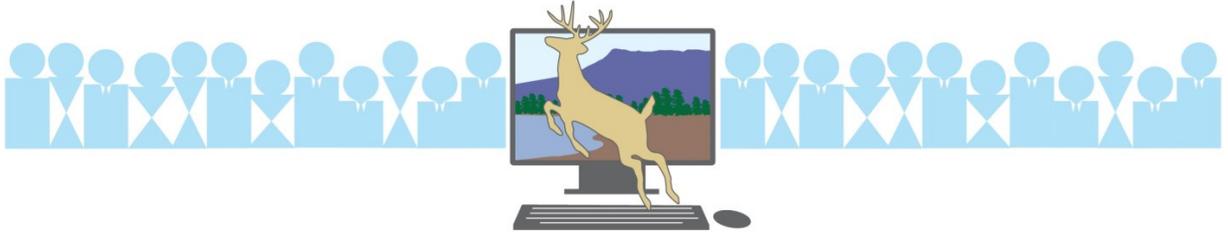


Responsive Management™



OPINIONS ON FISH, WILDLIFE, AND LAND USE AMONG VERMONT RESIDENTS, HUNTERS, AND ANGLERS

Conducted for the Vermont Fish and Wildlife Department

by Responsive Management

2015

OPINIONS ON FISH, WILDLIFE, AND LAND USE AMONG VERMONT RESIDENTS, HUNTERS, AND ANGLERS

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EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Vermont Fish and Wildlife Department (hereinafter referred to as the Department) to determine the opinions of residents, hunters, and anglers on issues pertaining to the intersection of land use and the management of fish and wildlife. The study entailed three scientific telephone surveys of Vermont residents, hunters, and anglers.

For the surveys, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among all three samples in Vermont. Note that both landlines and cell phones were called in their proper proportions for the sample of Vermont residents; landlines and cell phones were called for the samples of hunters and anglers depending on the telephone that was associated with their license. Note that telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective for general population surveys such as the survey of residents. Telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

The telephone survey questionnaire (the same questionnaire was used for all three surveys) was developed cooperatively by Responsive Management and the Department.

The sample of Vermont residents comprised a random landline sample and a random cell phone sample. This is called a dual-frame sample of residents because it consists of these two separate samples. Both the landline sample and the cell phone sample were obtained from SSI, a firm that specializes in providing scientifically valid samples for survey research. The two parts of the dual-frame sample were called in their proper proportions to be representative of Vermont residents, including those with landlines only, those with cell phones only, and those with both.

The samples of hunters and anglers were obtained from the Department; it consisted of those who held a hunting and/or fishing license.

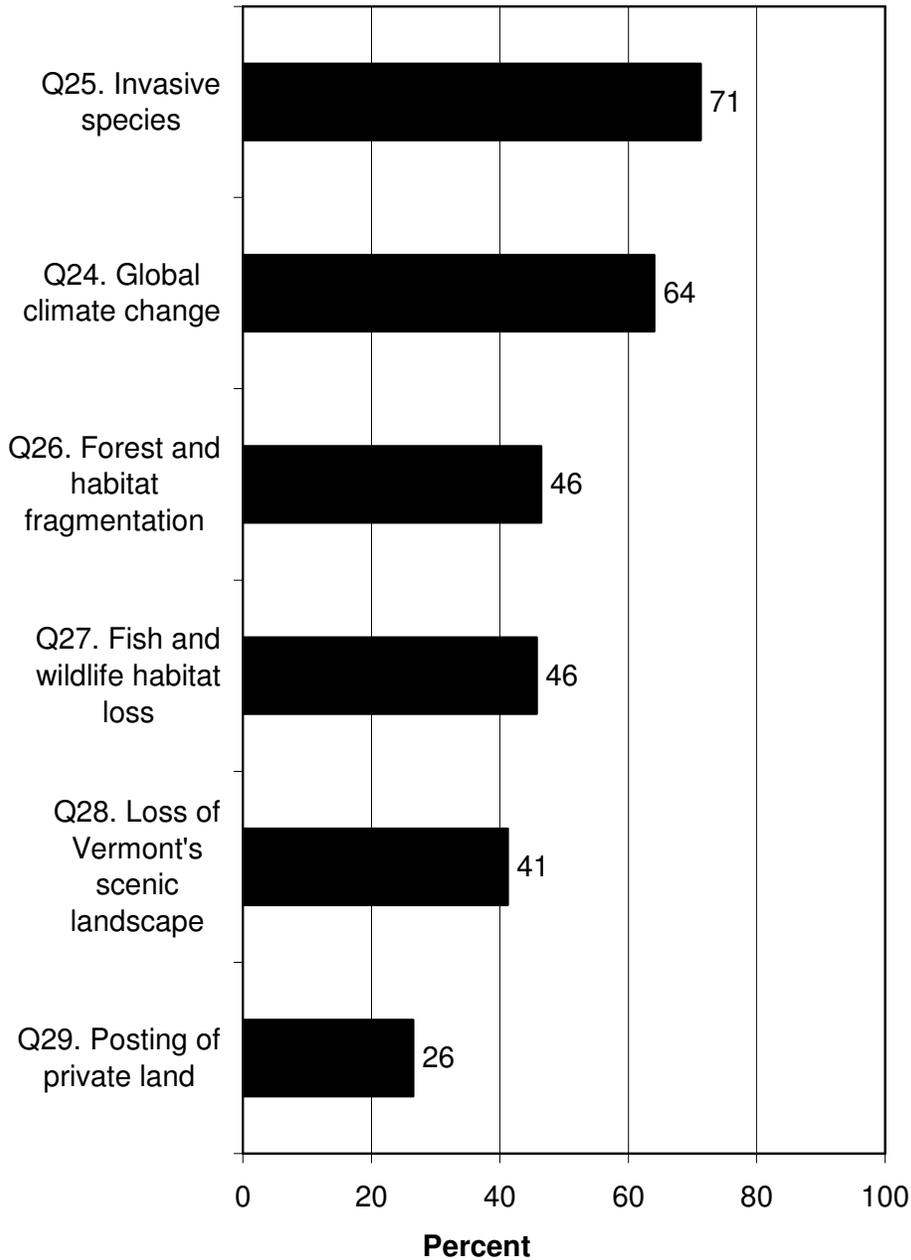
The surveys were conducted in June and July 2015. The software used for data collection was Questionnaire Programming Language. Responsive Management obtained a total of 802 completed interviews with residents, 200 completed interviews with hunters, and 203 completed interviews with anglers.

The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management.

PROBLEMS THAT VERMONT FACES

- The survey asked about the most important issues/factors that negatively affect the *quality of life*. This was open-ended and allowed multiple issues/factors to be named.
 - Among residents, the top responses relate to pollution/environmental degradation (21%), financial issues (17%), and poor health/age (14%).
 - Among hunters and anglers, the same responses that residents give are prominent: pollution/environmental degradation (11% of hunters, 15% of anglers), financial issues (17% and 18%), and poor health/age (14% and 12%)
- The survey presented six potential problems to respondents. For each potential problem, they were asked to rate it as a big problem, a small problem, or no problem.
 - Among residents, the problem of *invasive species* has the most saying it is a big problem (71% say it is a big problem), followed by *global climate change* (64% say it is a big problem).
 - A similar study in 1992 showed only 57% of respondents stating that *invasive species* is a big problem; however, note that the 1992 study referred to “nuisance aquatic plants” rather than “invasive species.”
 - Among hunters, two problems are at the top: *invasive species* (70% say it is a big problem) and the *posting of private land* (55%). Among anglers, the top problems are *invasive species* (68%) and *forest/habitat fragmentation* (48%).

Q24-29: Percent of residents who believe each of the following is a big problem:



- The survey directly asked about another potential problem: suburban sprawl. The statement was made that “suburban sprawl is *not* yet a problem in Vermont,” and respondents were asked whether they agree or disagree with the statement.
 - A slight majority of residents think this is a problem, with 52% disagreeing with the statement. On the other hand, 39% agree that it is *not* yet a problem.
 - A similar survey in 1998 showed 29% of respondents agreeing with the statement that suburban sprawl is *not* yet a problem.
 - Among hunters, 48% disagree (i.e., think suburban sprawl is a problem), while 44% agree. Among anglers, 49% disagree, while 44% agree.

- The survey directly asked about another potential problem, somewhat related to the above problem: forest fragmentation and loss. Again, respondents were asked if they agree or disagree that “forest fragmentation and loss is a problem in Vermont.”
 - The large majority of residents agree with this statement (i.e., think it is a problem): 61% agree, while 18% disagree.
 - Hunters and anglers are more likely than the general population to agree. Among hunters, 68% agree, while 23% disagree. Among anglers, 67% agree, and 21% disagree.

PARTICIPATION IN WILDLIFE-ASSOCIATED RECREATION

- The survey asked about participation in a dozen wildlife-associated activities.
 - Very large majorities of residents have participated in the past 12 months in wildlife viewing (81% did so within 1 mile of home; 74% did so greater than 1 mile from home). Large majorities also visited a state or national park (63%) or went hiking (61%). A majority participated in birdwatching (55%).
 - The trend graph shows substantial increases in participation, since 2003, in wildlife viewing more than one mile from home (74% in 2015 compared to 53% in 2003), visiting state or national parks (63% in 2015 versus 49% in 2003), and canoeing/kayaking (40% in 2015 versus 27% in 2003).
 - Among hunters, top activities are hunting (86%—note that the sample is from licenses, so the hunter need not have hunted in the past year to be in the sample), viewing wildlife

within a mile of home (86%), viewing wildlife more than a mile from home (79%), fishing (79%), and hiking (51%).

- Among anglers, top activities are fishing (85%), wildlife viewing within a mile of home (78%), wildlife viewing more than a mile from home (76%), hiking (60%), hunting (52%), and camping (50%).

➤ In follow-up to the above question, the survey asked about the importance that *people have the opportunity in Vermont to participate in wildlife-related outdoor recreation*.

- The large majority of residents (91%) say it is *very* important, and another 8% say it is *somewhat* important, which is nearly all the respondents.
 - This is an increase compared to a similar study in 2000, in which 80% of respondents stated it is *very* important.
- This is even more important for hunters and anglers: 96% (hunters) and 95% (anglers) say it is *very* important, and nearly all say it is *very* or *somewhat* important.

KNOWLEDGE AND OPINION OF THE VERMONT FISH AND WILDLIFE DEPARTMENT

➤ The amount of knowledge that respondents have of the Department was assessed (self-professed knowledge, no “test” was given). Not surprisingly, hunters and anglers claim more knowledge of the Department, compared to residents.

- Most commonly, residents say that they know *a moderate amount* about the Department (41% give this response) or they know *a little* (40%). Only 14% claim to know *a great deal*.
- Hunters appear to be the most knowledgeable. Half of hunters claim to know *a moderate amount* (50%), and another 29% claim to know *a great deal*. Among anglers, 37% claim to know *a moderate amount*, and 28% claim to know *a great deal*.

➤ The survey asked about satisfaction or dissatisfaction with the Department as a government agency.

- The large majority of residents are satisfied with the Department (76%, including 44% being *very* satisfied). Only 3% are dissatisfied (the remainder giving a neutral response).

- Those who went fishing in the previous 12 months are most often *very* satisfied with the Department (52% stated this), whereas those who did not do any wildlife viewing or birdwatching in the previous 12 months are least often *very* satisfied (37%).
- The percent of residents who are *very* satisfied with the Department (44%) increased substantially since 2003 (25%).
- Large majorities of hunters and anglers are satisfied: 76% of hunters and 80% of anglers are satisfied (40% and 47%, respectively, are *very* satisfied).
- The survey asked about how the Department does at *effectively balancing the interests of anglers, hunters, conservation groups, and the general public*.
 - Most residents agree that the Department achieves this balance (76% agree); meanwhile, a small percentage disagree (7%).
 - Residents who most often *strongly* agree are those with an income less than \$50,000 per year (54% stated this) and those who indicated they are satisfied with the Department in general (53%).
 - Residents who *strongly* agree that the Department achieves this balance increased from 33% in 2003 to 42% in 2015.
 - While hunters and anglers agree at about the same rate as does the general population, their rate of disagreement is higher (at the expense of “don’t know” responses): 77% of hunters and 75% of anglers agree; however, 17% of hunters and 11% of anglers disagree.

IMPORTANCE OF FISH AND WILDLIFE

- One question directly compared wildlife with economic development. Wildlife is favored by survey respondents by a large amount in these general questions.
 - The large majority of Vermont residents (75%) disagree that *economic development is more important than wildlife*. Most of that is *strong* disagreement (49%). Only 12% agree, the rest being neutral.
 - Likewise, the large majority of hunters (81%) and anglers (76%) disagree, with most of that being *strong* disagreement (55% of hunters, 57% of anglers). The percentages that agree are 8% of hunters and 11% of anglers.

- The survey asked about agreement or disagreement with this statement: *Threatened and endangered species must be protected*. Agreement is overwhelming. Agreement is also overwhelming with this statement: *Knowing that Vermont's native fish and wildlife populations are healthy and surviving well is very important to me even if I don't get to see them*.

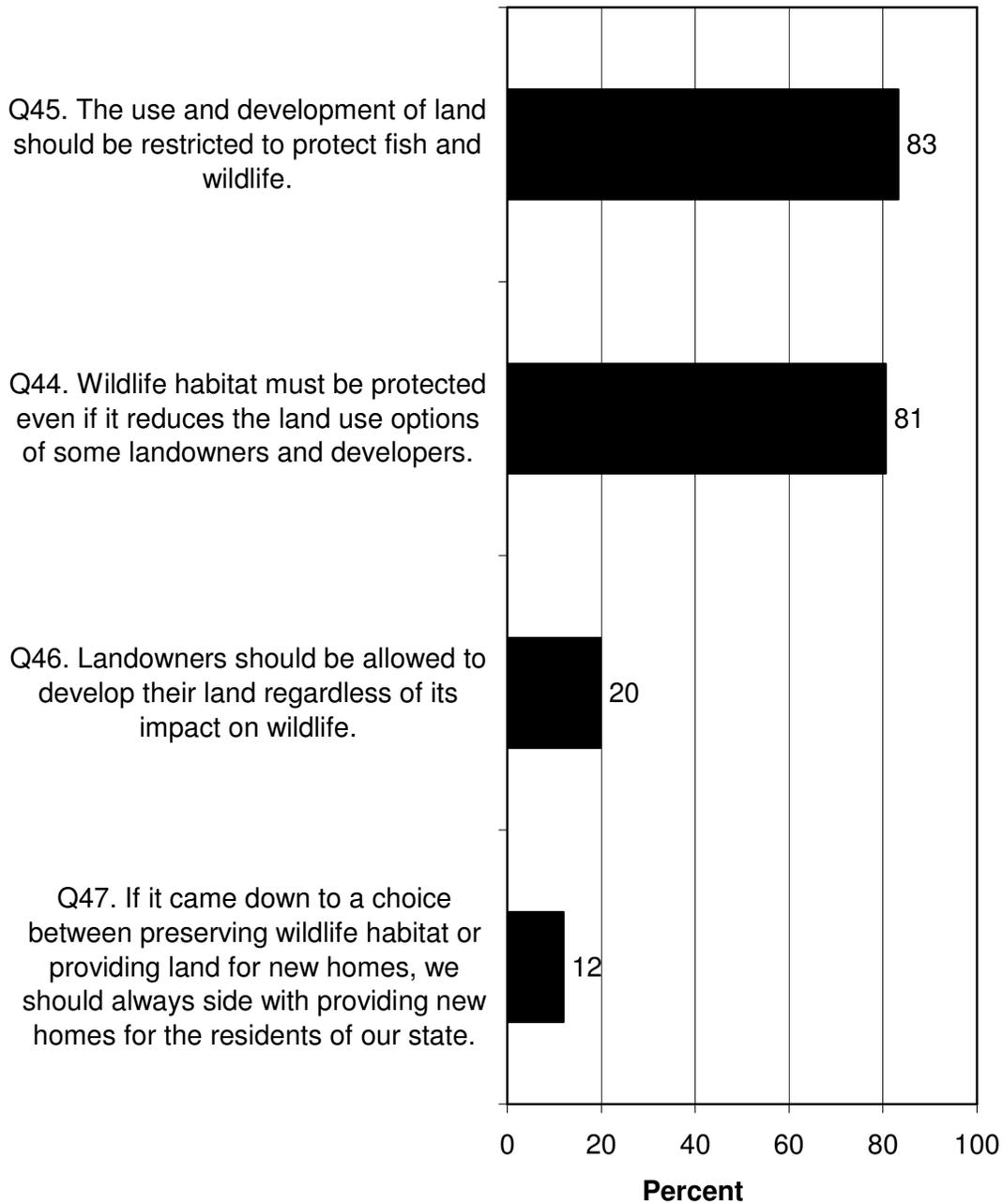
OPINIONS ON LAND USE IN VERMONT

- The survey asked for opinions on the *amount of state-owned land* in Vermont: should it be increased, decreased, or stay the same? It is roughly split between stay the same and increased; very few want it decreased.
 - Most commonly, residents think that the amount of state-owned land should stay the same (47% give this response). Otherwise, residents are much more likely to say that they want it increased (39%) than decreased (5%).
 - Since 1997, the percent of residents who want the amount of state-owned land to increase has declined (61% in 1997 compared to 39% in 2015), with more residents now wanting the amount to stay the same (28% in 1997 versus 47% in 2015).
 - Responses are similar among hunters and anglers. The most common response is stay the same (45% of hunters, 48% of anglers), and those wanting an increase (44% of hunters, 40% of anglers) far outnumber those wanting a decrease (5% of hunters, 6% of anglers).
- Respondents generally think that *state ownership of land is important to maintain biological diversity*.
 - The overwhelming majority of residents (89%) think that state ownership of land is important to maintain biological diversity, most of that being in the *very important* response.
 - Hunters and anglers are similar to residents on this question: 90% of hunters think it is important (62% thinking it is *very important*), and 87% of anglers think it is important (61% saying *very important*).

- Respondents overwhelmingly think it is important that *ecologically important habitats and land in Vermont are being protected and preserved*.
 - Among residents, 97% think this is important, including 75% who say it is *very* important. There is little change since 2000.
 - Residents who most often think this is *very* important are those who live in a large city, urban area, or suburban area (87% stated this) and those with an income less than \$50,000 per year (82%).
 - Hunters and anglers, as with residents, also overwhelmingly think it is important.

- Finally in this section, the survey presented four statements to respondents that pertain to the tradeoff between land development and habitat protection. For each, respondents indicated if they agree or disagree with it. In general, they side with habitat protection over unfettered use of land.
 - Among residents, agreement is high that *the use and development of land should be restricted to protect fish and wildlife* (83%) and that *wildlife habitat must be protected even if it reduces the land use options of some landowners and developers* (81%), as shown on the graph. However, statements favoring development are *not* well received: disagreement ranges from 74% to 77% on the two statements that favor development over wildlife. There is little marked change since 2003.
 - Hunters and anglers are much the same as residents.

Q44-47: Percent of residents who strongly or moderately agree with the following:



OPINIONS ON DEPARTMENT ACTIONS AS THEY RELATE TO BOTH LAND USE AND FISH/WILDLIFE

- Respondents overwhelmingly agree that *hunting and fishing are part of scientific management of healthy fish and wildlife populations*.
 - Among residents, 91% agree, with 67% *strongly* agreeing. There is little change since 2003.
 - Among recreationists, hunters are almost unanimous (98% agree); with anglers just under that (93% agree).

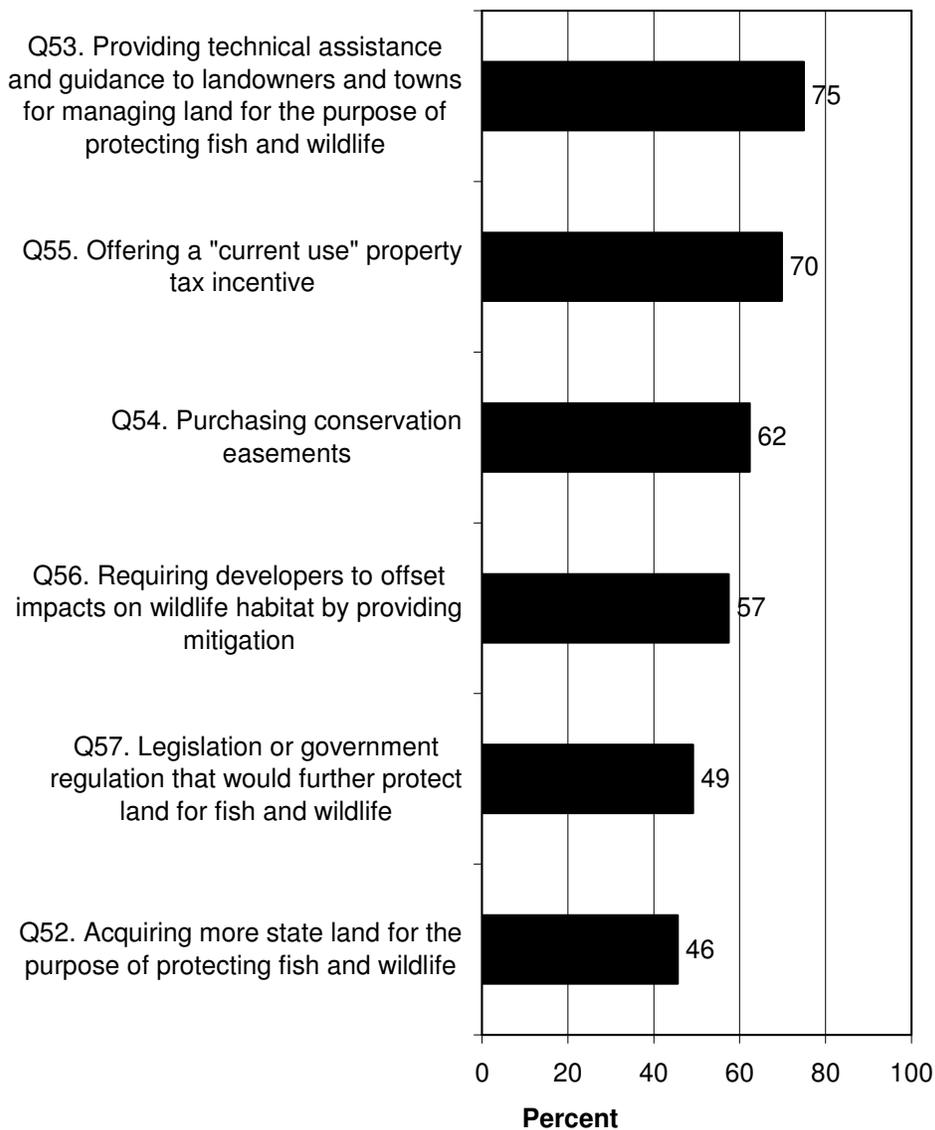
- Respondents generally place much importance on *protecting endangered species*.
 - The huge majority of residents (95%) think protecting endangered species is *very* or *somewhat* important (with 76% saying *very* important). There is little change since 2003.
 - Hunters and anglers are like the general population: 95% of hunters and 97% of anglers place importance on this.

- There is much support for having the Department protect important wildlife habitat by purchasing land.
 - The large majority of residents support (83%); opposition is low (9%). There is little change since 2003.
 - Hunters and anglers generally support (85% and 87%, respectively).

