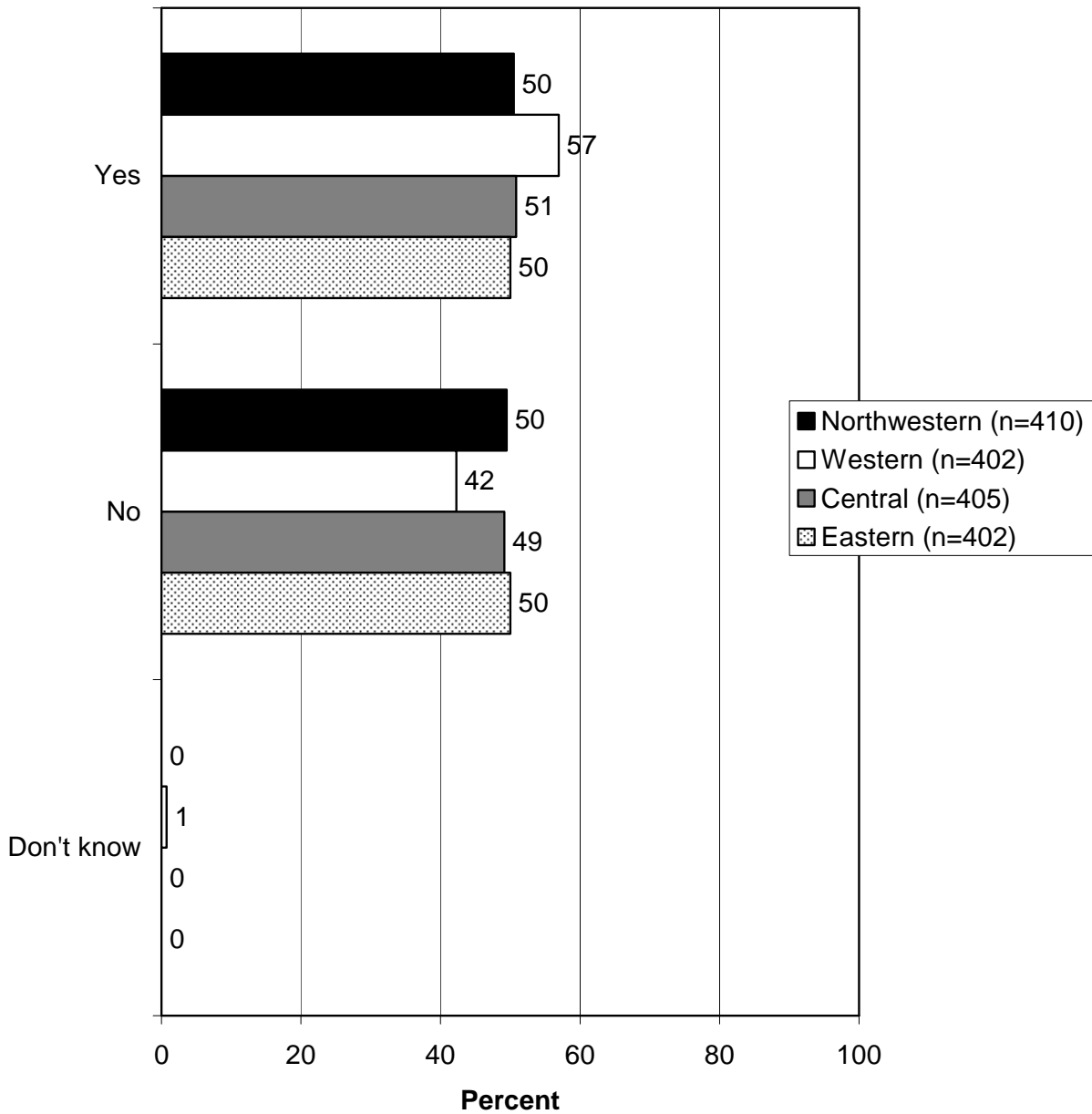
Q70. Currently, the season bag limit for does in [county] County is 6 does. In your opinion, is the current season bag limit for does in [county] County too high, about right, or too low? (Asked of those whose property is not in a county that allows hunters to get an unlimited number of tags to harvest additional does on private land.)



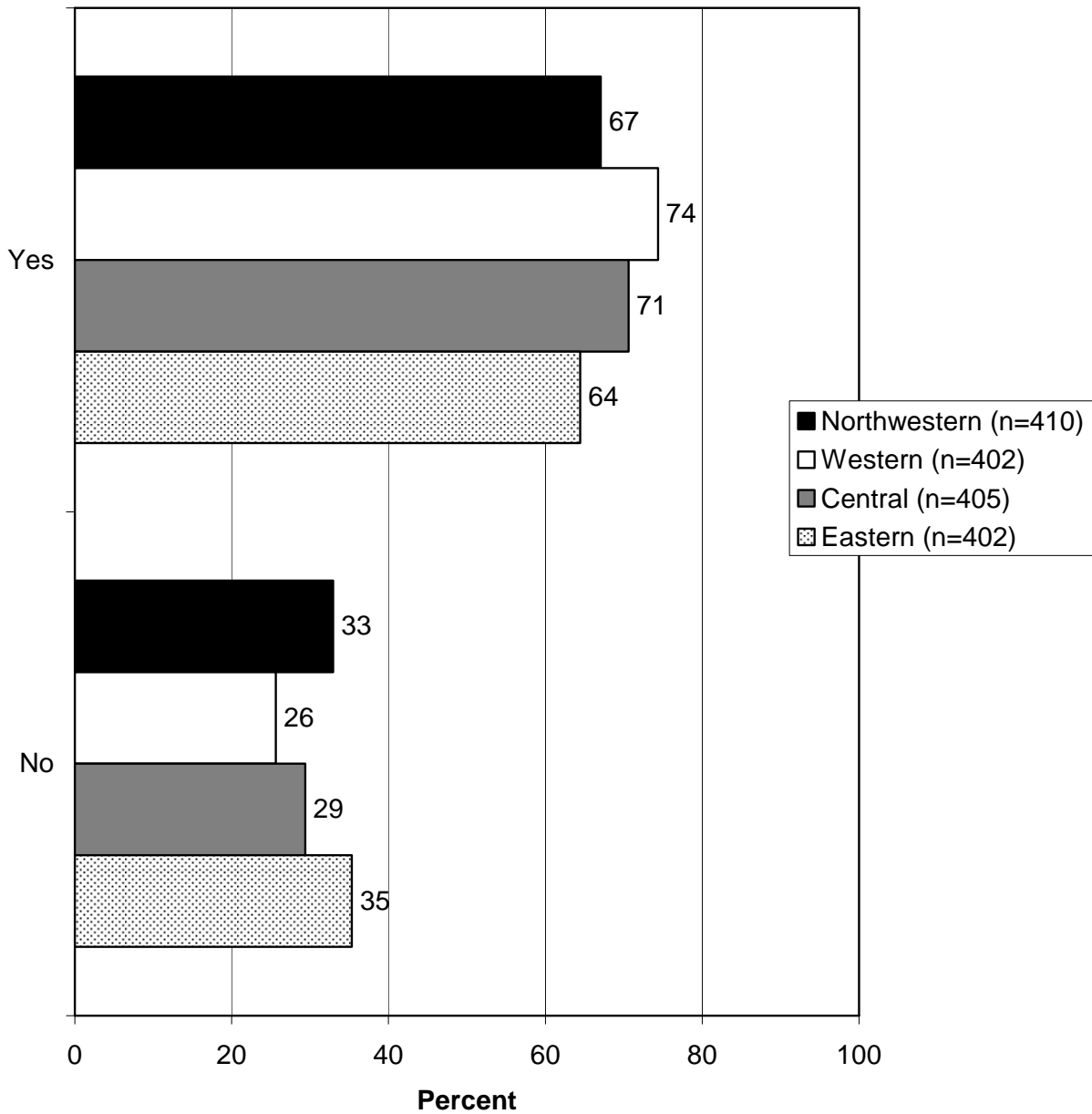
Q72. Currently, the season bag limit for bucks in [county] County is [number of bucks]. In your opinion, is the current season bag limit for bucks in [county] County too high, about right, or too low?



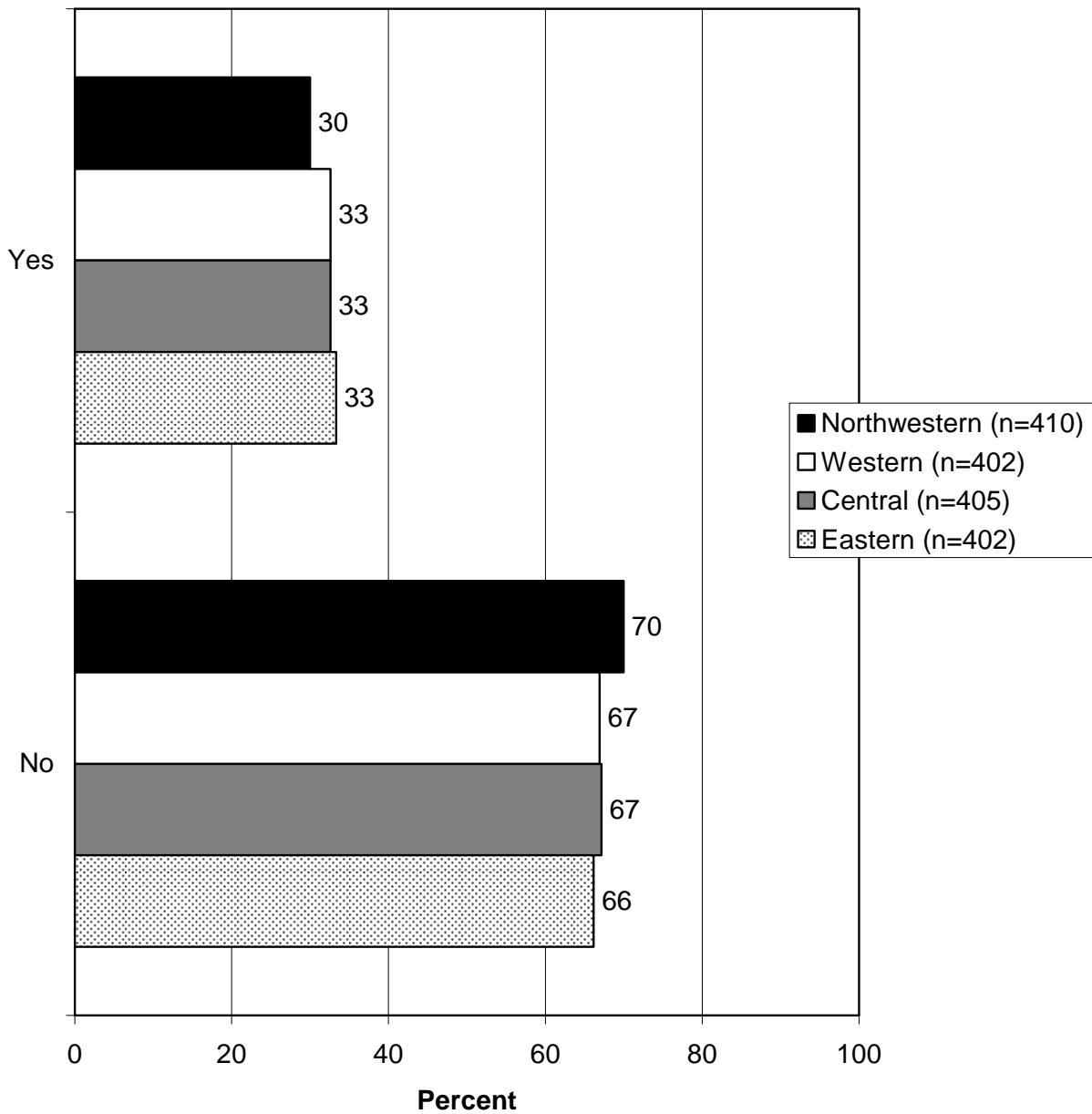
Q74. In the past 12 months, have you participated in wildlife watching or photography?



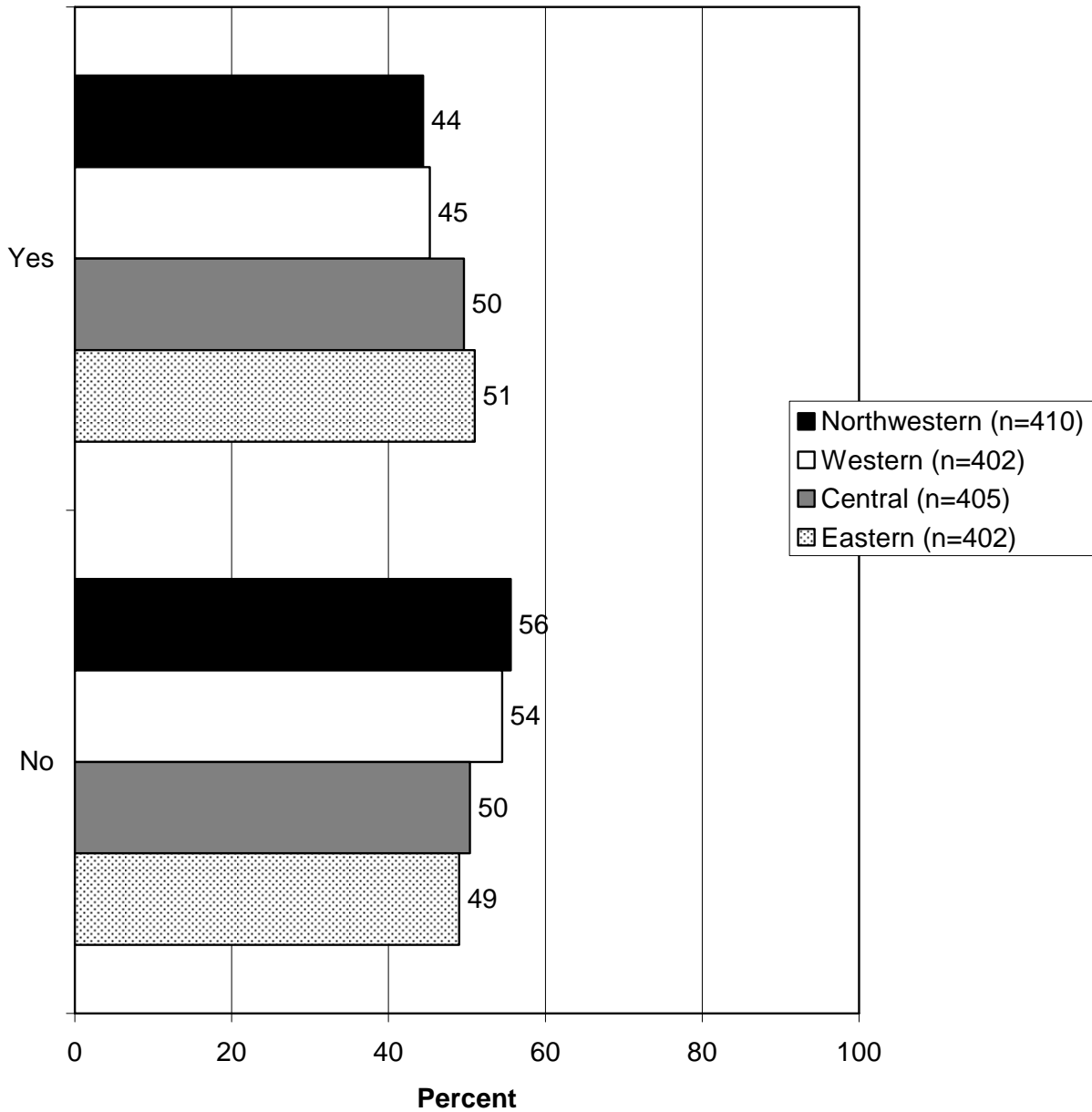
Q75. In the past 12 months, have you fed birds or other wildlife besides deer?



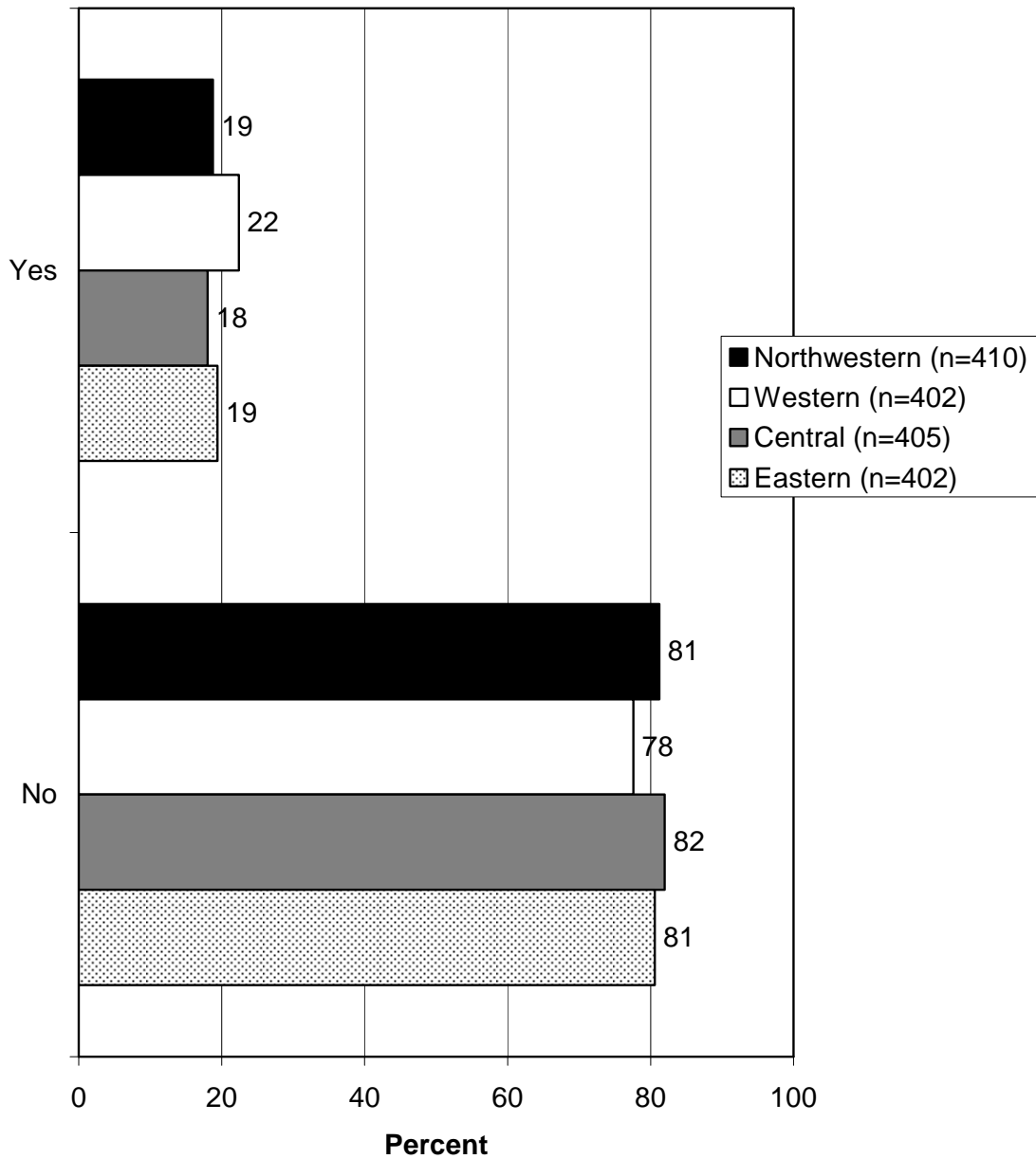
Q76. In the past 12 months, have you fed deer?



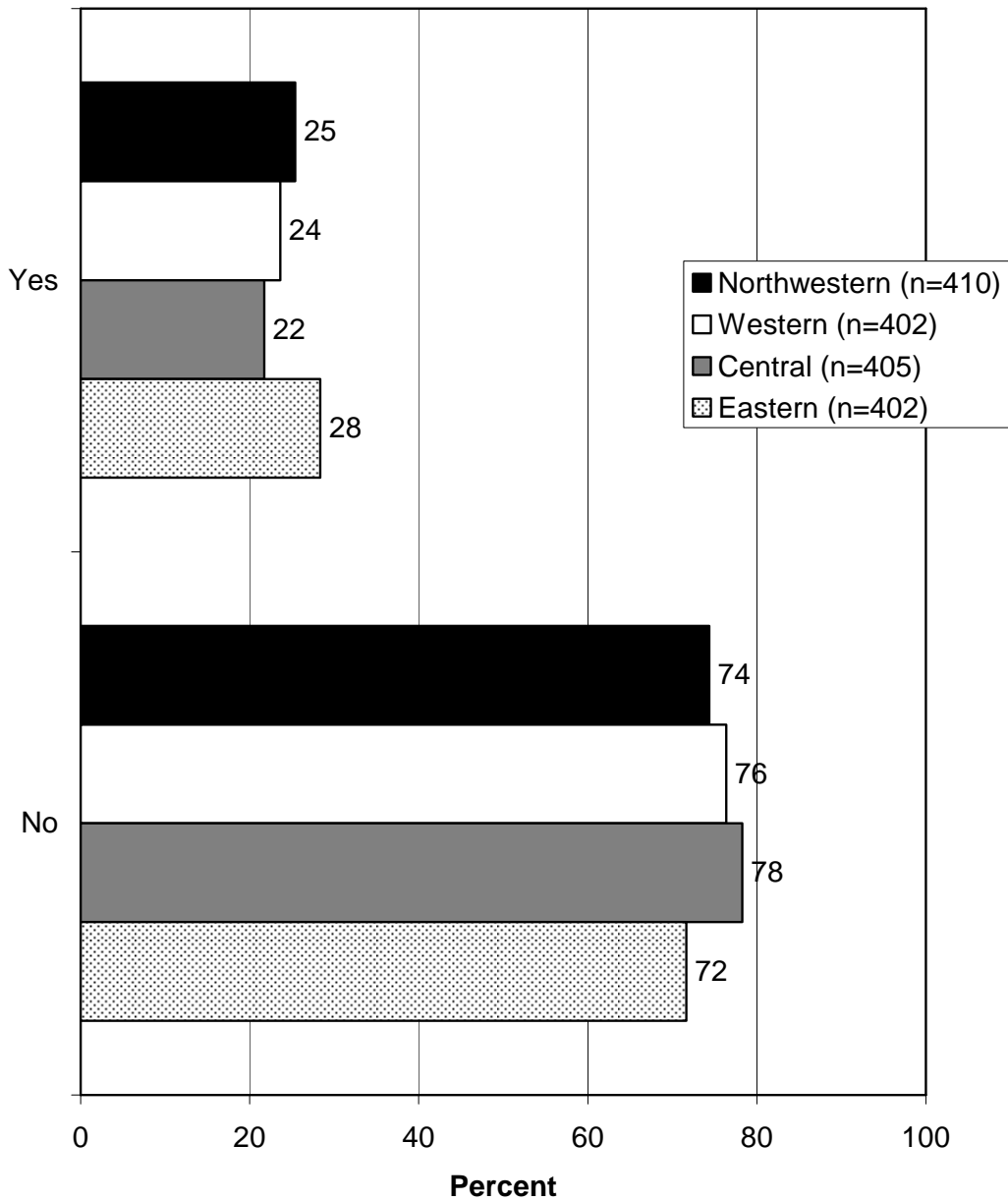
Q77. In the past 12 months, have you gone fishing?



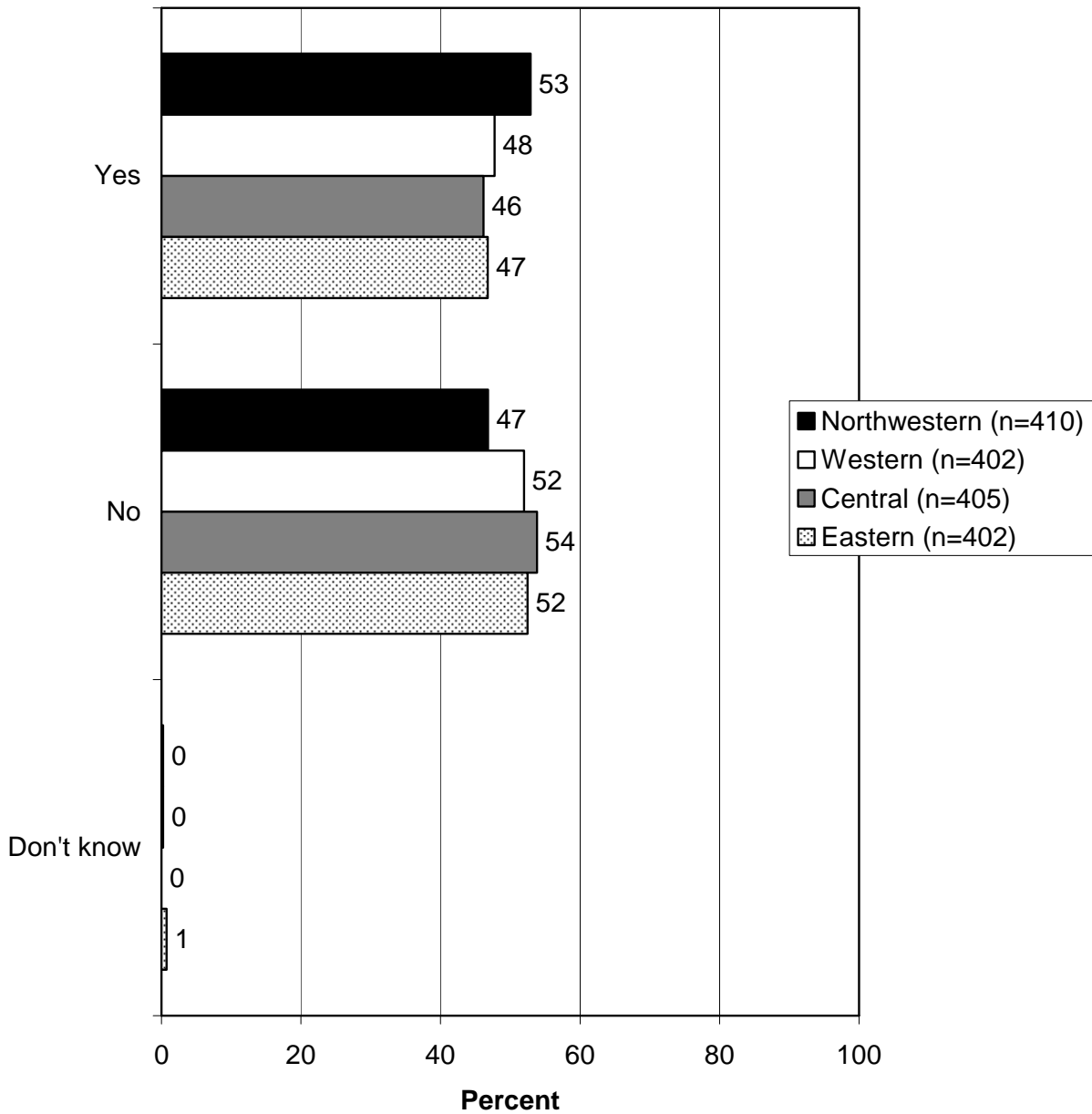
Q78. In the past 12 months, have you gone hunting for wildlife other than deer?



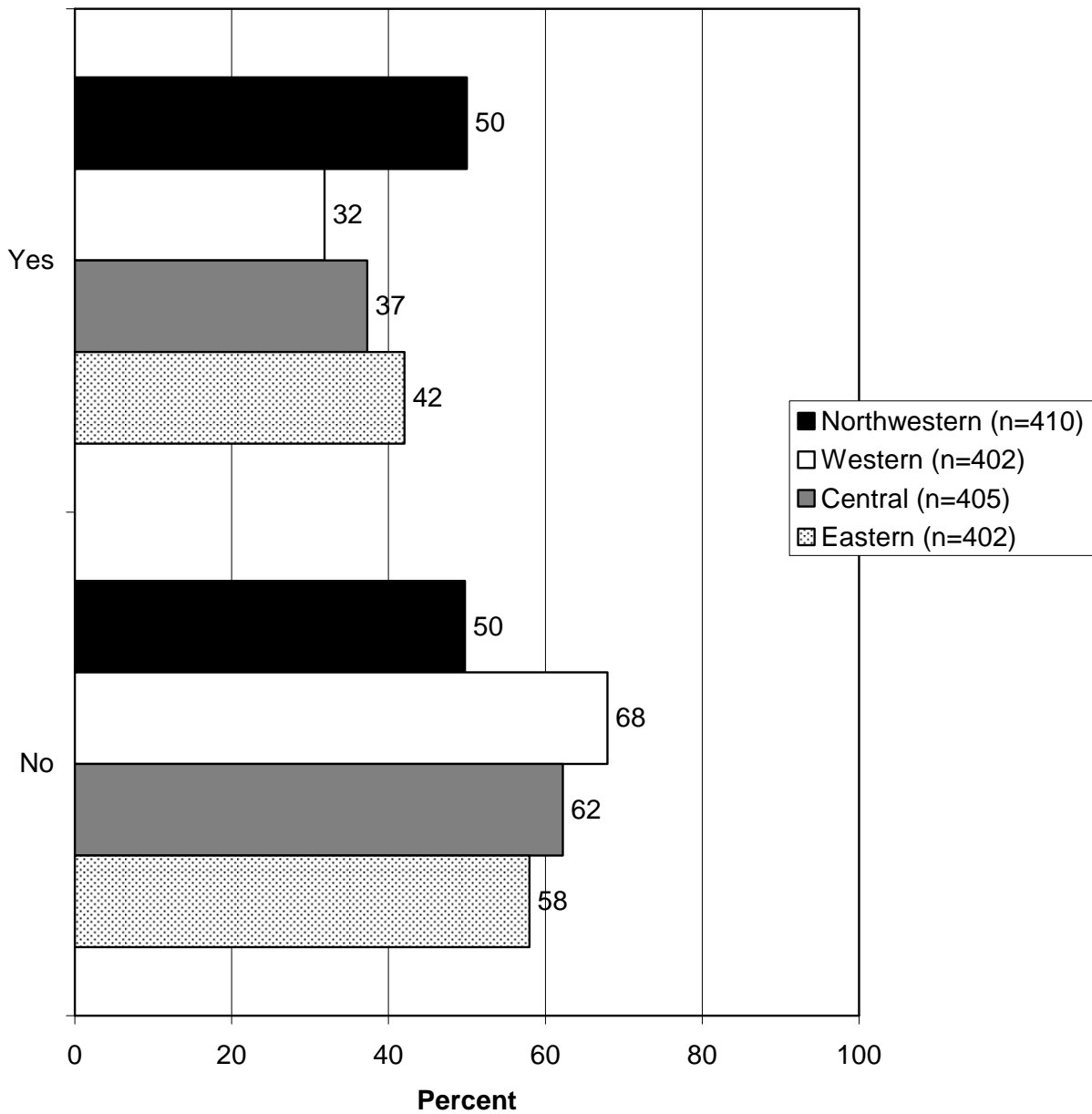
Q79. In the past 12 months, have you gone deer hunting?



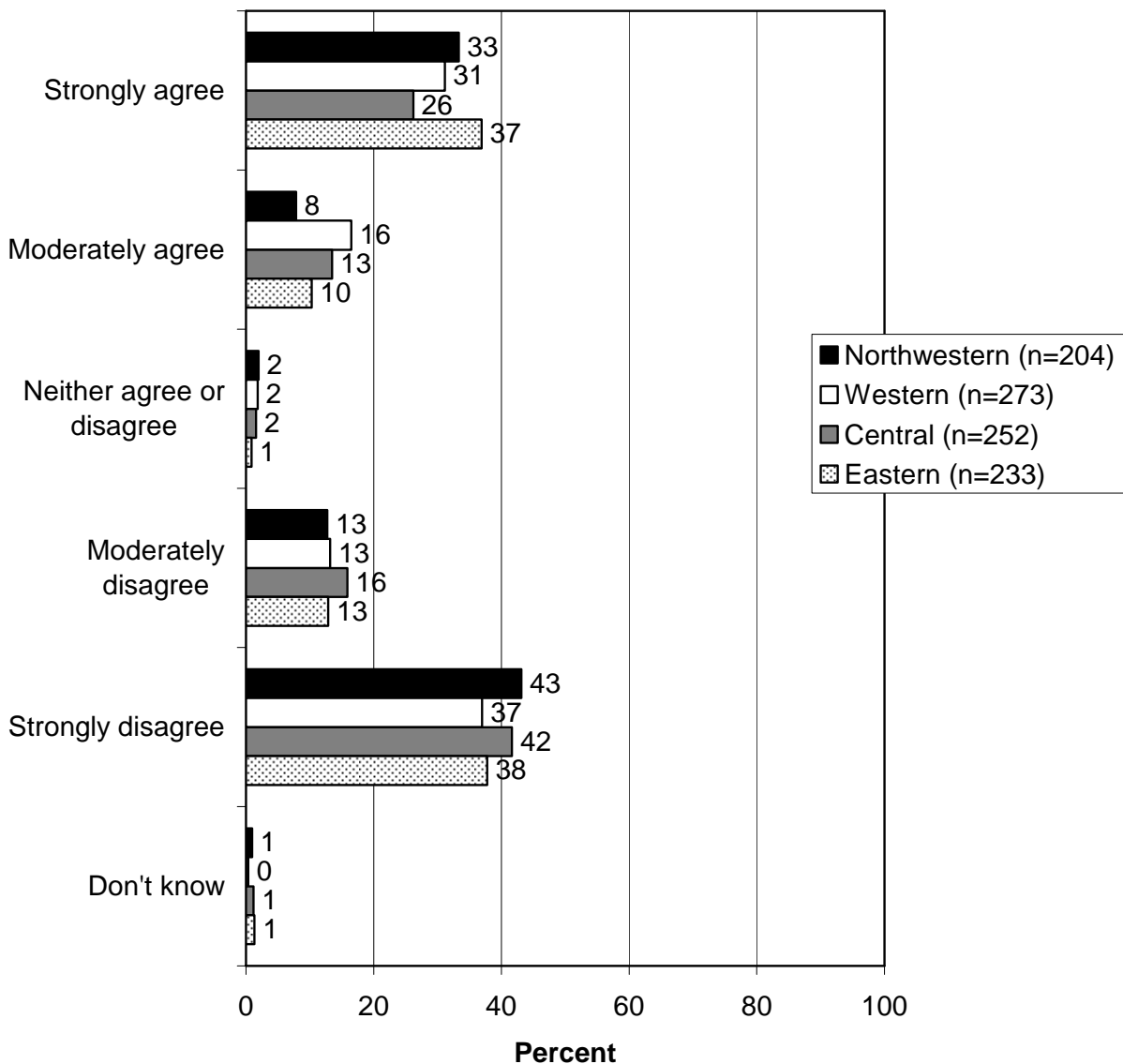
Q80. Have you eaten deer meat in the past 12 months?



