

Vermont Residents' Attitudes Toward Furbearer Management



Conducted for the
Vermont Fish and Wildlife Department

2022



VERMONT RESIDENTS' ATTITUDES TOWARD FURBEARER MANAGEMENT

2022

Responsive Management National Office

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EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Vermont Fish and Wildlife Department (the Department) to determine residents' attitudes toward the Department and its management of furbearer species. In particular, the study had an emphasis on trapping, attitudes about furbearer species, and factors that influence trapping approval, among other topics. The study entailed a probability-based, scientific telephone survey of Vermont residents 18 years old and older.

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones (both landlines and cell phones were called in their proper proportions). Additionally, telephone surveys, relative to mail or online surveys, allow for more scientific sampling and data collection, as well as higher response rates. Research has shown that respondents who are more interested in the subject matter of the study are more likely to respond to a mail survey, resulting in skewed results. For example, avid recreationists and/or those with an interest in the work of the Department will disproportionately choose to complete the survey, while other individuals may not. Responsive Management's professional telephone interviewers are adept at avoiding this type of bias by persuading each randomly selected respondent that their opinion, regardless of how "informed" they feel it may be, is important to the study. In addition, if a potential respondent cannot be reached on the first call, subsequent calls are placed on different days of the week and different times of the day to ensure a probability-based, scientifically valid sample. Another advantage of telephone surveys, relative to mail or online surveys, is that they provide higher quality data because of the clarification that a live interviewer provides for any questions in the survey.

Telephone surveys also allow respondents who cannot or will not respond to a mail or online survey to participate. Mail and online surveys systematically exclude those who have difficulty reading. According to statistics published by the U.S. Department of Education, 54% of U.S. residents 16 to 74 years old, which represents about 130 million Americans, lack proficiency in literacy, reading below the sixth-grade level.¹ Therefore, many might be reticent to complete a mail or online survey they must read to themselves. In addition, those with poor or limited internet service or who are intimidated by technology may be reticent to complete a survey online. In a telephone survey, however, a live interviewer reads the survey questions, clarifies them if necessary, and assists the respondent with completing the survey, making it an excellent option to reduce bias and increase response rates for the survey.

Finally, telephone surveys also have fewer negative effects on the environment than do mail surveys because of the reduced use of paper, reduced energy consumption for delivering and

¹ U.S. Department of Education, National Center for Education Statistics. 2019. *Adult Literacy* (<https://nces.ed.gov/fastfacts/display.asp?id=69>). Downloaded November 8, 2022.

See also: Nietzel, M.T. 2020. "Low Literacy Levels Among U.S. Adults Could Be Costing the Economy \$2.2 Trillion a Year." *Forbes*, September 9, 2020.

returning the questionnaires, and reduced quantity of material to be disposed of after the survey.

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Department, based on the research team's familiarity with natural resources and wildlife management. The telephone survey was coded for integration with Responsive Management's computer-assisted telephone interviewing (CATI) process. An important aspect of this CATI process is that the computer controls which questions are asked, but each telephone survey is administered by a live interviewer. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

The sample of adult Vermont residents was obtained from Marketing Systems Group, a firm that specializes in providing scientifically valid samples for survey research. The sample included both landlines and cellular phones in their proper proportions, and the survey was administered to reflect these proportions. The sampling plan was designed to achieve a representative sample of residents both statewide and stratified at a regional level for each of the Department's four regions. Note that the regions were weighted to be in their proper proportions for statewide data.

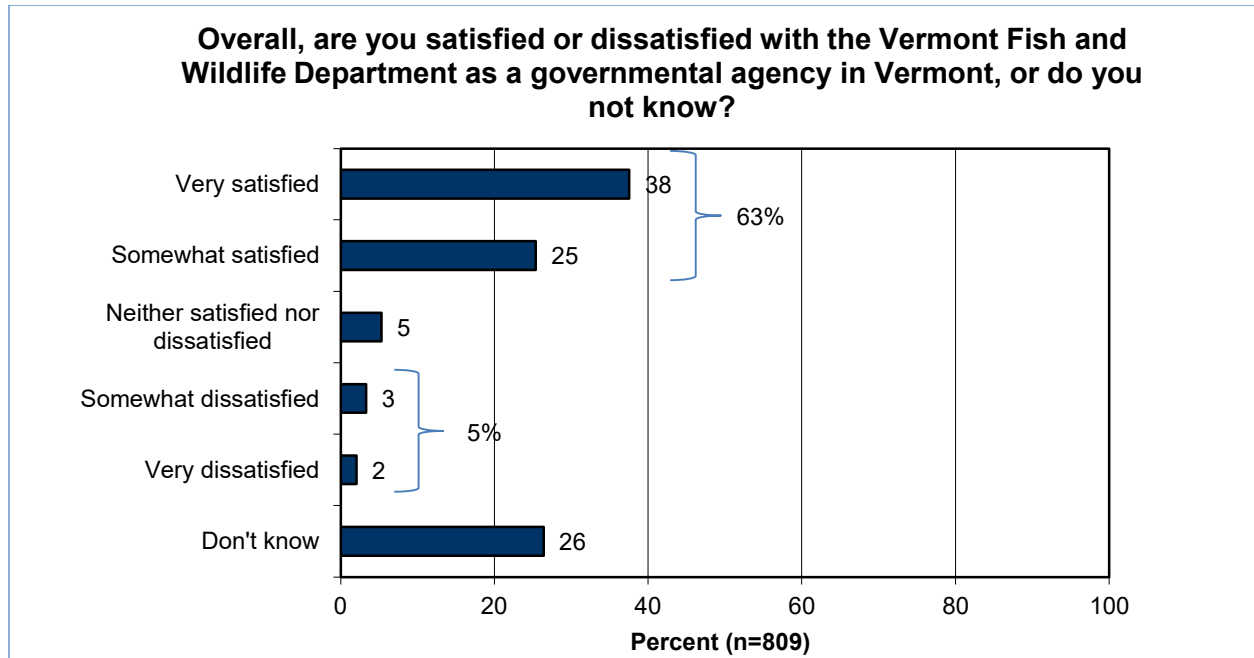
The survey was conducted in October 2022, and Responsive Management obtained a total of 809 completed questionnaires.

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The data were weighted in each region by demographic and participatory factors, including age and gender. The regions were then weighted to match their proper proportions in the statewide analysis. Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of Vermont residents 18 years old and older, the sampling error is at most plus or minus 3.44 percentage points.

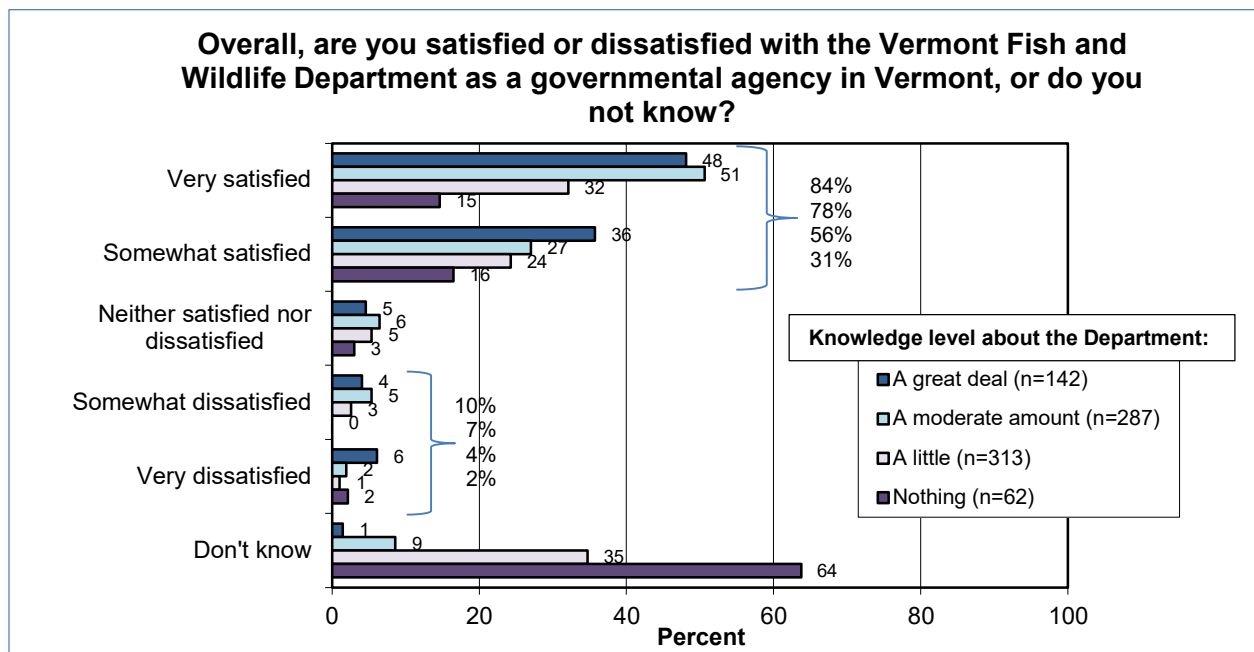
KNOWLEDGE OF AND ATTITUDES TOWARD THE DEPARTMENT

Nearly half of residents (42%) said they knew *a great deal* or *a moderate amount* about the Department prior to taking the survey. This compares to 46% who knew *a little* and 12% who knew *nothing*.

As shown on the following page, nearly two thirds of residents (63%) are *very* or *somewhat* satisfied with the Department as a governmental agency in Vermont, compared to only 5% who are dissatisfied. About a quarter of residents do not know.



The previous two questions regarding knowledge of and satisfaction with the Department were crosstabulated. As shown below, knowledge and satisfaction are correlated: 84% of those who knew *a great deal* about the Department are *very* or *somewhat* satisfied, 78% who knew *a moderate amount* are satisfied, 56% of those who knew *a little* are satisfied, and 31% who knew *nothing* are satisfied. Also, *don't know* responses for satisfaction increase with lack of knowledge about the Department. The takeaway is that the more people know about the Department, the more satisfied they are with it.



The vast majority of residents (81%) were aware that trapping is regulated by the Department; a majority (55%) were *very* aware. On the other hand, 18% were *not at all* aware.

ATTITUDES TOWARD TRAPPING

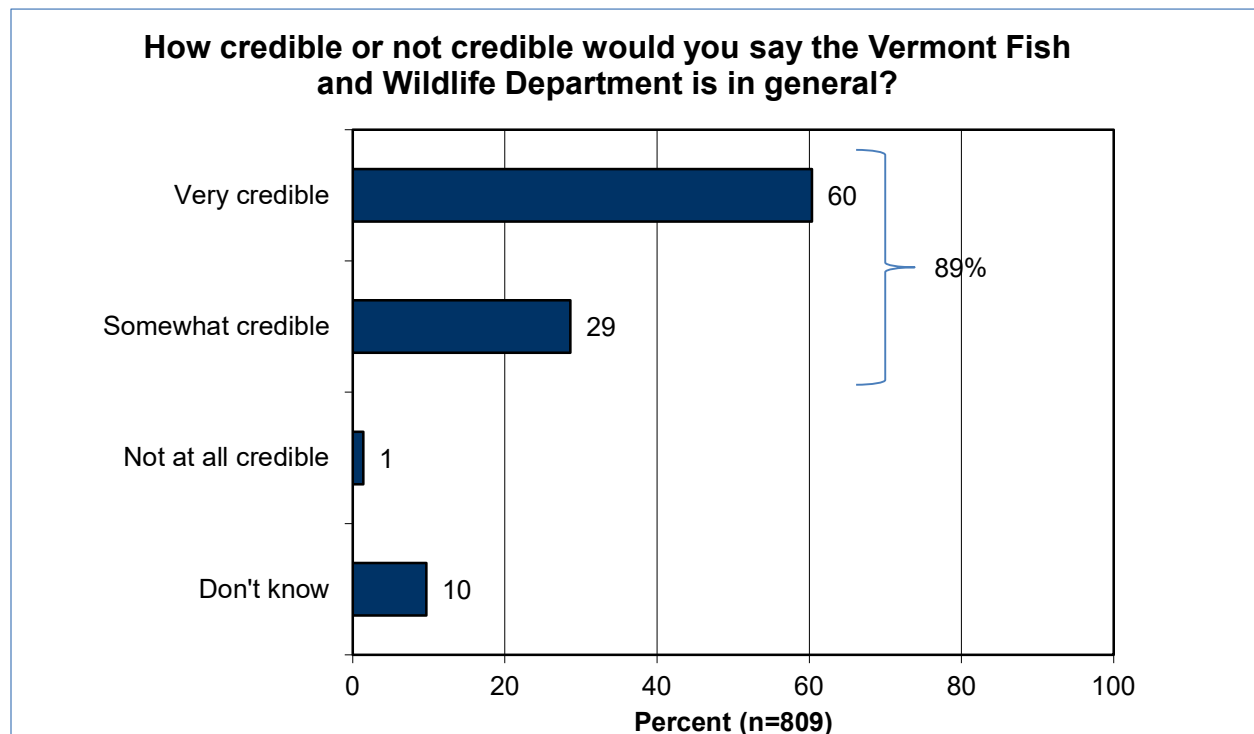
Residents were asked about their approval or disapproval of trapping in Vermont. A random half of the sample were asked if they approve of “regulated trapping,” while the other half were simply asked about “trapping.” This distinction matters: 60% of those who were asked about “regulated trapping” *strongly* or *moderately* approve, while only 42% of those asked about “trapping” approve. In other words, a majority of Vermont residents approve of trapping, in general, when they know it is regulated.

Those who stated approval of trapping, in either version of the question, were asked to give their reasons for approval, in an open-ended question. The most common reasons for approval were for population control, that they support trapping if it is regulated and humane, that it is a tradition, and for nuisance animal control. About two thirds of those who disapprove of trapping (68%) do so because they feel it is cruel or inhumane.

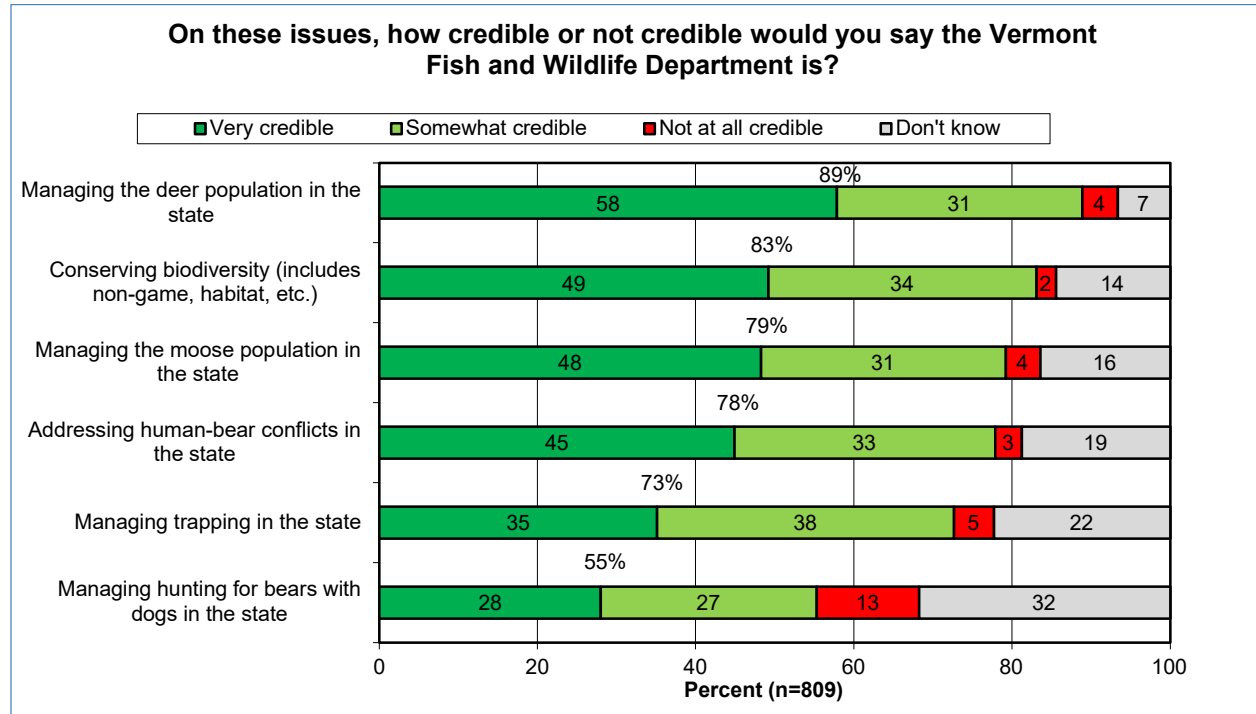
A majority of residents (60%) support the right of others to trap in Vermont, regardless of their personal opinion on trapping.

CREDIBILITY OF THE DEPARTMENT

Most residents (89%) say the Department is credible; 60% say it is *very* credible.



Residents were asked to rate the credibility of the Department regarding six management issues. A majority of residents rated the Department as *very* or *somewhat* credible in all six issues, with the highest percentages being for managing the deer population in the state and conserving biodiversity. (Note that all series graphs are presented in descending order of the first response option; this graph is presented in descending order of *very* credible percentages.)



Two thirds of residents who indicated any knowledge about the Department *and* about trapping in Vermont rate the Department as *excellent* or *good* at regulating and managing trapping in the state.

KNOWLEDGE OF TRAPPING

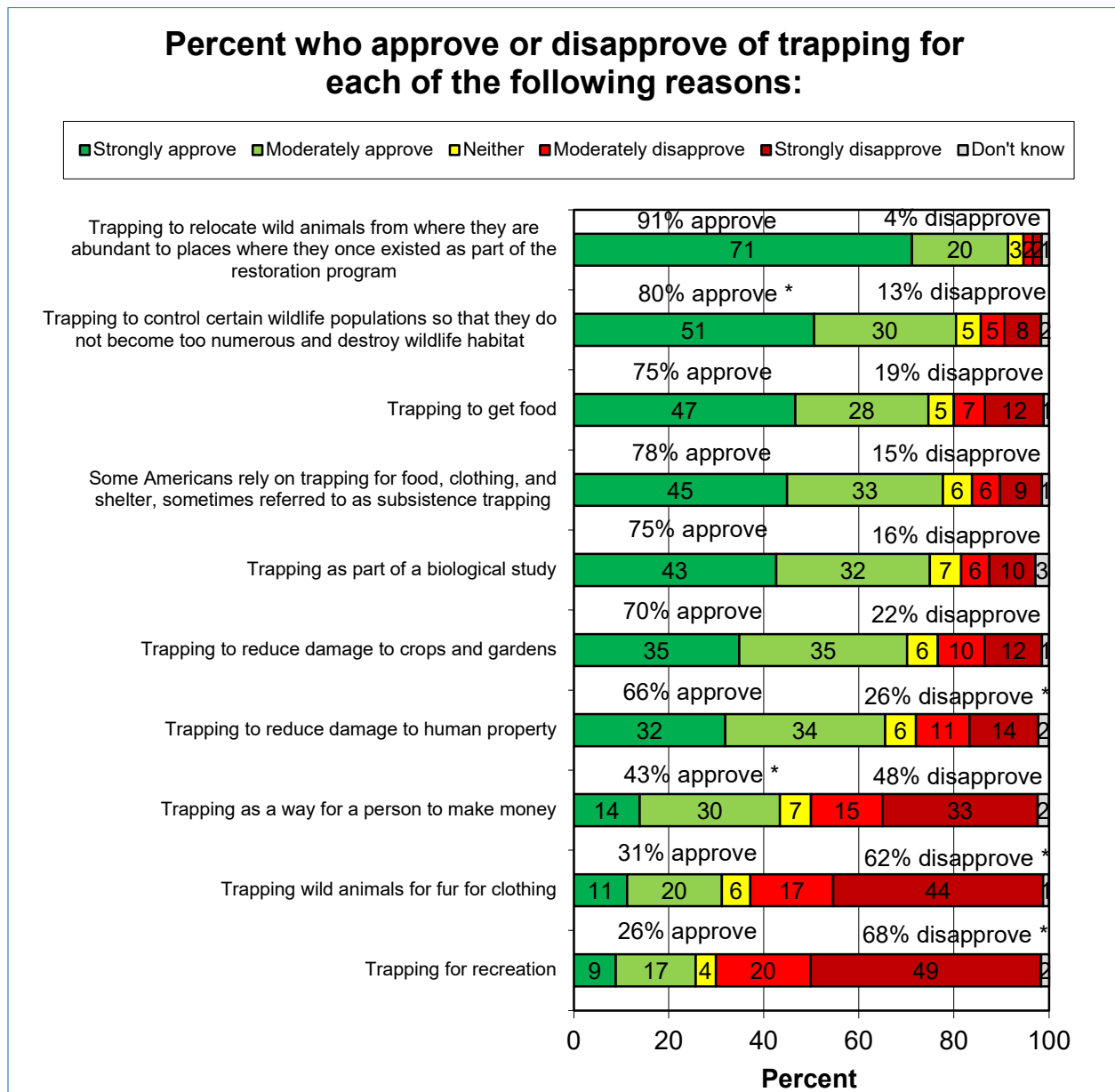
A majority of residents (70%) expressed at least a little knowledge about trapping in Vermont, although only a third said they are *very* or *somewhat* knowledgeable.

The survey presented residents with a list of information sources and asked them to select the two that they think are the most credible sources of information about trapping in the state. By far the Department is considered the most credible source, with 78% who selected it as their first or second choice. This is distantly followed, with 16% to 25% who rated them as their first or second choice, by hunting and trapping organizations, trappers, media outlets, and their family and friends.

A majority of residents (61%) know or have ever known someone who currently traps or previously has trapped wild animals.

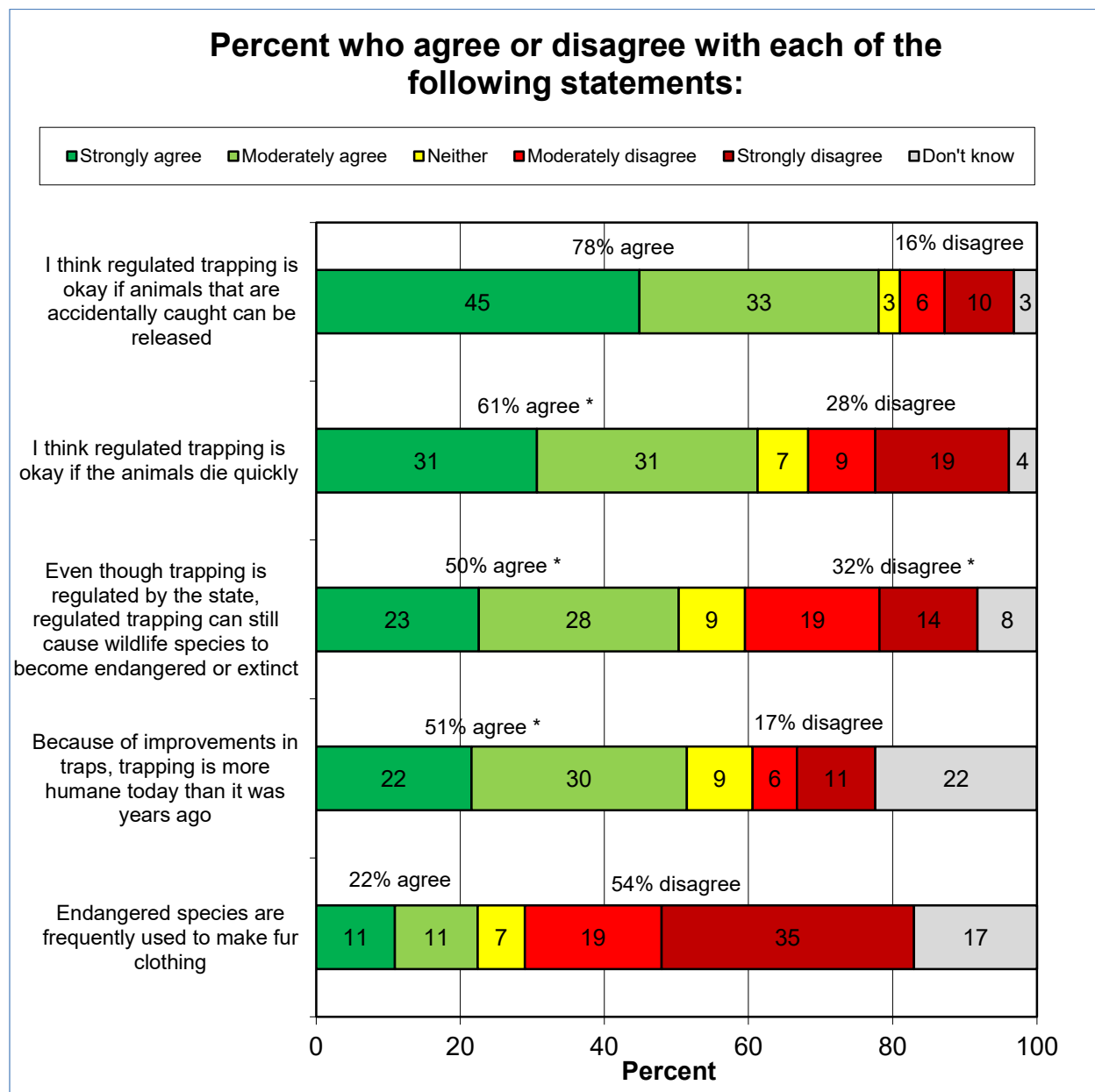
APPROVAL / DISAPPROVAL OF VARIOUS REASONS TO TRAP

Residents were asked if they approve or disapprove of trapping for a series of 10 reasons. As the results below show, approval is high for reasons that benefit wildlife. By far the most approval is for trapping to relocate animals to where they once existed as part of the restoration program. Other reasons for trapping with high approval are to control wildlife populations, for food, and as part of a biological study. At the bottom of the graph, with disapproval exceeding approval, are trapping for recreation, for fur clothing, and for money. (Some summations appear to be off by 1% because they are summed on unrounded numbers; these instances are denoted by an asterisk.)



FACTORS AFFECTING ATTITUDES TOWARD TRAPPING

Residents were asked if they agree or disagree with five statements regarding attitudes toward trapping. The most agreement is for “I think regulated trapping is okay if animals that are accidentally caught can be released” (78% *strongly* or *moderately* agree) and “I think regulated trapping is okay if the animals die quickly” (61%). The most disagreement is with the statement “Endangered species are frequently used to make fur clothing” (22% agree, 54% disagree). Note that the statement “...trapping can still cause wildlife species to become endangered or extinct” has more agreement (50%) than disagreement (32%). (Regulated trapping in the United States has not caused any species to become threatened, endangered, or extinct.)



KNOWLEDGE OF AND ATTITUDES TOWARD FURBEARER SPECIES

This section of the survey had questions specific to eight furbearer species: beaver, bobcat, fisher, otter, coyote, fox, raccoon, and skunk.

A majority of residents (54%) know *a great deal* or *a moderate amount* about skunk, followed by raccoon (47%) and coyote (43%). The next tier, with percentages ranging from 27% to 33%, includes beaver, fox, fisher, and bobcat; the lowest amount of knowledge is for otter (21%).

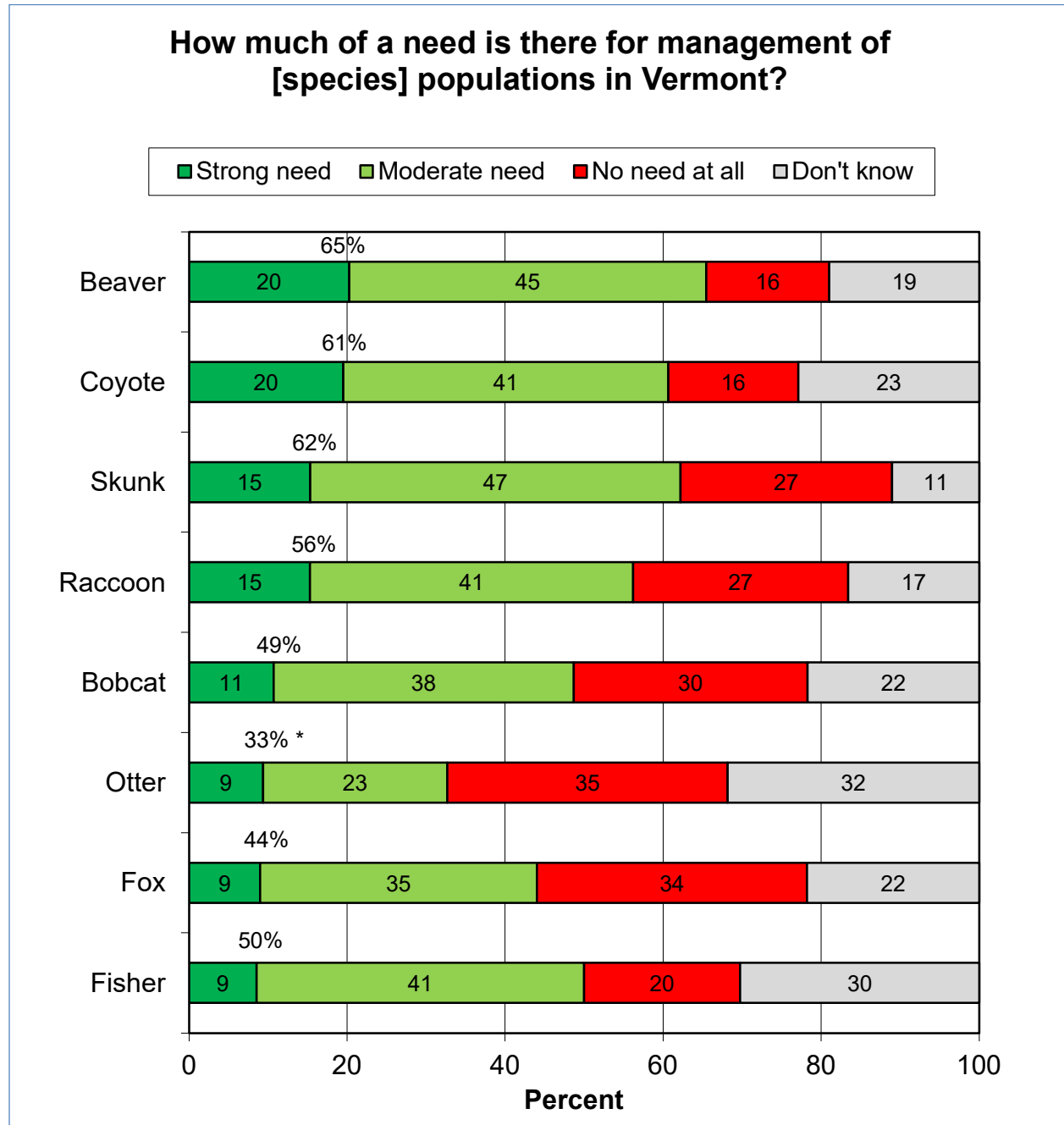
Consistent with the knowledge results, most residents (92%) have skunk around their home, while a second tier (ranging from 72% to 78%) said they have fox, raccoon, and coyote in their area. Only 42% said they have otter in their area.

Those who have a given species in their area were asked to pick a statement that best describes their feelings about the species, on a spectrum of enjoying having it in the area to regarding it as dangerous. The species most enjoyed by residents are otter, bobcat, fox, and beaver. At the other end, the species most often considered dangerous are raccoon, skunk, and coyote.

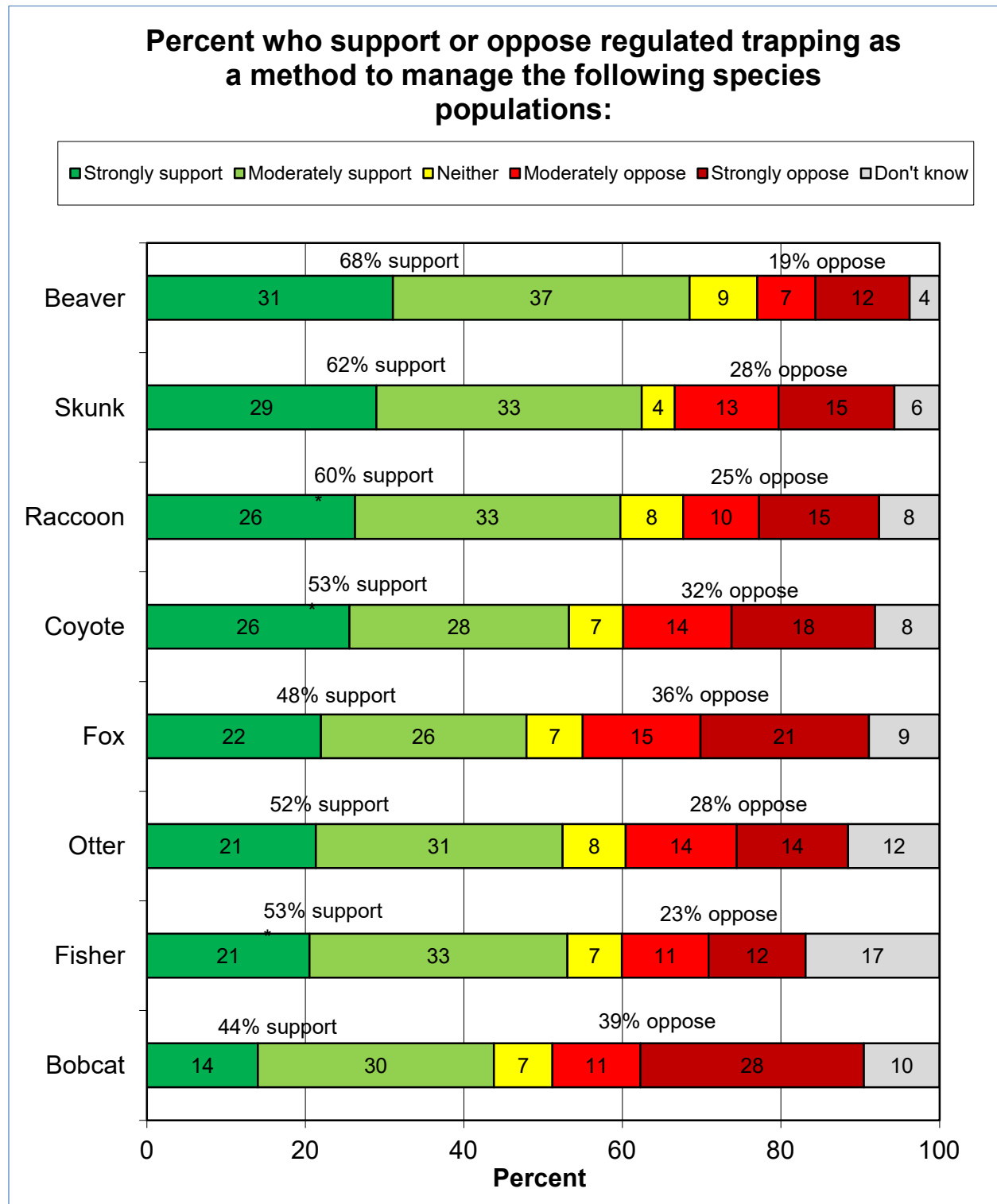
Those who do not have a given species in their area were presented with equivalent statements about how they would feel. Again, the most welcome species would be otter, whereas the most concern was expressed for coyote.

Residents were asked if the furbearer populations where they live are too high, about right, or too low (or if the species is not in their area). For most species, the most common response was *about right*, particularly for skunk (57% stated this), fox (53%), and beaver (50%). The one exception is otter: 40% said there are no otter where they live, while 30% said the otter population is *about right*. Regarding populations that are considered *too high*, the highest percentages were for skunk (19%), raccoon (16%), and coyote (14%).

Among the eight furbearer species in the survey, residents most often said there is a need to manage the populations of beaver (65% said there is a *strong* or *moderate* need), skunk (62%), coyote (61%), and raccoon (56%). Only 33% said there is a need to manage otter. (Although “[species]” is shown in the graph, the survey used the specific name of each species.)



Support exceeds opposition for regulated trapping as a method to manage each of the eight furbearer species populations. The most support is for trapping beaver (68% *strongly* or *moderately* support this), skunk (62%), and raccoon (60%). The full list is shown.



HUMAN–WILDLIFE CONFLICTS

About half of residents (51%) have had problems with wild animals or birds within the past 2 years. Those who had problems with wildlife most commonly said the problems were caused by bear, raccoon, and skunk.

The problems most frequently caused by wildlife involved the animals getting into garbage, damage to crops or gardens, and damage to human property such as buildings or vehicles.

Nearly a third of residents who had problems with wildlife (31%) took no action to address the problems. Otherwise, actions taken by 10% or more of these residents include fencing off the yard or garden, capturing and relocating the animal, using wildlife repellents or deterrents, and using an animal-proof garbage container.

Only 4% of those who had problems with wildlife hired someone to resolve the problems. Half of those who hired someone (50%) said the person they hired gave them information on non-lethal means to resolve the problems.

Nearly two thirds of residents (63%) support trapping as a way to resolve nuisance animal problems, whereas 19% oppose.

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INTRODUCTION AND METHODOLOGY

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USE OF TELEPHONES FOR THE SURVEY

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones (both landlines and cell phones were called in their proper proportions). Additionally, telephone surveys, relative to mail or online surveys, allow for more scientific sampling and data collection, as well as higher response rates. Research has shown that respondents who are more interested in the subject matter of the study are more likely to respond to a mail survey, resulting in skewed results. For example, avid recreationists and/or those with an interest in the work of the Department will disproportionately choose to complete the survey, while other individuals may not. Responsive Management's professional telephone interviewers are adept at avoiding this type of bias by persuading each randomly selected respondent that their opinion, regardless of how "informed" they feel it may be, is important to the study. In addition, if a potential respondent cannot be reached on the first call, subsequent calls are placed on different days of the week and different times of the day to ensure a probability-based, scientifically valid sample. Another advantage of telephone surveys, relative to mail or online surveys, is that they provide higher quality data because of the clarification that a live interviewer provides for any questions in the survey.

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See also: Nietzel, M.T. 2020. "Low Literacy Levels Among U.S. Adults Could Be Costing the Economy \$2.2 Trillion a Year." *Forbes*, September 9, 2020.

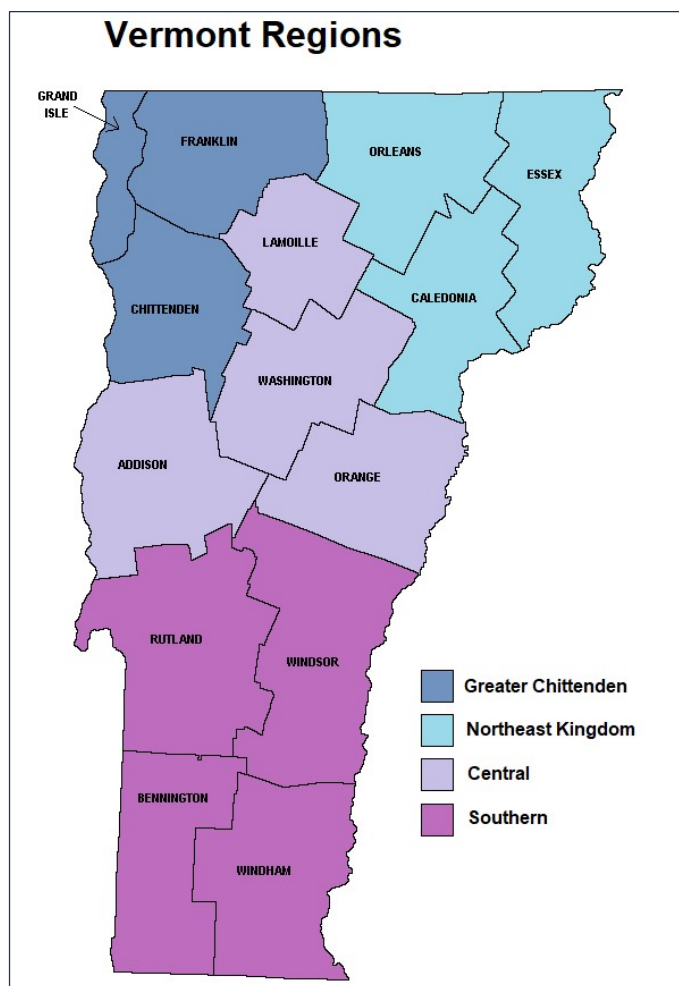
QUESTIONNAIRE DESIGN

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Department, based on the research team's familiarity with natural resources and wildlife management. The telephone survey was coded for integration with Responsive Management's computer-assisted telephone interviewing (CATI) process. An important aspect of this CATI process is that the computer controls which questions are asked, but each telephone survey is administered by a live interviewer. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

SURVEY SAMPLE

The sample of adult Vermont residents was obtained from Marketing Systems Group, a firm that specializes in providing scientifically valid samples for survey research. The sample included both landlines and cellular phones in their proper proportions, and the survey was administered to reflect these proportions.

The sampling plan was designed to achieve a representative sample of residents both statewide and stratified at a regional level for each of the Department's four regions, as shown in the map below. For the analysis of results, the data were weighted to be in their proper statewide proportions.



TELEPHONE SURVEY DATA COLLECTION AND QUALITY CONTROL

The interviews were conducted using Responsive Management's CATI system, which utilizes software for telephone data collection. The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey instrument was programmed so that the CATI system branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection. The software also allowed for error checks during the interview to help ensure that the data were accurate and valid.

Responsive Management has interviewers who have been trained according to the highest industry standards originally established by the Council of American Survey Research Organizations (the survey industry trade association that has since merged with Marketing Research Association to form The Insights Association). The Survey Center Managers and other professional staff conducted a project briefing with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaires. The survey center managers and statisticians monitored the telephone 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.

Telephone surveying times were Monday through Friday from noon to 9:00 p.m. and Saturday from noon to 7:00 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.

Those with a cellular number who could not be reached after five attempts were sent a text message inviting them to participate in the survey. An example is shown on the following page; due to the limited characters allowed in a text, the initial short message links to the longer message.

Hello Vermont Resident. I am Amanda from Responsive Management. The State of Vermont would you like your opinion on wildlife in the state! Please consider participating in this survey: [survey link].

The [State of Vermont](#) is conducting a study on wildlife management in Vermont. We want to know more about everyone's opinions and knowledge, regardless of experience or interest. Your input is vital and will help Vermont with future wildlife management decisions.

Your answers will be kept completely confidential and will not be associated with your contact information in any way.

Responsive Management, an independent research firm that specializes in natural resource and fish and wildlife issues, has been contracted by the state to conduct this study. If you need technical assistance with the survey, please contact Responsive Management via email at research@responsivemanagement.com.

Thank you for your time and willingness to participate.

Please click "Next" below to begin the survey.

After the telephone and text surveys were obtained, the Survey Center Managers and statisticians checked each completed survey to ensure clarity and completeness. The survey was conducted in October 2022, and Responsive Management obtained a total of 809 completed questionnaires.

DATA ANALYSIS

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The data were weighted in each region by demographic and participatory factors, including age and gender. The regions were then weighted to match their proper proportions in the statewide analysis.

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

SAMPLING ERROR

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of Vermont residents 18 years old and older, the sampling error is at most plus or minus 3.44 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 3.44 percentage points of each other. Sampling error was calculated using the formula described on the following page, with a sample size of 809 and a population size of 507,659 Vermont residents 18 years old and older.

Sampling Error Equation

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

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

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

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

PRESENTATION OF RESULTS

In examining the results, it is important to be aware that the questionnaire included several types of questions:

- Open-ended questions are those in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Some questions allow only a single response, while other questions allow respondents to give more than one response or choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Some closed-ended questions are in a scale, such as a continuum from strongly support to strongly oppose.
- Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

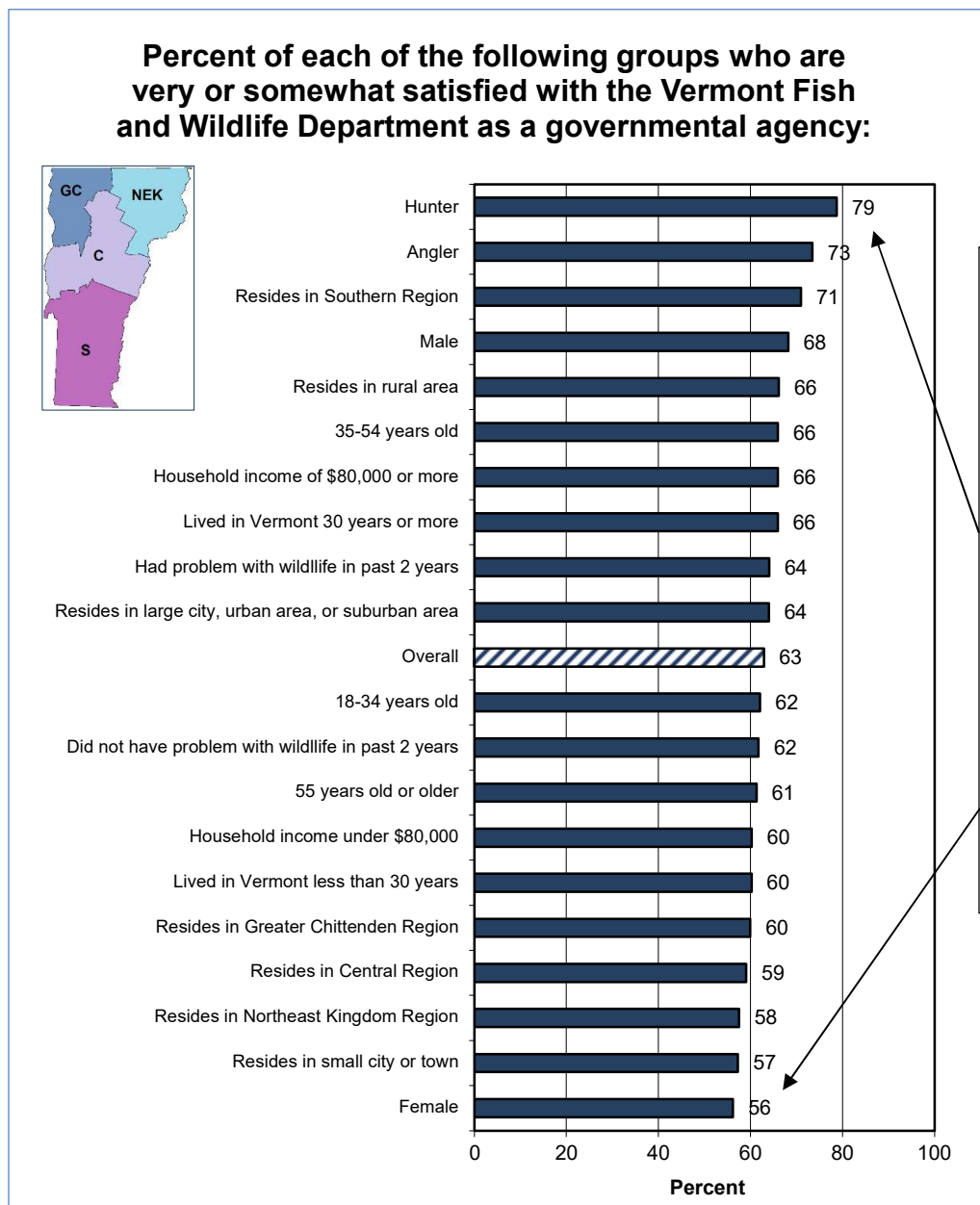
Three questions in the survey match questions from a 2017 survey of Vermont residents, presented in the report titled, *Vermont Department of Fish and Wildlife Media and Communications Survey* (Responsive Management, 2018). (The survey was conducted in 2017 but the report was issued in January 2018.) The results of those questions are shown in graphs side-by-side for trend comparisons.

In addition to graphs depicting the results of each individual survey question, the report includes special graphs that show how various demographic groups respond to certain questions, hereinafter simply referred to as demographic analyses graphs. Not all the questions were analyzed in this way; questions chosen for these analyses are those deemed to be of the most interest or utility. The example on the following page is being provided to explain how to interpret the graphs.

The example shows the percentages of the various groups who are *very* or *somewhat* satisfied with the Vermont Fish and Wildlife Department as a governmental agency. Overall, 63% of residents are *very* or *somewhat* satisfied with the Department, as shown by the patterned bar. Those groups shown above the overall bar have a higher percentage giving one of those responses compared to residents overall. For instance, 79% of hunters are *very* or *somewhat*

satisfied with the Department, shown by the top bar. Meanwhile, those groups below the overall bar have lower percentages expressing satisfaction with the Department; in this example, 56% of females are *very* or *somewhat* satisfied with the Department, substantially lower than residents overall.

When one group is above the overall bar (for instance, in this example, males), its counterpart (in this instance, females) will be below the overall bar. The distance from the overall bar matters, as well. If a group is close to the overall bar (for instance, residents age 18 to 34 years old in this example), then the group should not be considered markedly different from respondents overall. A rule of thumb is that the difference should be 5 percentage points or more for the difference to be noteworthy.



This graph looks at satisfaction with the Department in general. The striped bar shows that 63% of residents are *very* or *somewhat* satisfied with the Department, as indicated by the patterned bar.

Groups above the patterned bar are more likely to hold this opinion than are residents overall; e.g., 79% of hunters gave one of these responses.

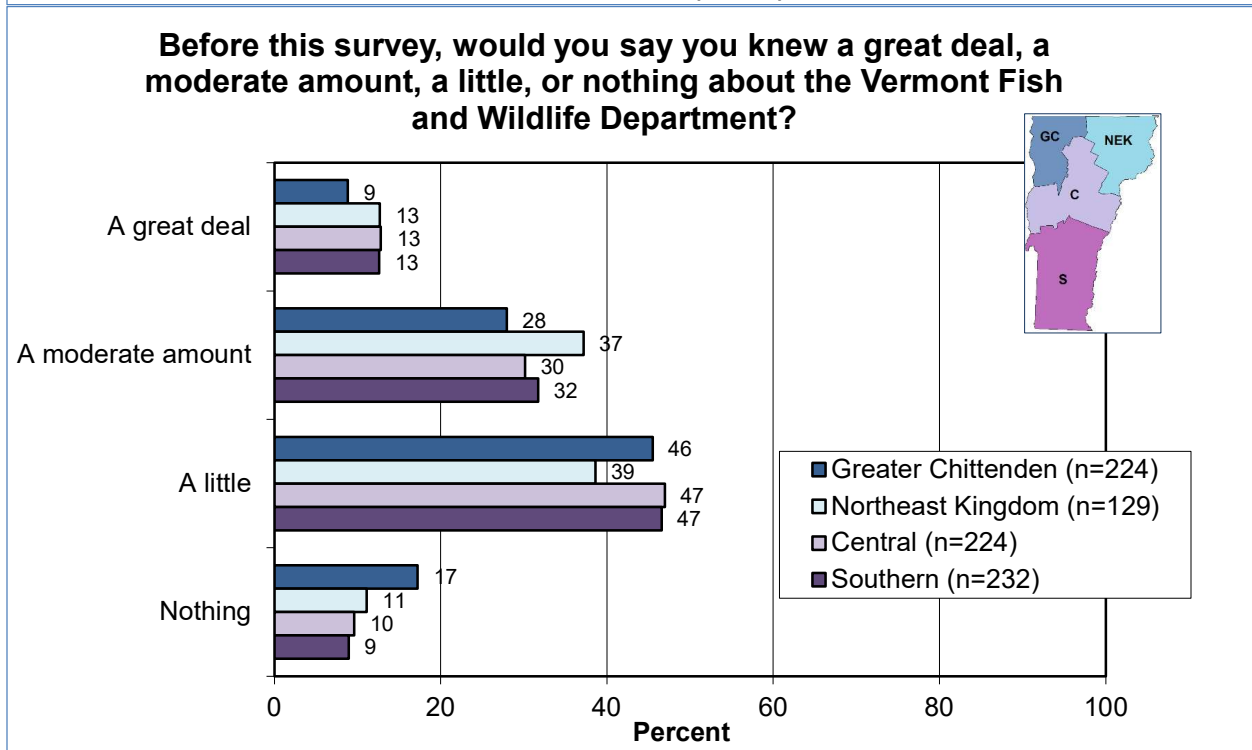
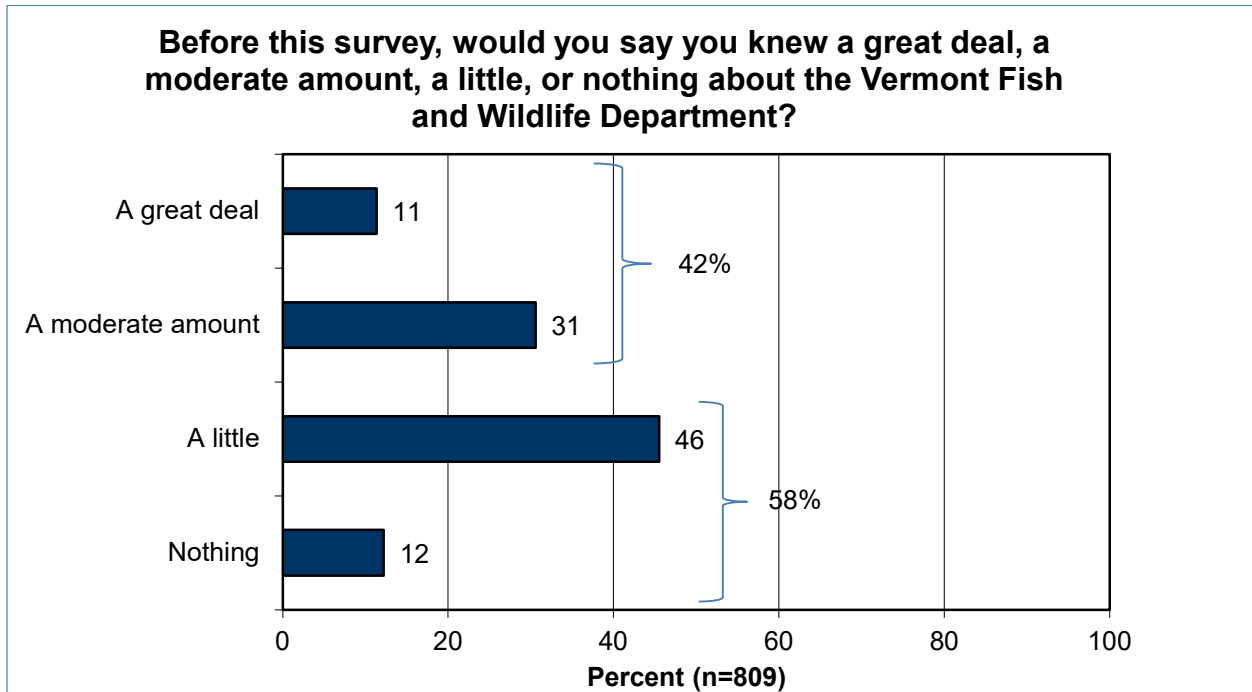
Conversely, those groups below the patterned bar are less likely to be *very* or *somewhat* satisfied with the Department. For example, 56% of females gave one of these responses, notably lower than residents overall.