- The survey presented six possible strategies for protecting land for fish and wildlife. For each strategy, respondents rated their level of support for it or opposition to it.
 - Residents most favor the provision of technical assistance/guidance (75% strongly support) and tax incentives (70%). Furthermore, the purchase of conservation easements (62%) is favored over outright purchase of land (46%). (Note that when looking at strong or moderate support, the percentages are very high—from 78% to 95%.) In the middle are two strategies that entail more regulation.
 - Hunters and anglers also show the most support for technical assistance/guidance and tax incentives. In the middle are requiring developers to provide mitigation actions and the

purchase of conservation easements. At the bottom for hunters and anglers are purchasing more state land and more government regulations.

Q52-57: Percent of residents who strongly support each of the following strategies for protecting land for fish and wildlife:



FUNDING OF FISH AND WILDLIFE MANAGEMENT

- The survey listed four items to see where *open land* falls on the spectrum (the other items were police/fire services, roads, and schools). Respondents were asked if they would be willing to pay an extra percentage in taxes for each.
 - The top of the list among residents is roads (61% would pay extra in taxes for them) and police/fire services (56%). These are both slightly above open land (52%) and schools (51%).
 - Similar surveys were conducted in 1990, 1995, and 2000. Respondents' willingness to pay extra taxes for open land has remained relatively stable over the years, while it has steadily increased for roads and police and fire services.
 - While the percentage of hunters saying that they would pay extra taxes for open land is about the same as among residents, their ranking of it is higher than the ranking among residents. Anglers also say open land at about the same rate as do residents, but they rank open land last in the items for which they would pay more taxes.
- Respondents are split between wanting funding for fish and wildlife conservation programs to be *increased* or *kept the same* (with very few wanting funding to be *decreased*).
 - Among residents, 44% want funding to *stay the same* (the most common response), while 38% want it *increased*; only 2% want it *decreased*. There is little change since 1995.
 - Residents most likely to want funding *increased* are those who went canoeing or kayaking in the past 12 months (45% stated this) and those who went camping (43%).
 - Hunters and anglers are even more in the conservationist camp: 48% of hunters and 49% of anglers want funding to *stay the same*; meanwhile, 44% of hunters and 41% of anglers want funding *increased* (the *decreased* responses are at 2% and 3%).
- Finally, five funding options were presented in the survey. Respondents were told that the funding would be used for *a land conservation initiative to ensure the future of fish and wildlife populations, habitat, and public access to lands for recreation*. For each, respondents were asked if they would support or oppose it.
 - A majority of residents strongly or moderately support three of the five taxes: a one-eighth of 1% increase in the state general sales tax, a state tax on sporting equipment, and

a bond (support ranges from 59% to 61%). There is less than a majority who support a parking fee on state lands or a registration fee for kayaks and canoes.

- Hunters’ and anglers’ opinions mirror those of residents. At the top is the bond, followed by the one-eighth of 1% sales tax and the tax on sporting equipment. At the bottom are the registration fee for kayaks/canoes and the parking fee.

Q70-74: Percent of residents who strongly or moderately support each of the following to provide funding for a land conservation initiative:

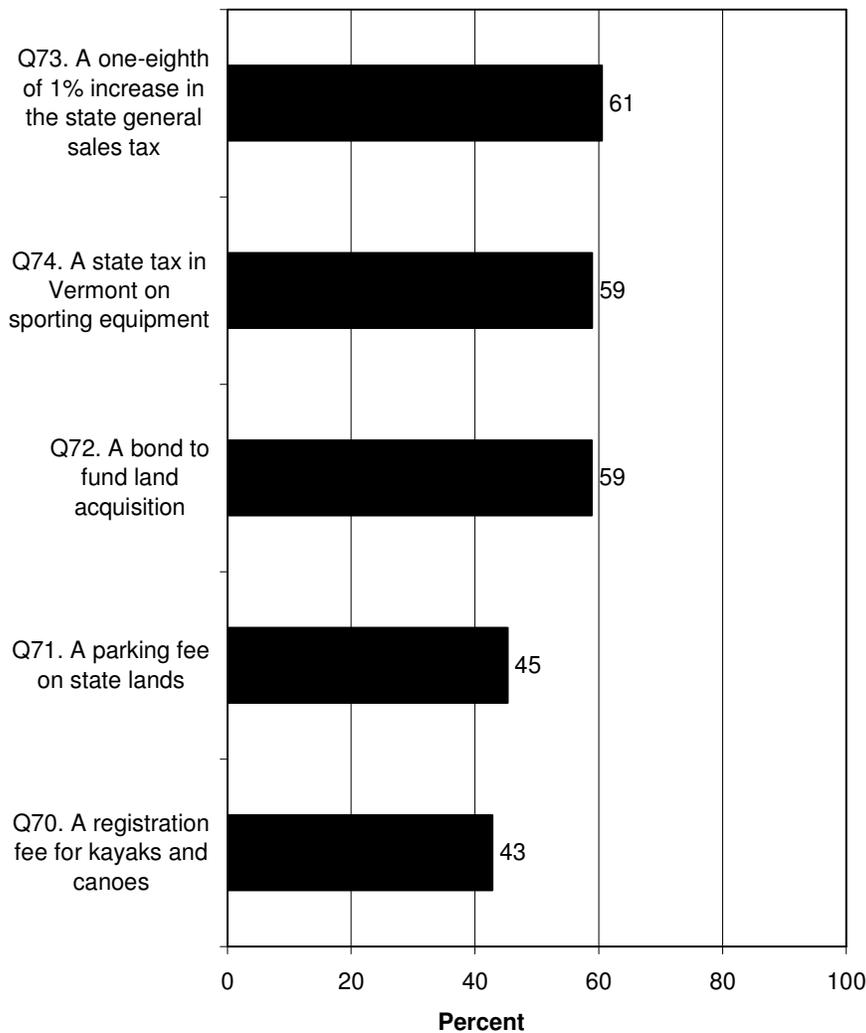


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INTRODUCTION AND METHODOLOGY

This study was conducted for the Vermont Fish and Wildlife Department (hereinafter referred to as the Department) to determine the opinions of residents, hunters, and anglers on issues pertaining to the intersection of land use and the management of fish and wildlife. The study entailed three scientific telephone surveys of Vermont residents, hunters, and anglers. Specific aspects of the research methodology are discussed below.

USE OF TELEPHONES FOR THE SURVEY

For the surveys, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among all three samples in Vermont. Note that both landlines and cell phones were called in their proper proportions for the sample of Vermont residents; landlines and cell phones were called for the samples of hunters and anglers depending on the telephone that was associated with their license. Note that telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective for general population surveys such as the survey of residents. Telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

QUESTIONNAIRE DESIGN

The telephone survey questionnaire (the same questionnaire was used for all three surveys) was developed cooperatively by Responsive Management and the Department, based on the research team's familiarity with natural resources, land use, and wildlife-associated recreation in general, as well as hunting and fishing specifically.

The survey included questions that had been asked in previous surveys conducted by various researchers. These studies are listed further on in the section, "Data Analysis."

SURVEY SAMPLES

The sample of Vermont residents comprised a random landline sample and a random cell phone sample. This is called a dual-frame sample of residents because it consists of these two separate samples. Both the landline sample and the cell phone sample were obtained from SSI, a firm that specializes in providing scientifically valid samples for survey research. The two parts of the dual-frame sample were called in their proper proportions to be representative of Vermont residents, including those with landlines only, those with cell phones only, and those with both. This dual-frame sample of residents used a probability-based selection process that ensured that each adult resident had an essentially equal chance of being selected for the survey.

The samples of hunters and anglers were obtained from the Department; it consisted of those who held a hunting and/or fishing license.

TELEPHONE INTERVIEWING FACILITIES

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

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

INTERVIEWING DATES AND TIMES

Telephone surveying times are Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of 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 surveys were conducted in June and July 2015.

TELEPHONE SURVEY DATA COLLECTION AND QUALITY CONTROL

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

The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. The survey questionnaire itself contains error checkers and computation statements to ensure quality and consistent data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. Responsive Management obtained a total of 802 completed interviews with residents, 200 completed interviews with hunters, and 203 completed interviews with anglers.

DATA ANALYSIS

The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management. Although the respondents from whom interviews were gathered as a whole fairly closely matched the actual demographic breakdown of adult residents of Vermont, the general population results were weighted slightly

by age and gender so that the sample was exactly representative of residents of Vermont as a whole.

Trends were analyzed based on twelve other studies:

- 1990, 1995, 2000: Vermont Business Roundtable. Pulse of Vermont, Quality of Life Study (three studies).
- 1992. Manning, Schmidt, and Wiberg (UVM). Vermont Recreation Survey and Environmental Index.
- 1994. Glass and More. Human Relationships With Wildlife in Vermont.
- 1995. Responsive Management (RM). Vermont Residents' Opinions and Attitudes Toward Alternative Funding.
- 1995. Buck and Williams. Expenditures and Opinions of Vermont Residents Participating in Non-Consumptive Wildlife-Based Recreation.
- 1996. RM. Vermont Residents' Opinions and Attitudes Toward Species Management.
- 1997. ANR. Land Conservation Survey.
- 1998. Vermont Population Alliance. Vermont Population Alliance Survey.
- 2000. RM. Vermont Residents' Attitudes Toward Program Priorities and Alternative Funding Mechanisms for the VFWD.
- 2003. RM. Public Opinion on Fish and Wildlife Management Issues and the Reputation and Credibility of Fish and Wildlife Agencies in the Northeast United States.

SAMPLING ERROR

The sampling errors are shown in the tabulation below, which is followed by the sampling error equation that was used.

	Sample Size	Population Size	Sampling Error
Residents (18 years old and older)	802	504,976	3.46
Hunters	200	118,373	6.92
Anglers	203	184,486	6.87

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).

ADDITIONAL INFORMATION ABOUT THE PRESENTATION OF RESULTS IN THE REPORT

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

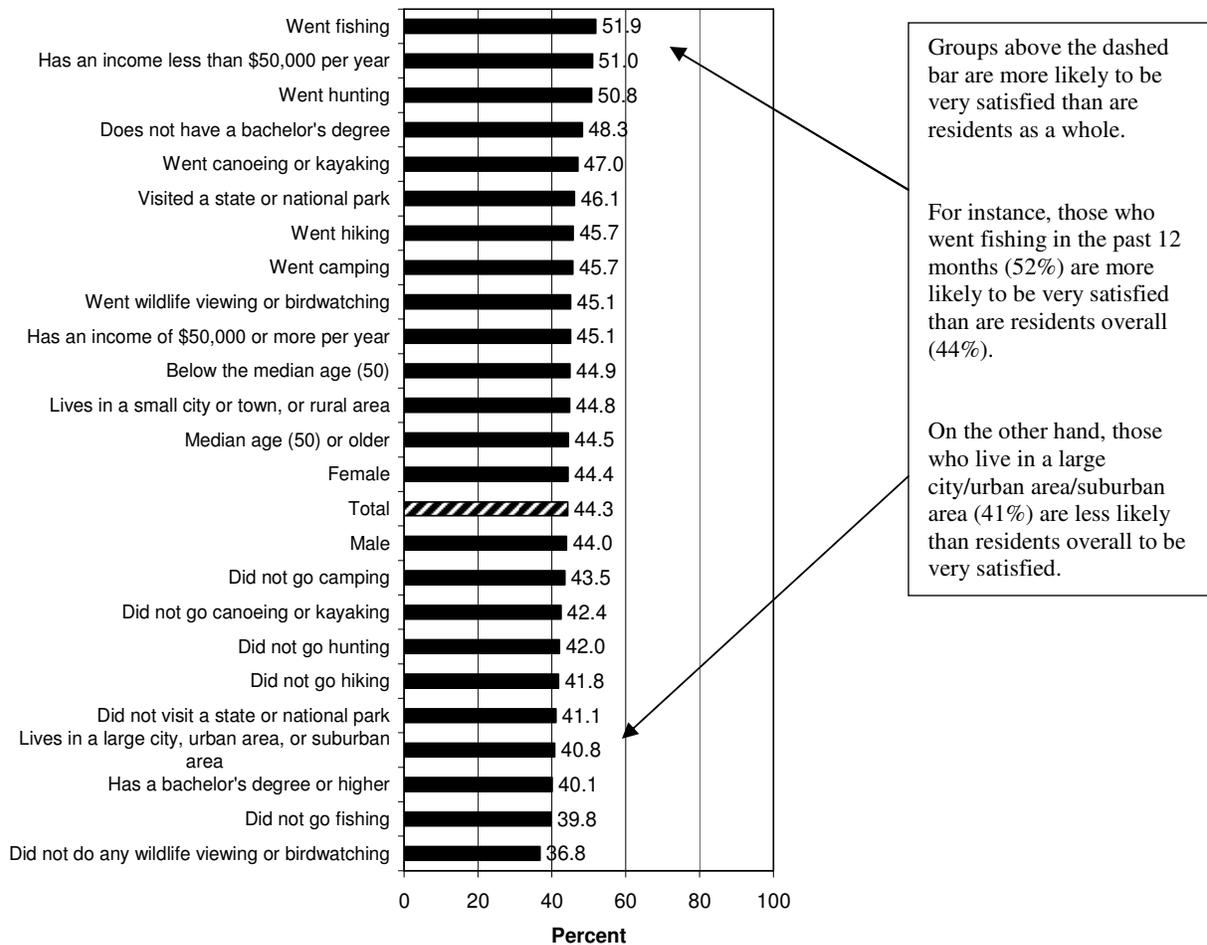
- Open-ended questions are those in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Single or multiple response questions: Some questions allow only a single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

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

HOW TO INTERPRET THE DEMOGRAPHIC CORRELATION GRAPHS

Graphs are included for select questions that show how various demographic characteristics correlate with various opinions on fish and wildlife management. Each graph shows an overall result, and then it shows the result for that question among various demographic groups. Those groups at the top of the graph have a greater percentage giving a specific response, compared to respondents overall; those groups at the bottom of the graph have a lower percentage giving a specific response, compared to respondents overall. To better differentiate between the demographic groups, percentages are shown on these graphs to one decimal point. However, throughout the narrative and on general graphs, results are presented in whole percentages. An example of a demographic correlation graph is provided below:

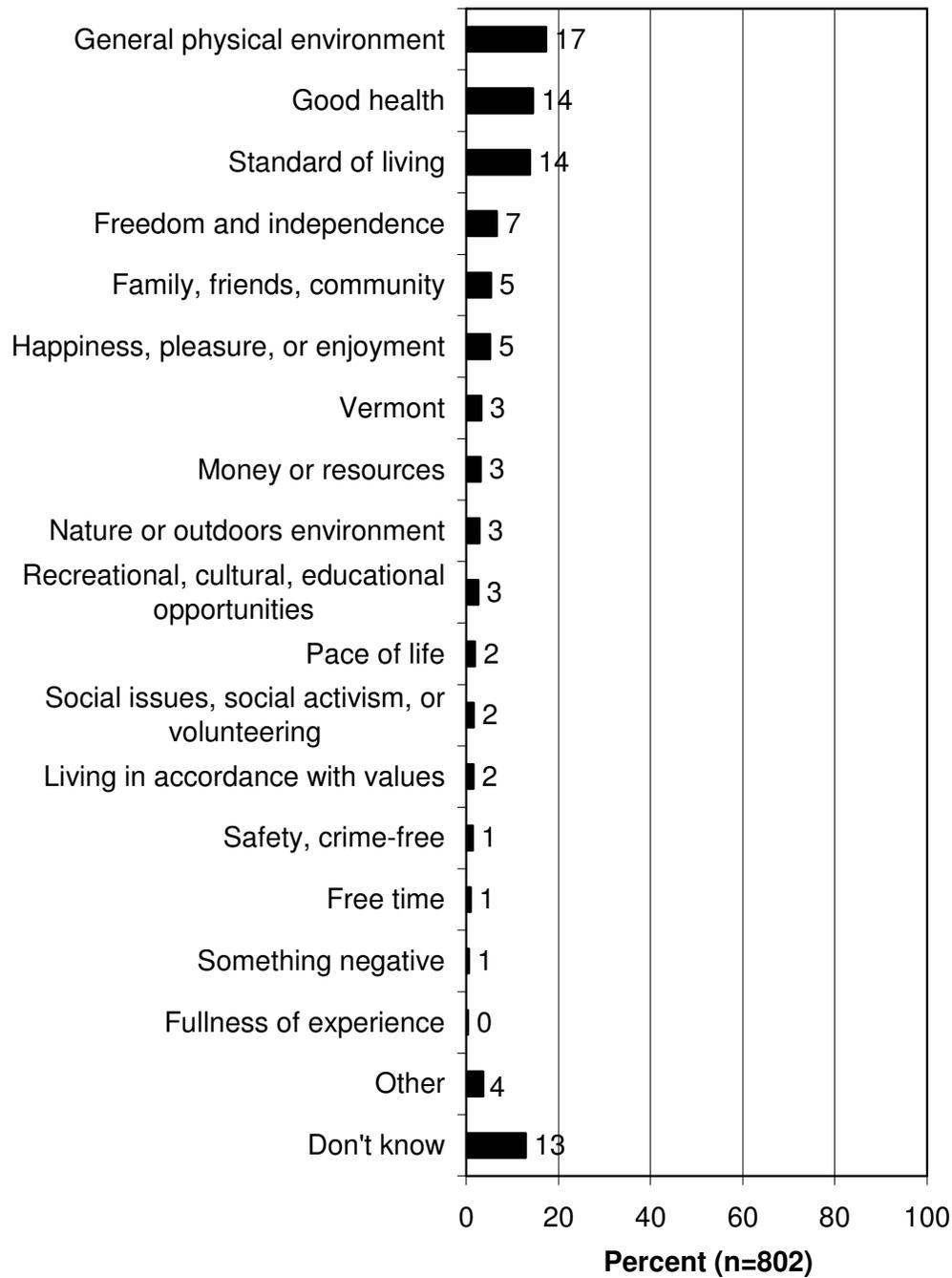
Q59. Percent of residents who are very satisfied with the Vermont Fish and Wildlife Department as a government agency in Vermont.



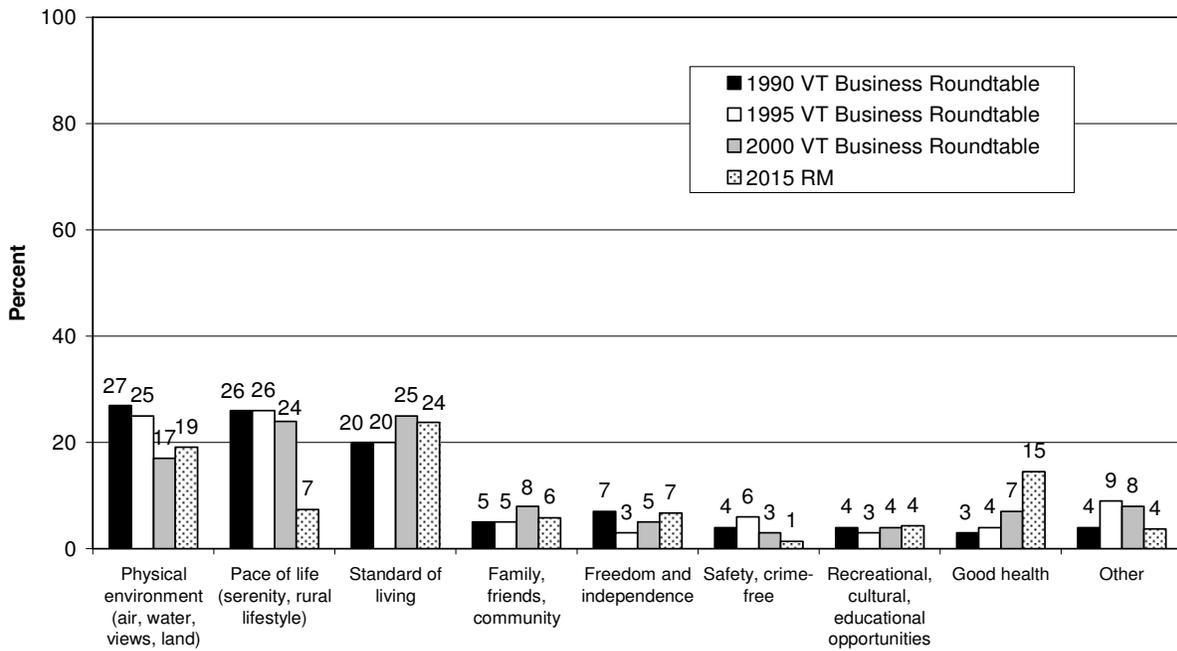
PROBLEMS THAT VERMONT FACES

- The initial question in the survey was not about problems, per se, but led into the discussion of problems. The question simply asked, in an open-ended format (where no answer set is presented, instead allowing any response that comes to mind), what first comes to mind when one hears the expression, “quality of life.” Note that only a single response was allowed.
 - The most common responses among residents relate to the general physical environment (17% give a response related to this), good health (14%), and standard of living (14%). Other responses run the gamut, as shown in the graph.
 - The trend graph shows comparisons to studies conducted in 1990, 1995, and 2000. This survey showed a considerably lower percentage of residents who stated “pace of life,” compared to the earlier surveys, whereas substantially more residents stated “good health.”
 - The most common responses among hunters and anglers include standard of living (19% of hunters; 8% of anglers) and general physical environment (12% and 11%, respectively).
- As indicated, the purpose of the question above was to lead in to the next question that asked about the most important issues/factors that negatively affect the quality of life. This also was open-ended, but it allowed multiple issues/factors to be named.
 - Among residents, the top responses relate to pollution/environmental degradation (21%), financial issues (17%), and poor health/age (14%).
 - Among hunters and anglers, the same responses that residents give are prominent: pollution/environmental degradation (11% of hunters, 15% of anglers), financial issues (17% and 18%), and poor health/age (14% and 12%).