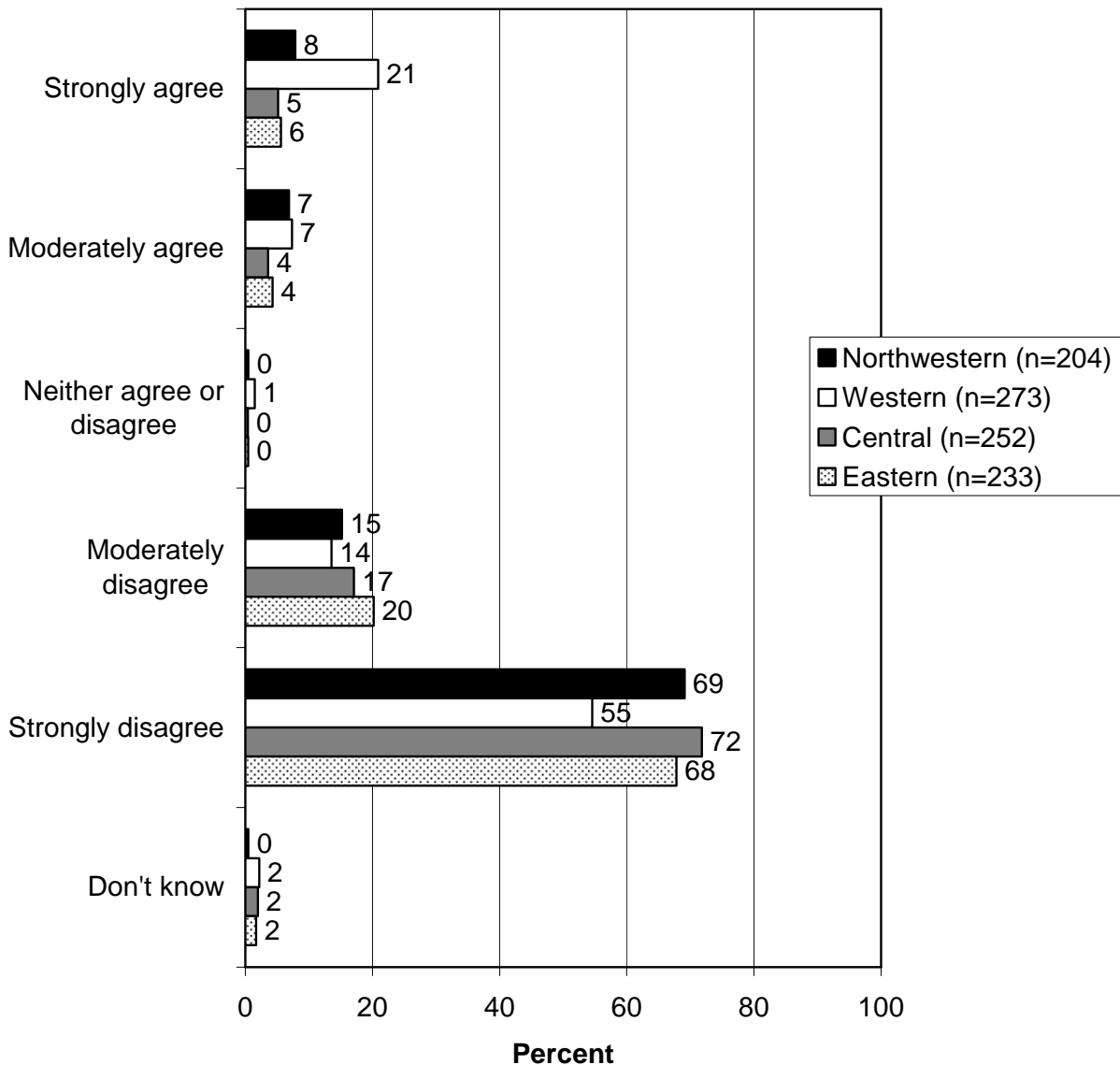
Q81. Have you or other members of your household hunted deer on your property in [county] county in the past 5 years?



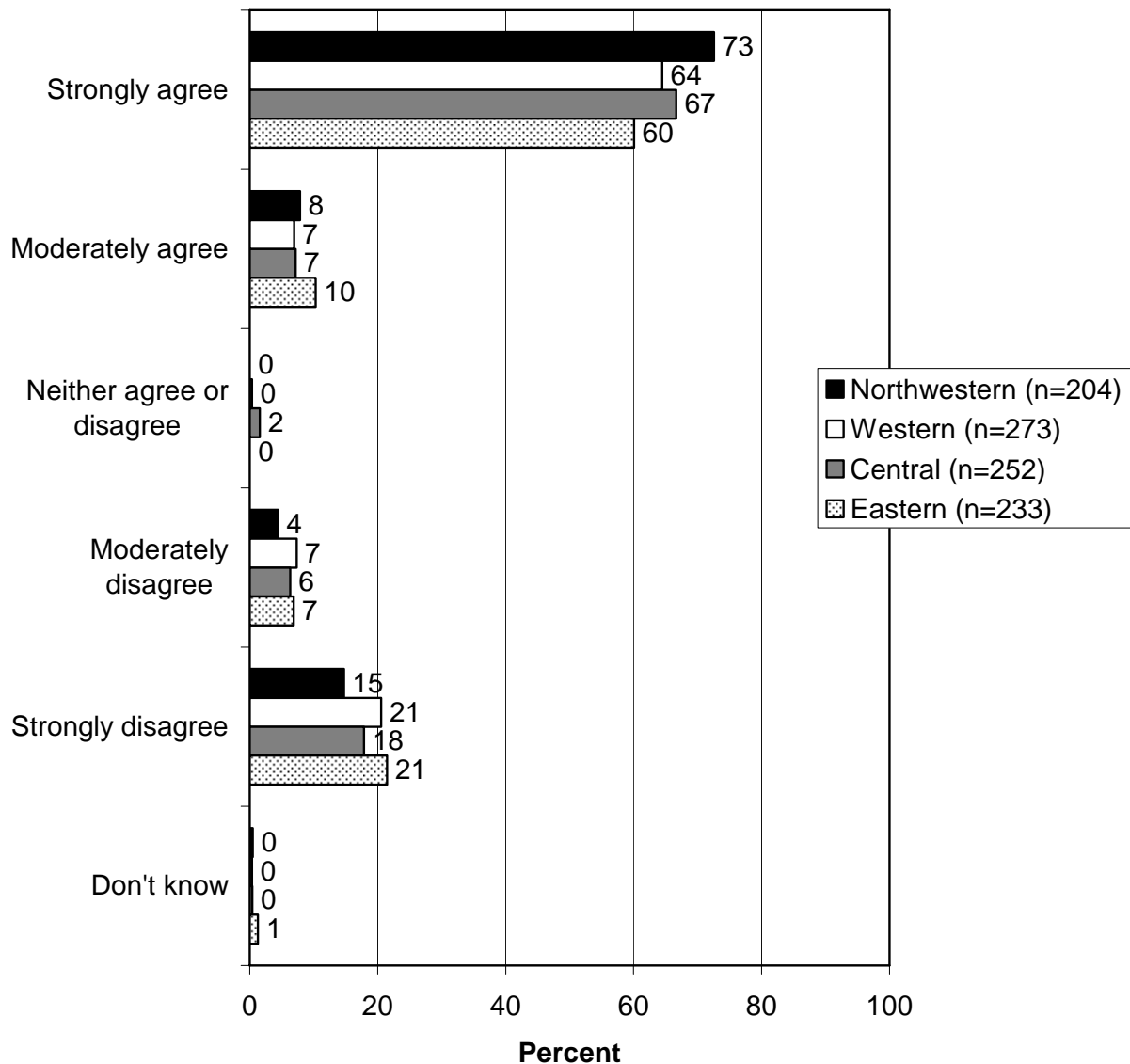
Q83. My property is too small for deer hunting. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



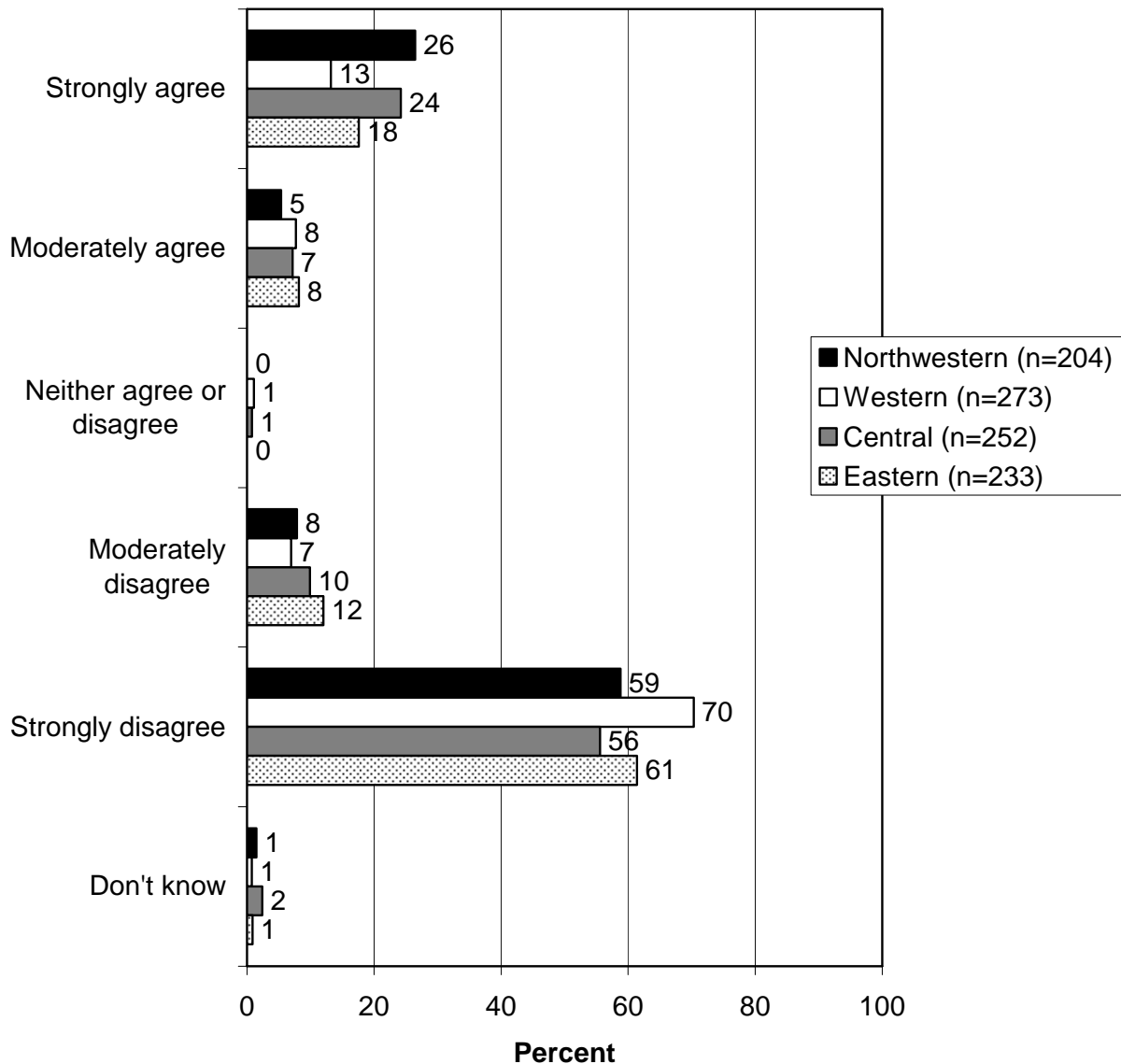
Q84. There are no deer on my property. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



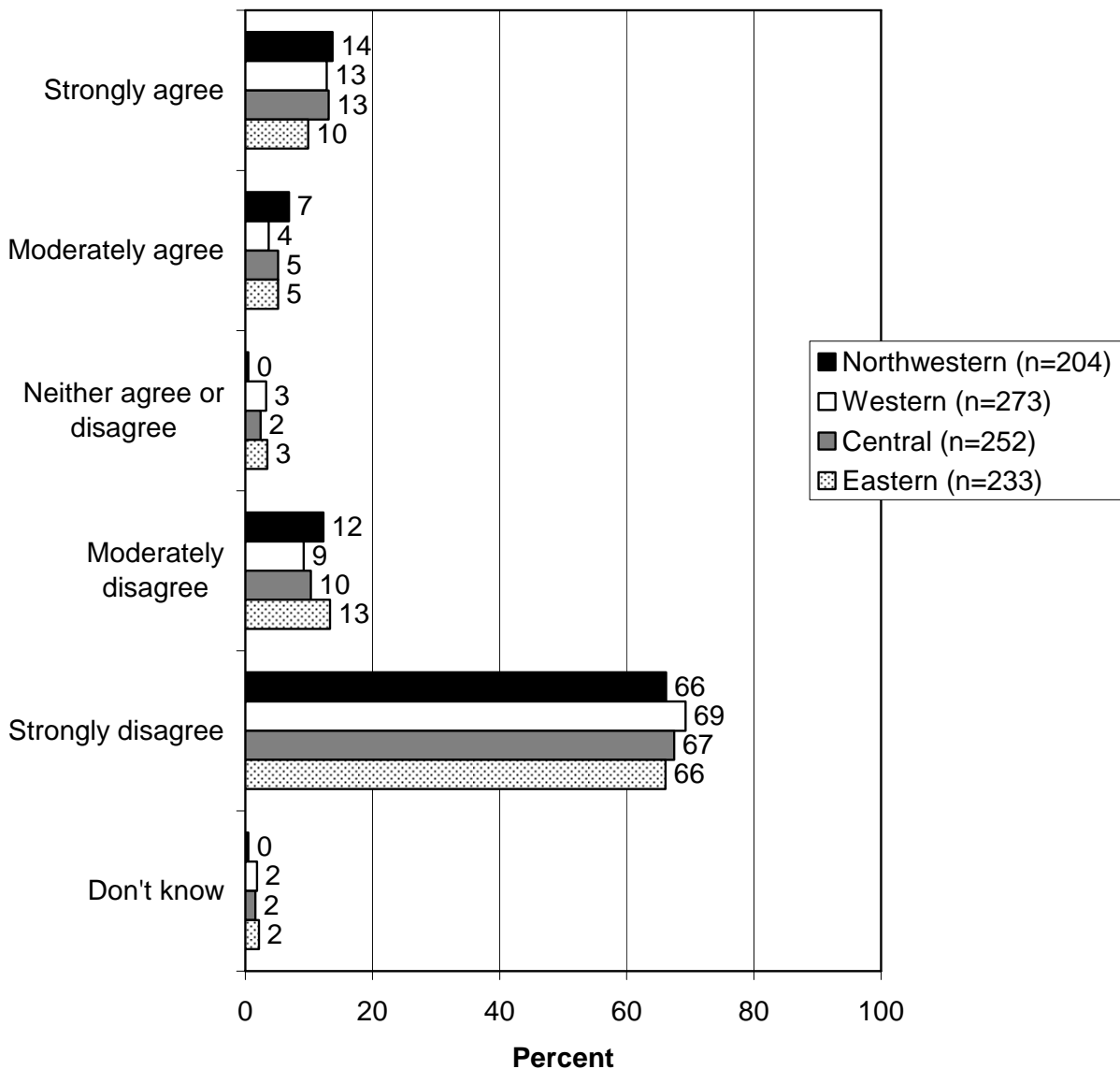
Q85. No one in my household hunts. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



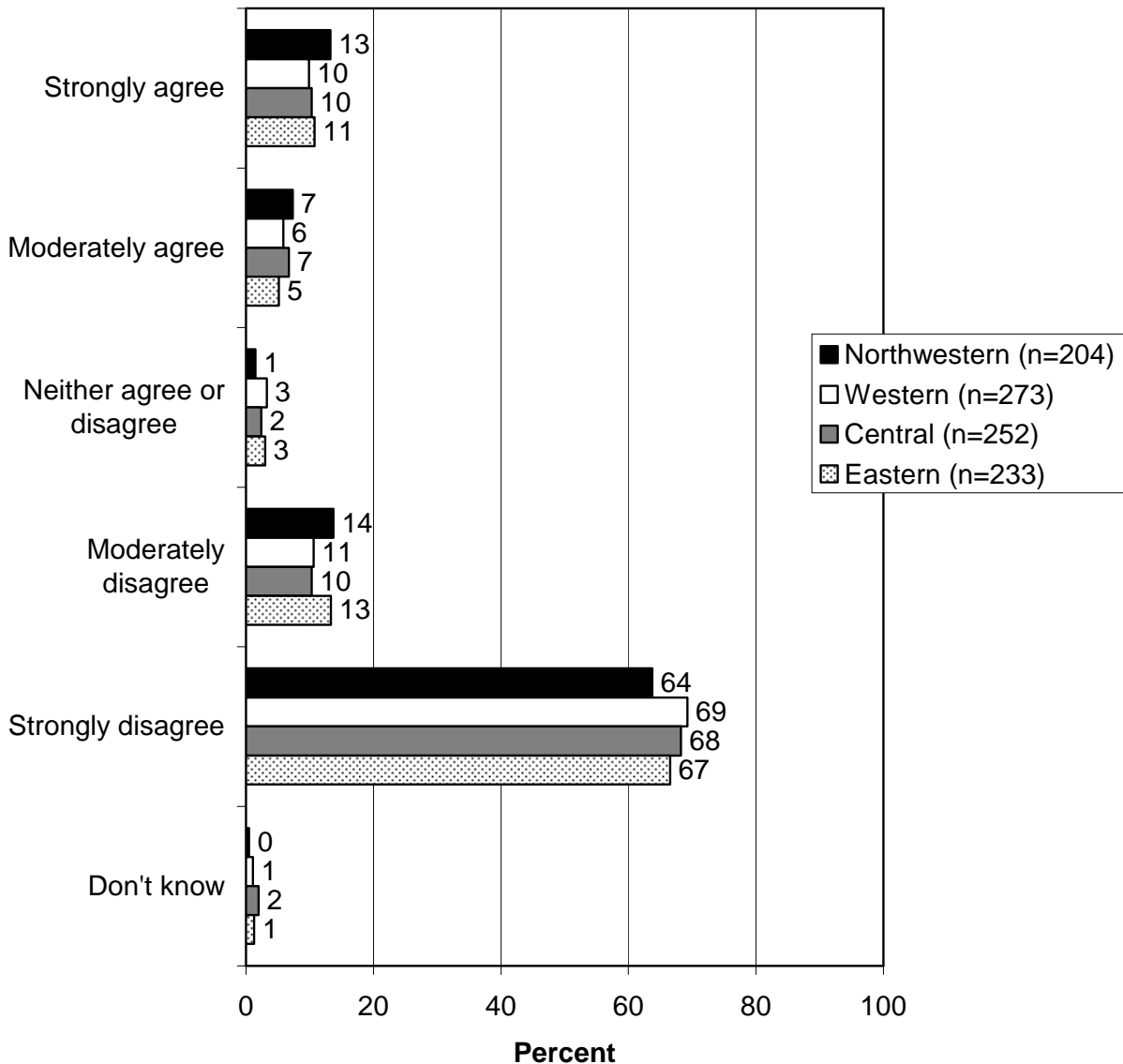
Q86. Someone outside my household hunts deer on my property. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



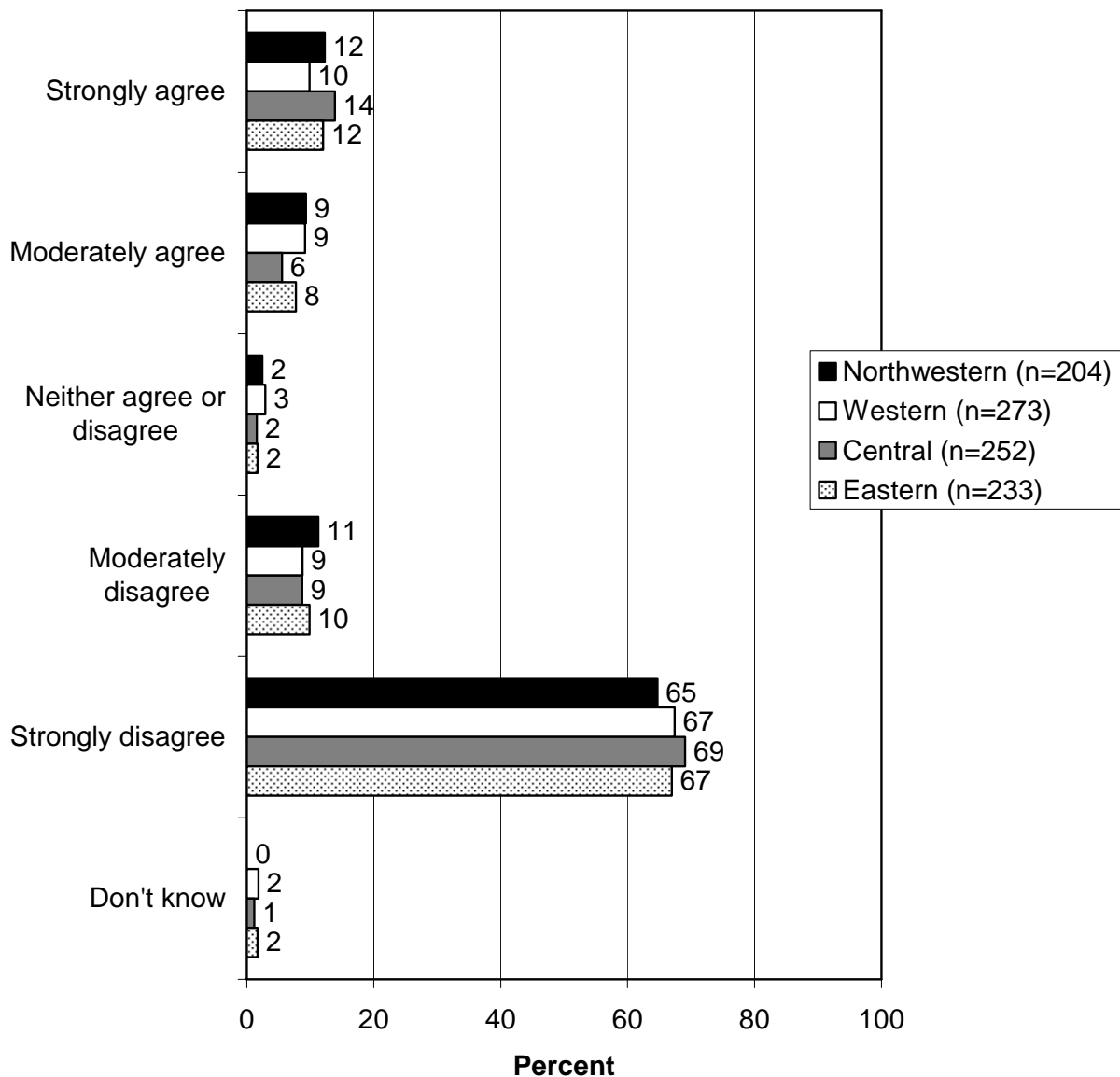
Q87. My work commitments limit my time to hunt. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



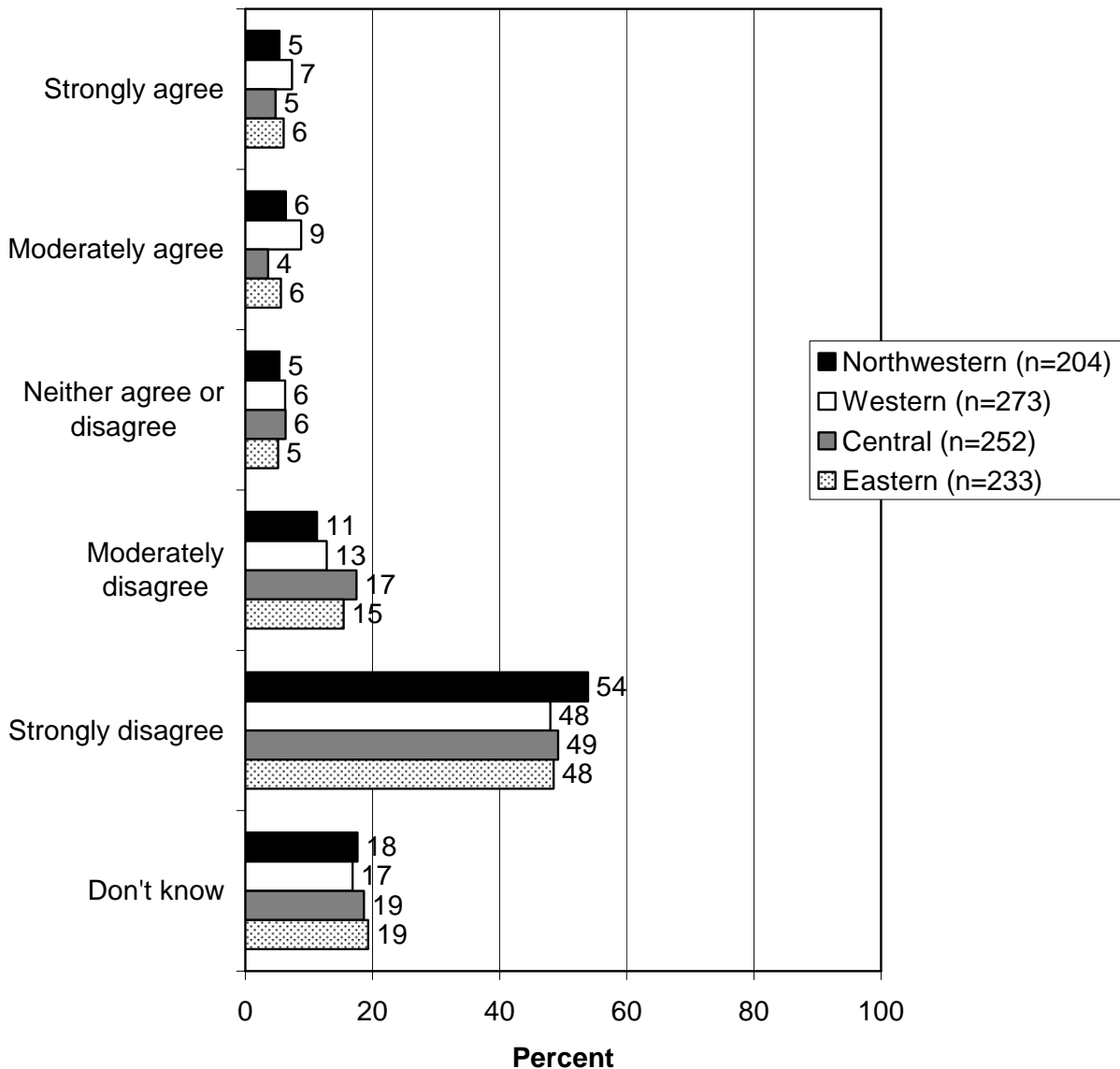
Q88. My family commitments limit my time to hunt. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



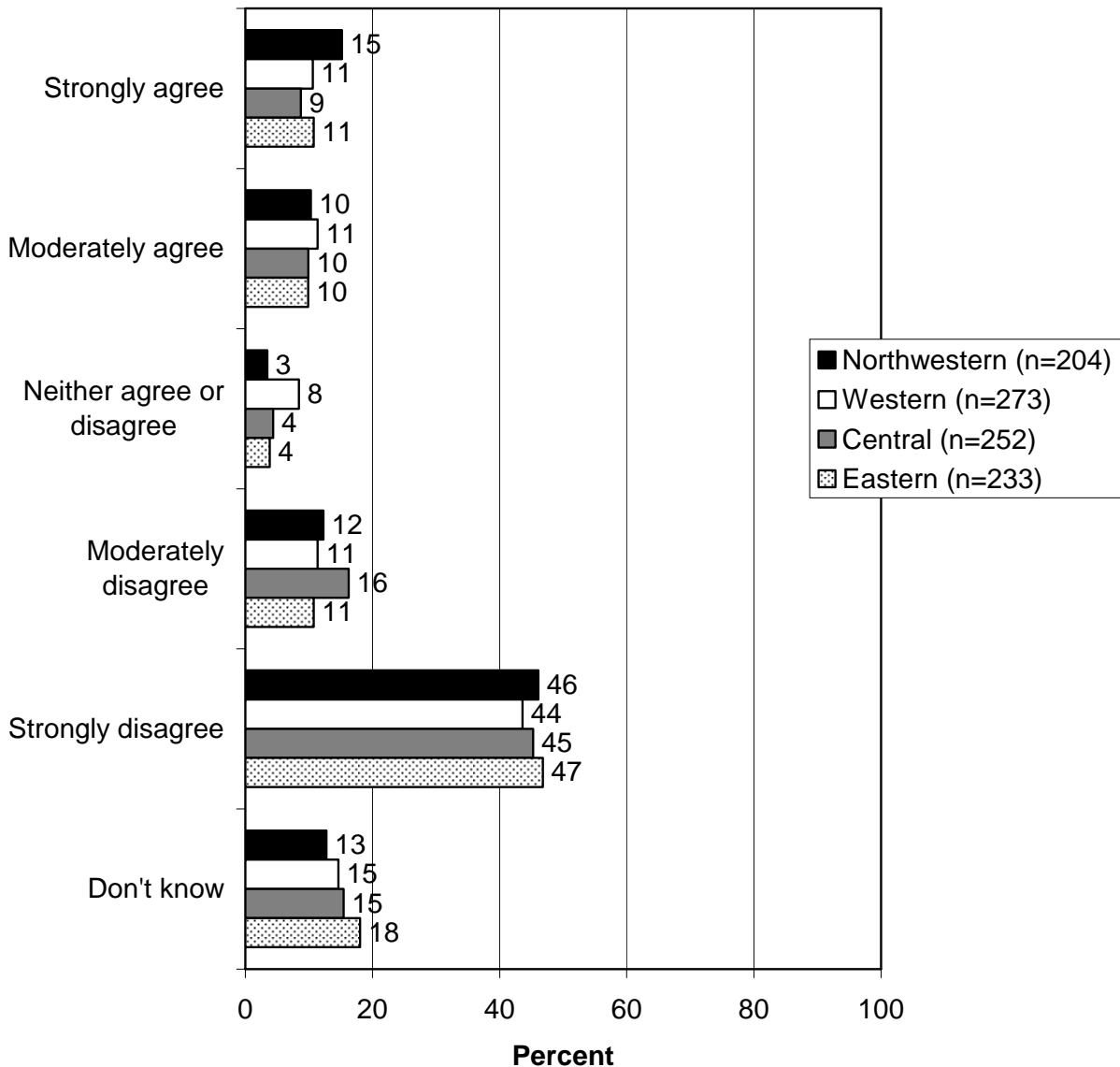
Q89. My health or my age limits my hunting. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