Throughout the report, results are shown in the following order:

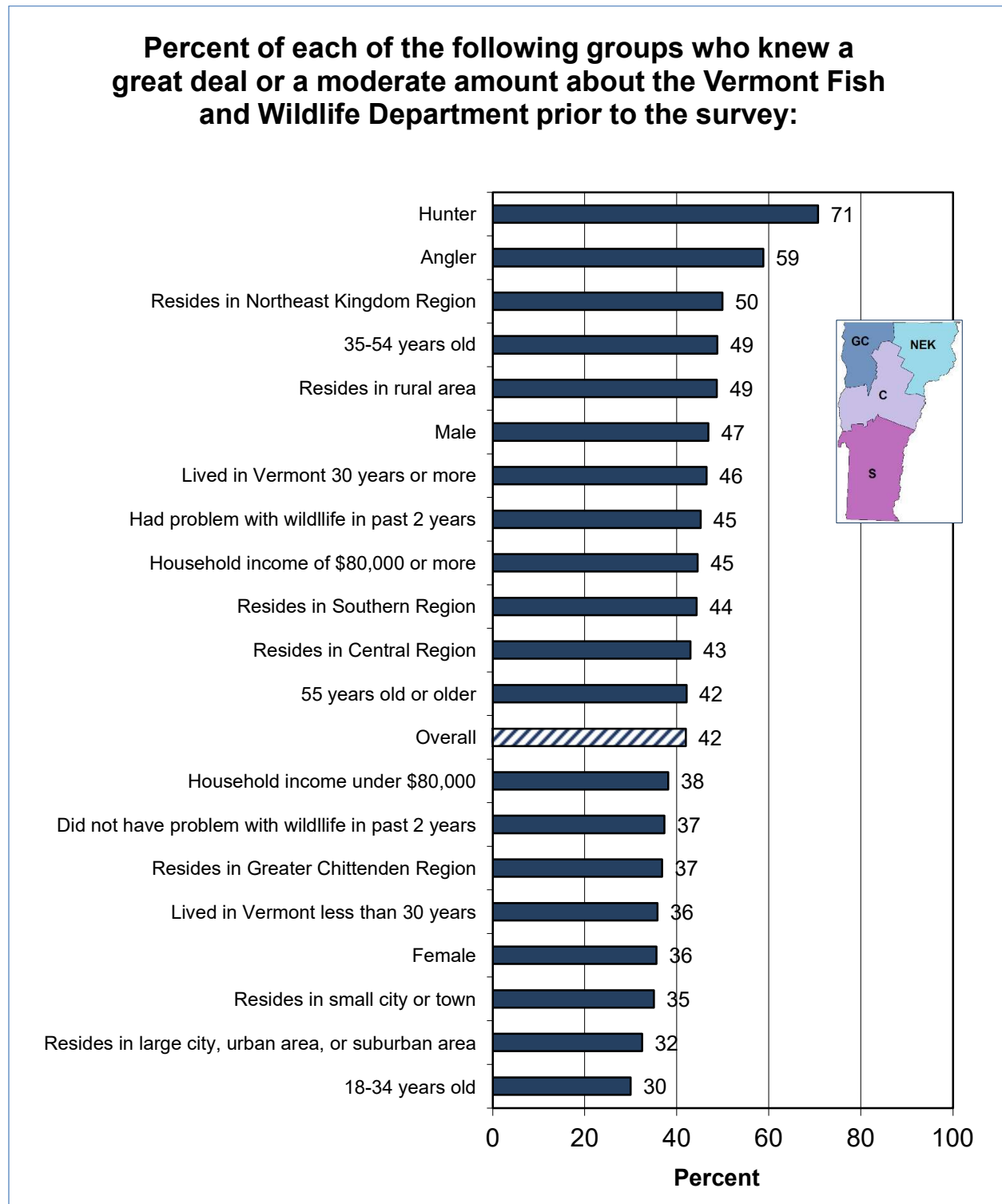
- Overall statewide graphs.
- 4-bar regional graphs (with the exception of series graphs, in which each response option is shown in a single bar for each question in the series; for series results, each region is shown in a separate graph).
- Demographic analyses graphs (for select questions).
- Trends analyses graphs (for three questions).

KNOWLEDGE OF AND ATTITUDES TOWARD THE DEPARTMENT

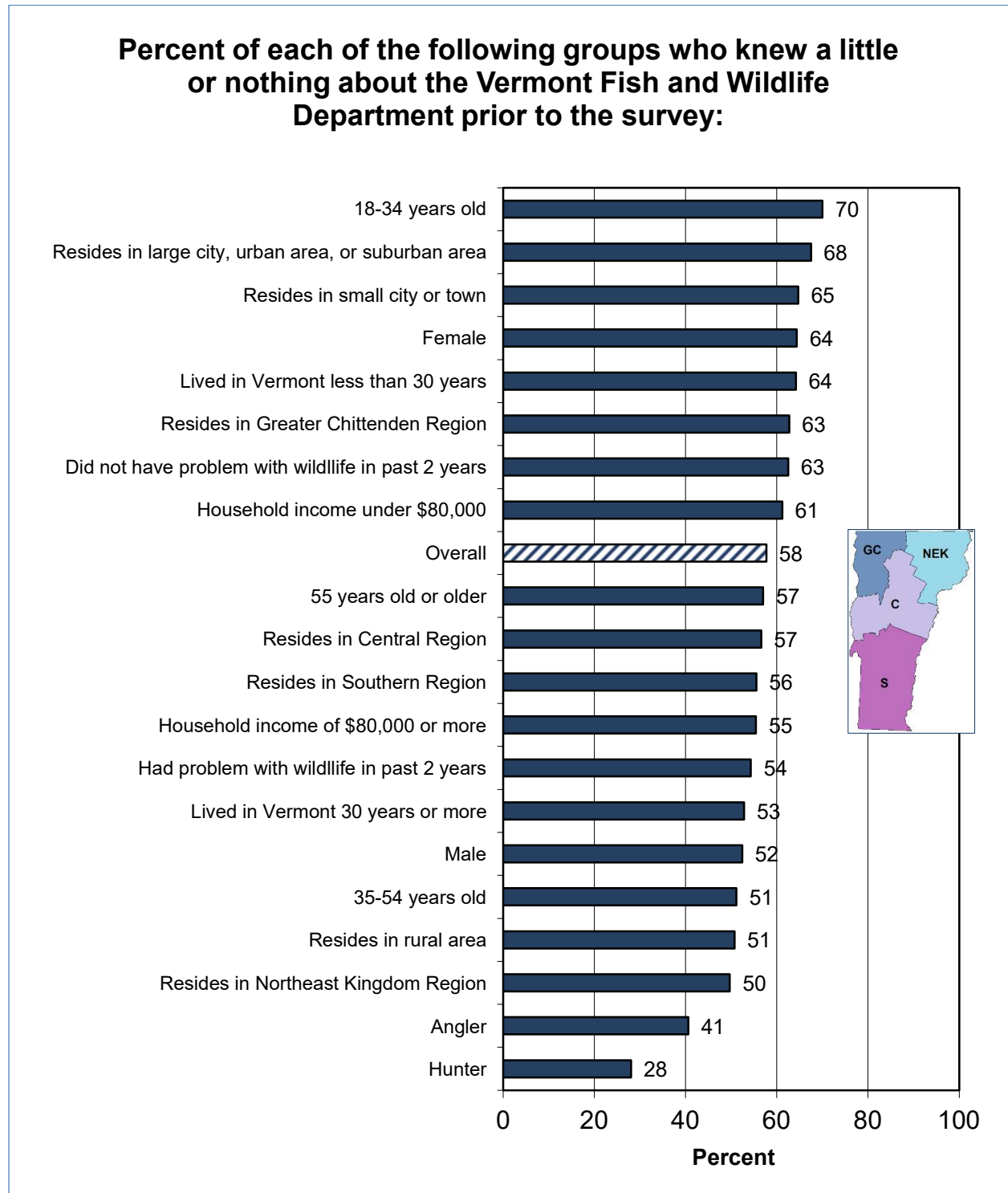
Nearly half of residents (42%) said they knew *a great deal* or *a moderate amount* about the Department prior to taking the survey. This compares to 46% who knew *a little* and 12% who knew *nothing*.



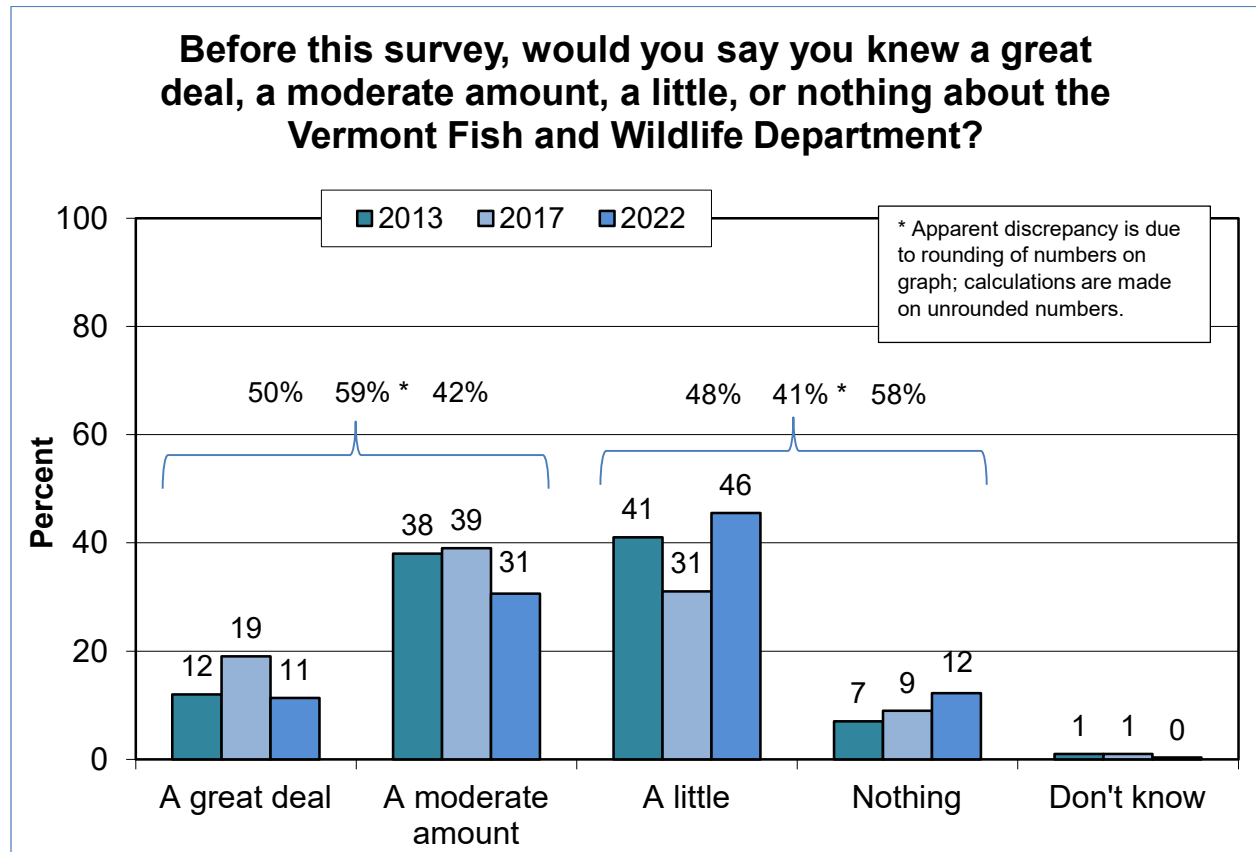
By far, hunters were the most likely to know *a great deal* or *a moderate amount* about the Department, distantly followed by anglers, Northeast Kingdom Region residents, those in the middle age category, and rural residents.



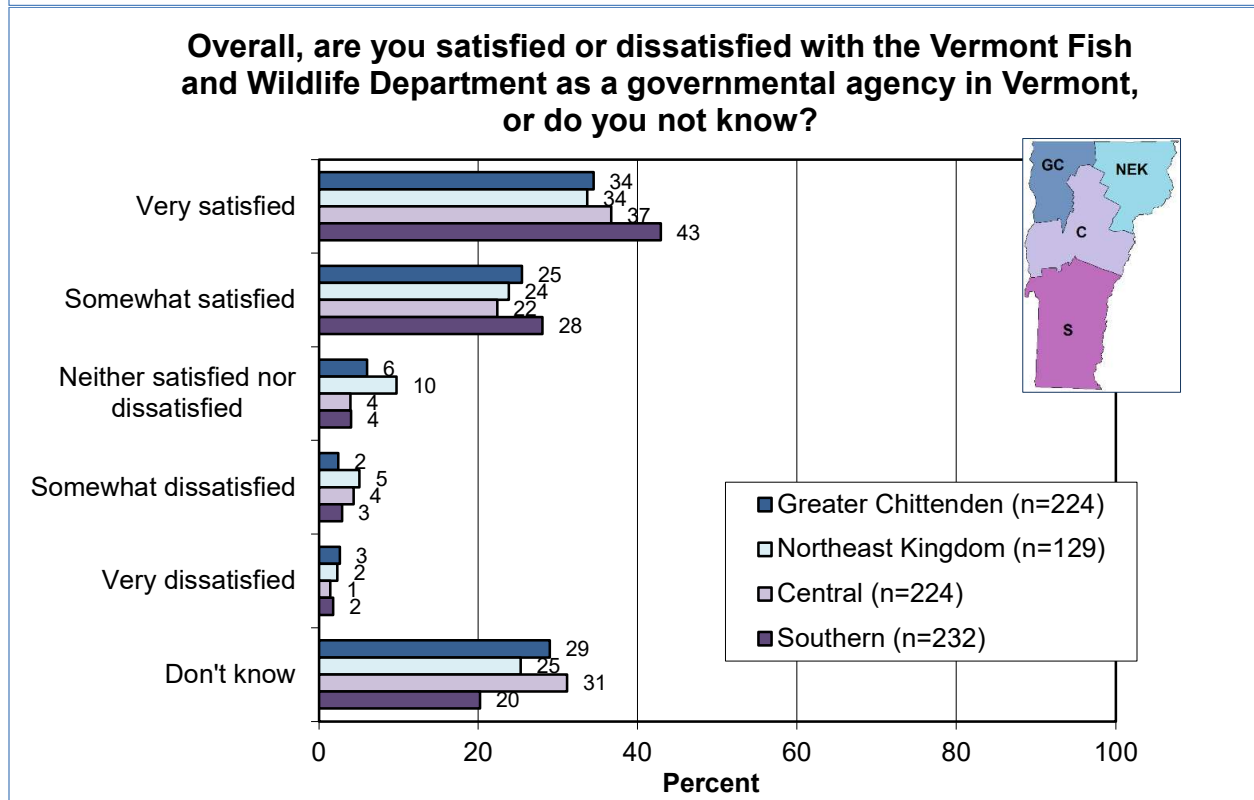
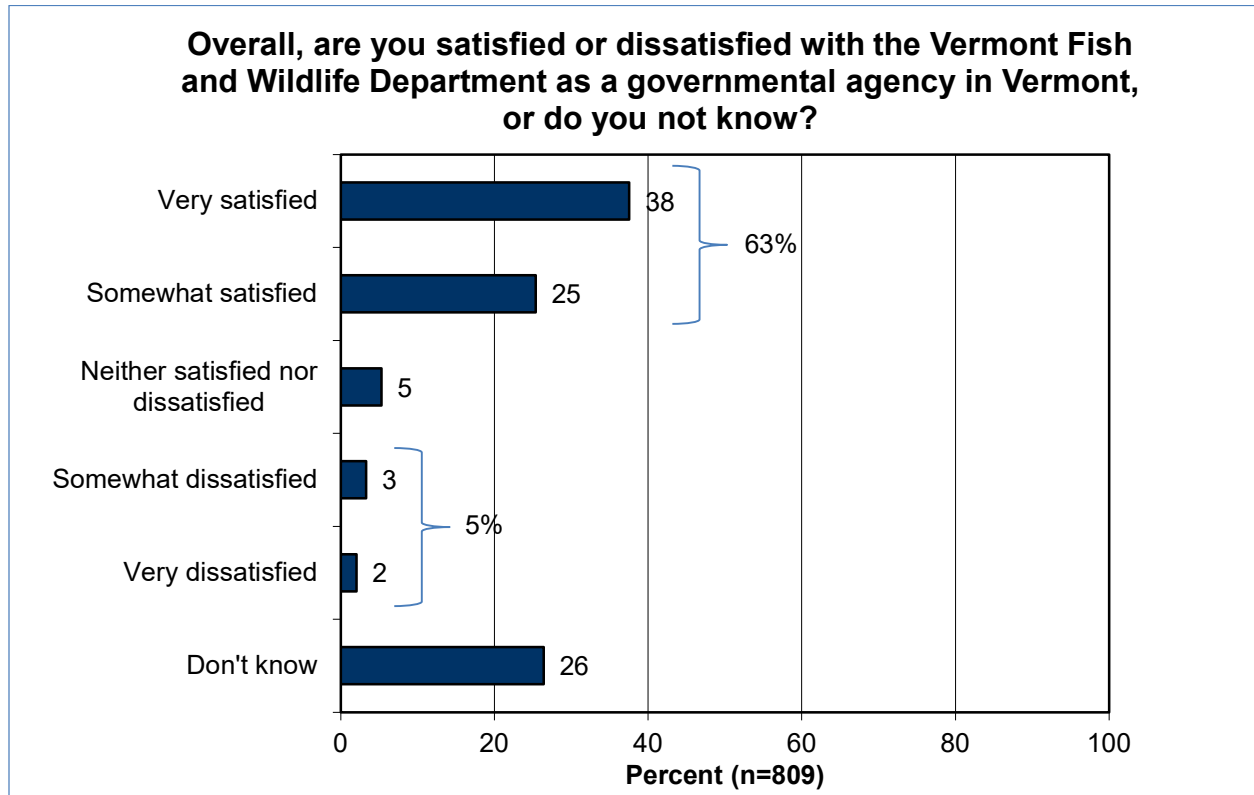
Younger residents and those from urban or suburban areas had the least knowledge about the Department.



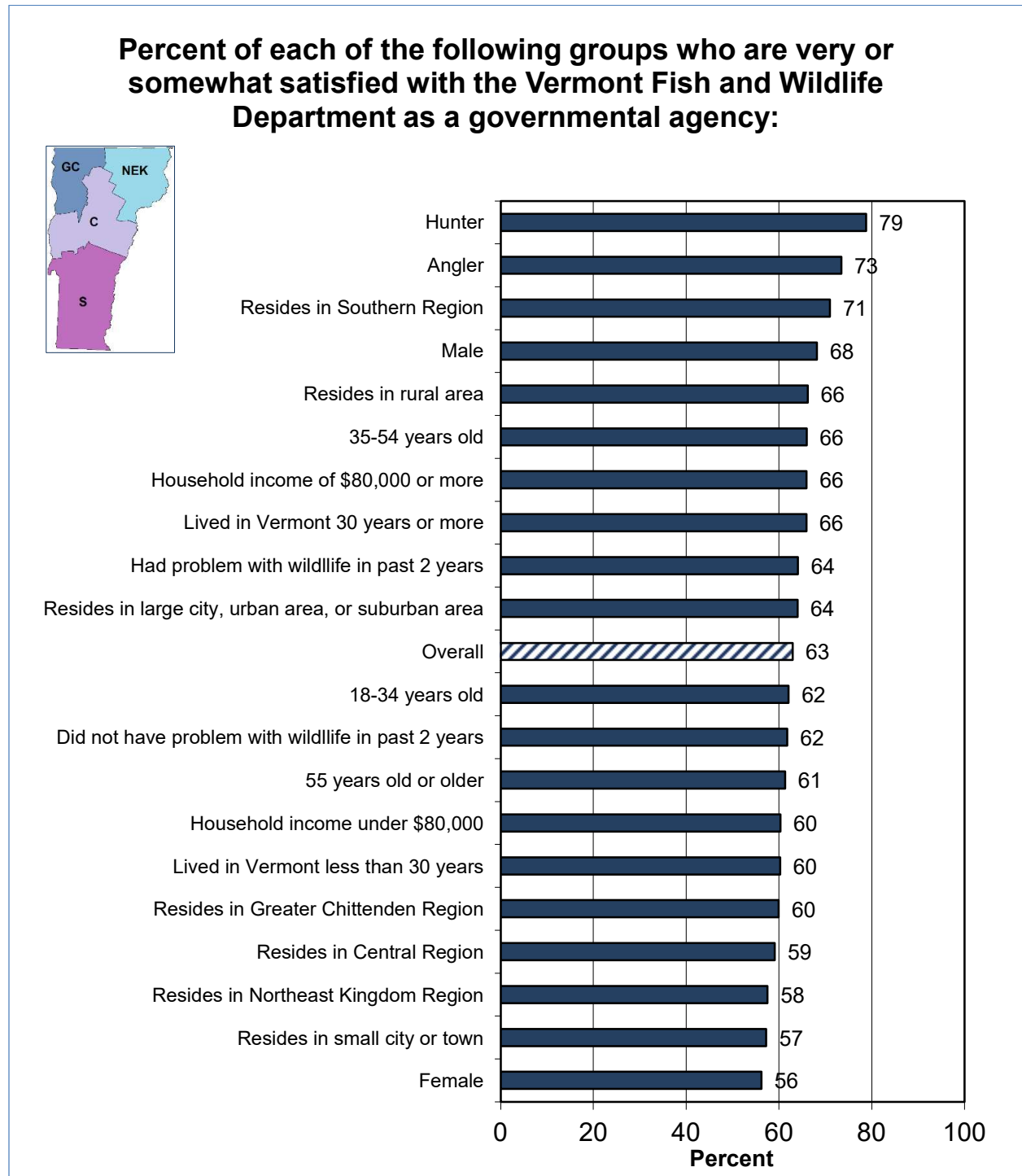
The trends graph shows that knowledge about the Department has decreased substantially since the 2017 survey.



Nearly two thirds of residents (63%) are *very* or *somewhat* satisfied with the Department as a governmental agency in Vermont, compared to only 5% who are dissatisfied. About a quarter of residents do not know. Satisfaction is highest in the Southern Region.

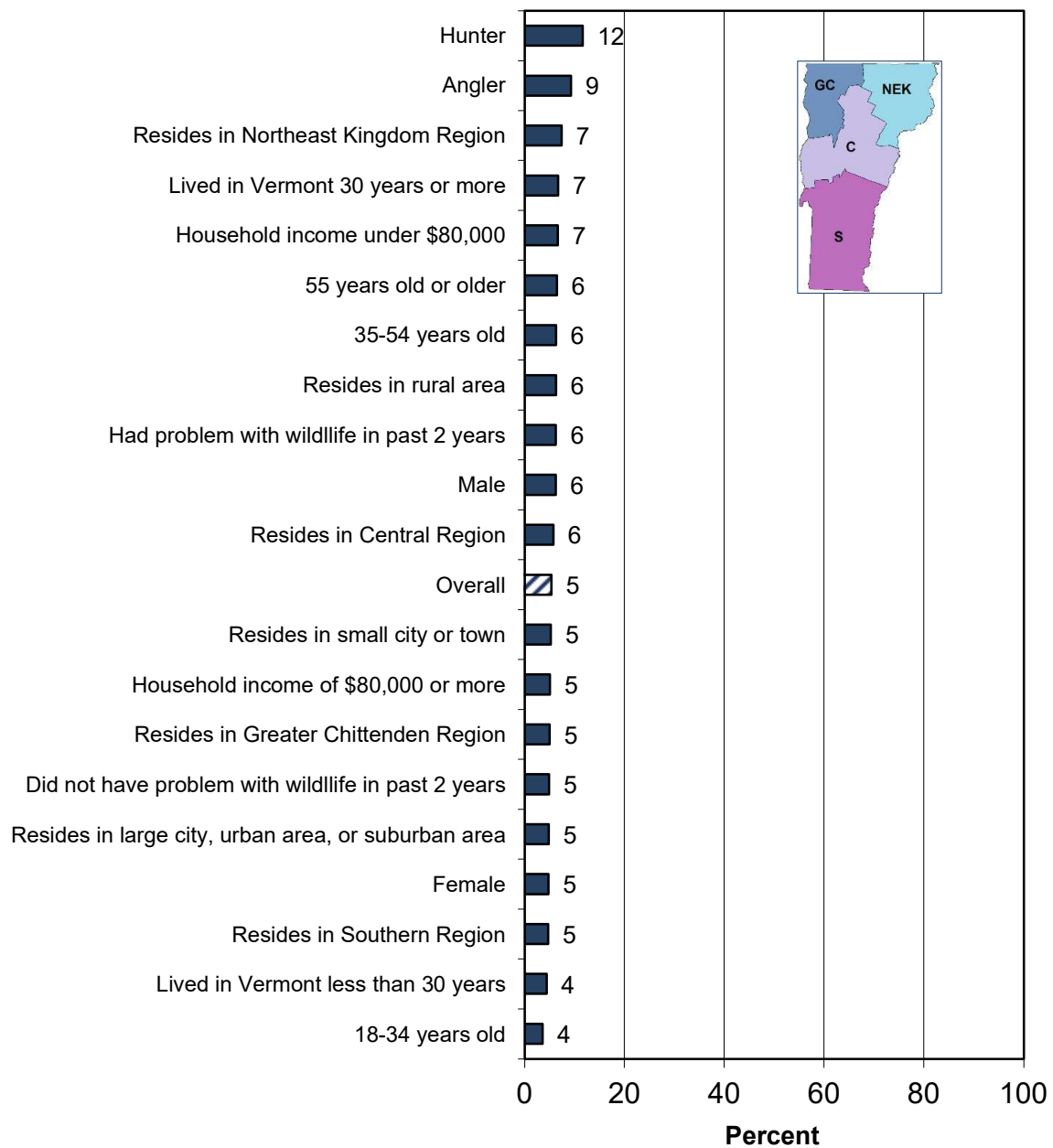


The groups expressing the most satisfaction with the Department are hunters, anglers, Southern Region residents, and males.

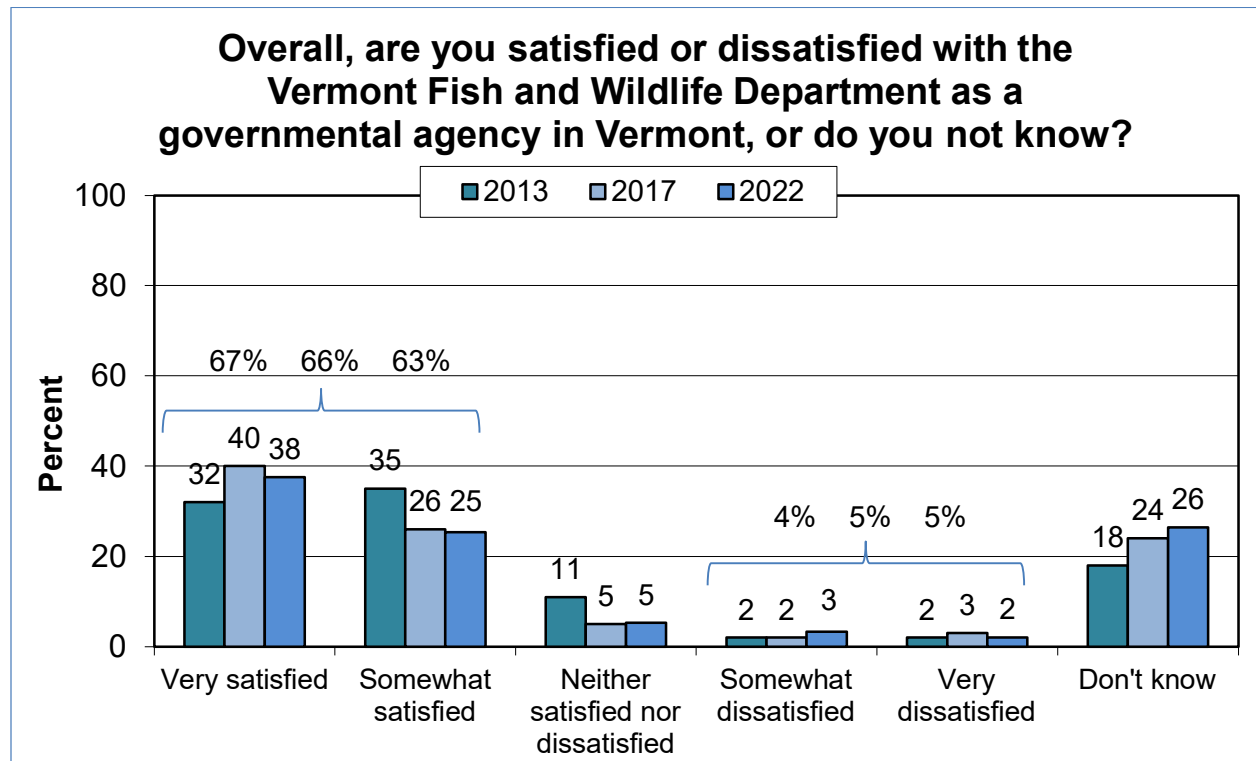


At the other end, hunters and anglers are the groups most dissatisfied with the Department, although the percentages are very low. Note that hunters and anglers are at the top of both demographic analyses graphs because few of them selected neutral or don't know responses. In other words, there was a greater proportion of them giving an opinion, good or bad, rather than being neutral.

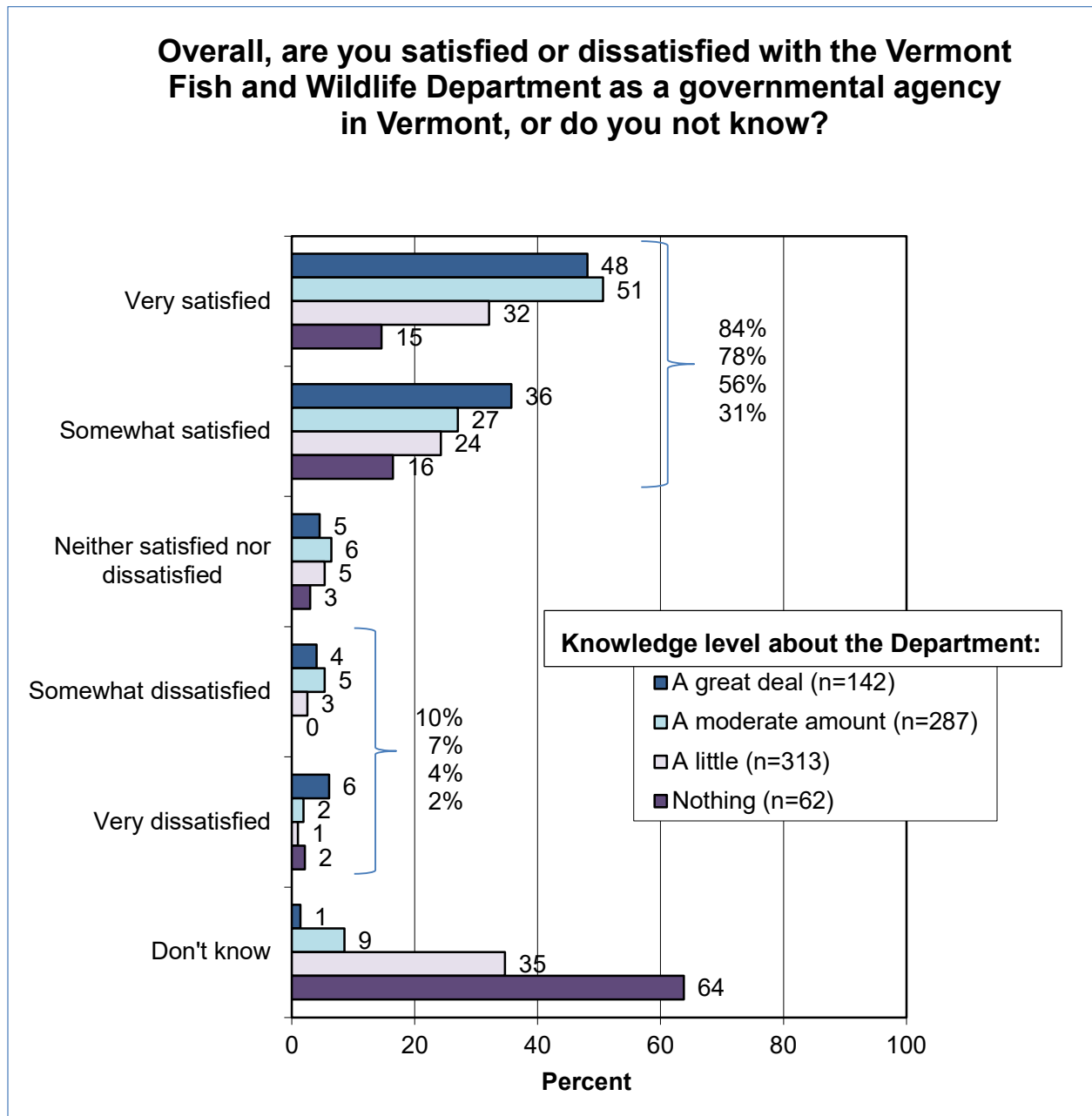
Percent of each of the following groups who are very or somewhat dissatisfied with the Vermont Fish and Wildlife Department as a governmental agency:



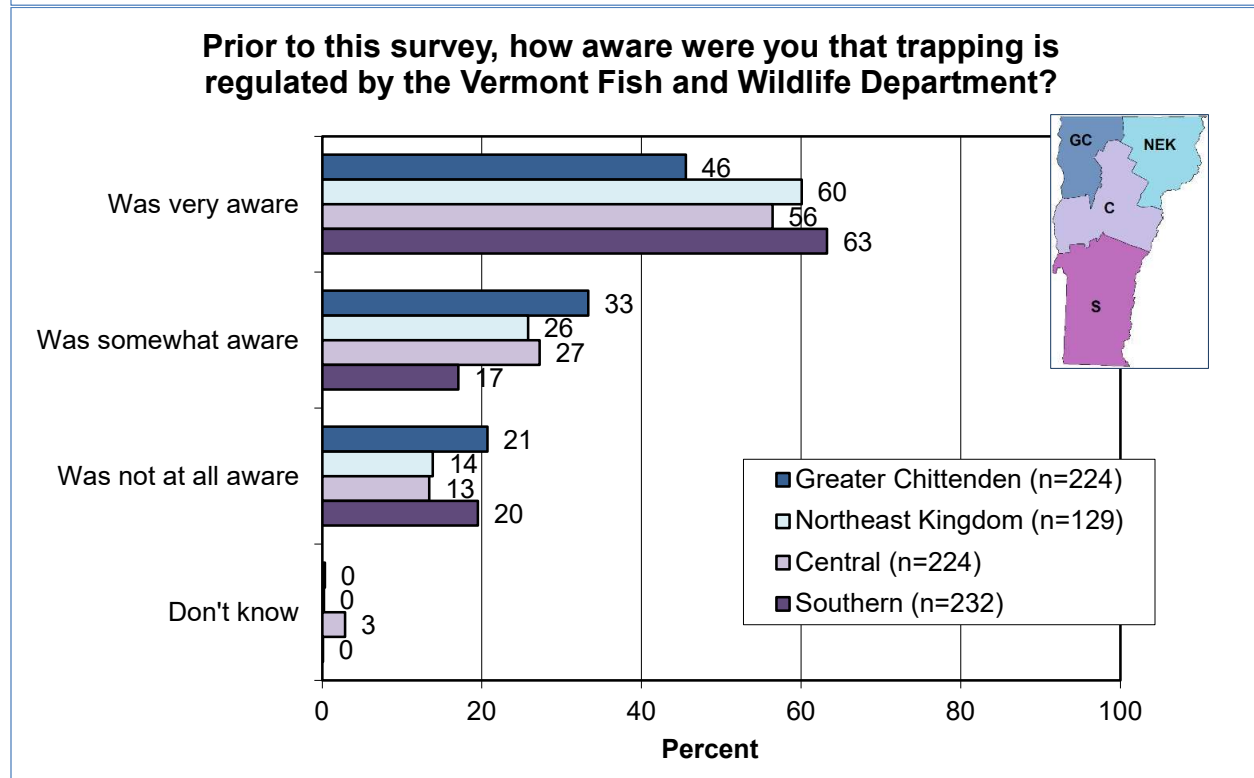
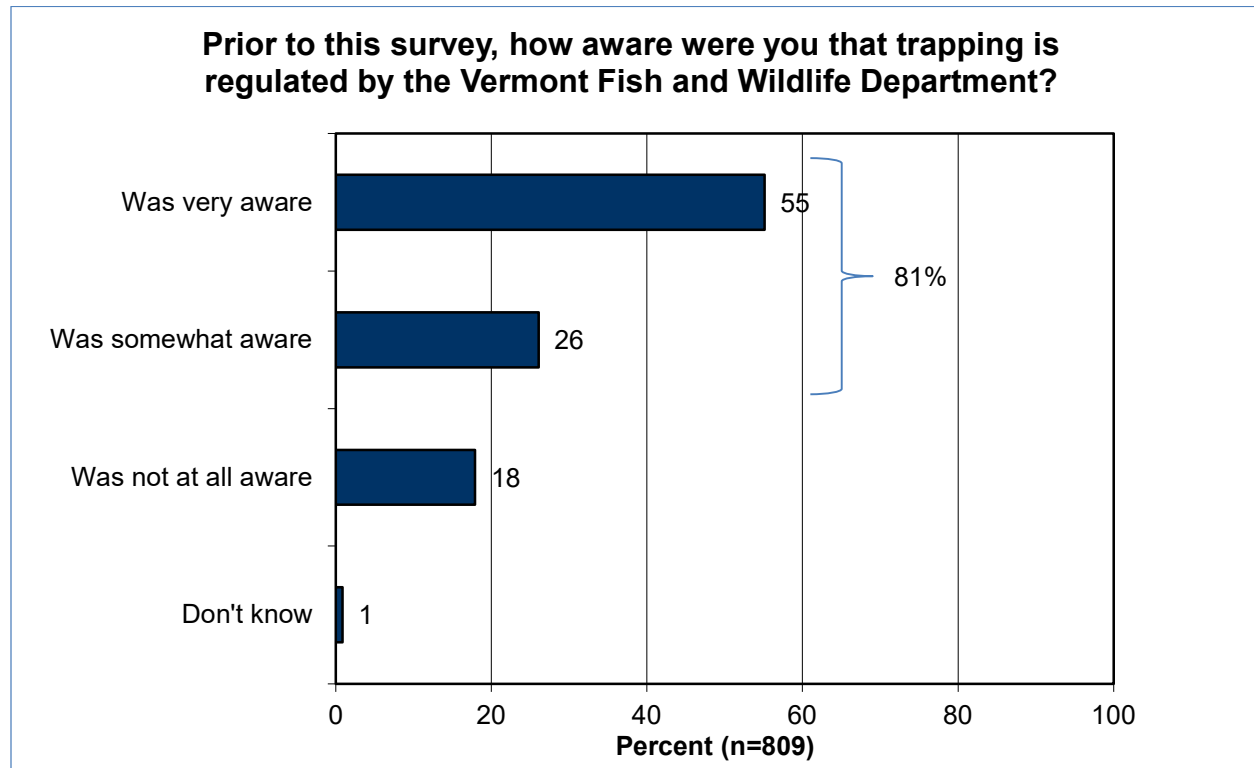
Satisfaction with the Department changed very little since 2017.



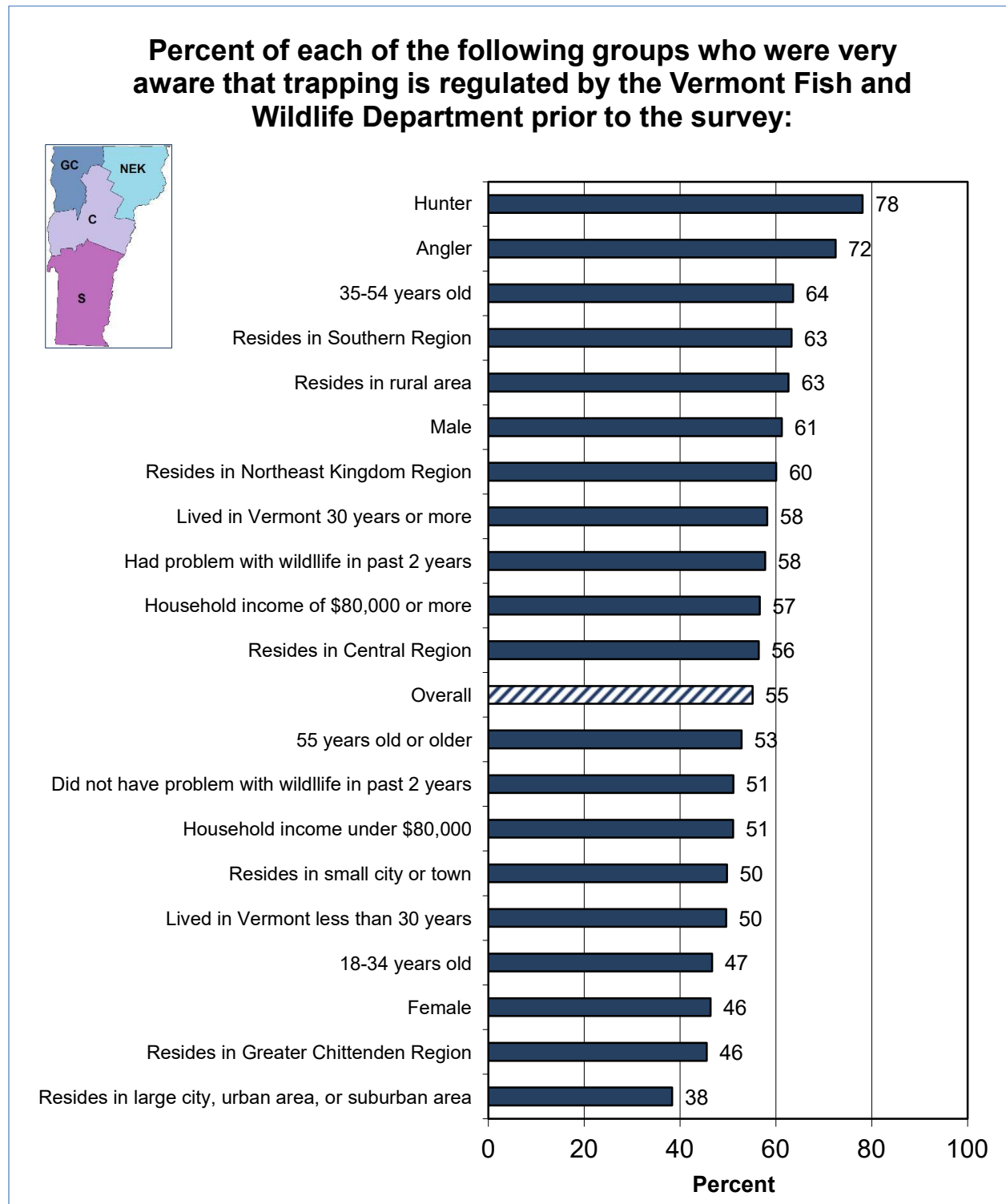
The previous two questions regarding knowledge of and satisfaction with the Department were crosstabulated. As shown below, knowledge and satisfaction are correlated: 84% of those who knew *a great deal* about the Department are *very* or *somewhat* satisfied, 78% who knew *a moderate amount* are satisfied, 56% of those who knew *a little* are satisfied, and 31% who knew *nothing* are satisfied. Also, *don't know* responses for satisfaction increase with lack of knowledge about the Department. The takeaway is that the more people know about the Department, the more satisfied they are with it.



The vast majority of residents (81%) were aware that trapping is regulated by the Department; a majority (55%) were *very* aware. On the other hand, 18% were *not at all* aware.

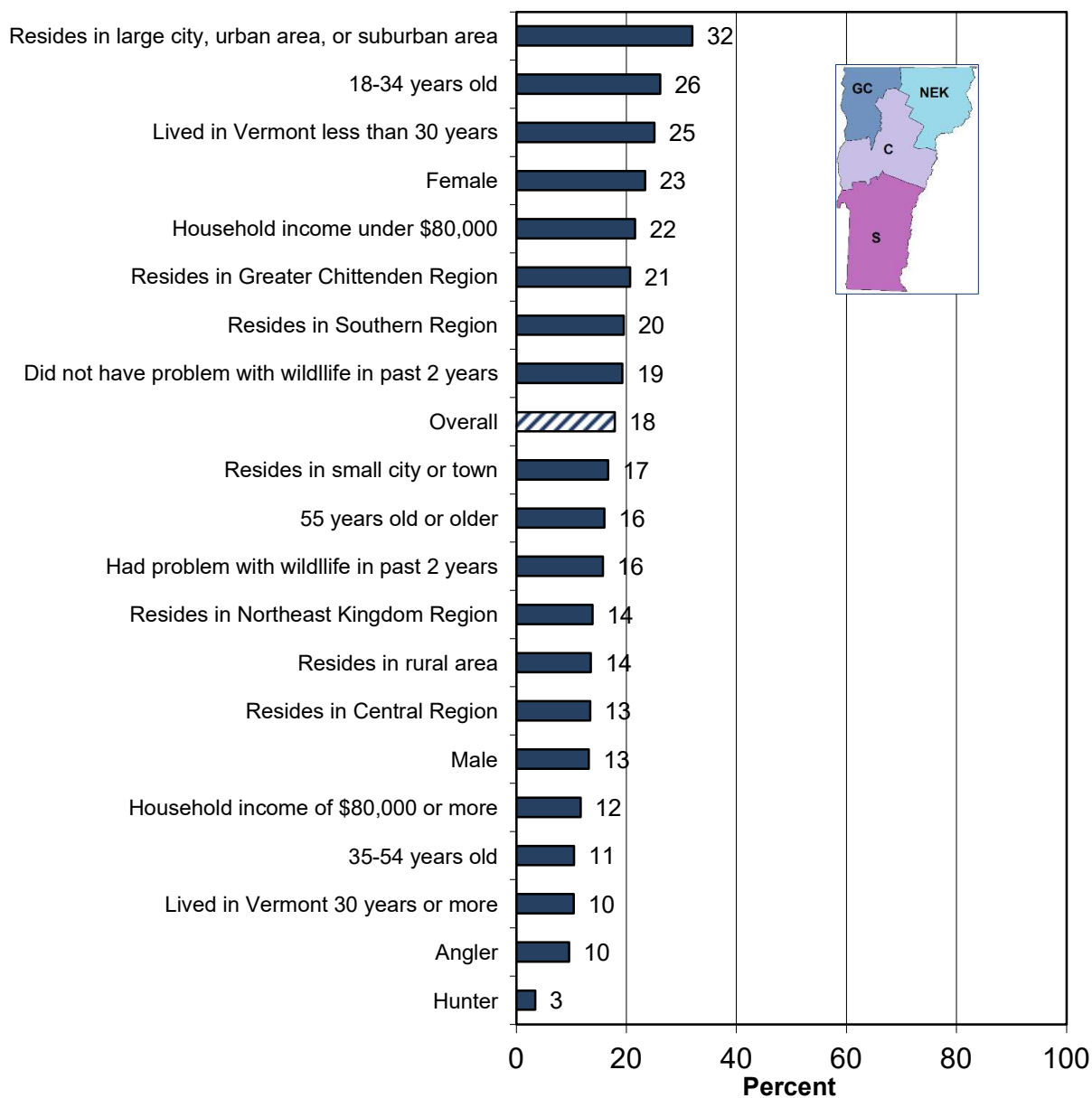


Hunters and anglers were most aware that trapping is regulated by the Department. Middle aged, Southern Region, and rural residents also had higher percentages of awareness compared to residents overall.



Large city or suburban residents, younger residents, and those who lived in Vermont less than 30 years (the median time of residency) were more likely than residents overall to be *not at all* aware.