**Q11. What first comes to mind when you hear the expression "quality of life"?
(Vermont residents.)**



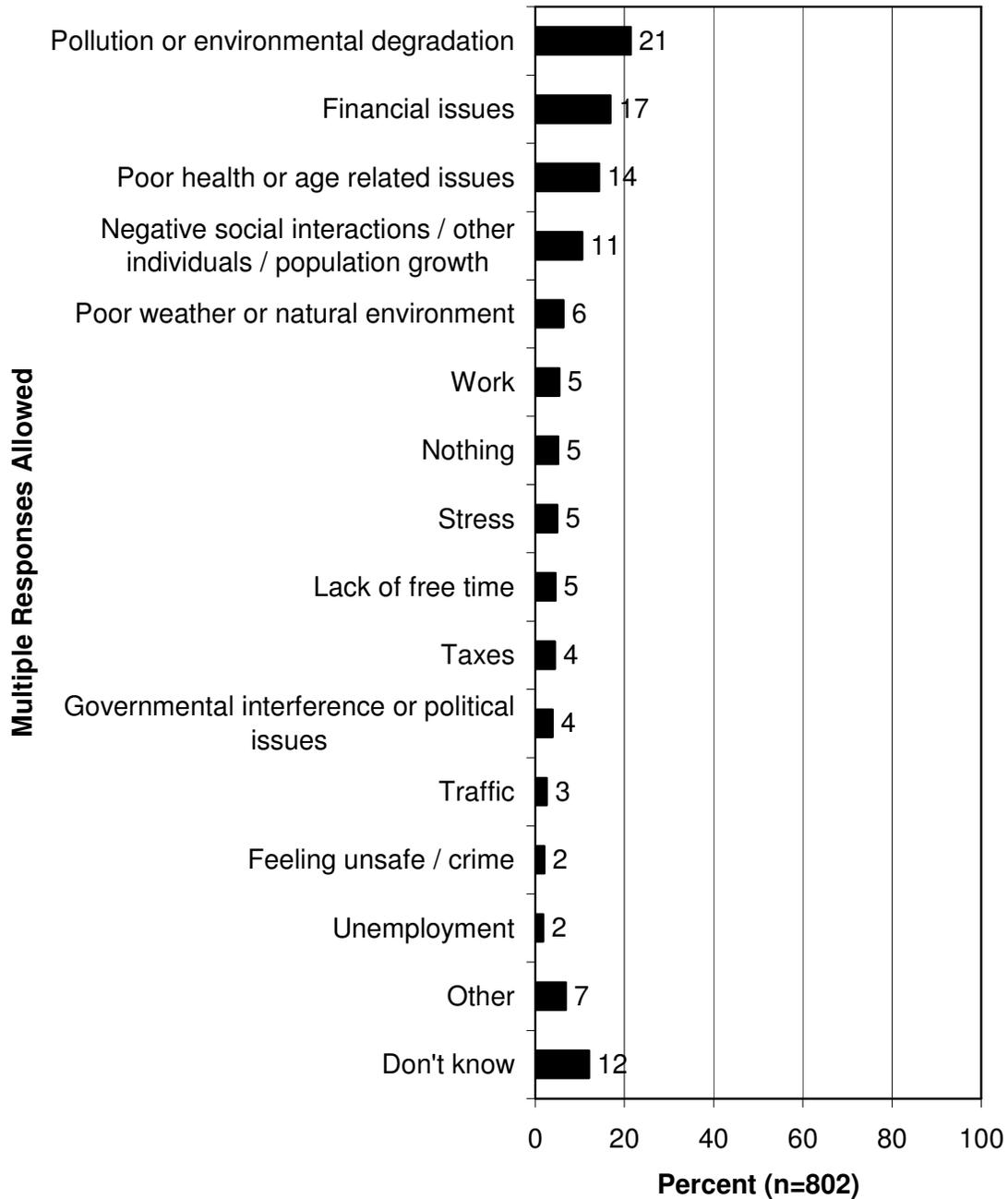
Q11. What first comes to mind when you hear the expression "quality of life"?



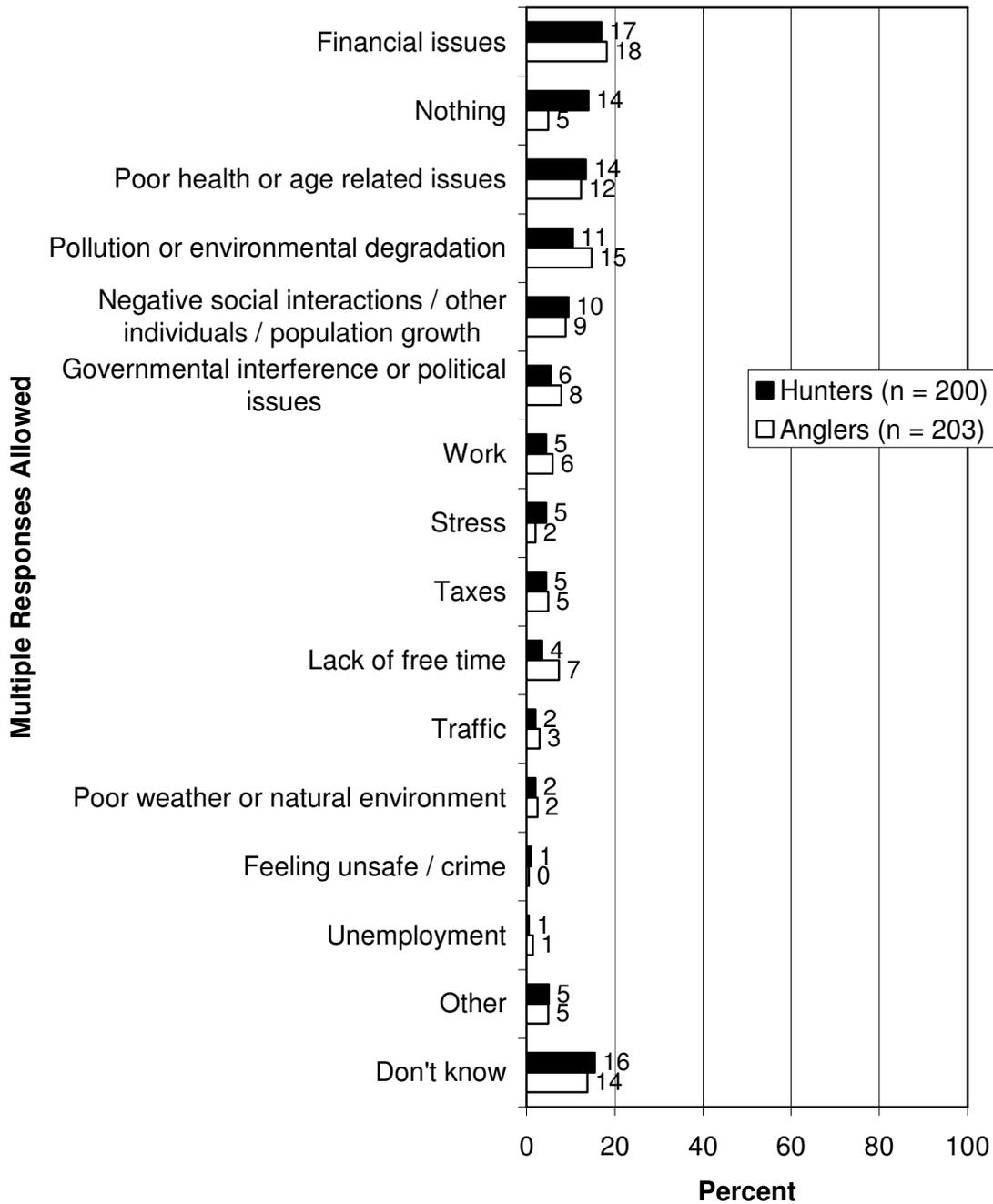
**Q11. What first comes to mind when you hear the expression "quality of life"?
(Hunters and anglers.)**



**Q13. What are the most important issues or factors that negatively affect your "quality of life"?
(Vermont residents.)**

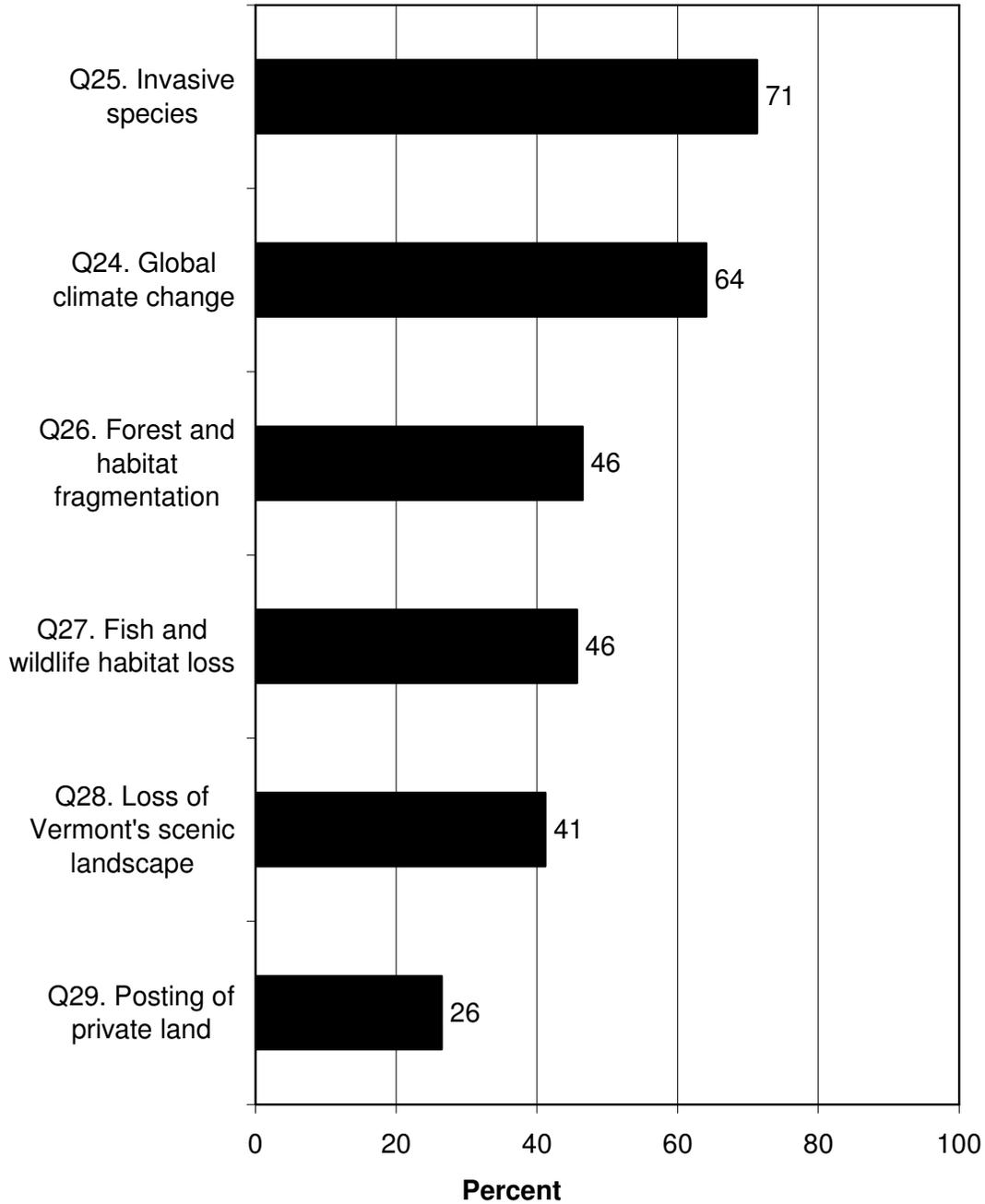


**Q13. What are the most important issues or factors that negatively affect your “quality of life”?
(Hunters and anglers.)**

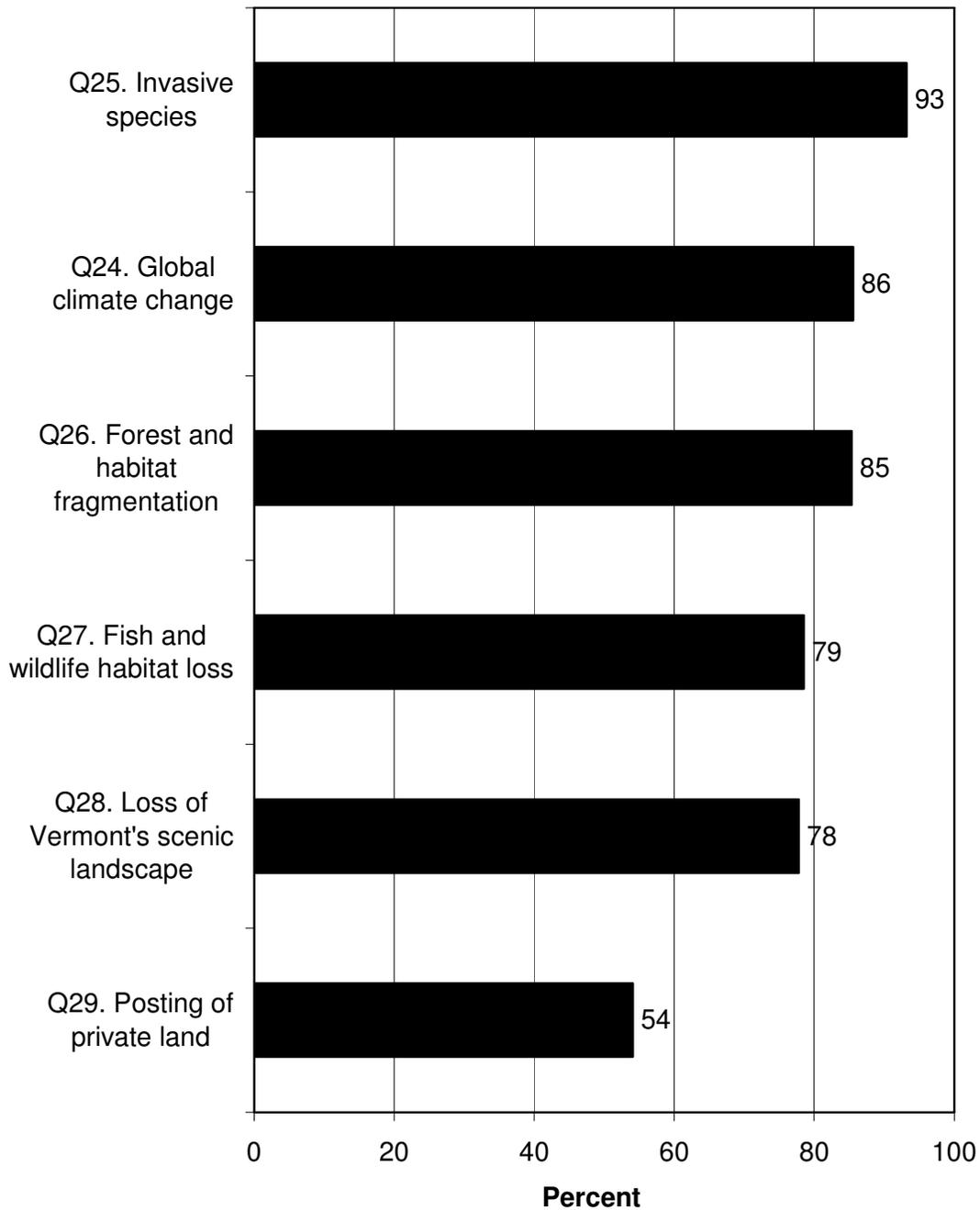


- The survey presented six potential problems to respondents. For each potential problem, they were asked to rate it as a big problem, a small problem, or no problem.
 - Among residents, the problem of *invasive species* has the most saying it is a big problem (71% say it is a big problem), followed by *global climate change* (64% say it is a big problem).
 - A similar study in 1992 showed only 57% of respondents stating that *invasive species* is a big problem; however, note that the 1992 study referred to “nuisance aquatic plants” rather than “invasive species.” Subsequent trend graphs show little marked change from the 1992 survey responses regarding *fish and wildlife habitat loss*, *loss of Vermont’s scenic landscape*, and *posting of private land*. Note that the trend graph for *fish and habitat loss* is compared to two similar questions from the 1992 survey: *destruction of wildlife habitat* and *destruction of habitat for fish*.
 - Among hunters, two problems are at the top: *invasive species* (70% say it is a big problem) and the *posting of private land* (55%). Among anglers, the top problems are *invasive species* (68%) and *forest/habitat fragmentation* (48%).
 - For this series, three graphs are shown for each group: the percentage saying each is a big problem, the percentage saying each is a big or small problem, and the percentage saying each is no problem.

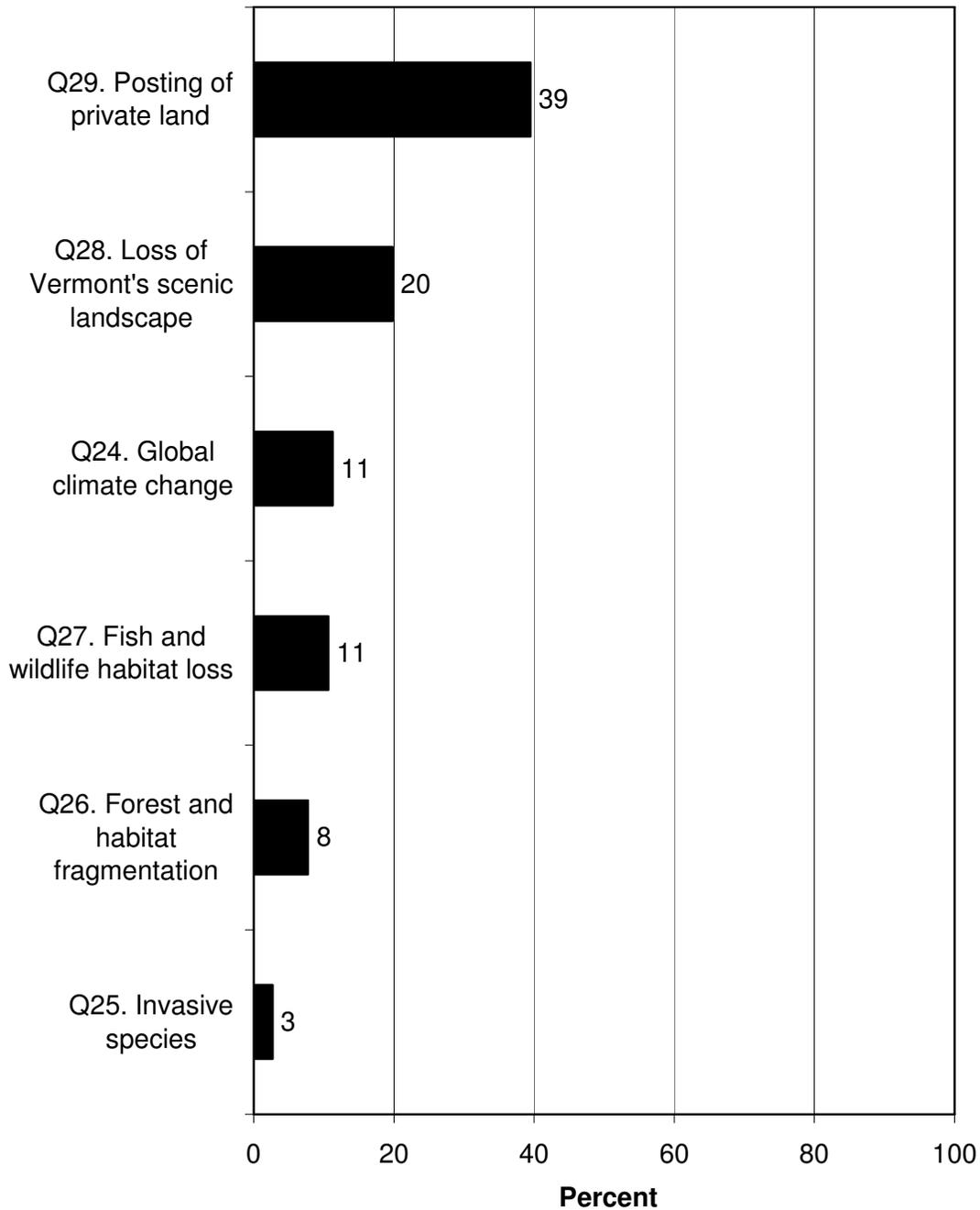
Q24-29: Percent of residents who believe each of the following is a big problem:



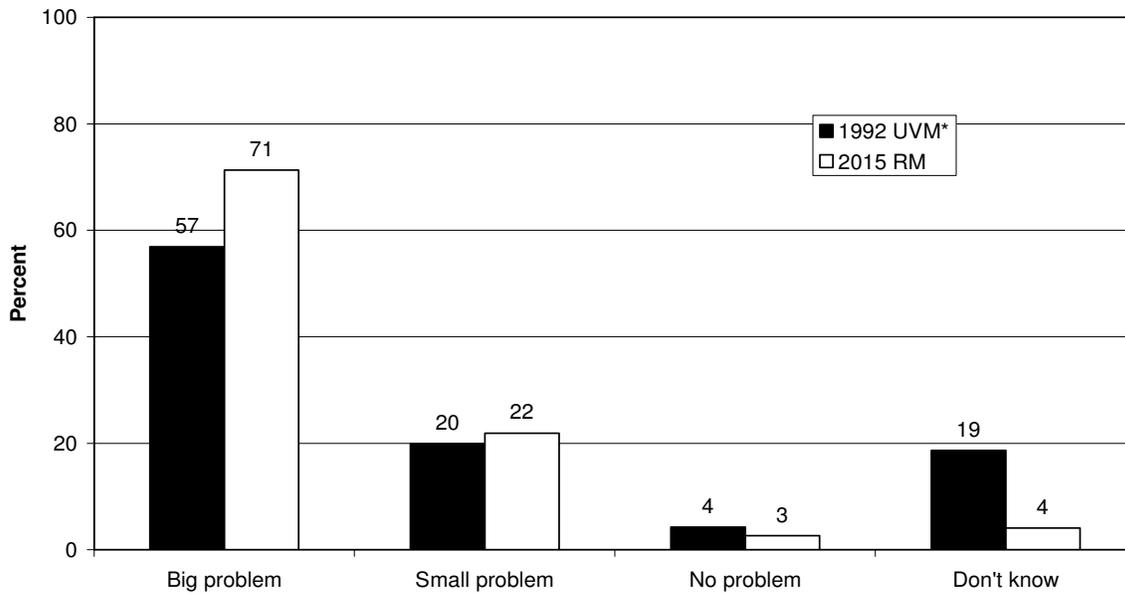
Q24-29: Percent of residents who believe each of the following is a big problem or small problem:



Q24-29: Percent of residents who believe each of the following is no problem:

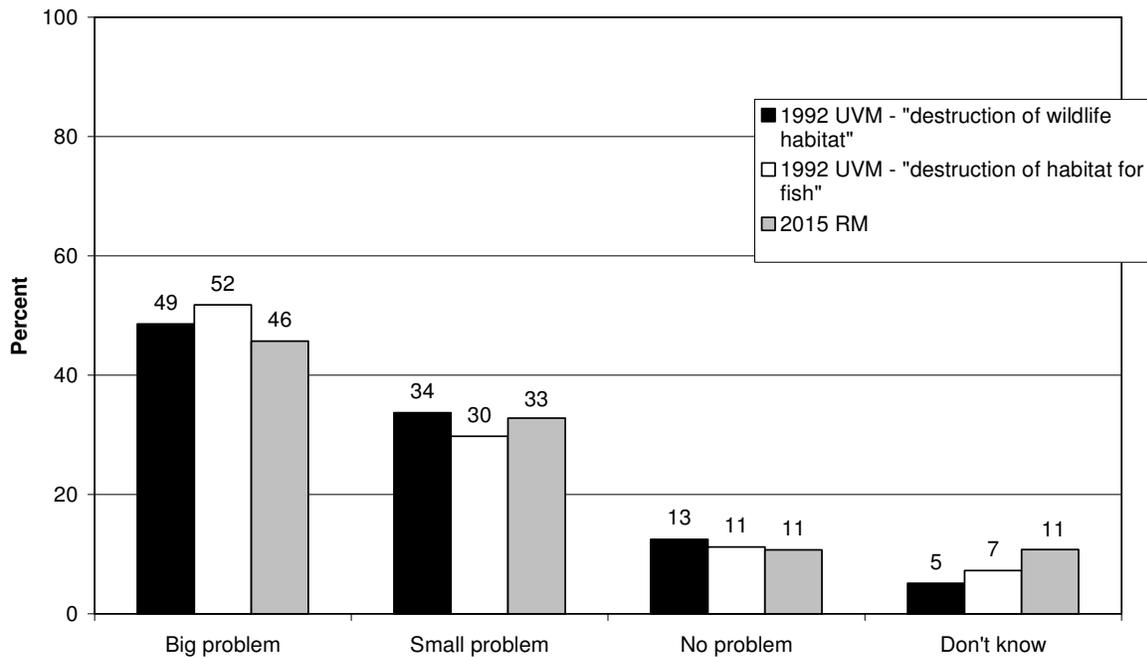


Q25. Percent of residents who think invasive species are a big problem, small problem, or no problem at all in Vermont.