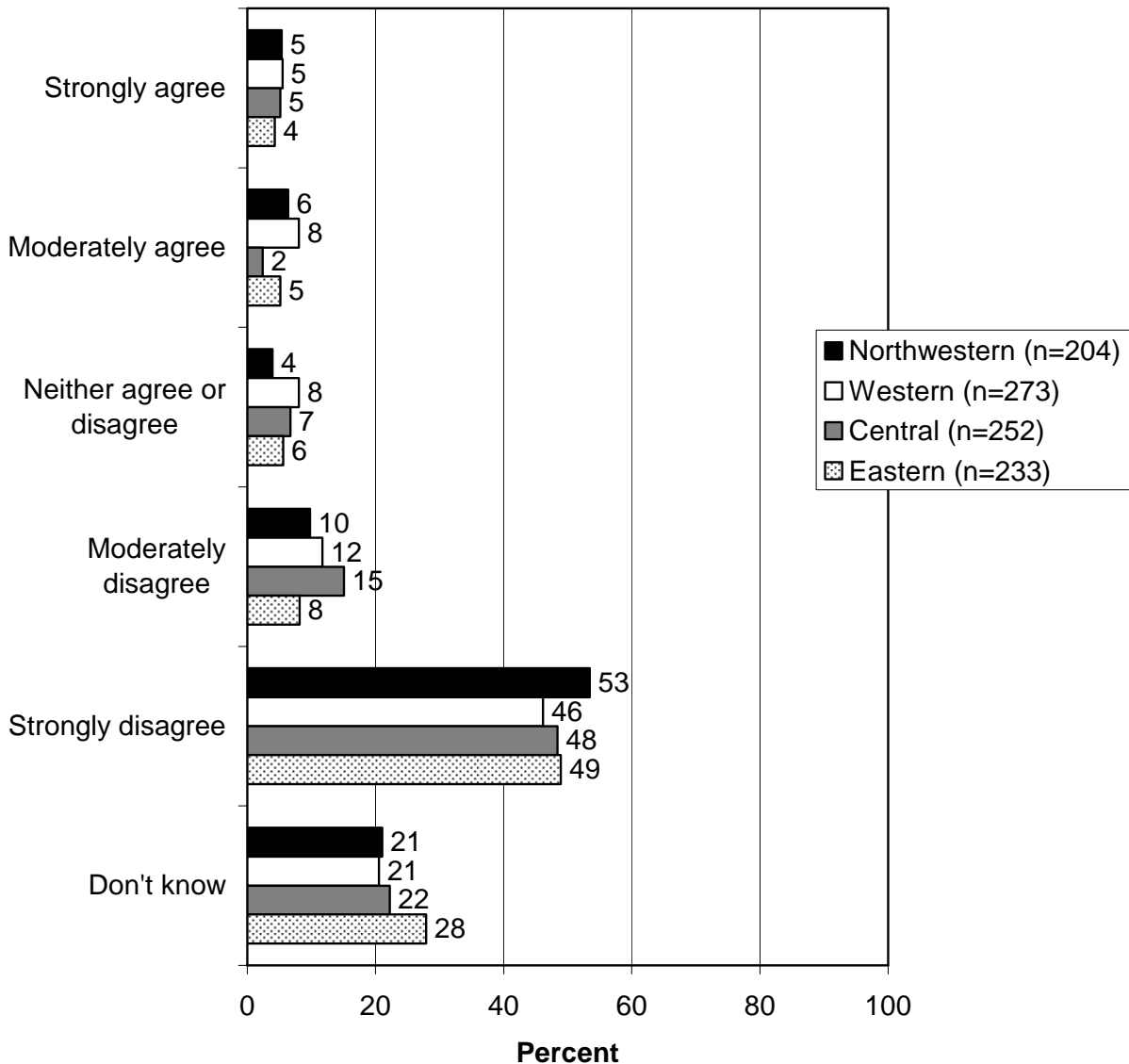
Q90. I think hunting regulations are too confusing. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



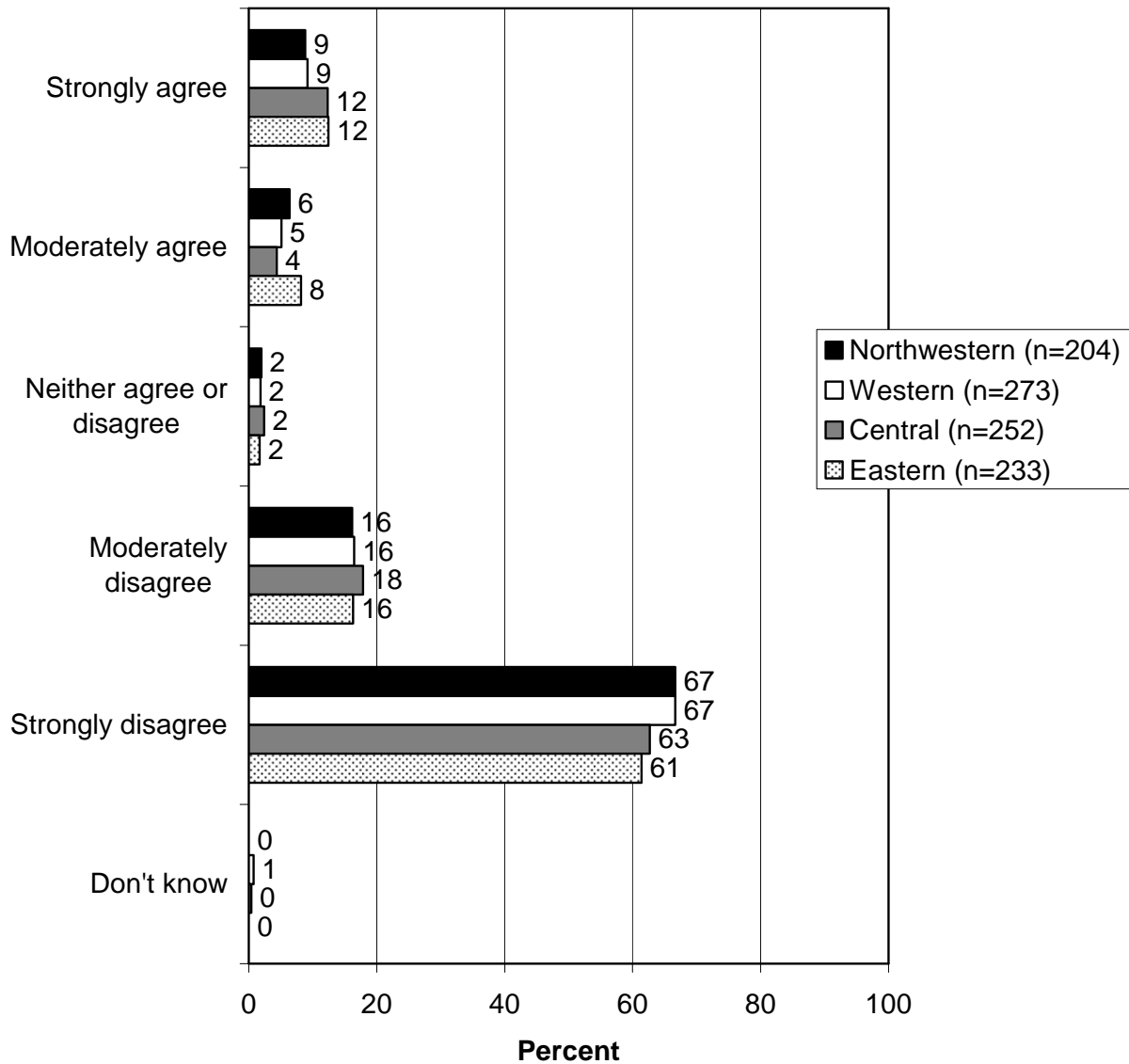
Q91. I think hunting equipment is too expensive. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



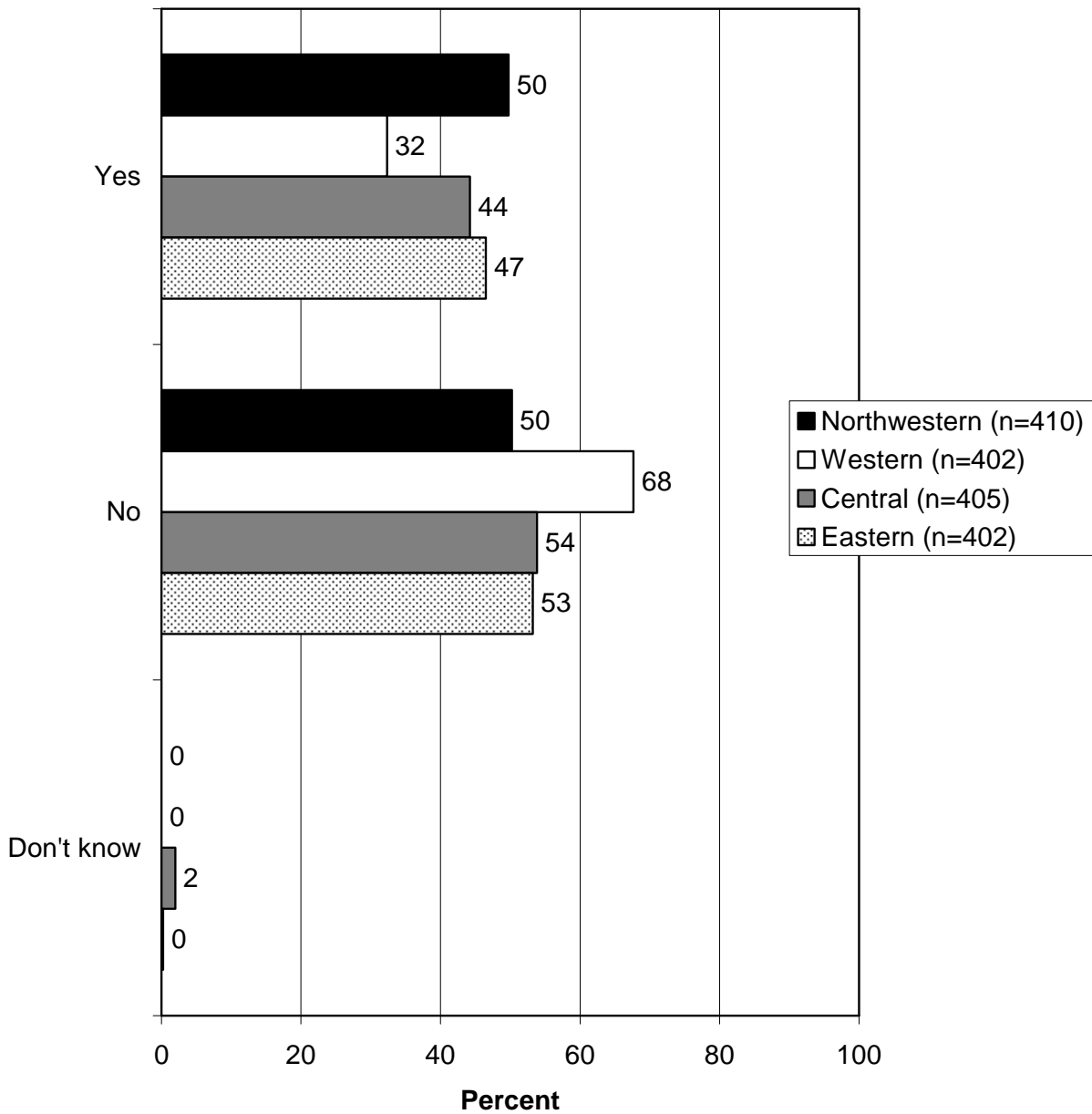
Q92. I think hunting licenses are too expensive. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



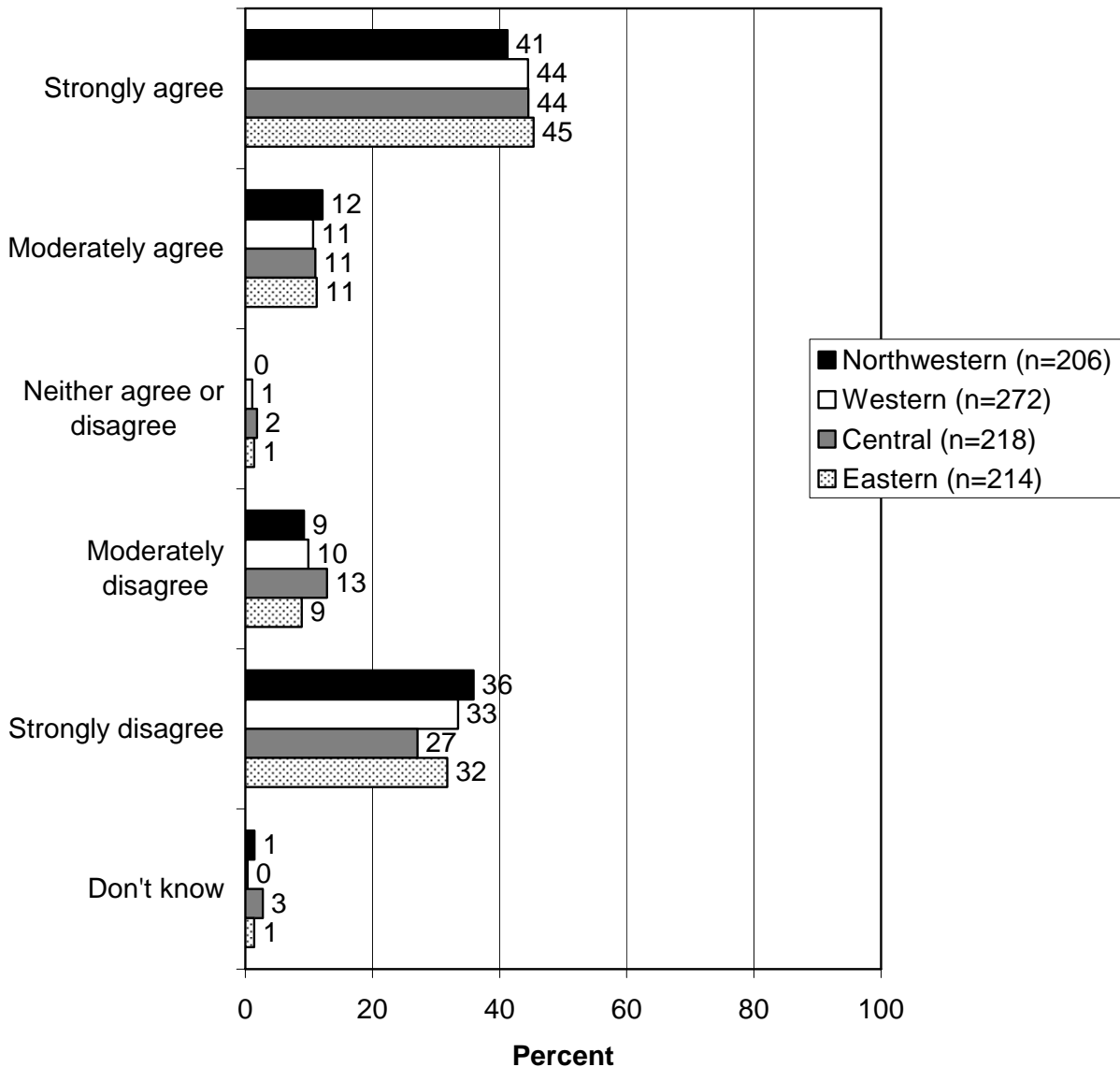
Q93. I disapprove of hunting. Do you agree or disagree that this was a reason that you or other members of your household did not hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not had any members of their household, including themselves, hunt deer in the past 5 years on their property in [county] County.)



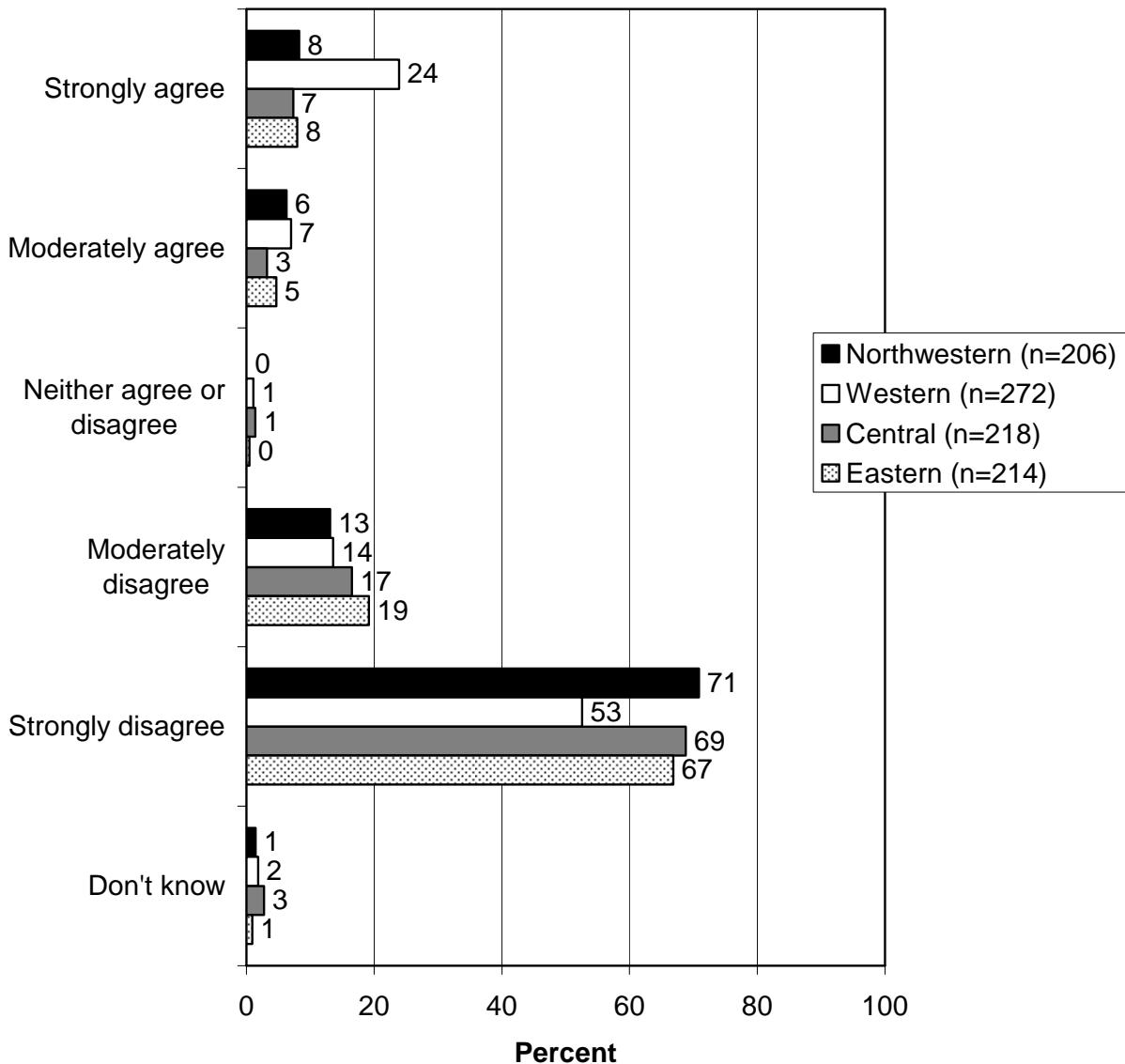
Q95. Have you allowed people other than members of your household to hunt deer on your property in [county] County in the past 5 years?



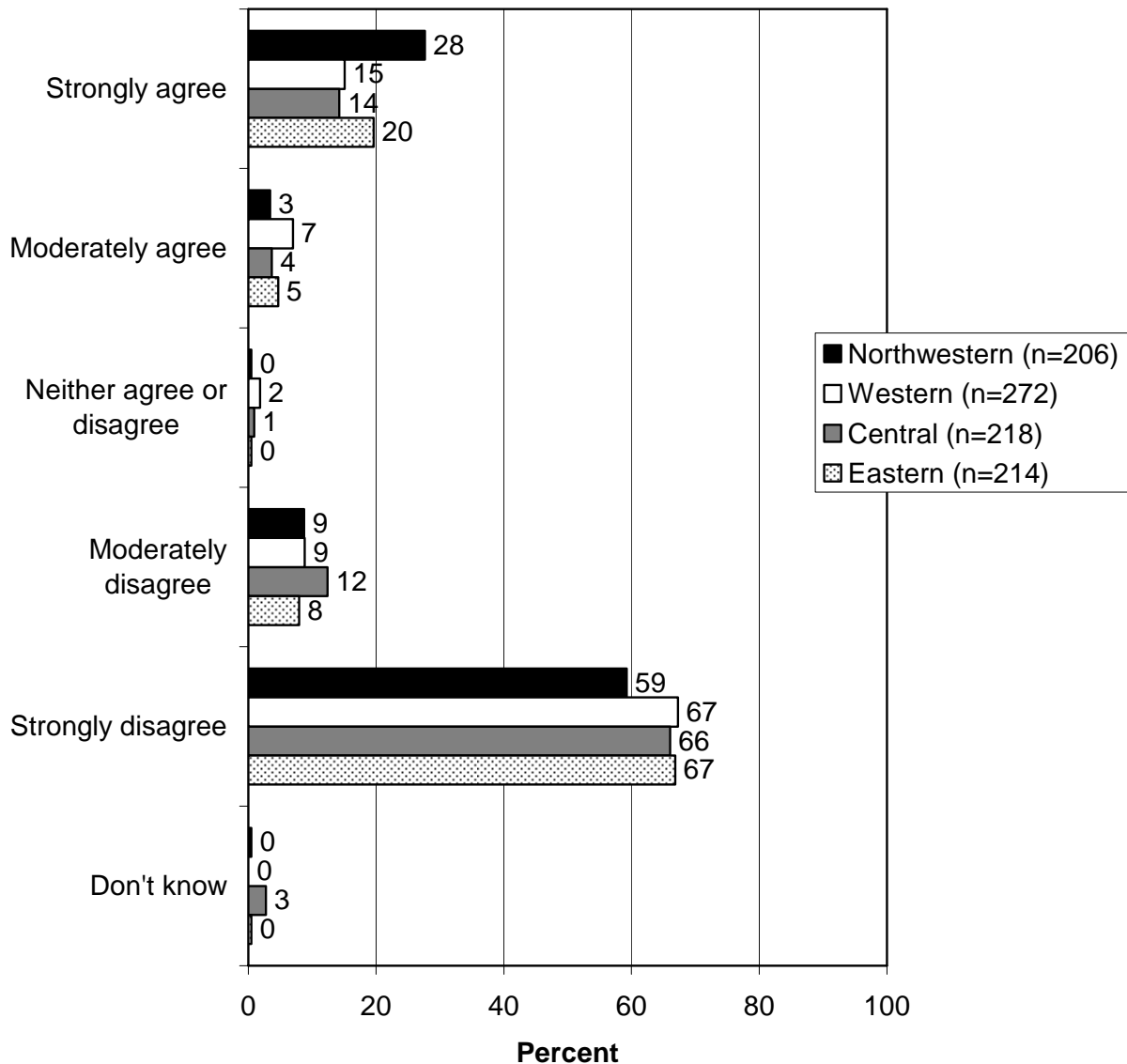
Q97. My property is too small for deer hunting. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



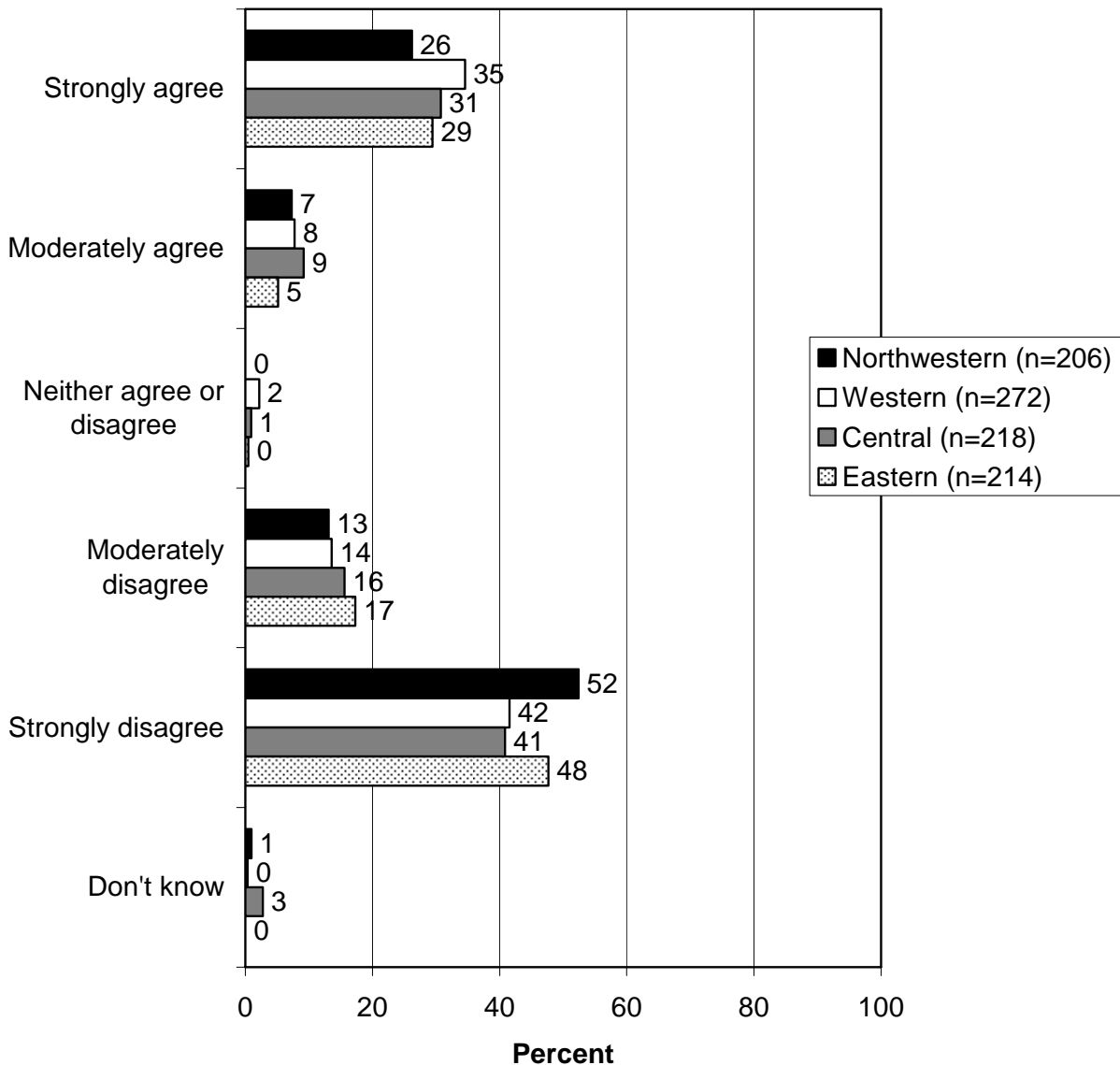
Q98. There are no deer on my property. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



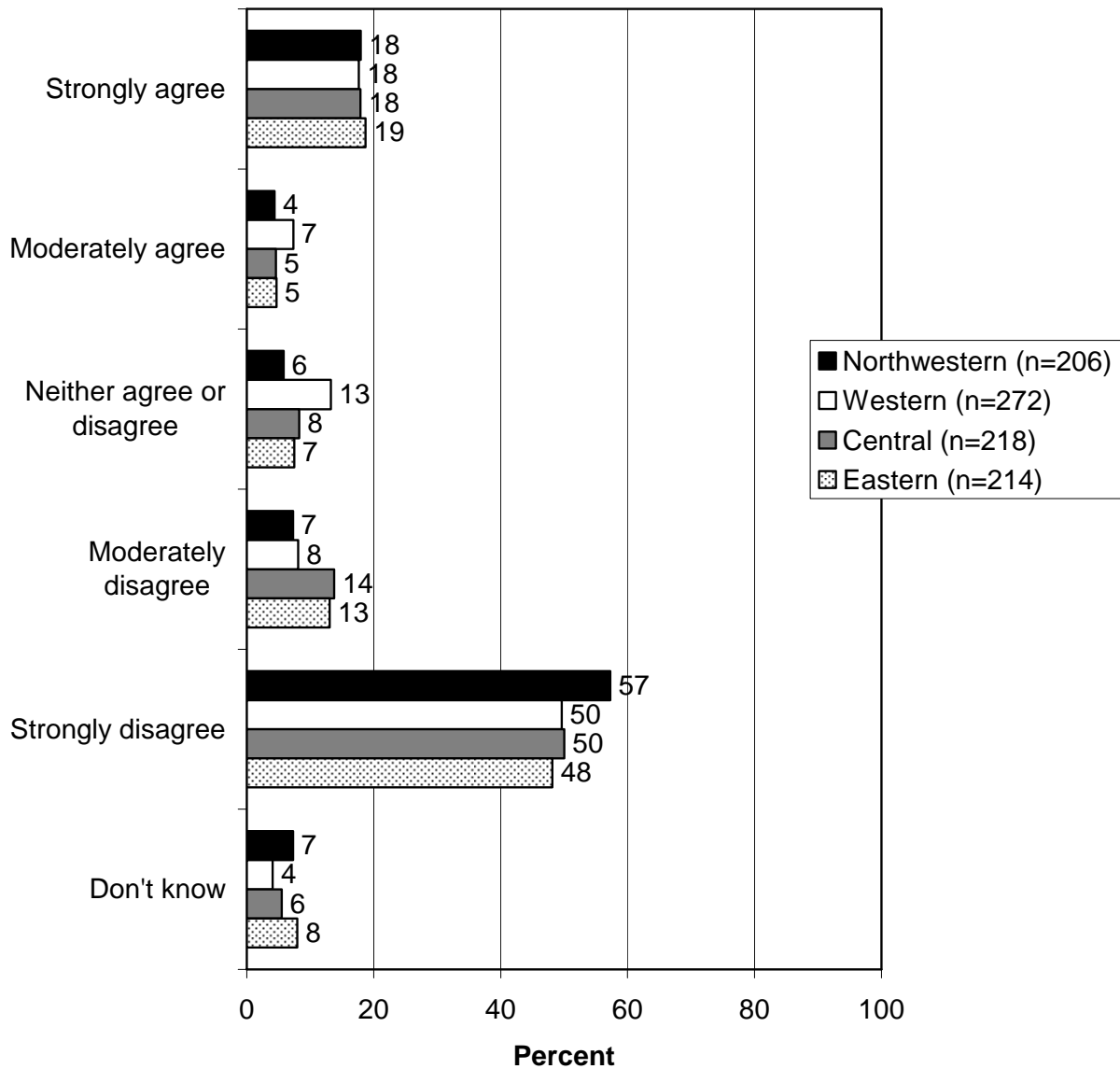
Q99. Someone in my household already hunts on the property. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



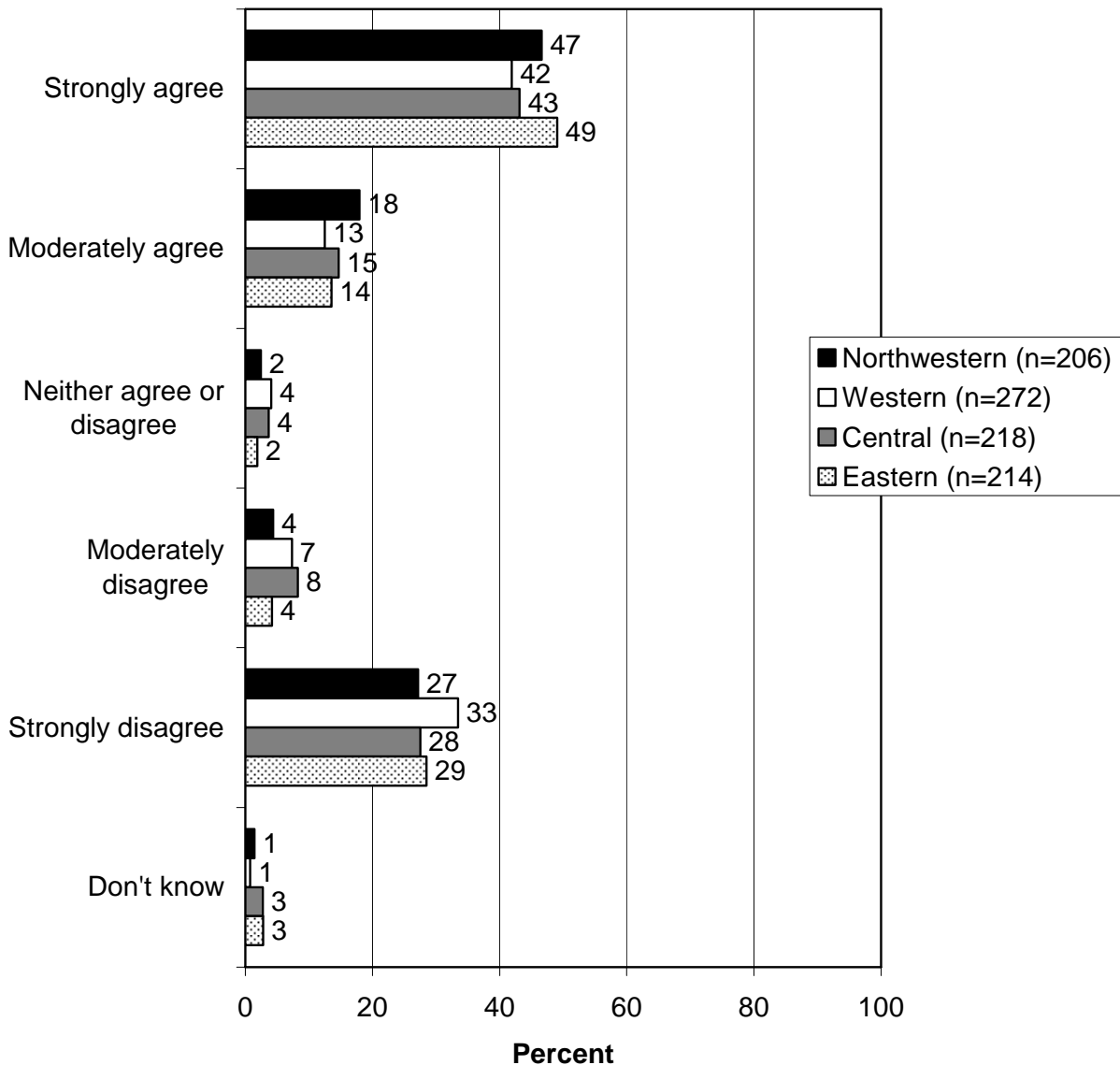
Q100. No one has expressed an interest in deer hunting on my property. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