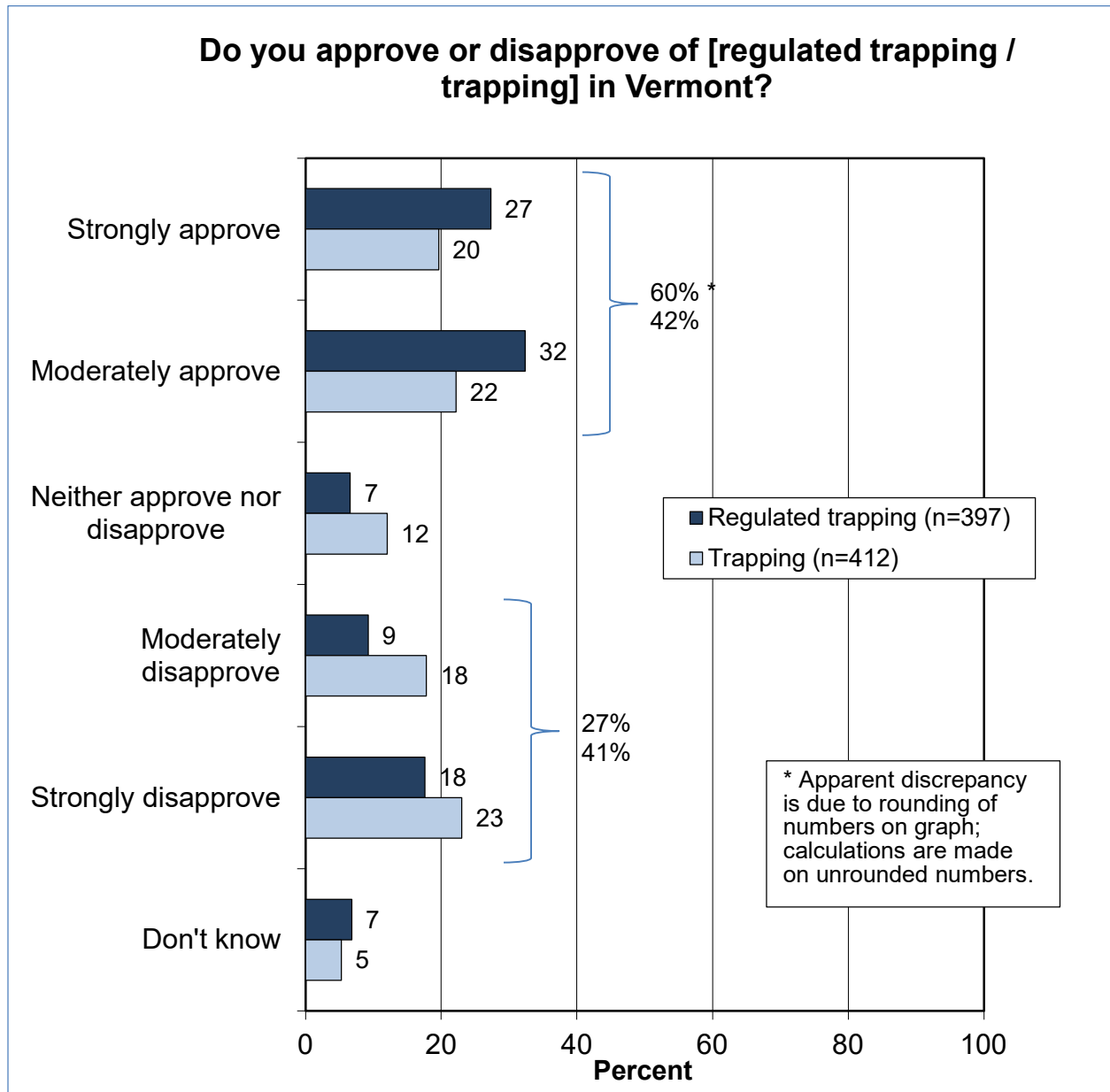
Percent of each of the following groups who were not at all aware that trapping is regulated by the Vermont Fish and Wildlife Department prior to the survey:

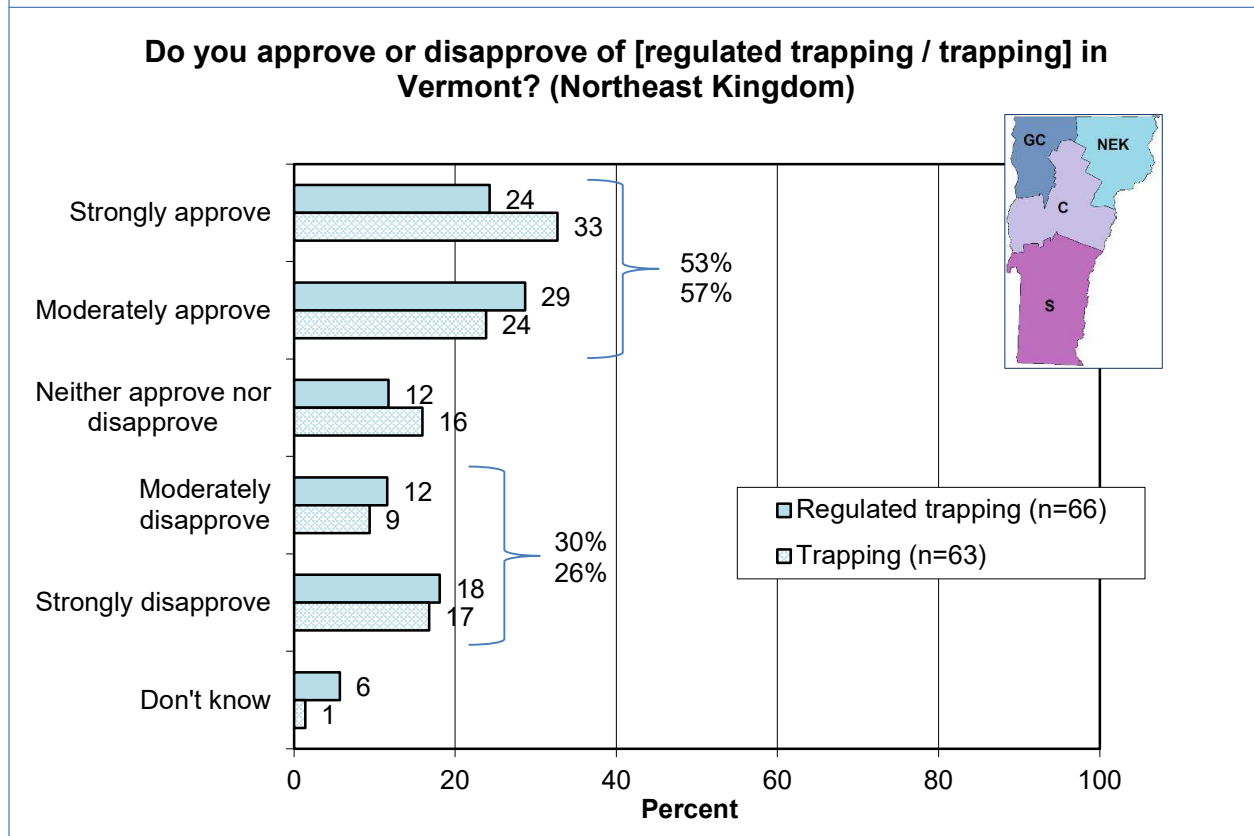
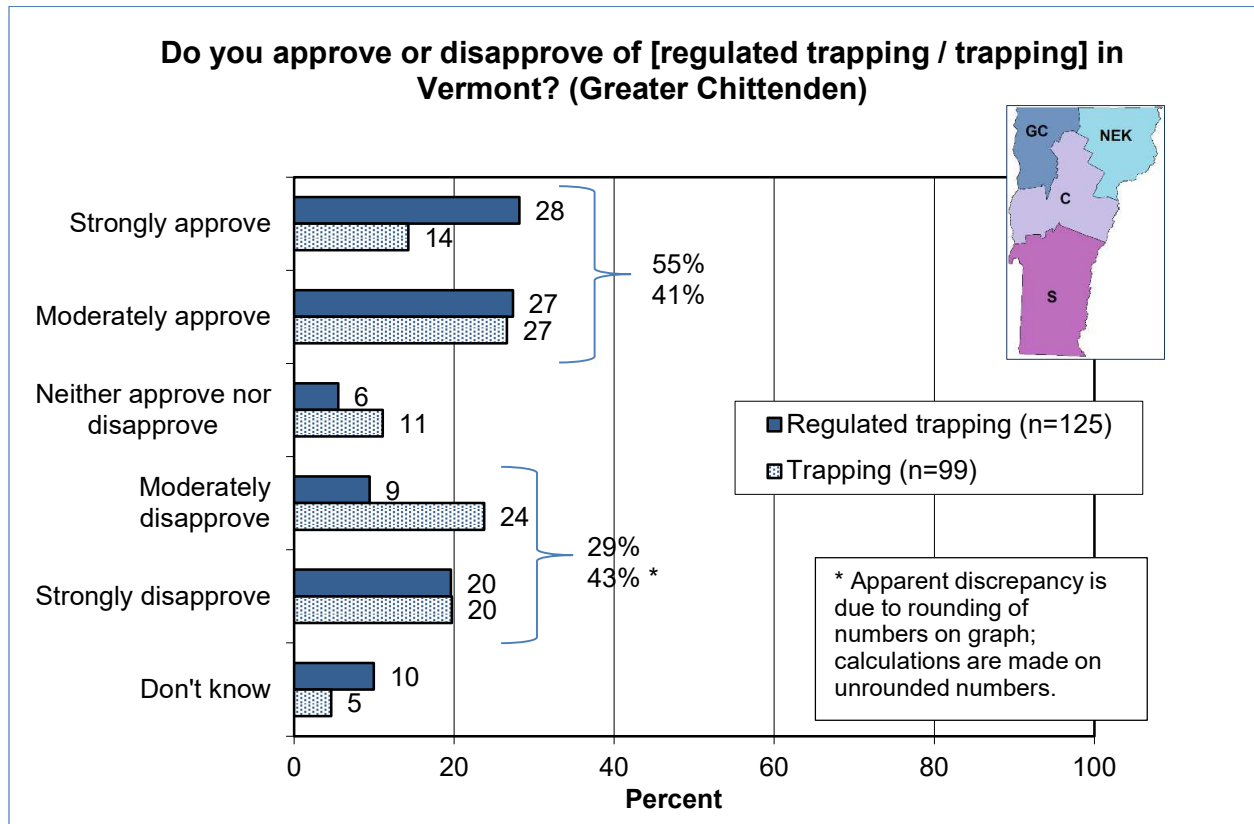


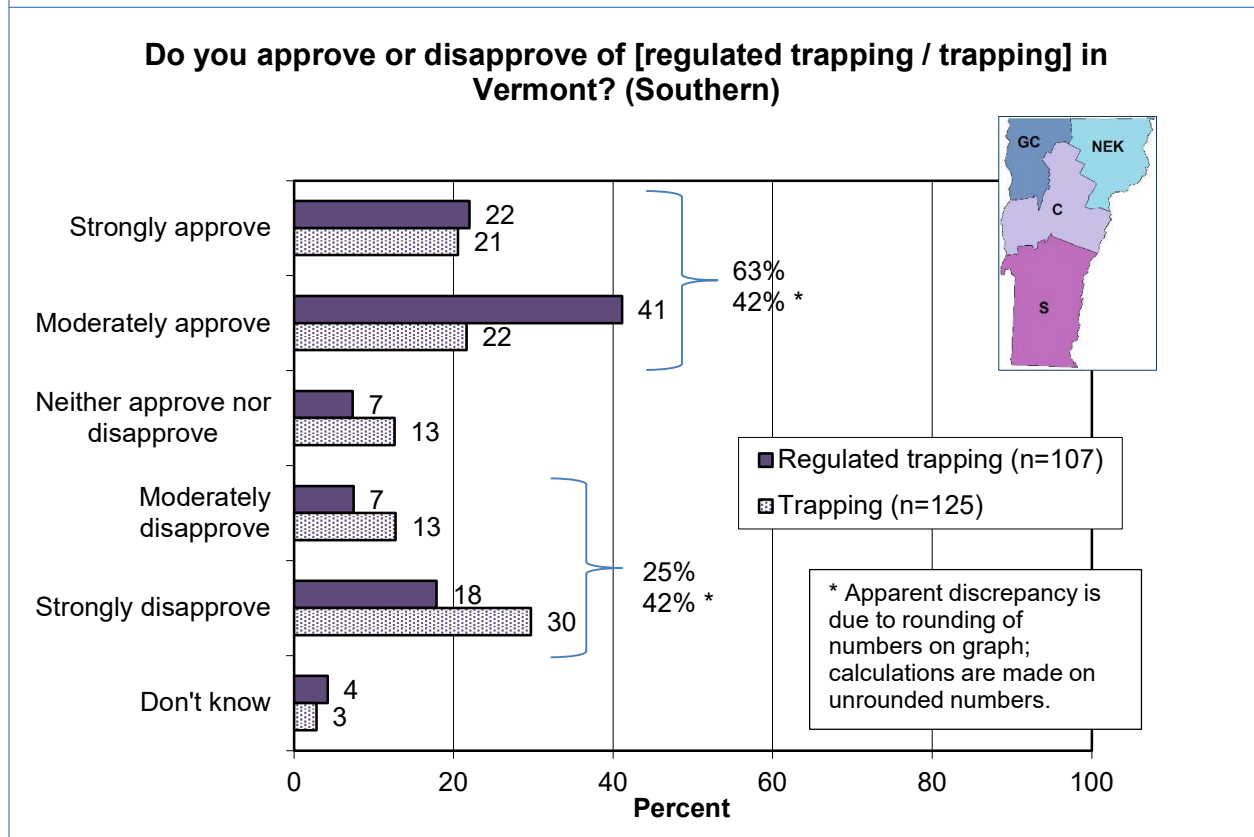
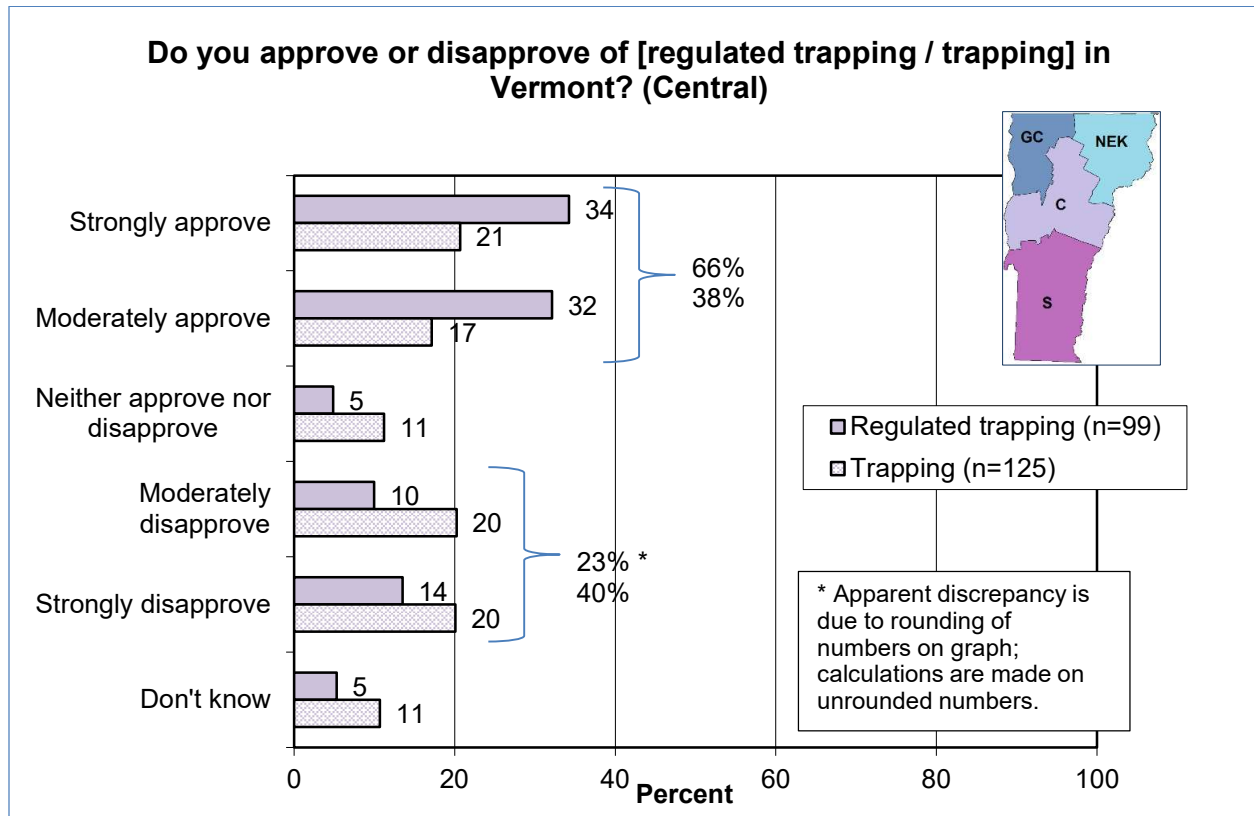
ATTITUDES TOWARD TRAPPING

Residents were asked about their approval or disapproval of trapping in Vermont. A random half of the sample were asked if they approve of “regulated trapping,” while the other half were simply asked about “trapping.” As the graph below shows, this distinction matters: 60% of those who were asked about “regulated trapping” *strongly* or *moderately* approve, while only 42% of those asked about “trapping” approve. In other words, a majority of Vermont residents approve of trapping, in general, when they know it is regulated.

The largest difference is observed in the Central Region. However, the Northeast Kingdom Region shows a slightly higher percentage of approval for “trapping.”

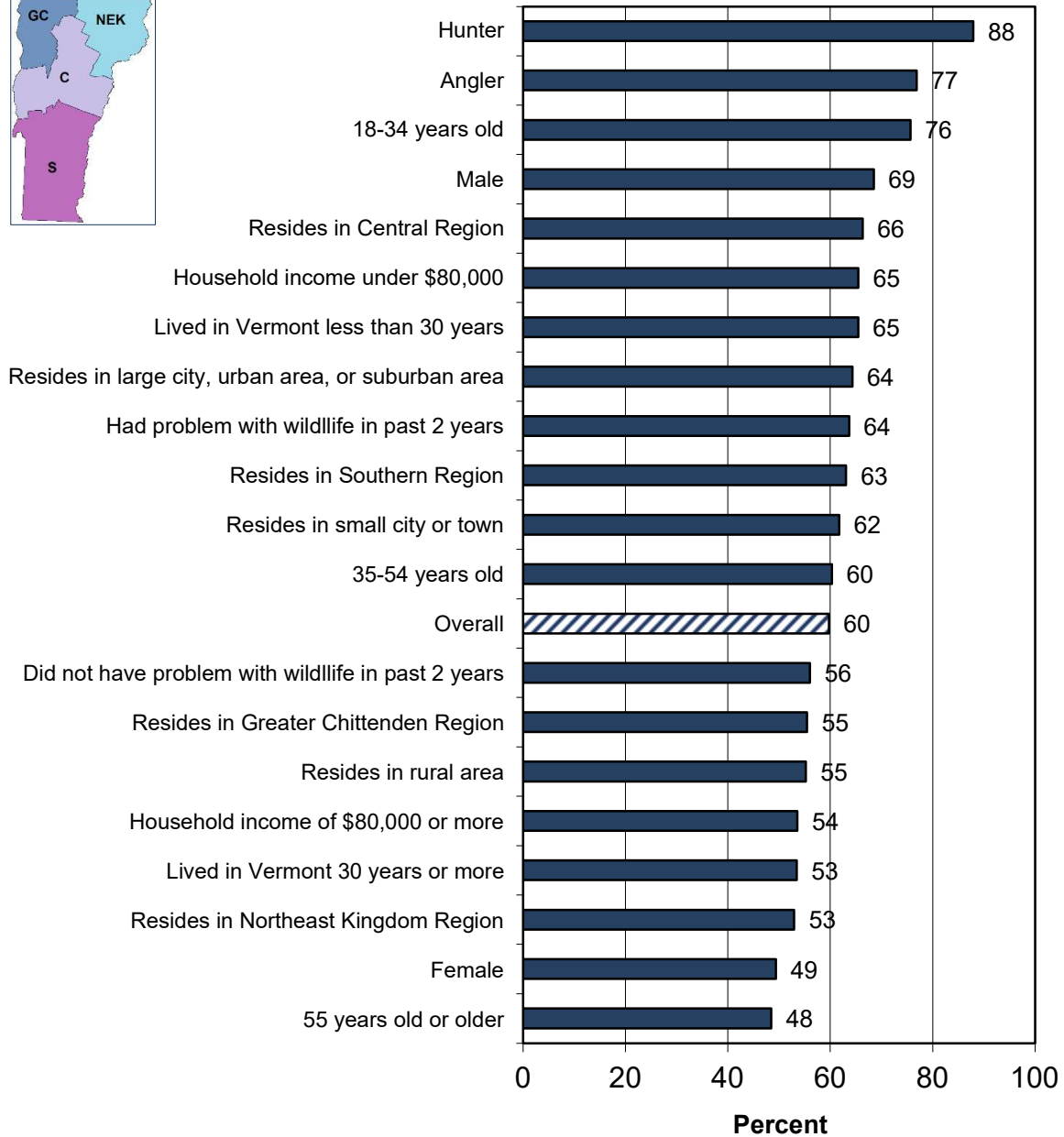




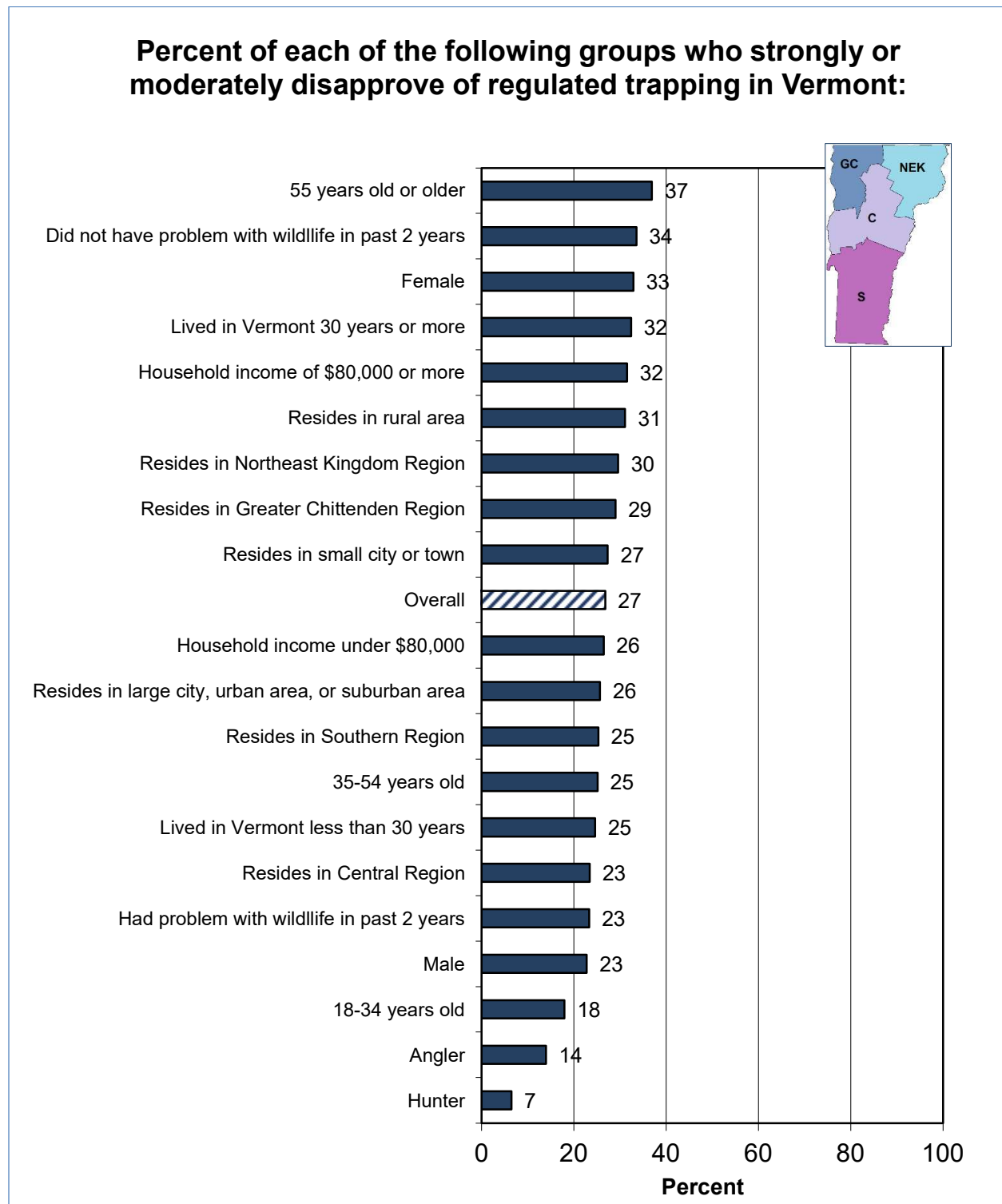


Hunters, anglers, and younger residents had the highest percentages of approval for “regulated trapping.”

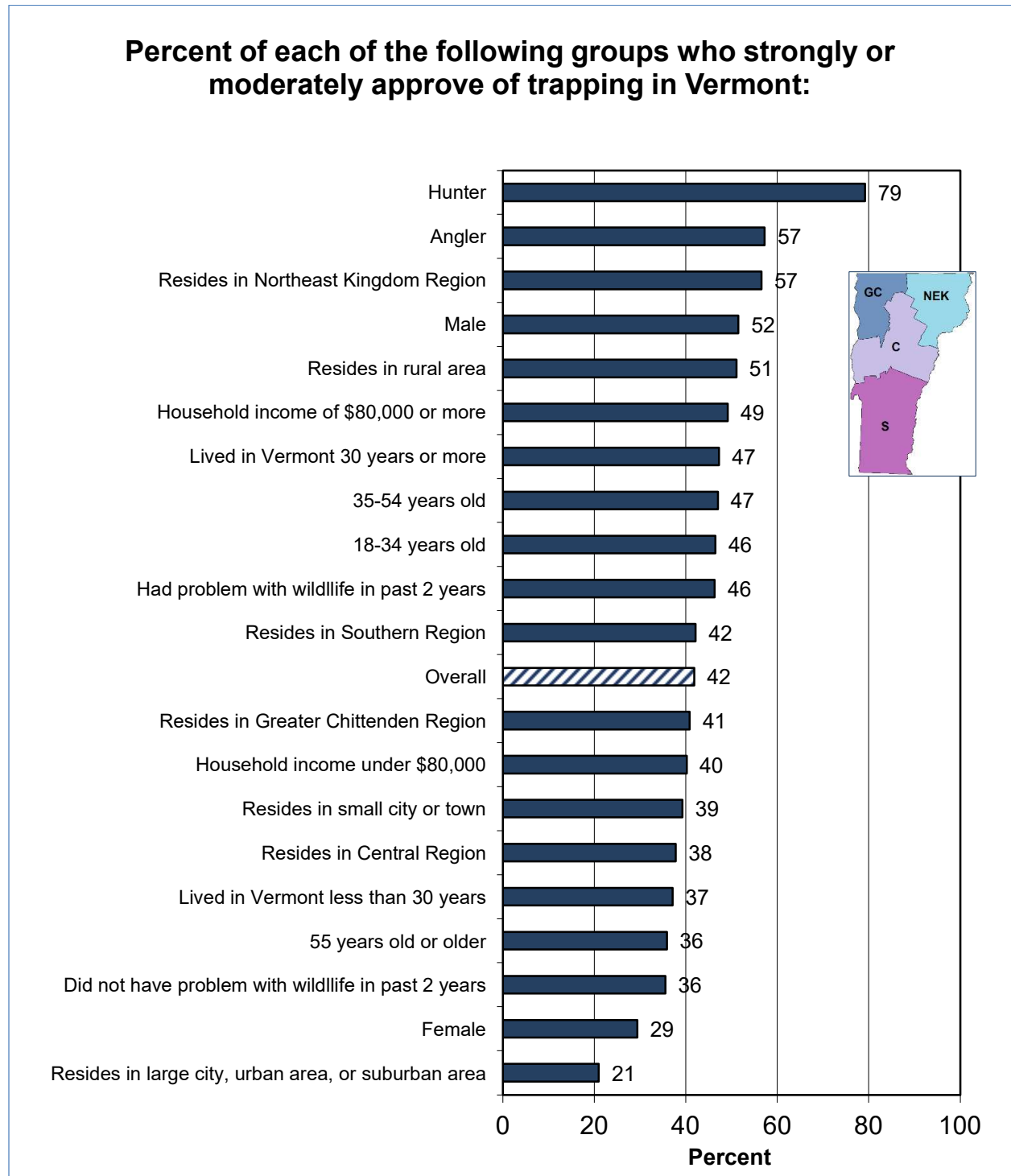
Percent of each of the following groups who strongly or moderately approve of regulated trapping in Vermont:



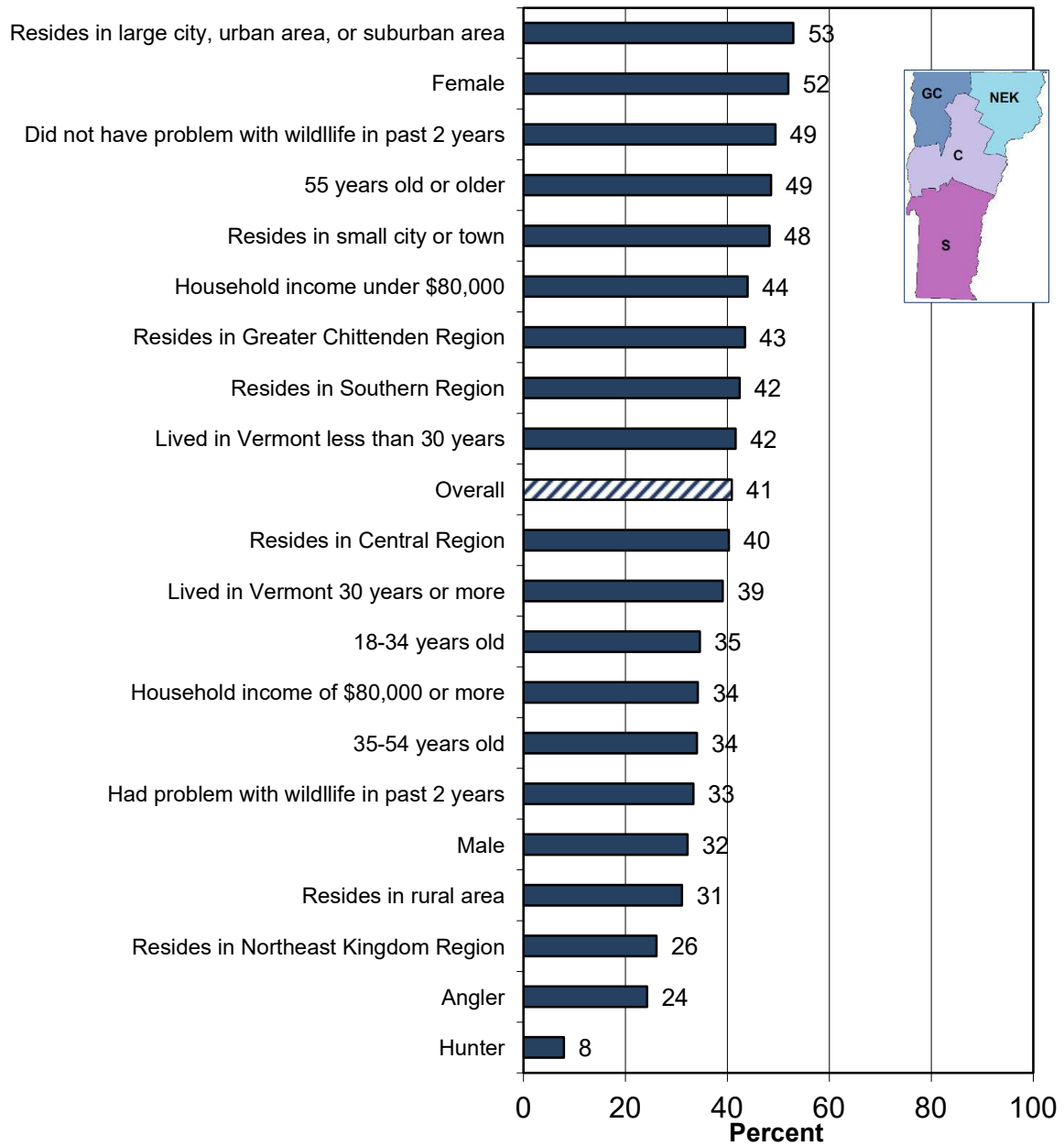
Older residents, those who did not have problems with wildlife in the past 2 years, and females had the highest percentages of disapproval for “regulated trapping.”



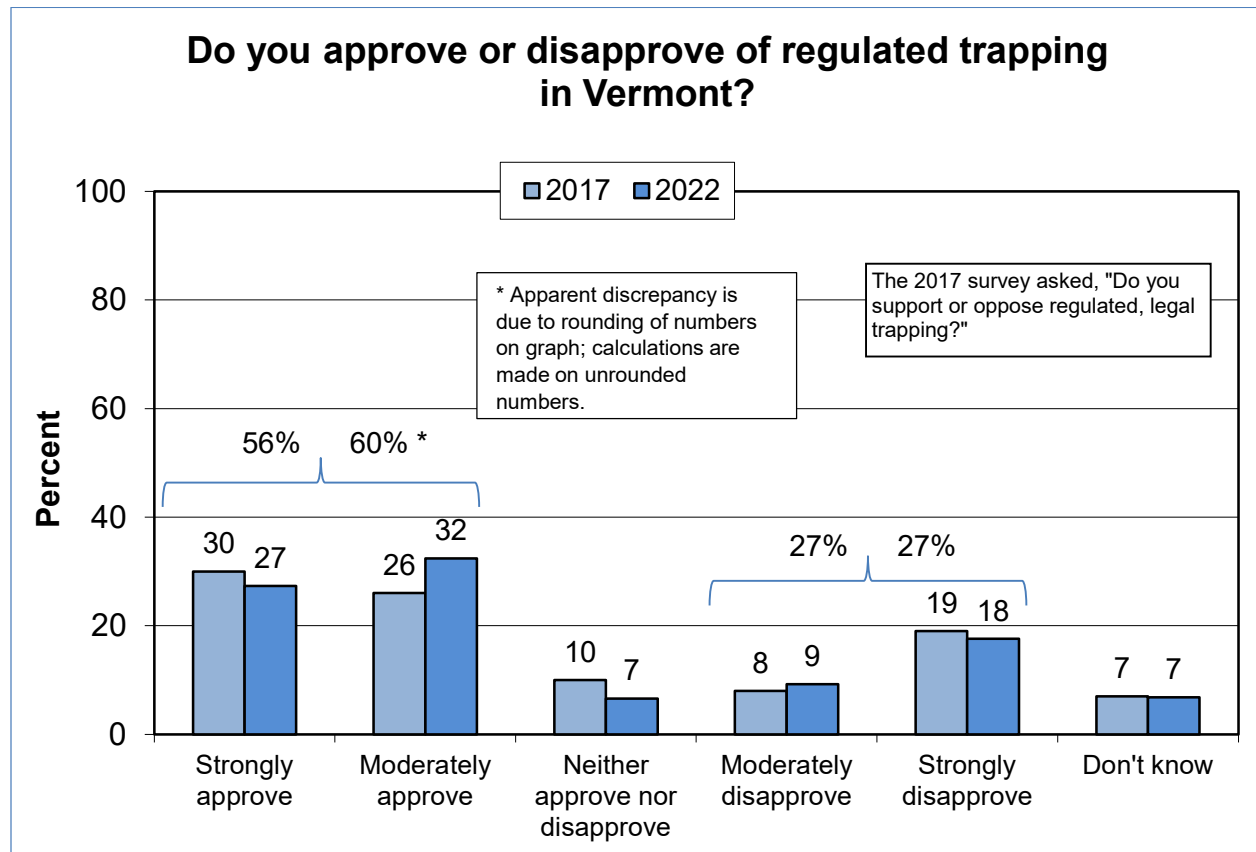
The breakdown of groups most likely to approve or disapprove of “trapping” is similar to that of “regulated trapping,” although the percentages are lower.



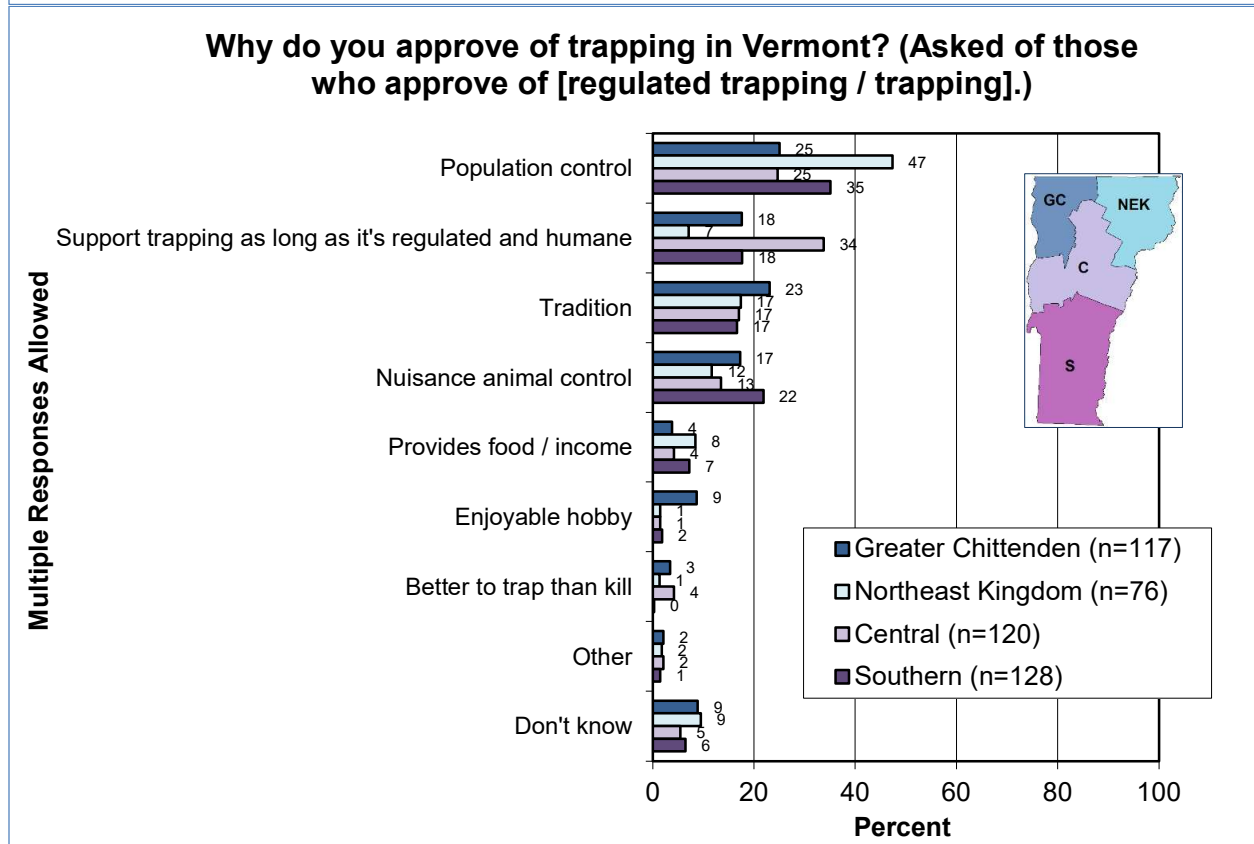
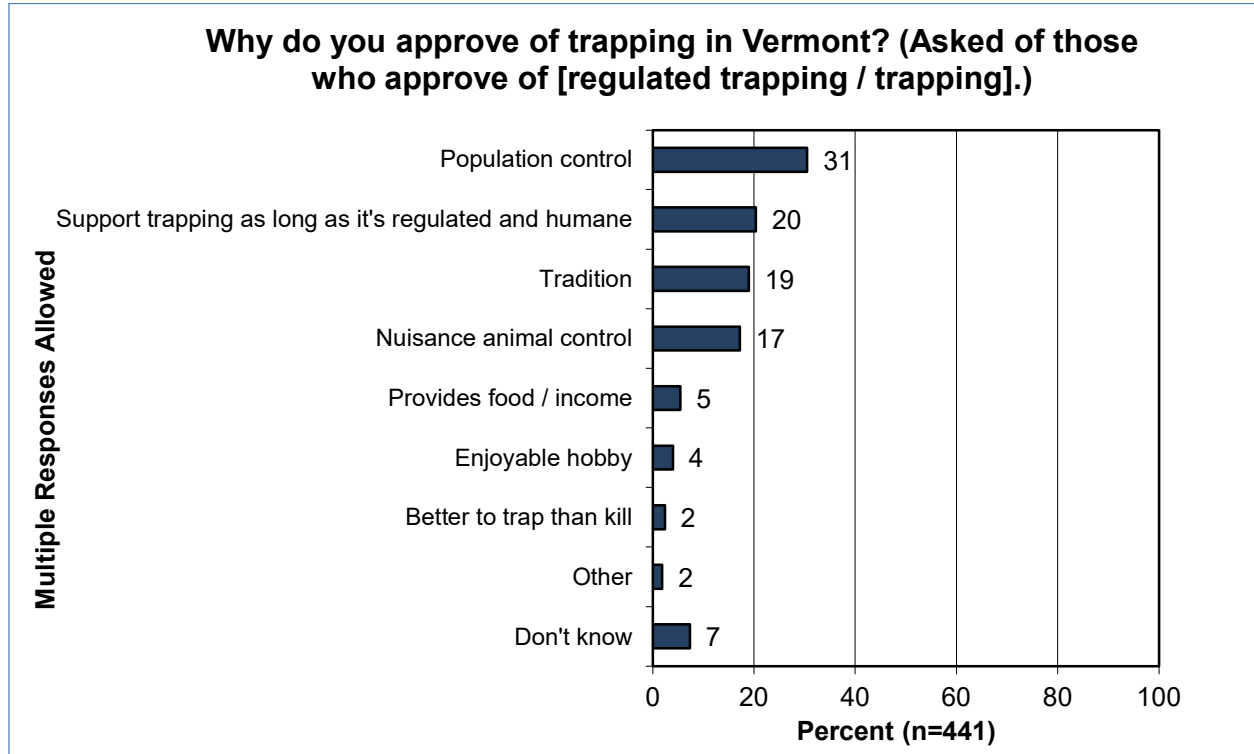
Percent of each of the following groups who strongly or moderately disapprove of trapping in Vermont:



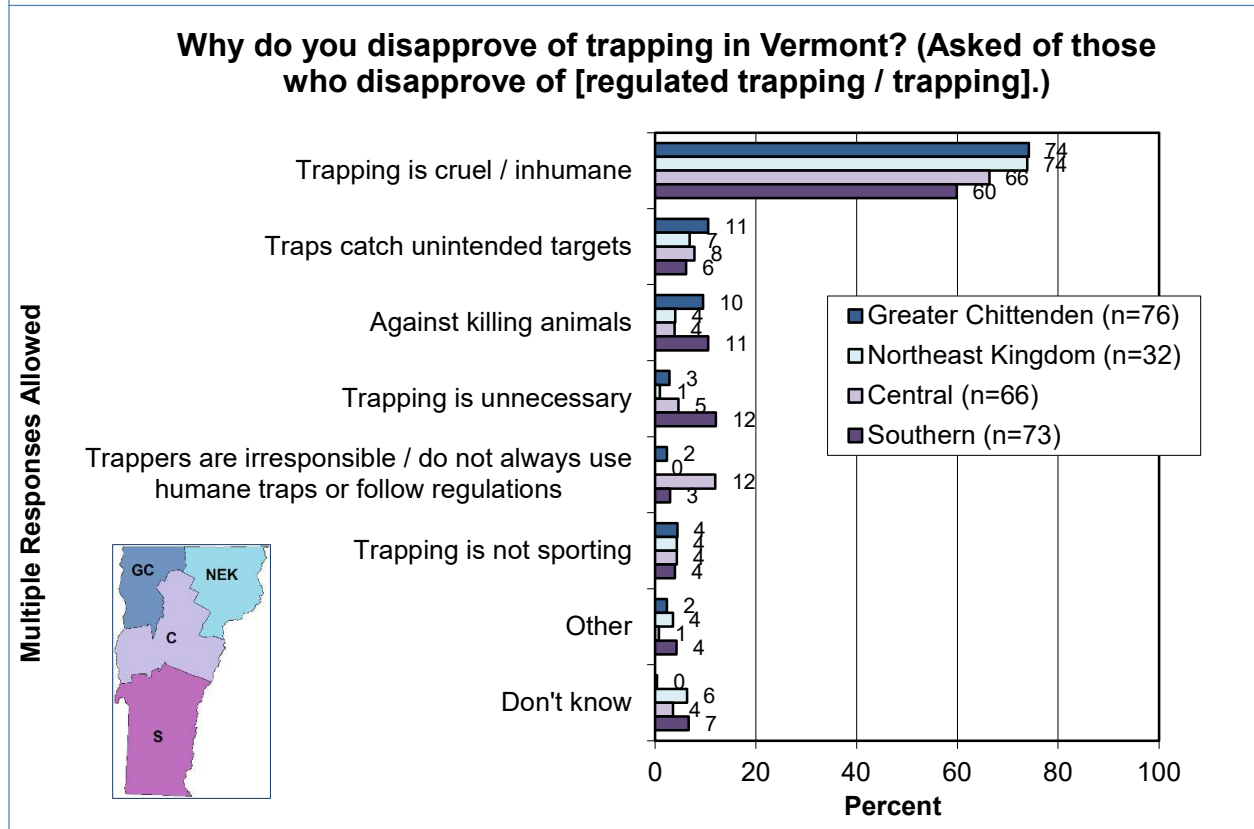
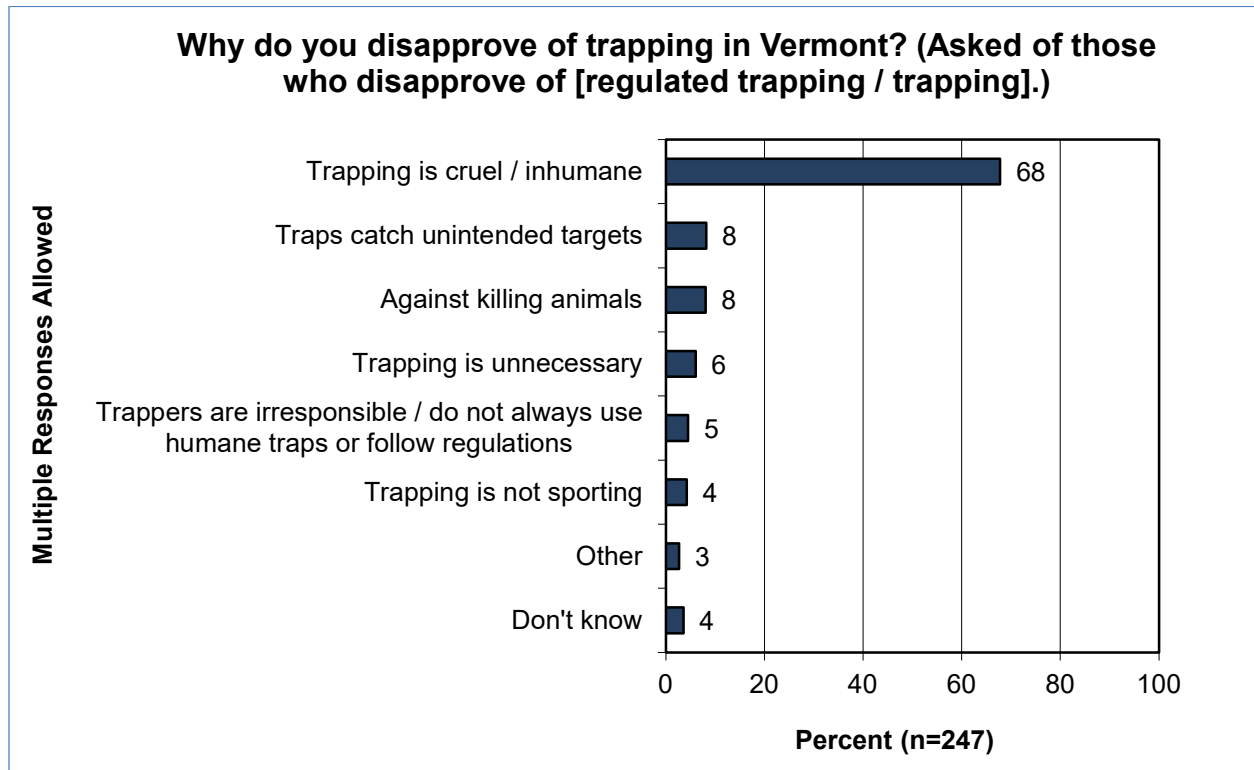
There is a slight increase in approval of/support for "regulated trapping" compared to 2017.



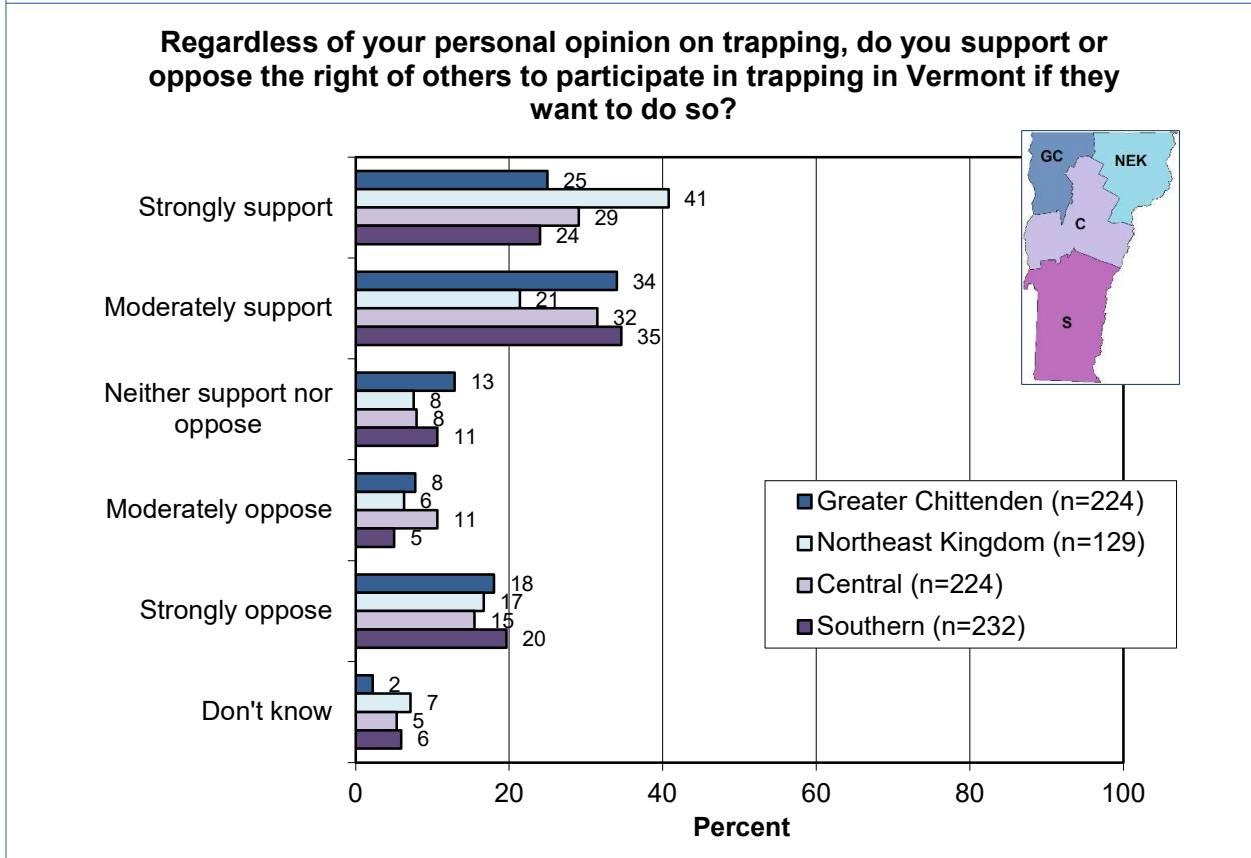
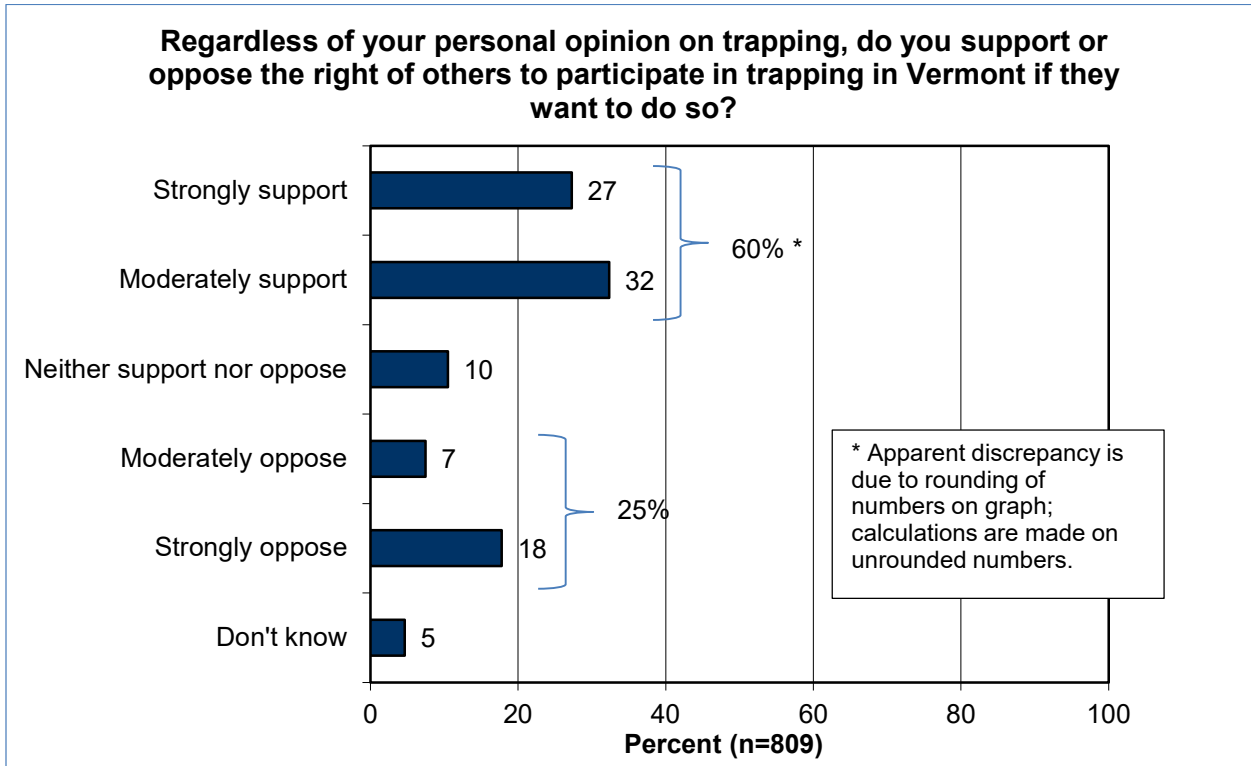
Those who stated approval of trapping, in either version of the question, were asked to give their reasons for approval, in an open-ended question. The most common reasons for approval were for population control, that they support trapping if it is regulated and humane, that it is a tradition, and for nuisance animal control.



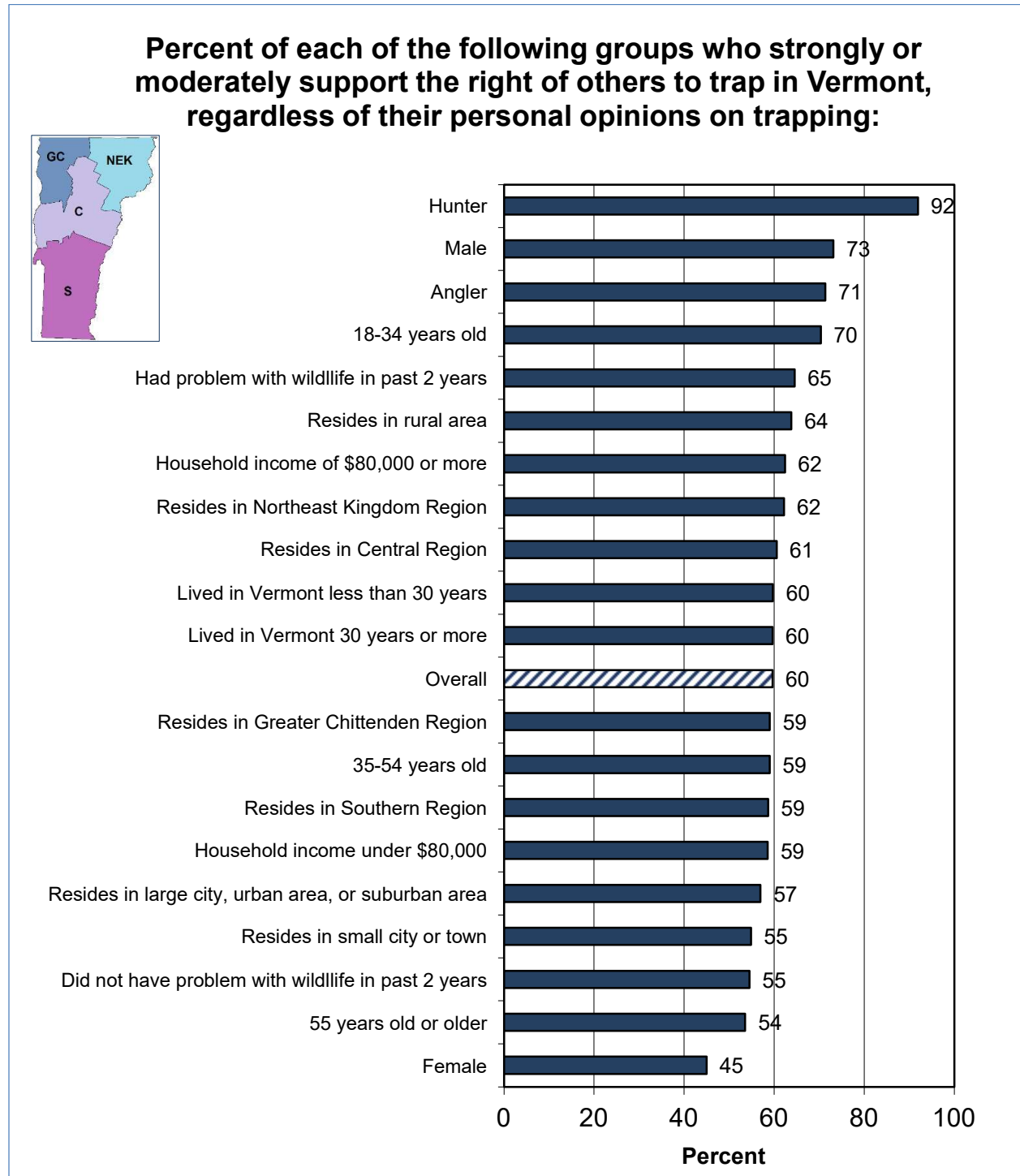
About two thirds of those who disapprove of trapping (68%) do so because they feel it is cruel or inhumane.



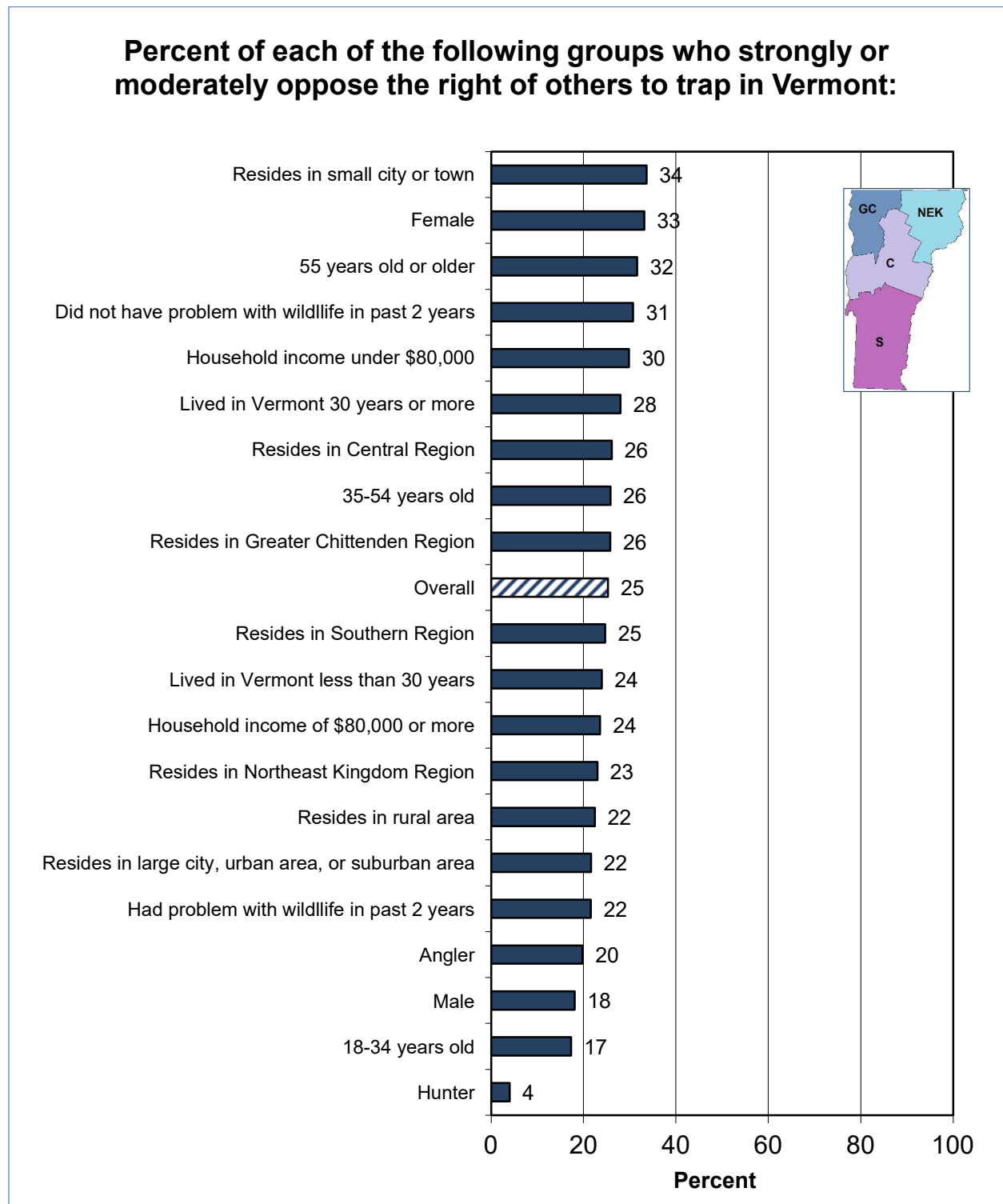
A majority of residents (60%) support the right of others to trap in Vermont, regardless of their personal opinion on trapping.