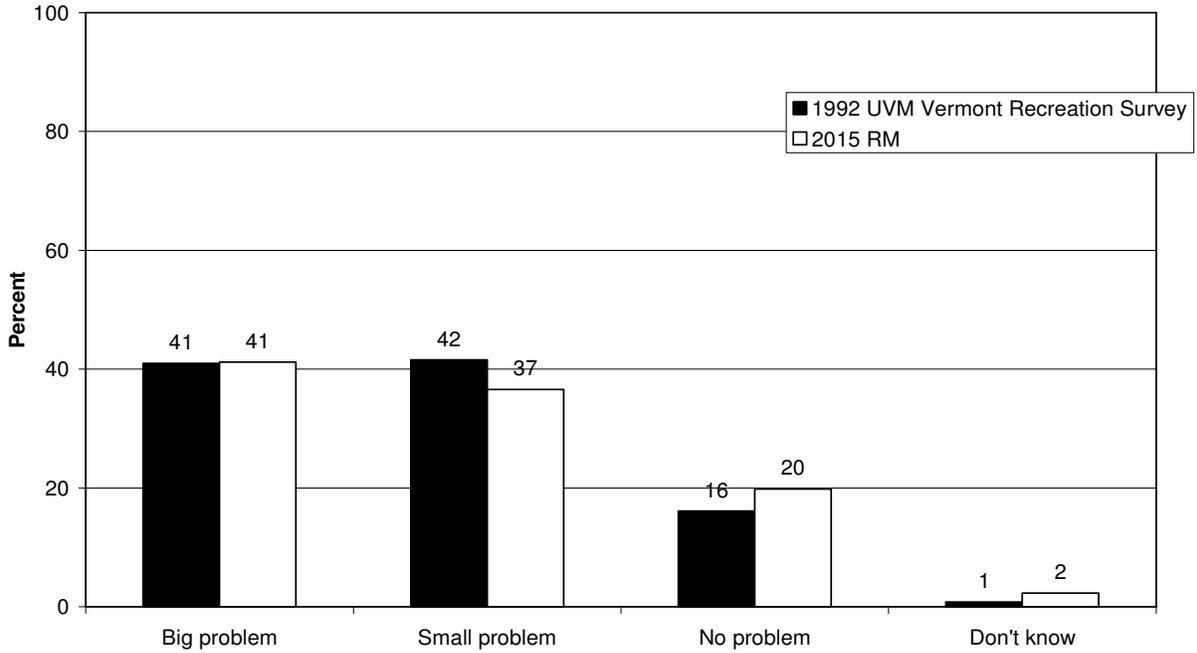


*Question asked about "nuisance aquatic plants" in the 1992 survey.

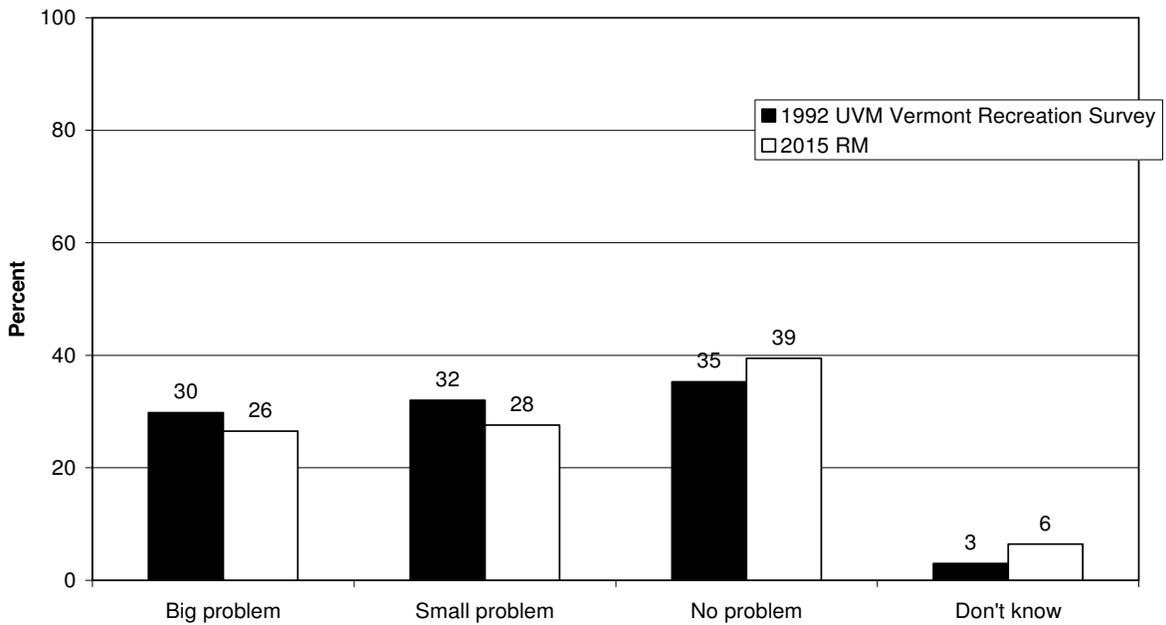
Q27. Percent of residents who think fish and wildlife habitat loss is a big problem, small problem, or no problem at all in Vermont.



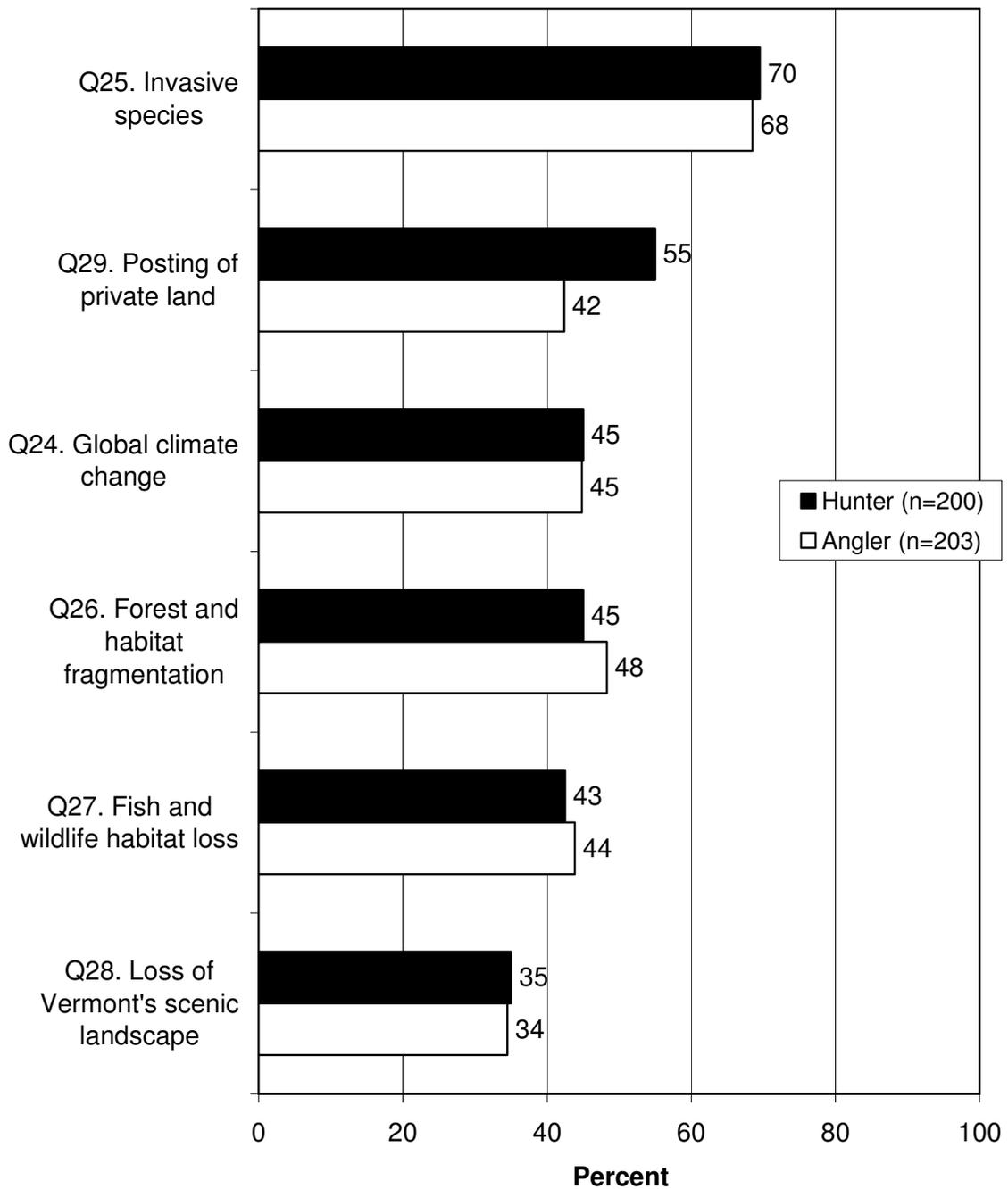
Q28. Percent of residents who think loss of Vermont's scenic landscape is a big problem, small problem, or no problem at all in Vermont.



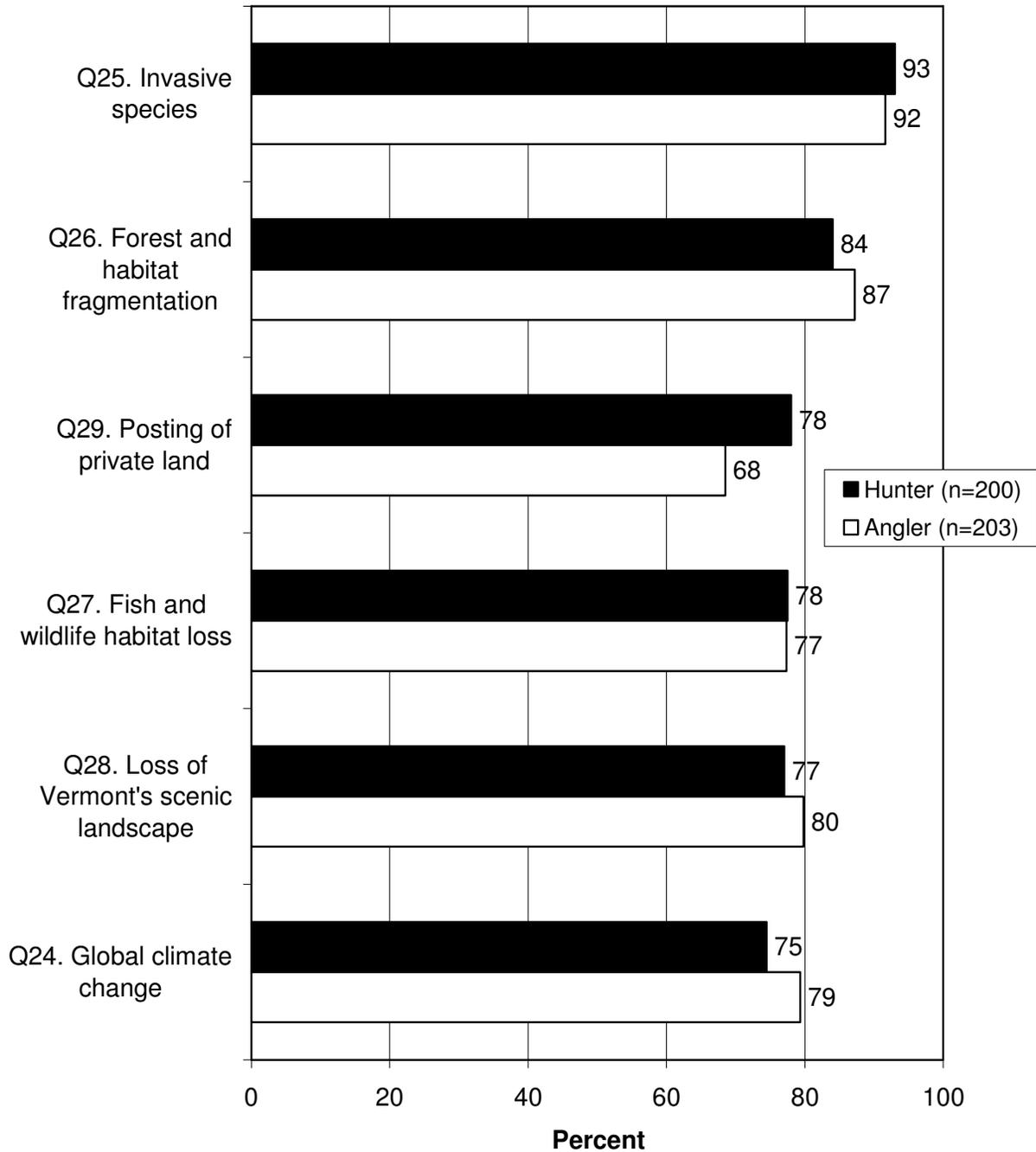
Q29. Percent of residents who think posting of private land is a big problem, small problem, or no problem at all in Vermont.



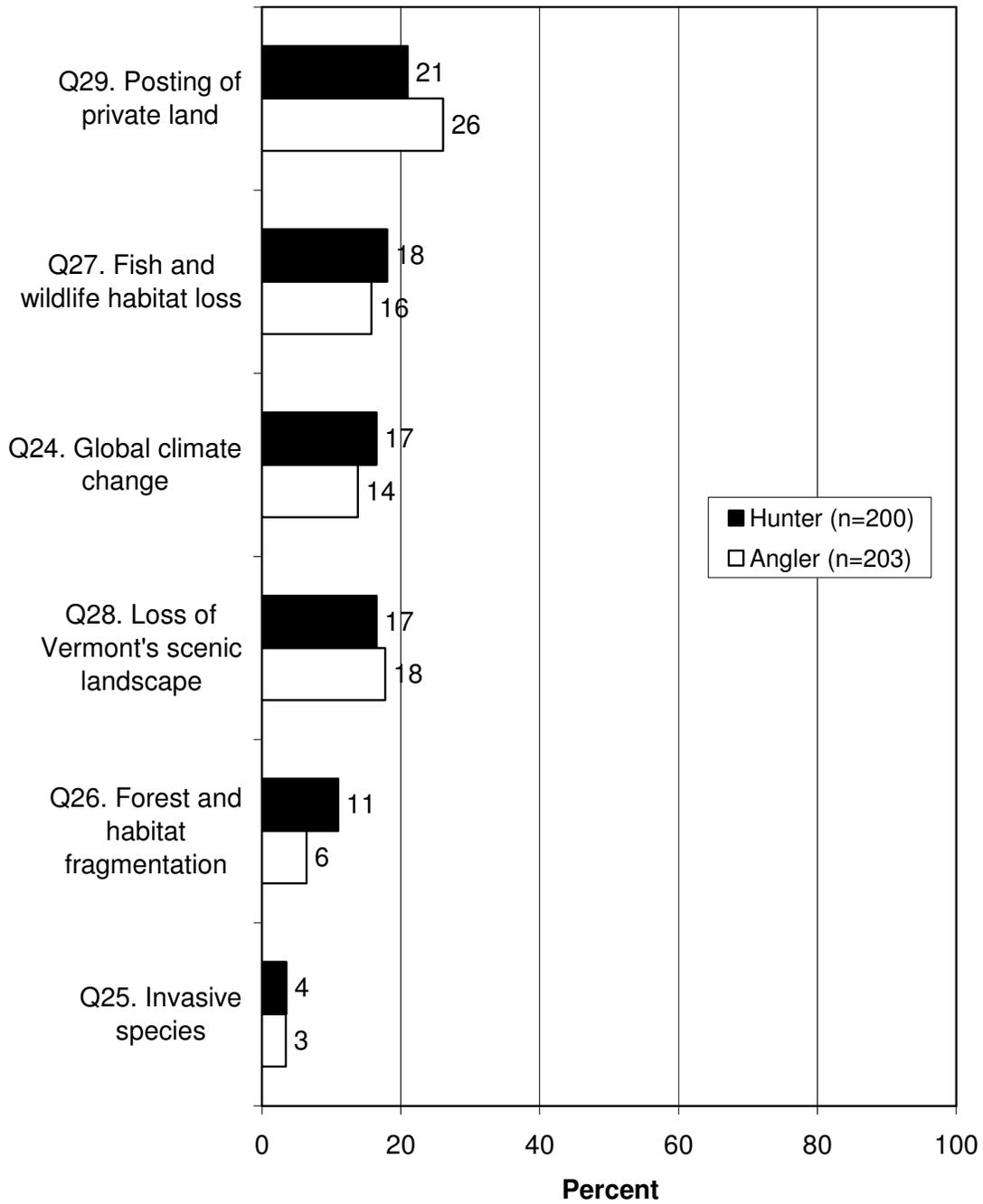
Q24-29: Percent who believe each of the following is a big problem:



Q24-29: Percent who believe each of the following is a big problem or small problem:



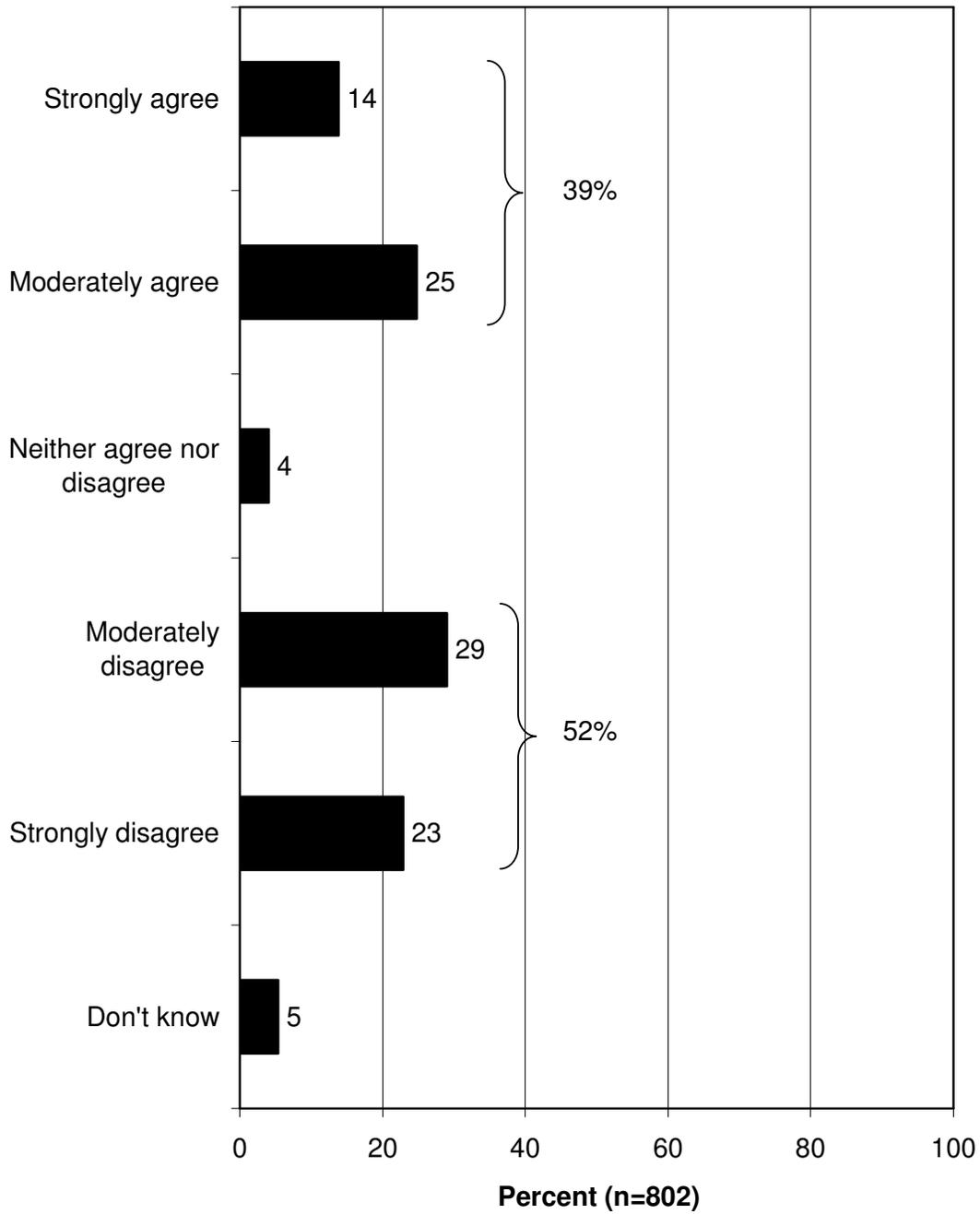
Q24-29: Percent who believe each of the following is no problem:



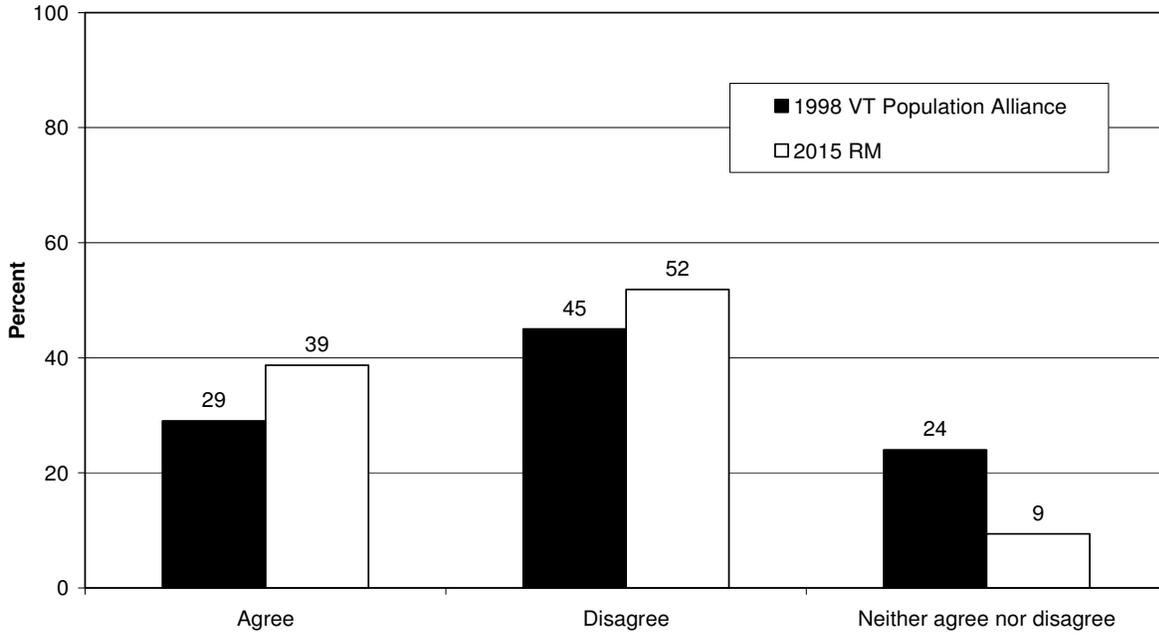
- The survey directly asked about another potential problem: suburban sprawl. The statement was made that “suburban sprawl is *not* yet a problem in Vermont,” and respondents were asked whether they agree or disagree with the statement.
 - A slight majority of residents think this is a problem, with 52% disagreeing with the statement. On the other hand, 39% agree that it is *not* yet a problem.
 - A similar survey in 1998 showed 45% of respondents disagreeing that suburban sprawl is *not* yet a problem.
 - Among hunters, 48% disagree (i.e., think suburban sprawl is a problem), while 44% agree. Among anglers, 49% disagree, while 44% agree.