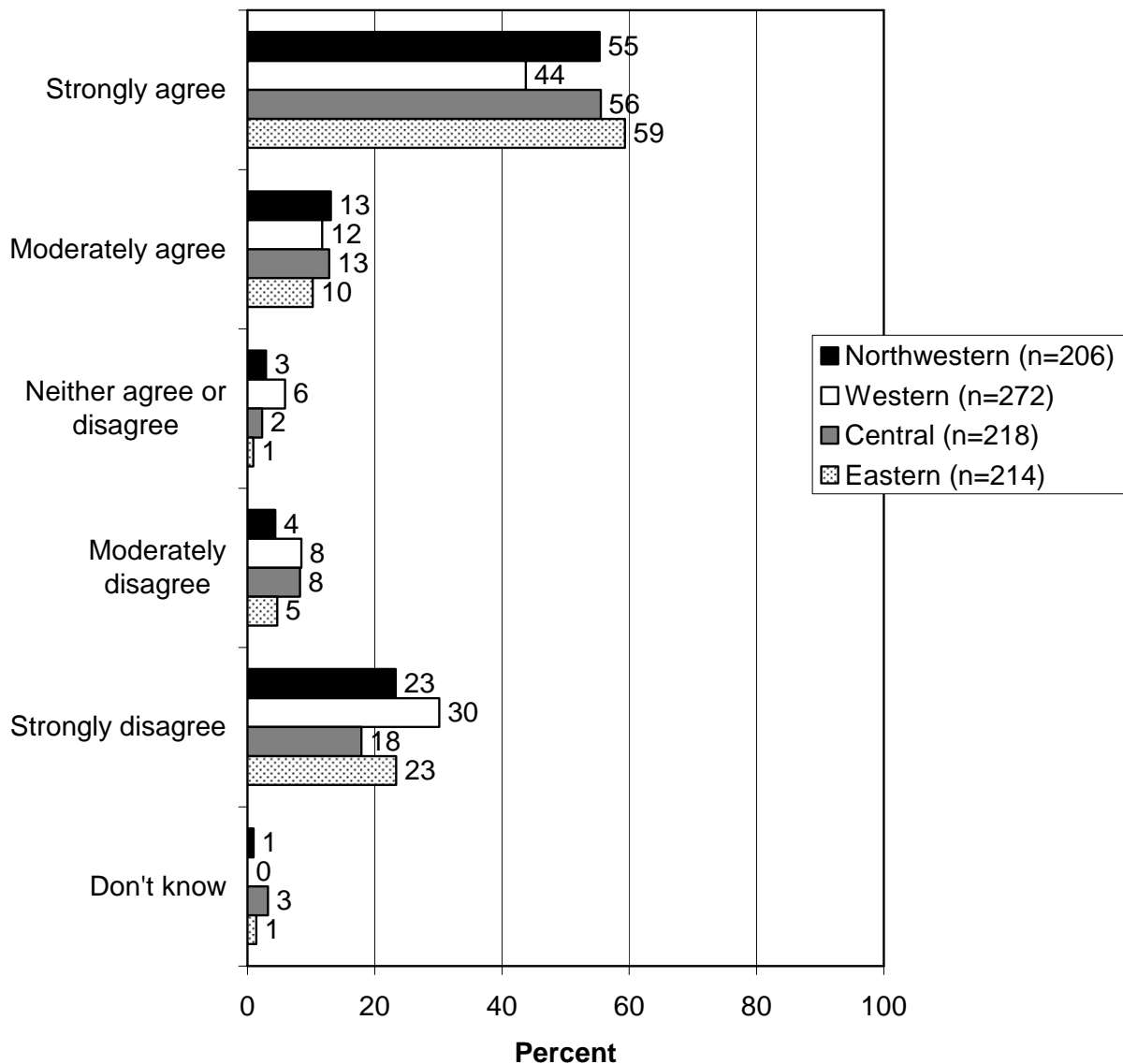
Q101. I would not be able to make enough money on deer hunting leases. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



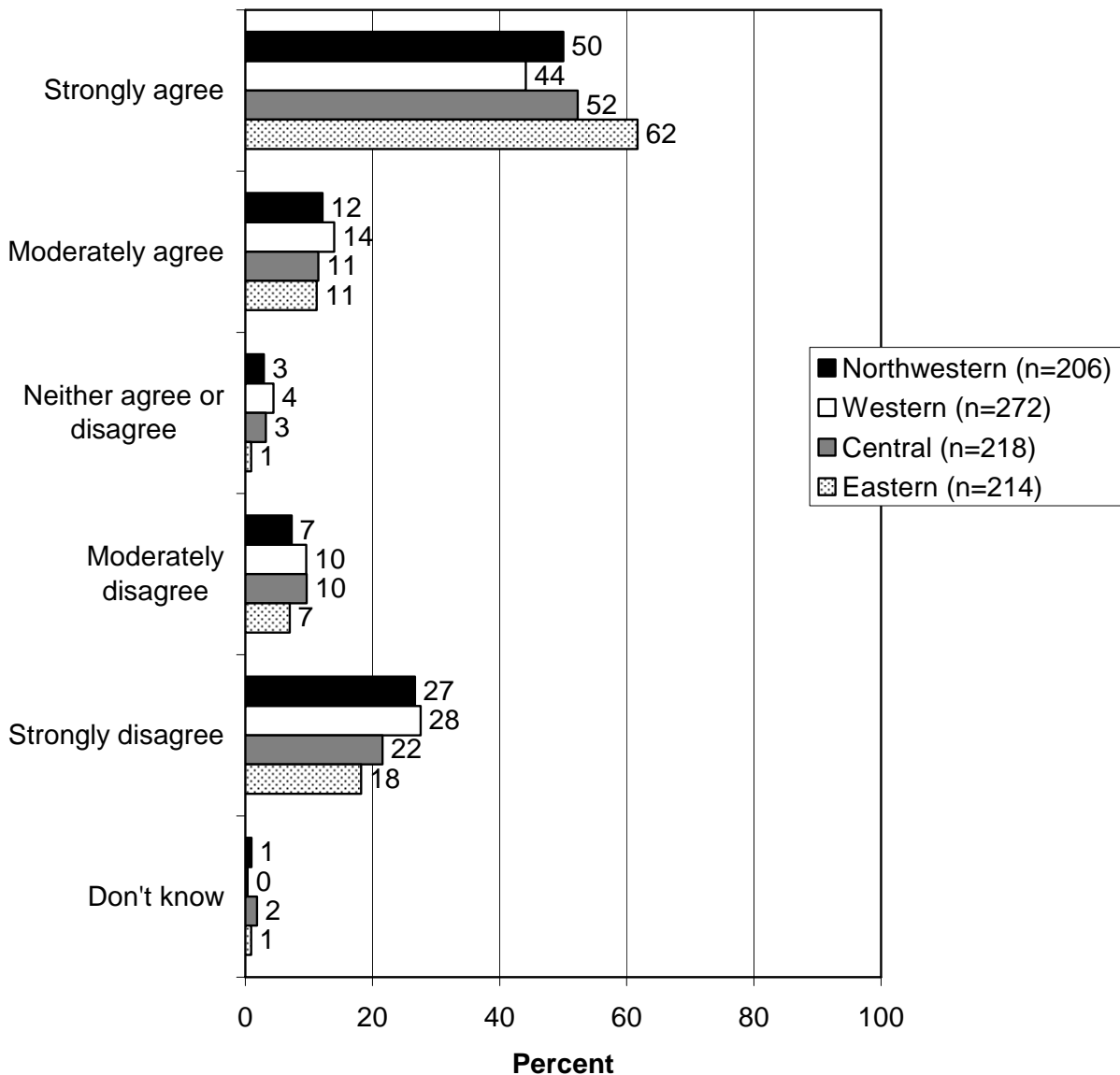
Q102. I am concerned about liability. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



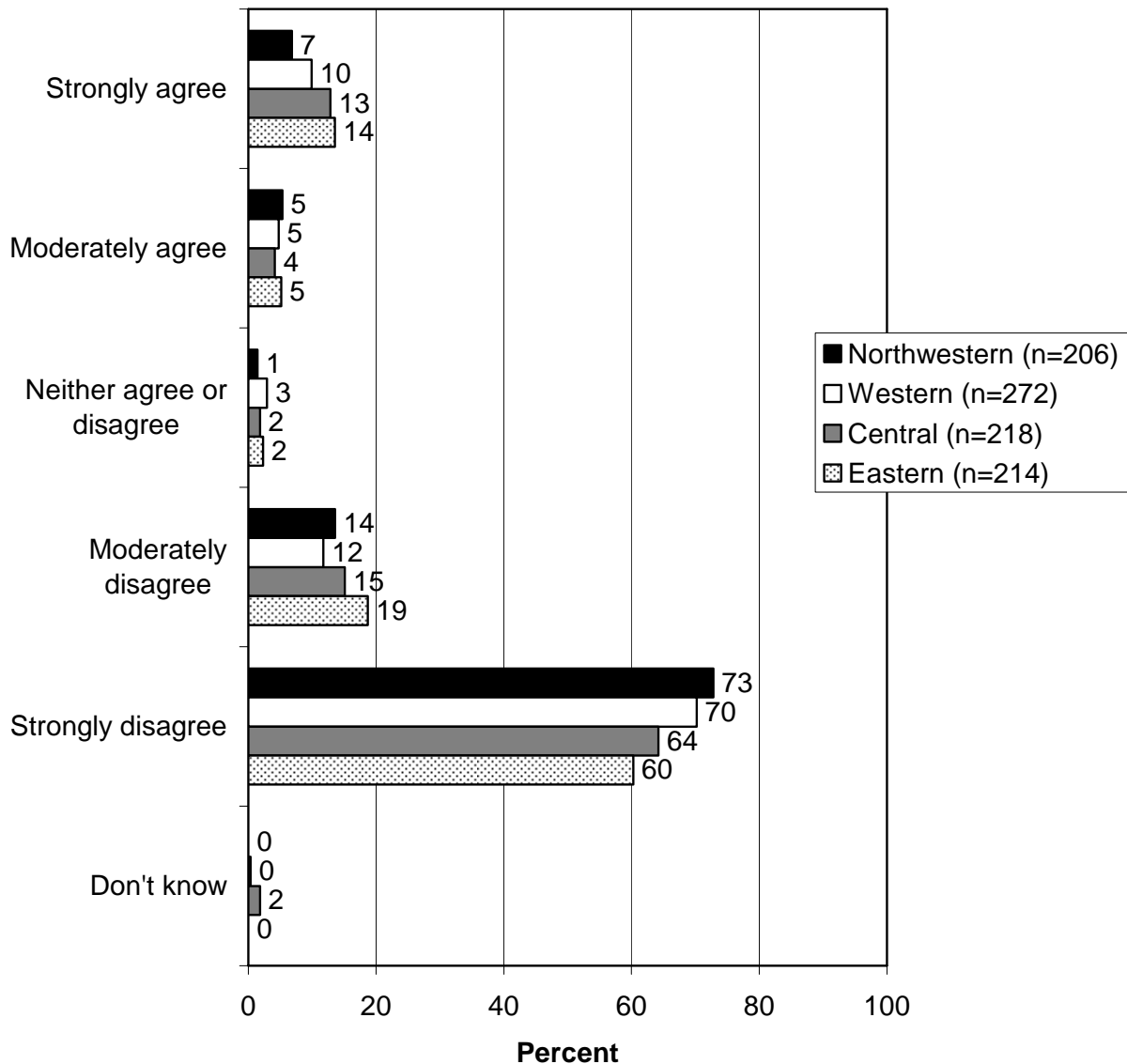
Q103. I am concerned about a hunter injuring another person on my property. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



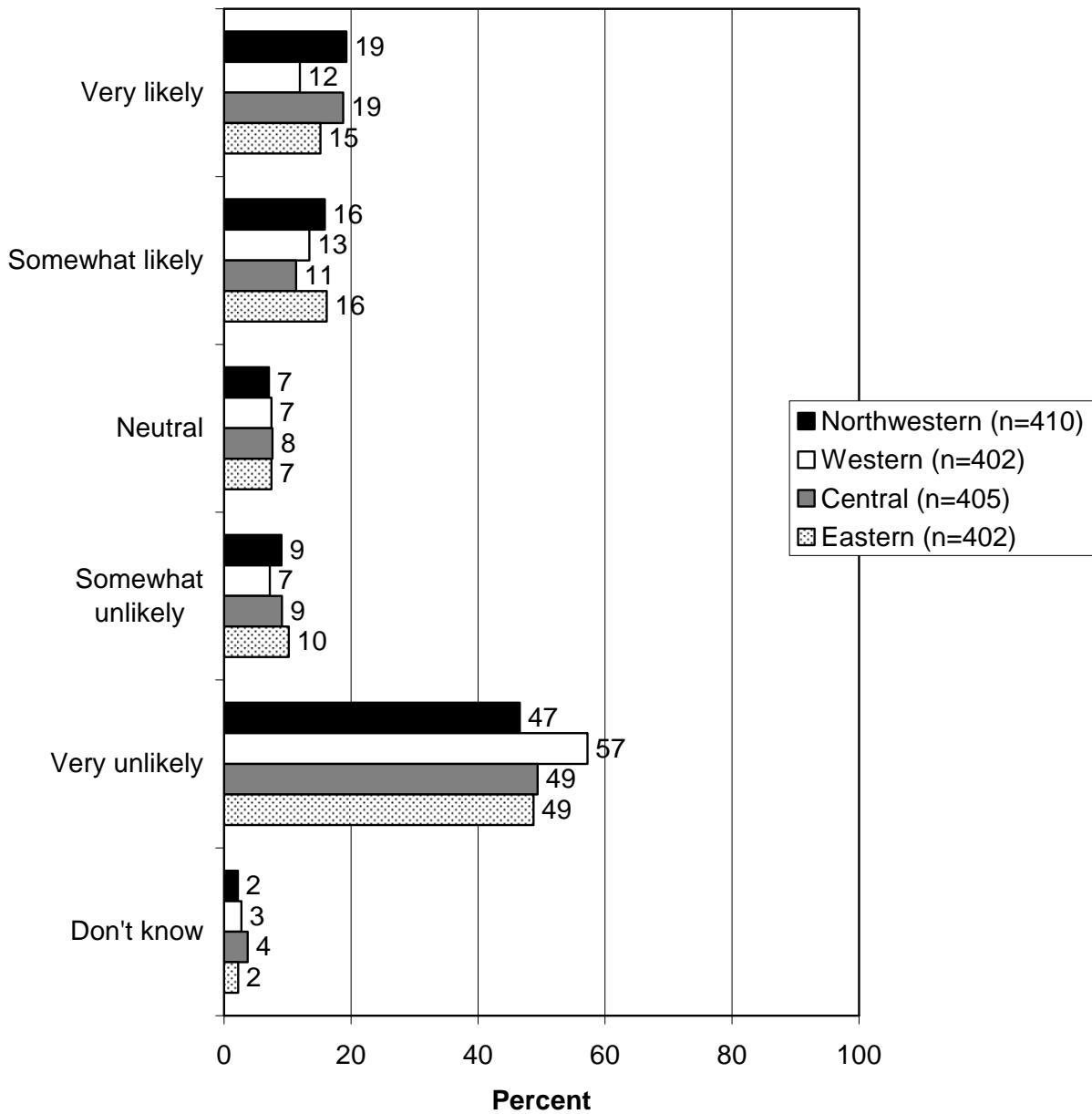
Q104. I am concerned about trespassing on my property. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



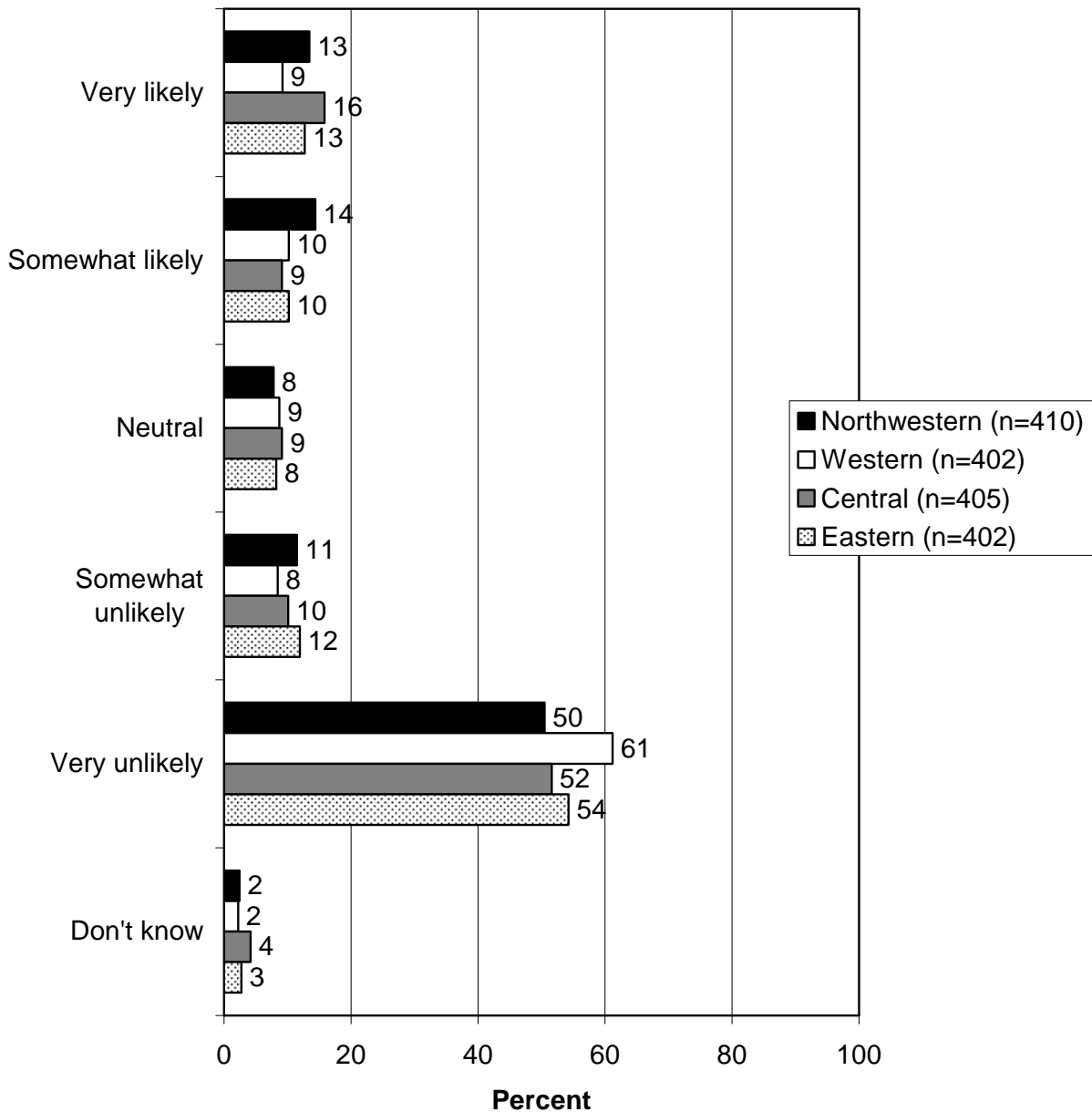
Q105. I disapprove of hunting. Do you agree or disagree that this was a reason that you did not allow people, outside of your household, to hunt deer on your property in [county] County in the past 5 years? (Asked of those who have not allowed people, outside of their household, to hunt deer in the past 5 years on their property in [county] County.)



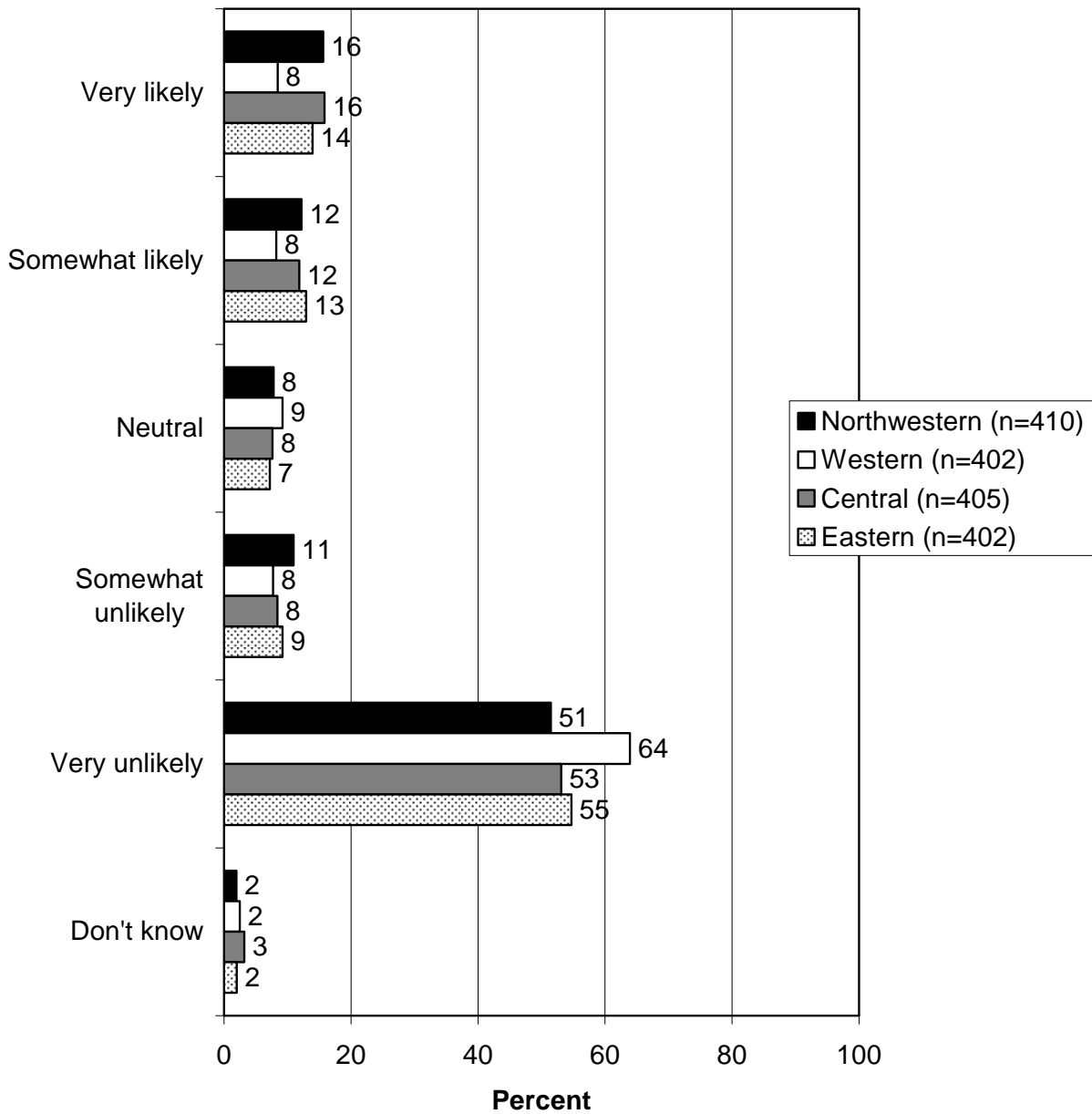
Q108. Would you be likely or unlikely to allow deer hunting on your property if the hunters only used bows and arrows?



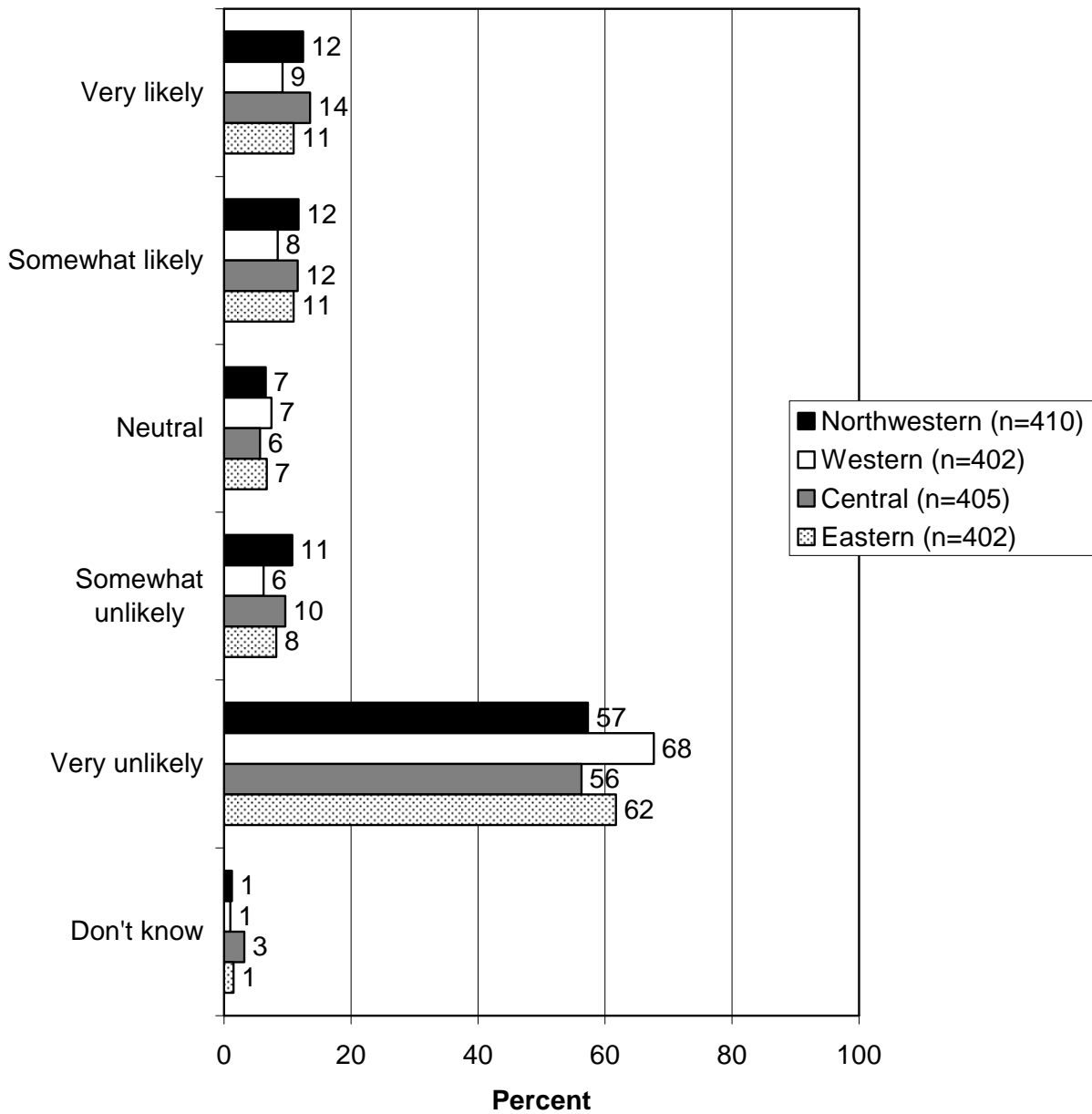
Q109. Would you be likely or unlikely to allow deer hunting on your property if the hunters only used muzzleloaders or bows and arrows?



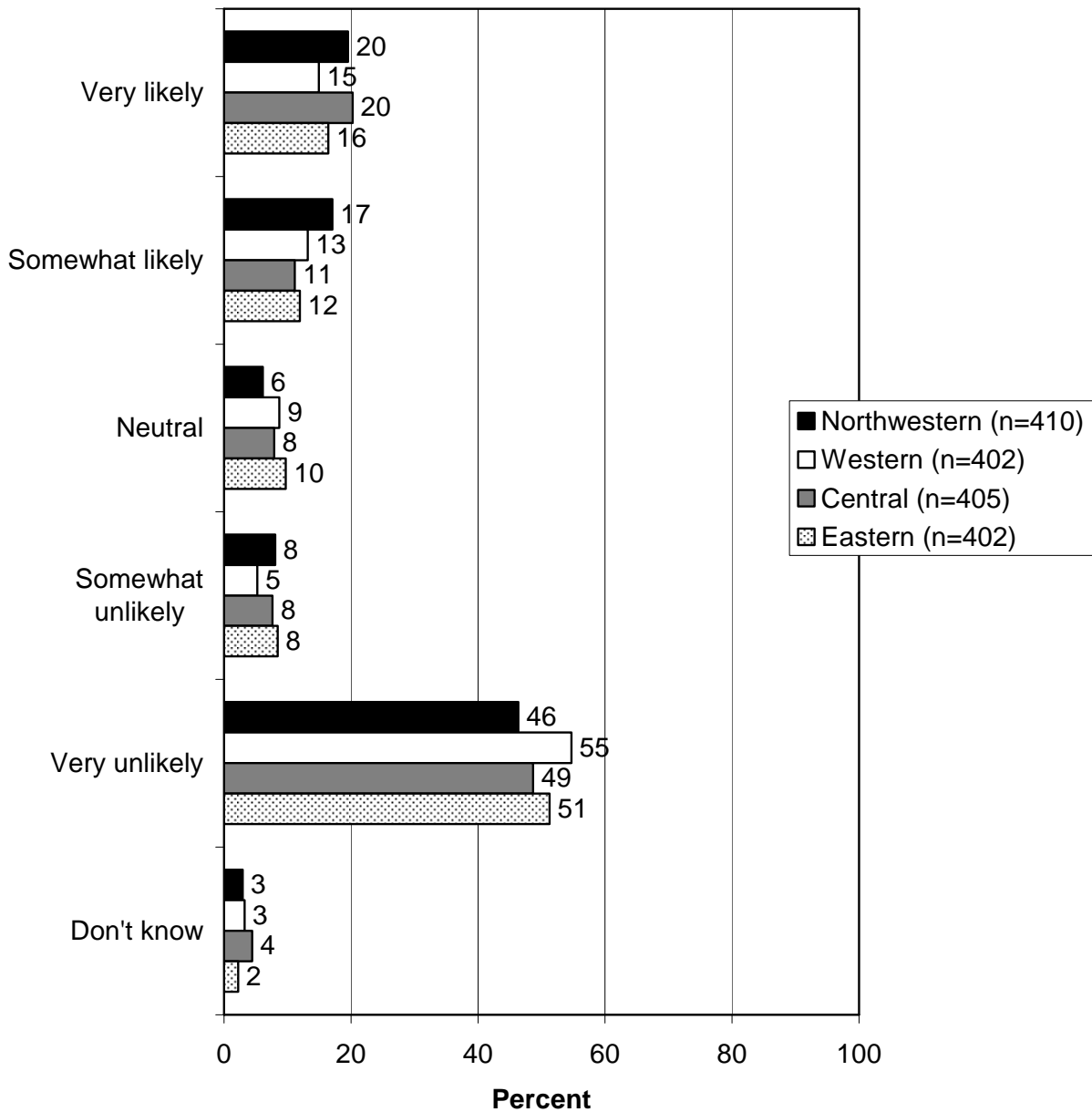
Q110. Would you be likely or unlikely to allow deer hunting on your property if the hunters used only shotguns or bows and arrows?