Most hunters (92%) support the right of others to trap in Vermont; they are distantly followed by males, anglers, and younger residents in supporting trapping rights. (Note that 92% support from hunters does not mean that 8% of hunters oppose; the 8% value encompasses neutral and don't know responses in addition to opposition.)

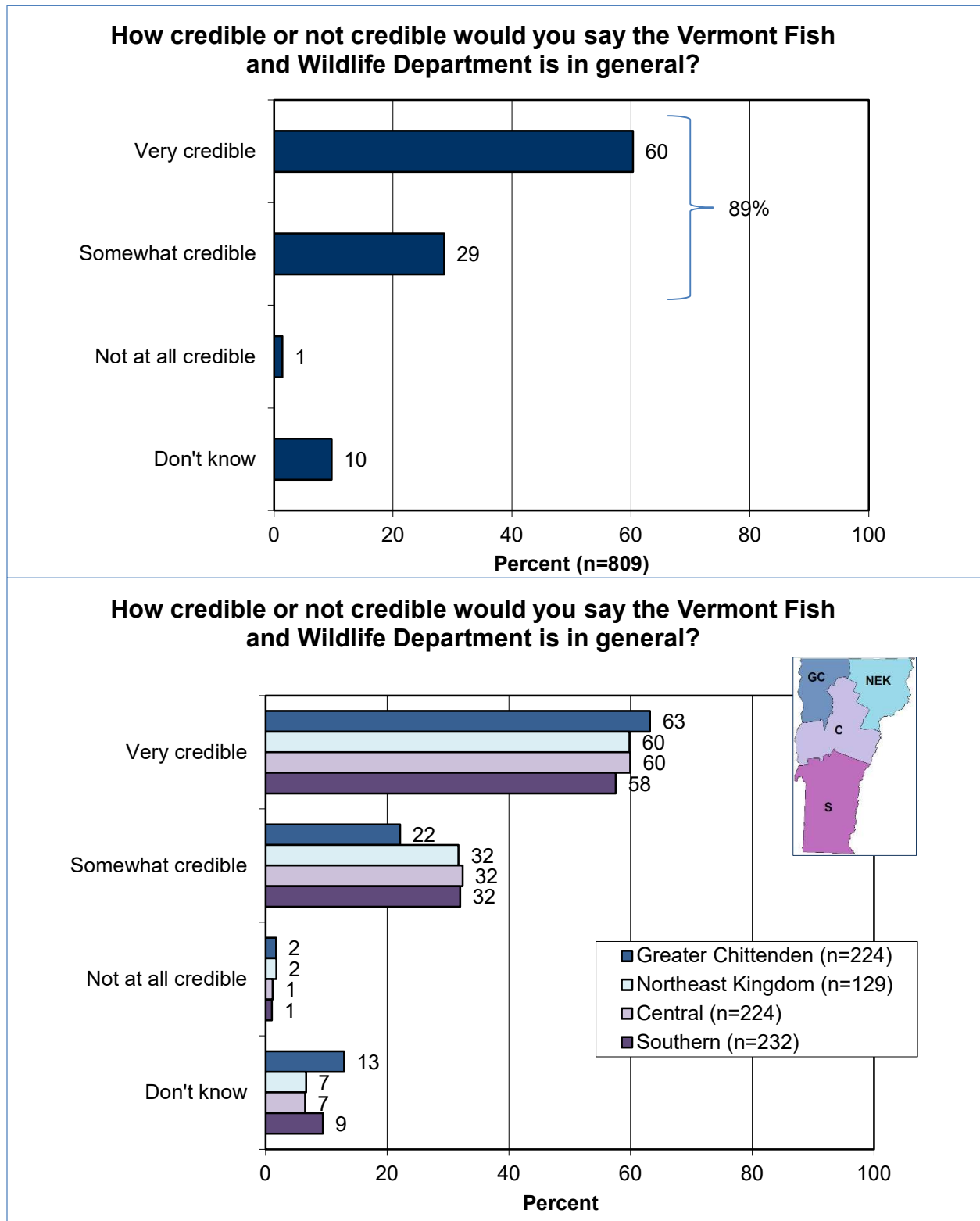


The groups most likely to oppose the right of others to trap are those from a small city or town, females, older residents, and those who did not have problems with wildlife in the past 2 years.



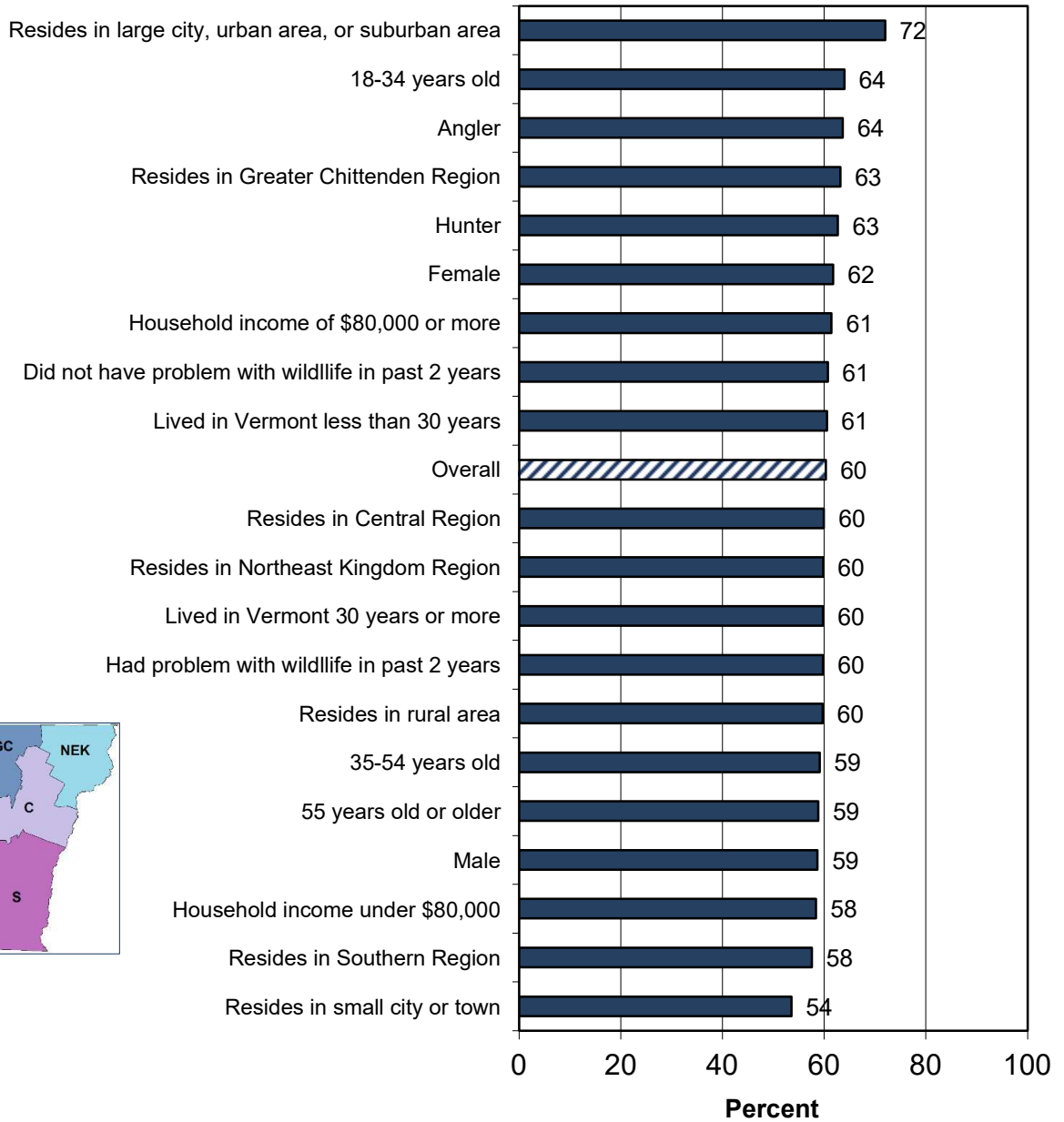
CREDIBILITY OF THE DEPARTMENT

Most residents (89%) say the Department is credible; 60% say it is *very* credible.

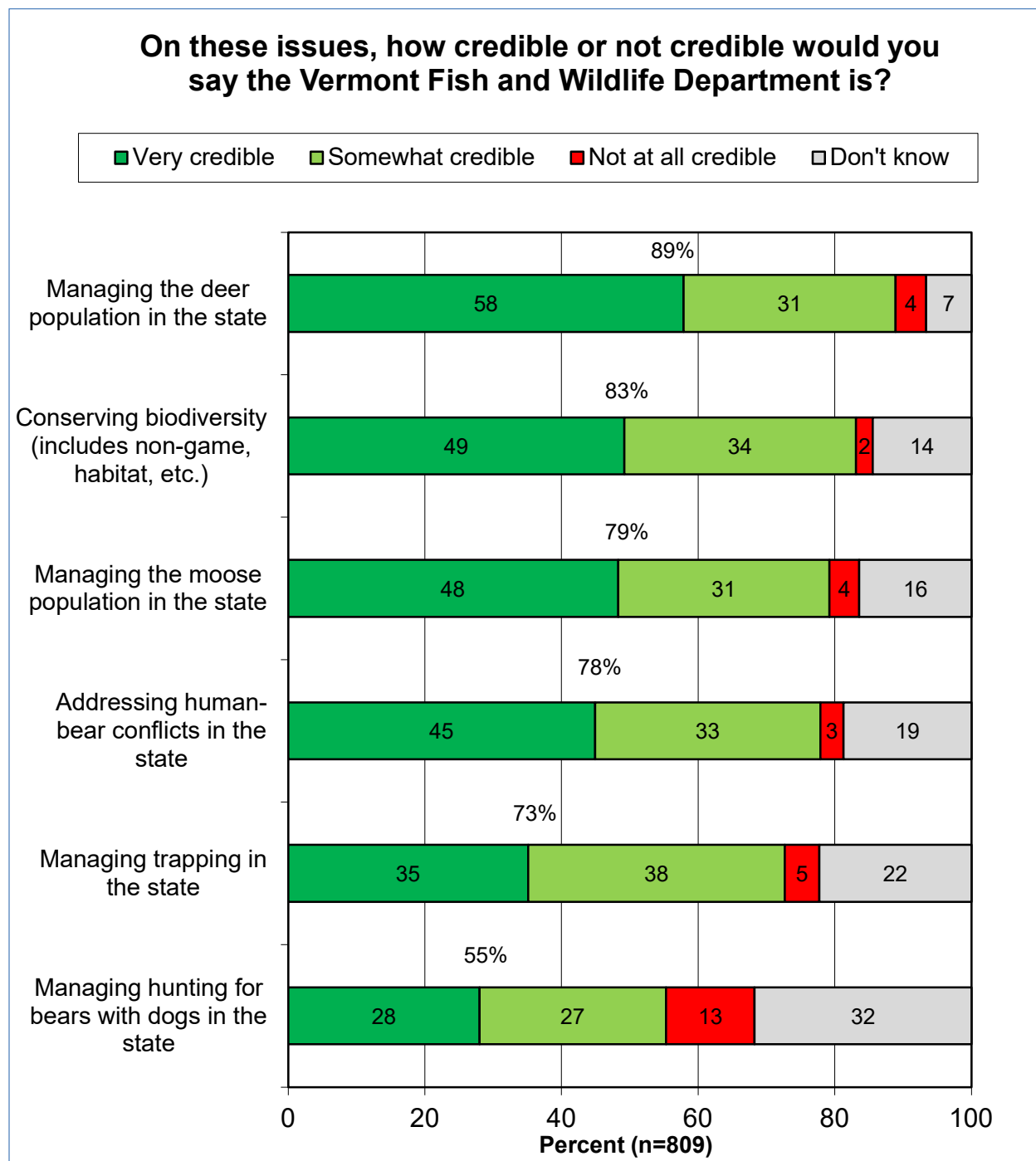


Residents of large cities or suburban areas are the group most often saying the Department is very credible.

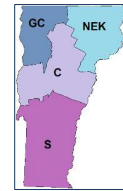
Percent of each of the following groups who say the Vermont Fish and Wildlife Department is very credible in general:



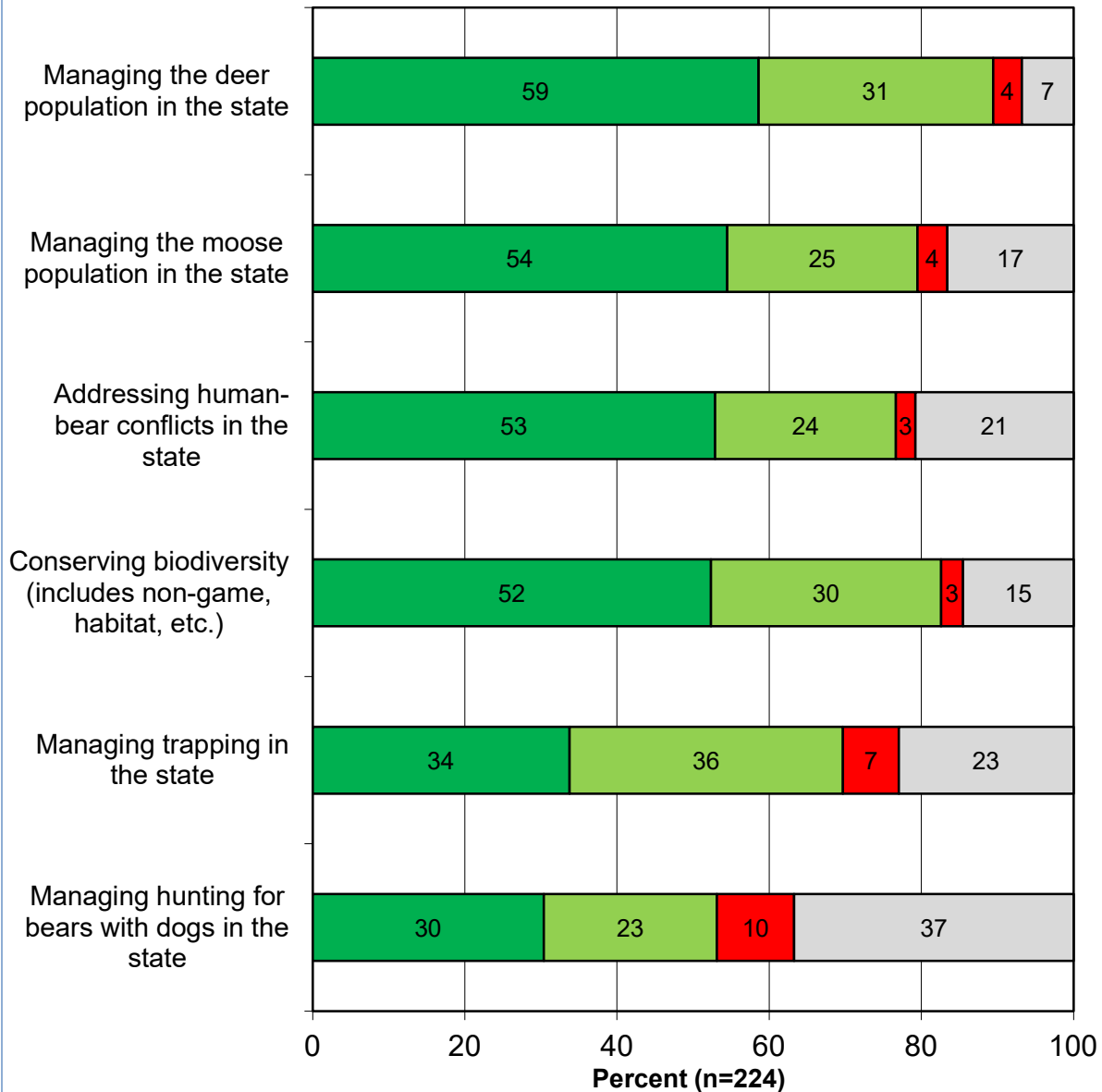
Residents were asked to rate the credibility of the Department regarding six management issues. A majority of residents rated the Department as *very* or *somewhat* credible in all six issues, with the highest percentages being for managing the deer population in the state and conserving biodiversity. The following pages show the regional results. (Note that all series graphs are presented in descending order of the first response option; this graph is presented in descending order of *very credible* percentages.)



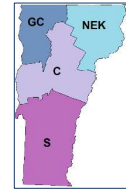
On these issues, how credible or not credible would you say the Vermont Fish and Wildlife Department is? (Greater Chittenden)



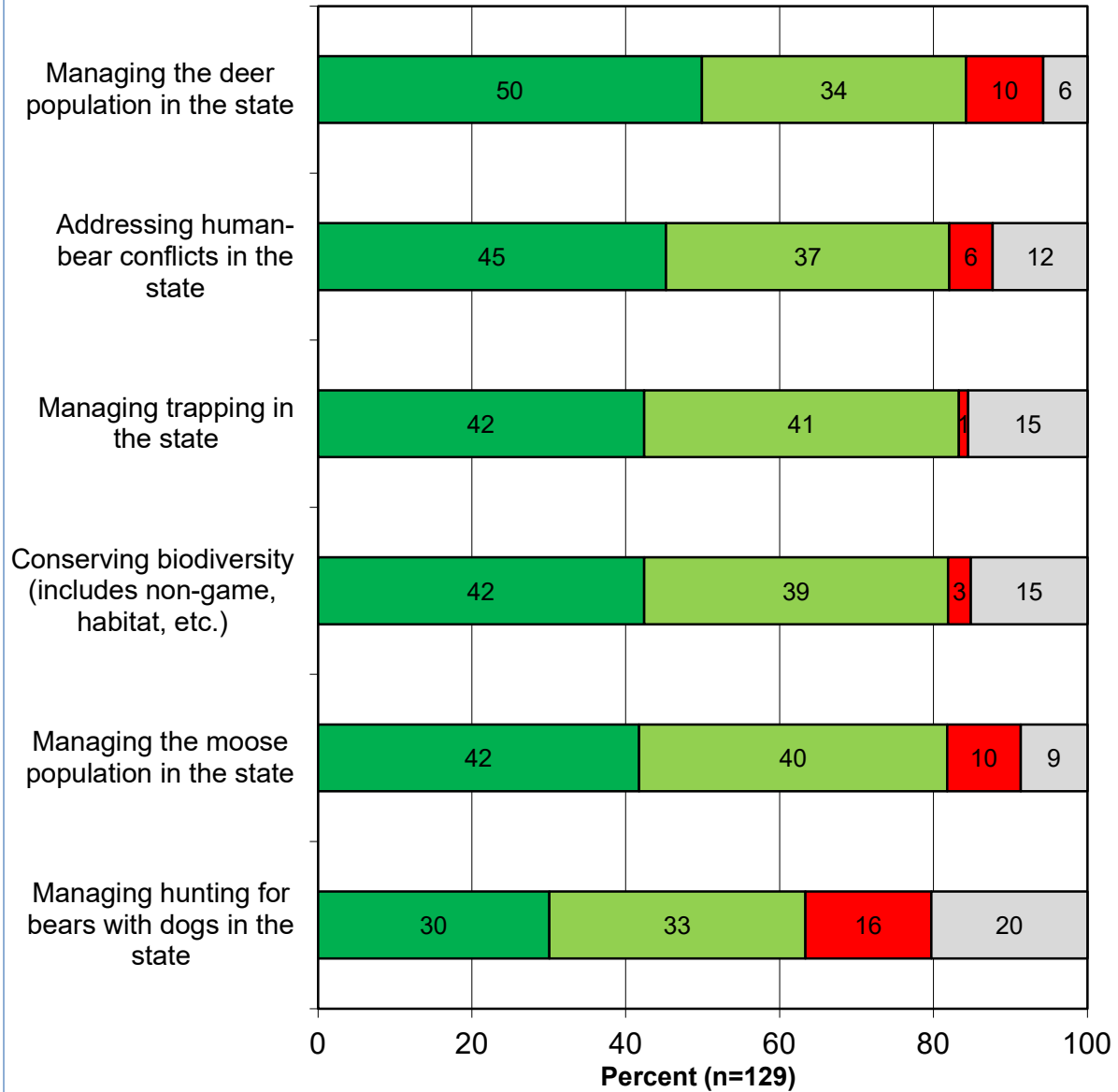
■ Very credible
 ■ Somewhat credible
 ■ Not at all credible
 ■ Don't know



**On these issues, how credible or not credible would you say the Vermont Fish and Wildlife Department is?
(Northeast Kingdom)**



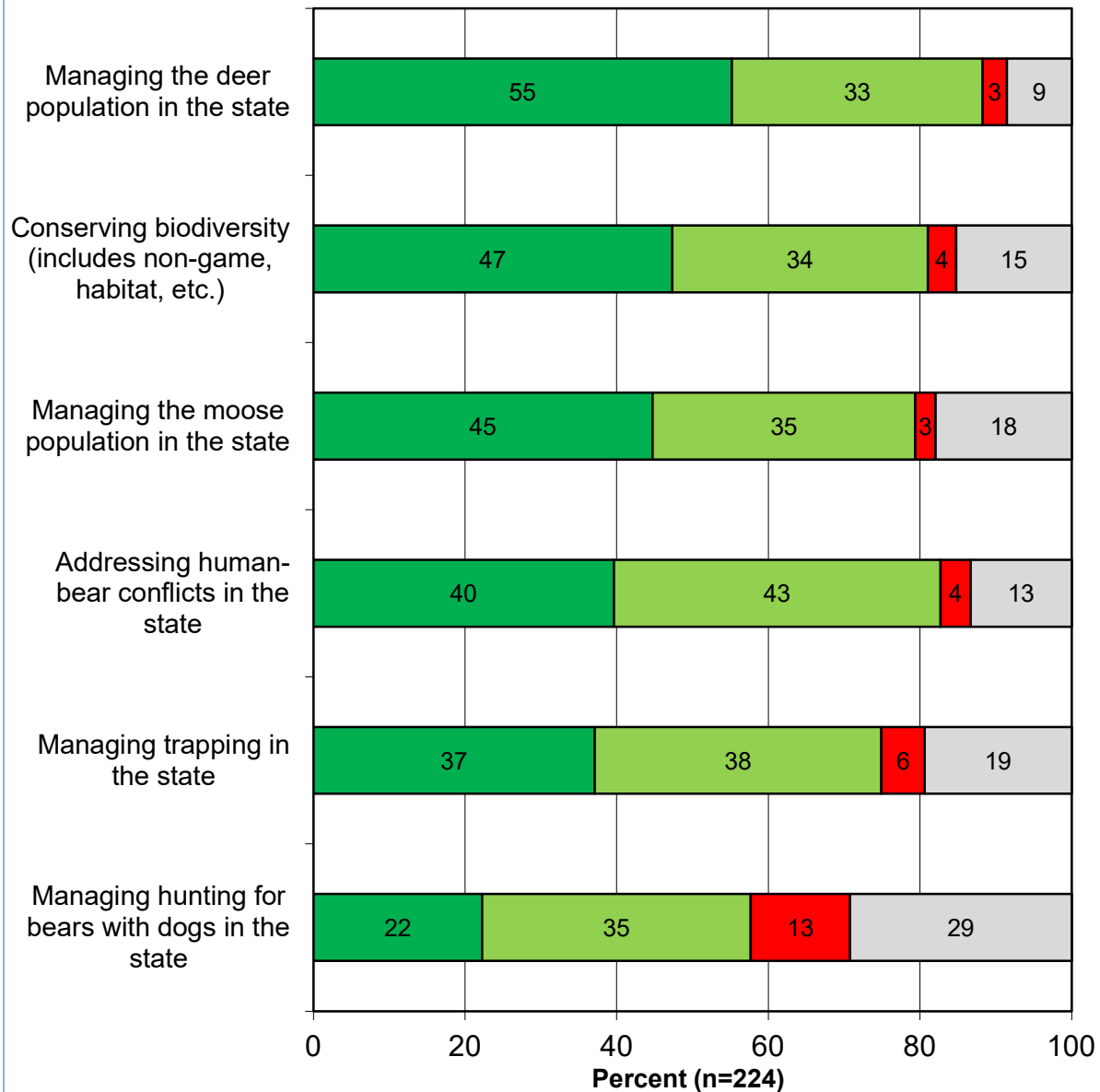
■ Very credible
 ■ Somewhat credible
 ■ Not at all credible
 ■ Don't know



On these issues, how credible or not credible would you say the Vermont Fish and Wildlife Department is? (Central)



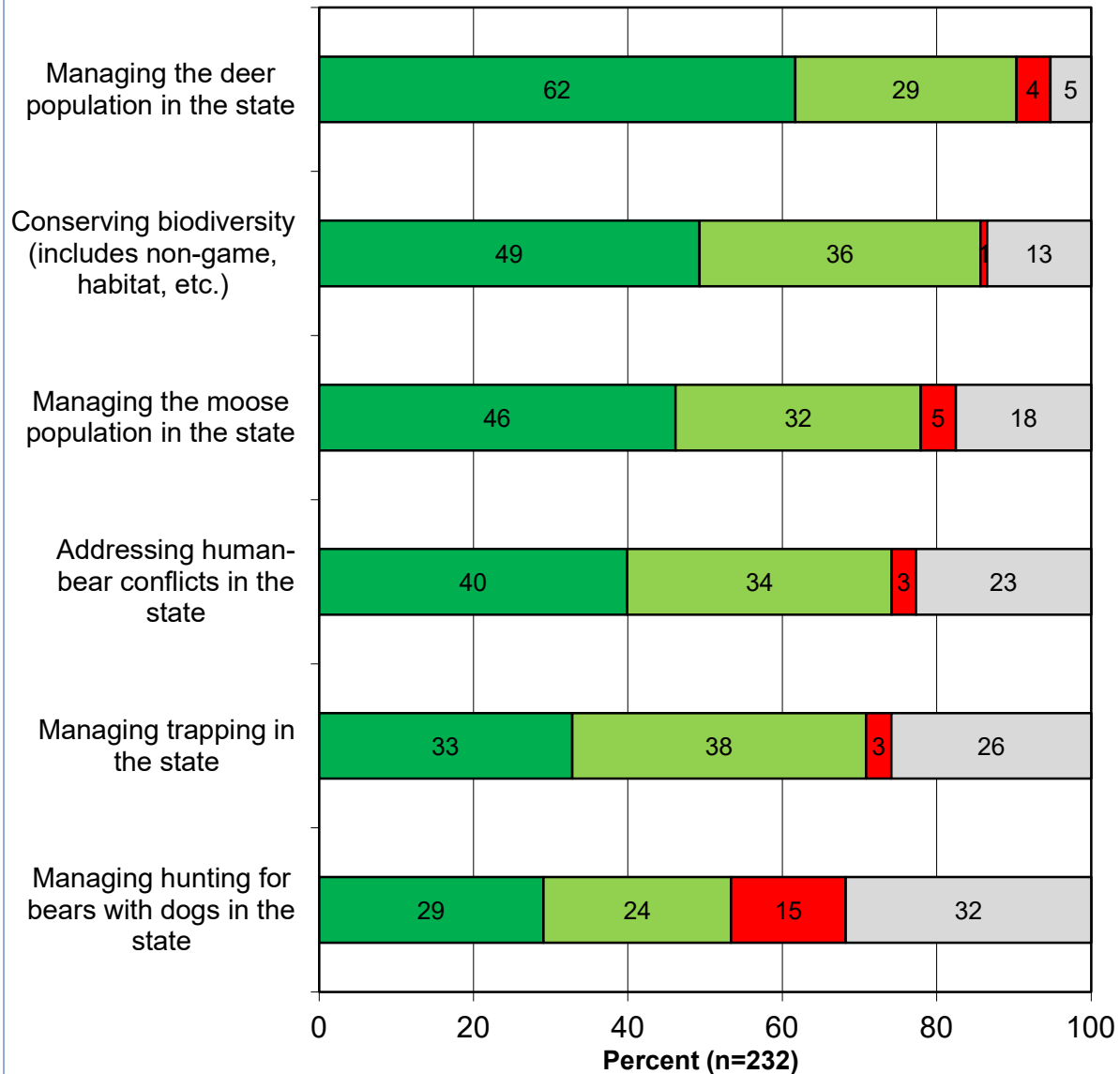
■ Very credible
 ■ Somewhat credible
 ■ Not at all credible
 ■ Don't know



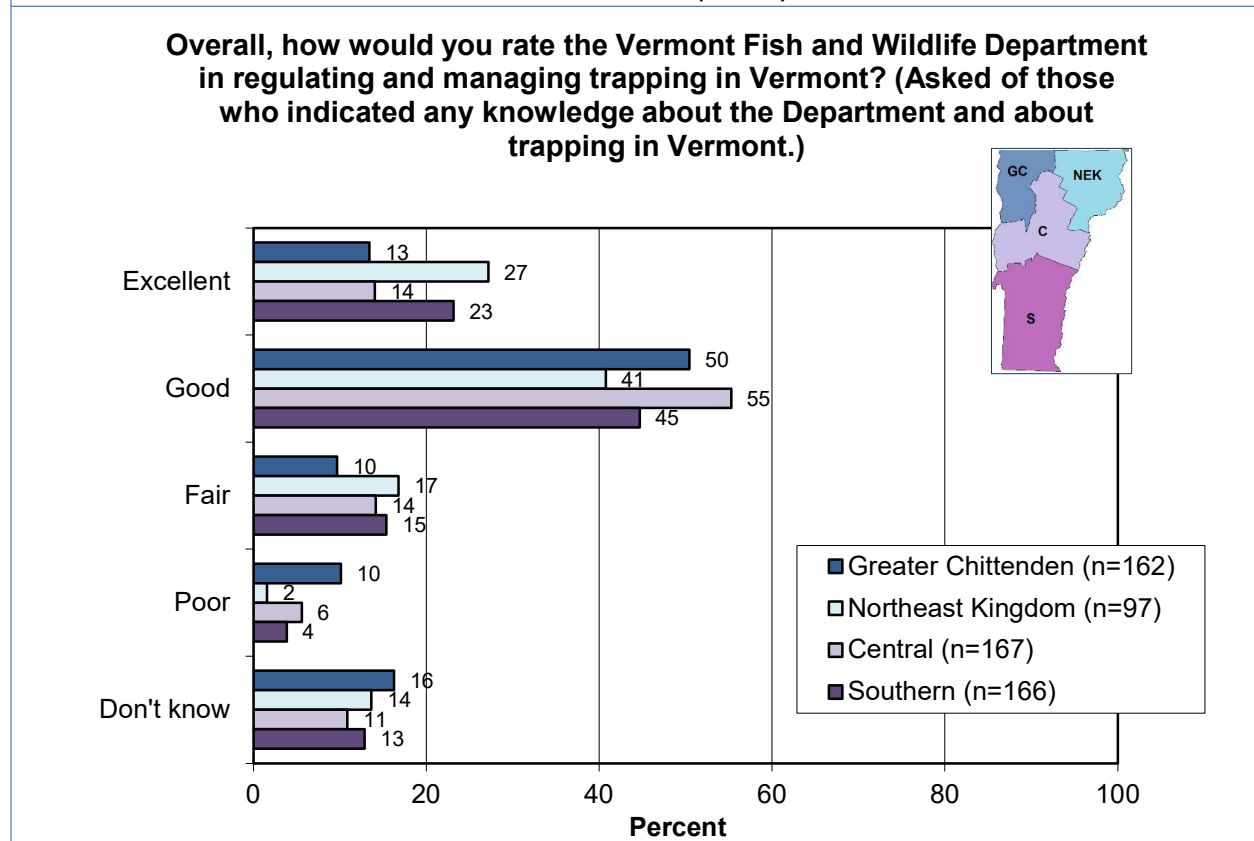
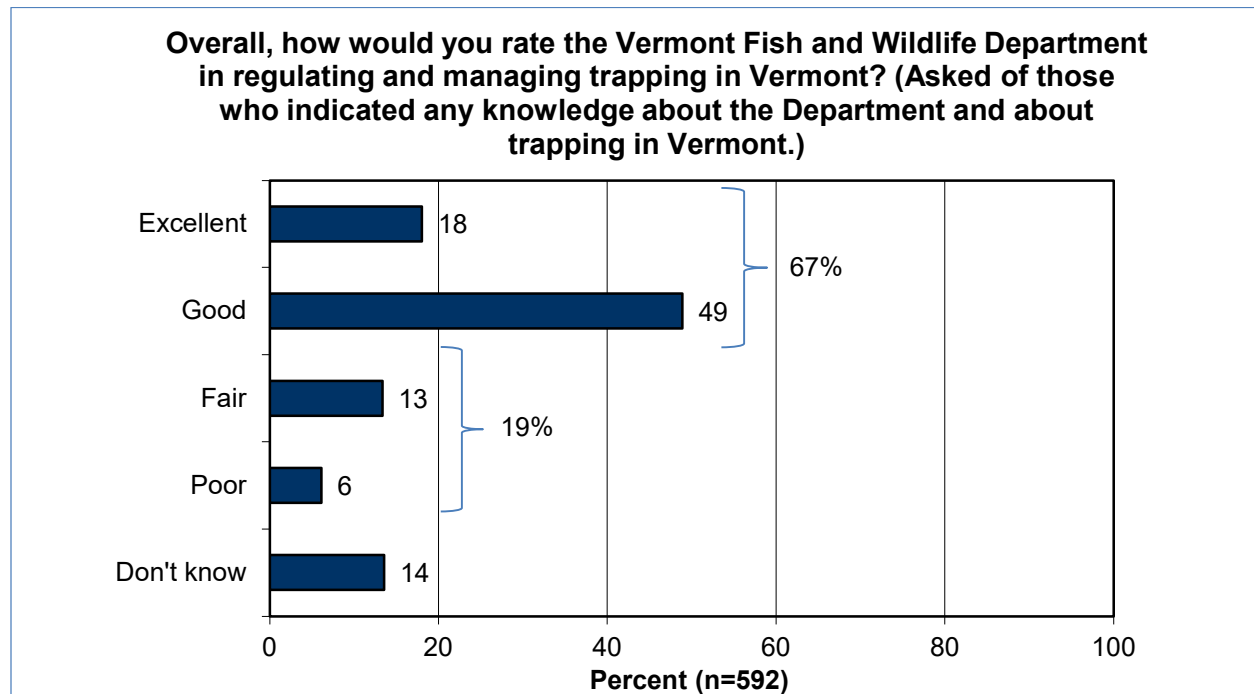
On these issues, how credible or not credible would you say the Vermont Fish and Wildlife Department is? (Southern)



■ Very credible
 ■ Somewhat credible
 ■ Not at all credible
 ■ Don't know

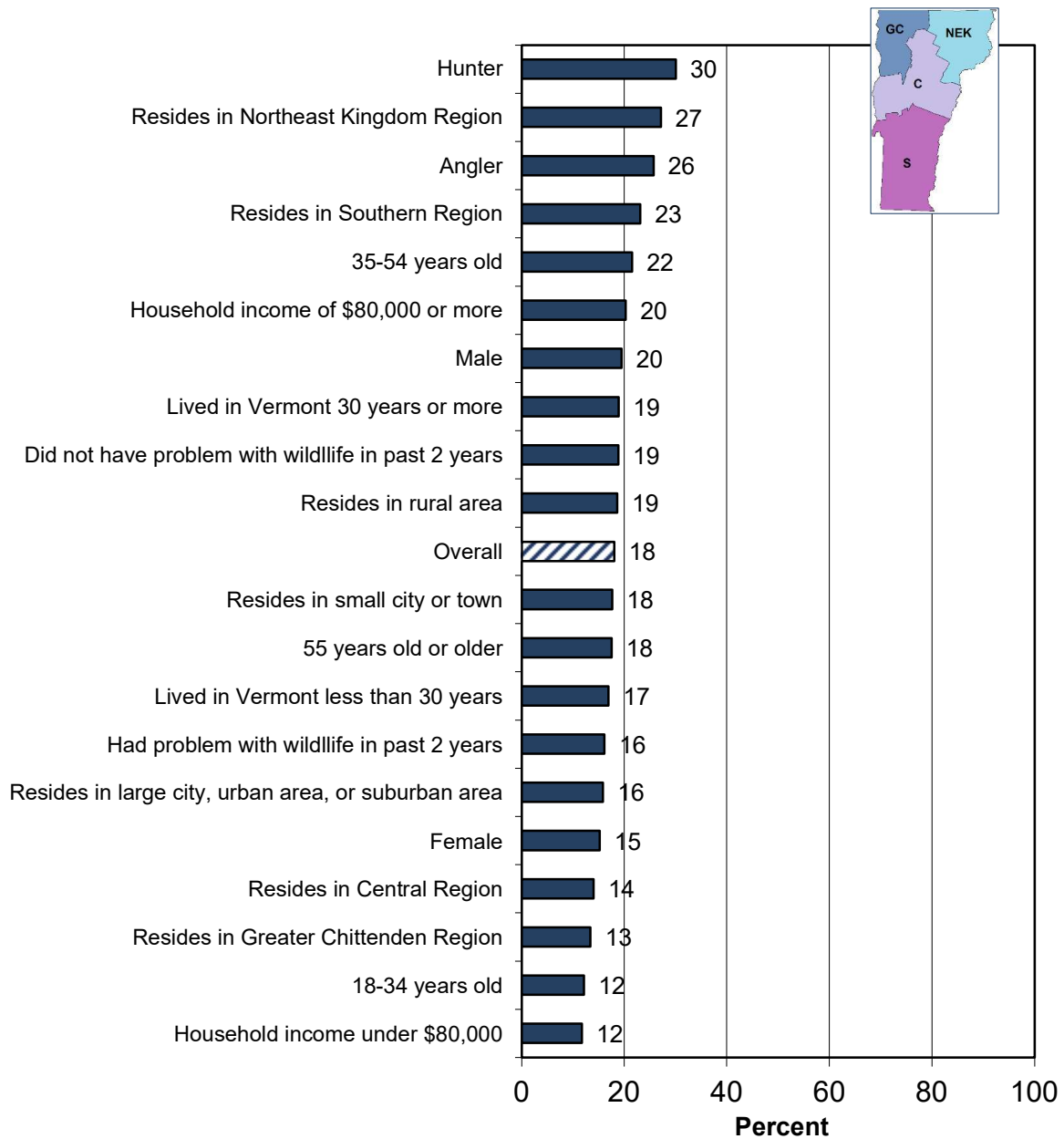


Two thirds of residents who indicated any knowledge about the Department *and* about trapping in Vermont rate the Department as *excellent* or *good* at regulating and managing trapping in the state.

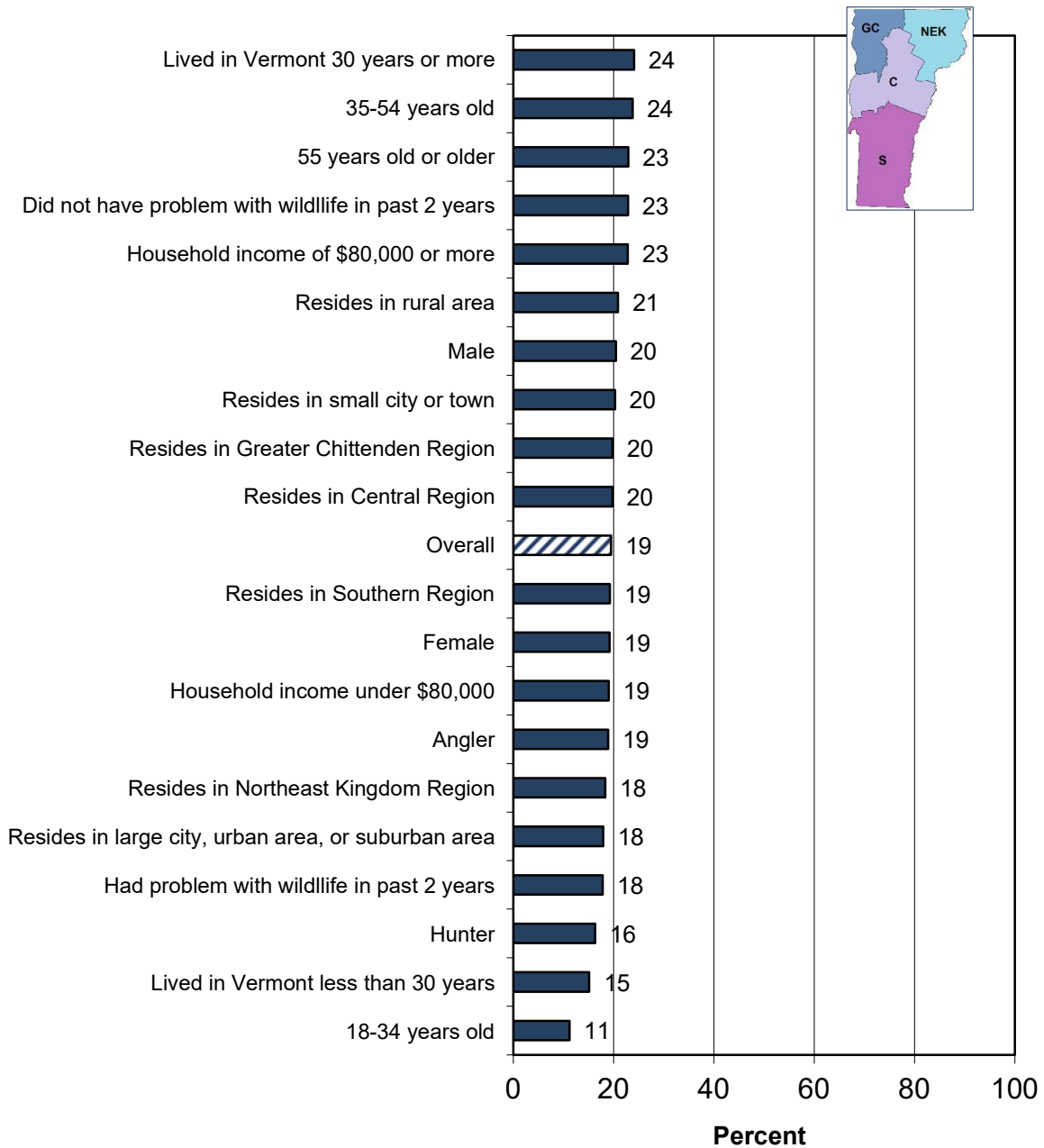


Hunters, those from the Northeast Kingdom Region, and anglers are the groups most likely to rate the Department as *excellent* in regulating and managing trapping in Vermont.

Percent of each of the following groups who rate the Vermont Fish and Wildlife Department as excellent in regulating and managing trapping in Vermont:

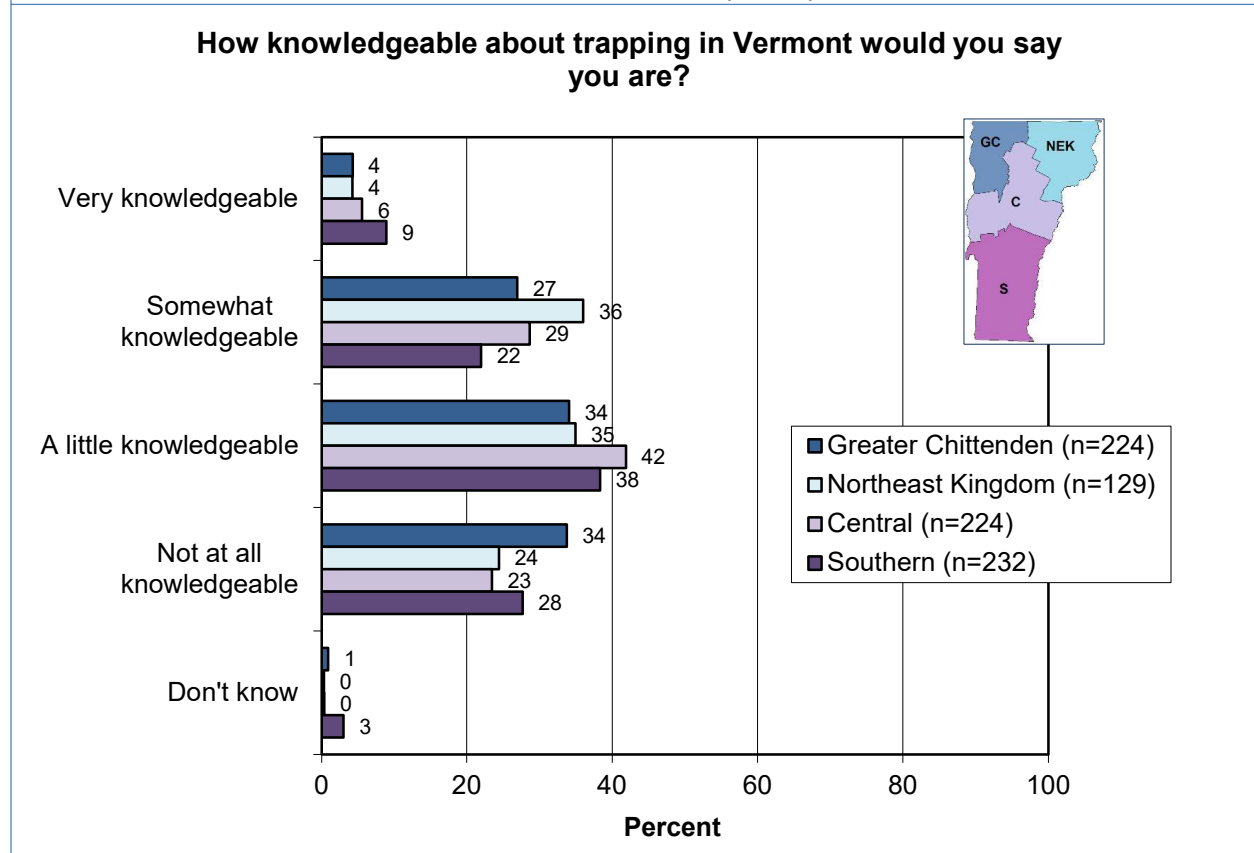
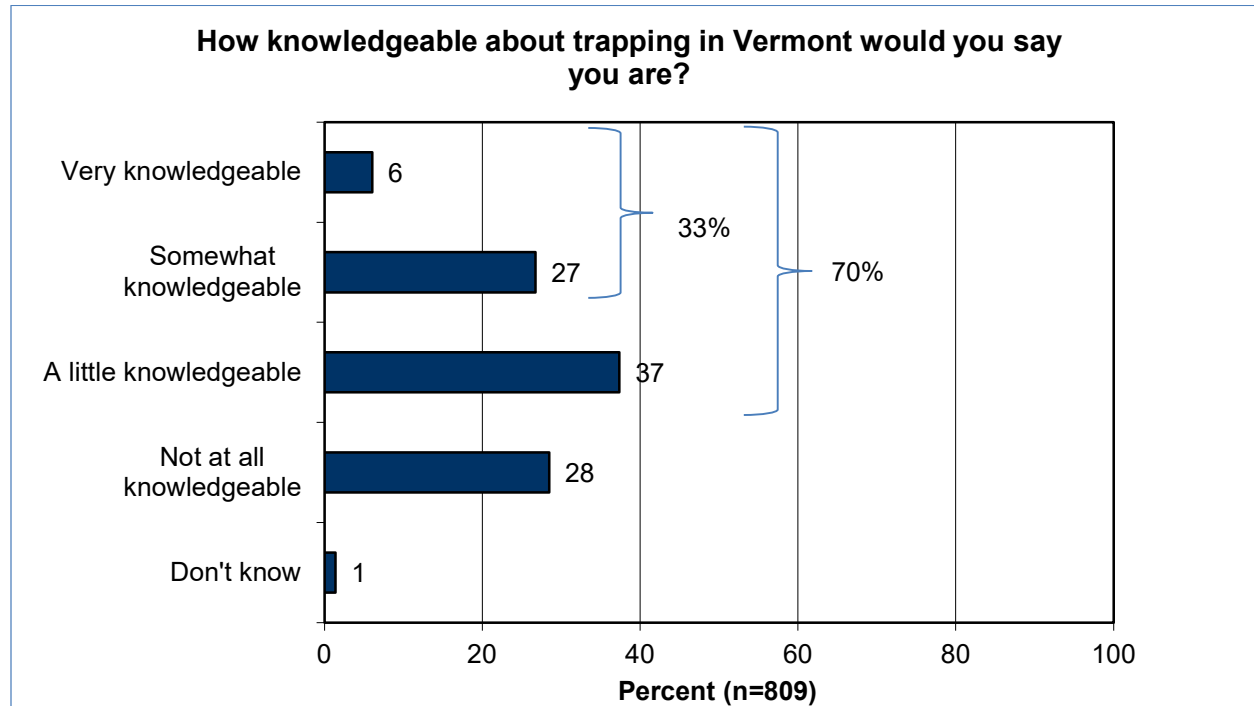


Percent of each of the following groups who rate the Vermont Fish and Wildlife Department as fair or poor in regulating and managing trapping in Vermont:

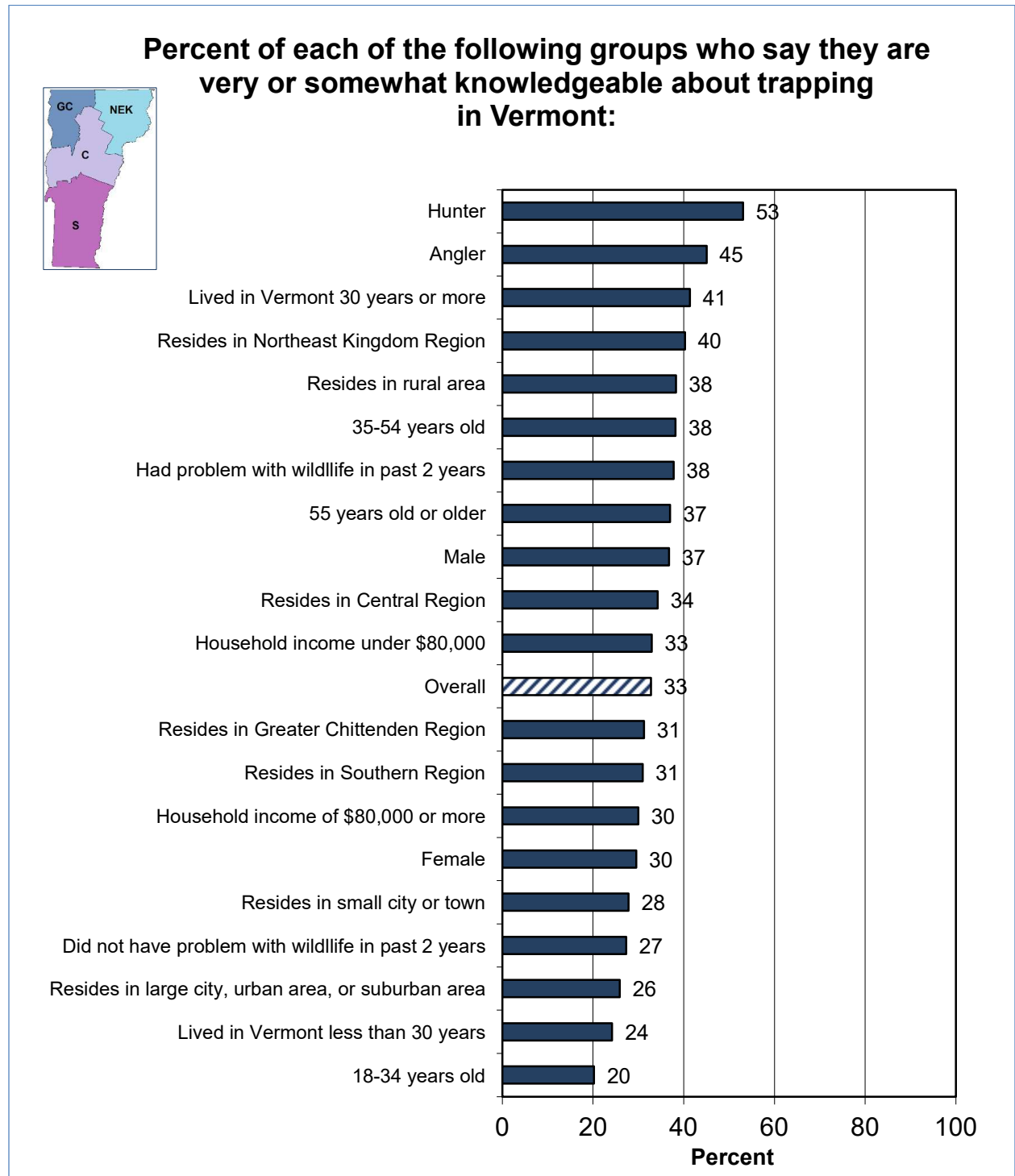


KNOWLEDGE OF TRAPPING

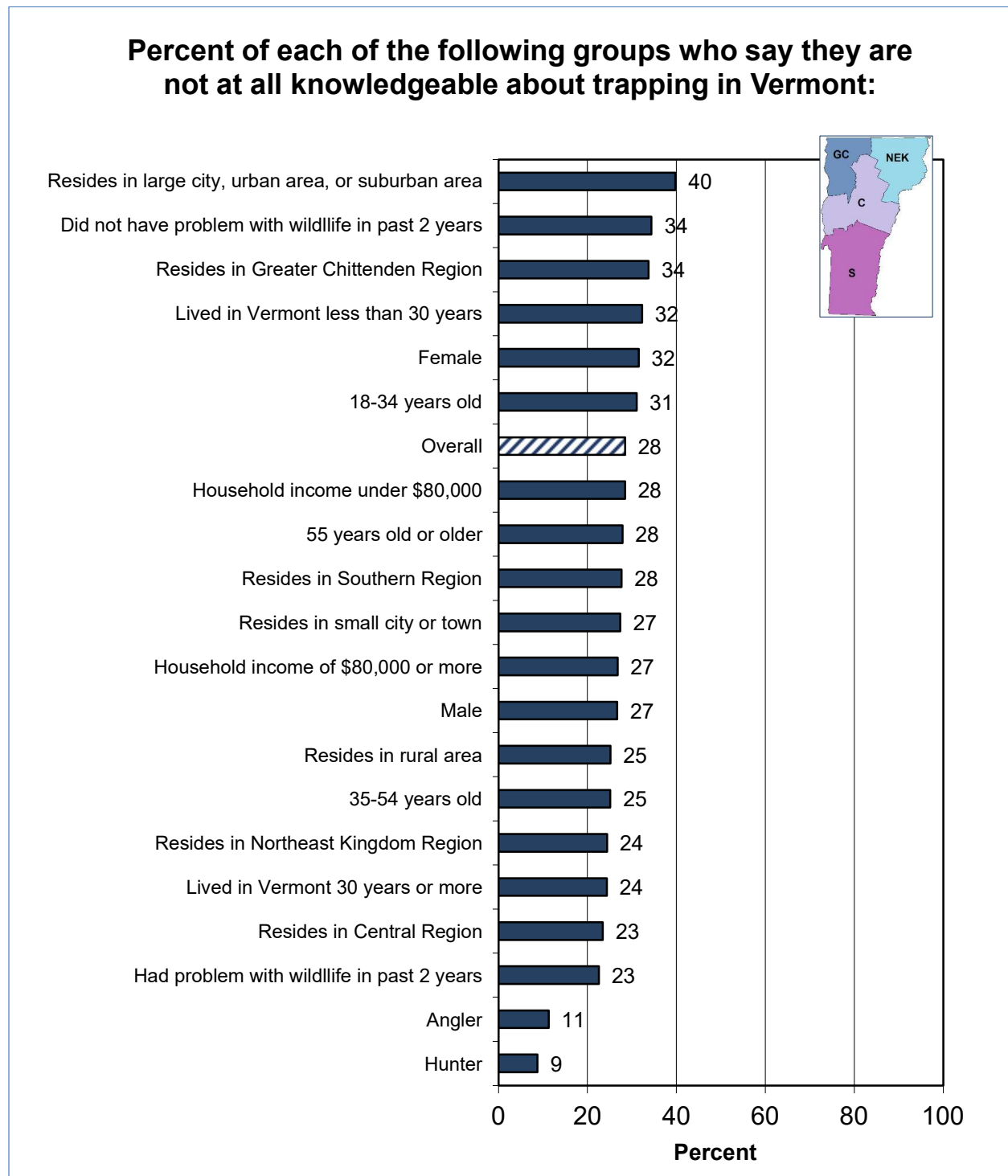
A majority of residents (70%) expressed at least a little knowledge about trapping in Vermont, although only a third said they are *very* or *somewhat* knowledgeable.