- The survey directly asked about another potential problem, somewhat related to the above problem: forest fragmentation and loss. Again, respondents were asked if they agree or disagree that “forest fragmentation and loss is a problem in Vermont.”
 - The large majority of residents agree with this statement (i.e., think it is a problem): 61% agree, while 18% disagree.
 - Hunters and anglers are more likely than the general population to agree. Among hunters, 68% agree, while 23% disagree. Among anglers, 67% agree, and 21% disagree.

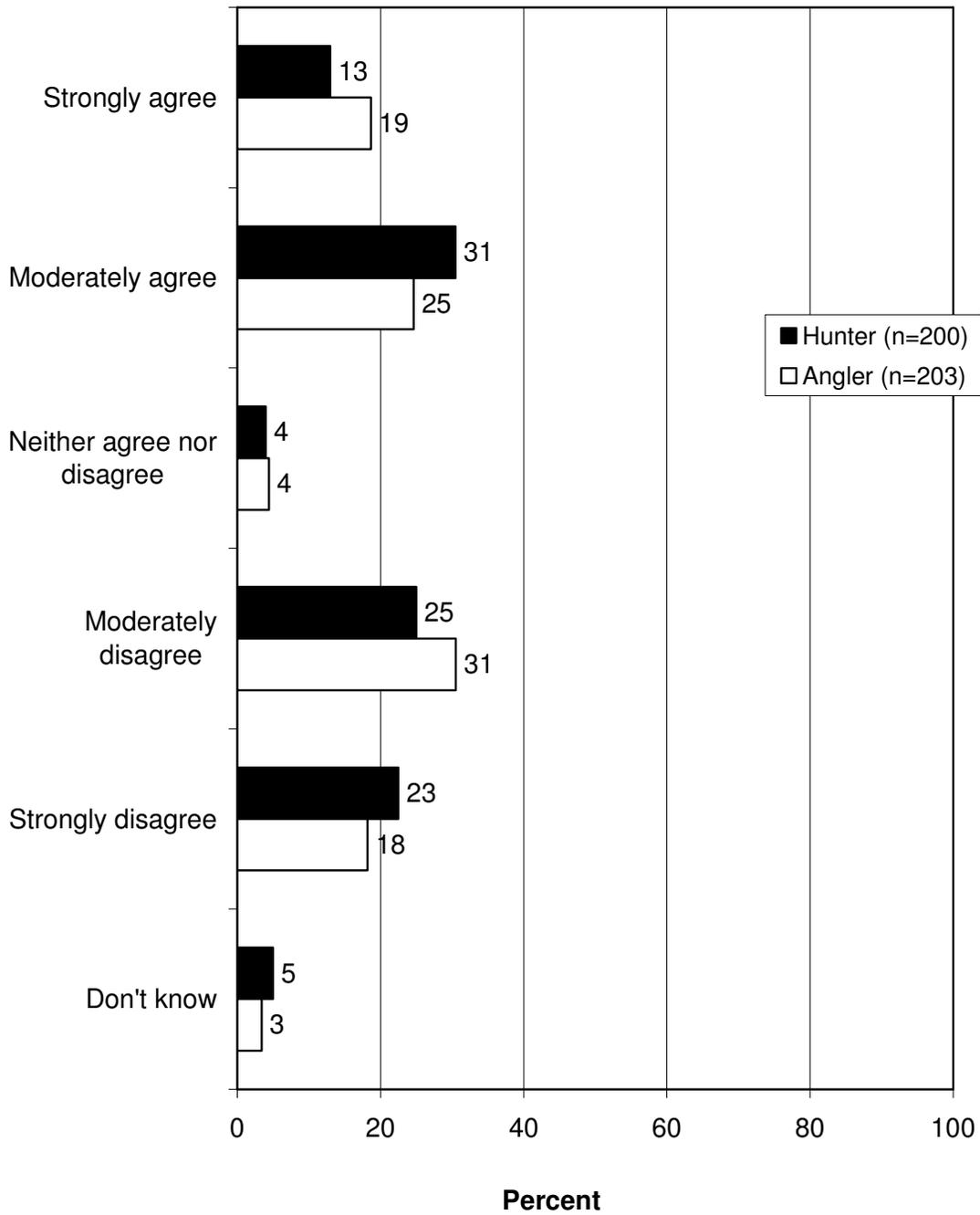
**Q33. Suburban sprawl is not yet a problem in Vermont.
(Vermont residents.)**



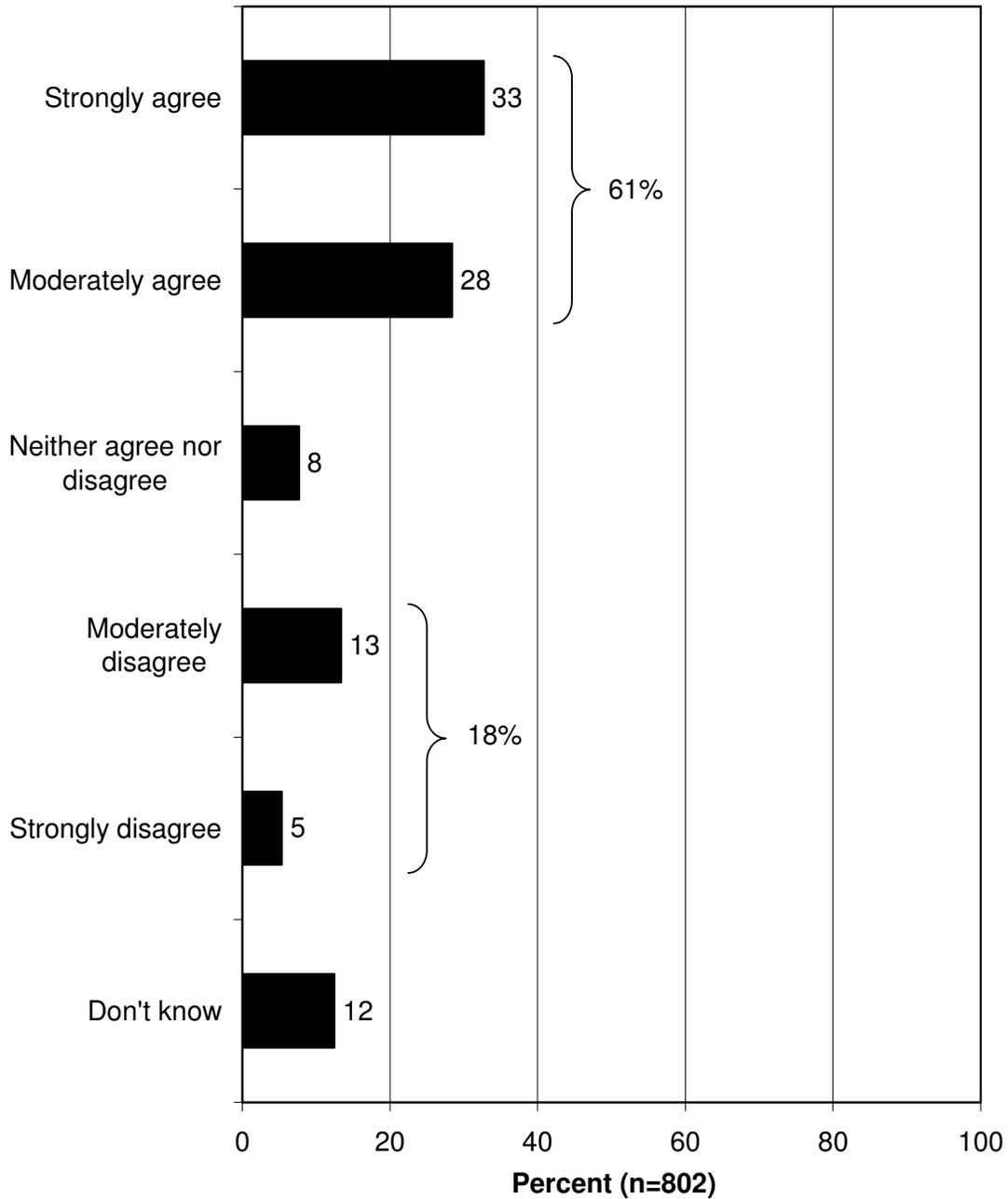
Q33. Percent of residents who believe suburban sprawl is not yet a problem in Vermont.



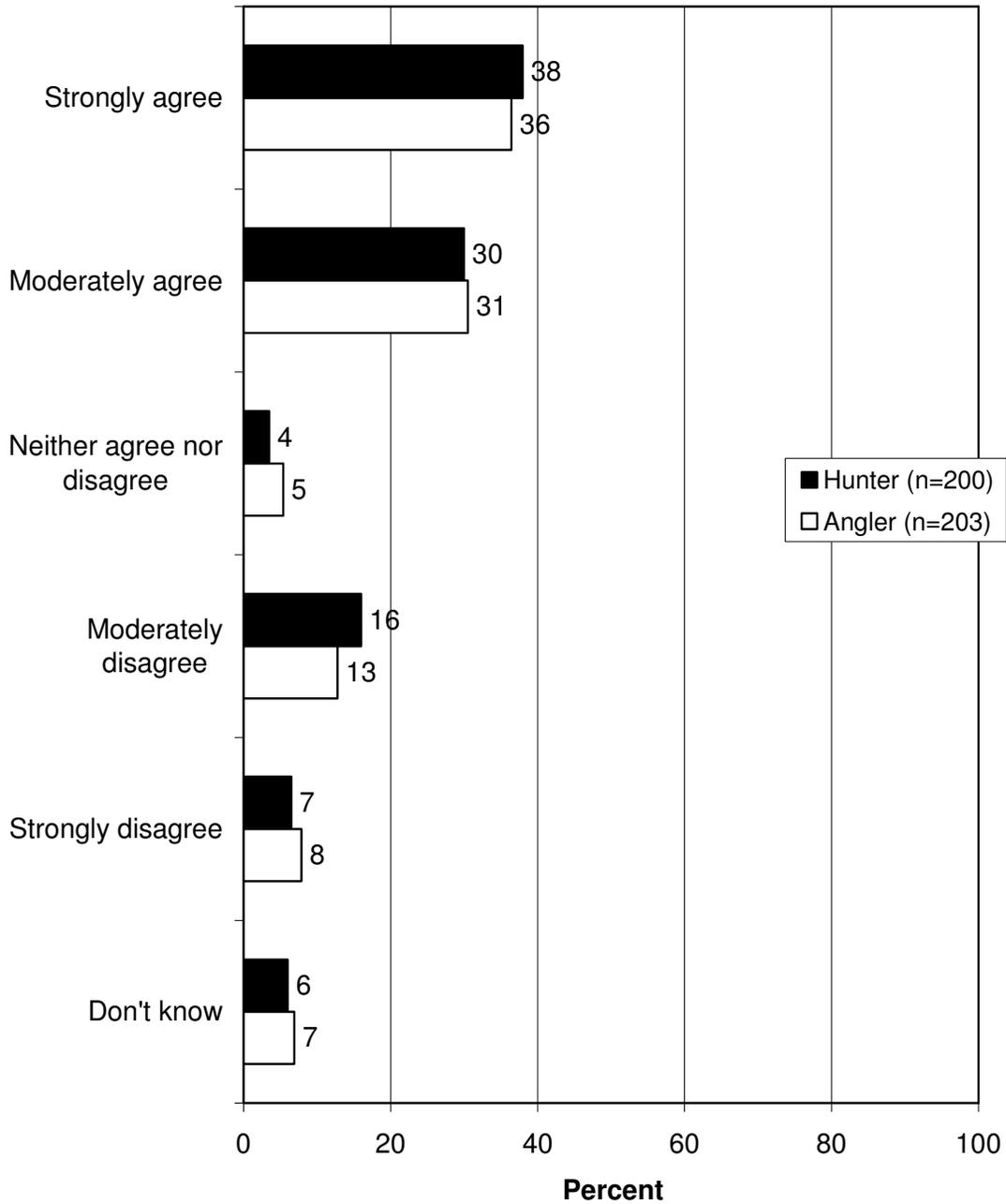
**Q33. Suburban sprawl is not yet a problem in Vermont.
(Hunters and anglers.)**



**Q38. Forest fragmentation and loss is a problem in Vermont.
(Vermont residents.)**



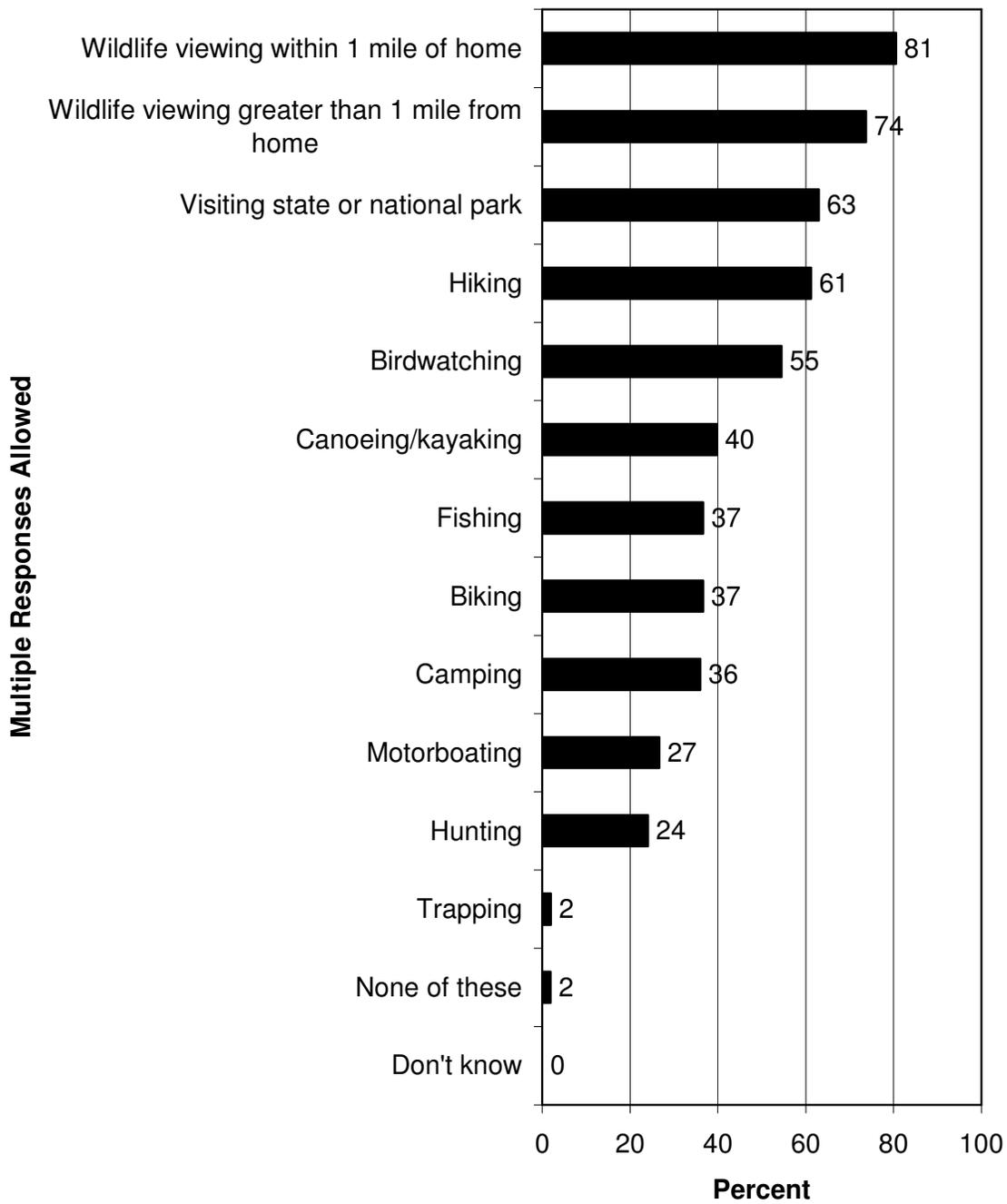
Q38. Forest fragmentation and loss is a problem in Vermont. (Hunters and anglers.)



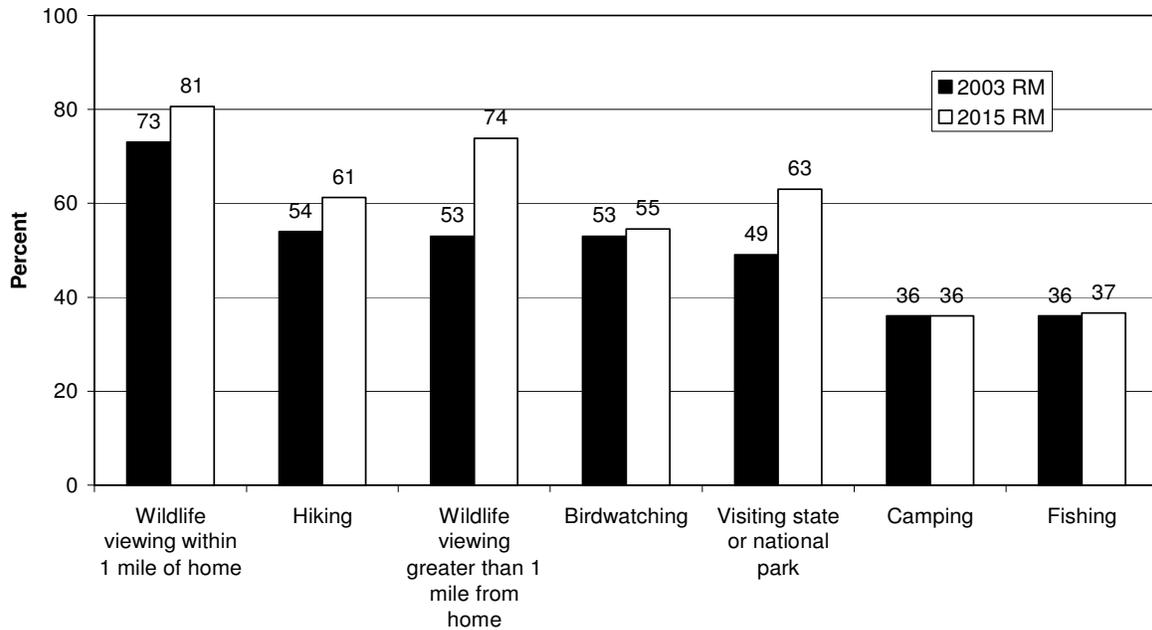
PARTICIPATION IN WILDLIFE-ASSOCIATED RECREATION

- The survey asked about participation in a dozen wildlife-associated activities.
 - Very large majorities of residents have participated in the past 12 months in wildlife viewing (81% did so within 1 mile of home; 74% did so greater than 1 mile from home). Large majorities also visited a state or national park (63%) or went hiking (61%). A majority participated in birdwatching (55%).
 - The trend graph shows substantial increases in participation, since 2003, in wildlife viewing greater than 1 mile from home (74% in 2015 compared to 53% in 2003), visiting state or national parks (63% in 2015 versus 49% in 2003), and canoeing/kayaking (40% in 2015 versus 27% in 2003).
 - Among hunters, top activities are hunting (86%—note that the sample is from licenses, so the hunter need not have hunted in the past year to be in the sample), viewing wildlife within 1 mile of home (86%), viewing wildlife greater than 1 mile from home (79%), fishing (79%), and hiking (51%).
 - Among anglers, top activities are fishing (85%), wildlife viewing within 1 mile of home (78%), wildlife viewing greater than 1 mile from home (76%), hiking (60%), hunting (52%), and camping (50%).
- In follow-up to the above question, the survey asked about the importance that *people have the opportunity in Vermont to participate in wildlife-related outdoor recreation*.
 - The large majority of residents (91%) say it is *very* important, and another 8% say it is *somewhat* important, which is nearly all the respondents.
 - This is an increase compared to a similar study in 2000, in which 80% of respondents stated it is *very* important.
 - This is even more important for hunters and anglers: 96% (hunters) and 95% (anglers) say it is *very* important, and nearly all say it is *very* or *somewhat* important.