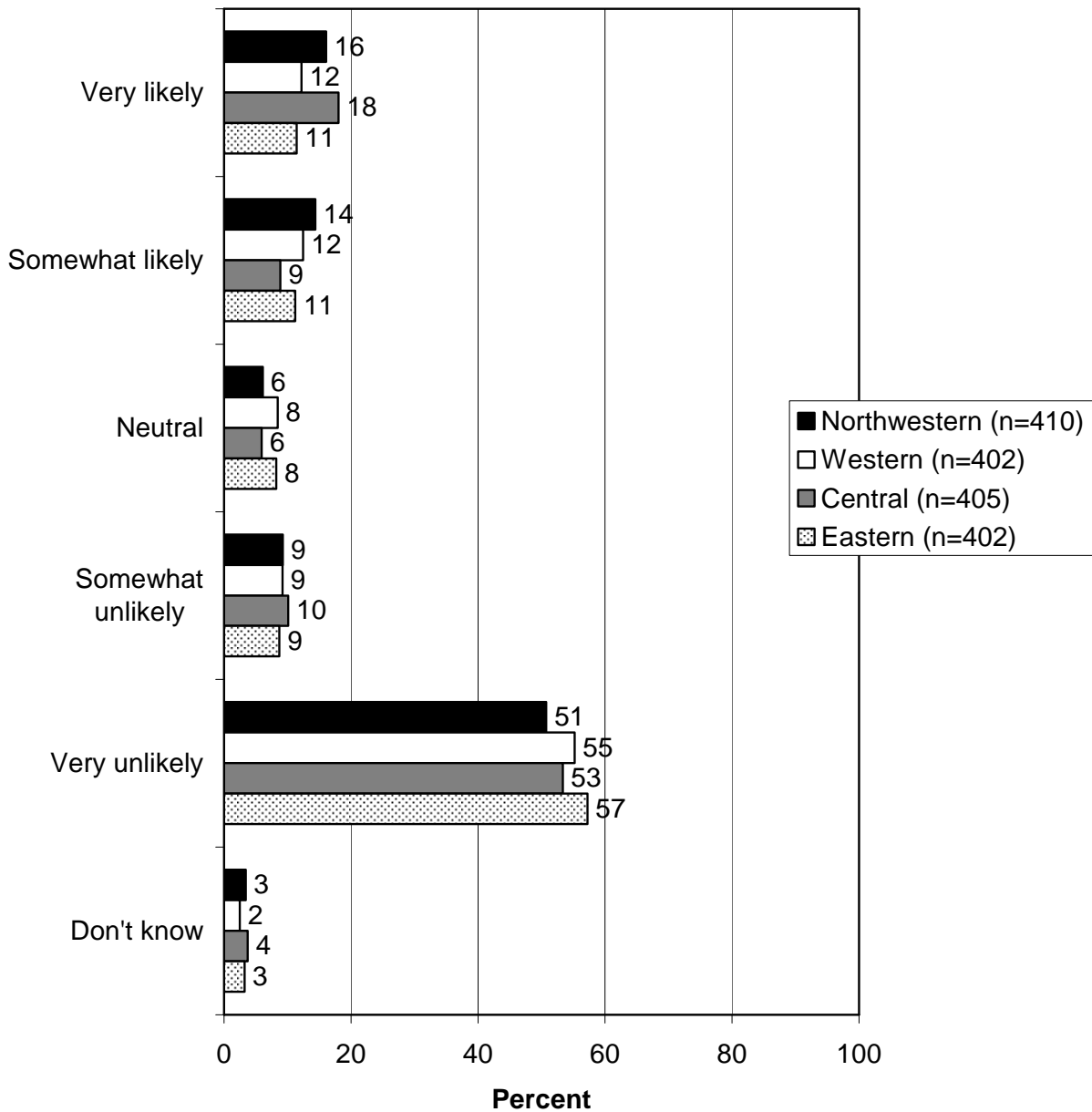
Q111. Would you be likely or unlikely to allow deer hunting on your property if the hunters used any legal weapon?



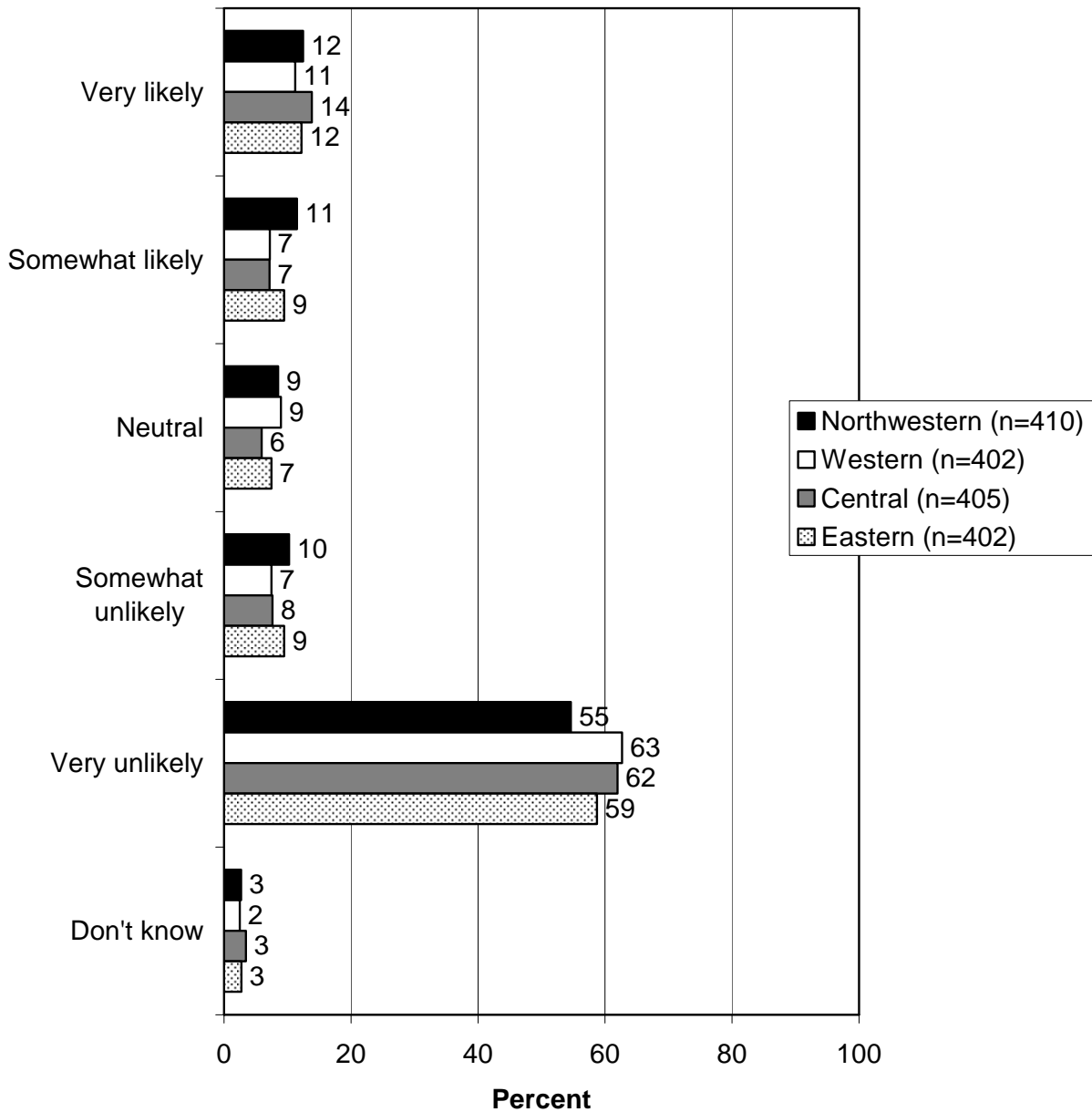
Q112. Would you be likely or unlikely to allow deer hunting on your property if you knew that the hunters had passed a Wildlife Resources Commission hunter certification program?



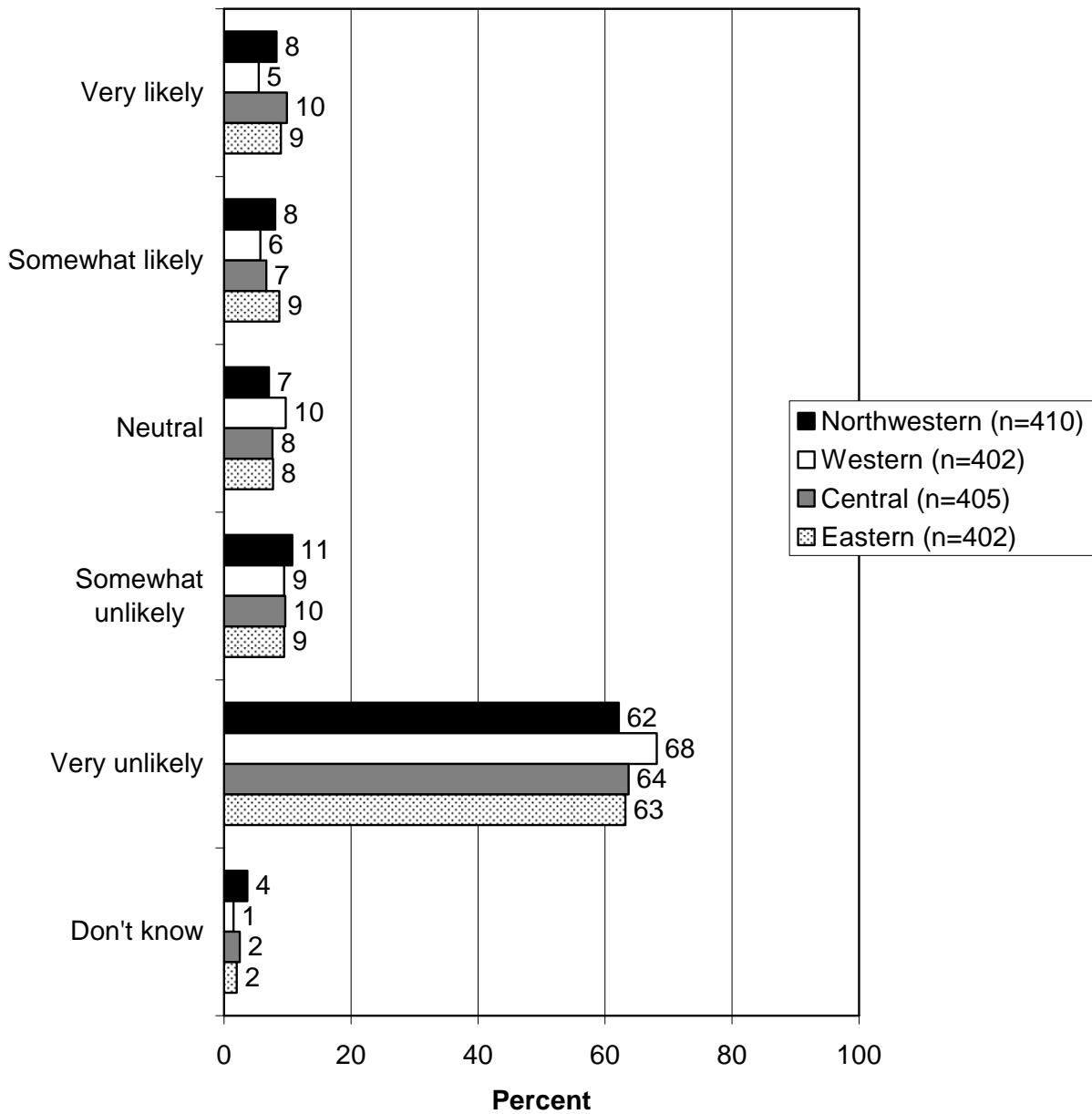
Q113. Would you be likely or unlikely to allow deer hunting on your property if the hunters assisted with planting or maintaining crops, food plots, or wildlife habitat?



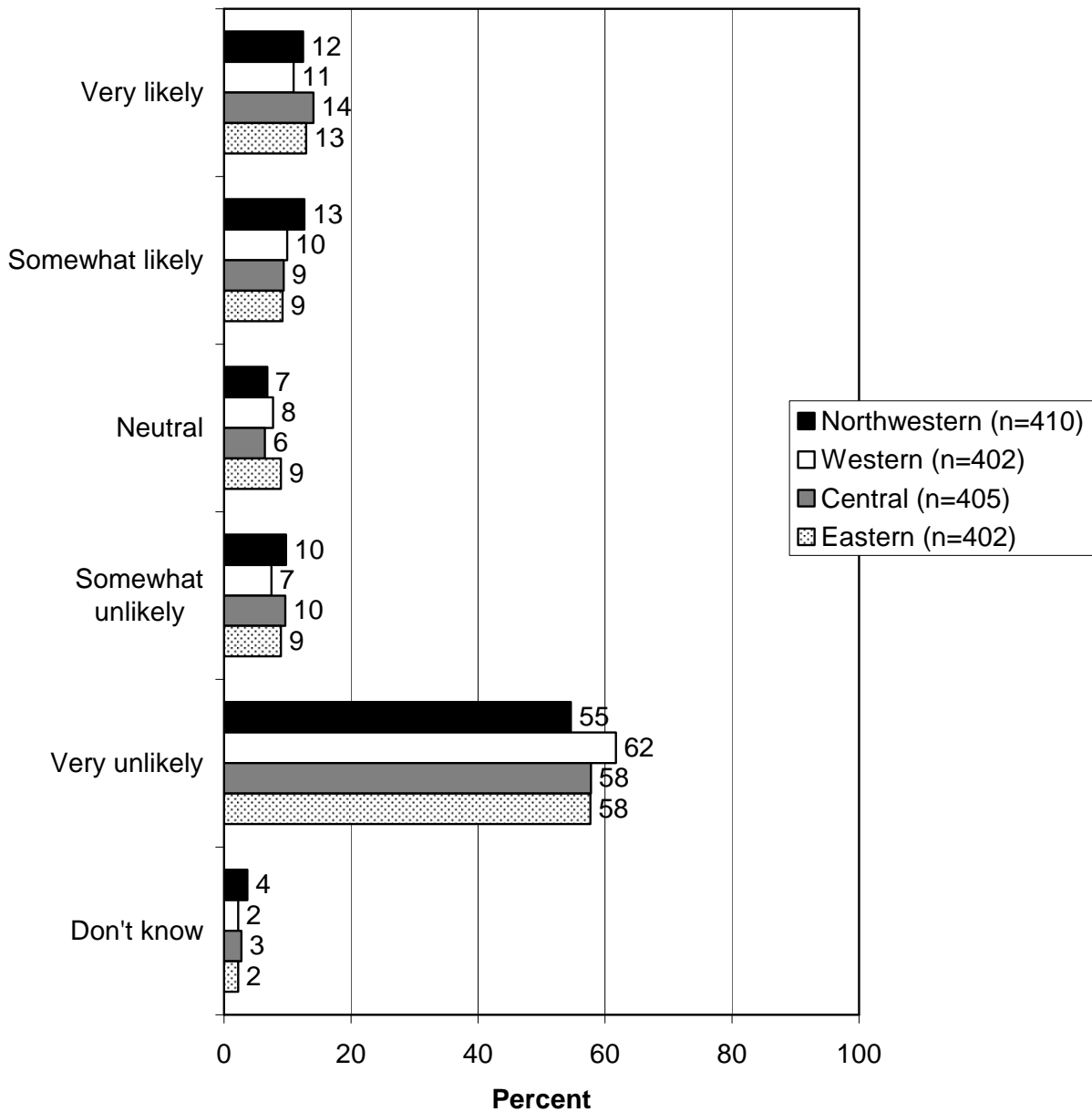
Q114. Would you be likely or unlikely to allow deer hunting on your property if the hunters assisted with maintenance of buildings, fences, or equipment on your property, or ran errands for you, such as getting groceries?



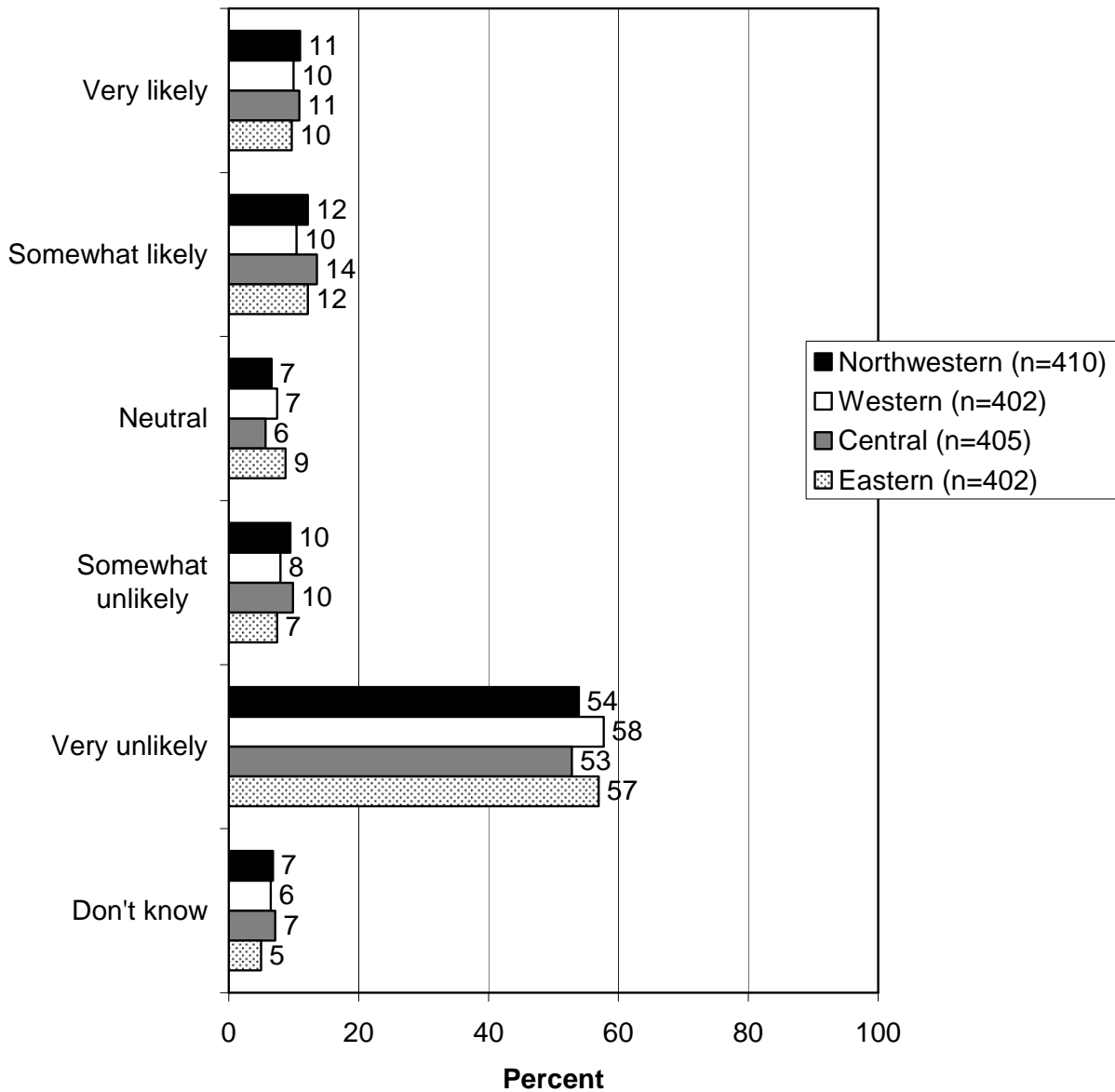
Q115. Would you be likely or unlikely to allow deer hunting on your property if you received a fee from the hunters?



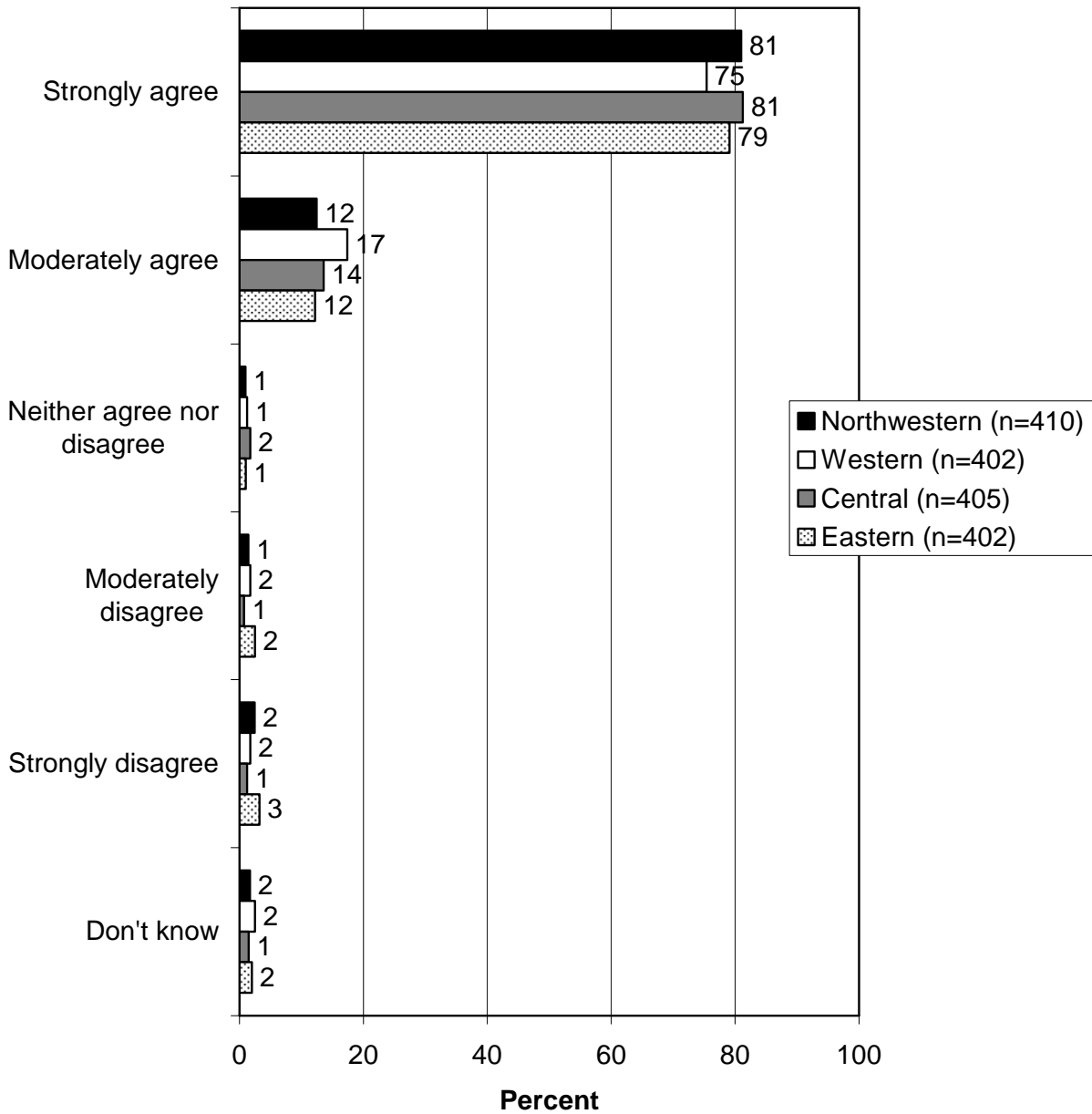
Q116. Would you be likely or unlikely to allow deer hunting on your property if the hunters purchased additional liability coverage that would cover hunting activities on your property?



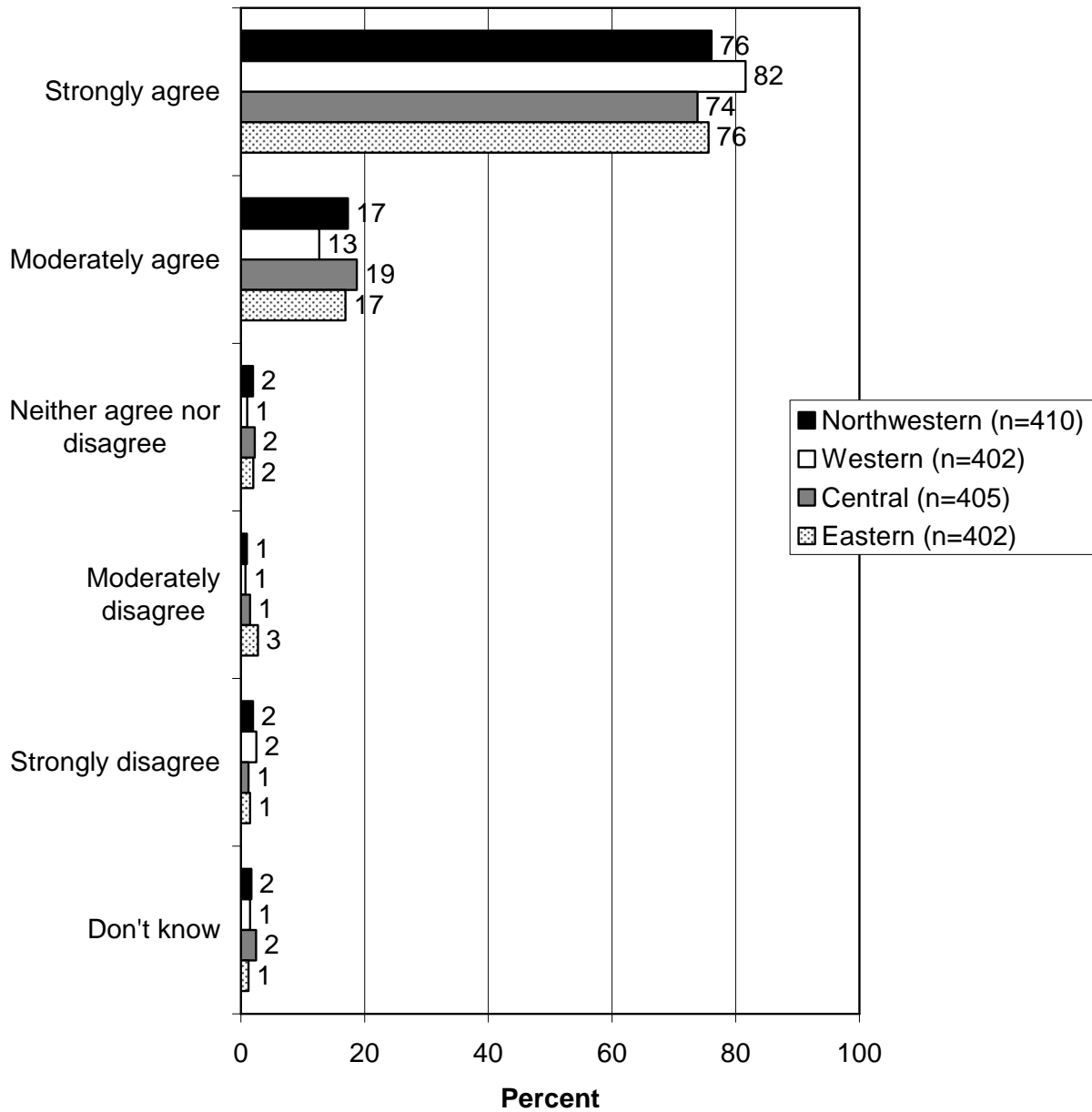
Q117. Would you be likely or unlikely to allow deer hunting on your property if you knew that landowners in North Carolina have reduced liability when they allow hunting on their properties, as long as no fees or services are provided by the hunters?



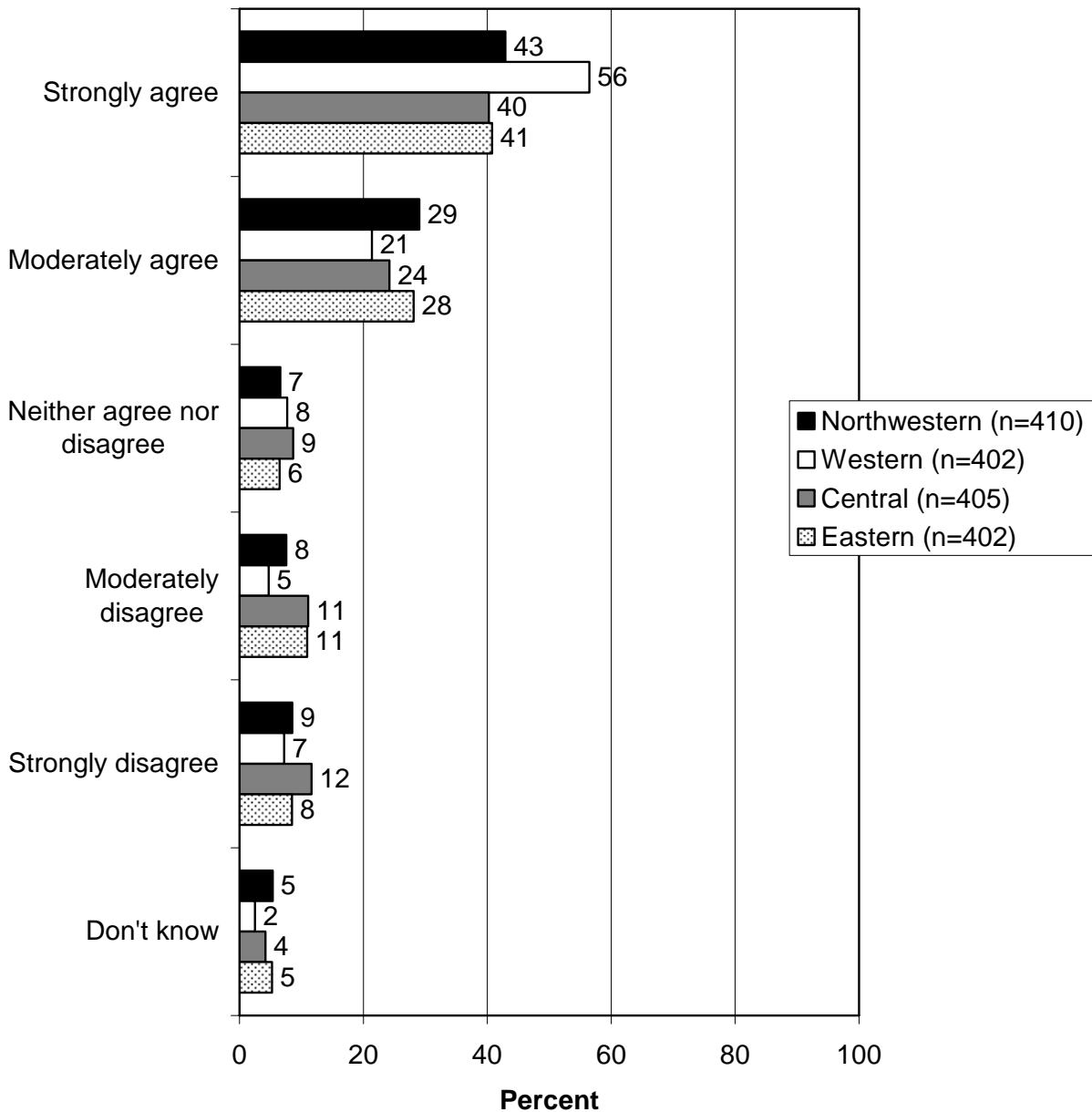
Q120. Do you agree or disagree that deer hunting is an important tool to manage deer populations?



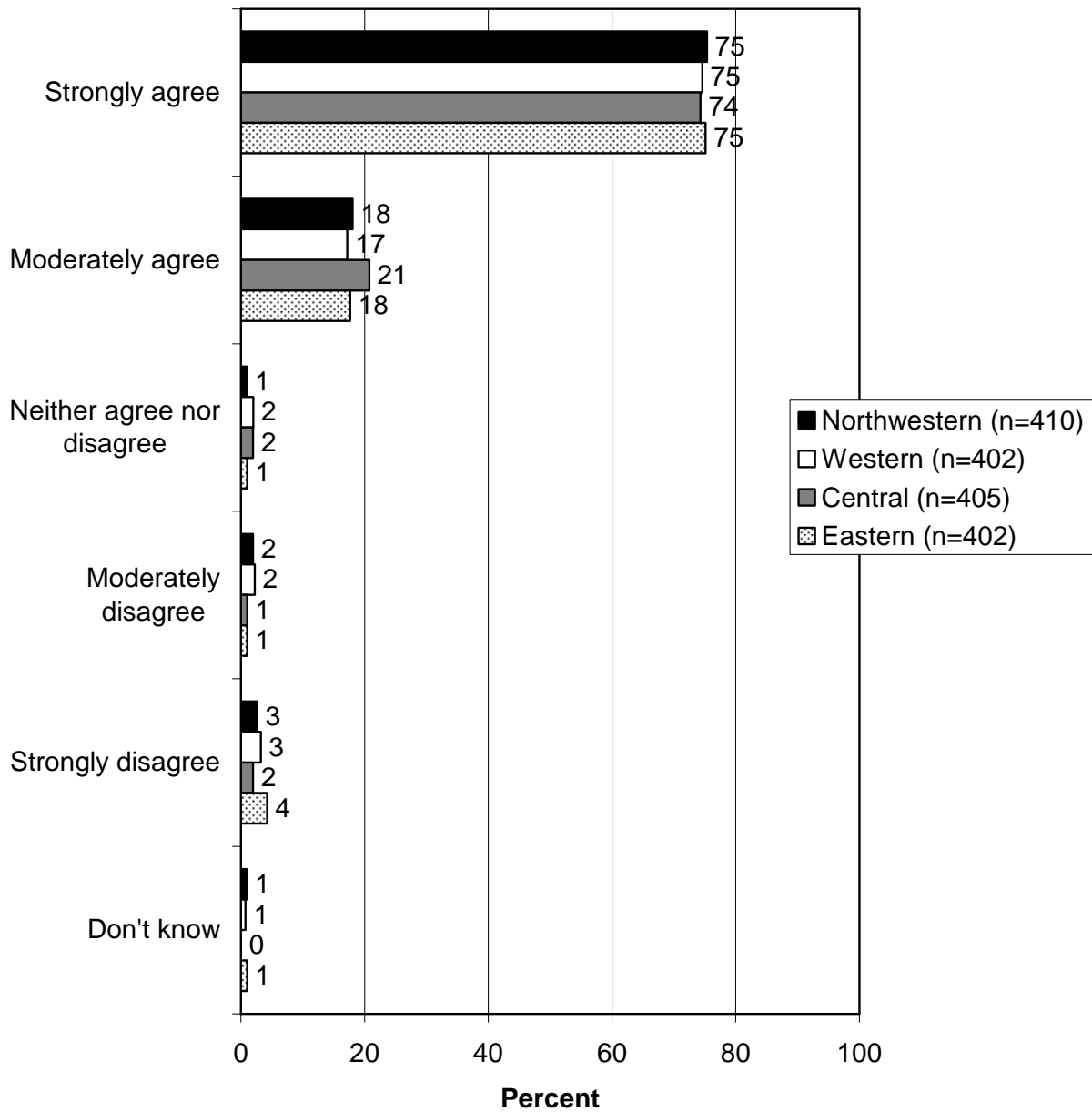
Q121. Do you agree or disagree that it is important just knowing that deer exist in North Carolina?