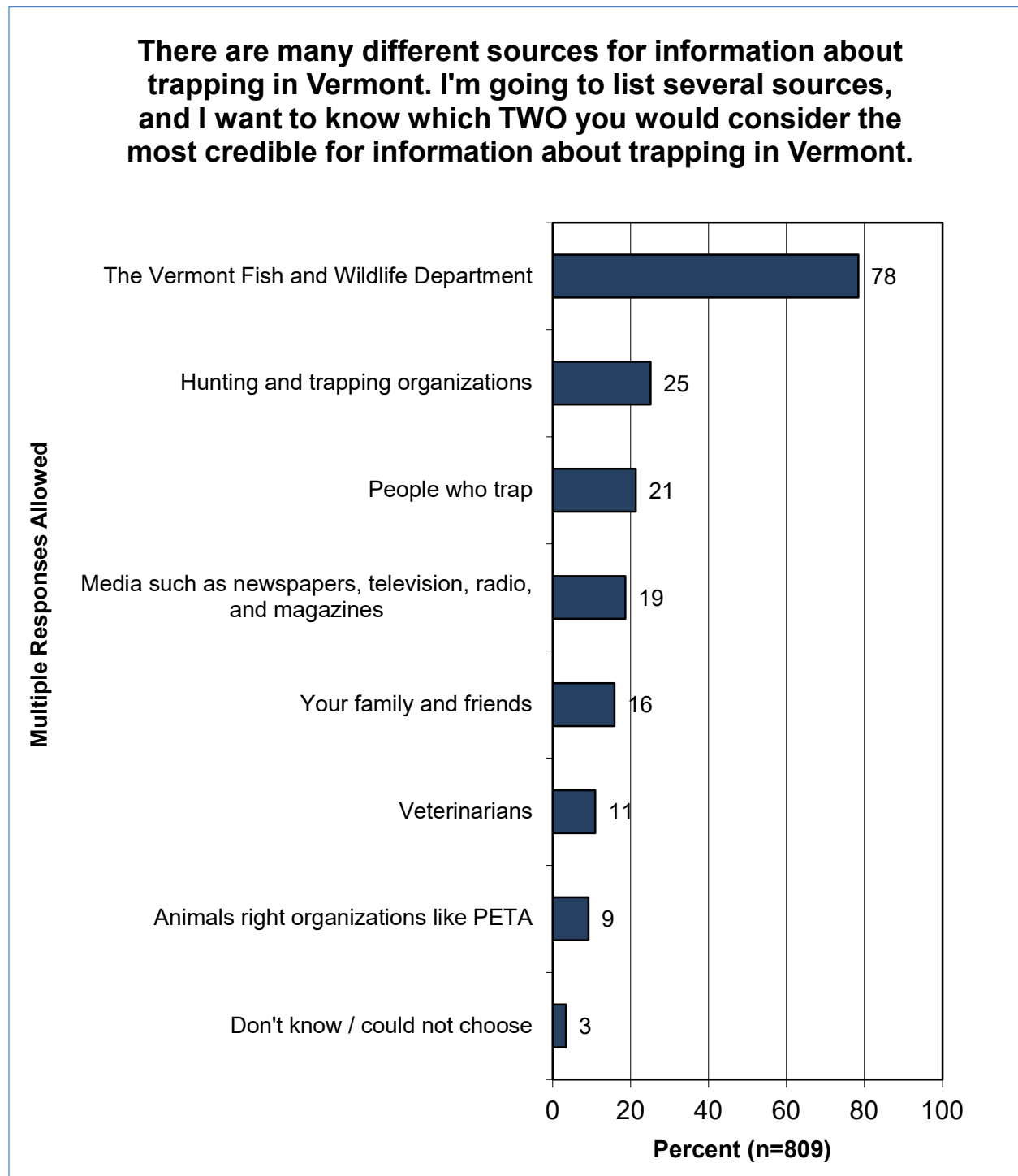
Hunters, anglers, those who lived in Vermont 30 years or more, and Northeast Kingdom Region residents are the groups most knowledgeable about trapping.



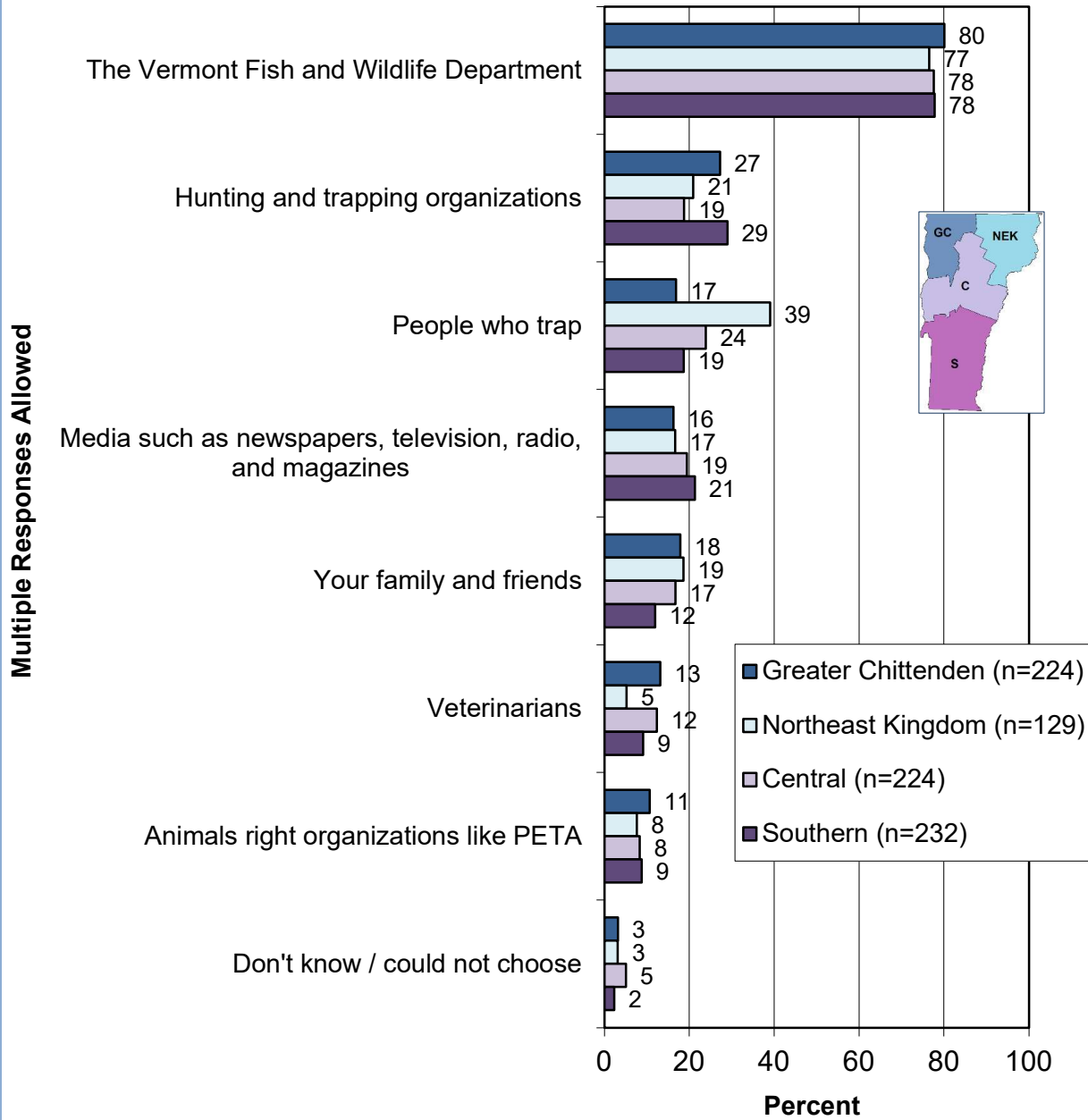
Large city or suburban residents, those who did not have problems with wildlife, and Greater Chittenden Region residents were most likely to be *not at all* knowledgeable about trapping.



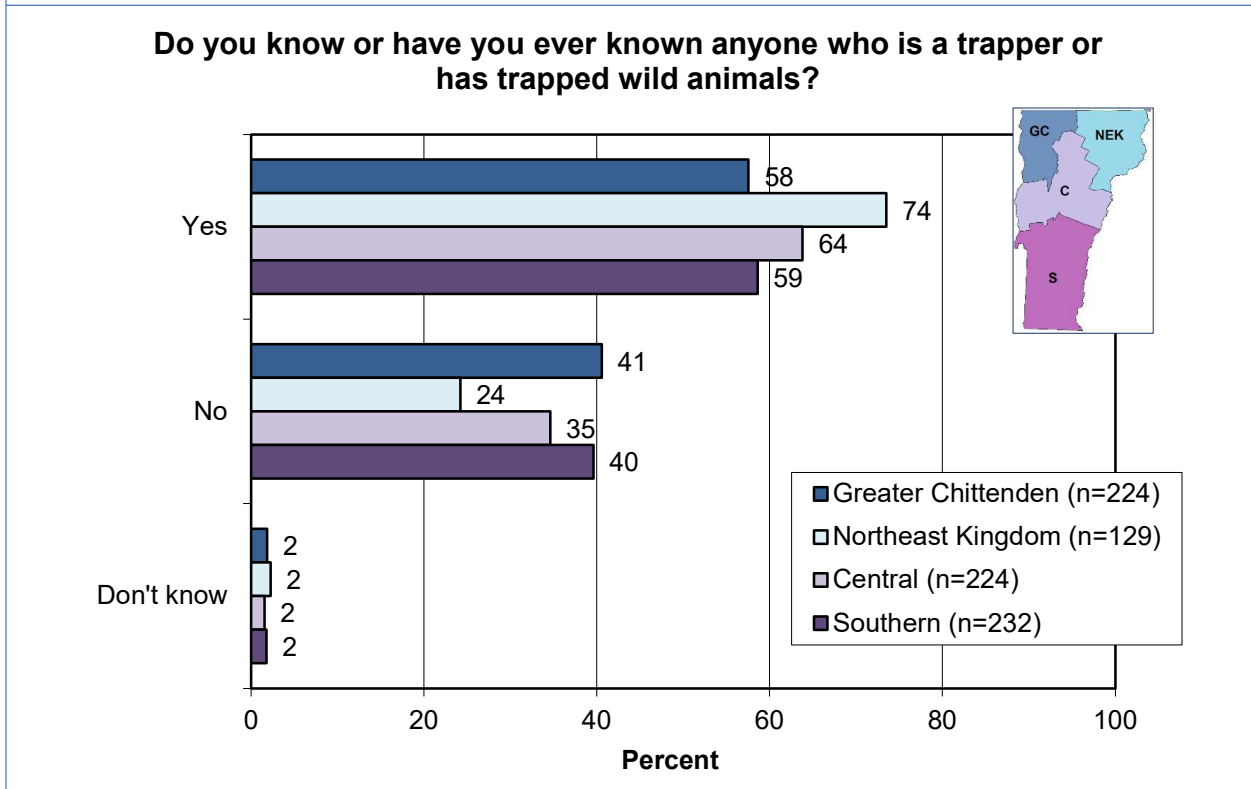
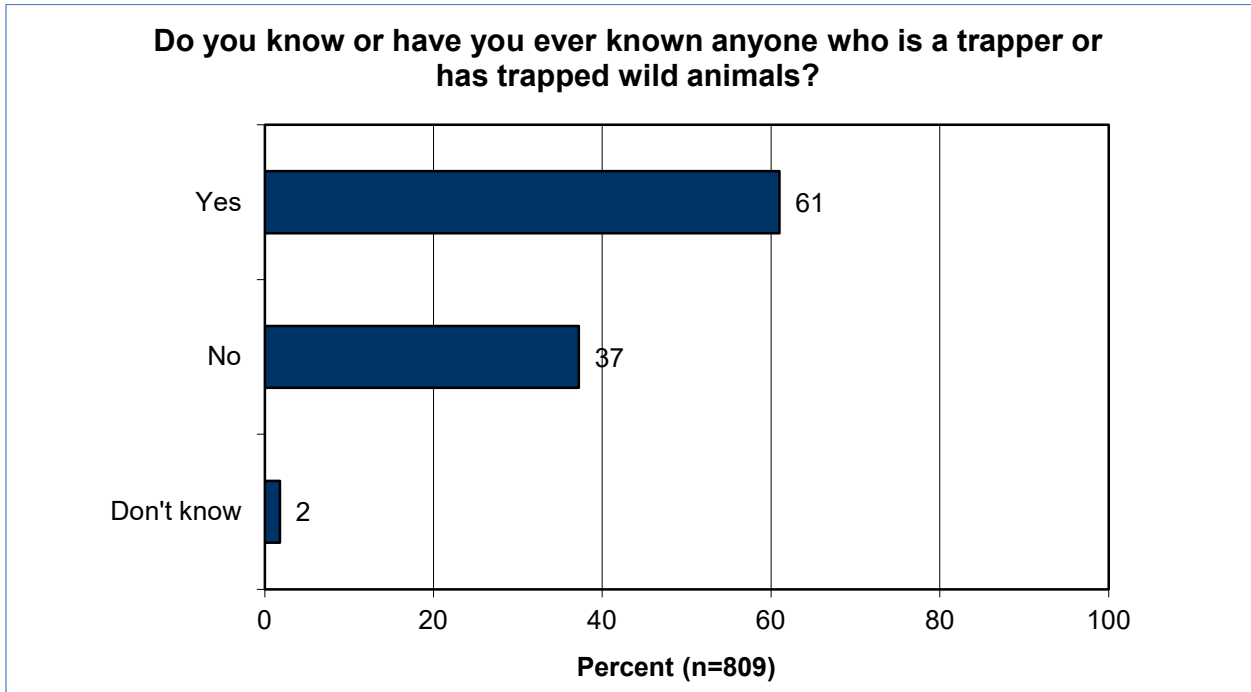
The survey presented residents with a list of information sources and asked them to select the two that they think are the most credible sources of information about trapping in the state. The combined results are shown below: by far the Department is considered the most credible source, with 78% who selected it as their first or second choice. This is distantly followed, with 16% to 25% who rated them as their first or second choice, by hunting and trapping organizations, trappers, media outlets, and their family and friends.



There are many different sources for information about trapping in Vermont. I'm going to list several sources, and I want to know which TWO you would consider the most credible for information about trapping in Vermont.



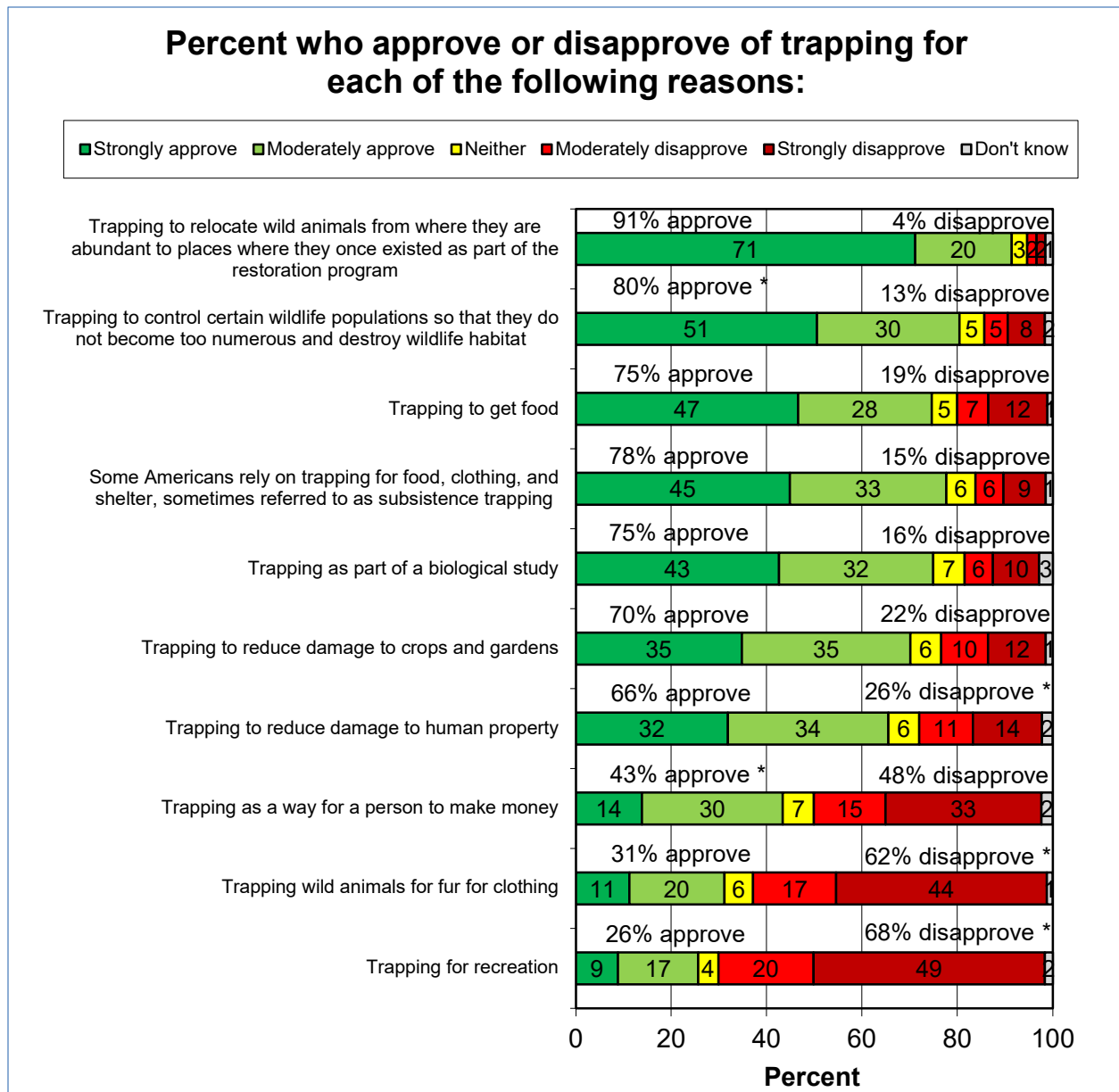
A majority of residents (61%) know or have ever known someone who currently traps or previously has trapped wild animals.



APPROVAL / DISAPPROVAL OF VARIOUS REASONS TO TRAP

Residents were asked if they approve or disapprove of trapping for a series of 10 reasons. As the results below show, approval is high for reasons that benefit wildlife. By far the most approval is for trapping to relocate animals to where they once existed as part of the restoration program. Other reasons for trapping with high approval are to control wildlife populations, for food, and as part of a biological study. At the bottom of the graph, with disapproval exceeding approval, are trapping for recreation, for fur clothing, and for money. Regional results are shown on the following pages.

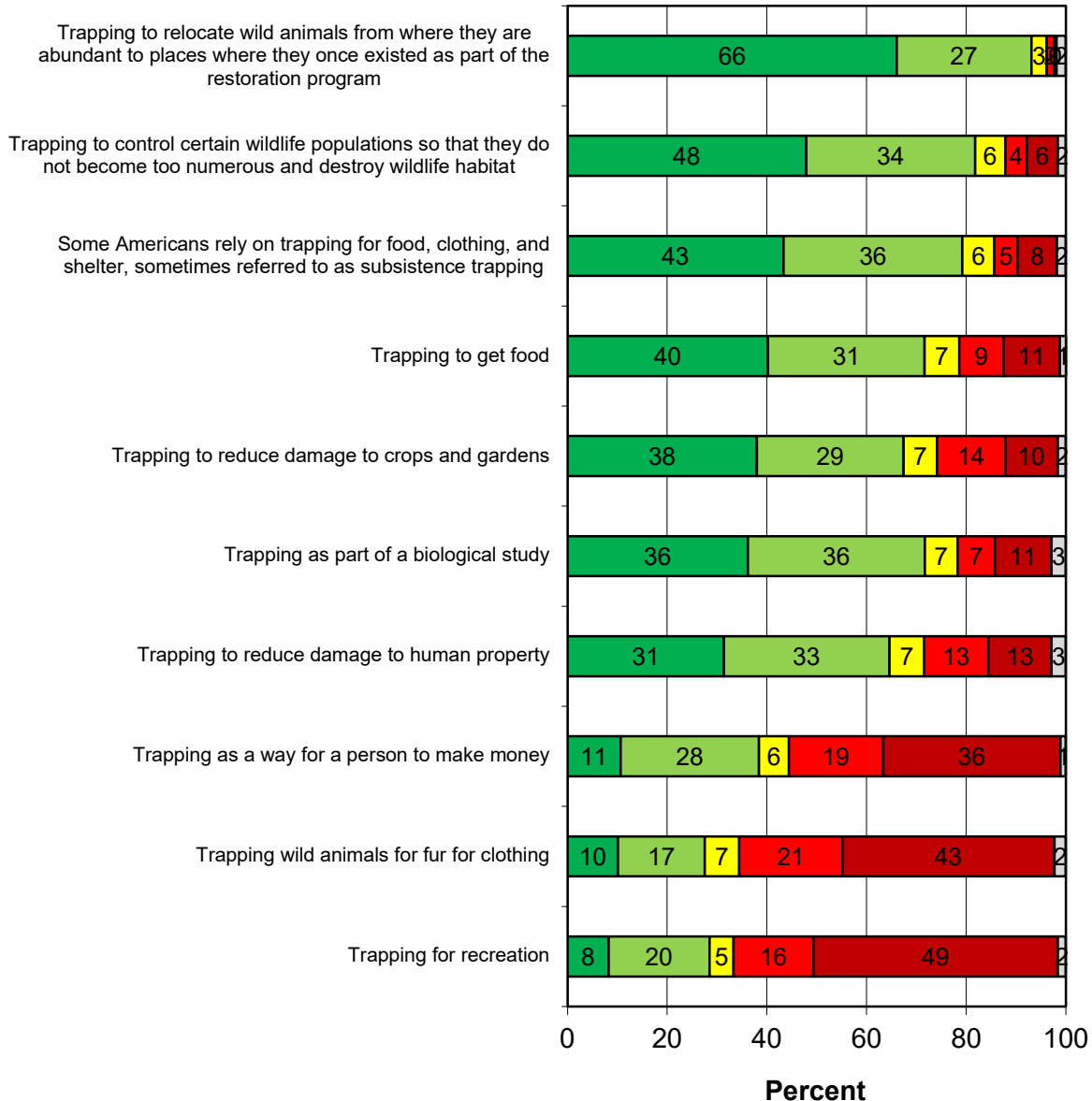
Some summations appear to be off by 1% because they are summed on unrounded numbers. These instances are denoted by an asterisk (*) on this and subsequent series graphs.



Percent who approve or disapprove of trapping for each of the following reasons: (Greater Chittenden)



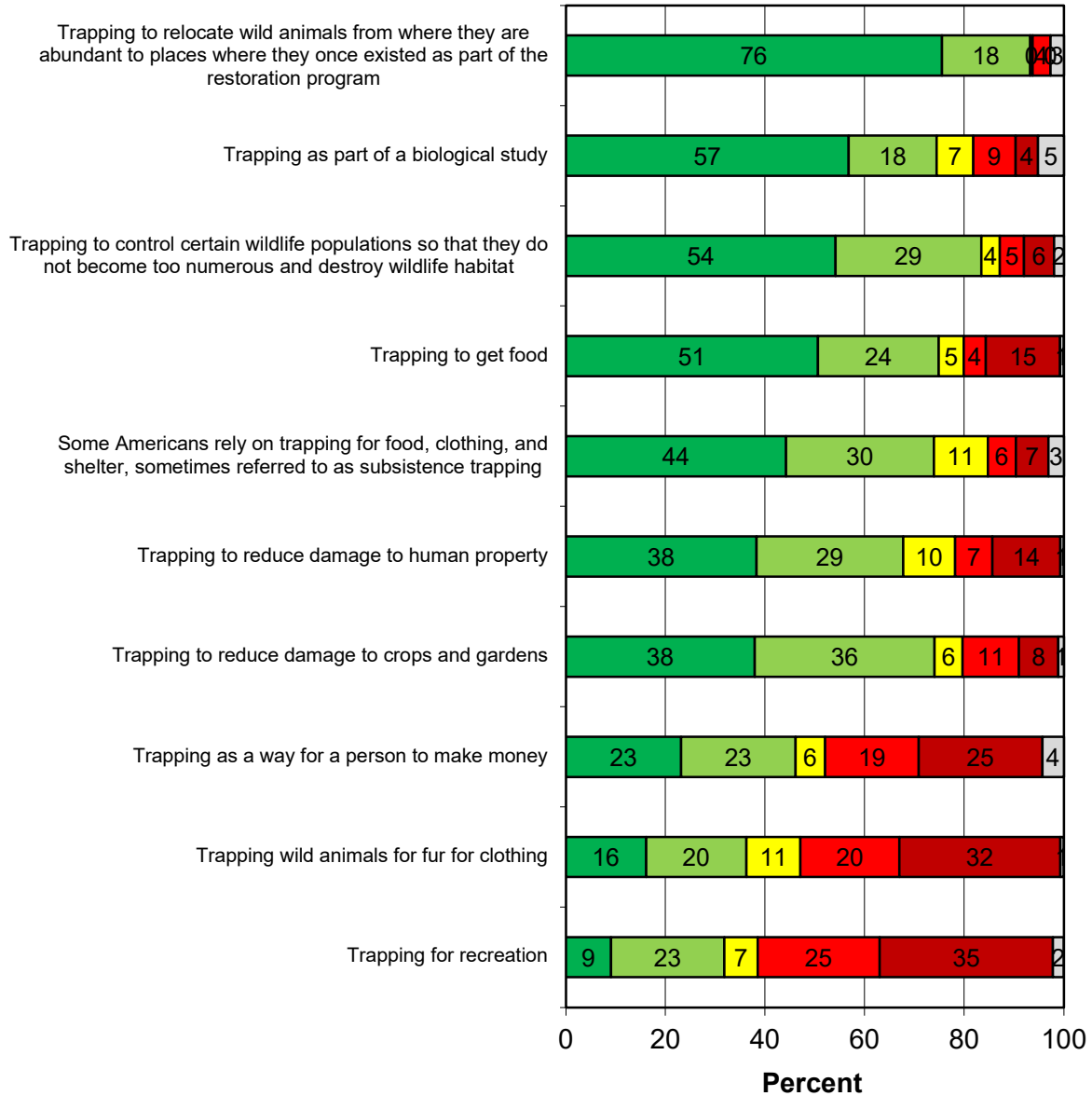
■ Strongly approve
 ■ Moderately approve
 ■ Neither
 ■ Moderately disapprove
 ■ Strongly disapprove
 ■ Don't know



Percent who approve or disapprove of trapping for each of the following reasons: (Northeast Kingdom)



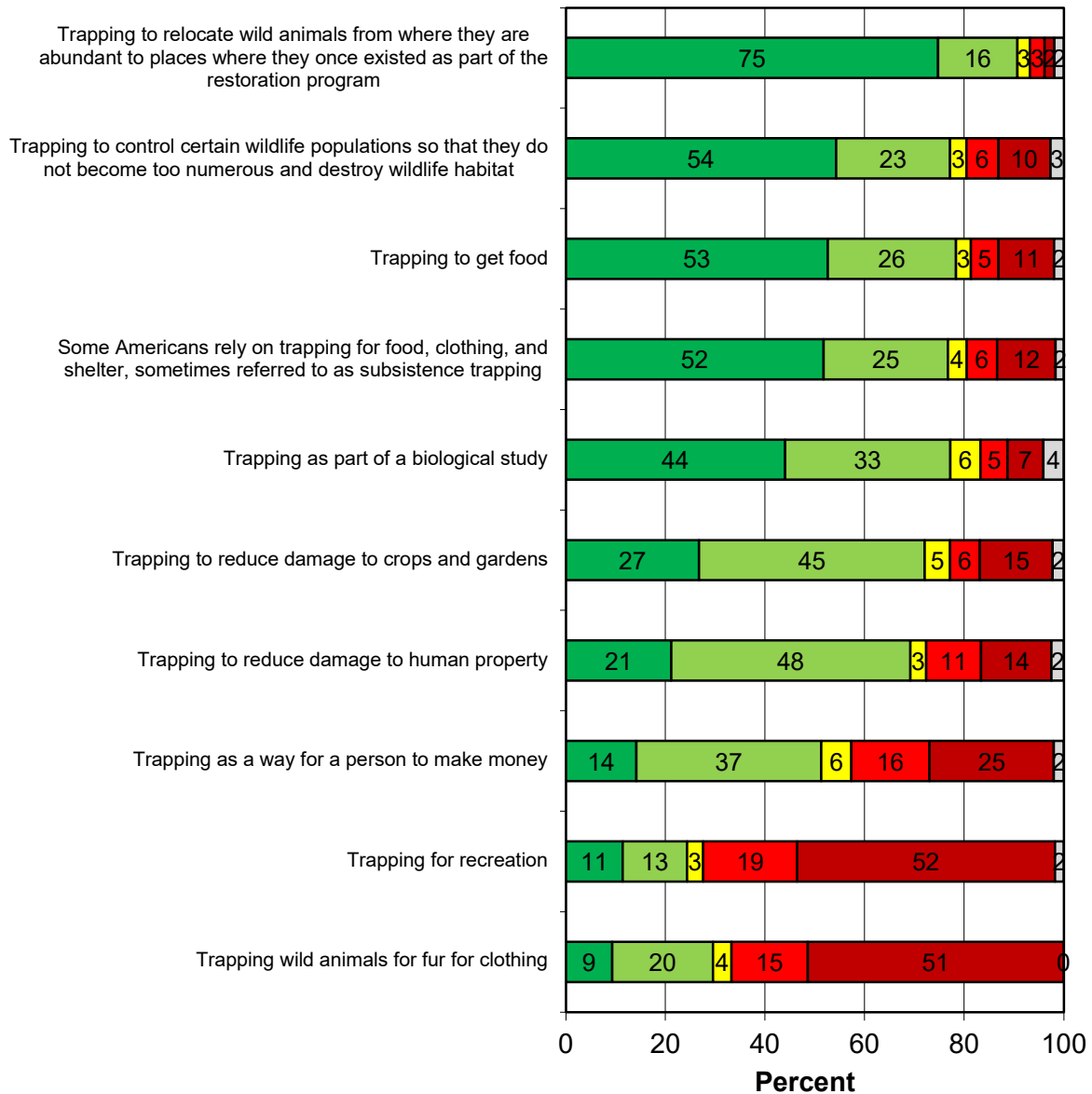
■ Strongly approve
 ■ Moderately approve
 ■ Neither
 ■ Moderately disapprove
 ■ Strongly disapprove
 ■ Don't know



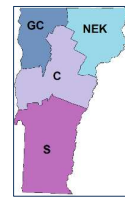
Percent who approve or disapprove of trapping for each of the following reasons: (Central)



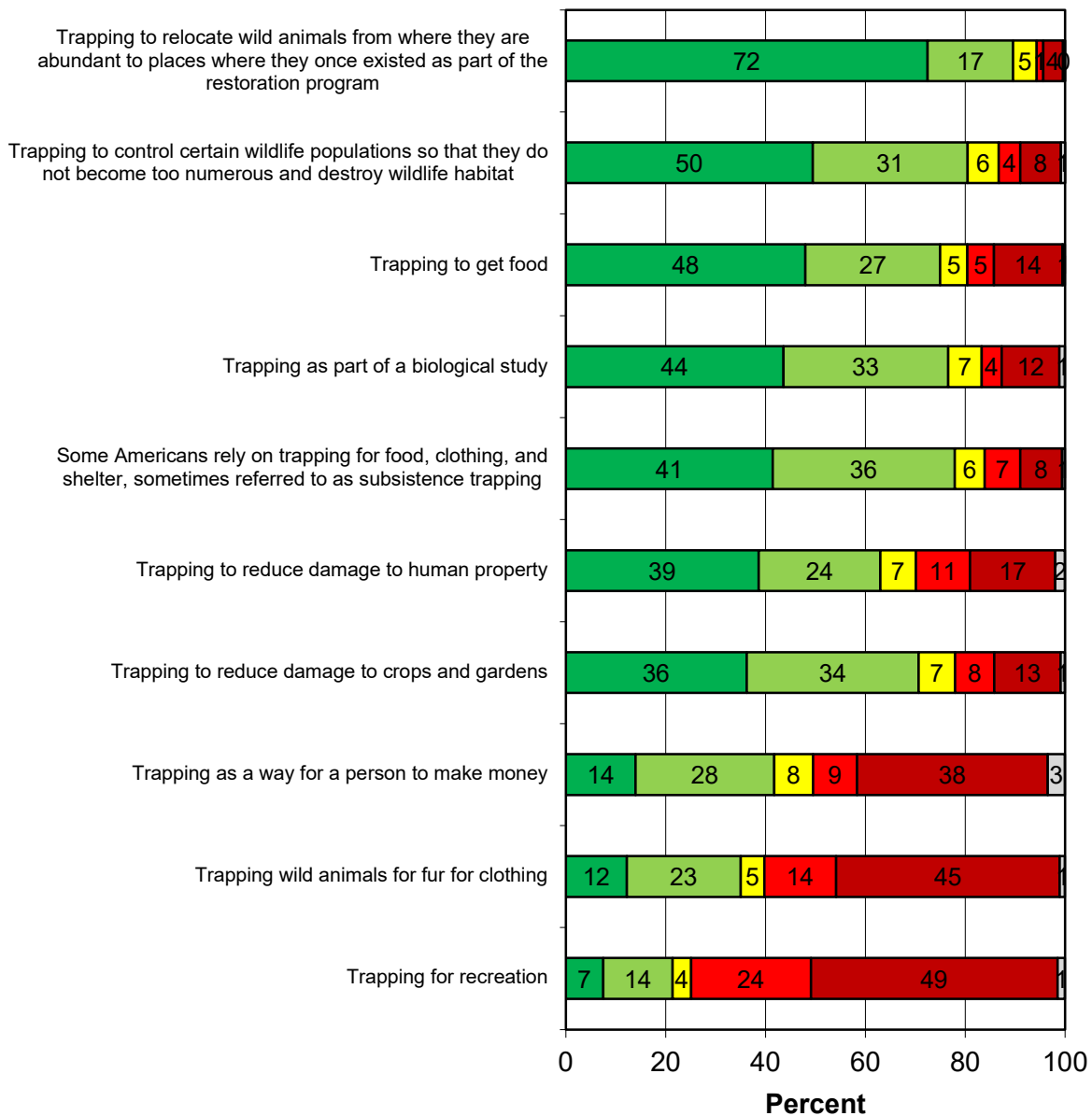
■ Strongly approve
 ■ Moderately approve
 ■ Neither
 ■ Moderately disapprove
 ■ Strongly disapprove
 ■ Don't know



Percent who approve or disapprove of trapping for each of the following reasons: (Southern)

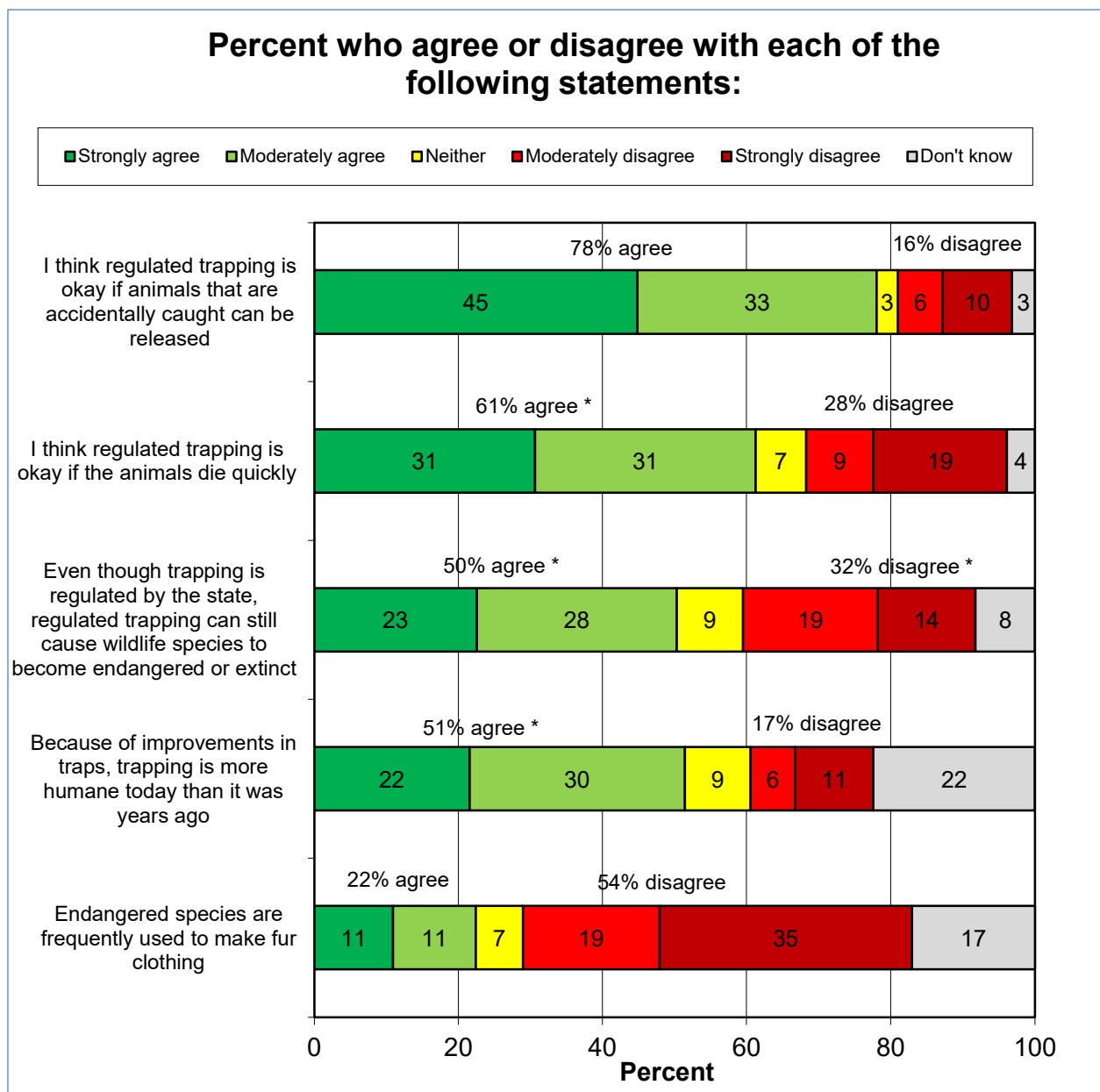


■ Strongly approve
 ■ Moderately approve
 ■ Neither
 ■ Moderately disapprove
 ■ Strongly disapprove
 ■ Don't know



FACTORS AFFECTING ATTITUDES TOWARD TRAPPING

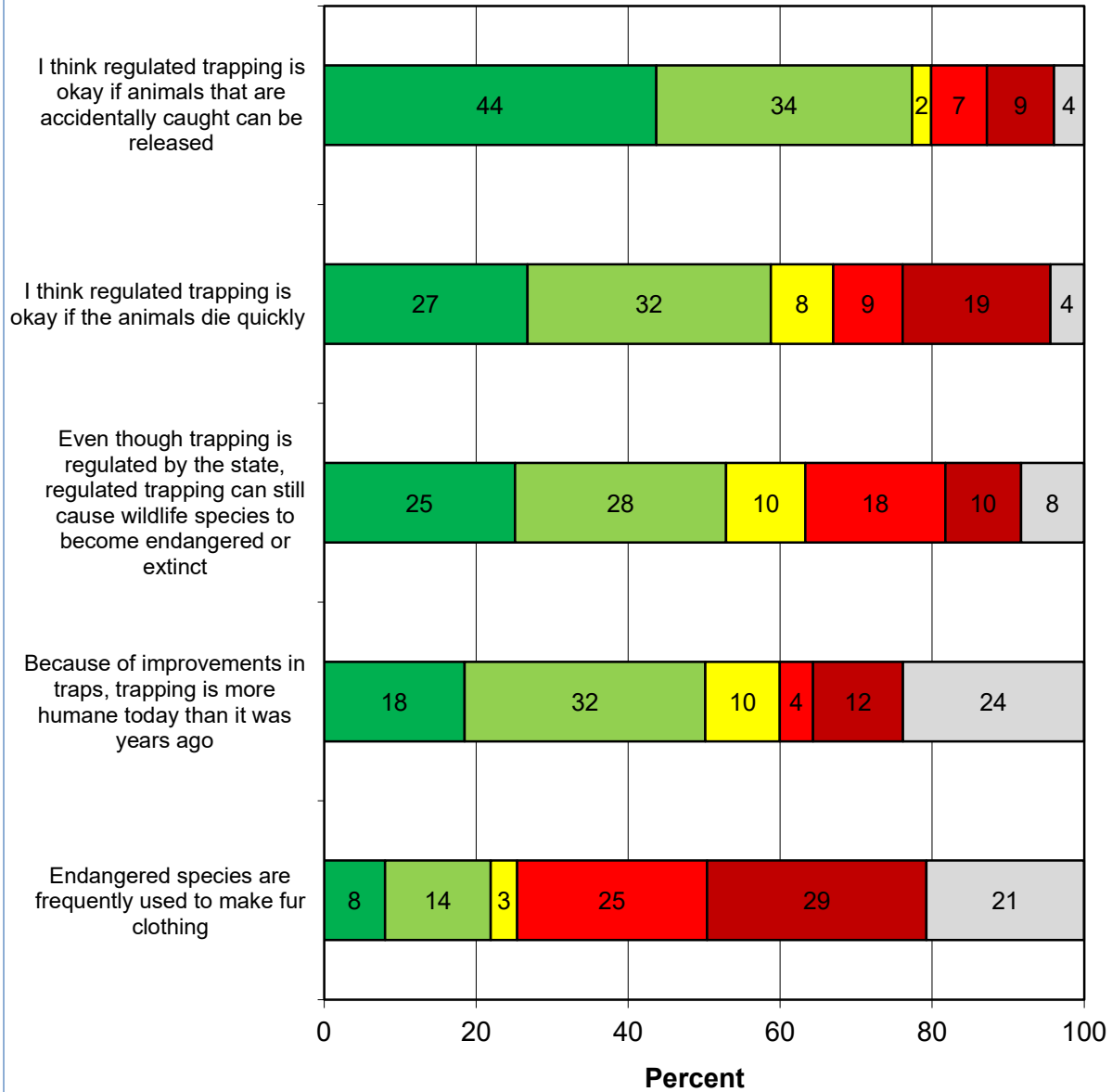
Residents were asked if they agree or disagree with five statements regarding attitudes toward trapping. The most agreement is for “I think regulated trapping is okay if animals that are accidentally caught can be released” (78% *strongly or moderately* agree) and “I think regulated trapping is okay if the animals die quickly” (61%). The most disagreement is with the statement “Endangered species are frequently used to make fur clothing” (22% agree, 54% disagree). However, note that the statement “...trapping can still cause wildlife species to become endangered or extinct” has more agreement (50%) than disagreement (32%). (Regulated trapping in the United States has not caused any species to become threatened, endangered, or extinct.) Overall results are shown, followed by regional graphs and demographic analyses graphs for each statement.



Percent who agree or disagree with each of the following statements: (Greater Chittenden)



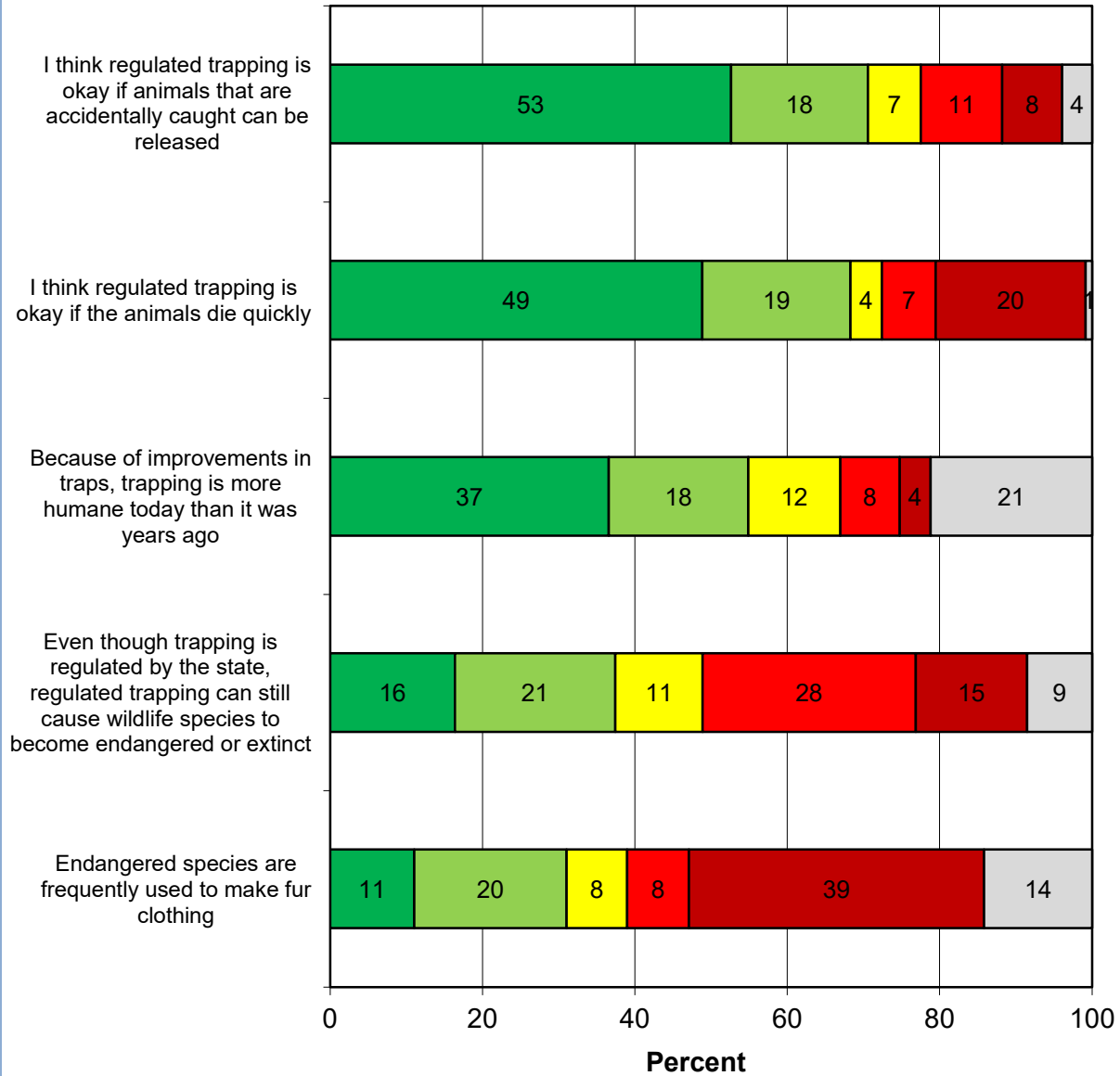
■ Strongly agree
 ■ Moderately agree
 ■ Neither
 ■ Moderately disagree
 ■ Strongly disagree
 ■ Don't know



Percent who agree or disagree with each of the following statements: (Northeast Kingdom)



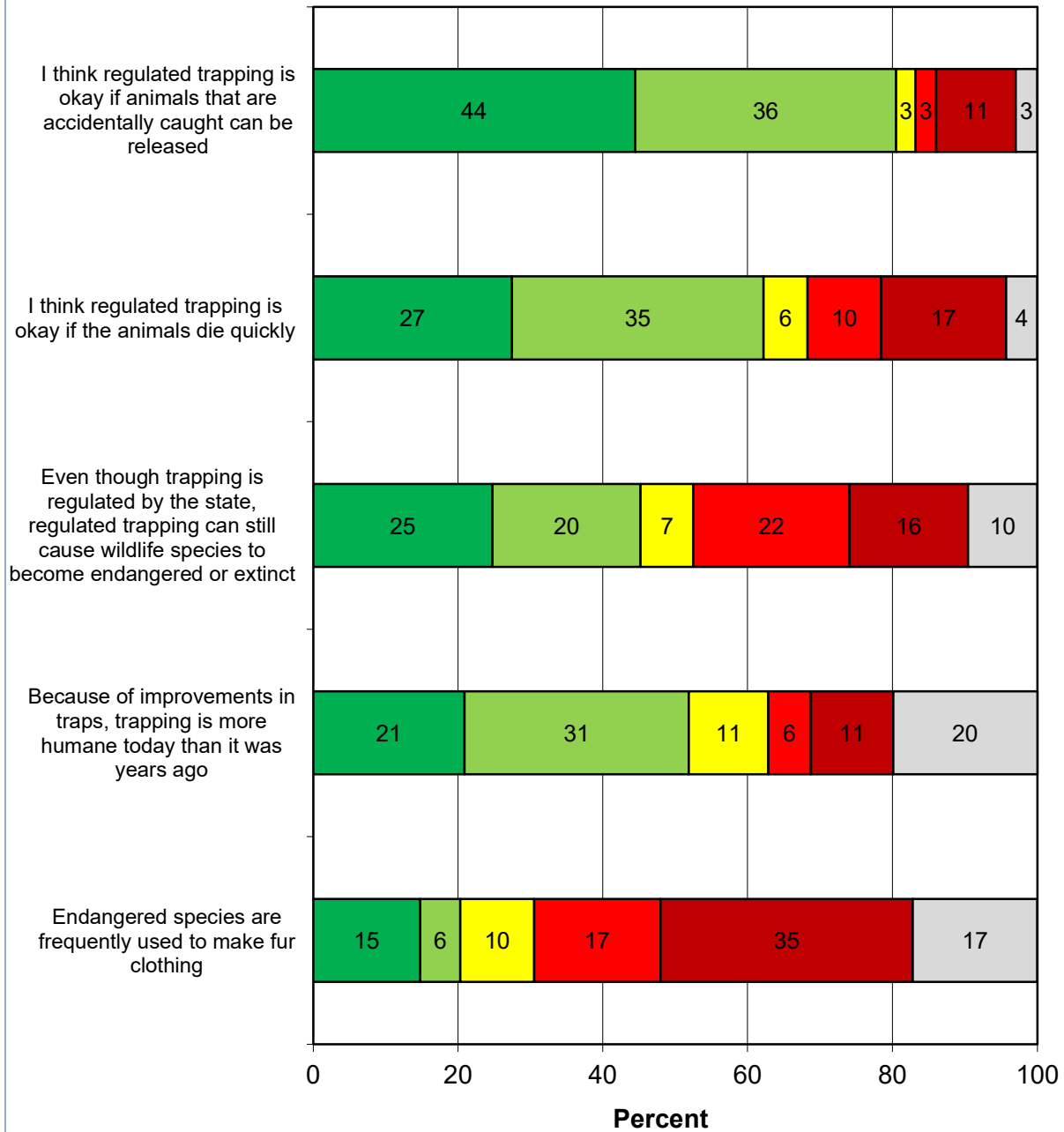
■ Strongly agree
 ■ Moderately agree
 ■ Neither
 ■ Moderately disagree
 ■ Strongly disagree
 ■ Don't know



Percent who agree or disagree with each of the following statements: (Central)



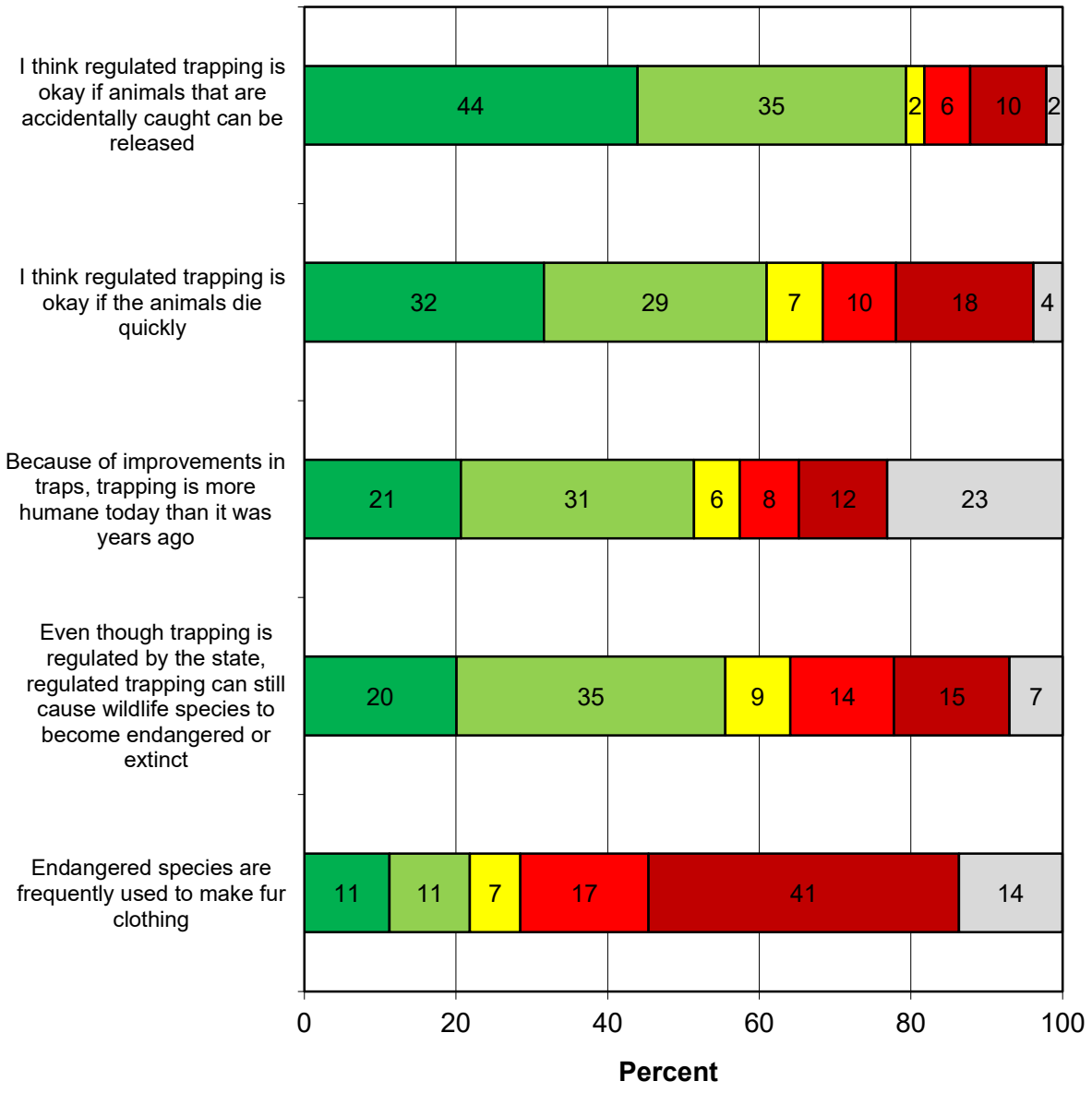
■ Strongly agree
 ■ Moderately agree
 ■ Neither
 ■ Moderately disagree
 ■ Strongly disagree
 ■ Don't know