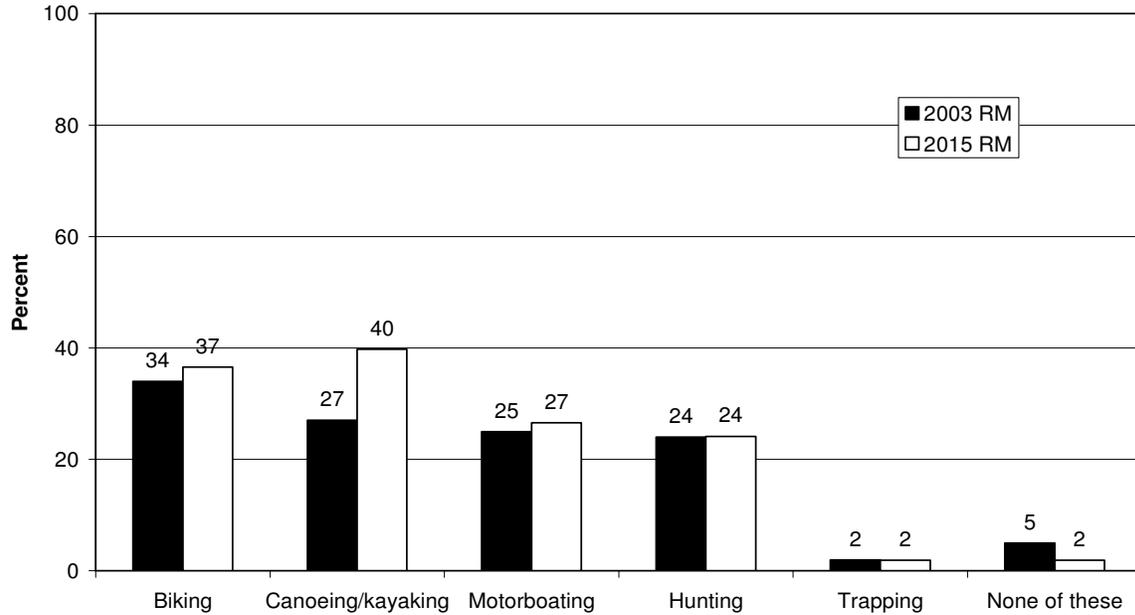
**Q16. In the past 12 months, have you participated in the following activities?
(Vermont residents.)**



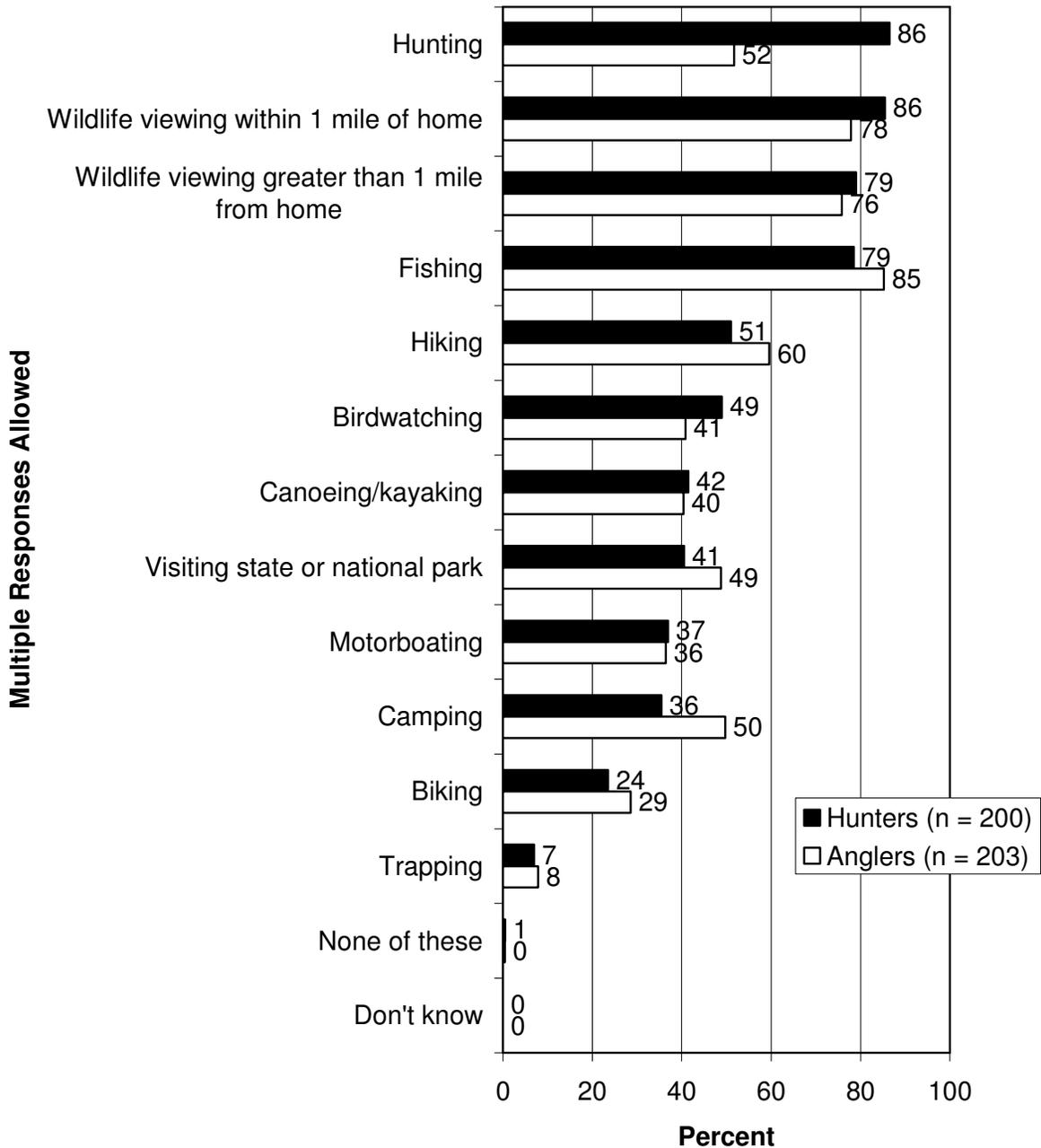
**Q16. In the past 12 months, have you participated in the following activities?
(Vermont residents.) (Part 1 of 2)**



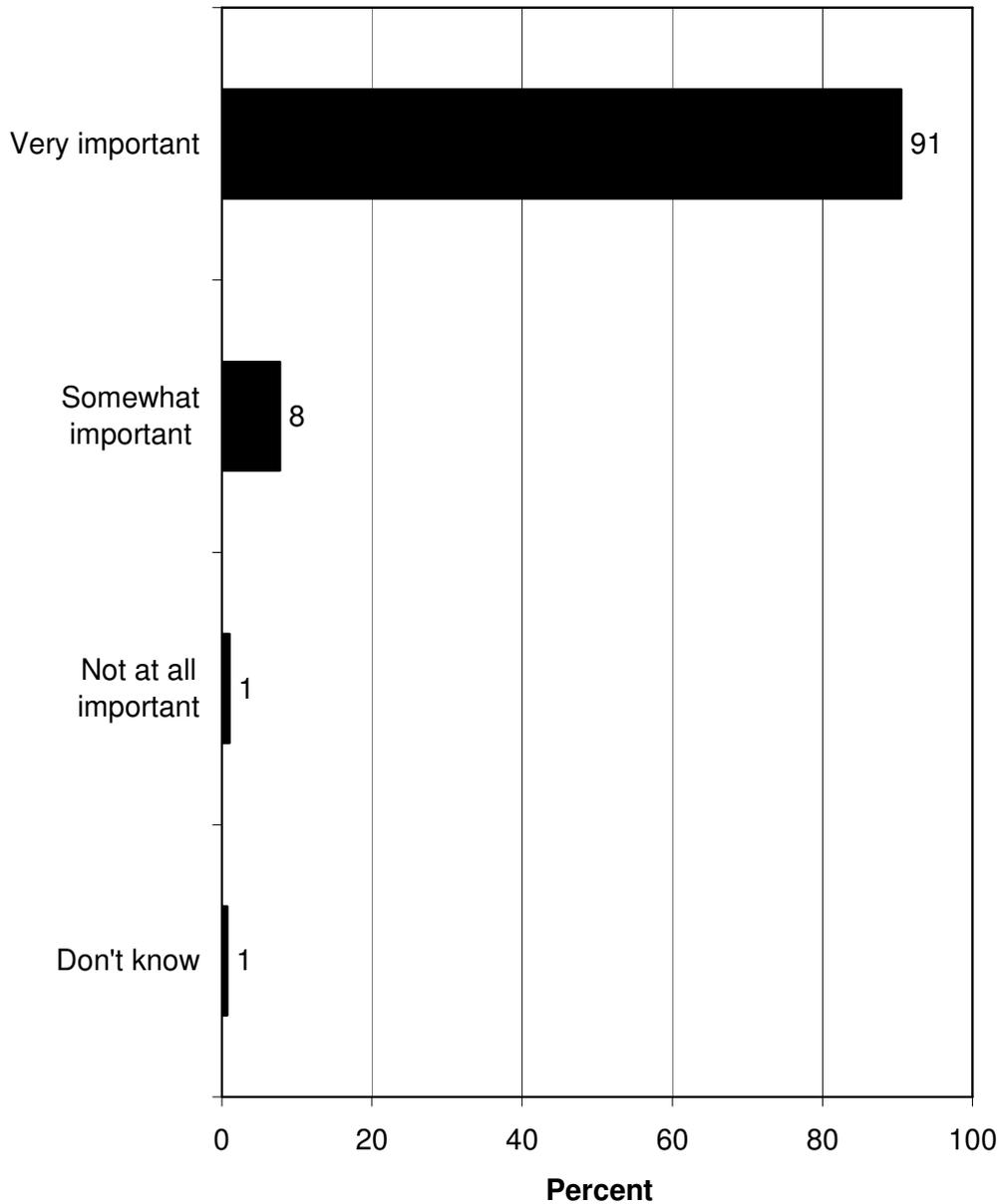
**Q16. In the past 12 months, have you participated in the following activities?
(Vermont residents.) (Part 2 of 2)**



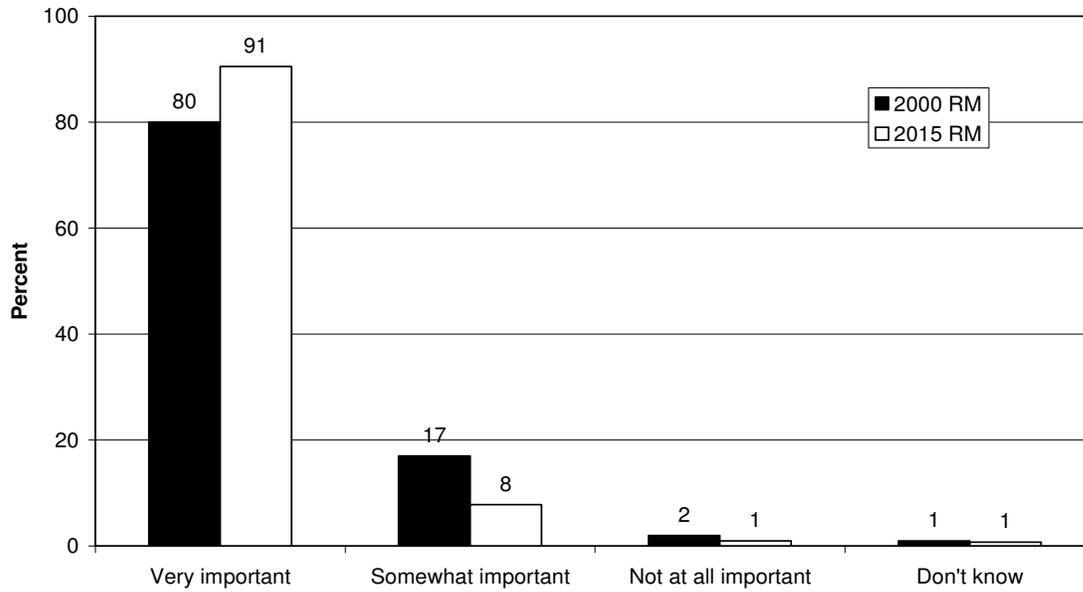
Q16. In the past 12 months, have you participated in the following activities? (Hunters and anglers.)



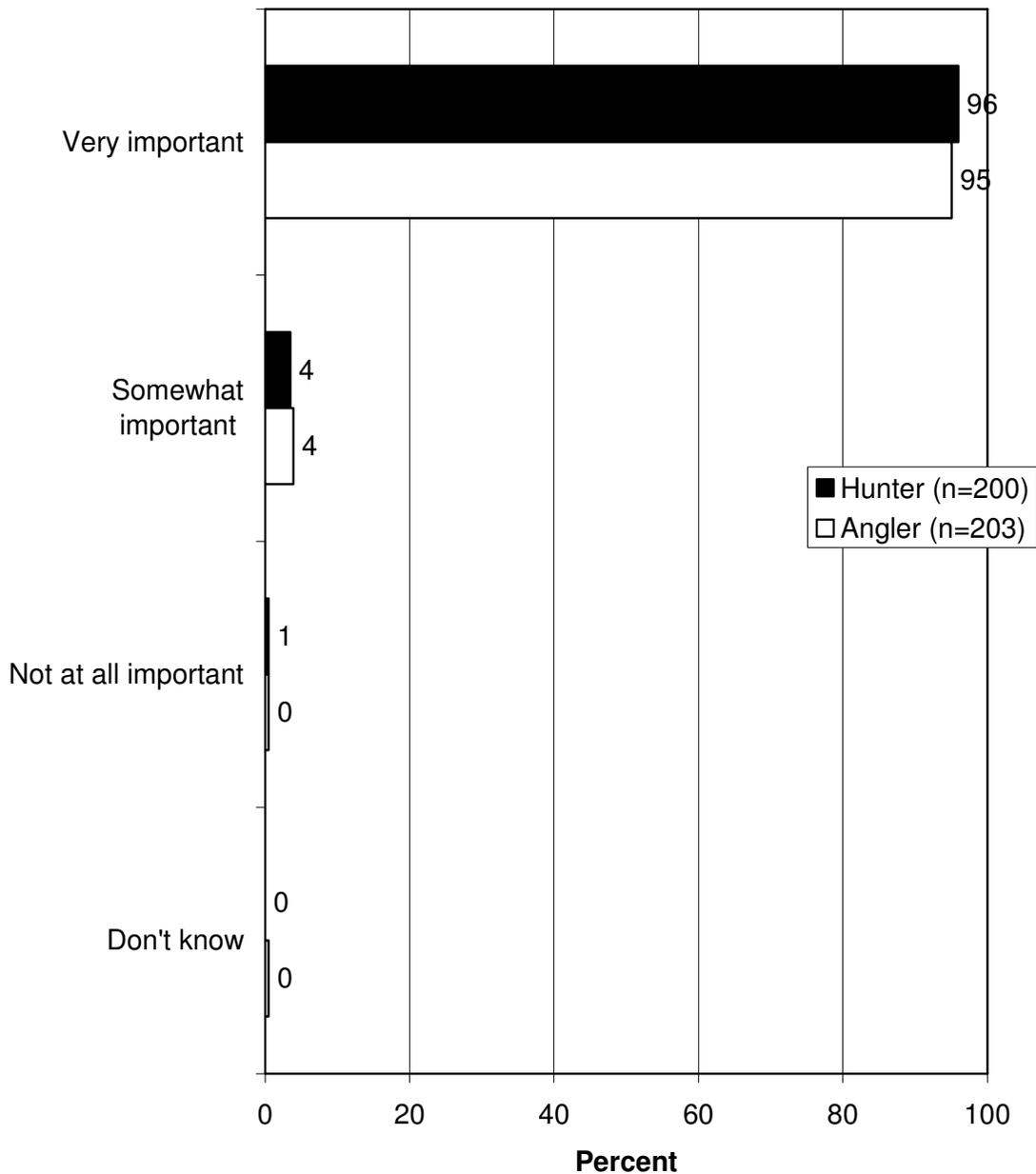
**Q17. How important is it to you that people have the opportunity in Vermont to participate in wildlife-related outdoor recreation, such as hunting, fishing, and wildlife viewing?
(Vermont residents.)**



**Q17. How important is it to you that people have the opportunity in Vermont to participate in wildlife-related outdoor recreation, such as hunting, fishing, and wildlife viewing?
(Vermont residents.)**



Q17. How important is it to you that people have the opportunity in Vermont to participate in wildlife-related outdoor recreation, such as hunting, fishing, and wildlife viewing? (Hunters and anglers.)



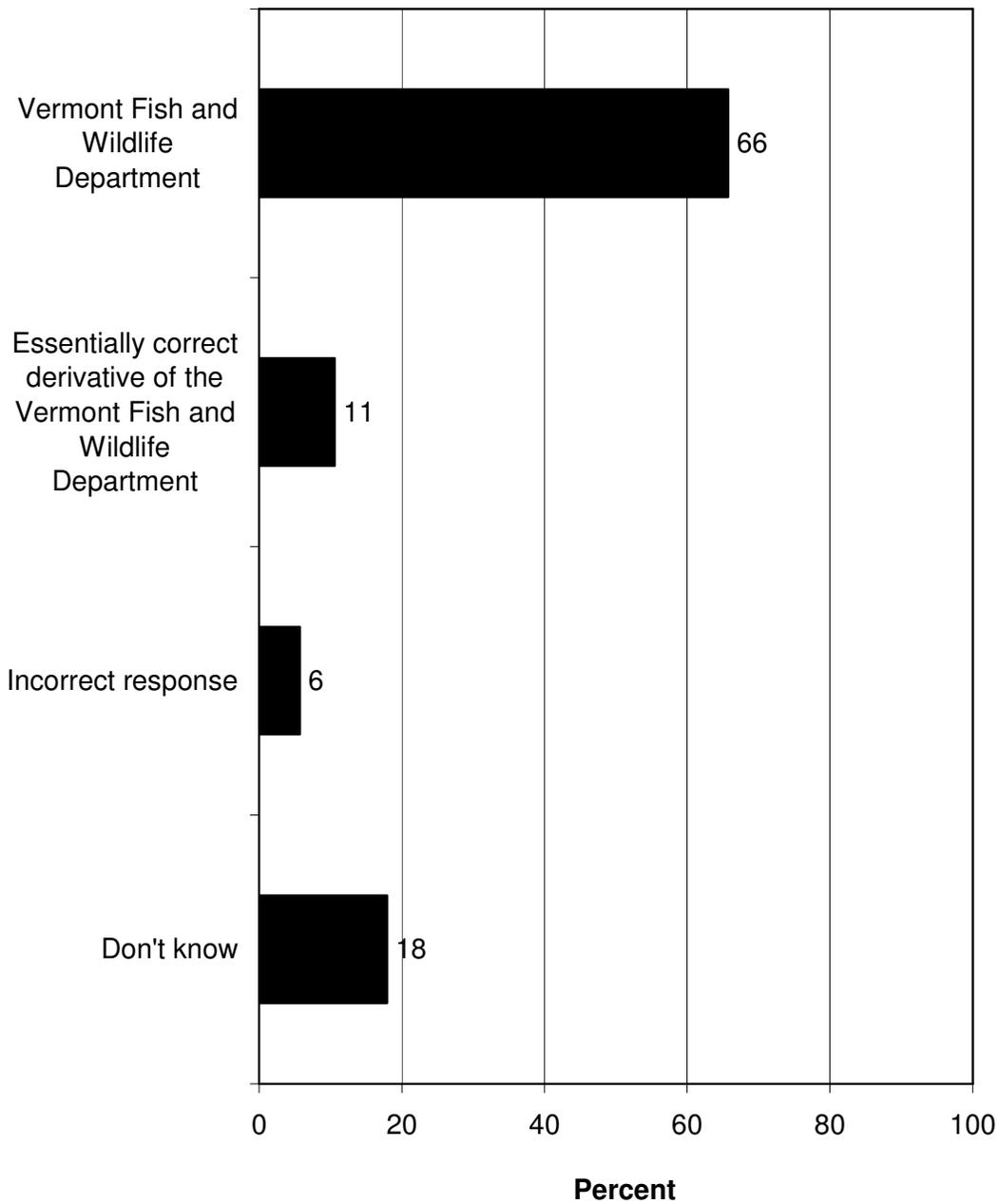
KNOWLEDGE AND OPINION OF THE VERMONT FISH AND WILDLIFE DEPARTMENT

- Knowledge levels of the Department are fairly high.
 - Among residents, 66% can correctly name the Vermont Fish and Wildlife Department when asked to name the government agency most responsible for managing and protecting all fish and wildlife in Vermont. Another 11% give an essentially correct derivative of that name (such as Fish and Wildlife Division, Fish and Game Department, and so forth). However, 24% do not know or give an incorrect response. (Note that the name of the agency was said in the introduction of the survey, so the most pertinent finding is that 24% still did not know.)
 - Hunters and anglers are even more knowledgeable: 73% of hunters and 68% of anglers name the Vermont Fish and Wildlife Department, and another 13% of hunters and 16% of anglers give an essentially correct derivative of that name. Nonetheless, don't know/incorrect responses are given by 15% of hunters and 16% of anglers. (Again, take note that the agency name was said once in the introduction of the survey.)
- The amount of knowledge that respondents have of the Department was assessed (self-professed knowledge, no "test" was given). Not surprisingly, hunters and anglers claim more knowledge of the Department, compared to residents.
 - Most commonly, residents say that they know *a moderate amount* about the Department (41% give this response) or they know *a little* (40%). Only 14% claim to know *a great deal*.
 - Self-professed knowledge levels have increased since 2003, in which only 6% of respondents said they know *a great deal* and 31% said they know *a moderate amount*.
 - Hunters appear to be the most knowledgeable. Half of hunters claim to know *a moderate amount* (50%), and another 29% claim to know *a great deal*. Among anglers, 37% claim to know *a moderate amount*, and 28% claim to know *a great deal*.

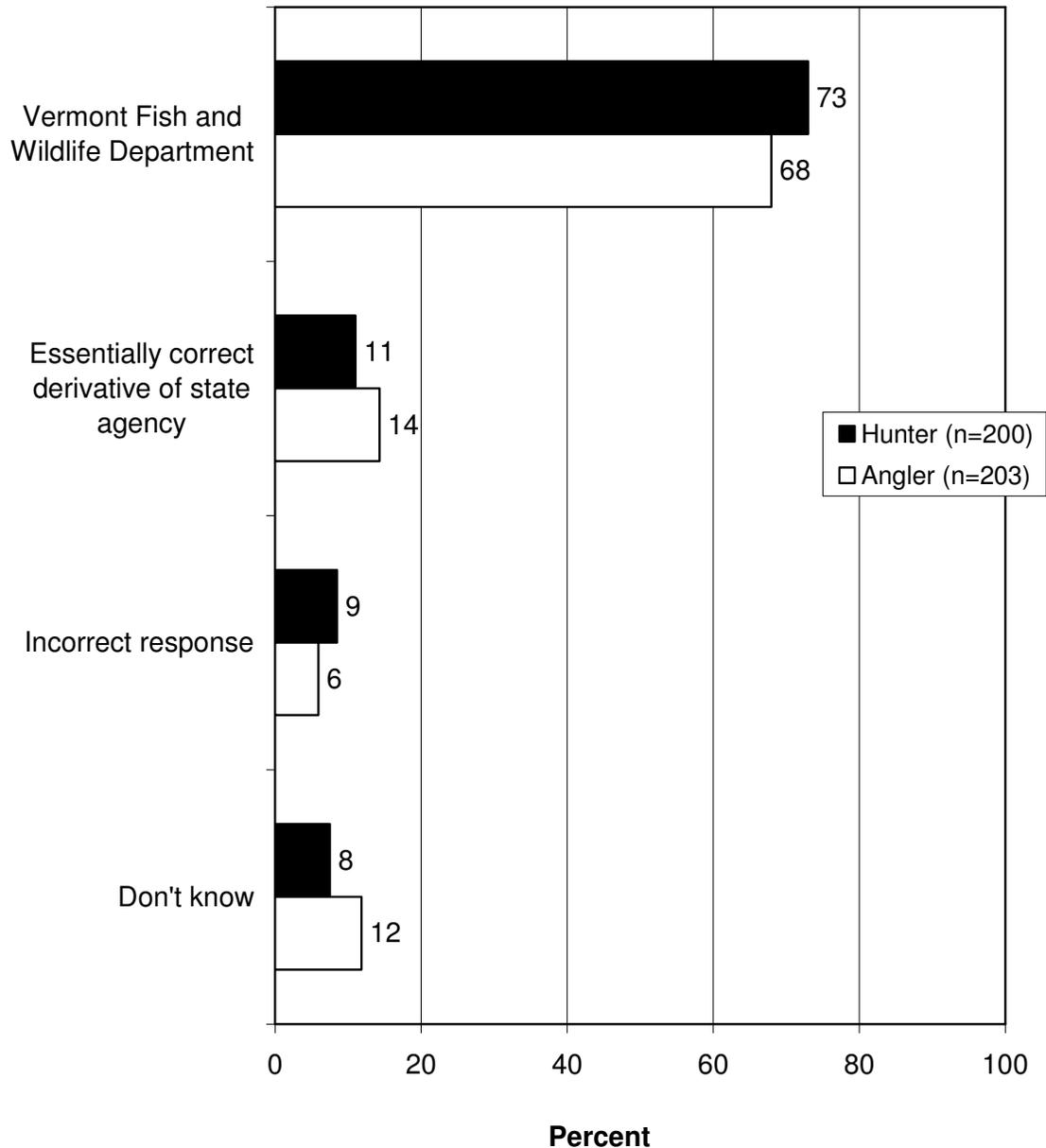
- The survey asked about satisfaction or dissatisfaction with the Department as a government agency.
 - The large majority of residents are satisfied with the Department (76%, including 44% being *very* satisfied). Only 3% are dissatisfied (the remainder giving a neutral response).
 - Those who went fishing in the previous 12 months are most often *very* satisfied with the Department (52% stated this), whereas those who did not do any wildlife viewing or birdwatching in the previous 12 months are least often *very* satisfied (37%).
 - The percent of residents who are *very* satisfied with the Department (44%) increased substantially since 2003 (25%).
 - Large majorities of hunters and anglers are satisfied: 76% of hunters and 80% of anglers are satisfied (40% and 47%, respectively, are *very* satisfied).