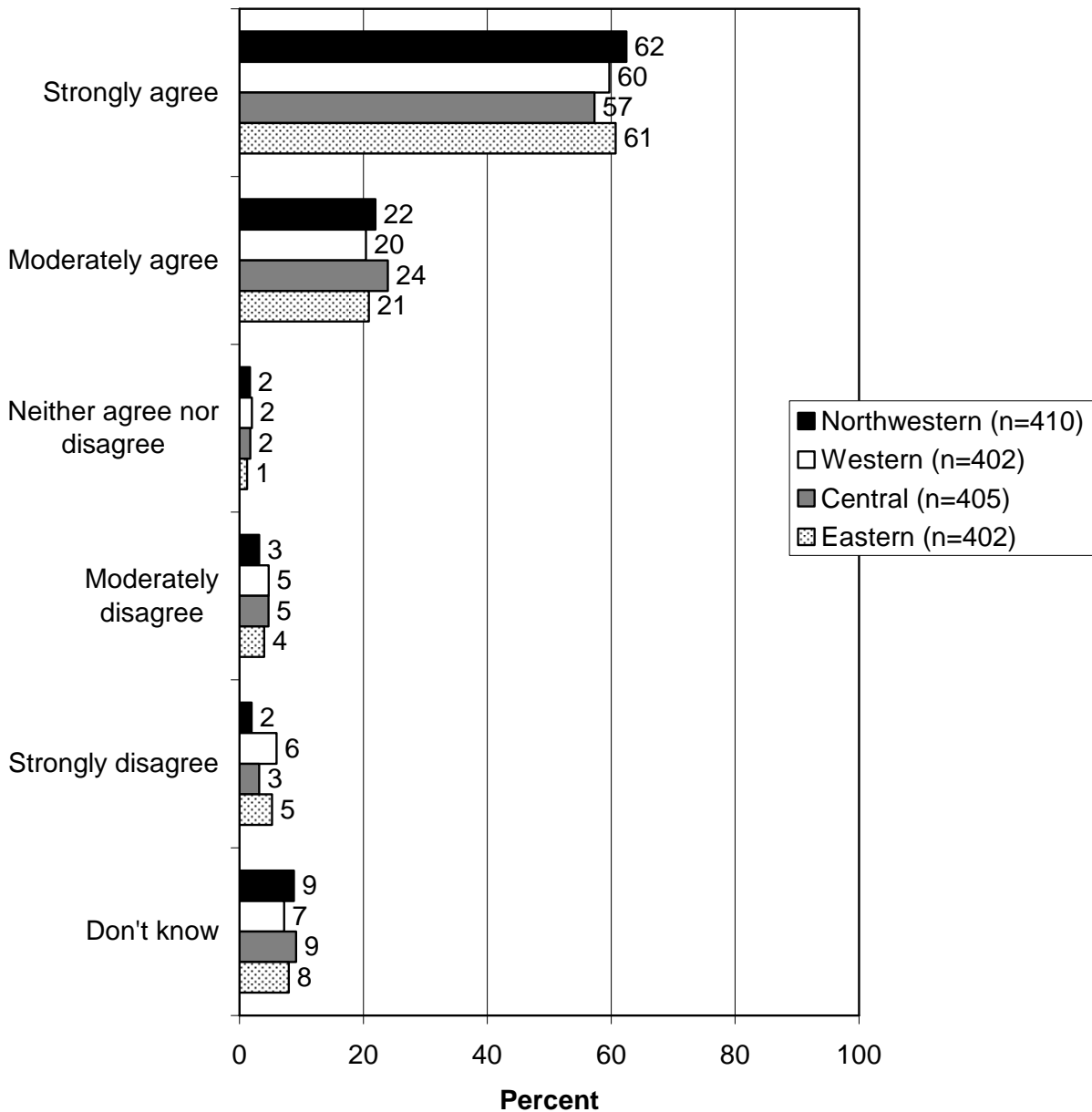
Q122. Do you agree or disagree that the presence of deer in North Carolina increases your overall quality of life?



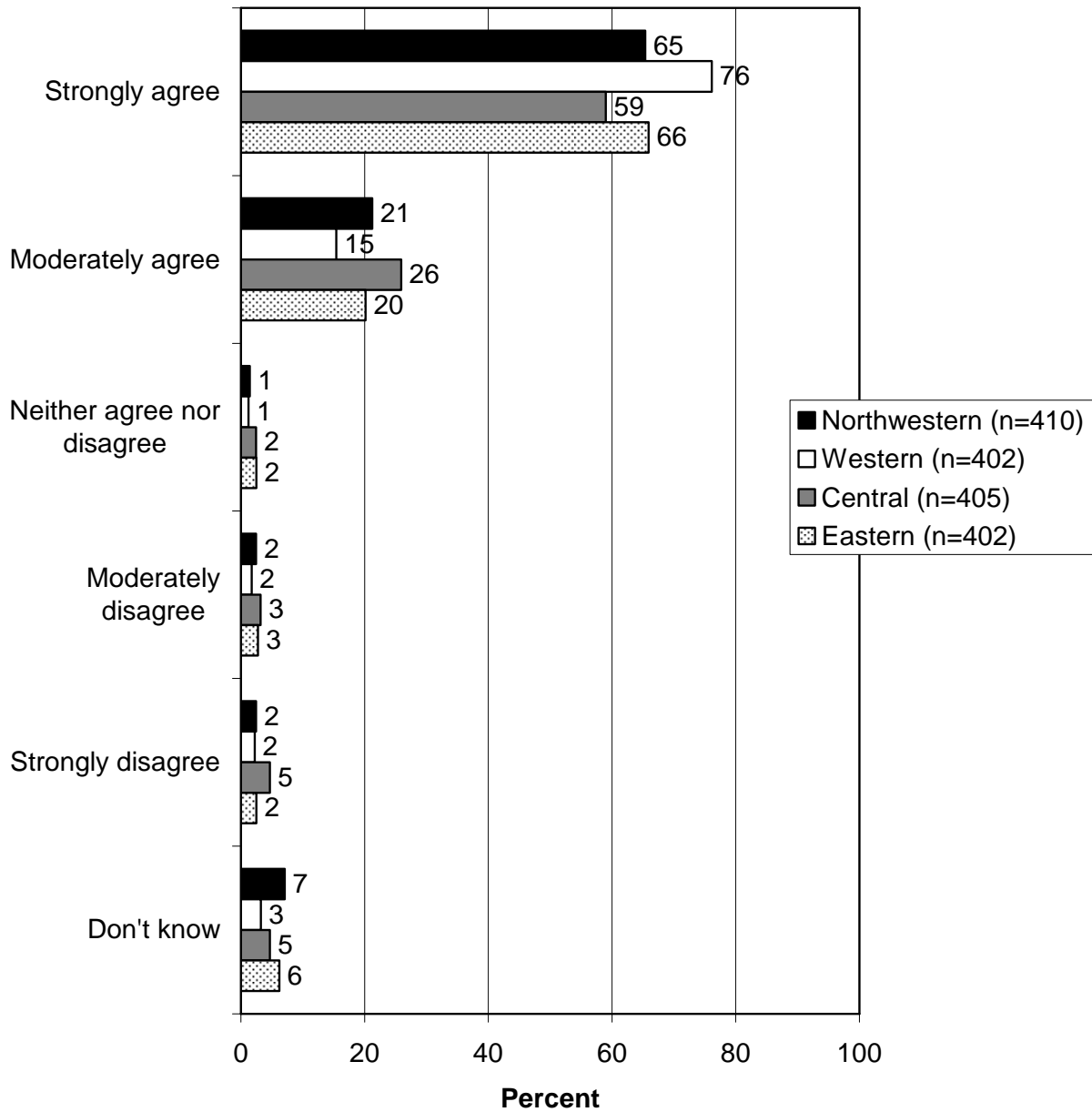
Q123. Do you agree or disagree that it is important for people to have opportunities to hunt deer in North Carolina?



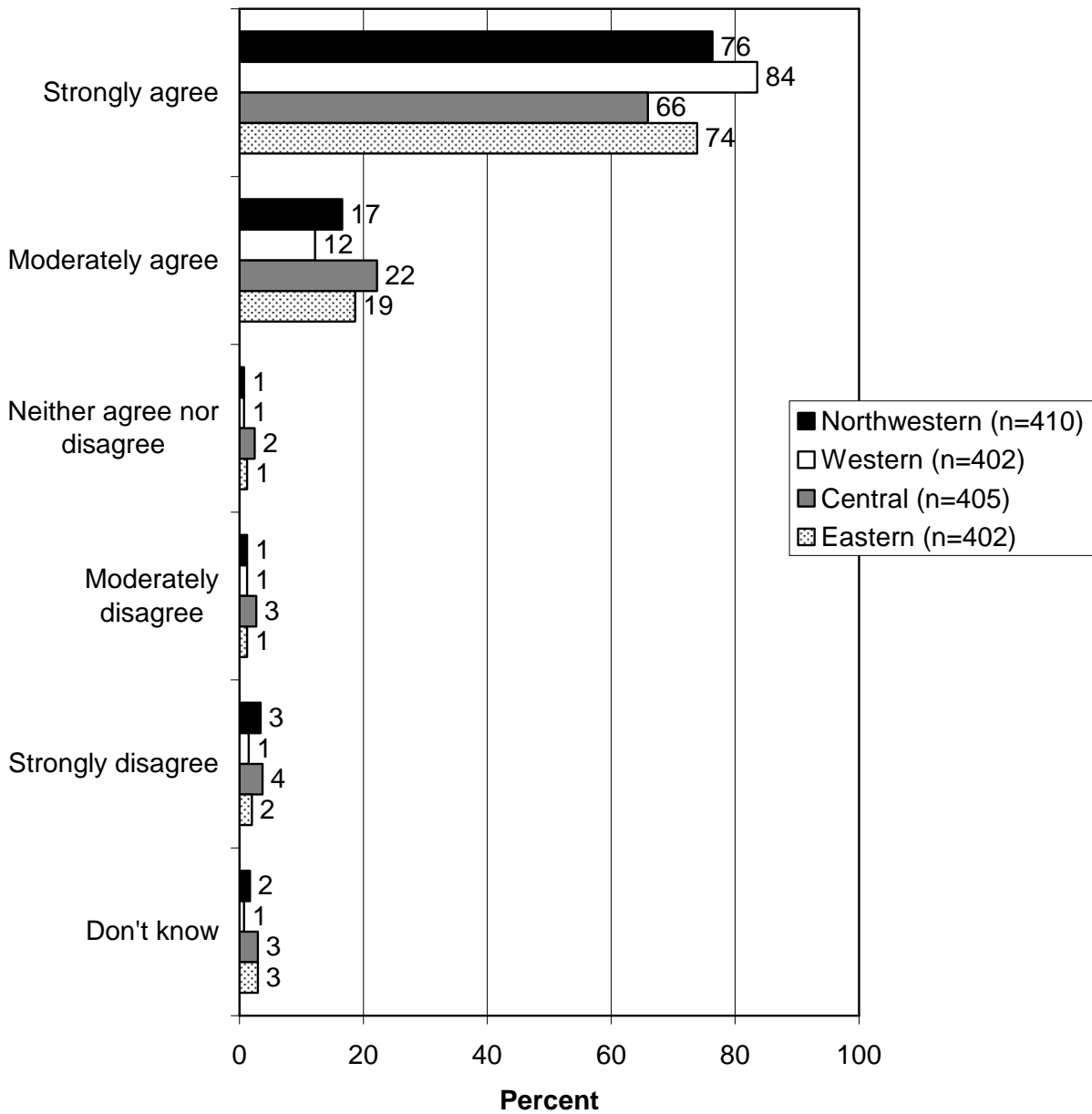
Q124. Do you agree or disagree that the money that people spend to hunt deer in North Carolina is important to the economy?



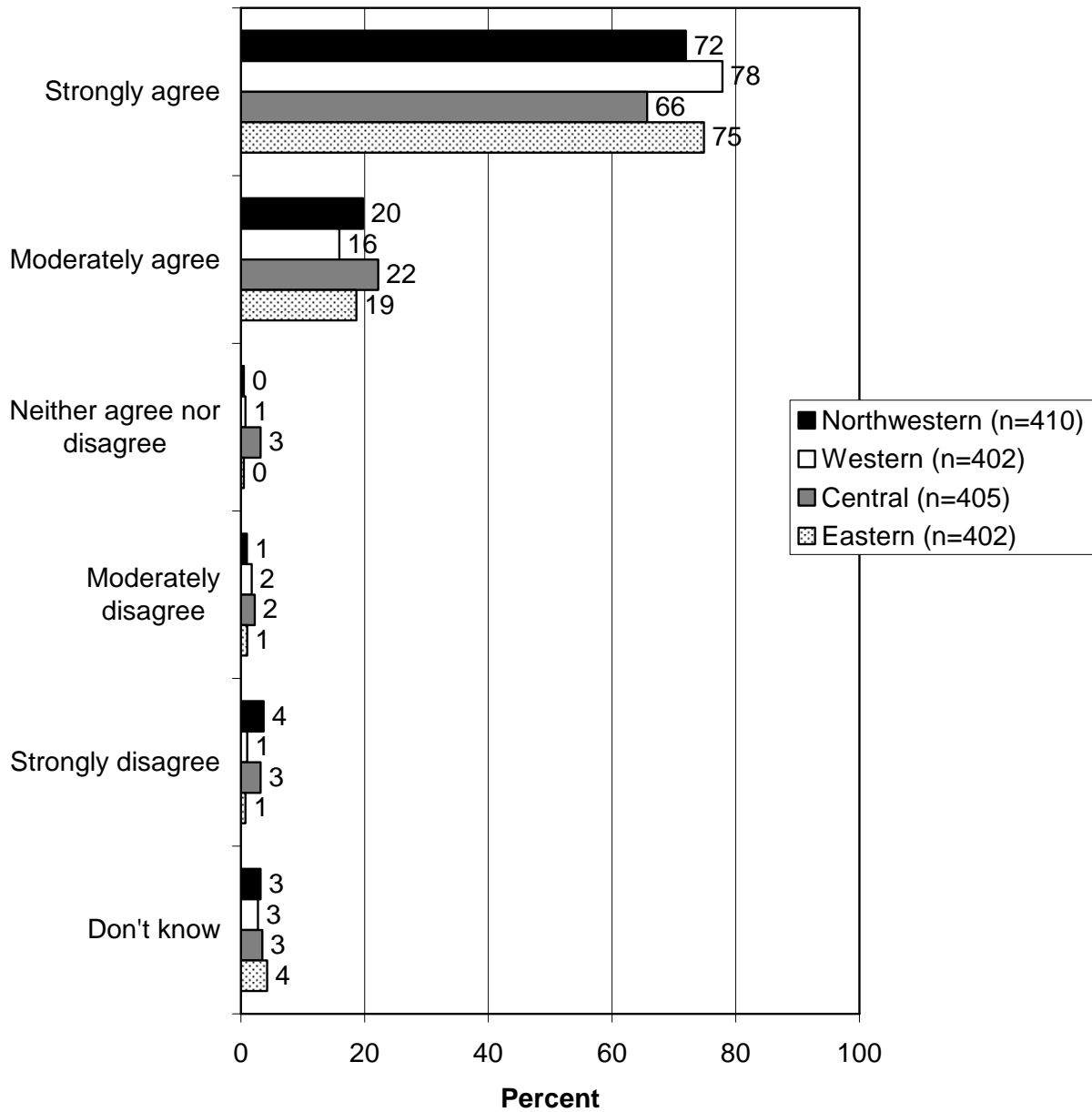
Q125. Do you agree or disagree that the presence of deer is a sign of a healthy environment?



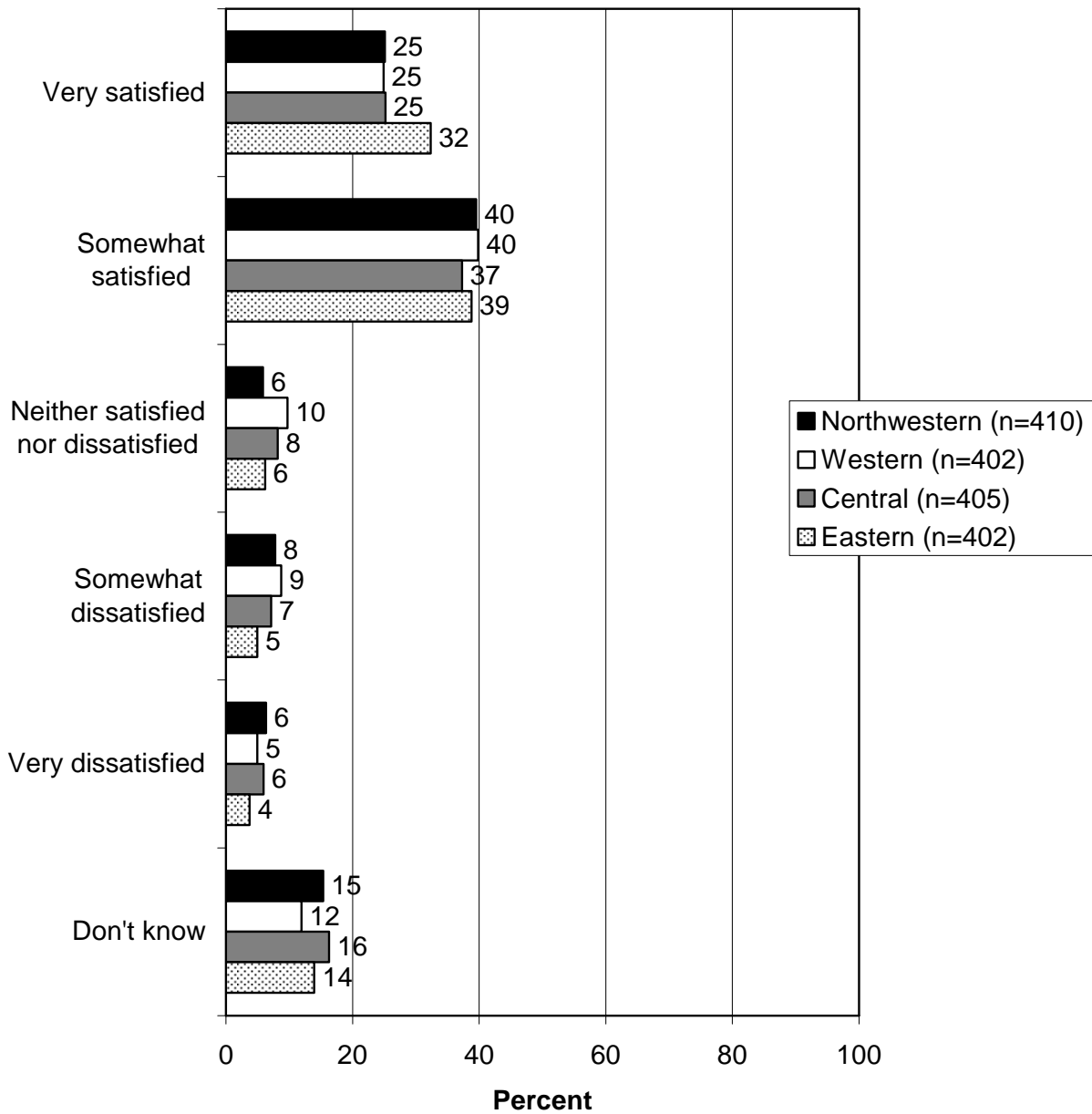
Q126. Do you agree or disagree that it is important to have a healthy population of deer in North Carolina?



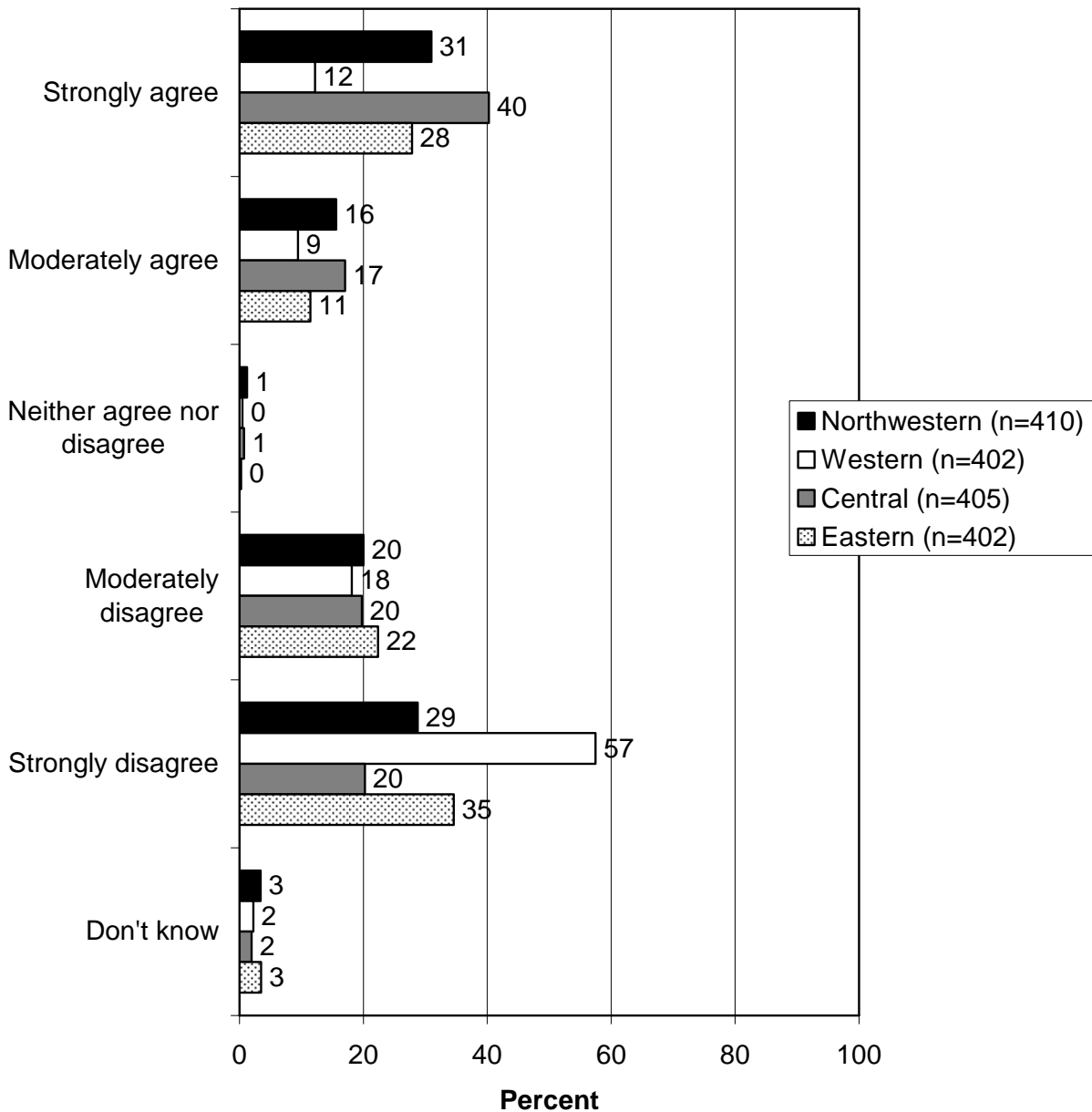
Q127. Do you agree or disagree that deer play an important role in nature?



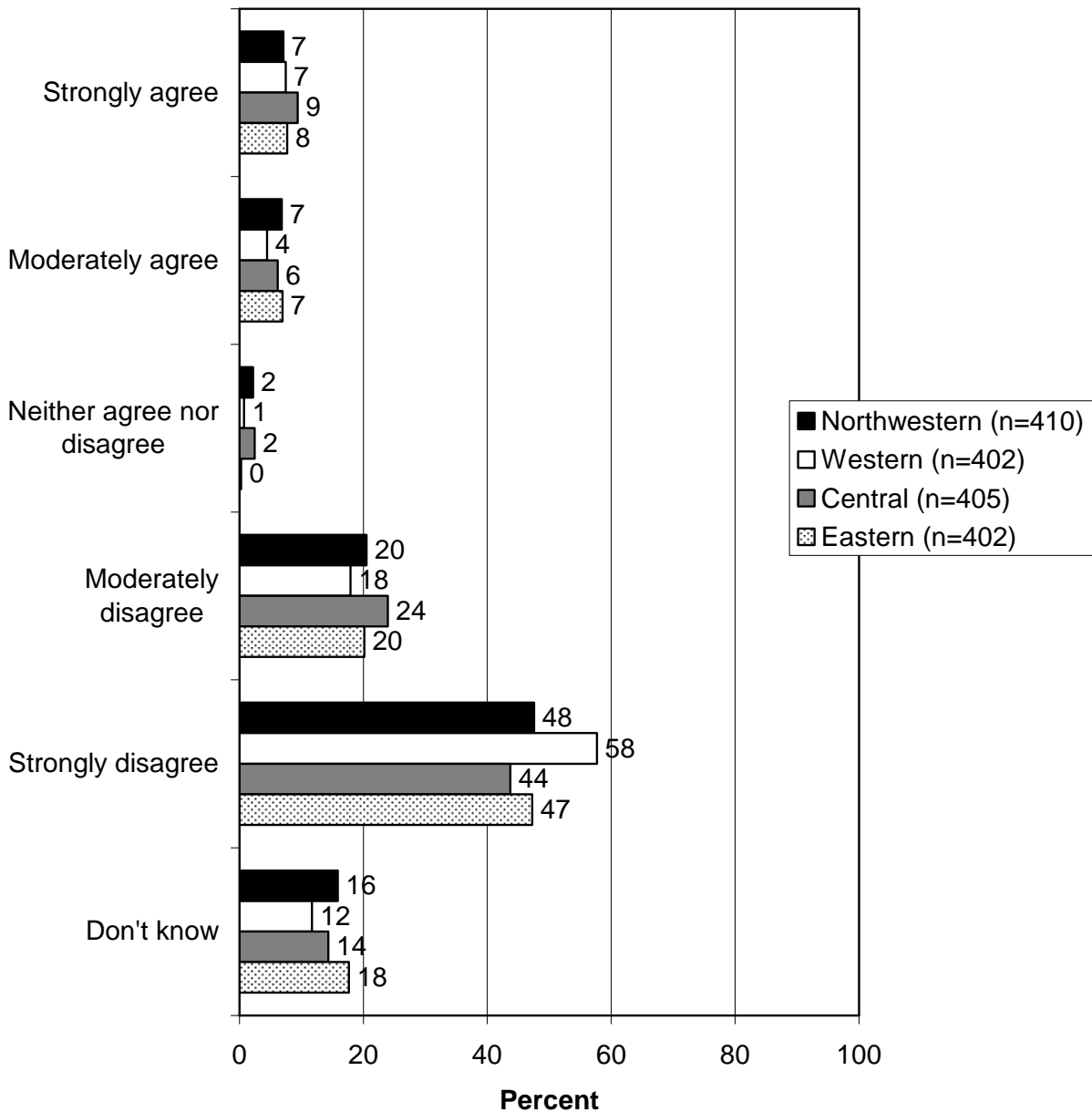
Q128. How satisfied or dissatisfied are you with the North Carolina Wildlife Resources Commission's management of deer in North Carolina?



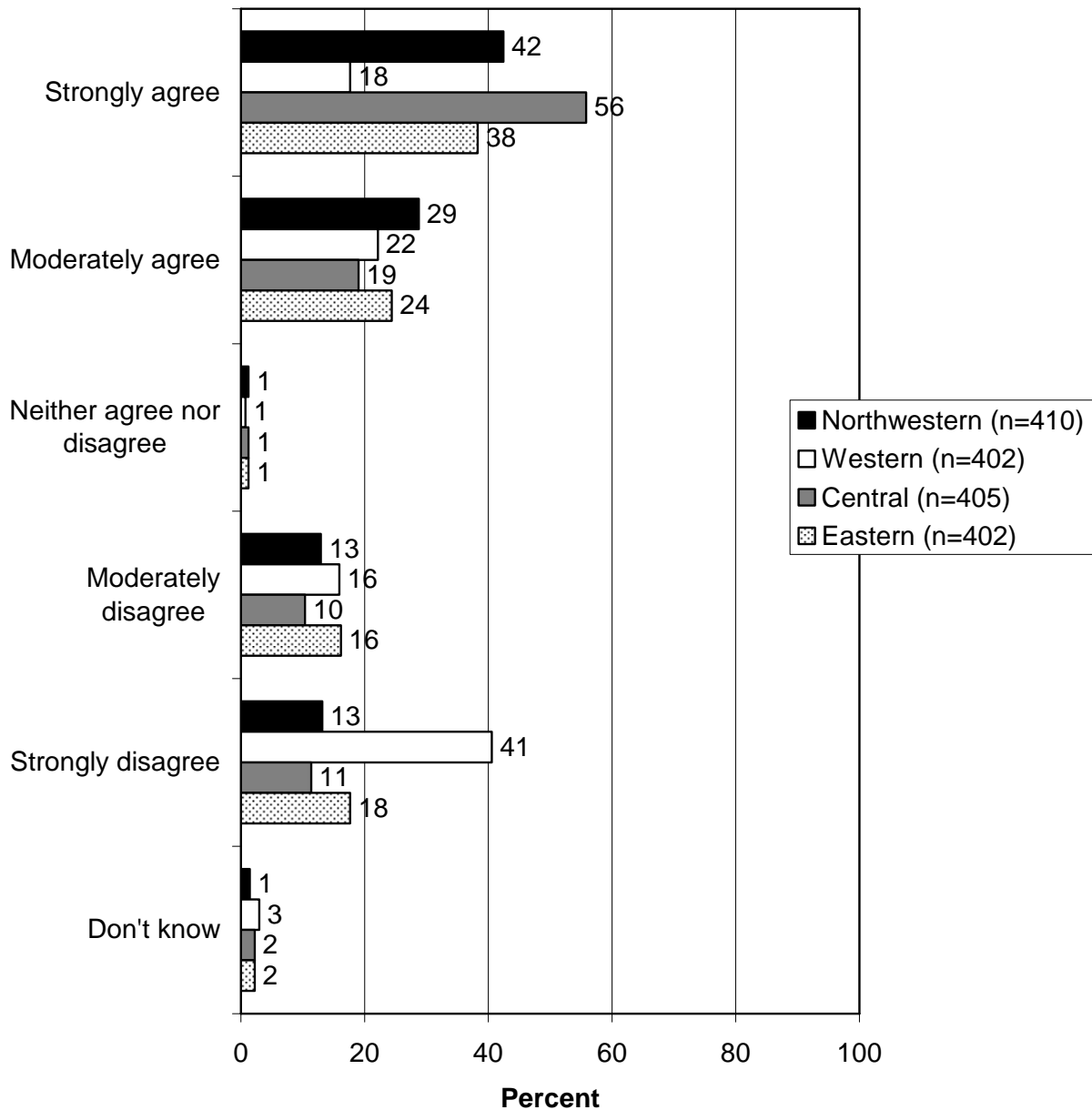
Q130. Do you agree or disagree that deer overpopulation is a problem in the general area of your property in [county] County?