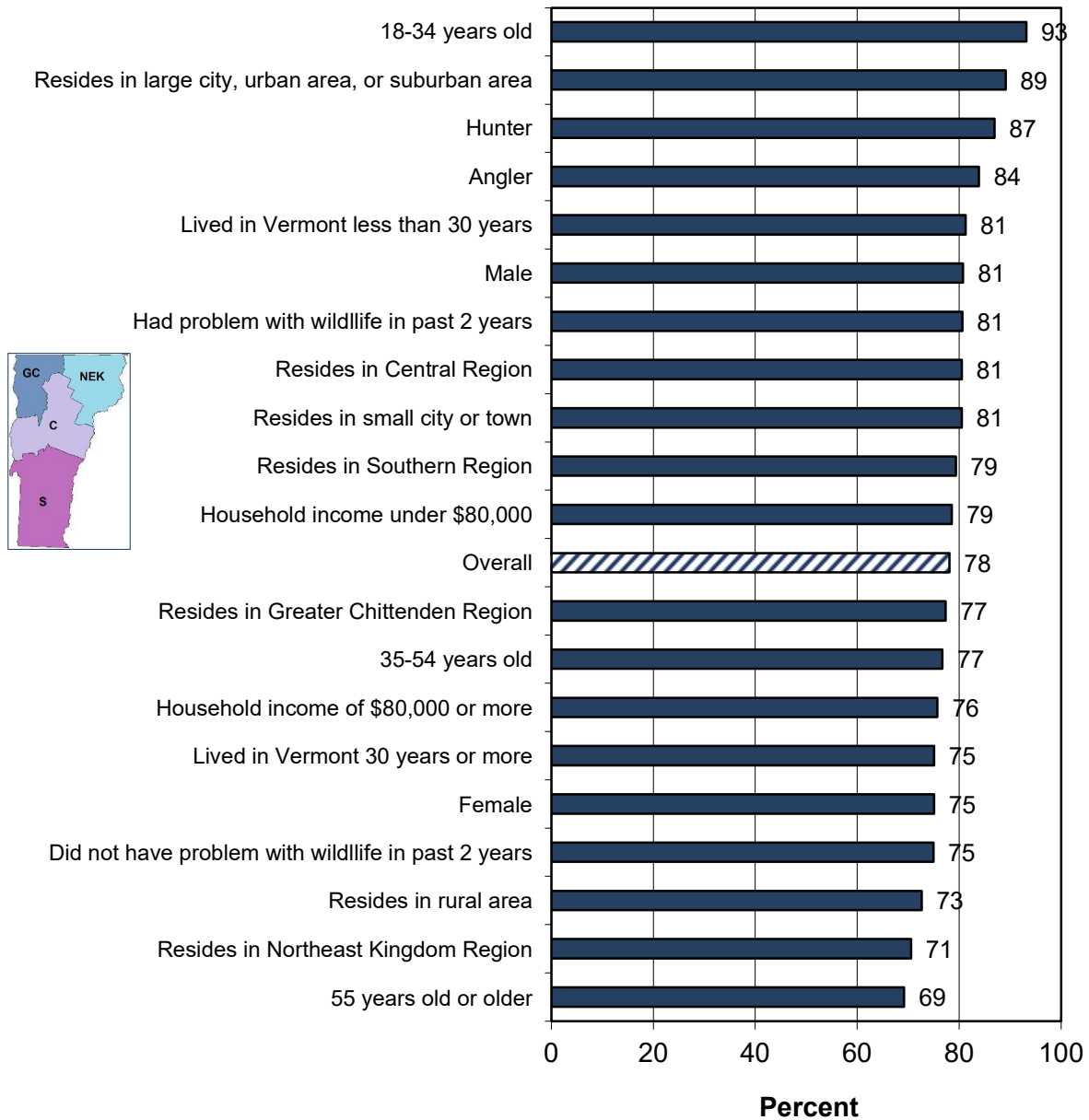
Percent who agree or disagree with each of the following statements: (Southern)



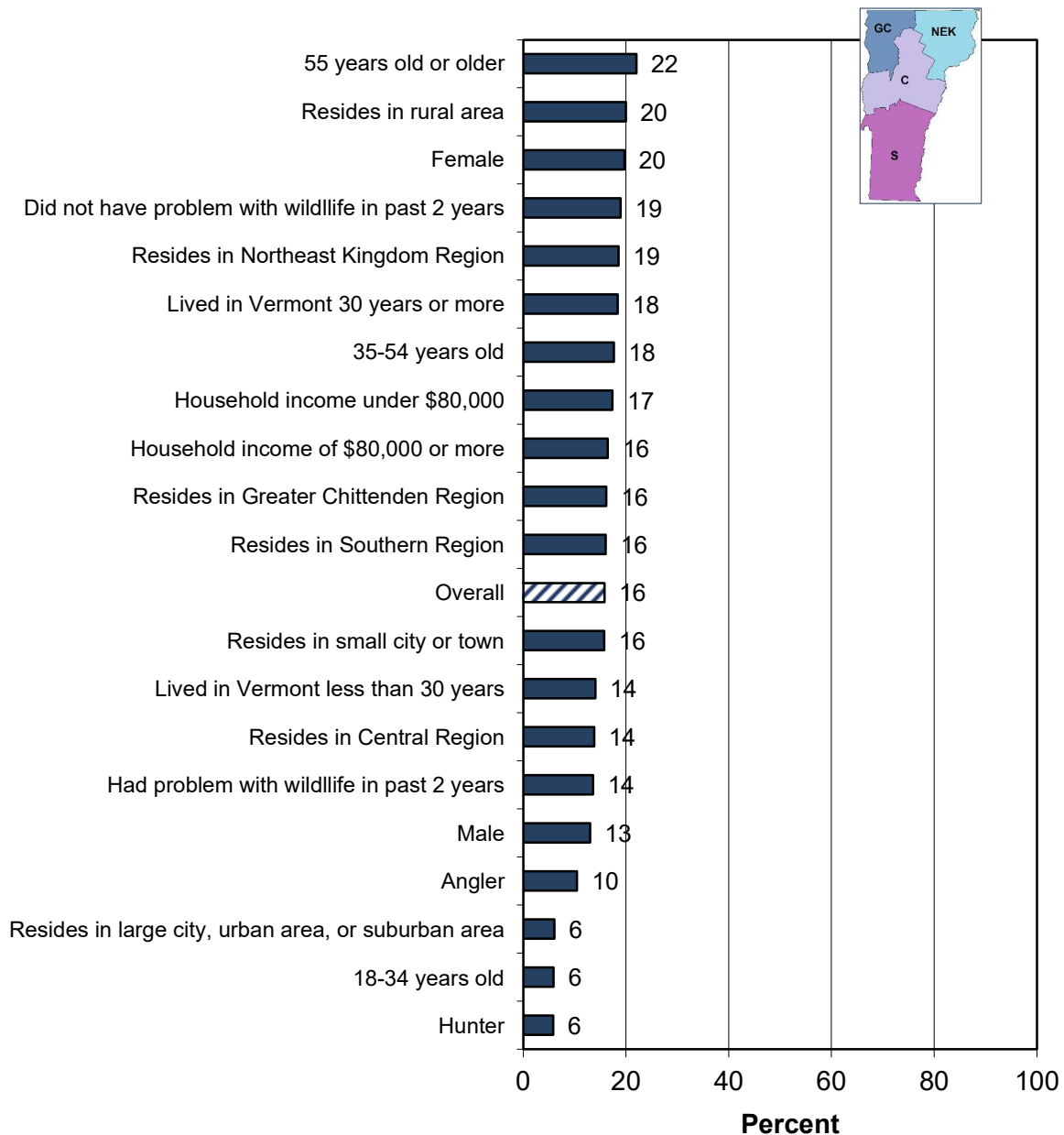
■ Strongly agree
 ■ Moderately agree
 ■ Neither
 ■ Moderately disagree
 ■ Strongly disagree
 ■ Don't know



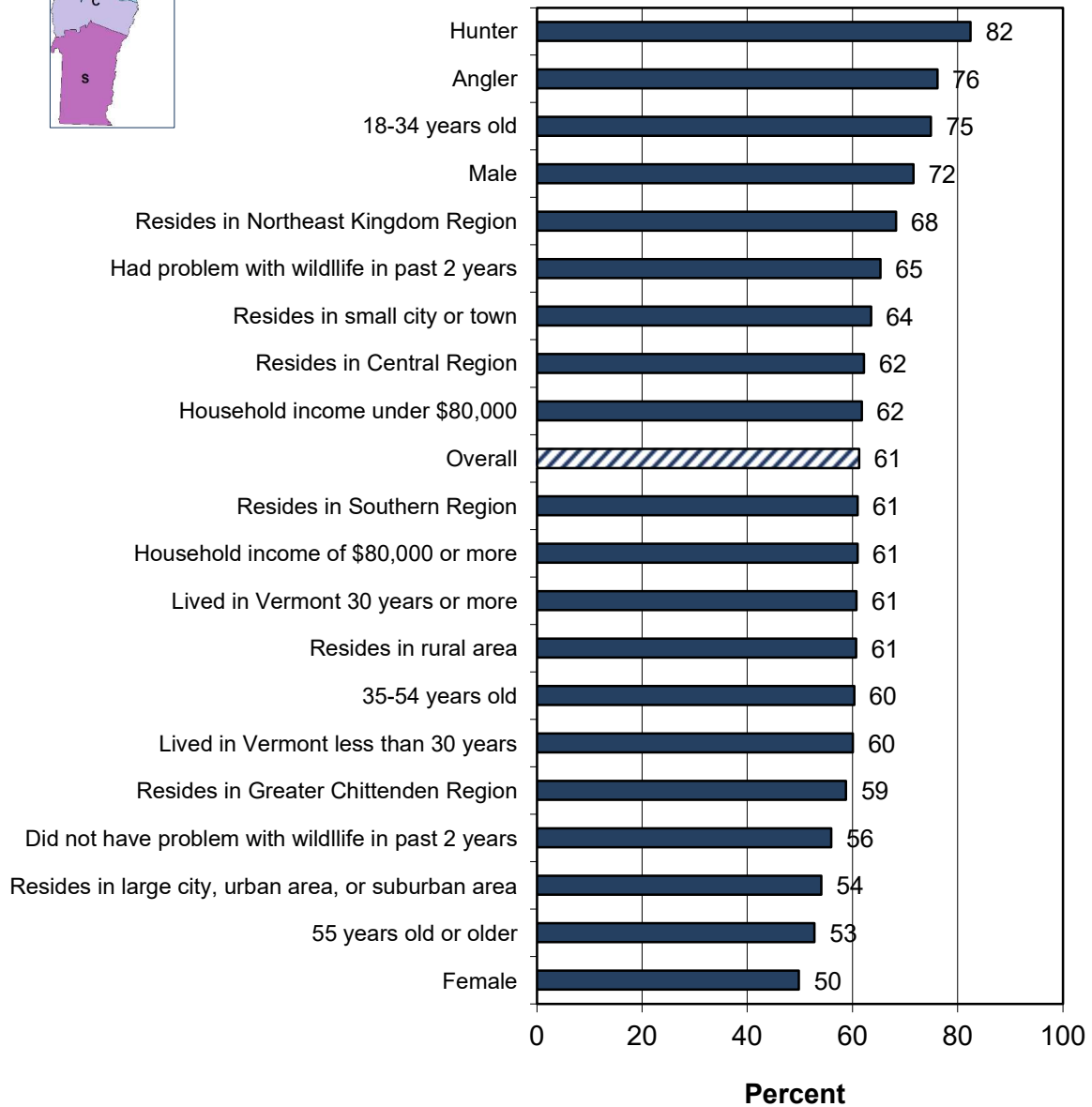
Percent of each of the following groups who strongly or moderately agree that regulated trapping is okay if animals that are accidentally caught can be released:



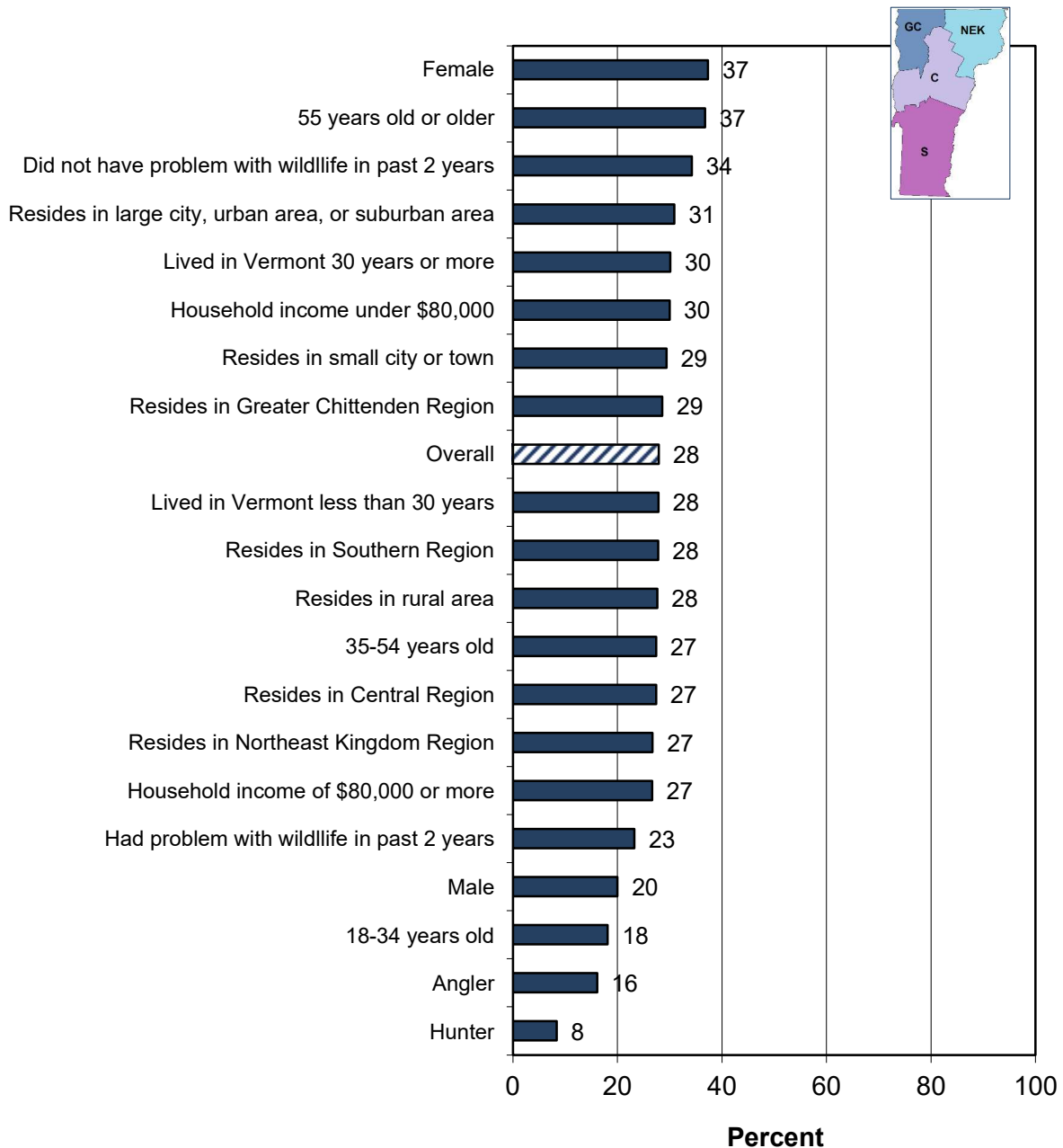
Percent of each of the following groups who strongly or moderately disagree that regulated trapping is okay if animals that are accidentally caught can be released:



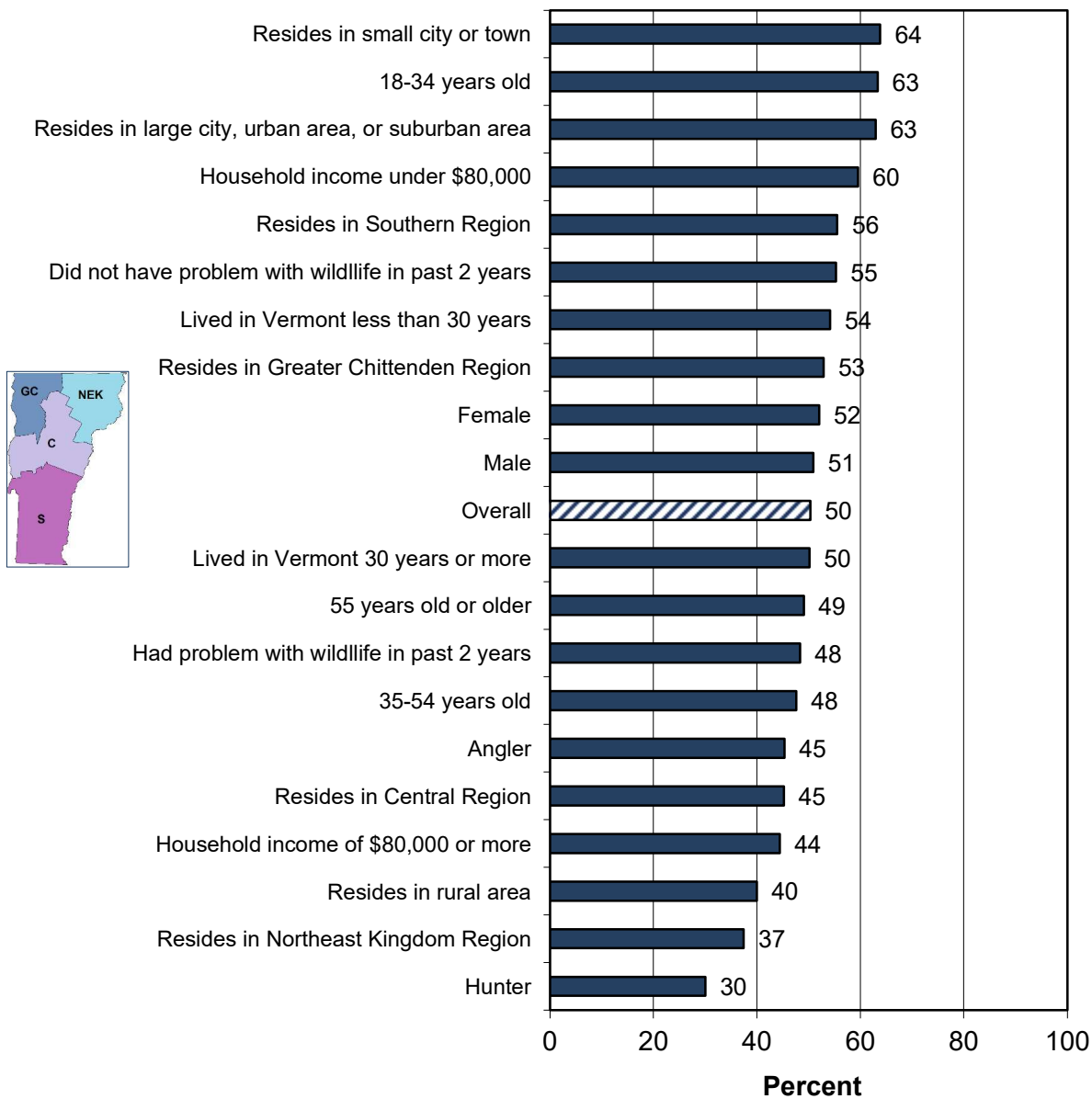
Percent of each of the following groups who strongly or moderately agree that regulated trapping is okay if the animals die quickly:



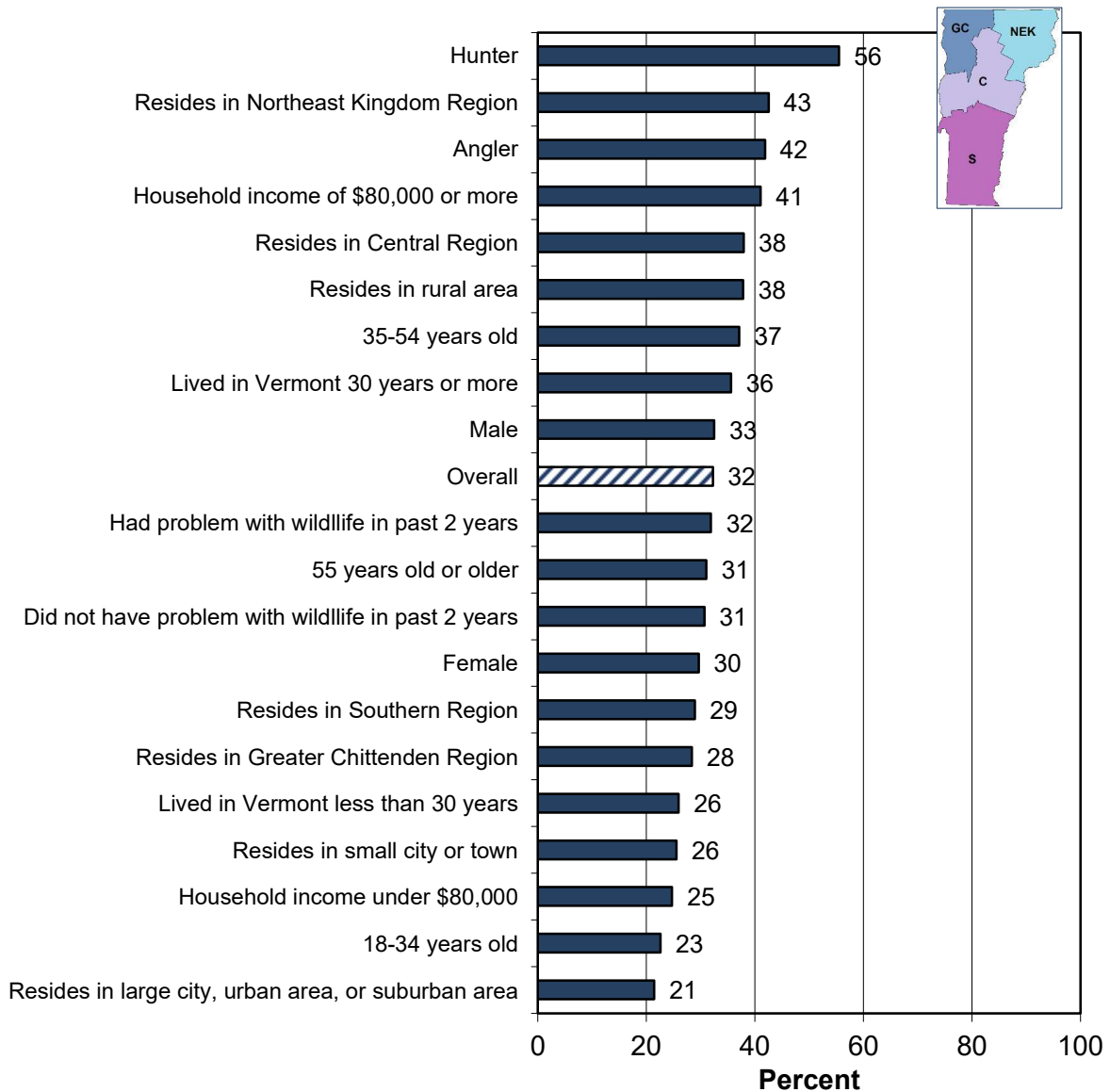
Percent of each of the following groups who strongly or moderately disagree that regulated trapping is okay if the animals die quickly:



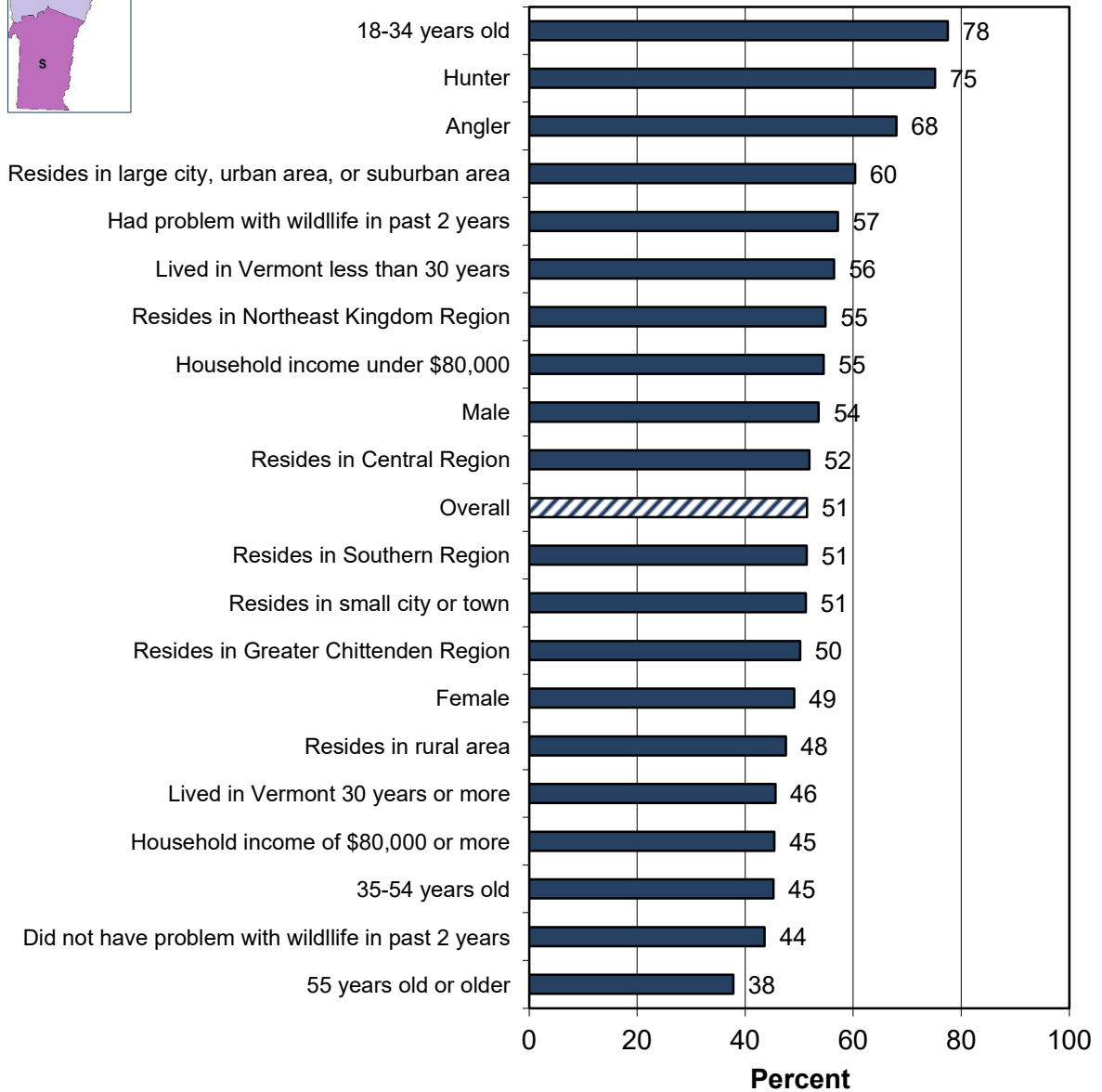
Percent of each of the following groups who strongly or moderately agree that trapping can still cause wildlife species to become endangered or extinct even though it is regulated by the state:



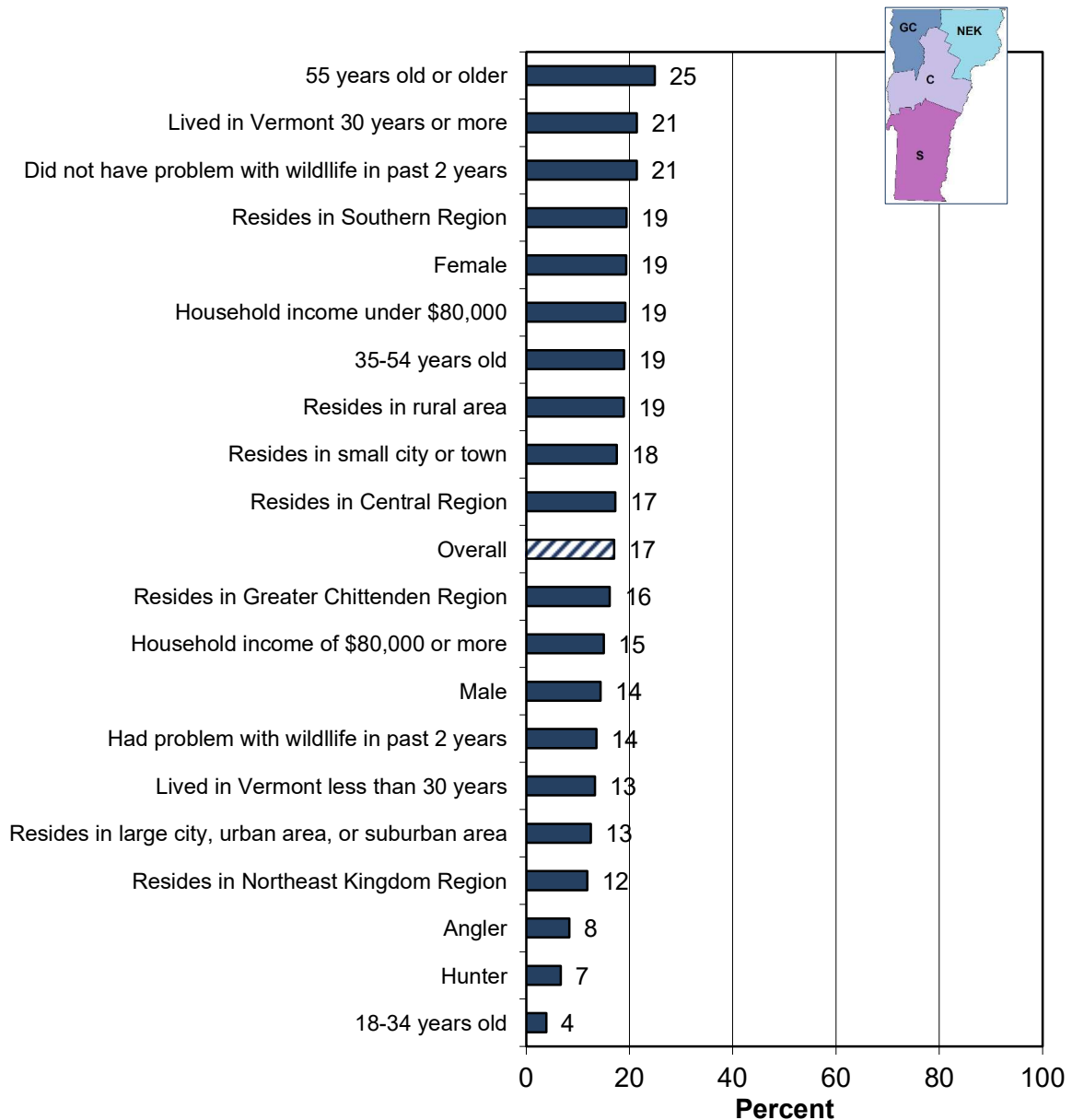
Percent of each of the following groups who strongly or moderately disagree that trapping can still cause wildlife species to become endangered or extinct even though it is regulated by the state:



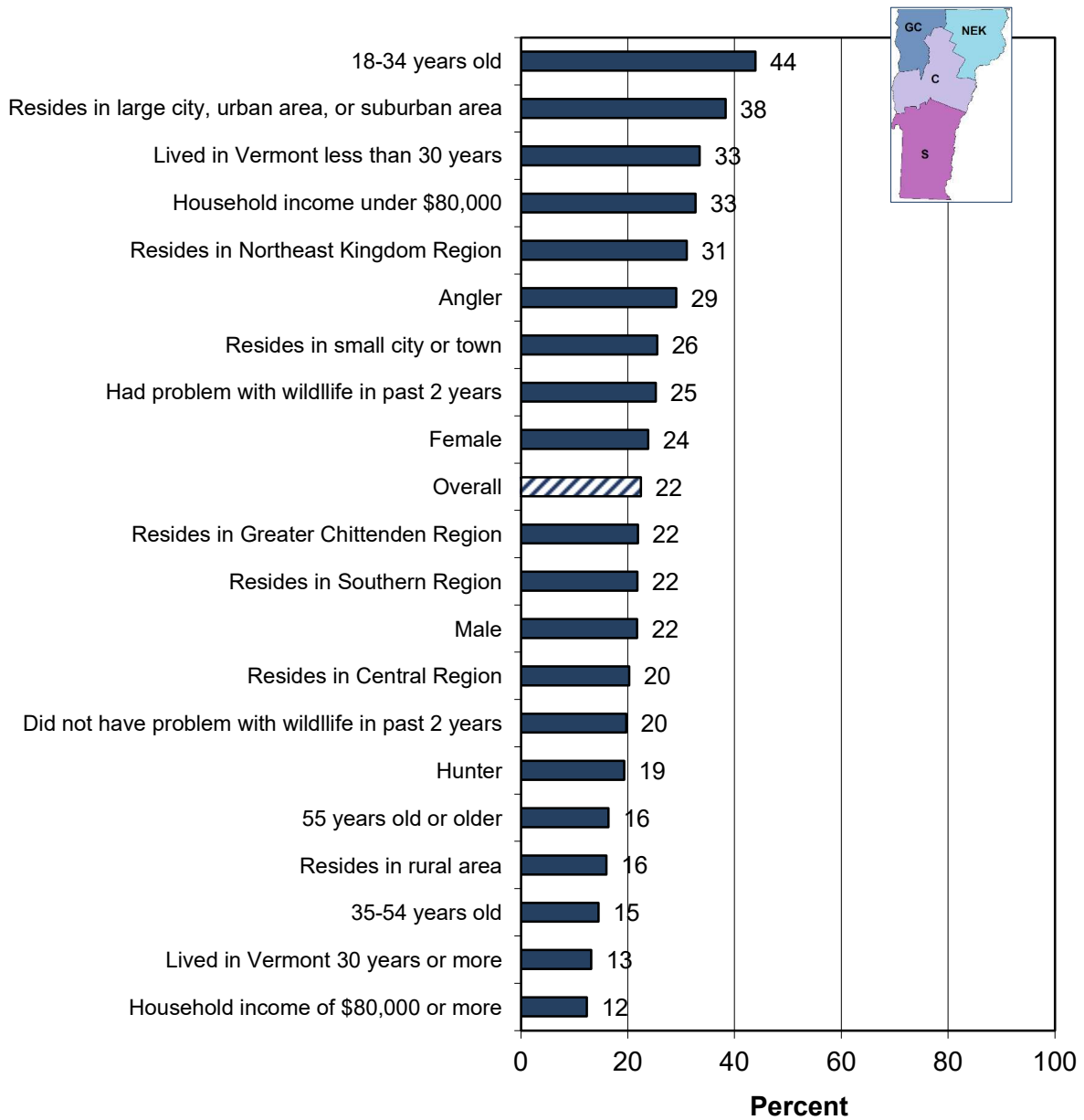
Percent of each of the following groups who strongly or moderately agree that trapping is more humane today than it was years ago because of improvements in traps:



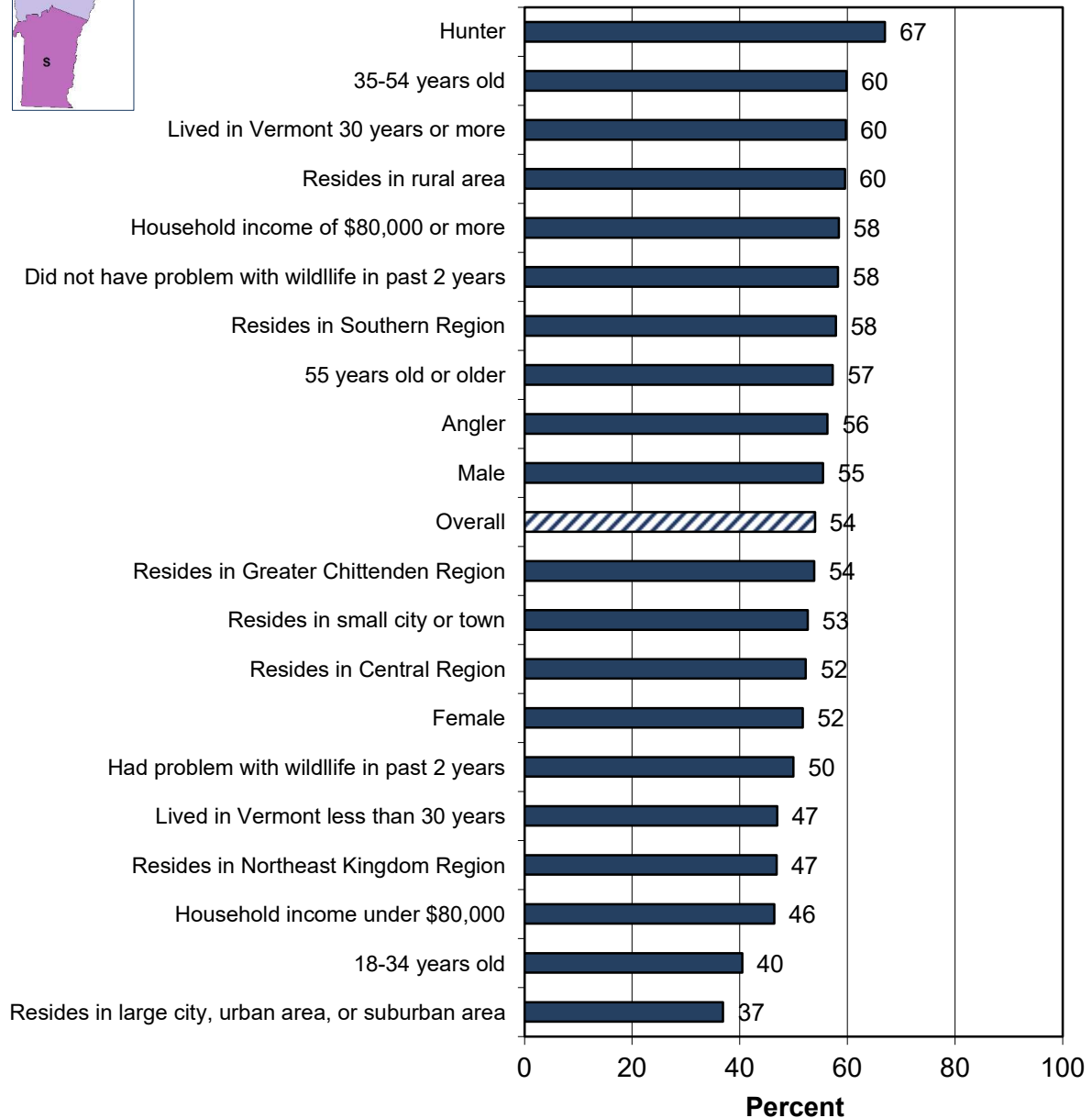
Percent of each of the following groups who strongly or moderately disagree that trapping is more humane today than it was years ago because of improvements in traps:



Percent of each of the following groups who strongly or moderately agree that endangered species are frequently used to make fur clothing:



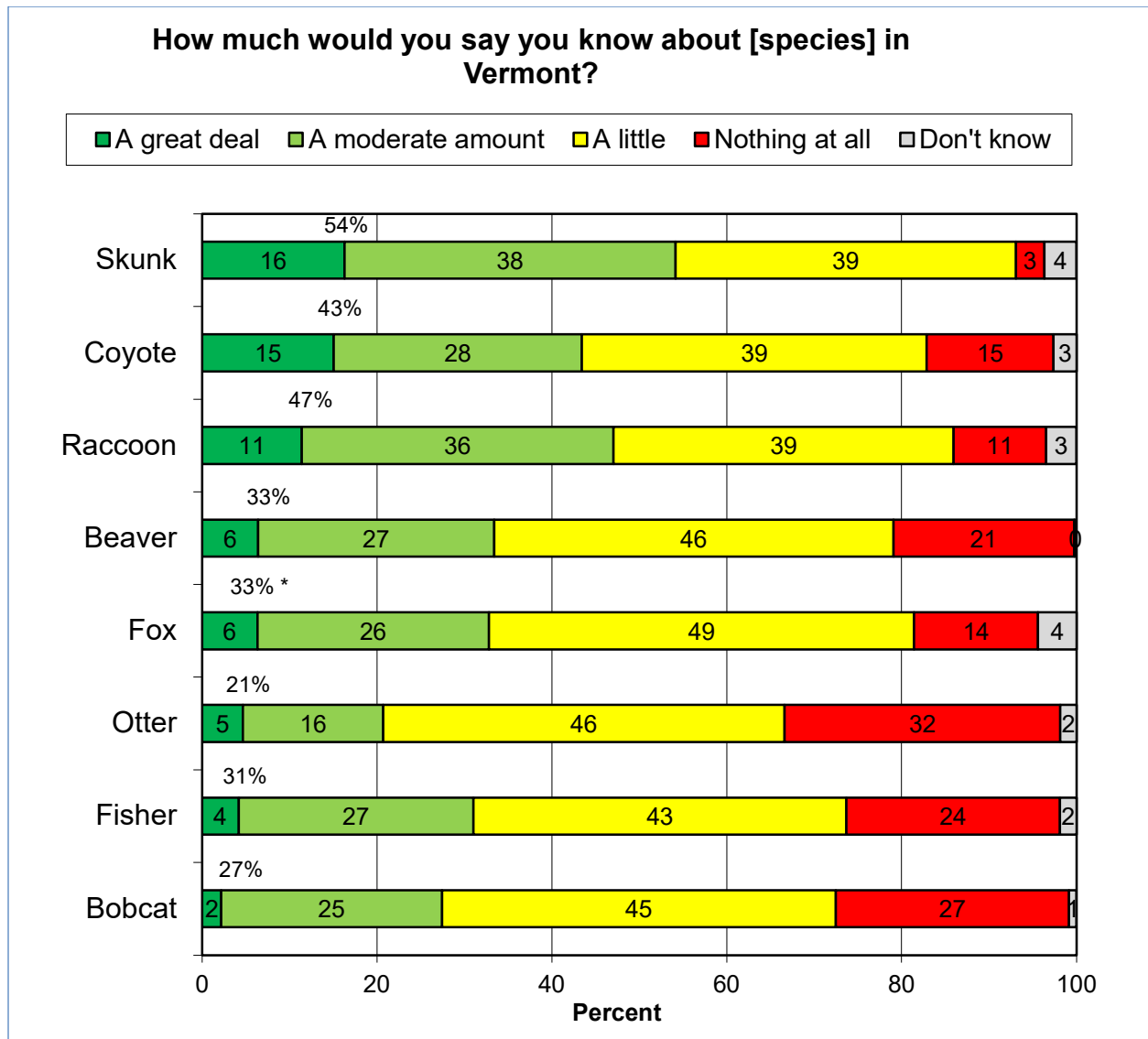
Percent of each of the following groups who strongly or moderately disagree that endangered species are frequently used to make fur clothing:



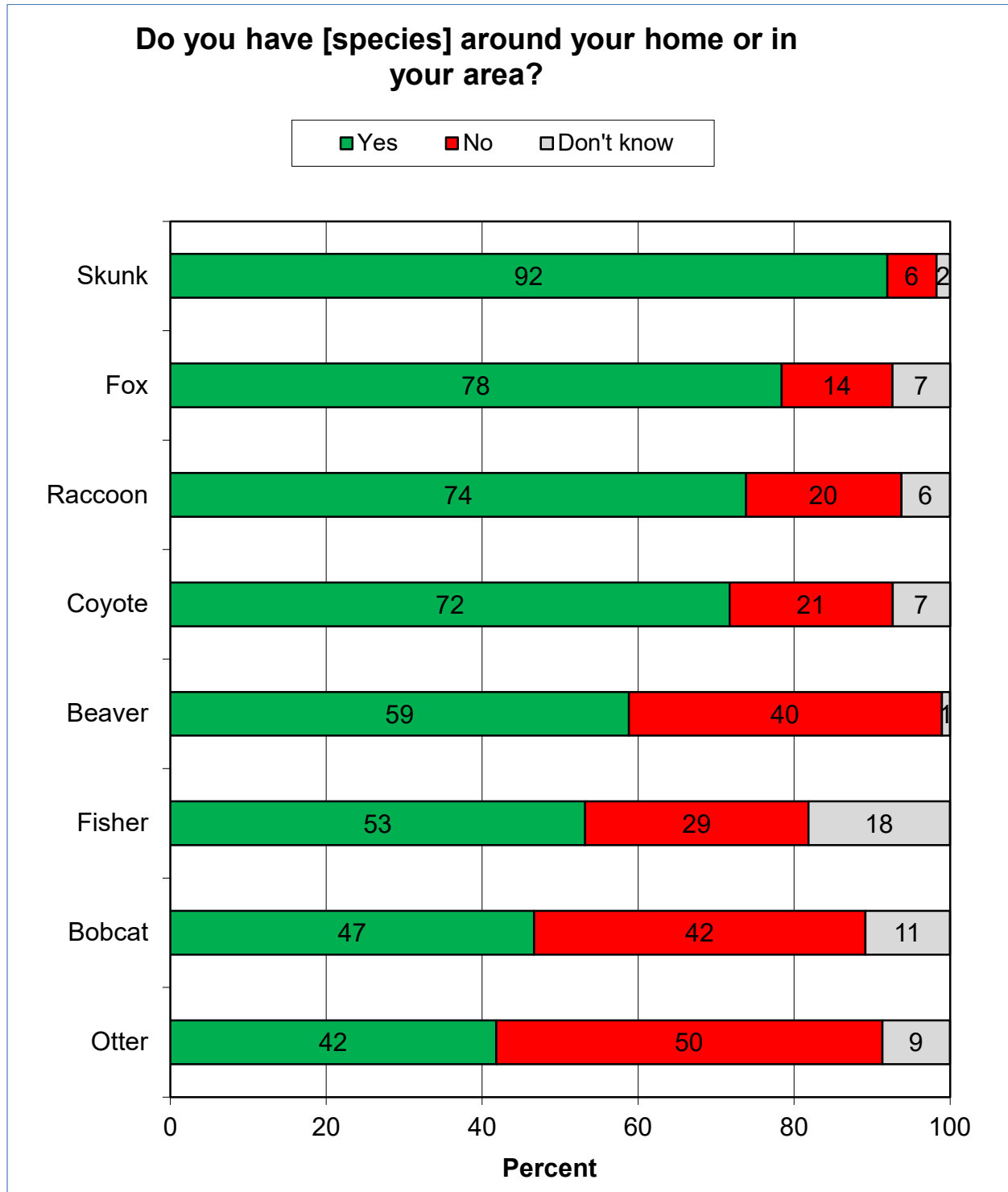
KNOWLEDGE OF AND ATTITUDES TOWARD FURBEARER SPECIES

This section of the survey had questions specific to eight furbearer species: beaver, bobcat, fisher, otter, coyote, fox, raccoon, and skunk. Survey respondents were randomly assigned three of the eight species to avoid an excessively long survey. Although the overall results are statistically valid, sample sizes are too low for regional or demographic analyses. The species were asked about individually, but the results are shown combined in series graphs for comparison. These graphs often show “[species]” in the questions or response options, but the survey used the specific name of each species.

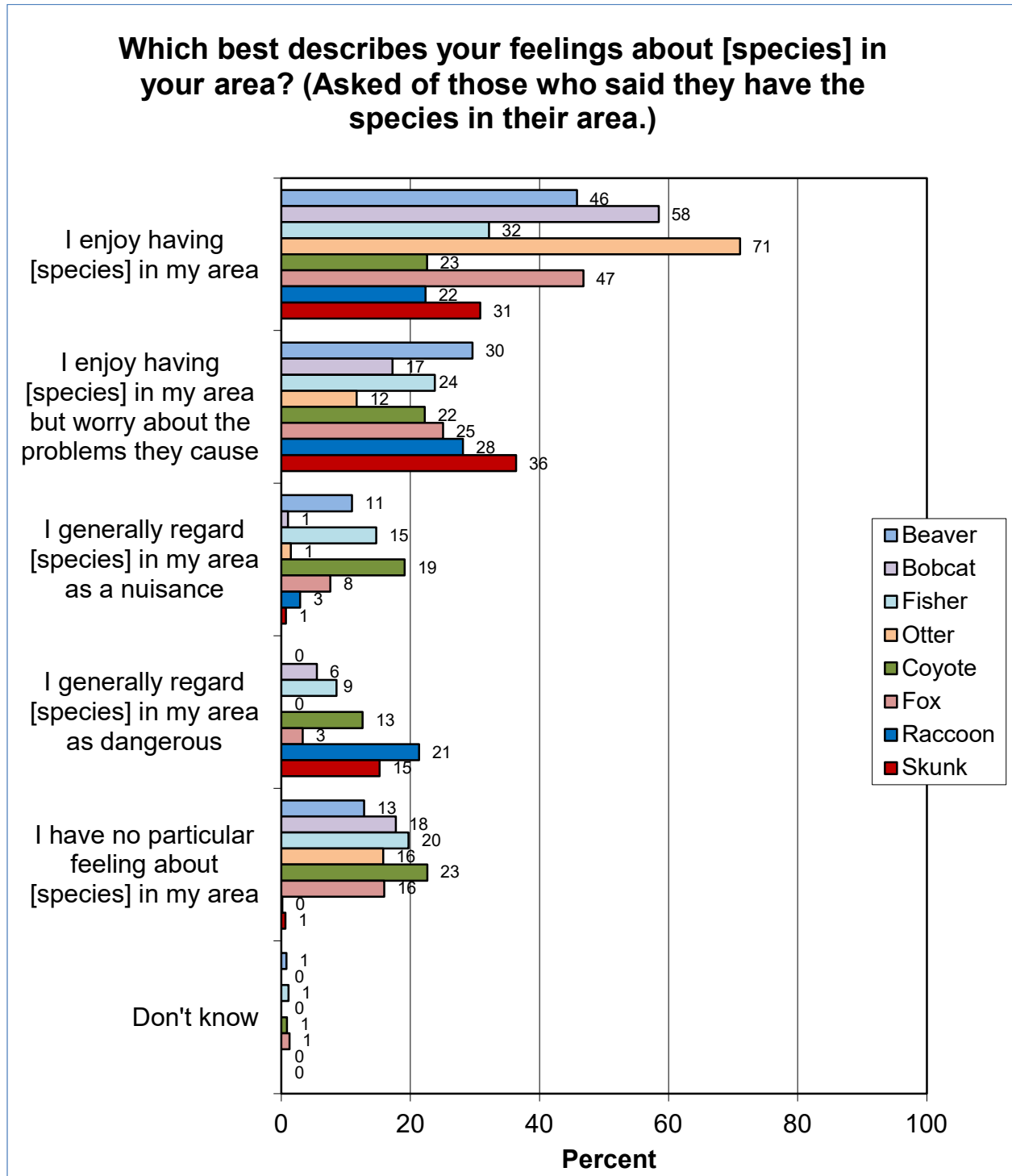
The graph below shows that a majority of residents (54%) know *a great deal* or *a moderate amount* about skunk, followed by raccoon (47%) and coyote (43%). The next tier, with percentages ranging from 27% to 33%, includes beaver, fox, fisher, and bobcat; the lowest amount of knowledge is for otter (21%).



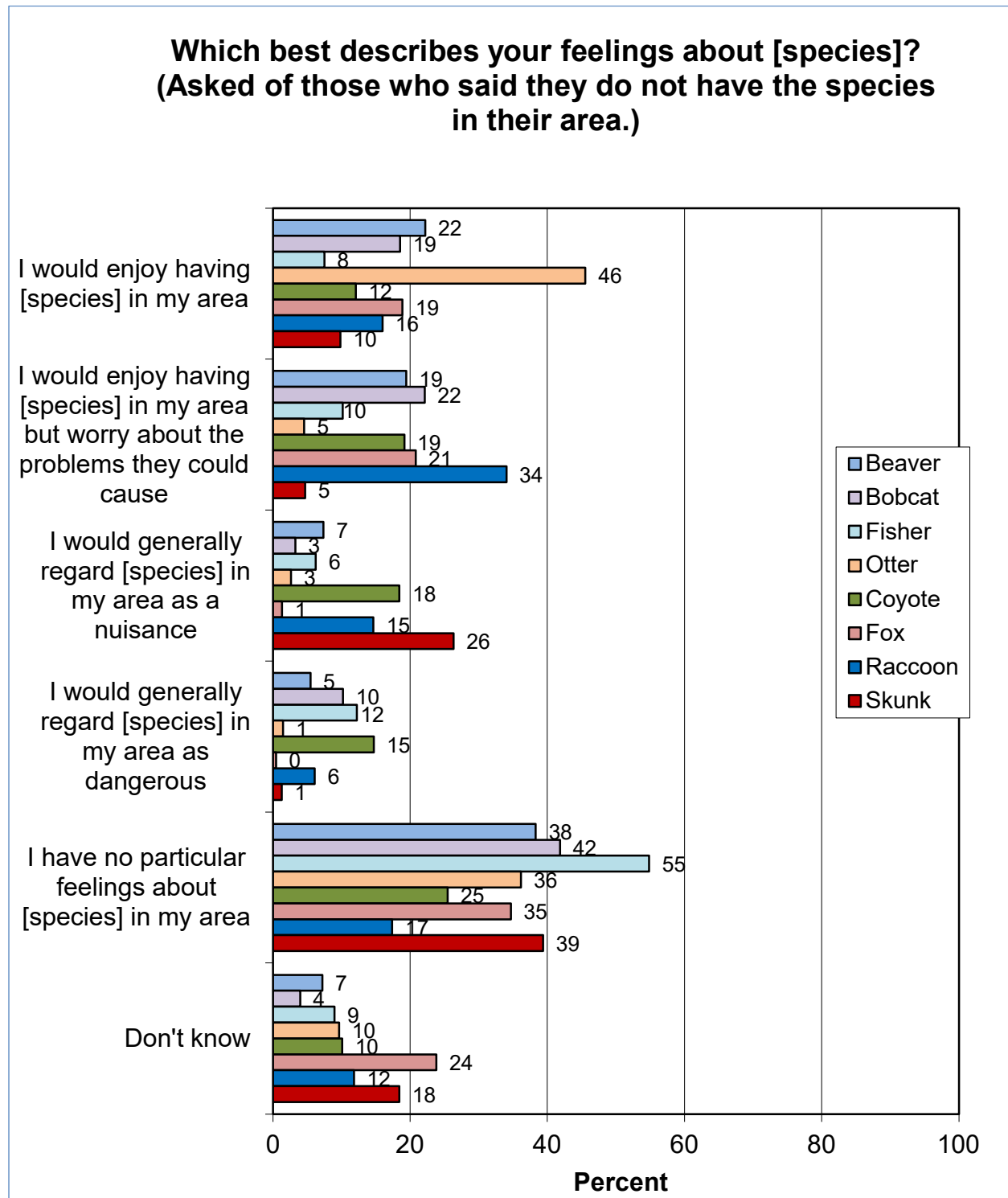
Consistent with the knowledge results, most residents (92%) have skunk around their home, while a second tier (ranging from 72% to 78%) said they have fox, raccoon, and coyote in their area. Only 42% said they have otter in their area.