- The survey asked about how the Department does at *effectively balancing the interests of anglers, hunters, conservation groups, and the general public*.
 - Most residents agree that the Department achieves this balance (76% agree); meanwhile, a small percentage disagree (7%).
 - Residents who most often *strongly* agree are those with an income less than \$50,000 per year (54% stated this) and those who indicated they are satisfied with the Department in general (53%).
 - Residents who *strongly* agree that the Department achieves this balance increased from 33% in 2003 to 42% in 2015.
 - While hunters and anglers agree at about the same rate as does the general population, their rate of disagreement is higher (at the expense of “don’t know” responses): 77% of hunters and 75% of anglers agree; however, 17% of hunters and 11% of anglers disagree.

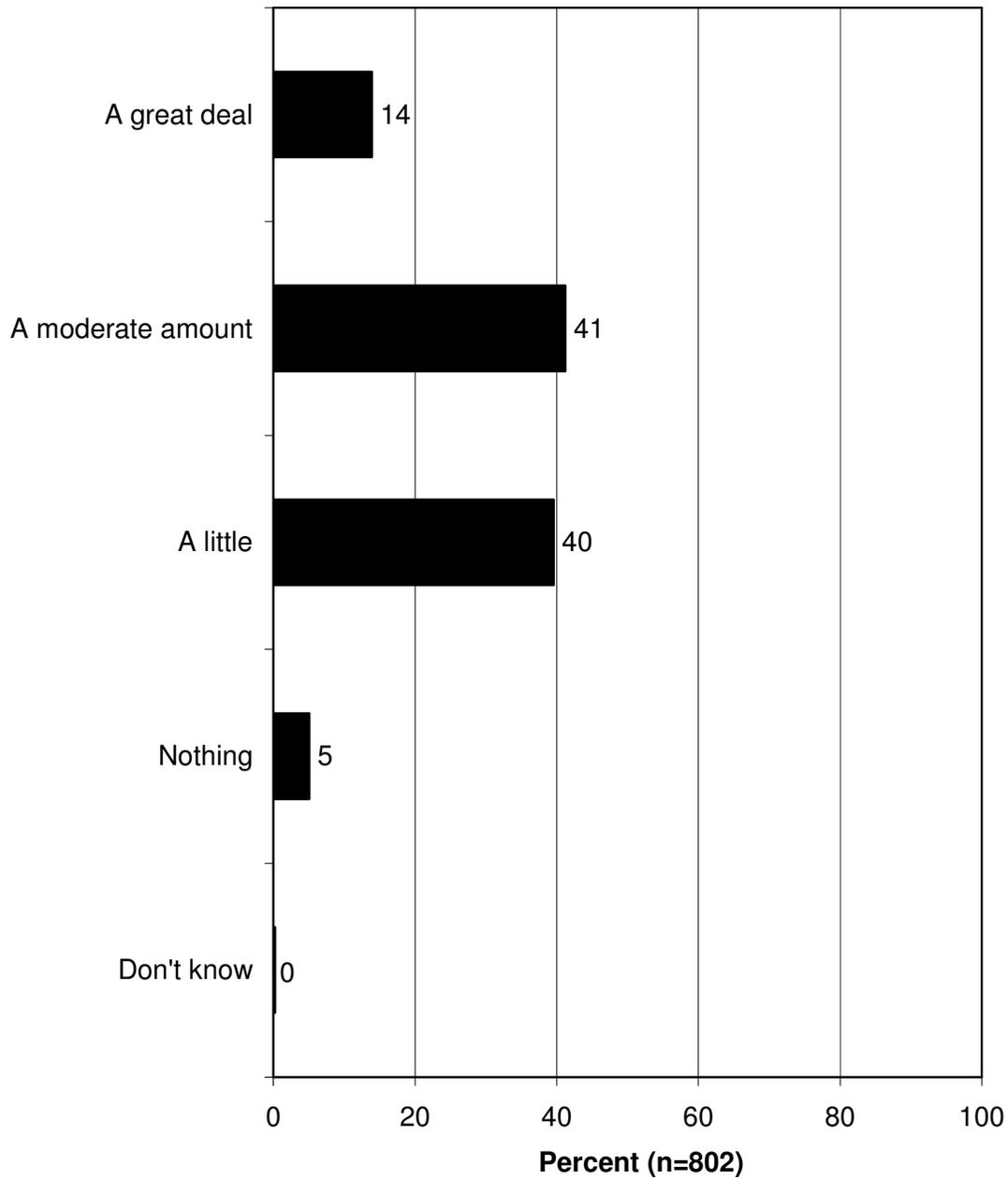
Q18. Which government agency or department would you say is most responsible for managing and protecting all fish and wildlife in Vermont, from the most common to endangered species? (Vermont residents.)



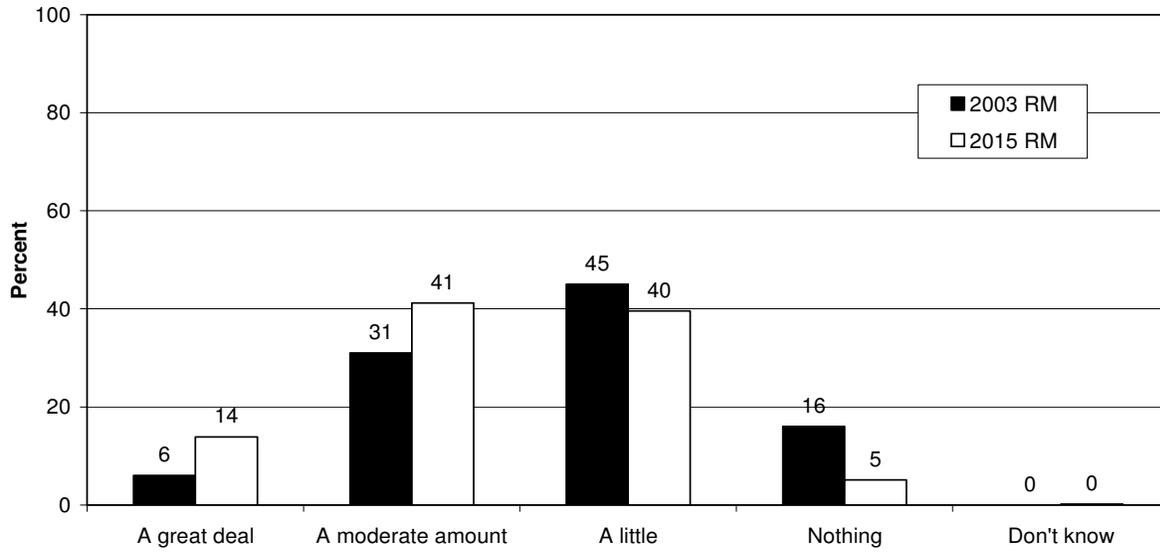
**Q18. Which government agency or department would you say is most responsible for managing and protecting all fish and wildlife in Vermont, from the most common to endangered species?
(Hunters and anglers.)**



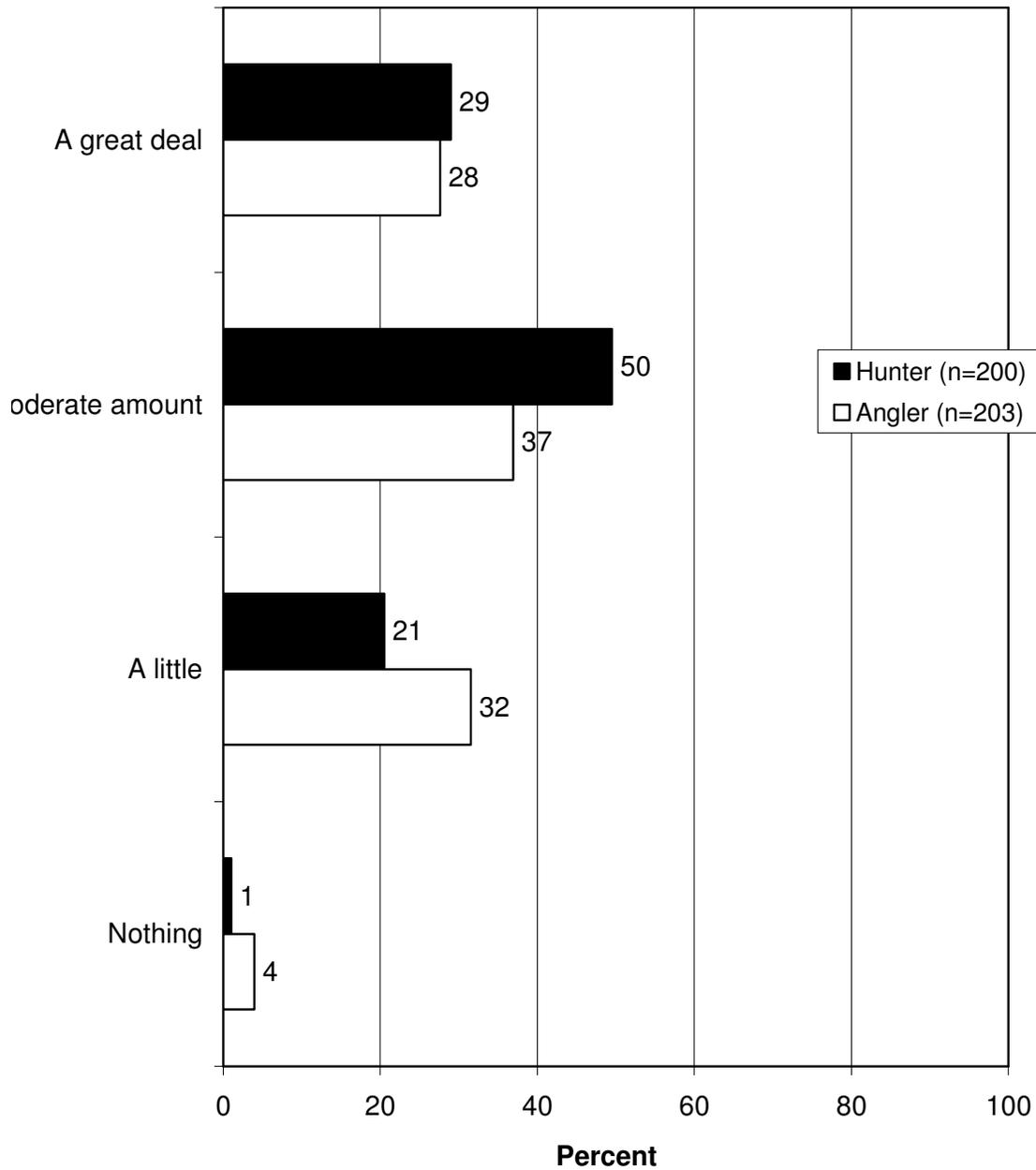
Q20. Before this survey, would you say you knew a great deal, a moderate amount, a little, or nothing about the Vermont Fish and Wildlife Department? (Vermont residents.)



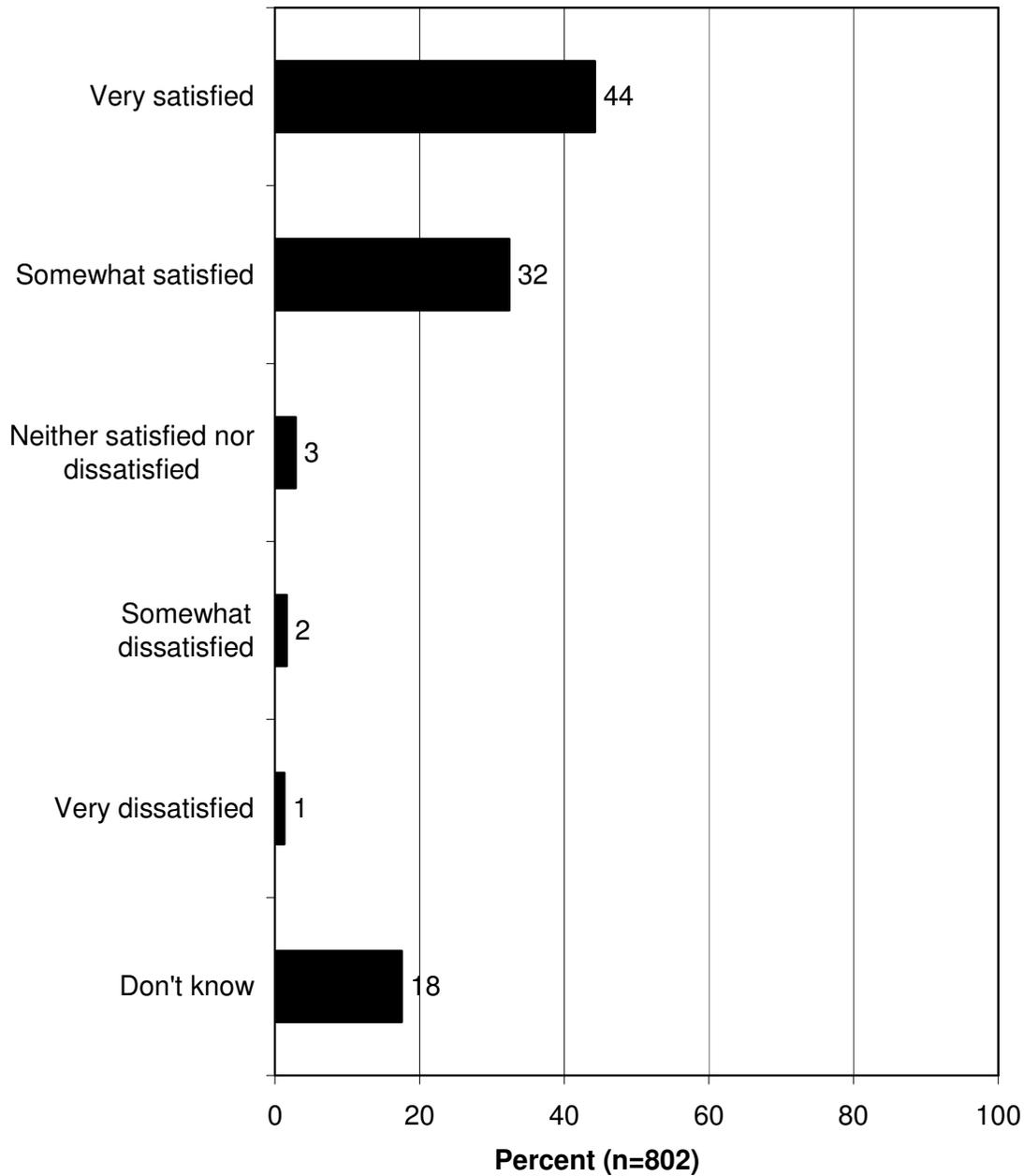
Q20. Before this survey, would you say you knew a great deal, a moderate amount, a little, or nothing about the Vermont Fish and Wildlife Department? (Vermont residents.)



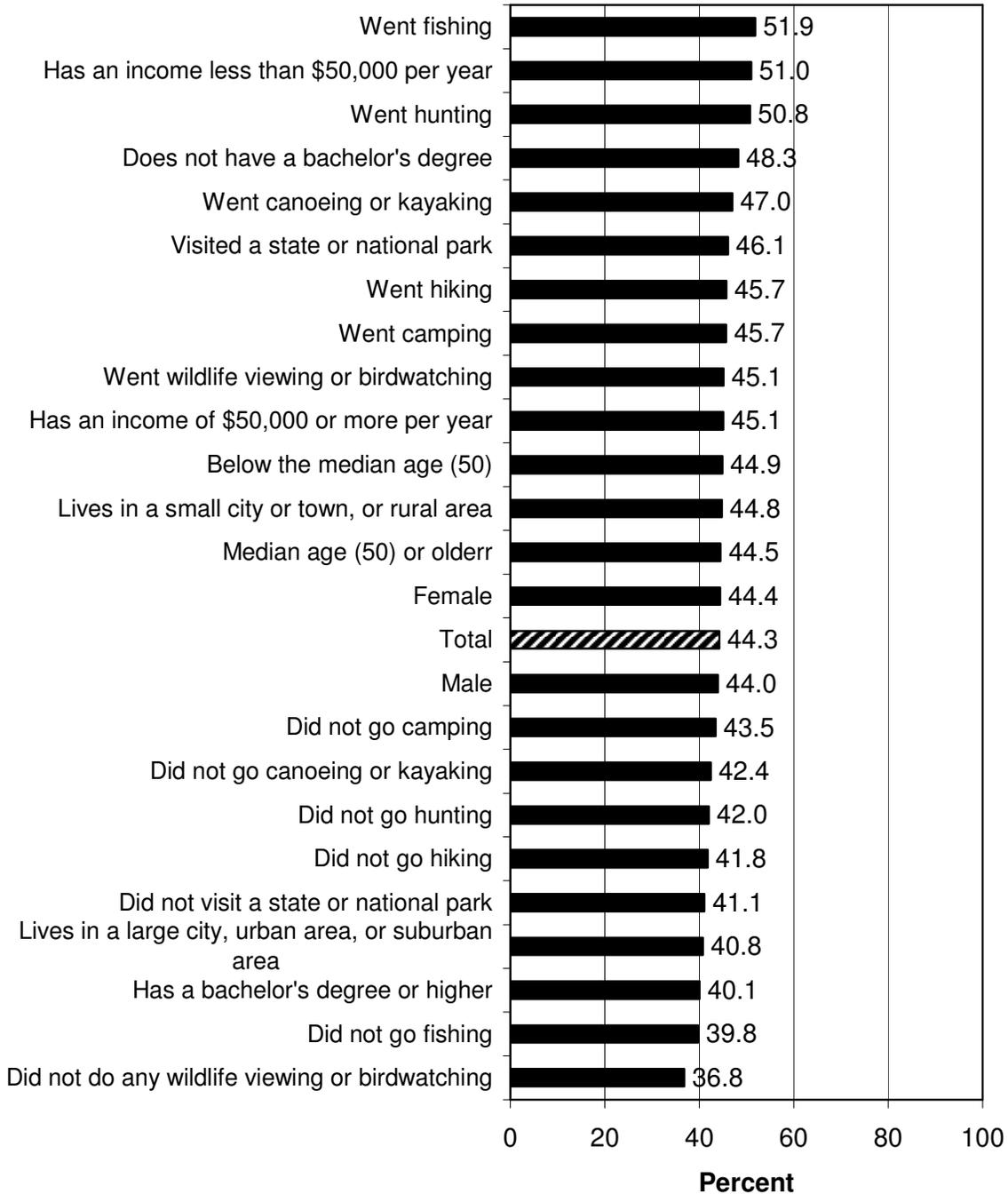
Q20. Before this survey, would you say you knew a great deal, a moderate amount, a little, or nothing about the Vermont Fish and Wildlife Department? (Hunters and anglers.)



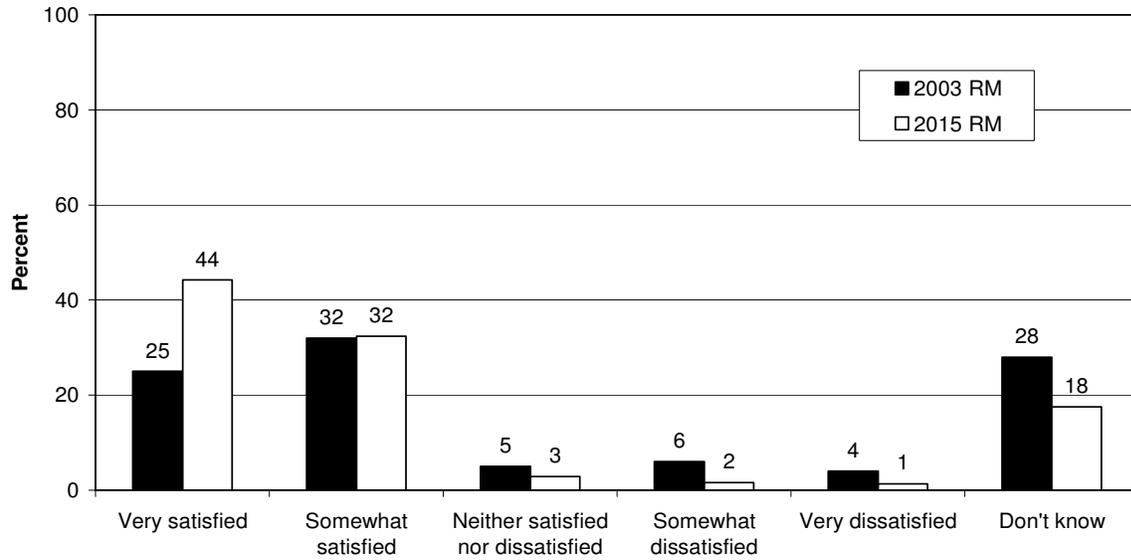
**Q59. Overall, are you satisfied or dissatisfied with the Vermont Fish and Wildlife Department as a government agency in Vermont, or do you not know?
(Vermont residents.)**



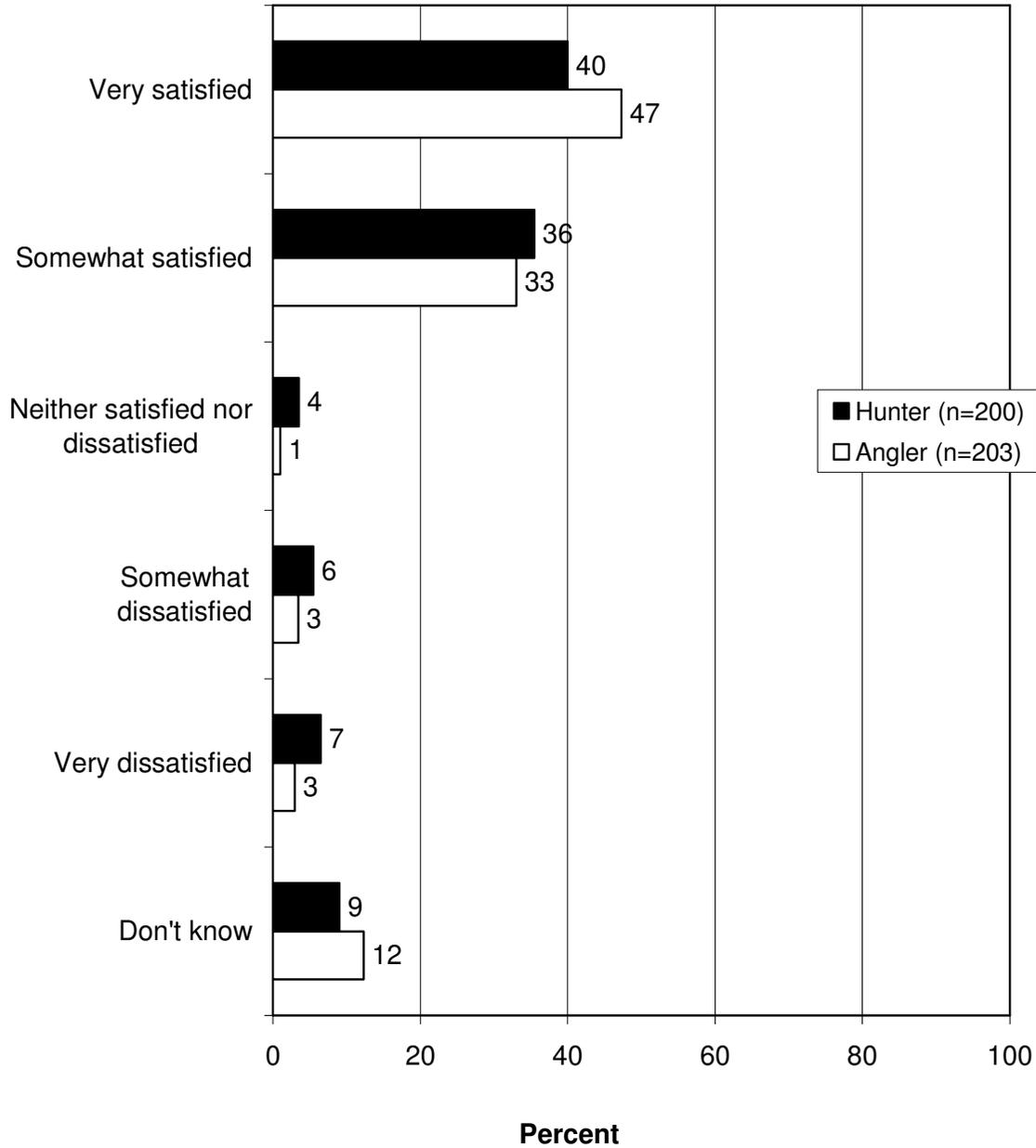
Q59. Percent of residents who are very satisfied with the Vermont Fish and Wildlife Department as a government agency in Vermont.