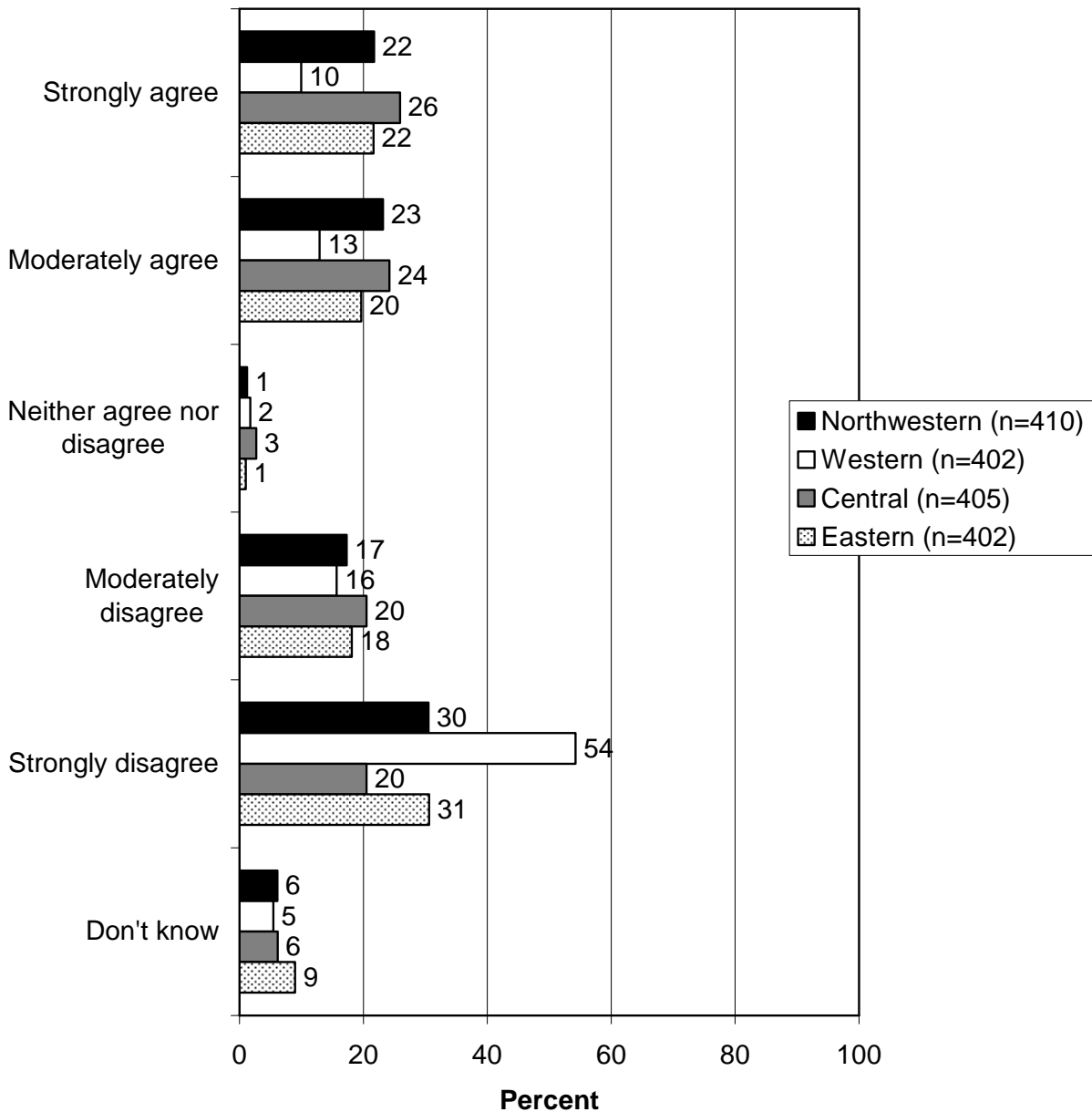
Q131. Do you agree or disagree that deer being in poor health is a problem in the general area of your property in [county] County?



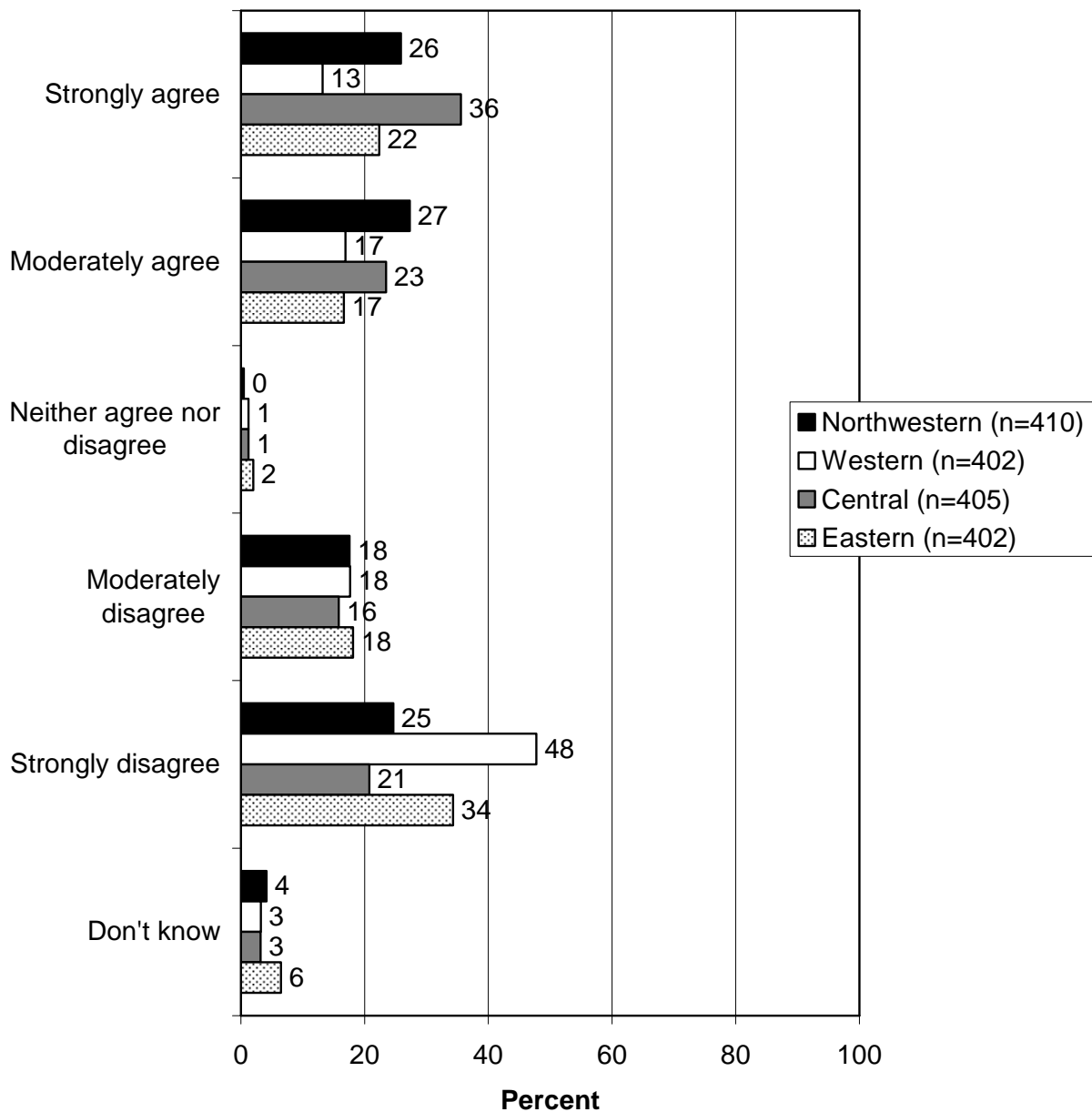
Q132. Do you agree or disagree that deer-vehicle accidents are a problem in the general area of your property in [county] County?



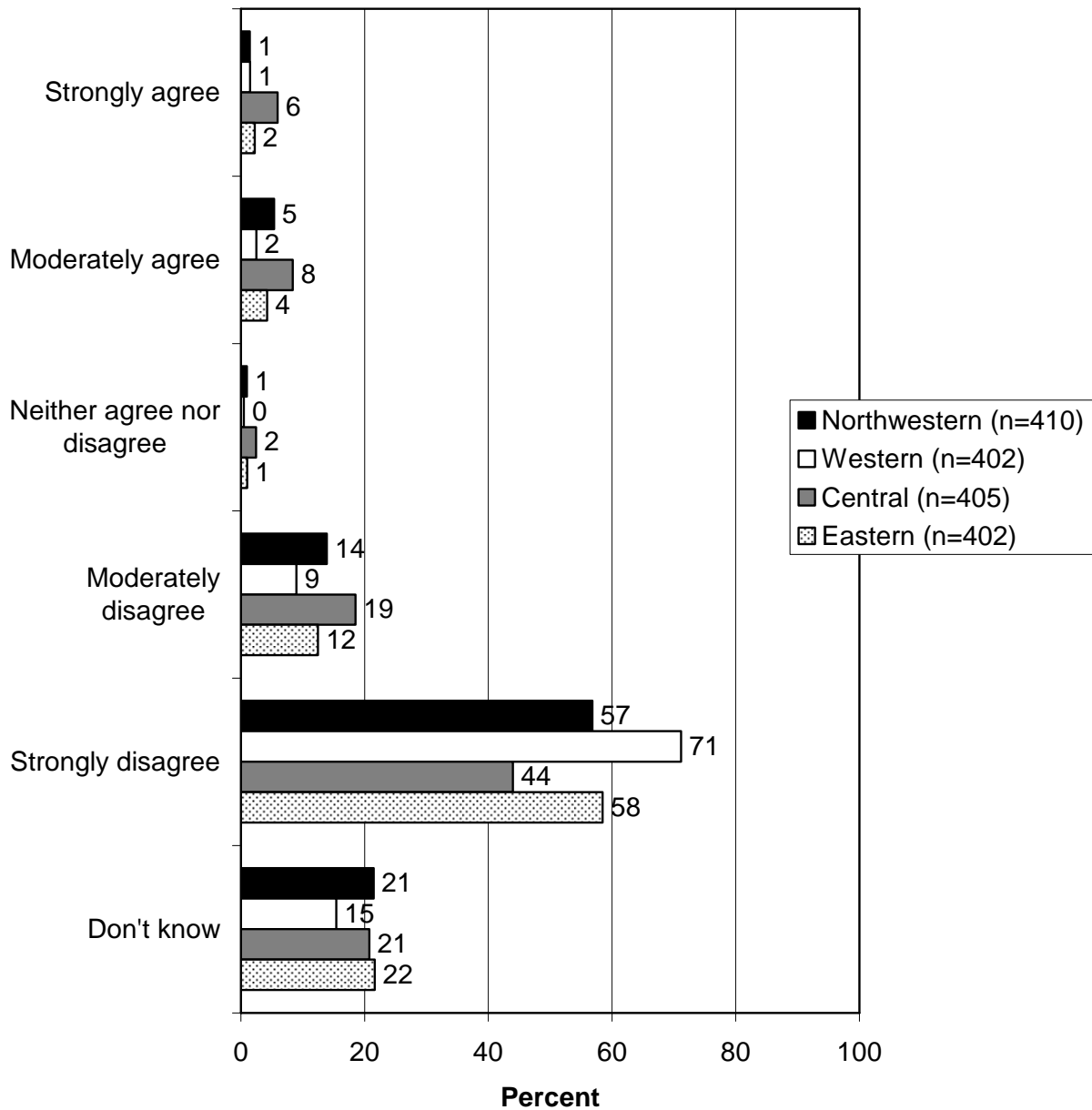
Q133. Do you agree or disagree that deer damage to crops or timber is a problem in the general area of your property in [county] County?



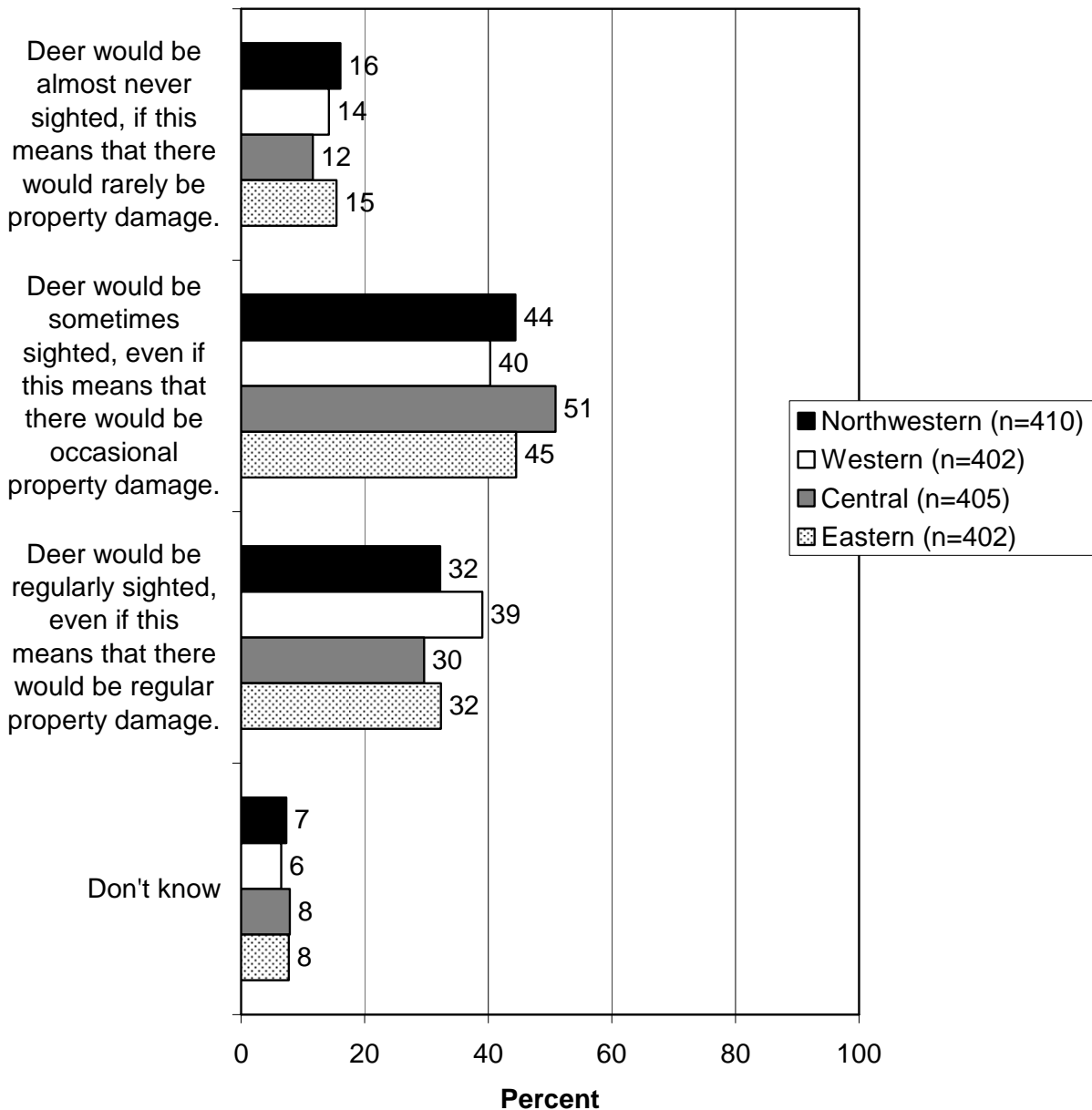
Q134. Do you agree or disagree that deer damage to ornamental plants or gardens is a problem in the general area of your property in [county] County?



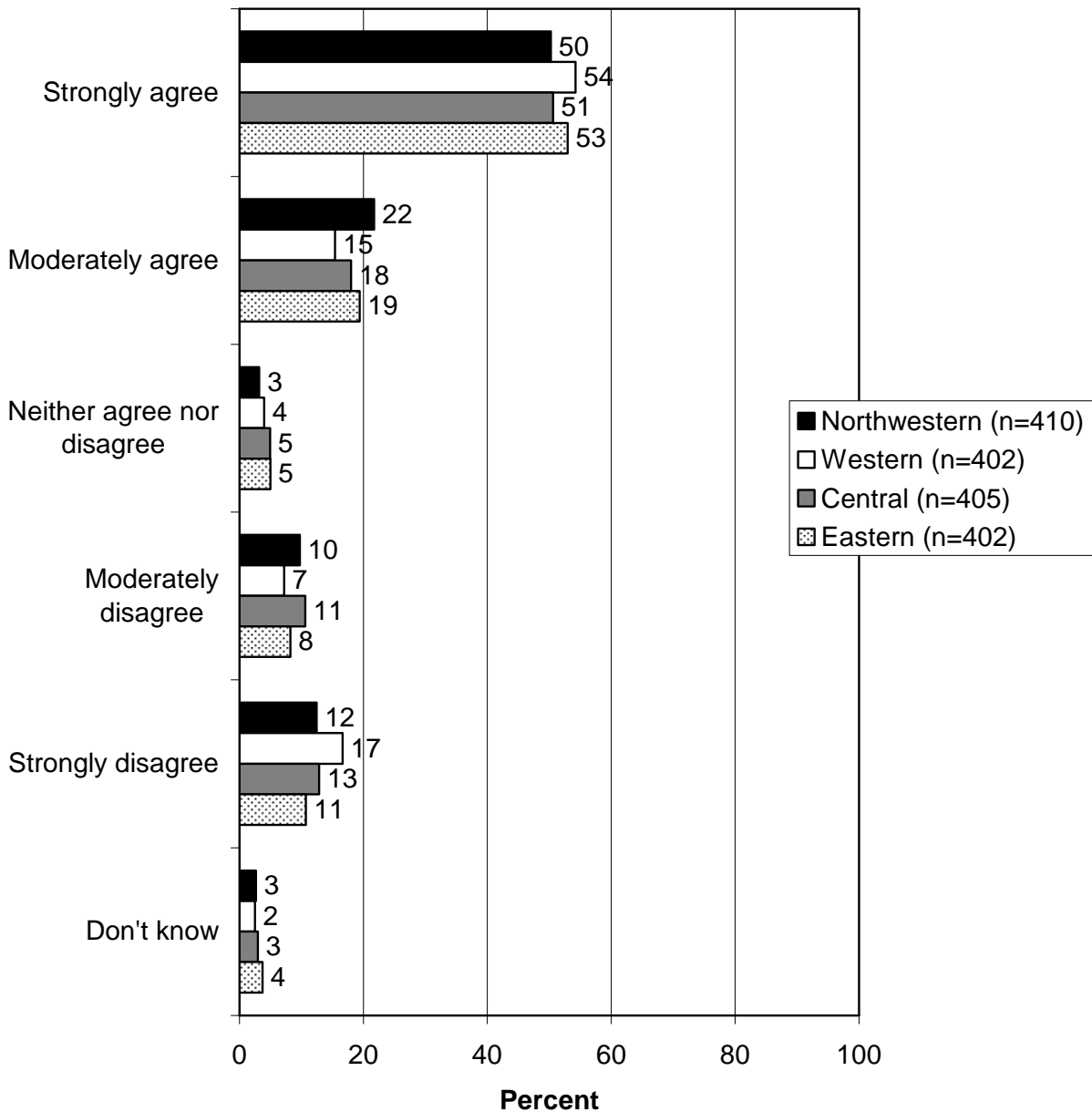
Q135. Do you agree or disagree that diseases in deer being transmitted to humans is a problem in the general area of your property in [county] County?



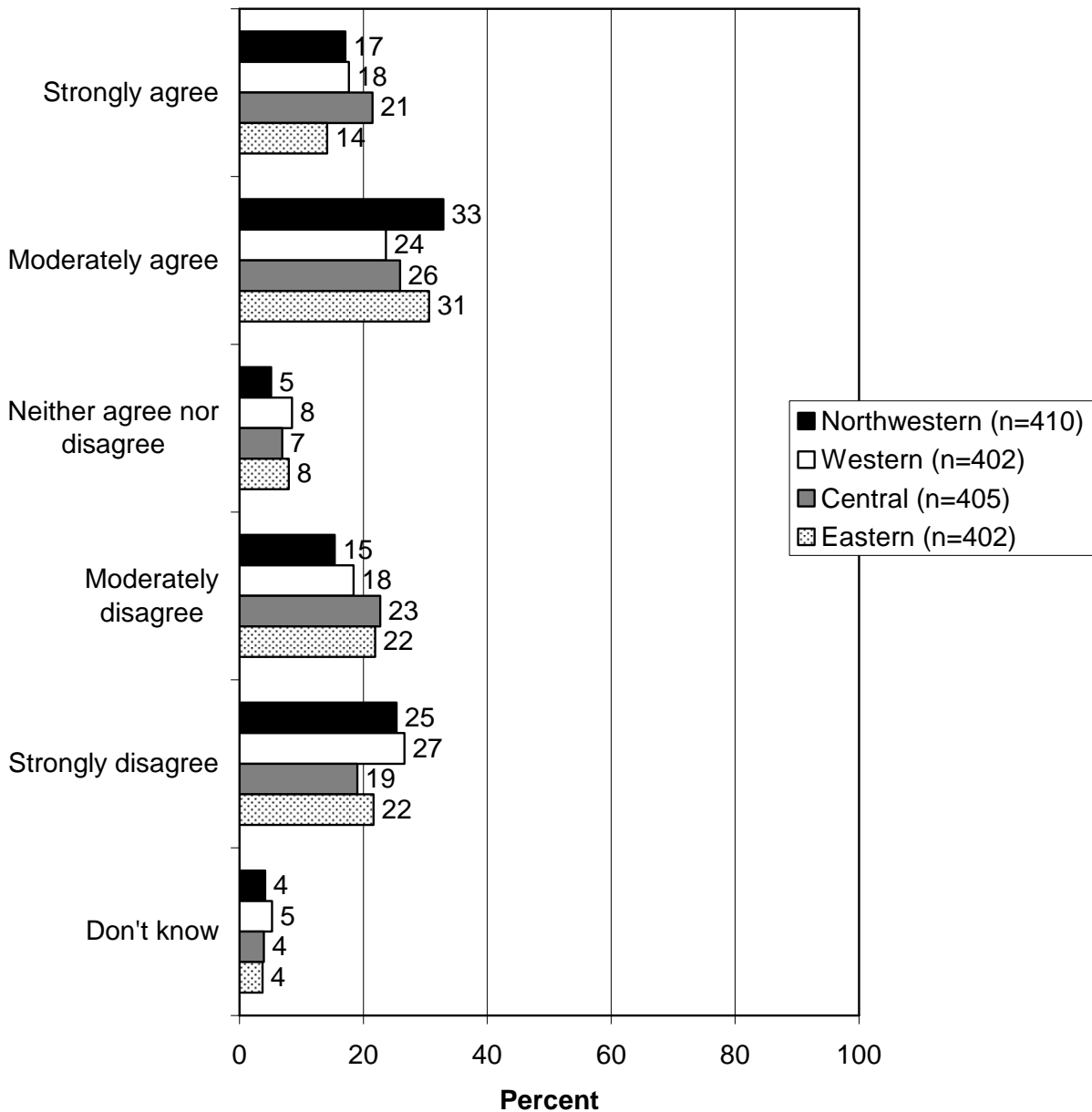
Q136. People prefer different levels of interaction between deer and people. Which of the following situations would you most prefer for the general area of your property in [county] County?



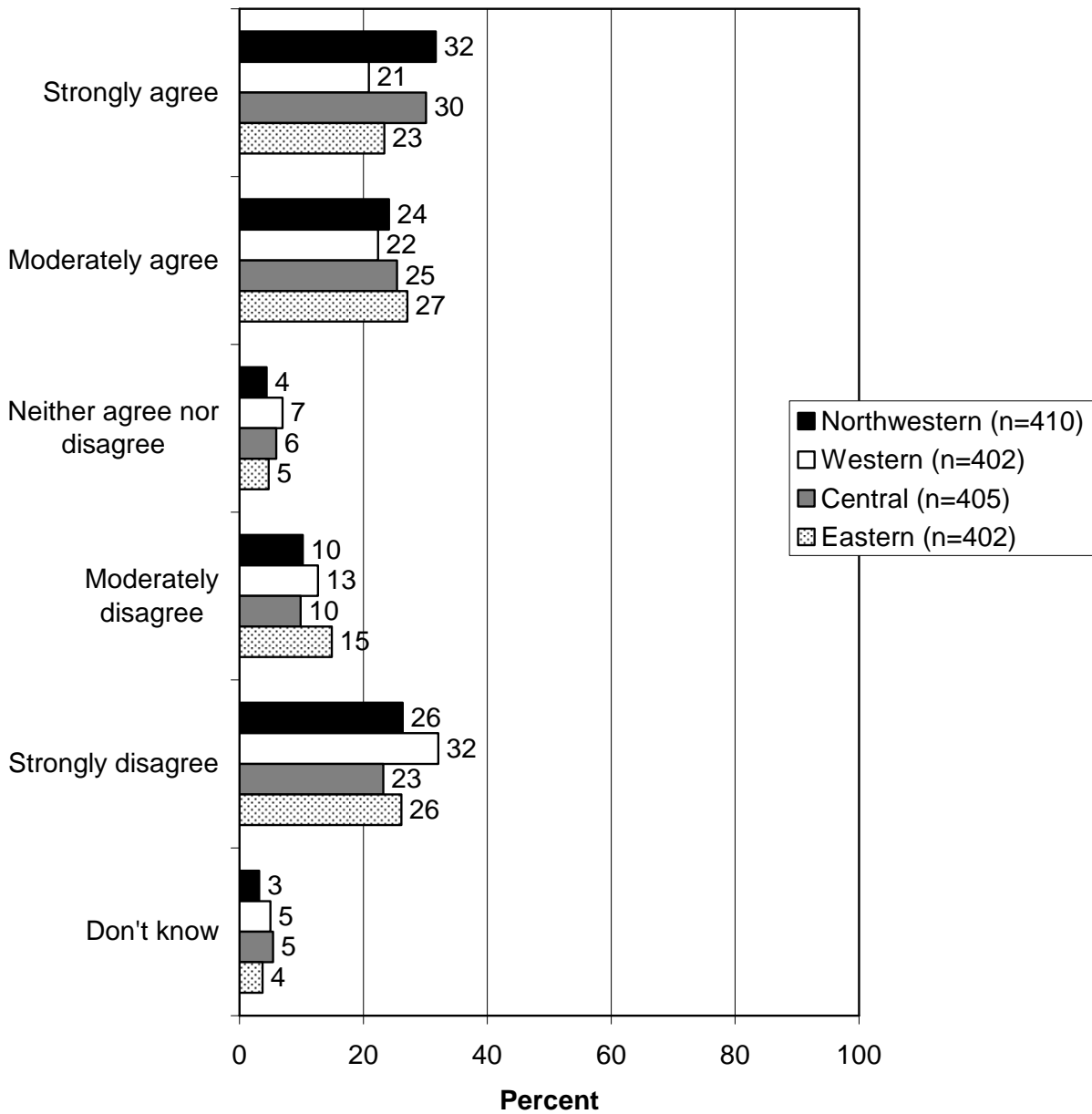
Q138. Do you agree or disagree that you would be concerned if deer were almost never sighted, if this meant that there was rarely property damage?



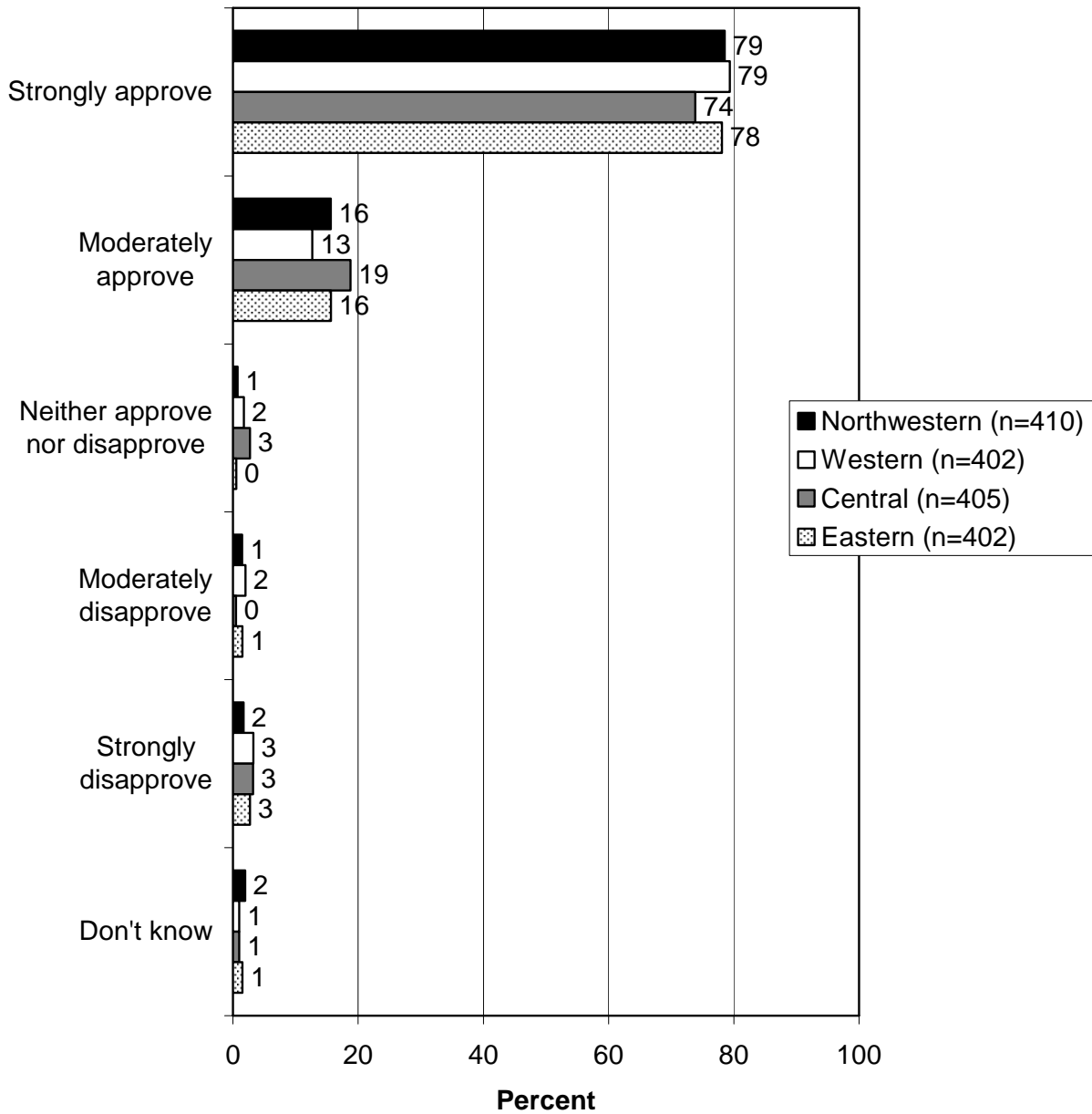
Q139. Do you agree or disagree that you would be concerned if deer were sometimes sighted, if this meant that there was occasional property damage?



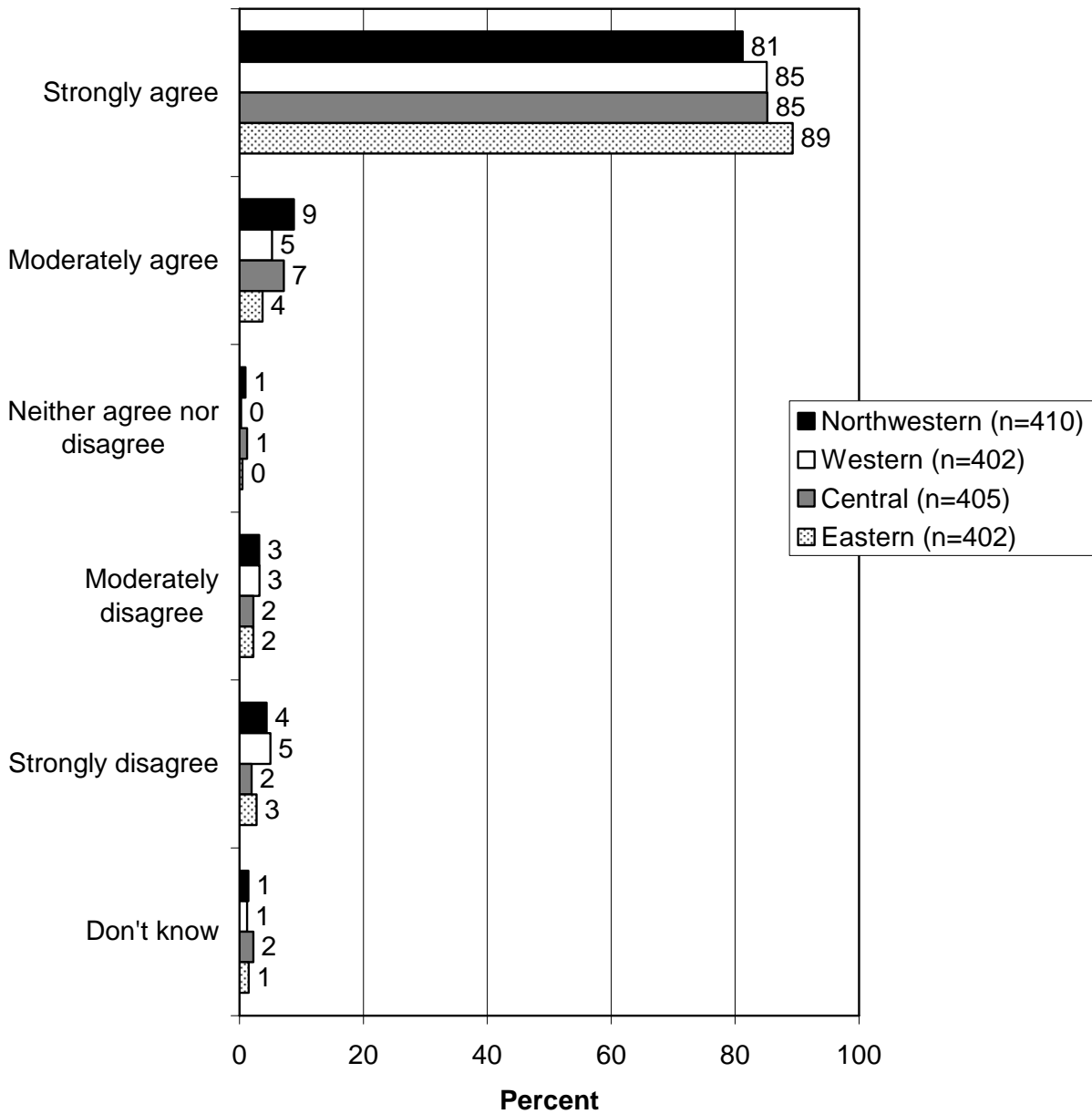
Q140. Do you agree or disagree that you would be concerned if deer were regularly sighted, if this meant that there was regular property damage?