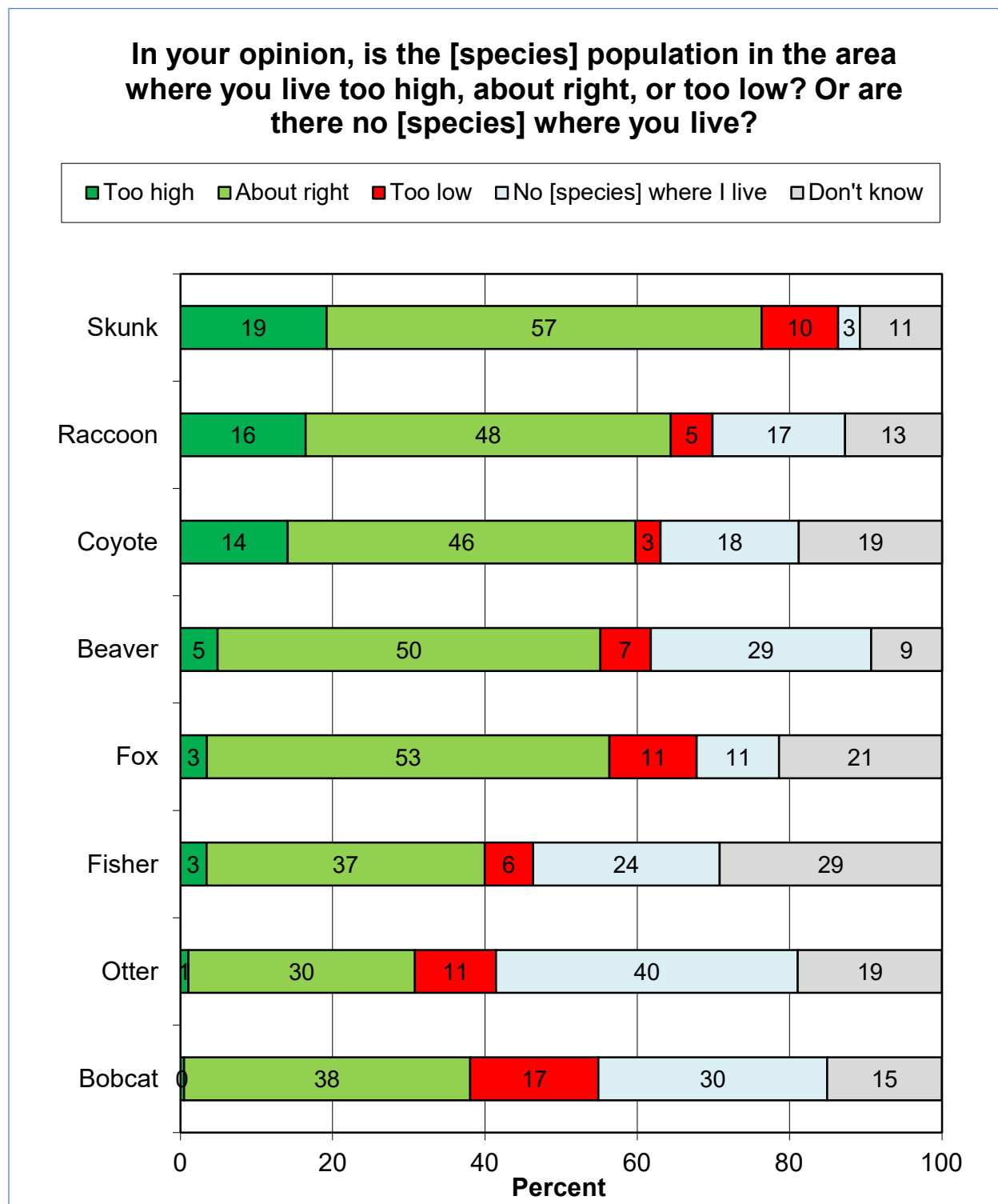
Those who have a given species in their area were asked to pick a statement that best describes their feelings about the species, on a spectrum of enjoying having it in the area to regarding it as dangerous. The species most enjoyed by residents are otter, bobcat, fox, and beaver. At the other end, the species most often considered dangerous are raccoon, skunk, and coyote.



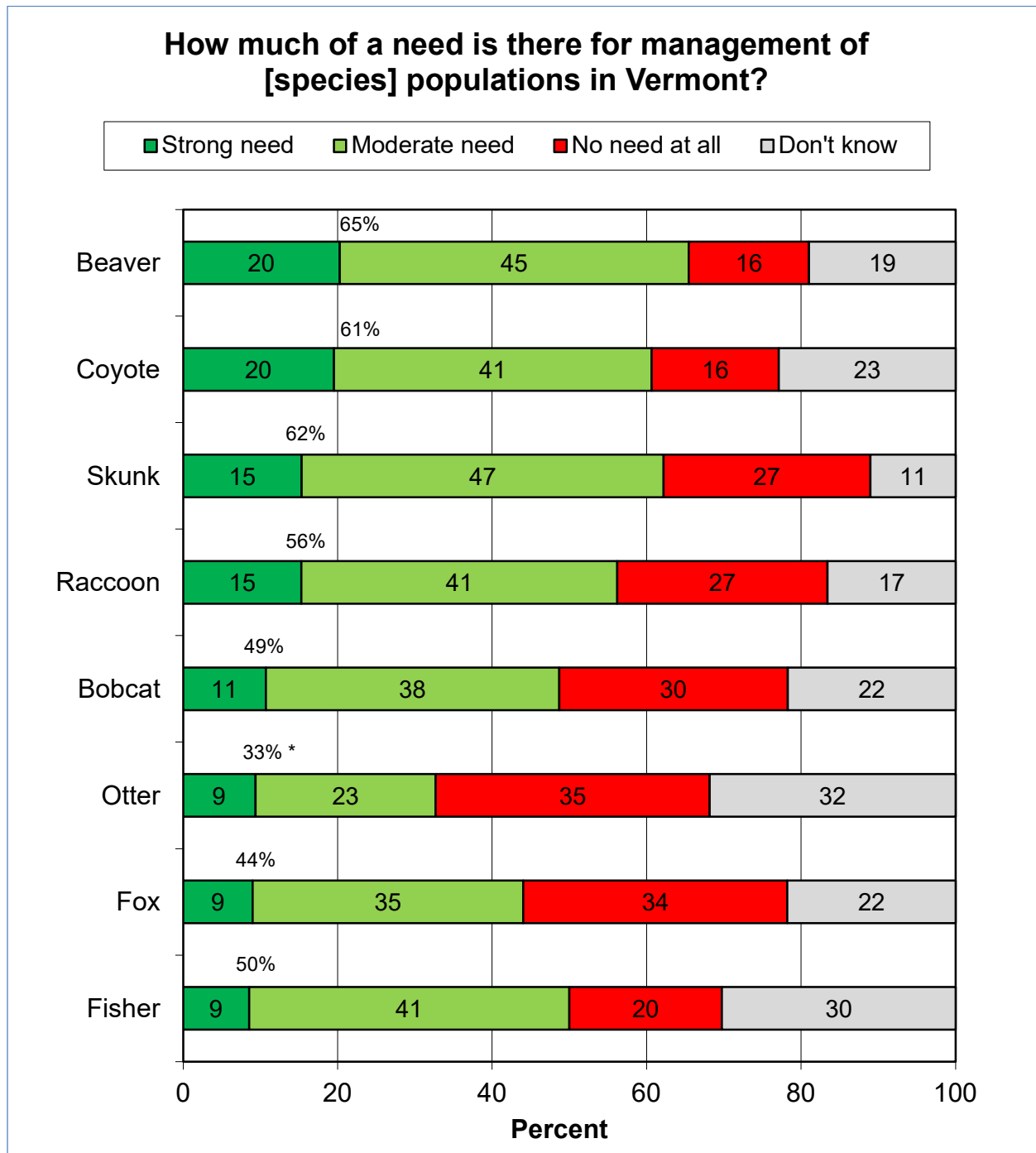
Those who do not have a given species in their area were presented with equivalent statements about how they would feel. Again, the most welcome species would be otter, whereas the most concern was expressed for coyote.



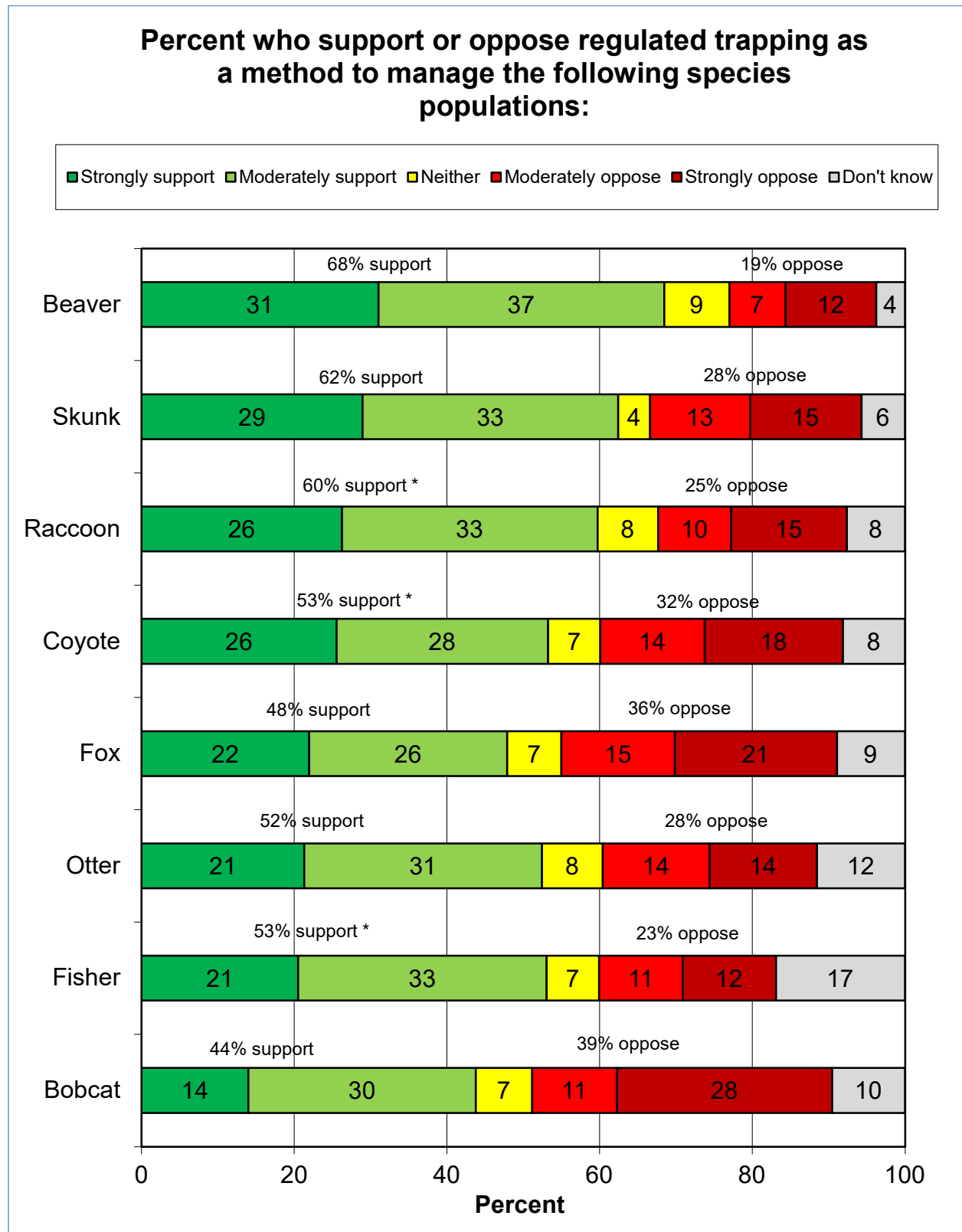
Residents were asked if the furbearer populations where they live are too high, about right, or too low (or if the species is not in their area). For most species, the most common response was *about right*, particularly for skunk (57% stated this), fox (53%), and beaver (50%). The one exception is otter: 40% said there are no otter where they live, while 30% said the otter population is *about right*. Regarding populations that are considered *too high*, the highest percentages were for skunk (19%), raccoon (16%), and coyote (14%).



Among the eight furbearer species in the survey, residents most often said there is a need to manage the populations of beaver (65% said there is a *strong* or *moderate* need), skunk (62%), coyote (61%), and raccoon (56%). Only 33% said there is a need to manage otter.

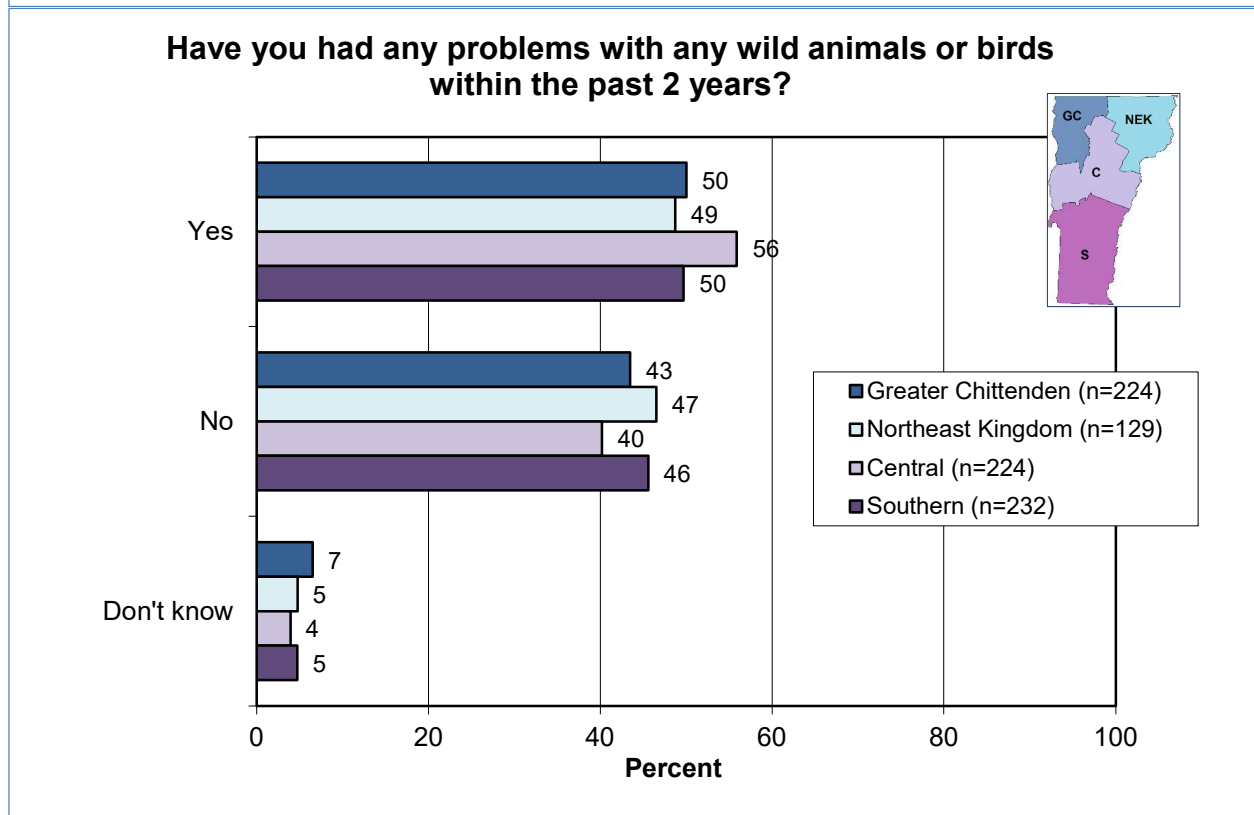
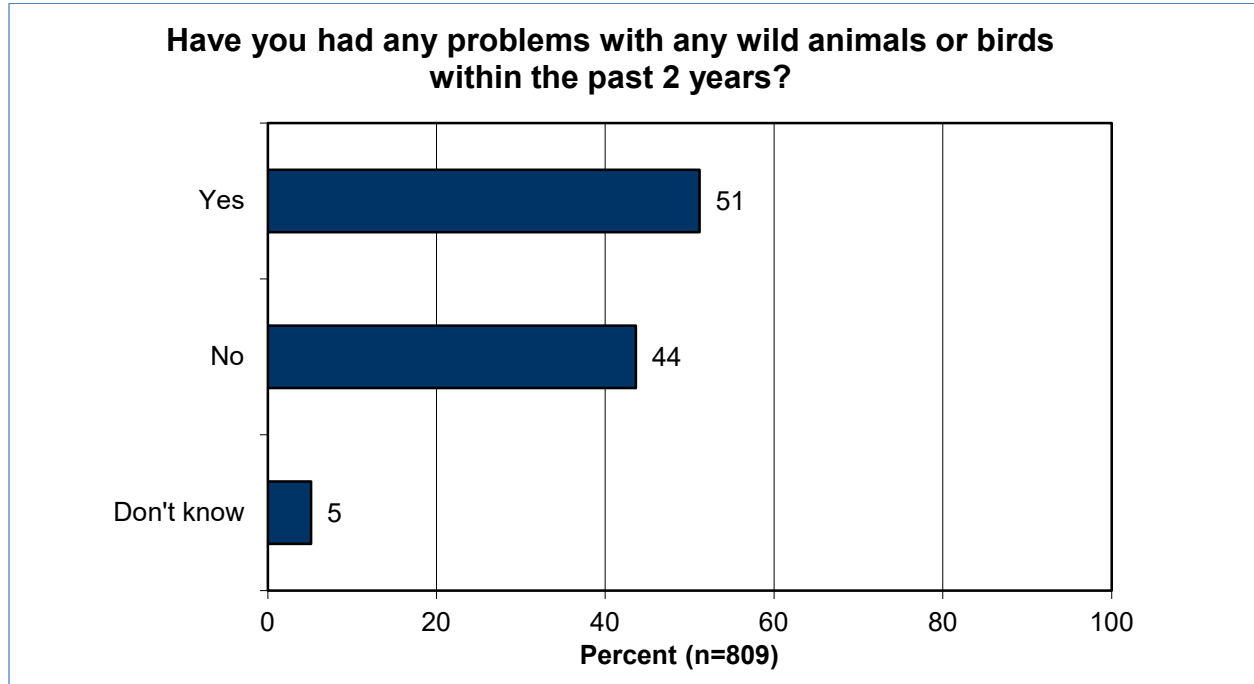


Support exceeds opposition for regulated trapping as a method to manage each of the eight furbearer species populations. The most support is for trapping beaver (68% *strongly* or *moderately* support this), skunk (62%), and raccoon (60%). The full list is shown.

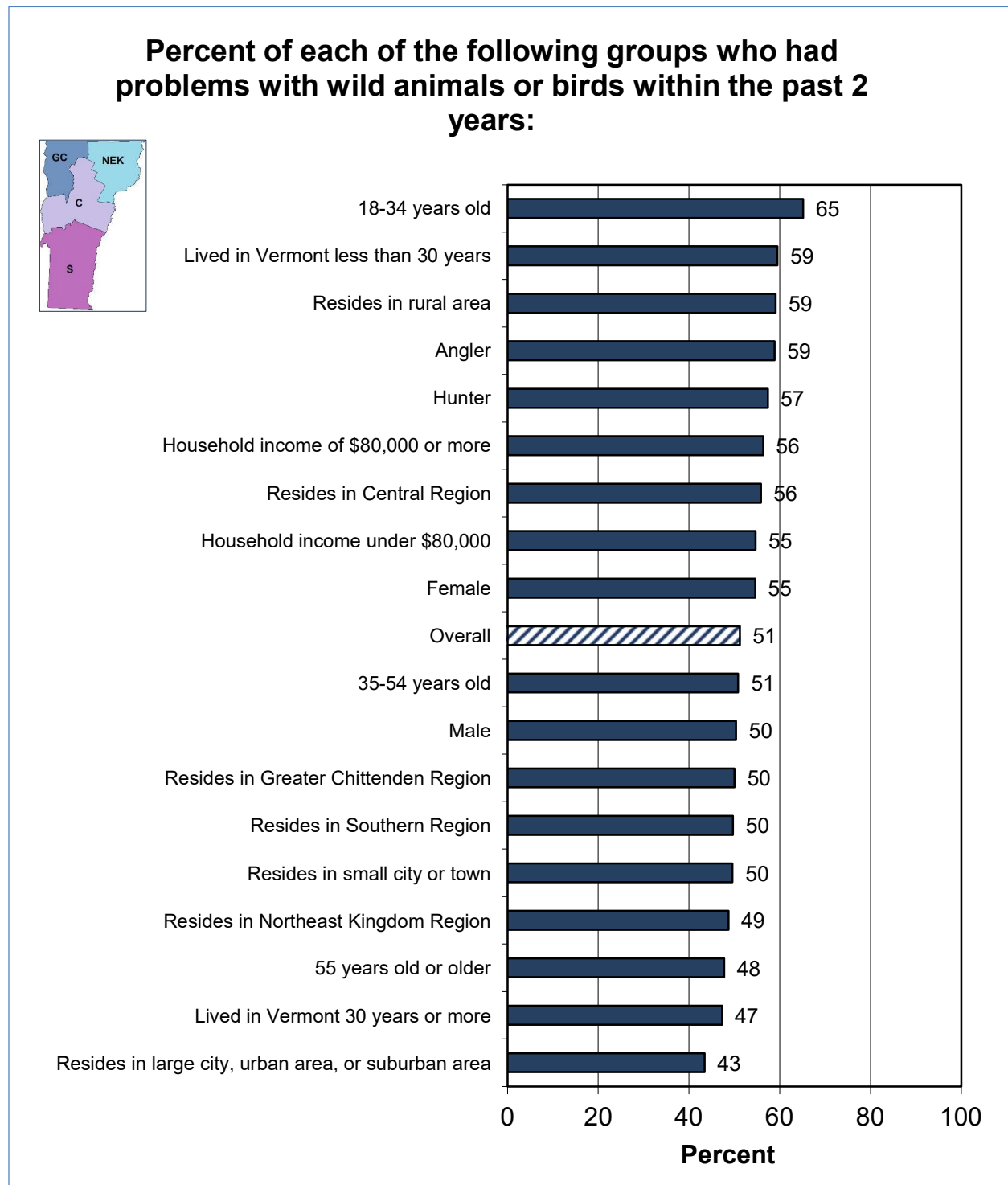


HUMAN-WILDLIFE CONFLICTS

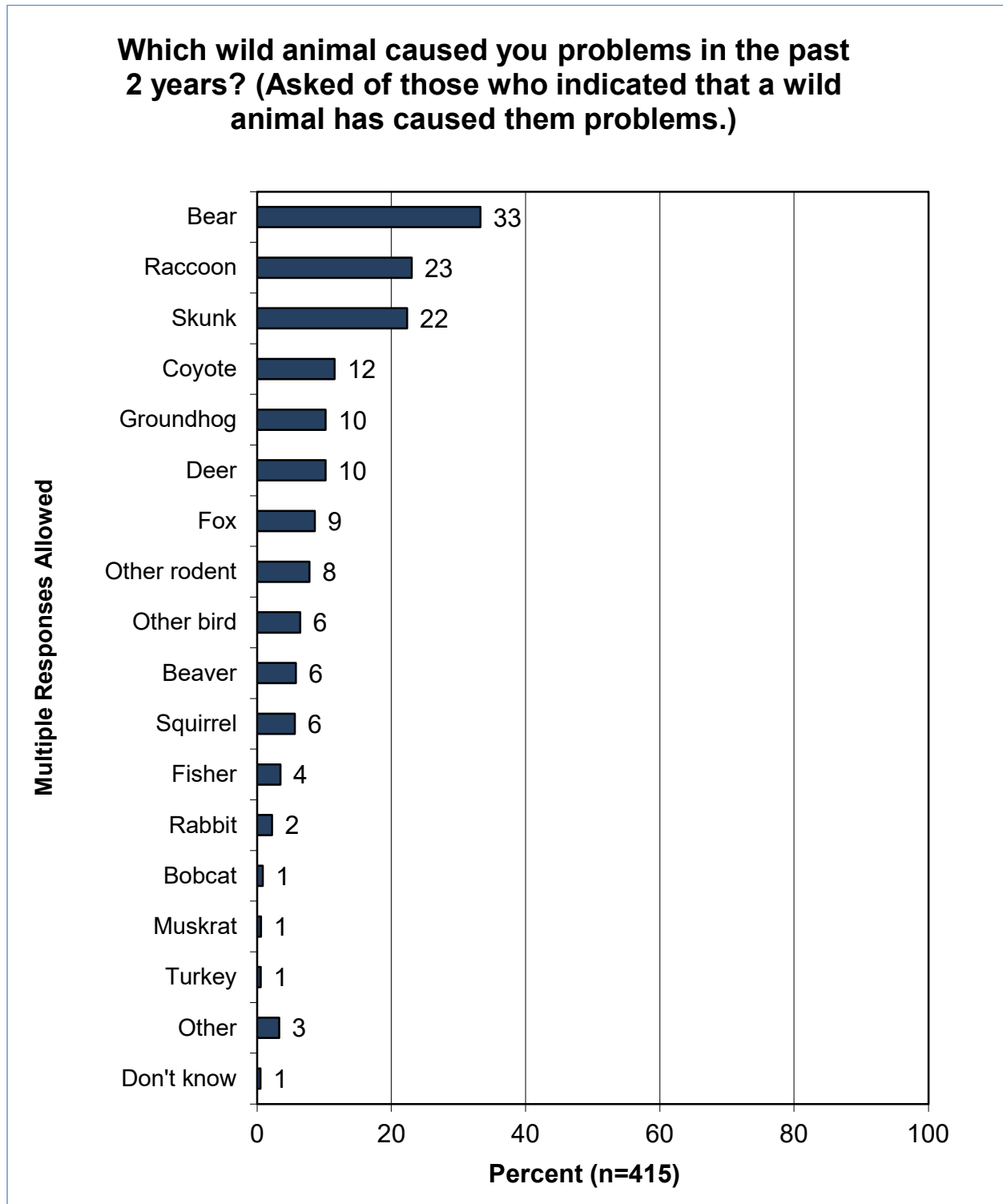
About half of residents (51%) have had problems with wild animals or birds within the past 2 years.



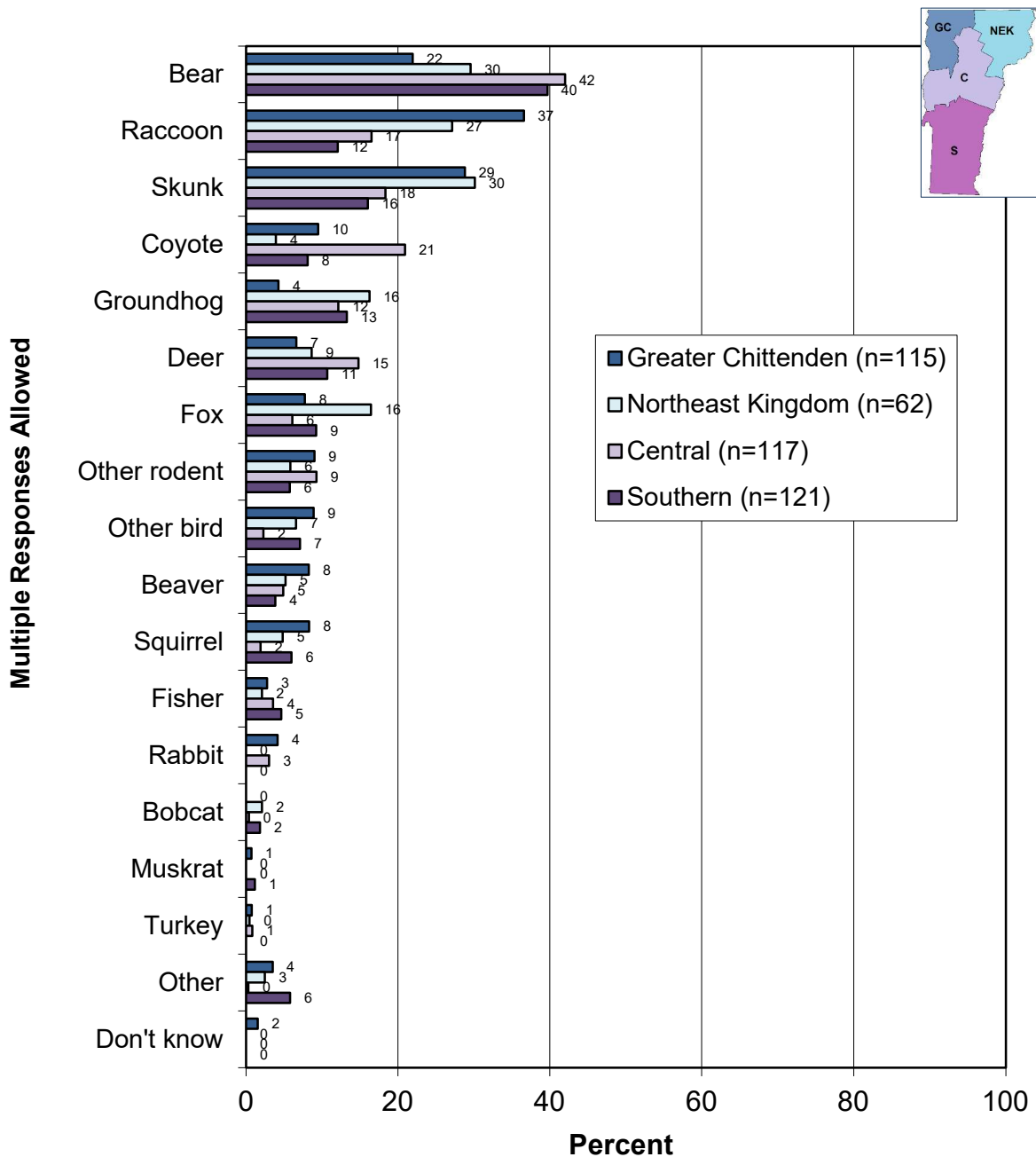
The groups most likely to have had problems with wildlife in the past 2 years are younger residents, those who lived in Vermont less than 30 years, rural residents, and anglers.



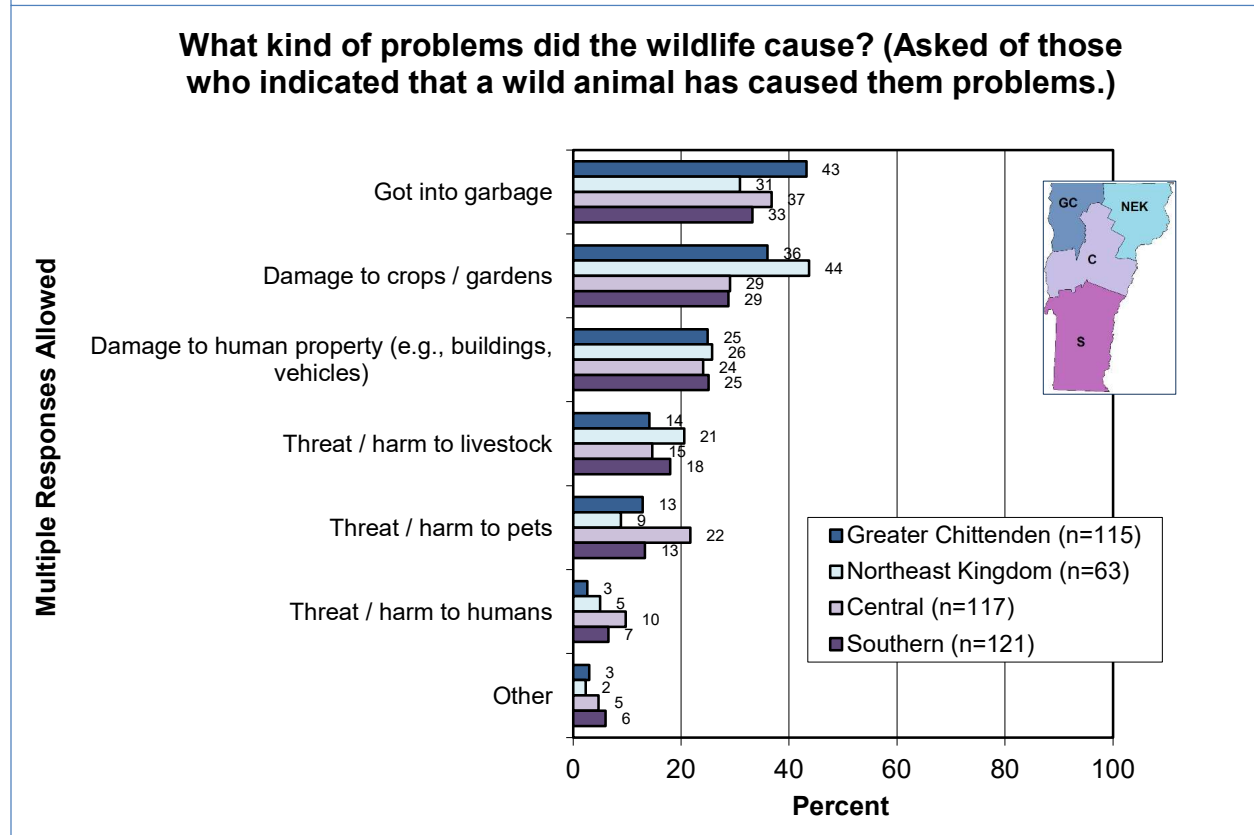
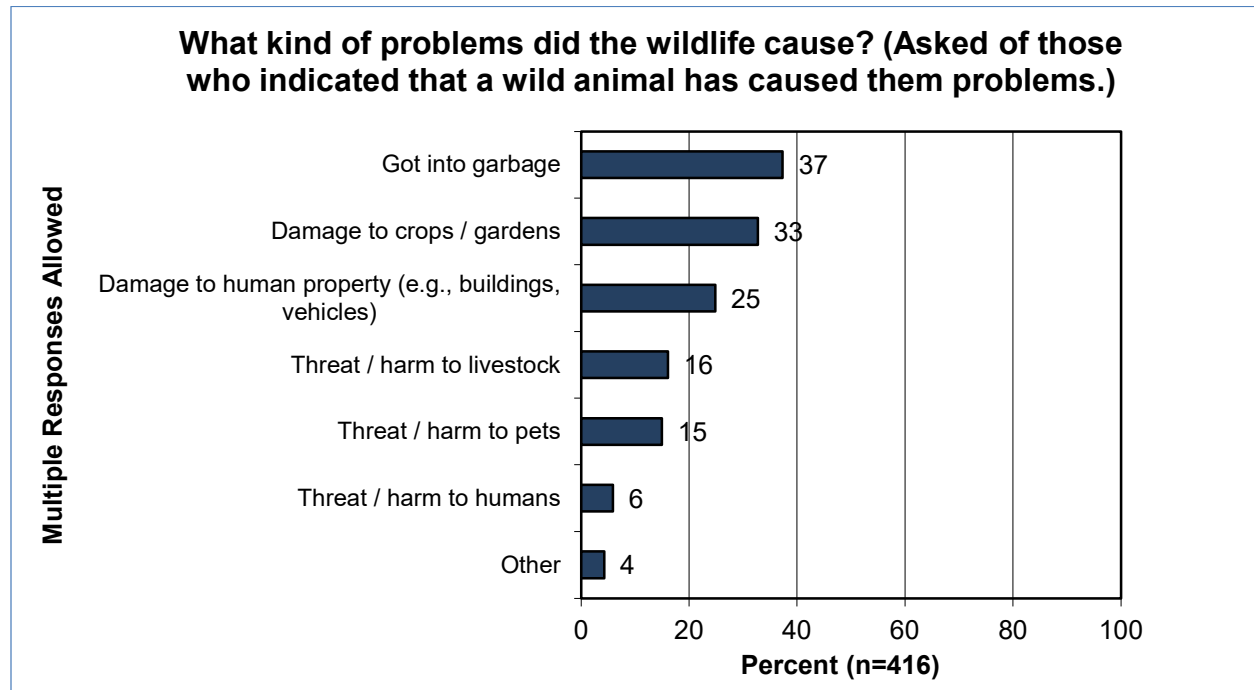
Those who had problems with wildlife most commonly said the problems were caused by bear, raccoon, and skunk.



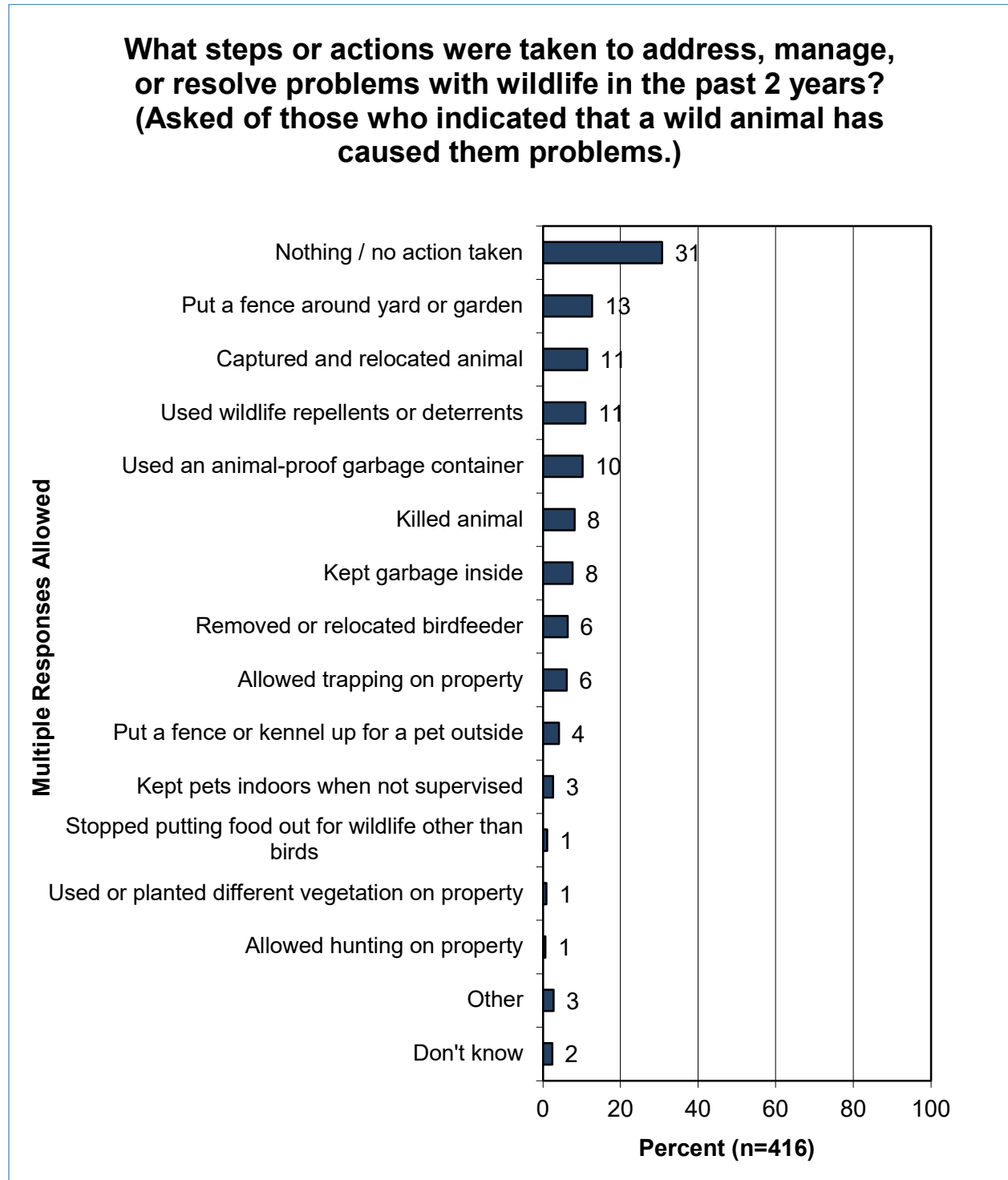
Which wild animal caused you problems in the past 2 years? (Asked of those who indicated that a wild animal has caused them problems.)



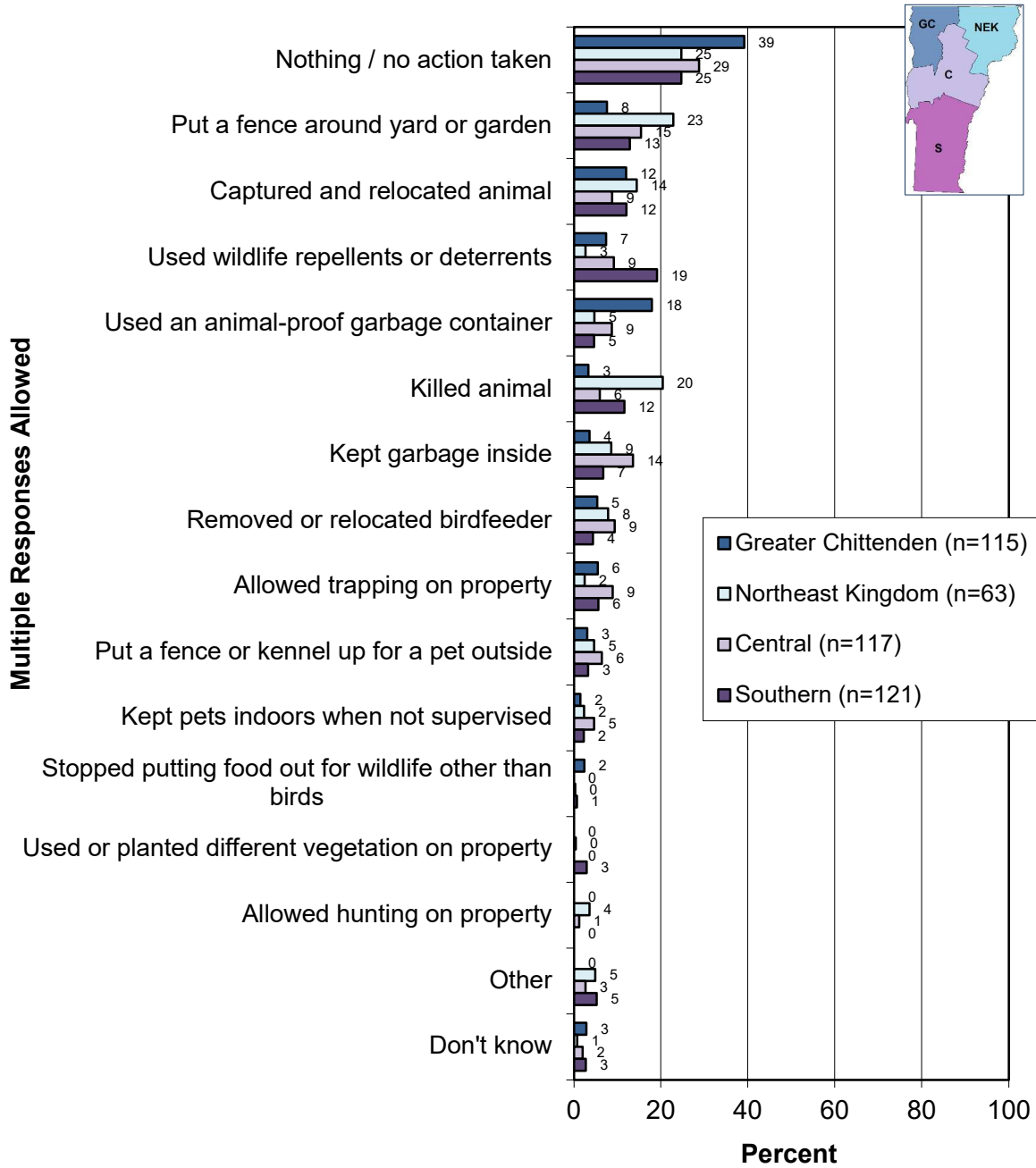
The problems most frequently caused by wildlife involved the animals getting into garbage, damage to crops or gardens, and damage to human property such as buildings or vehicles.



Nearly a third of residents who had problems with wildlife (31%) took no action to address the problems. Otherwise, actions taken by 10% or more of these residents include fencing off the yard or garden, capturing and relocating the animal, using wildlife repellents or deterrents, and using an animal-proof garbage container.

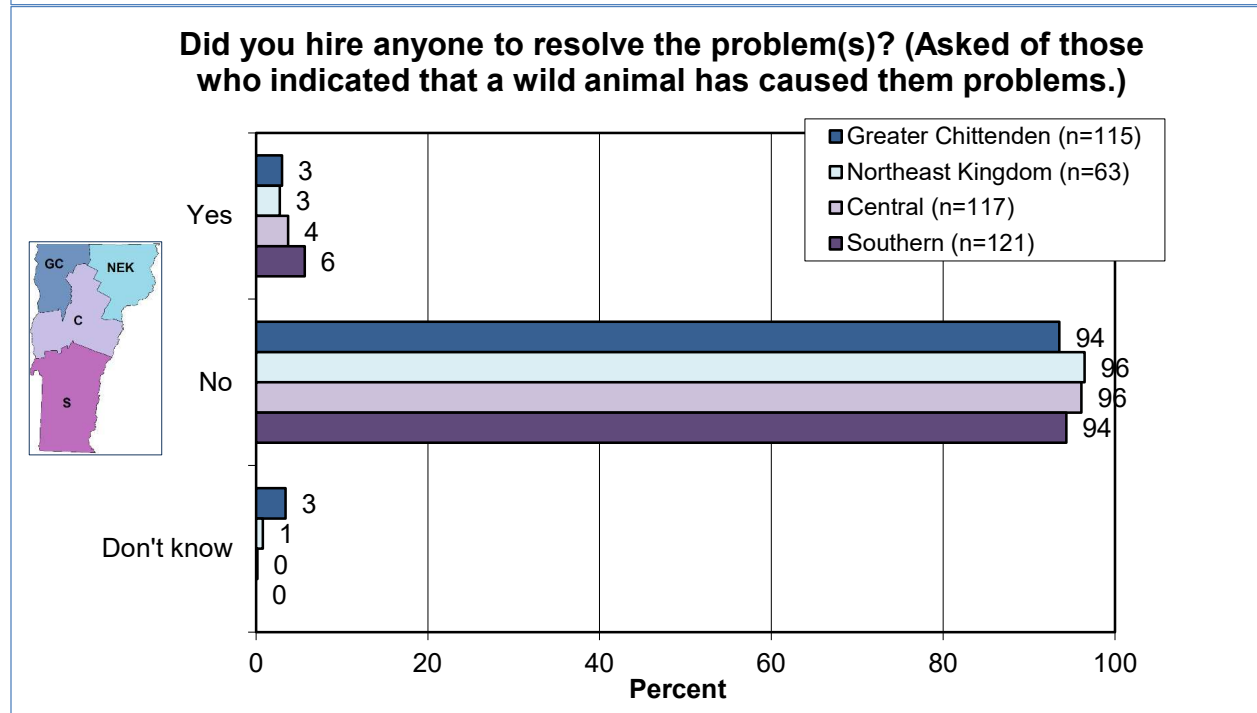
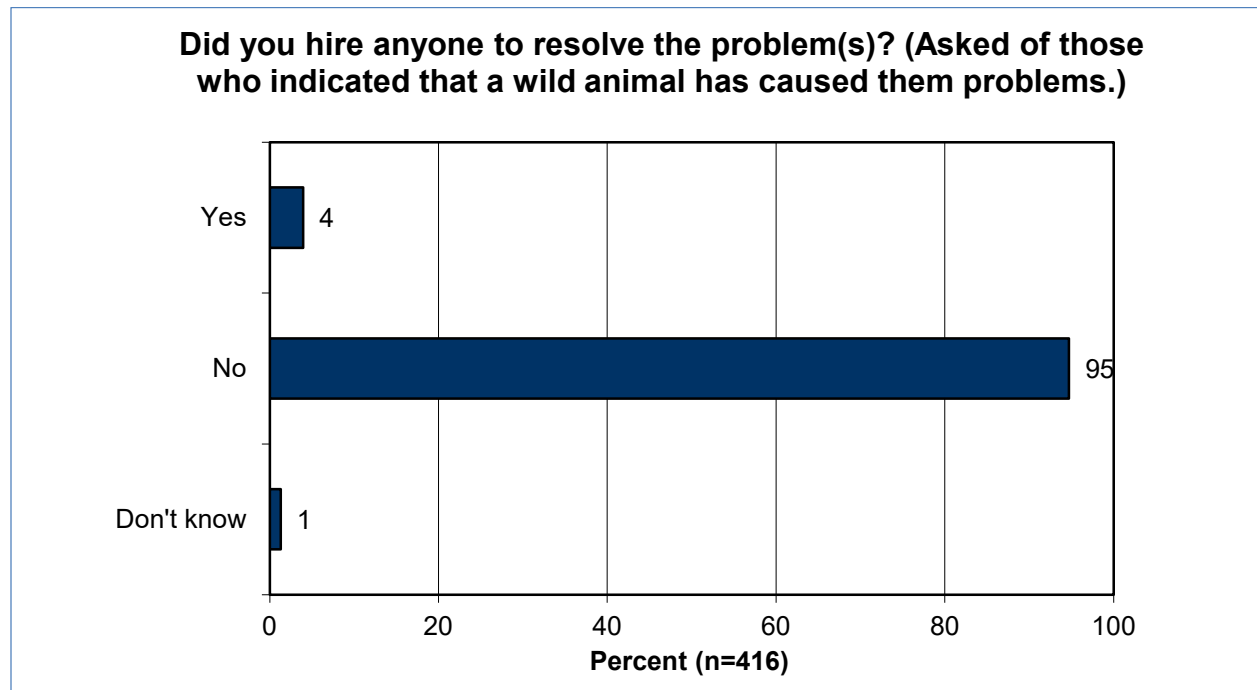


**What steps or actions were taken to address, manage, or resolve problems with wildlife in the past 2 years?
(Asked of those who indicated that a wild animal has caused them problems.)**

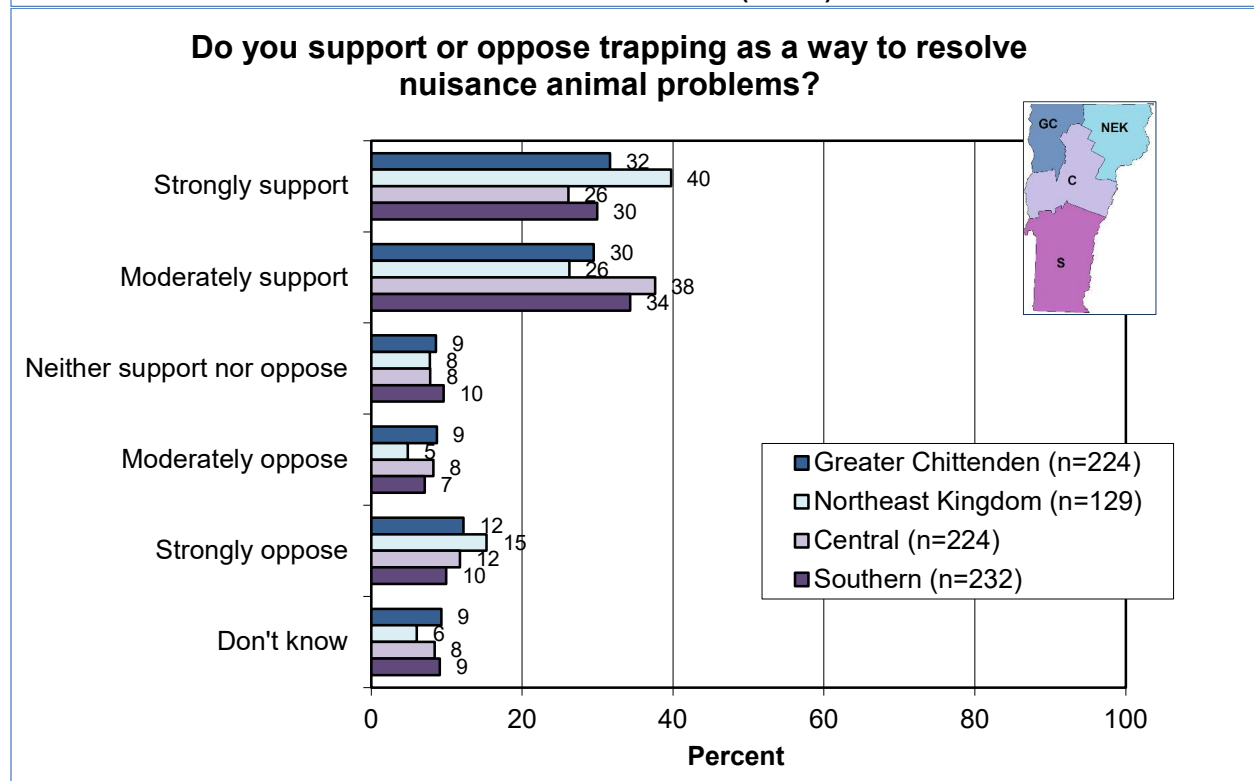
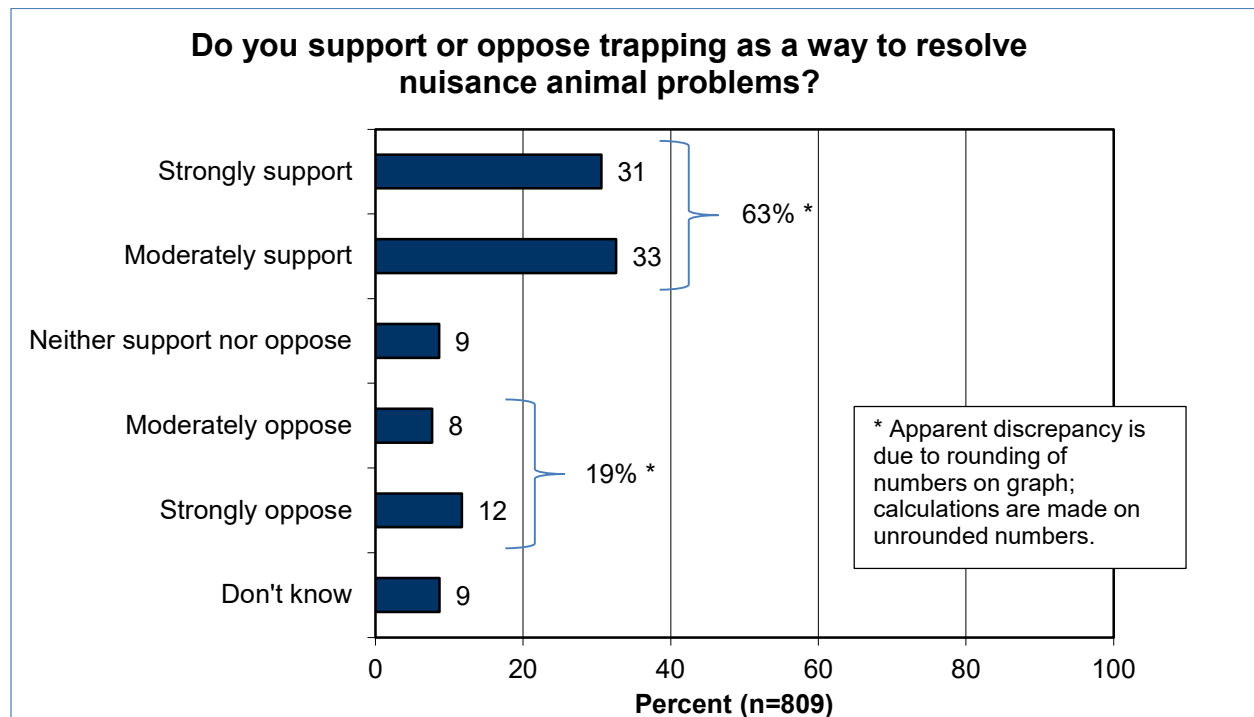


Only 4% of those who had problems with wildlife hired someone to resolve the problems.

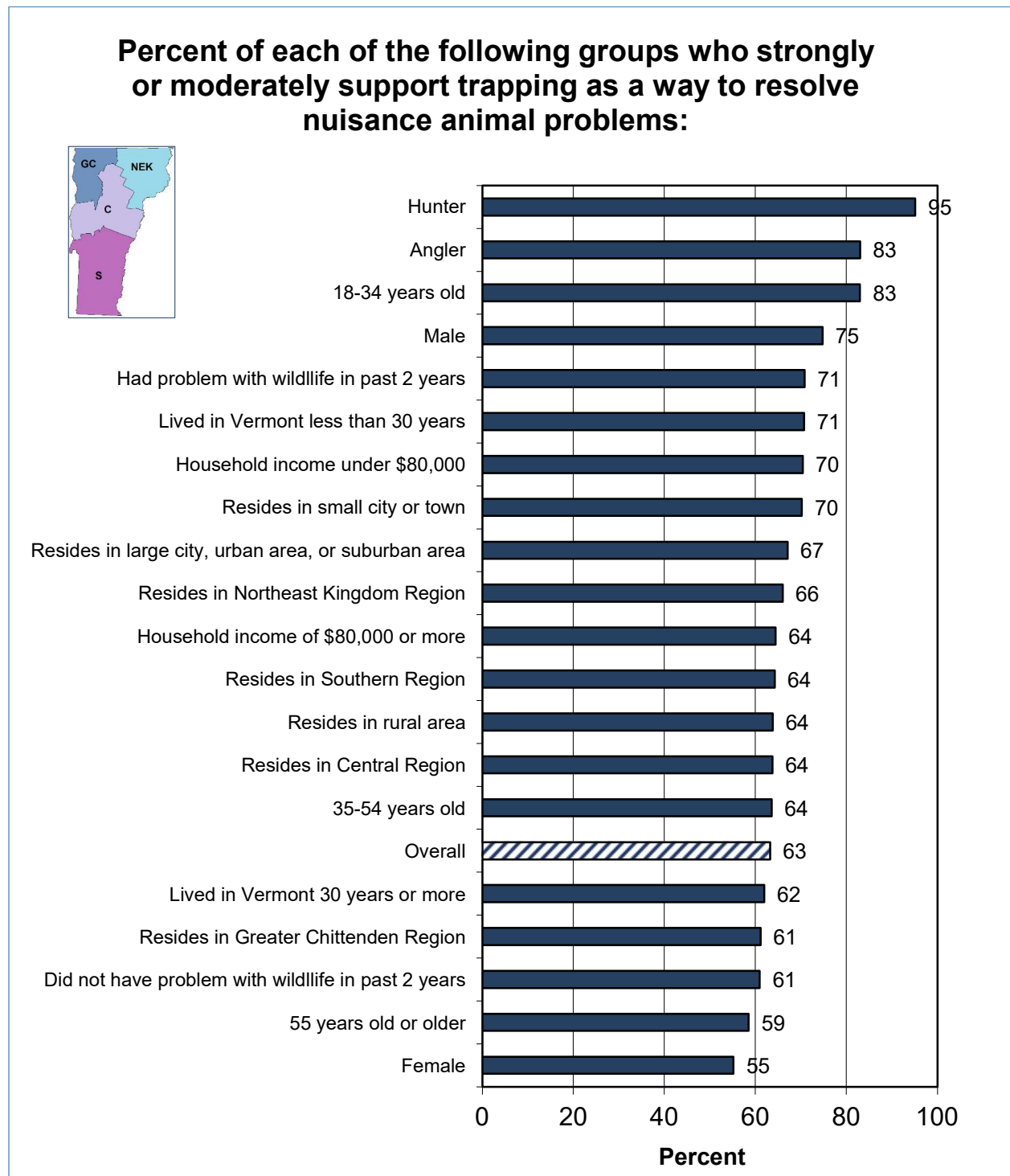
Half of those who hired someone (50%) said the person they hired gave them information on non-lethal means to resolve the problems (a graph is not shown because of the low sample size of residents who meet this criteria).



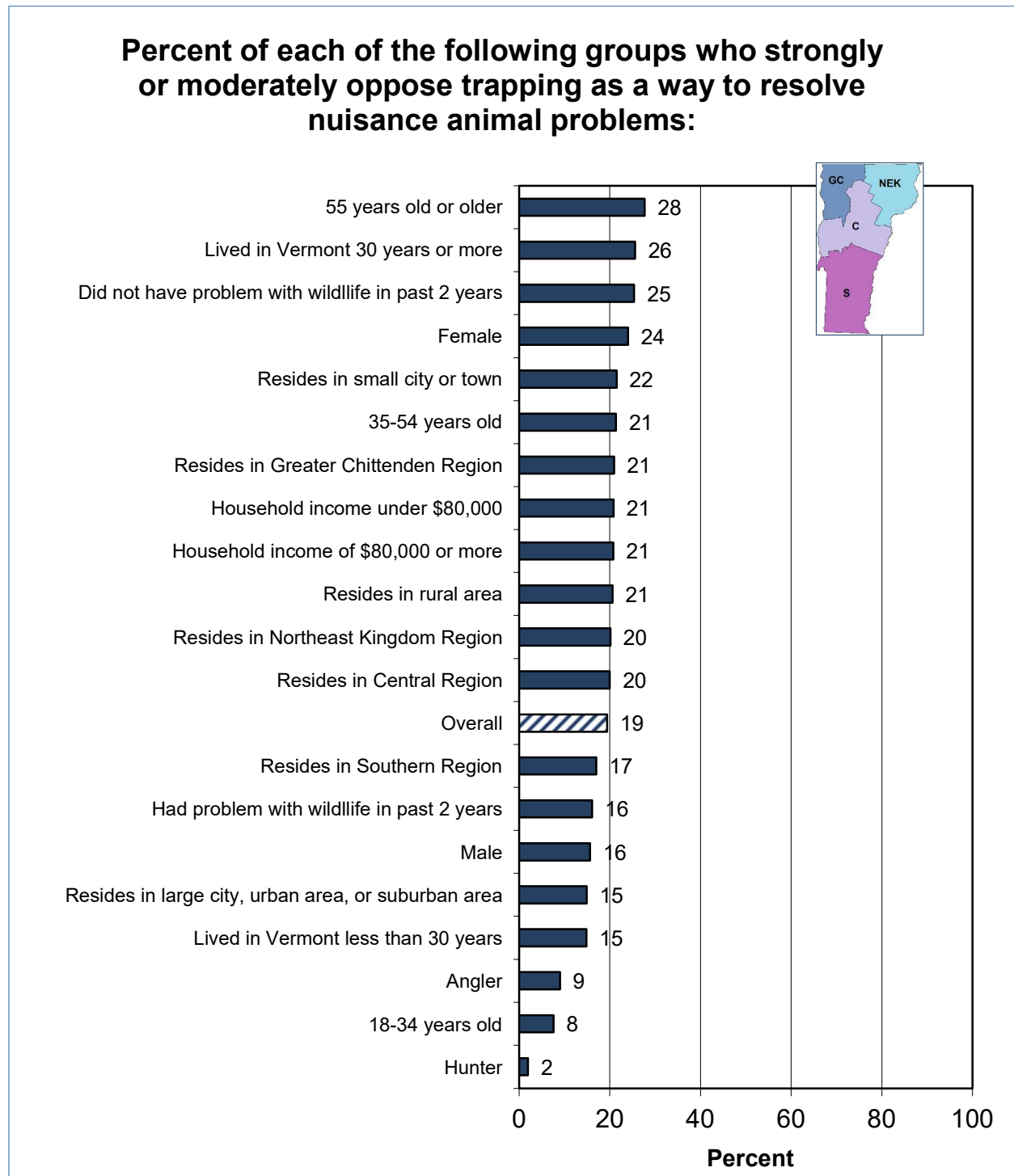
Nearly two thirds of residents (63%) support trapping as a way to resolve nuisance animal problems, whereas 19% oppose.



Support for trapping as a way to resolve nuisance animal problems was highest among hunters, anglers, younger residents, and males.

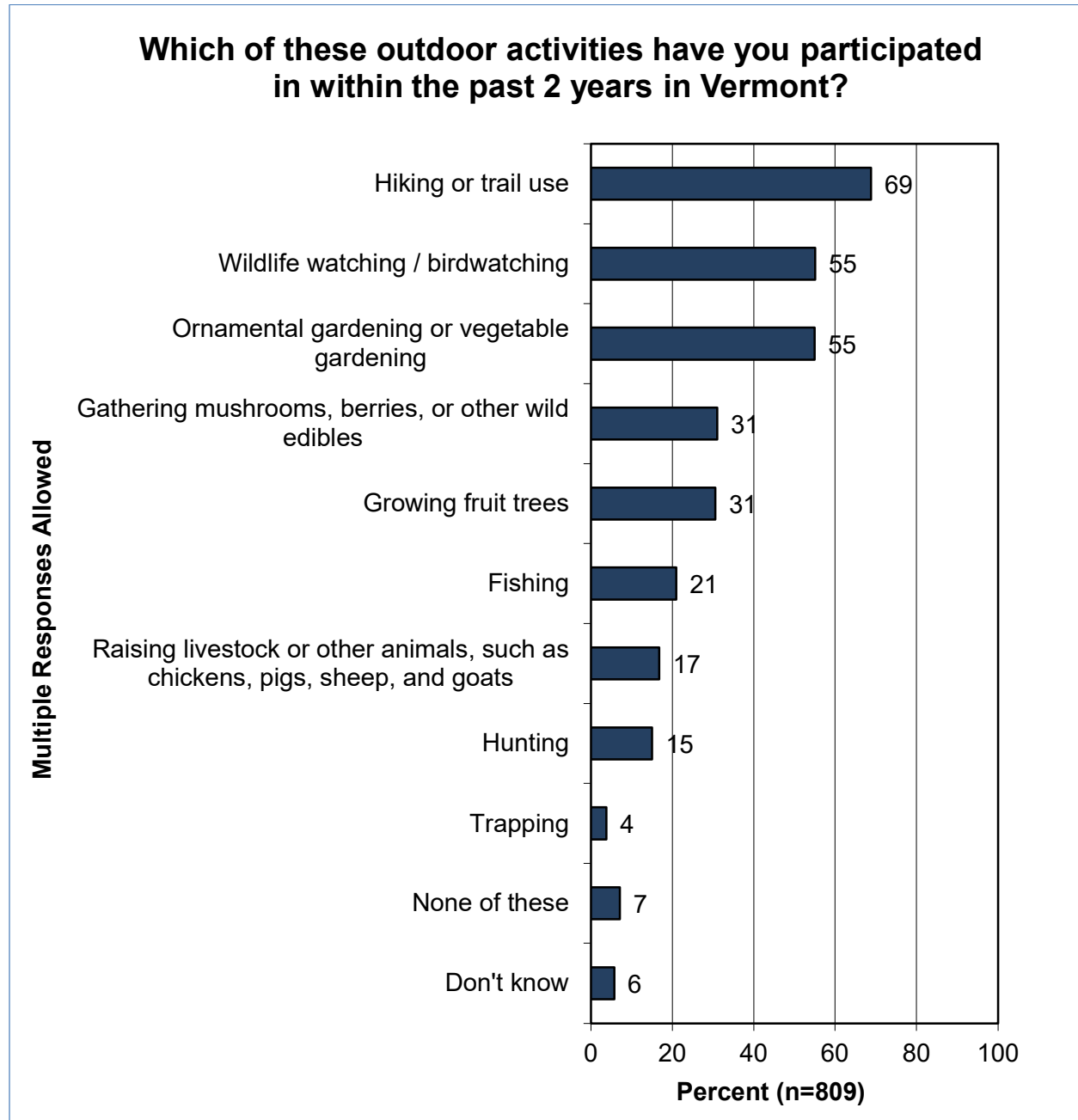


Opposition to trapping as a way to resolve nuisance animal problems was highest among older residents, those who lived in Vermont 30 years or more, those who did not have problems with wildlife in the past 2 years, and females.



PARTICIPATION IN OUTDOOR ACTIVITIES

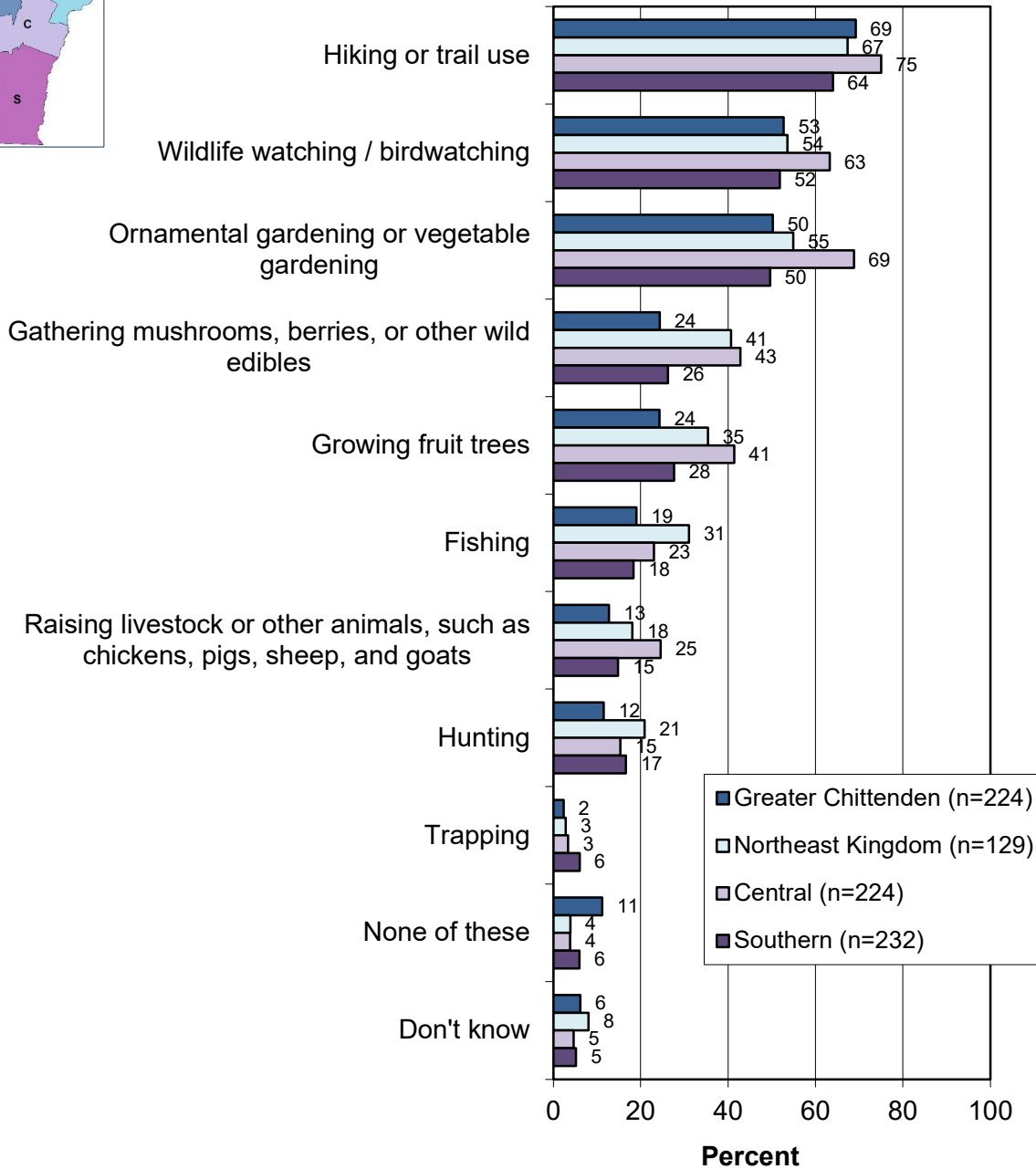
A majority of residents participated in hiking or trail use, wildlife watching or birdwatching, and gardening within the past 2 years in Vermont.



Which of these outdoor activities have you participated in within the past 2 years in Vermont?

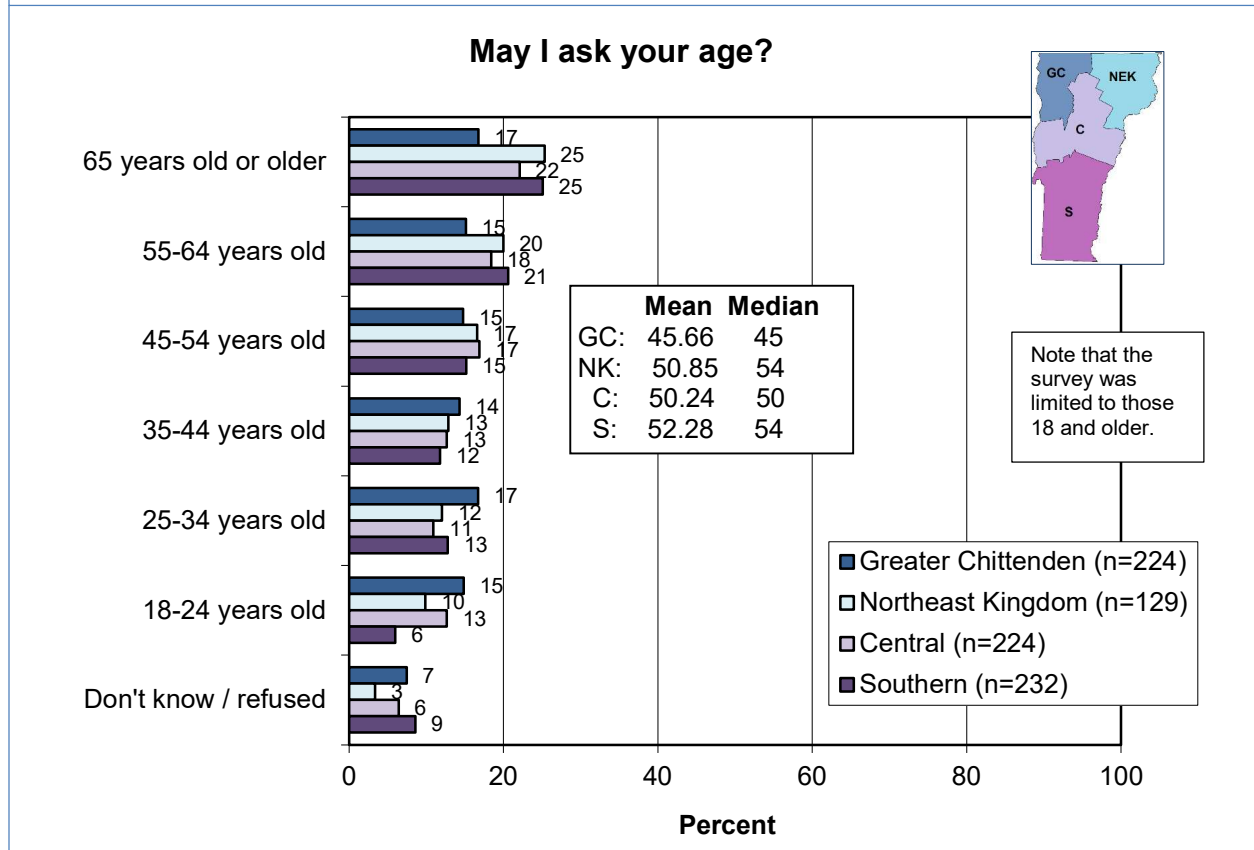
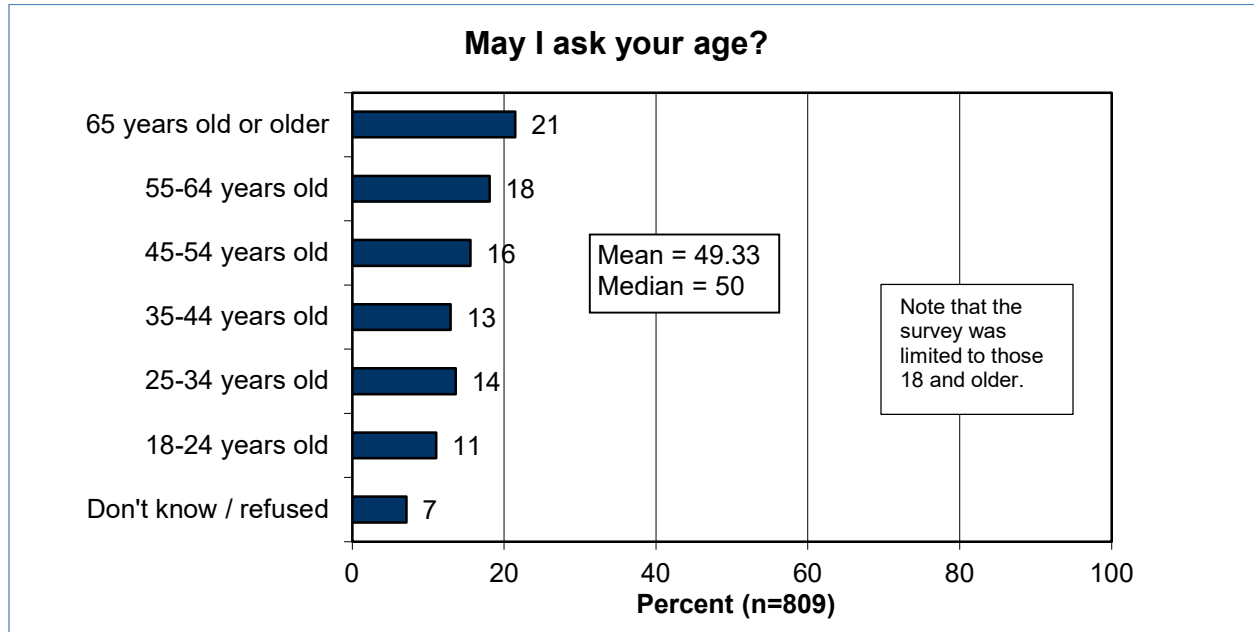


Multiple Responses Allowed

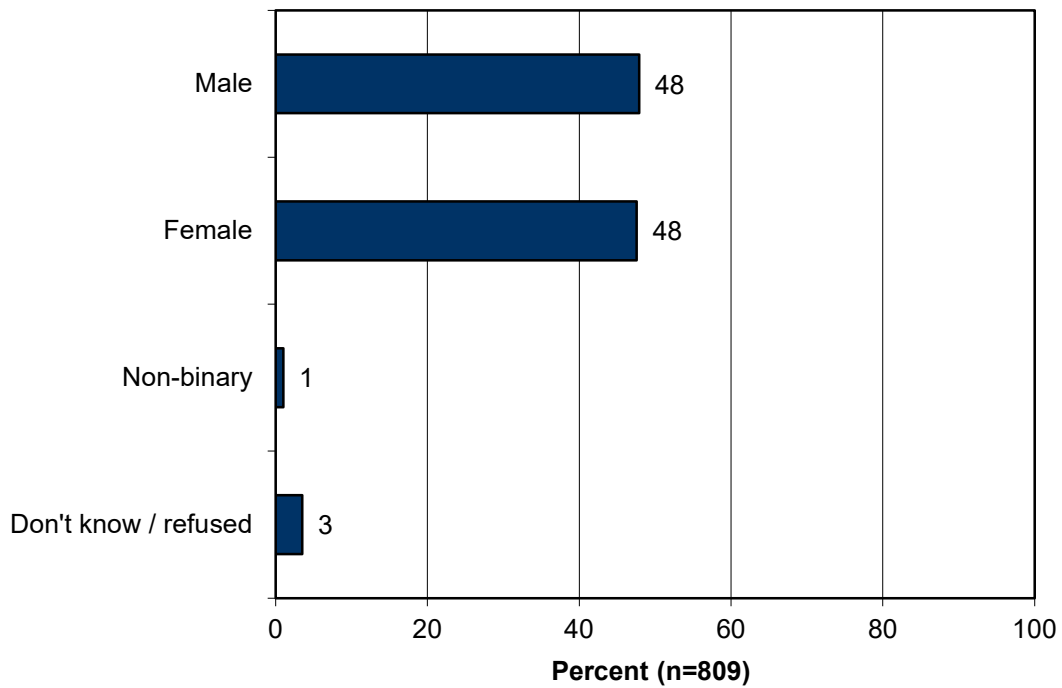


DEMOGRAPHIC DATA

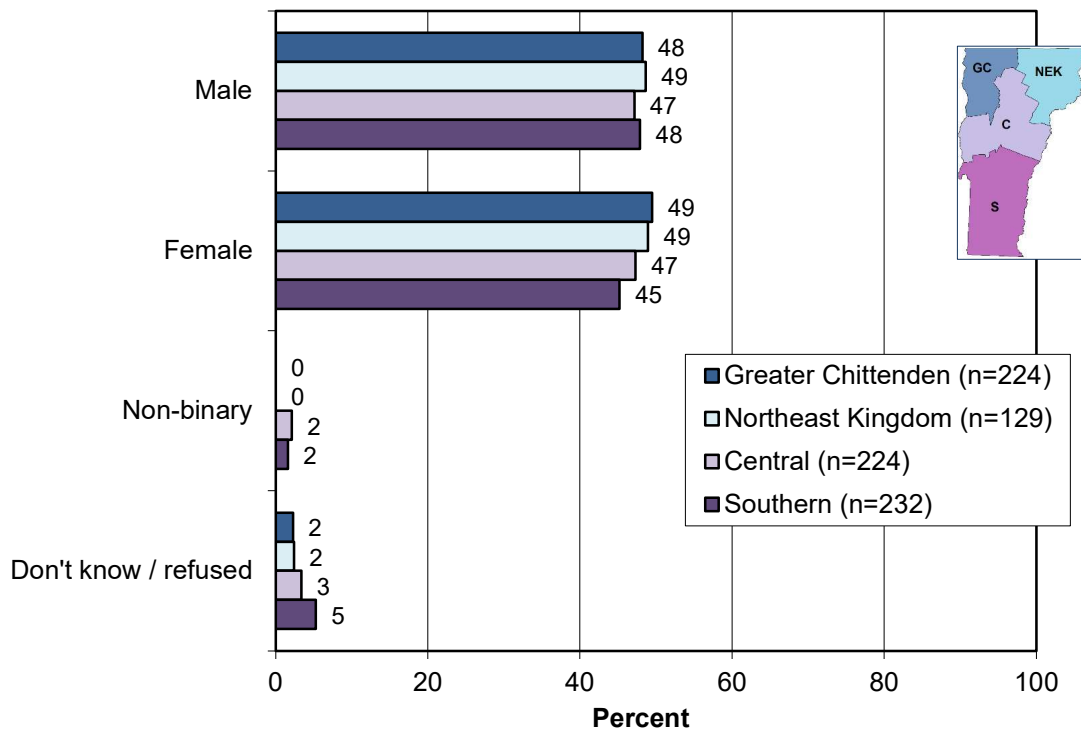
Demographic data were collected primarily for crosstabulations, but the results are shown here directly. Data include age, gender, race or ethnicity, county of residence, years of residency, type of residential area (urban–rural continuum), and household income.

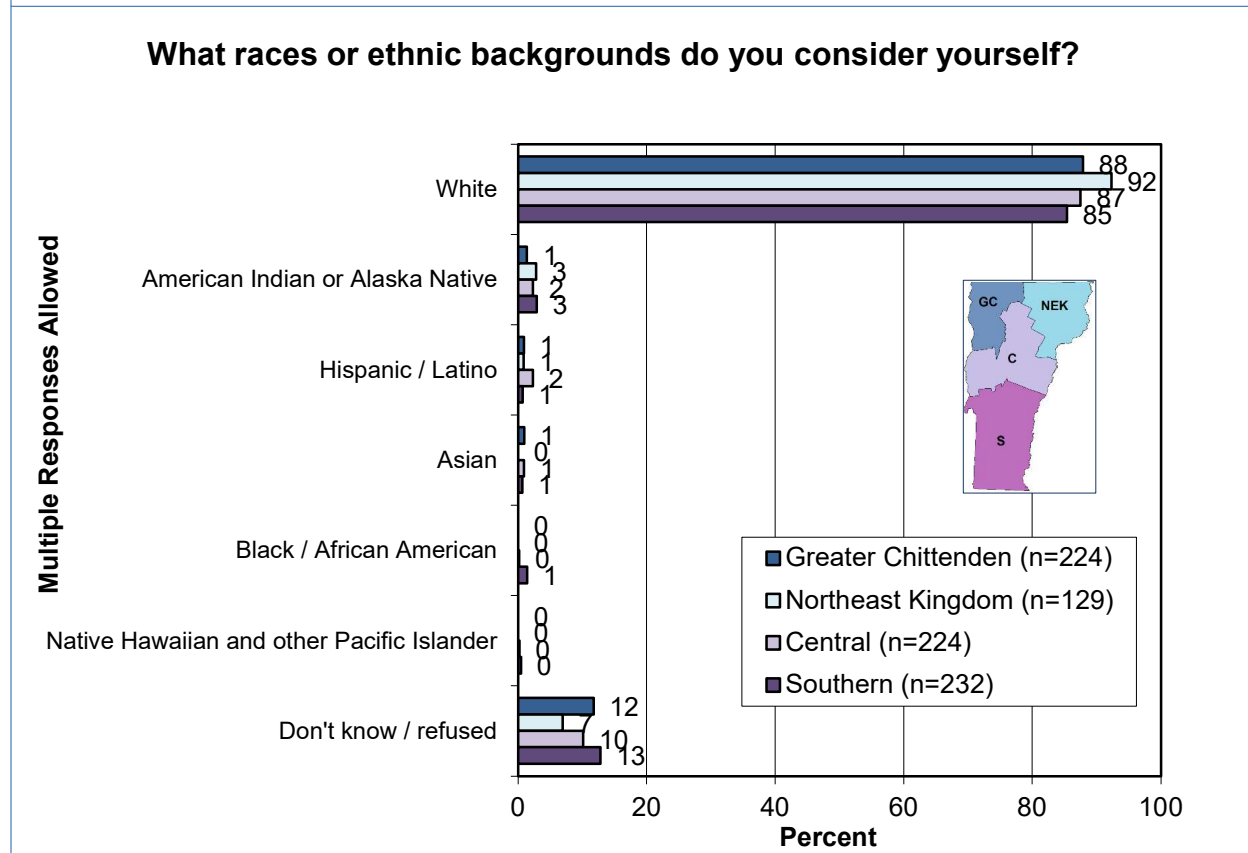
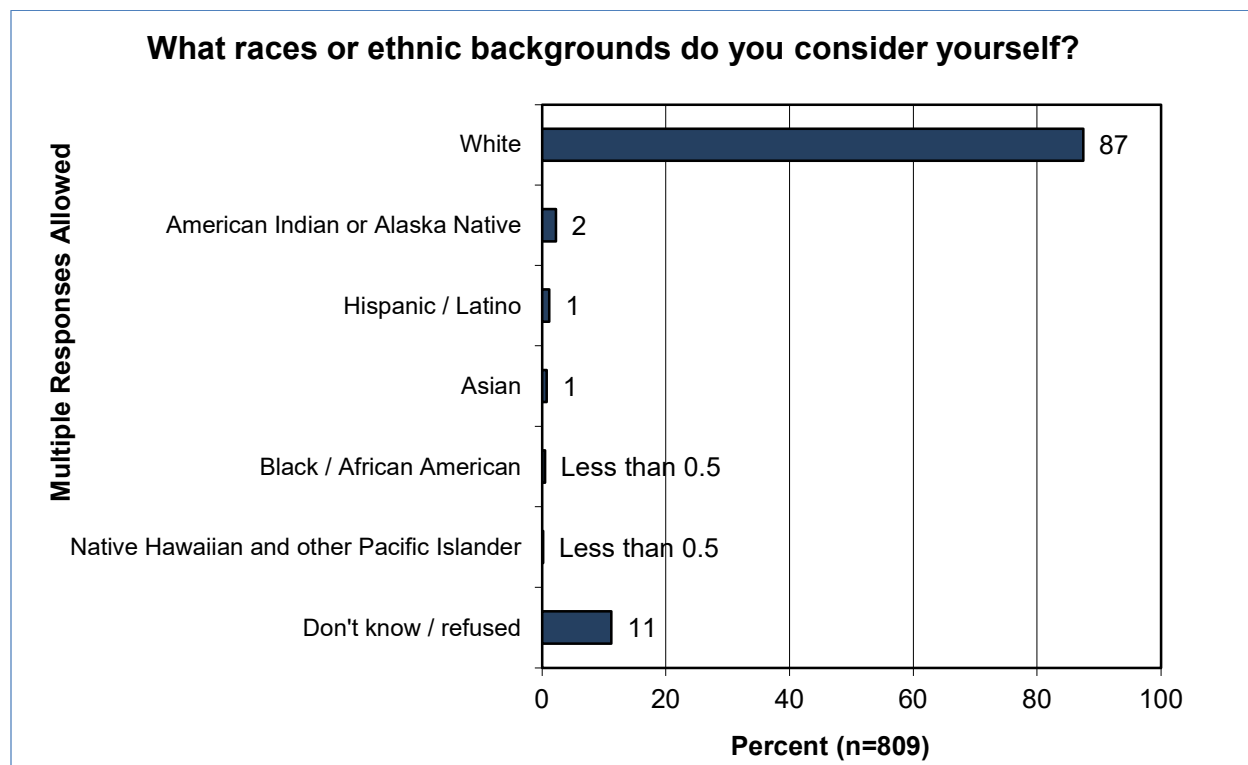


Do you consider yourself to be male, female, or nonbinary?

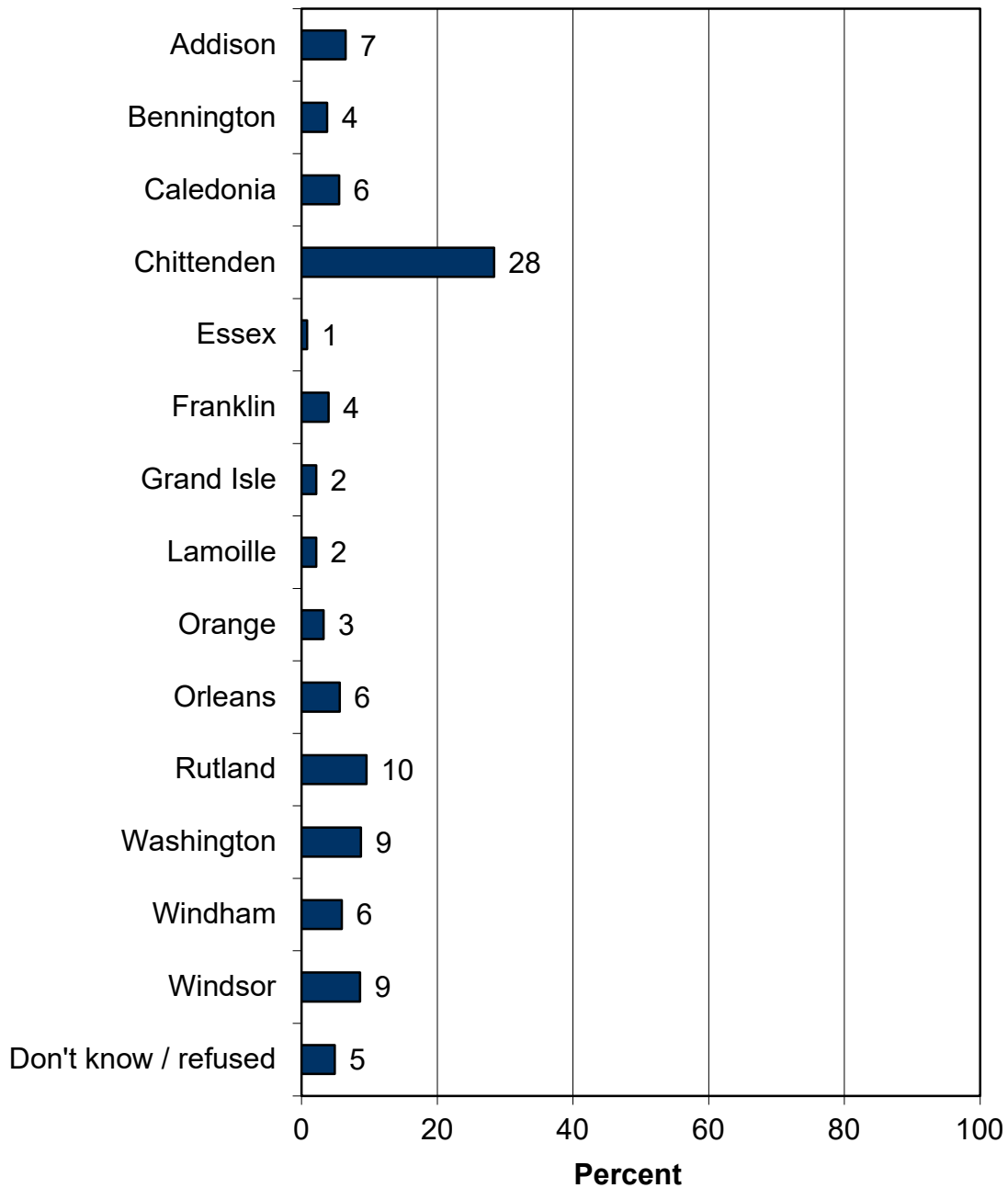


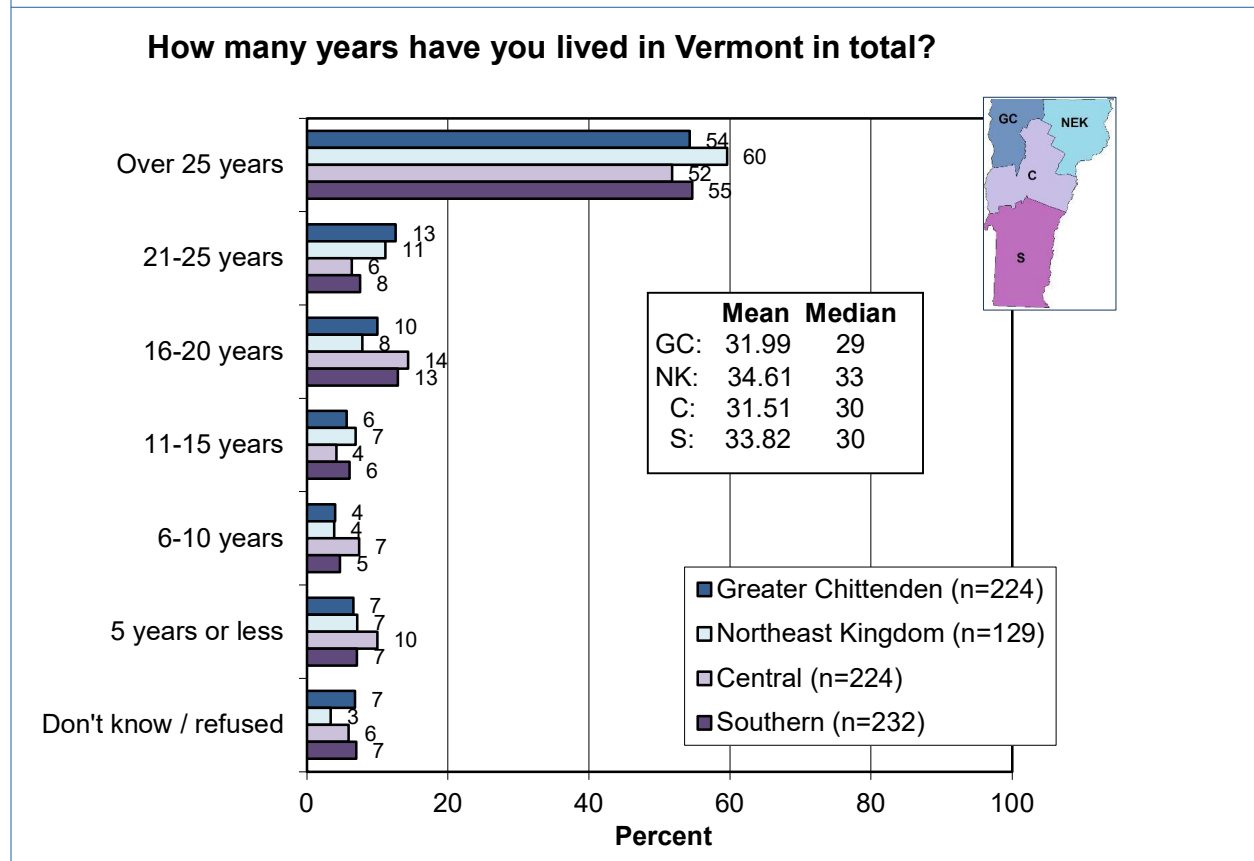
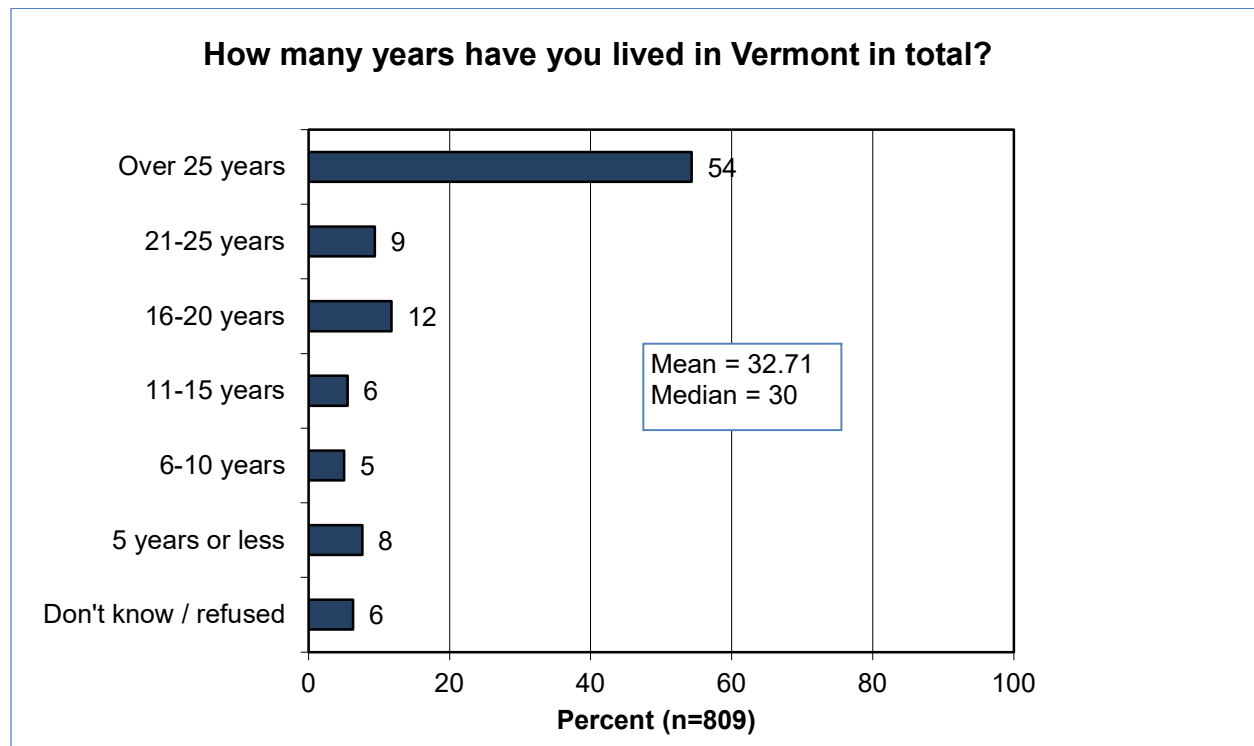
Do you consider yourself to be male, female, or nonbinary?



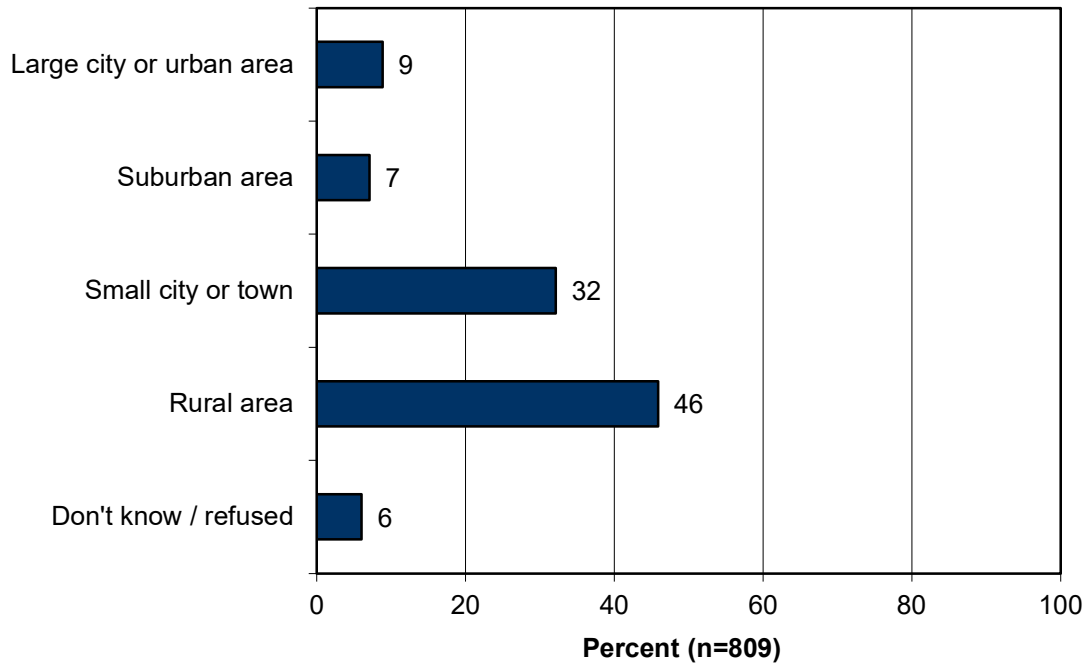


In which Vermont county do you reside?

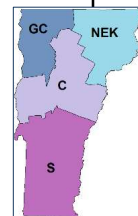
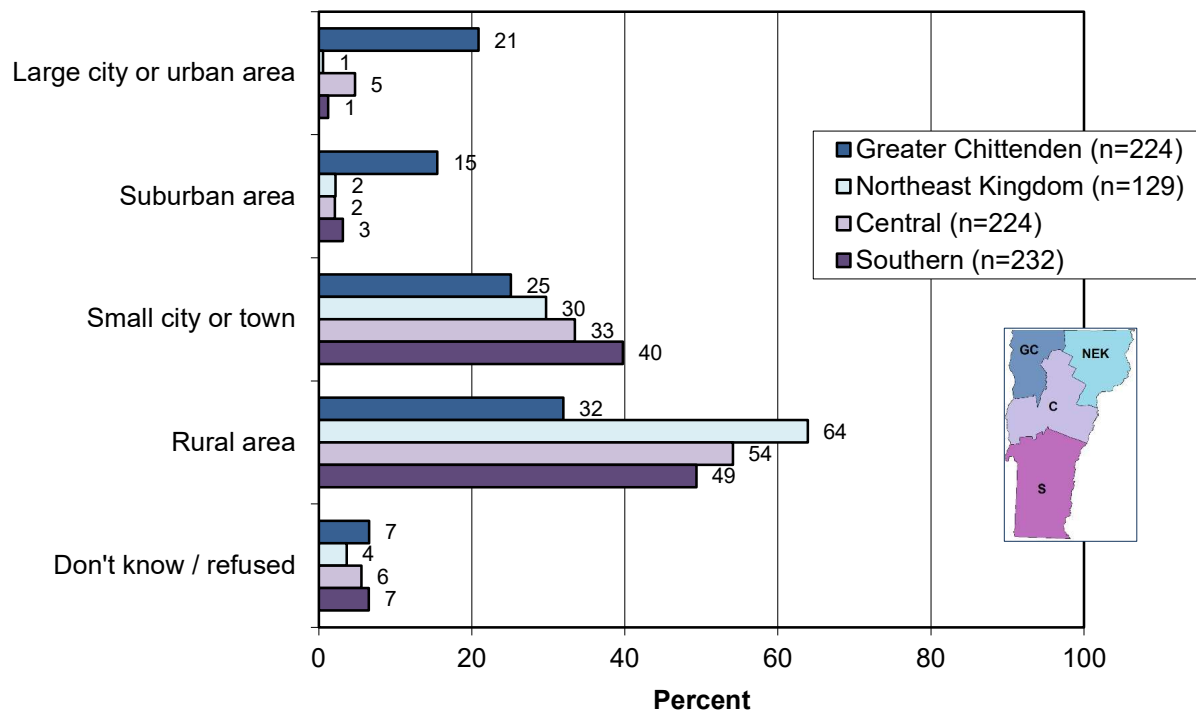




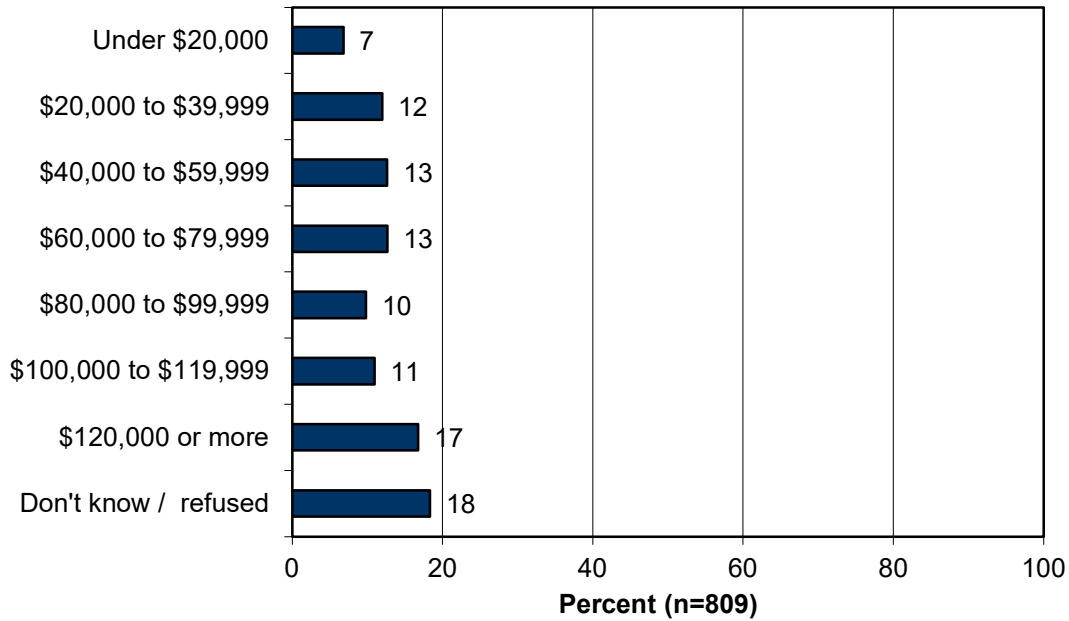
Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, or a rural area?



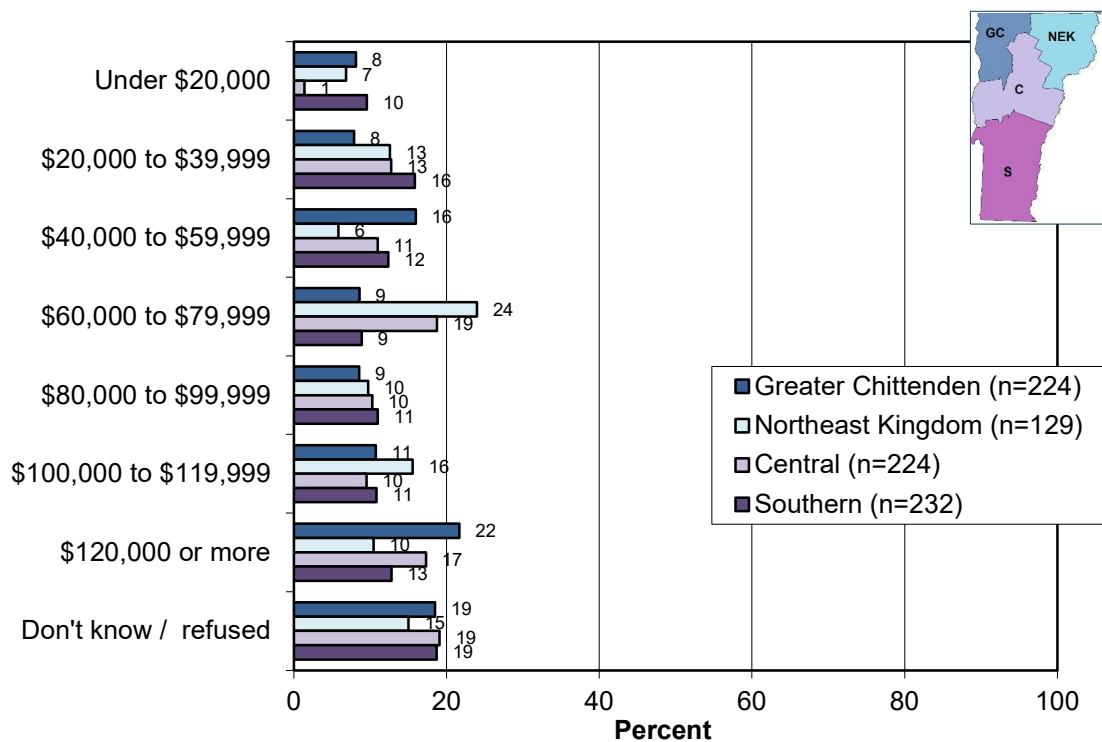
Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, or a rural area?



Which of the following categories best describes your total household income before taxes last year?



Which of the following categories best describes your total household income before taxes last year?



ABOUT RESPONSIVE MANAGEMENT

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

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

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

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