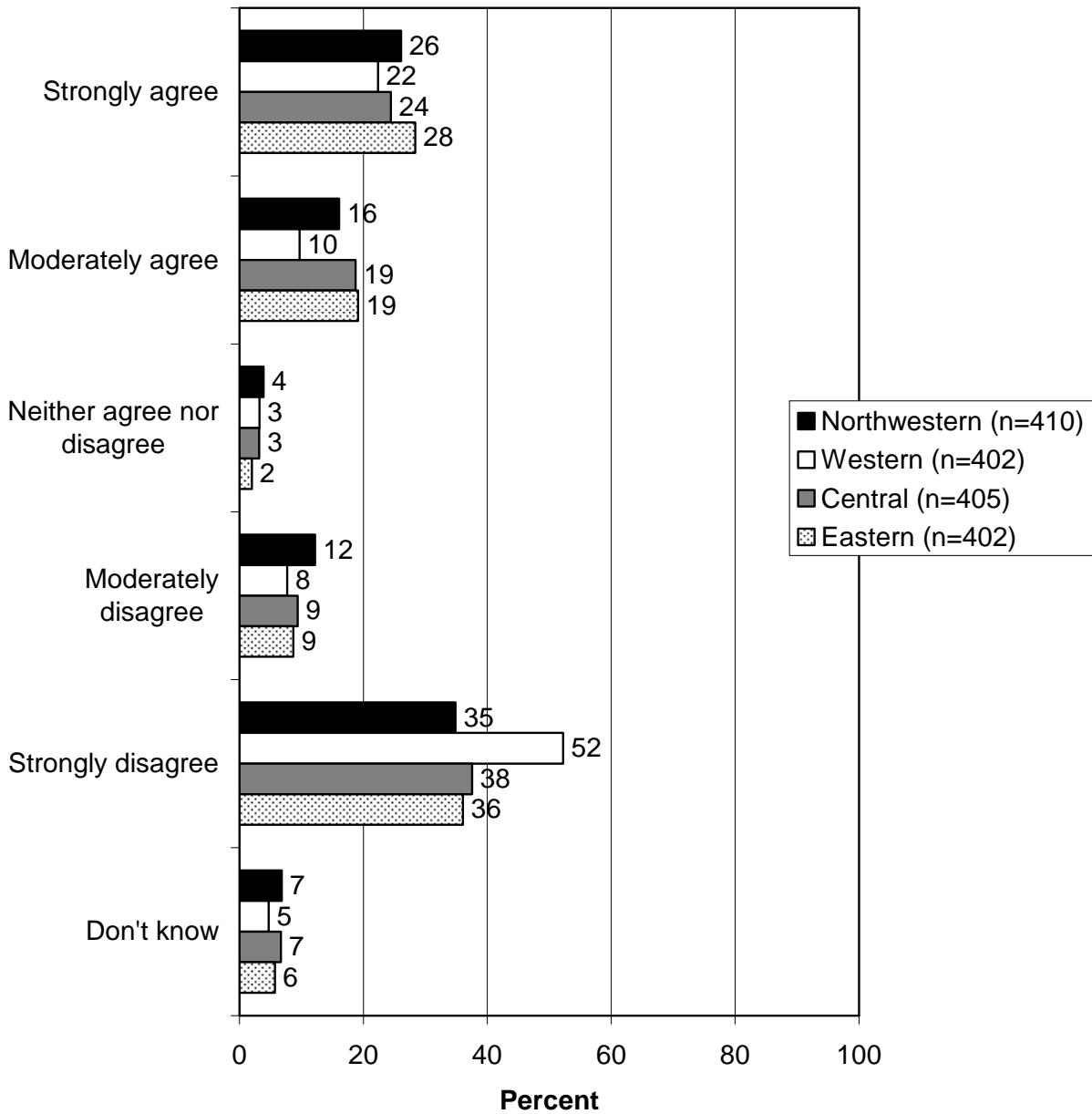
Q141. In general, do you approve or disapprove of legal, regulated hunting?



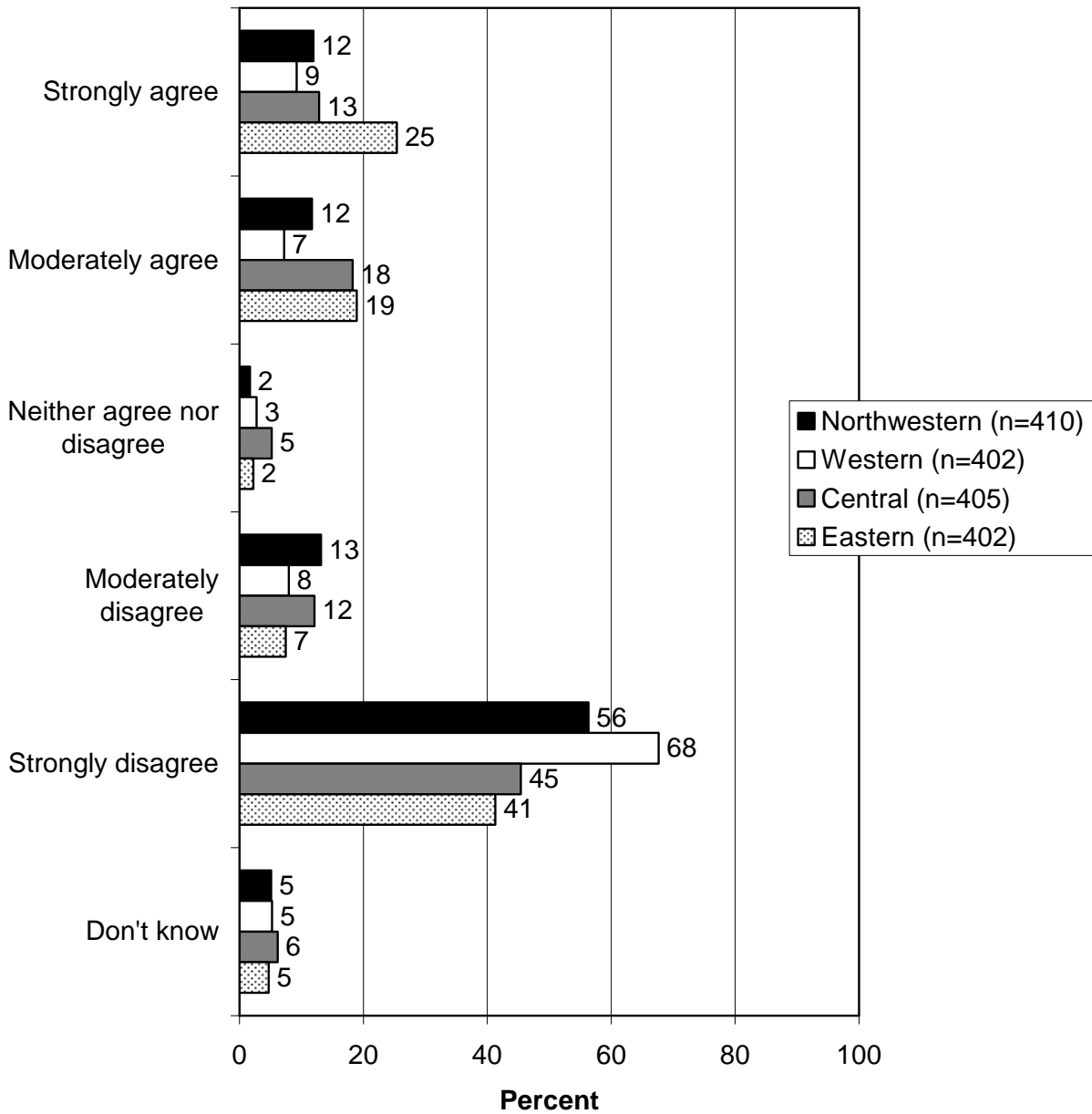
Q143. Do you agree or disagree that written permission from the landowner should be required to hunt on private land in North Carolina?



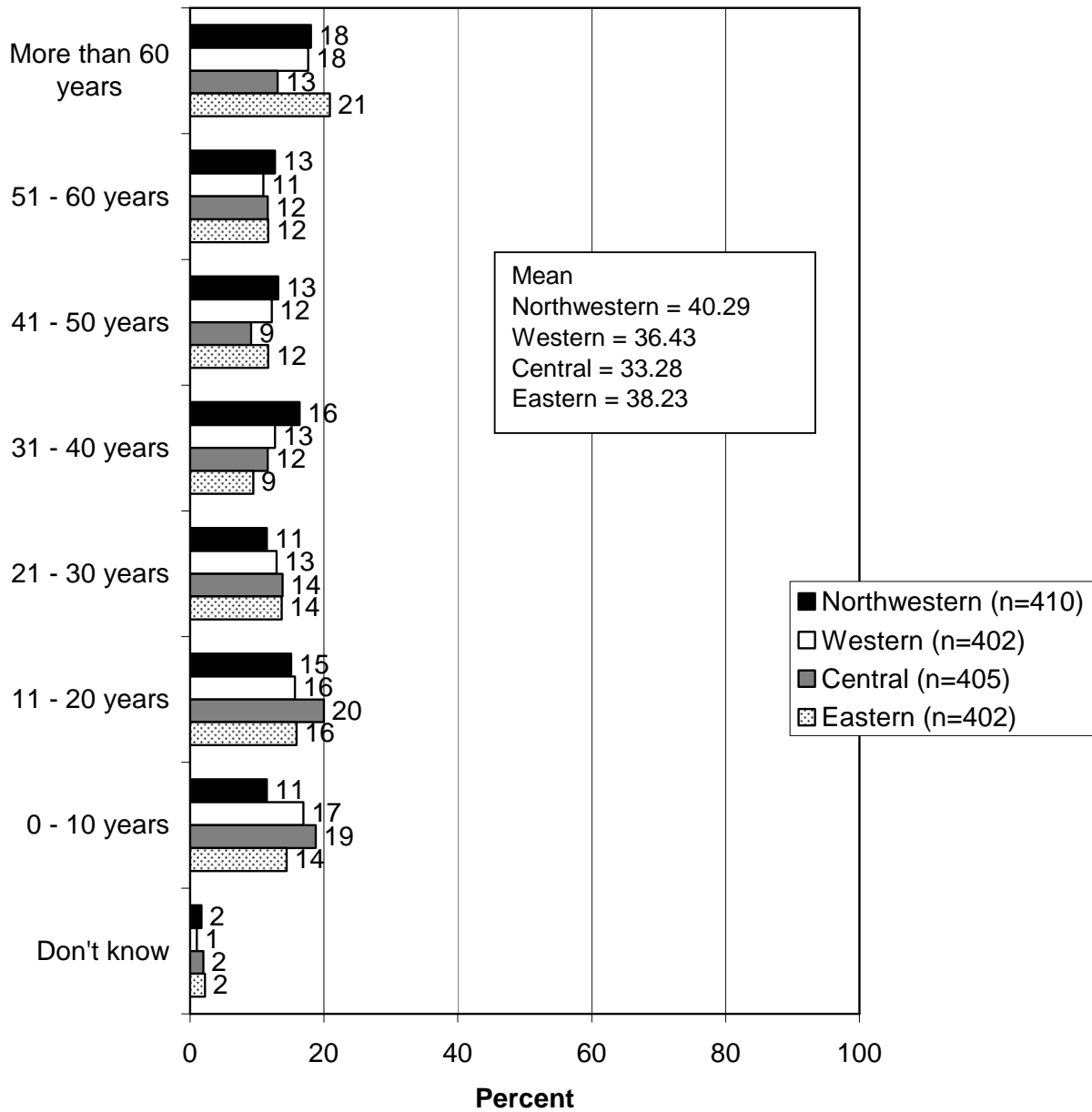
Q144. Do you agree or disagree that hunting deer over bait should be legal in North Carolina?



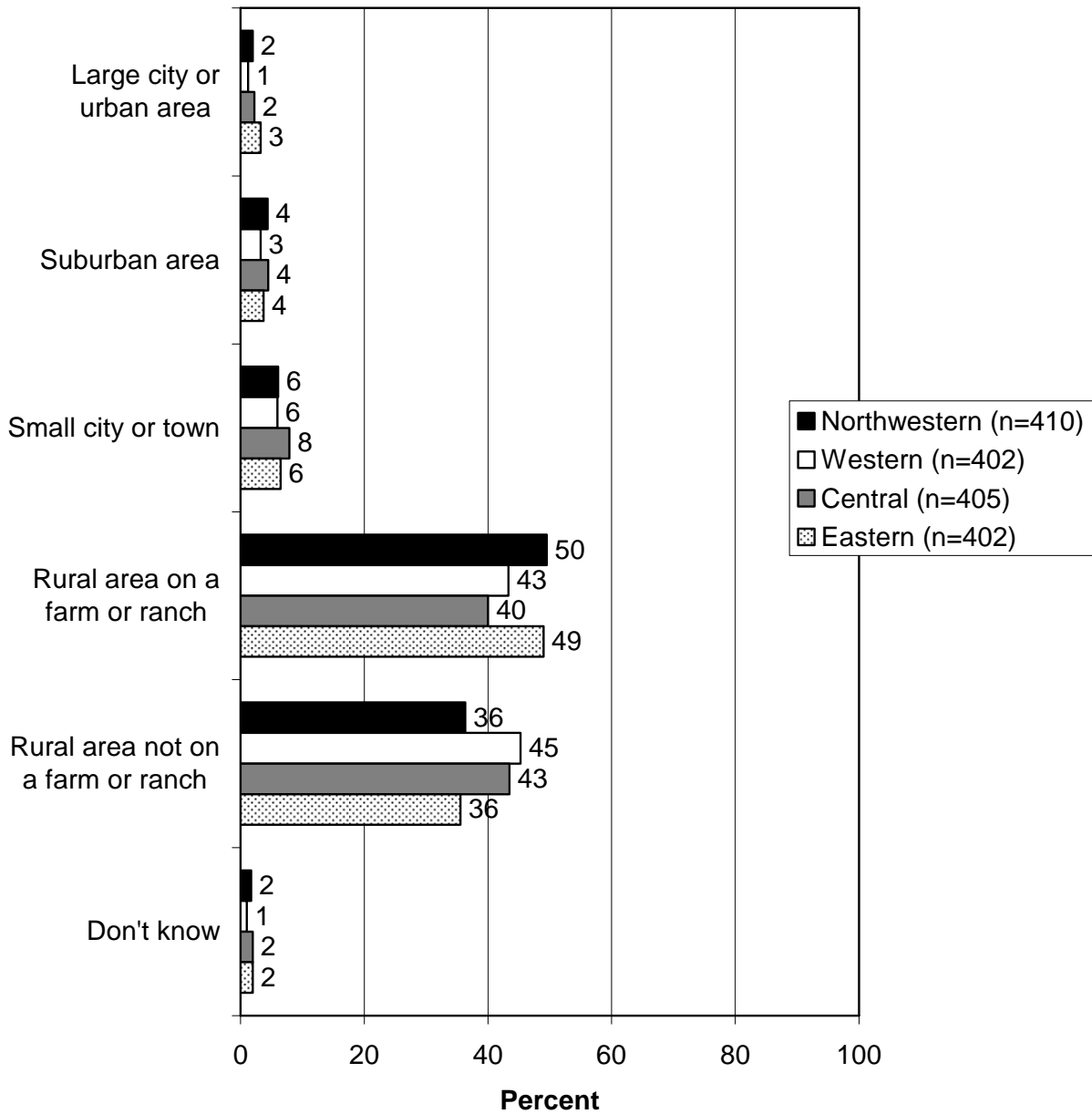
Q145. Do you agree or disagree that hunting deer with dogs should be legal in North Carolina?



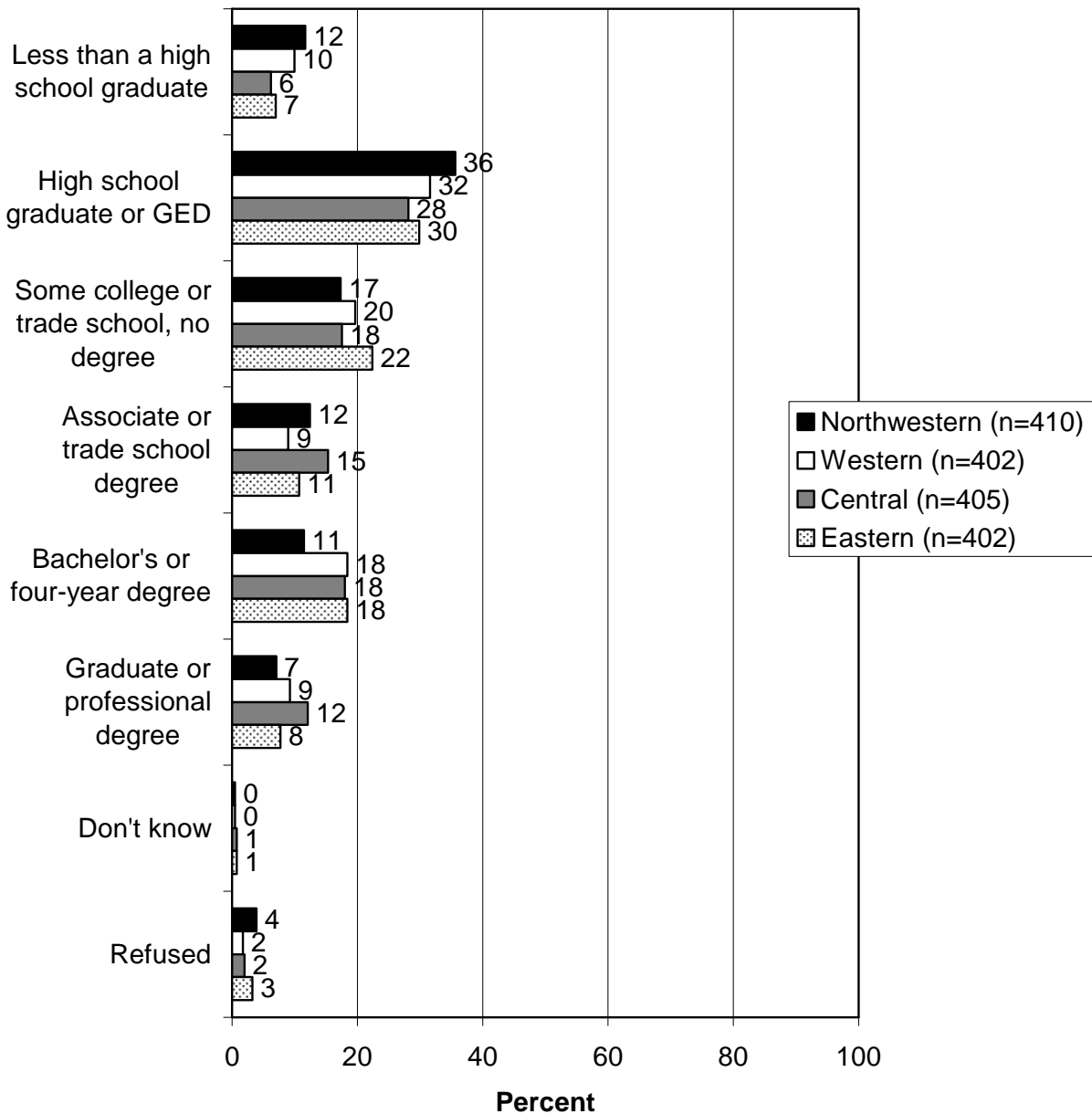
Q148. How many years have you lived in your community?



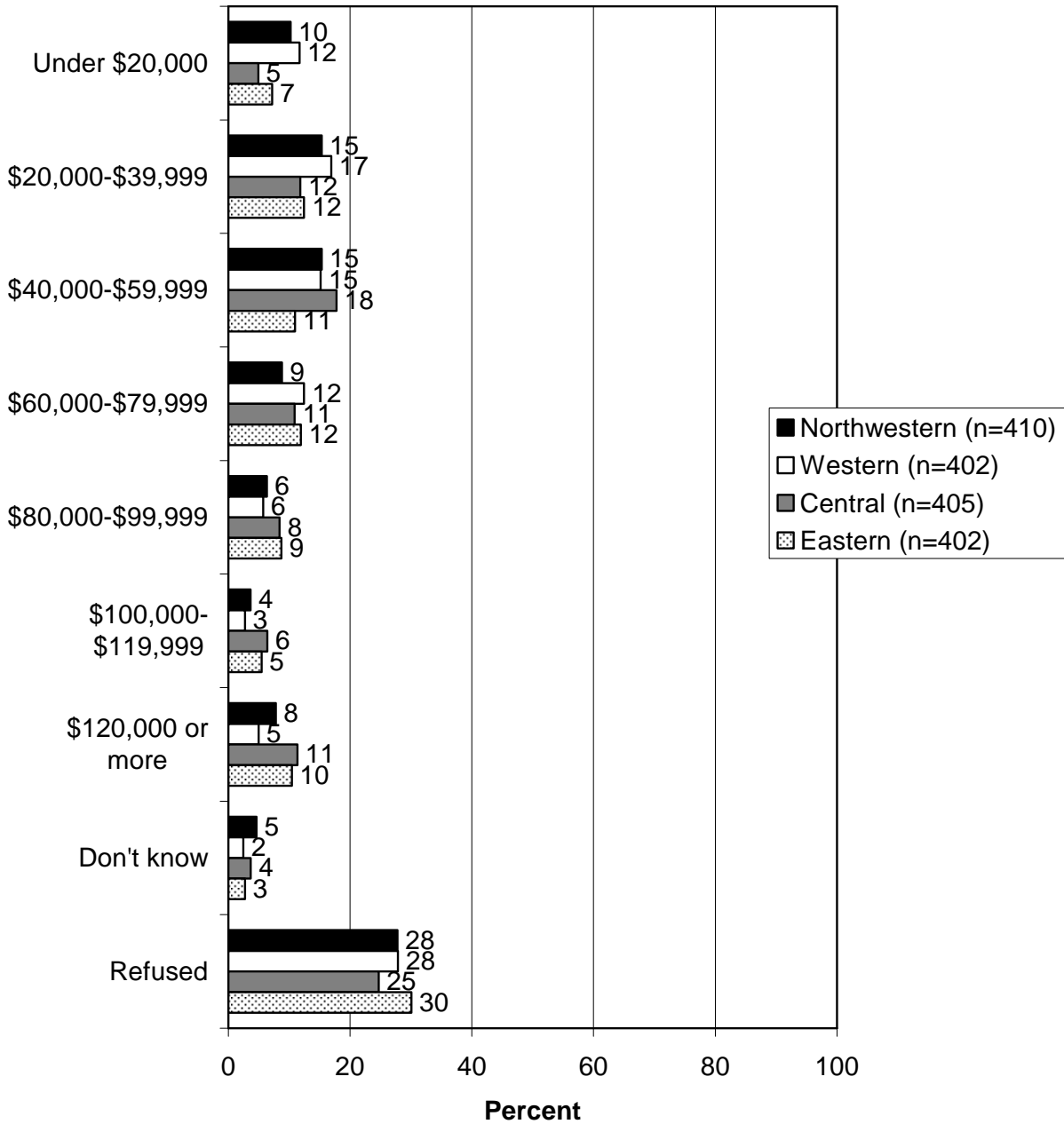
Q150. Which of the following statements best describes where you currently live?



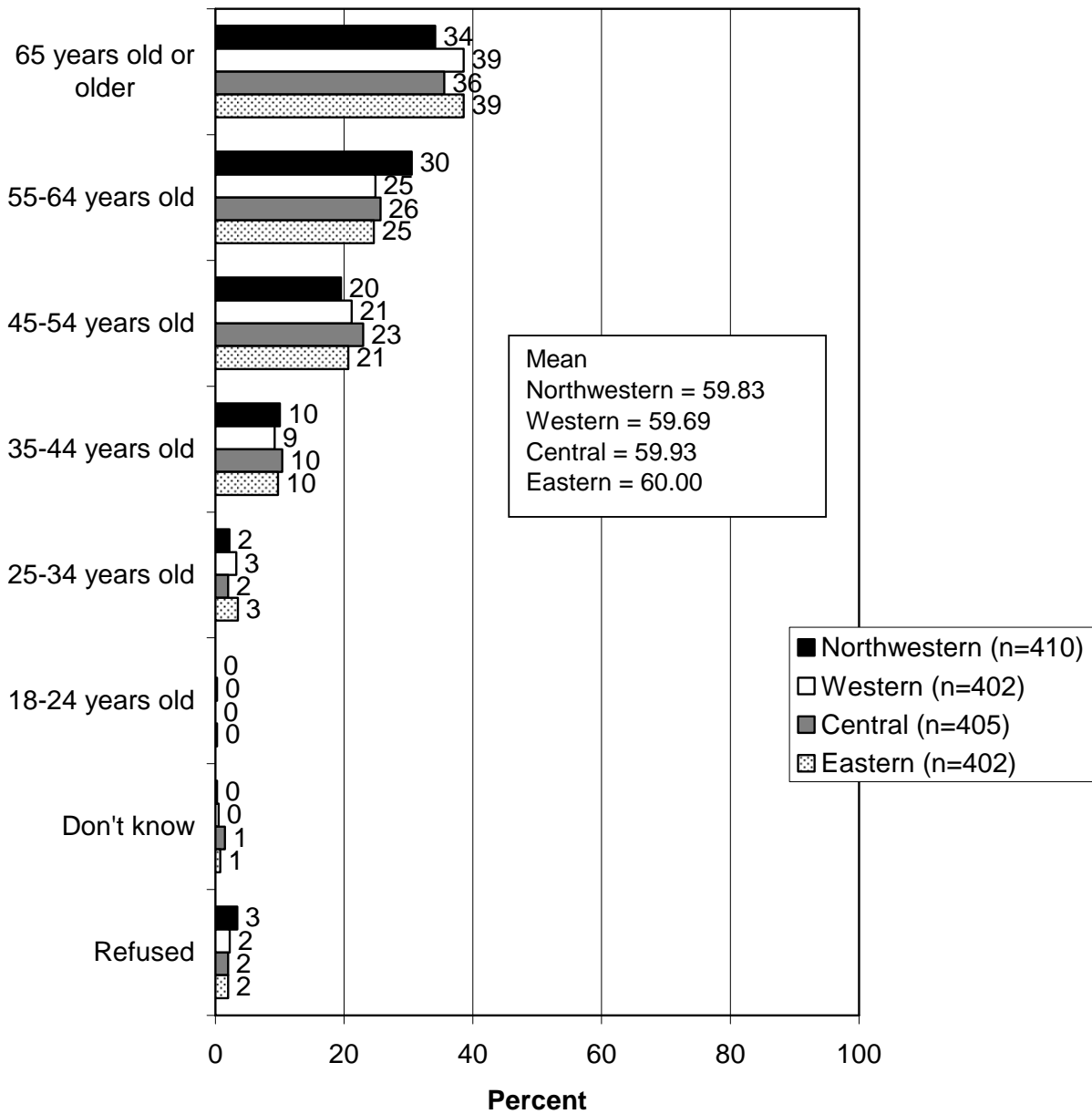
Q151. Which of the following statements best describes the highest level of formal education you have completed?



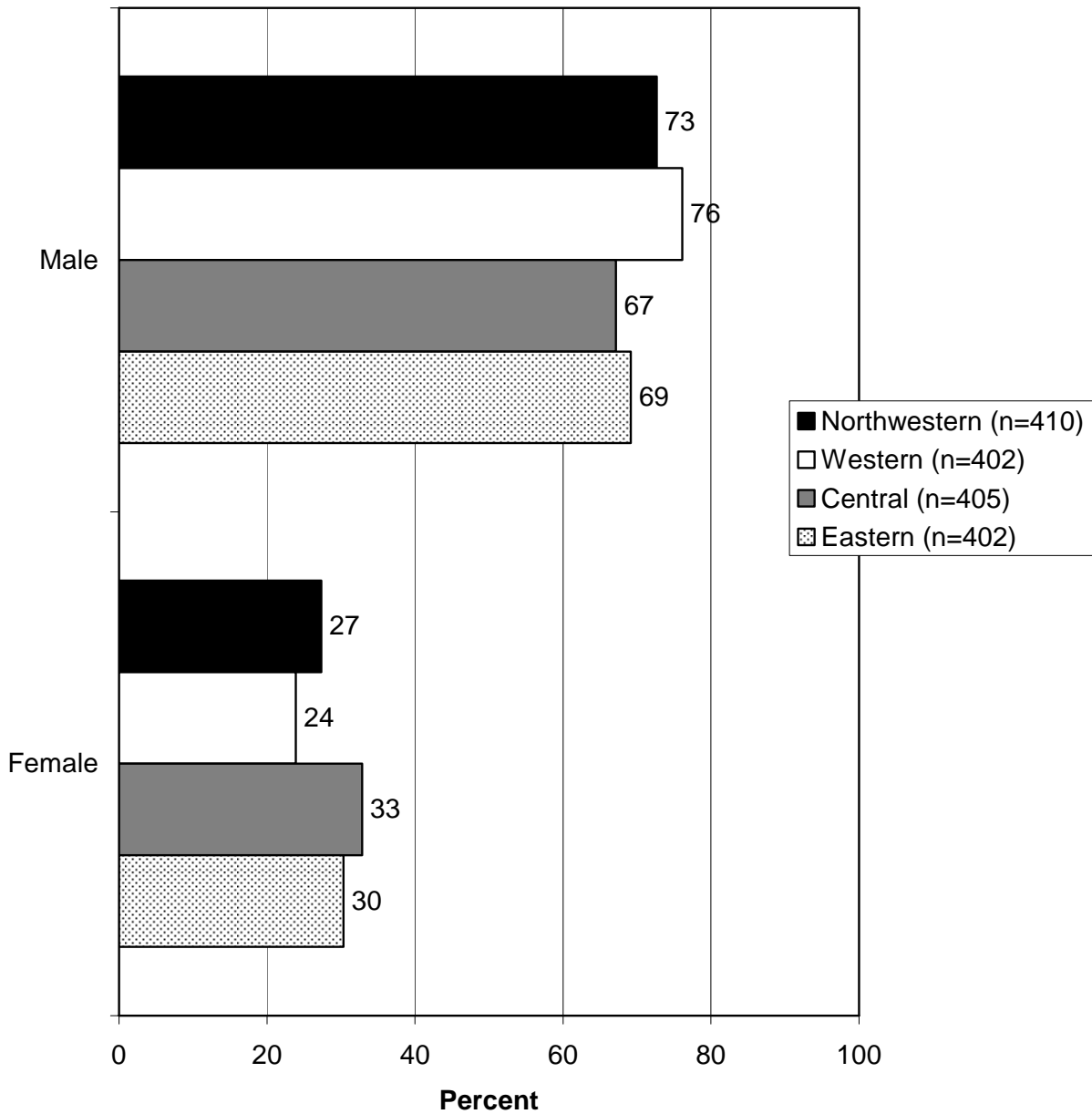
Q152. Which of these categories best describes your total household income before taxes last year?



Q153. Respondent's age.



Q159. Respondent's gender (observed, not asked, by interviewer).



ABOUT RESPONSIVE MANAGEMENT

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

Utilizing its in-house, full-service, computer-assisted telephone and mail survey center with 45 professional interviewers, Responsive Management has conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communications plans, need assessments, and program evaluations on natural resource and outdoor recreation issues.

Clients include most of the federal and state natural resource, outdoor recreation, and environmental agencies, and most of the top conservation organizations. Responsive Management also collects attitude and opinion data for many of the nation's top universities, including the University of Southern California, Virginia Tech, Colorado State University, Auburn, Texas Tech, the University of California—Davis, Michigan State University, the University of Florida, North Carolina State University, Penn State, West Virginia University, and others.

Among the wide range of work Responsive Management has completed during the past 20 years are studies on how the general population values natural resources and outdoor recreation, and their opinions on and attitudes toward an array of natural resource-related issues. Responsive Management has conducted dozens of studies of selected groups of outdoor recreationists, including anglers, boaters, hunters, wildlife watchers, birdwatchers, park visitors, historic site visitors, hikers, and campers, as well as selected groups within the general population, such as landowners, farmers, urban and rural residents, women, senior citizens, children, Hispanics, Asians, and African-Americans. Responsive Management has conducted studies on environmental education, endangered species, waterfowl, wetlands, water quality, and the reintroduction of numerous species such as wolves, grizzly bears, the California condor, and the Florida panther.

Responsive Management has conducted research on numerous natural resource ballot initiatives and referenda and helped agencies and organizations find alternative funding and increase their memberships and donations. Responsive Management has conducted major agency and organizational program needs assessments and helped develop more effective programs based upon a solid foundation of fact. Responsive Management has developed websites for natural resource organizations, conducted training workshops on the human dimensions of natural resources, and presented numerous studies each year in presentations and as keynote speakers at major natural resource, outdoor recreation, conservation, and environmental conferences and meetings.

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 routinely conducts surveys in Spanish and has also conducted surveys and focus groups in Chinese, Korean, Japanese, and Vietnamese.

Responsive Management's research has been featured in most of the nation's major media, including CNN, ESPN, *The Washington Times*, *The New York Times*, *Newsweek*, *The Wall Street Journal*, and on the front pages of *The Washington Post* and *USA Today*.

Visit the Responsive Management website at:

www.responsivemanagement.com