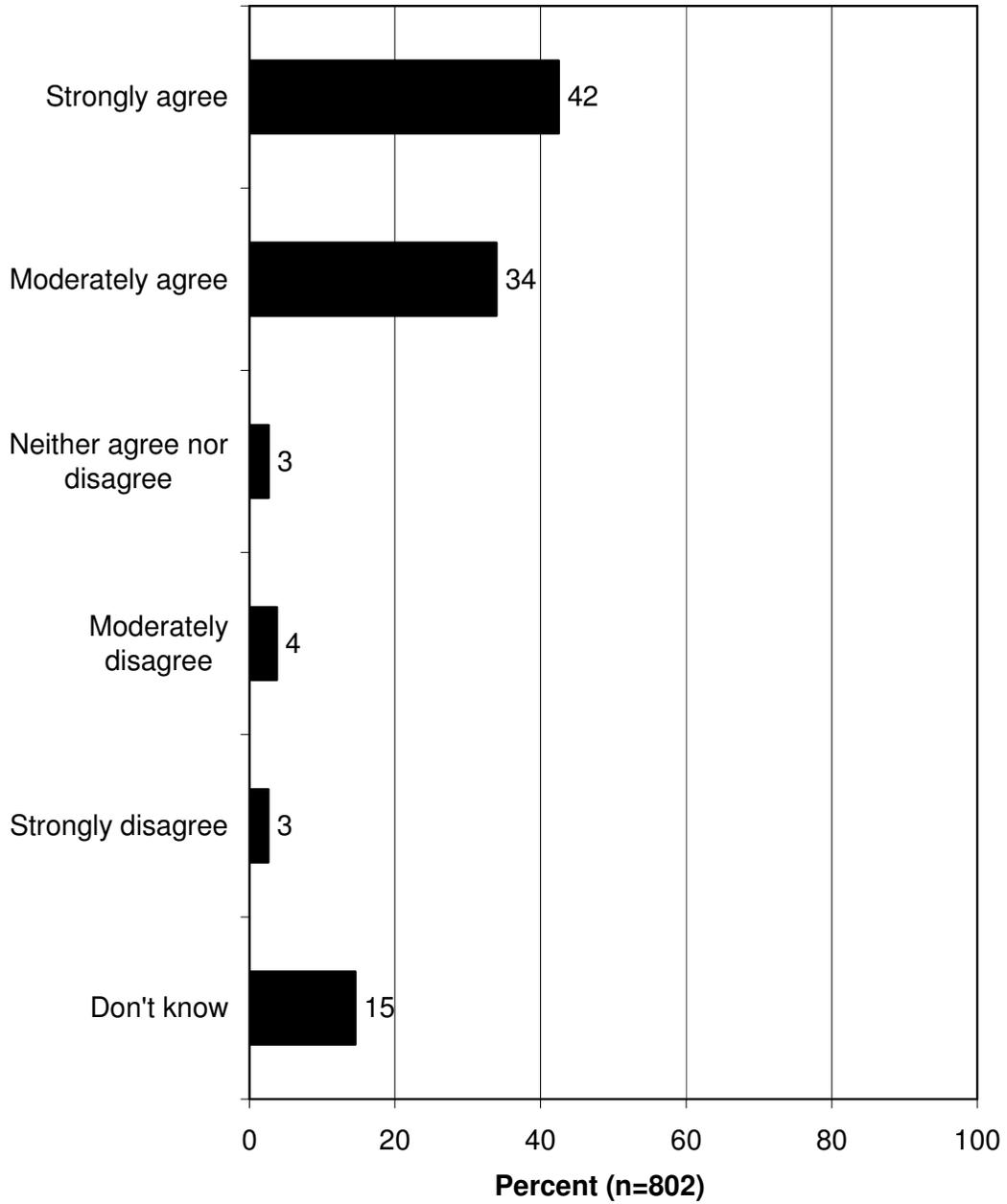
Q59. Overall, are you satisfied or dissatisfied with the Vermont Fish and Wildlife Department as a government agency in Vermont, or do you not know? (Vermont residents.)



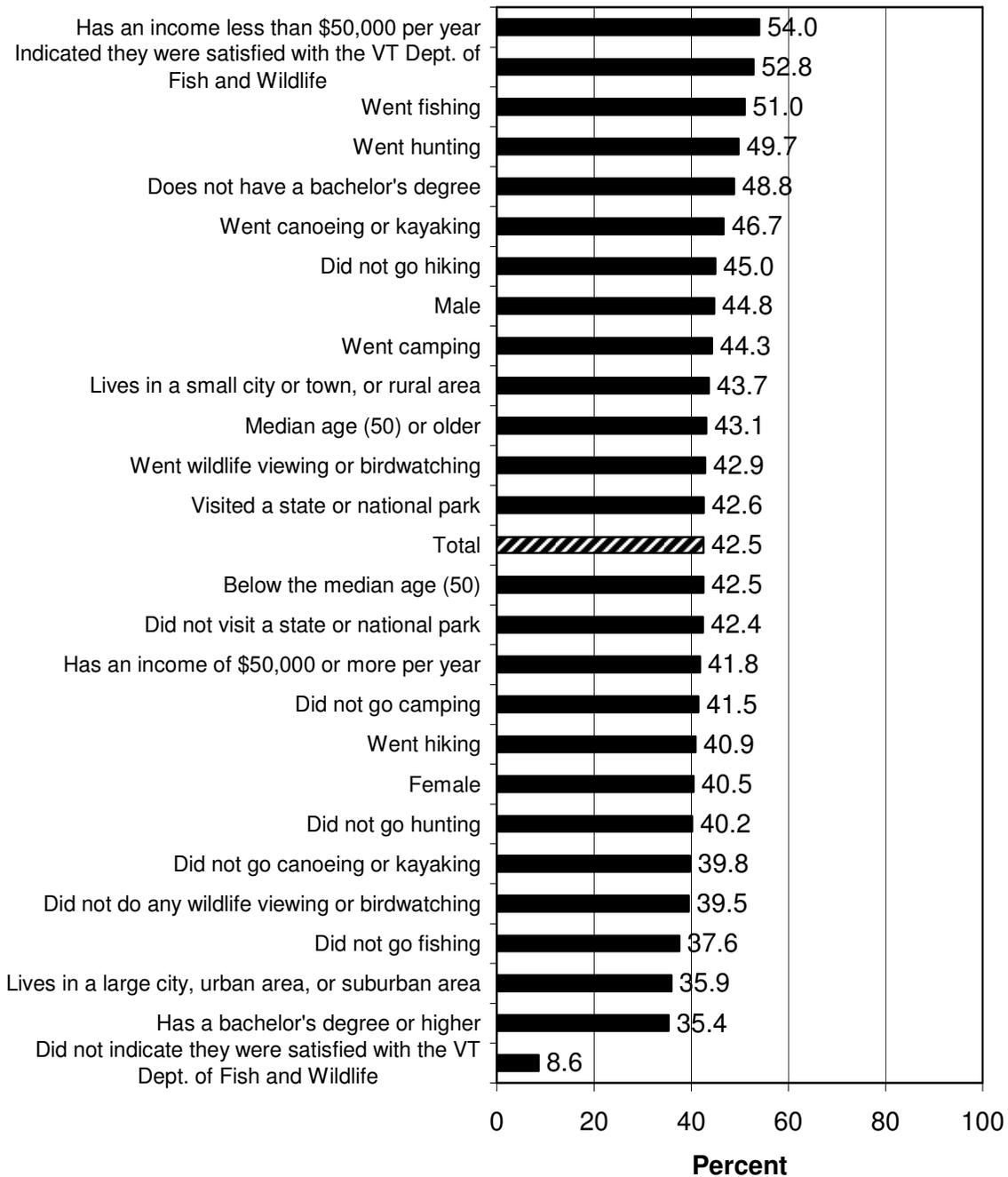
**Q59. Overall, are you satisfied or dissatisfied with the Vermont Fish and Wildlife Department as a government agency in Vermont, or do you not know?
(Hunters and anglers.)**



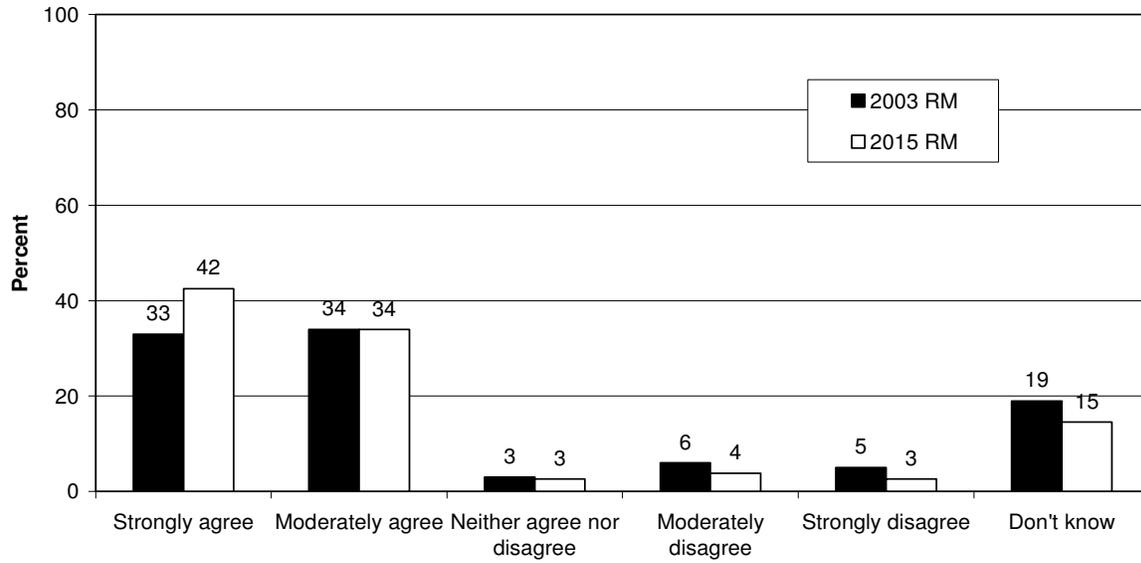
**Q60. Do you agree or disagree that the Department effectively balances the interests of anglers, hunters, conservation groups, and the general public?
(Vermont residents.)**



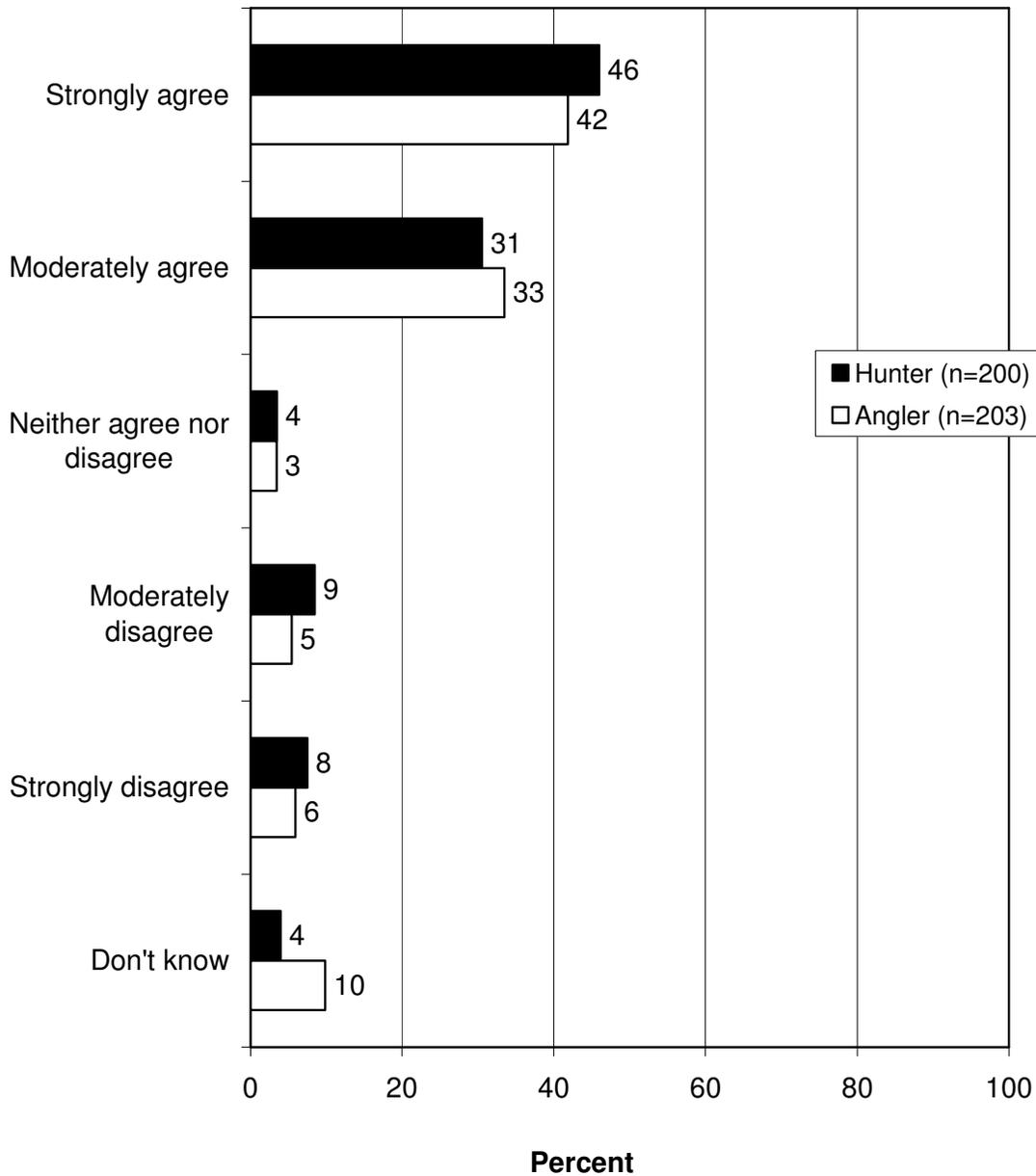
Q60. Percent of residents who strongly agree that the Department effectively balances the interests of anglers, hunters, conservation groups, and the general public.



Q60. Do you agree or disagree that the Department effectively balances the interests of anglers, hunters, conservation groups, and the general public? (Vermont residents.)



**Q60. Do you agree or disagree that the Department effectively balances the interests of anglers, hunters, conservation groups, and the general public?
(Hunters and anglers.)**



THE INTERSECTION OF LAND USE AND FISH/WILDLIFE MANAGEMENT

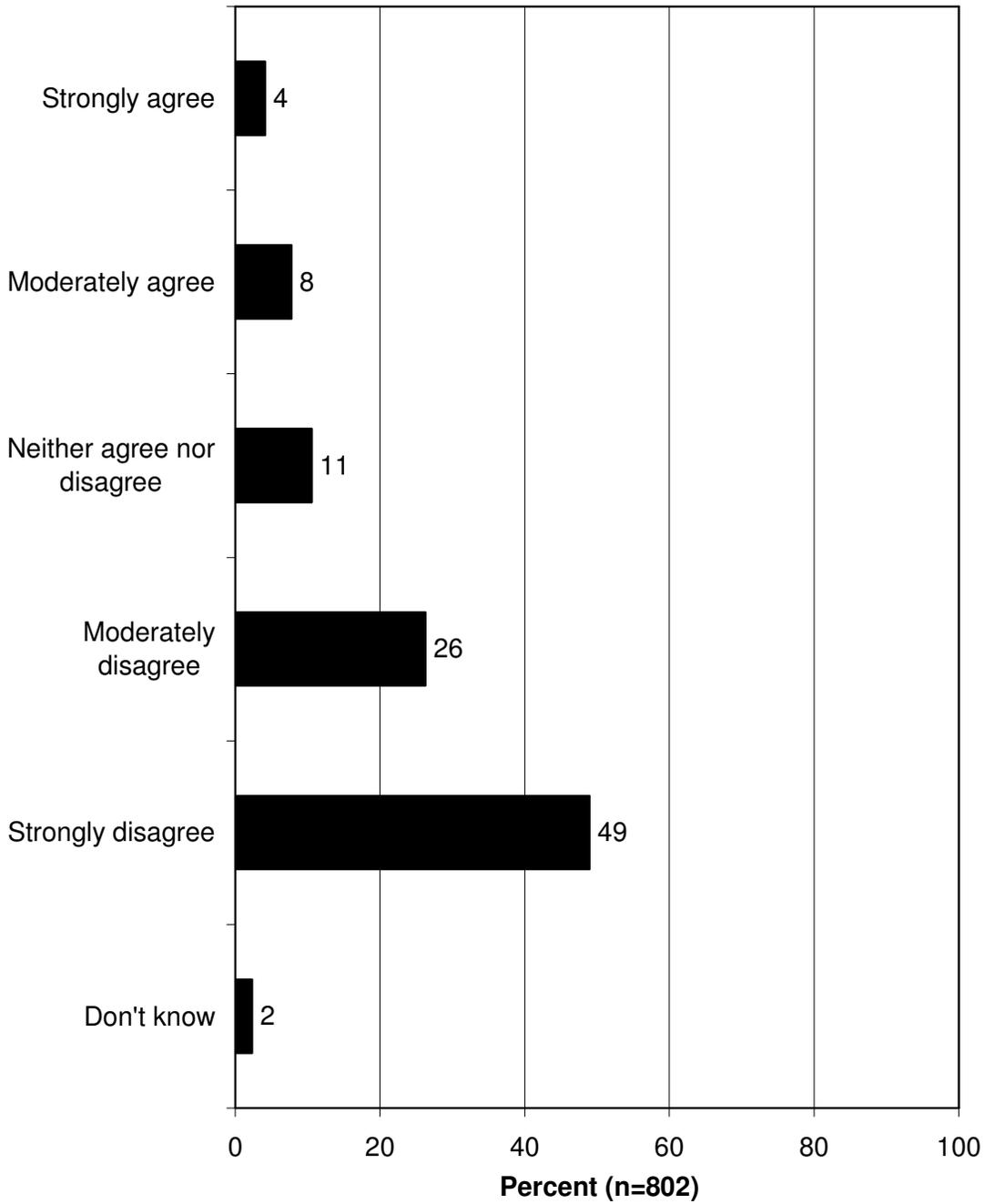
IMPORTANCE OF FISH AND WILDLIFE

- One question directly compared wildlife with economic development. Wildlife is favored by survey respondents by a large amount.
 - The large majority of Vermont residents (75%) disagree that *economic development is more important than wildlife*. Most of that is *strong* disagreement (49%). Only 12% agree, the rest being neutral. This reflects little marked change from a 1994 study.
 - Likewise, the large majority of hunters (81%) and anglers (76%) disagree, with most of that being *strong* disagreement (55% of hunters, 57% of anglers). The percentages that agree are 8% of hunters and 11% of anglers.

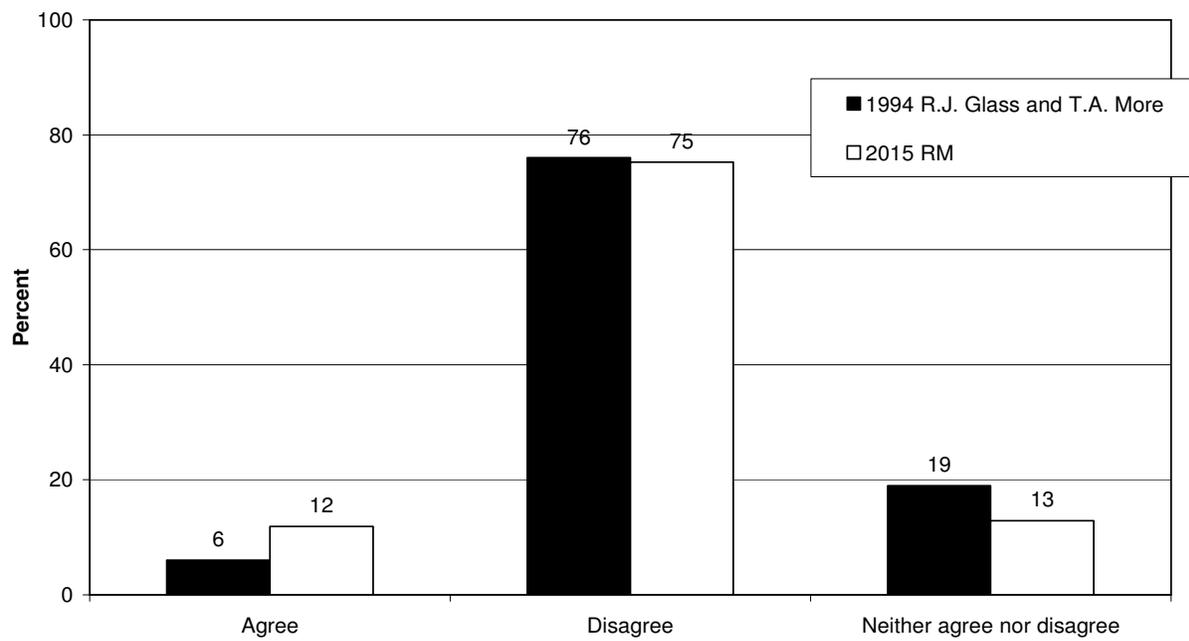
- The survey asked about agreement or disagreement with this statement: *Threatened and endangered species must be protected*. Agreement is overwhelming.
 - Among residents, 96% agree, with 81% *strongly* agreeing.
 - This *strong* agreement of 81% is a major increase since 1995 (only 37% in that survey); most of this movement came from those who *moderately* agree (42% in 1995 compared to 15% in 2015).
 - Among hunters, 97% agree, with 86% *strongly* agreeing; among anglers, 95% agree, with 86% *strongly* agreeing.

- Agreement is also overwhelming with this statement: *Knowing that Vermont's native fish and wildlife populations are healthy and surviving well is very important to me even if I don't get to see them*.
 - Among residents, 98% agree, with 85% *strongly* agreeing.
 - As with the previous question, a major shift occurred since 1995 from those who *moderately* agree to those who *strongly* agree.
 - Among hunters, 98% agree, with 90% *strongly* agreeing; among anglers, 96% agree, with 87% *strongly* agreeing.

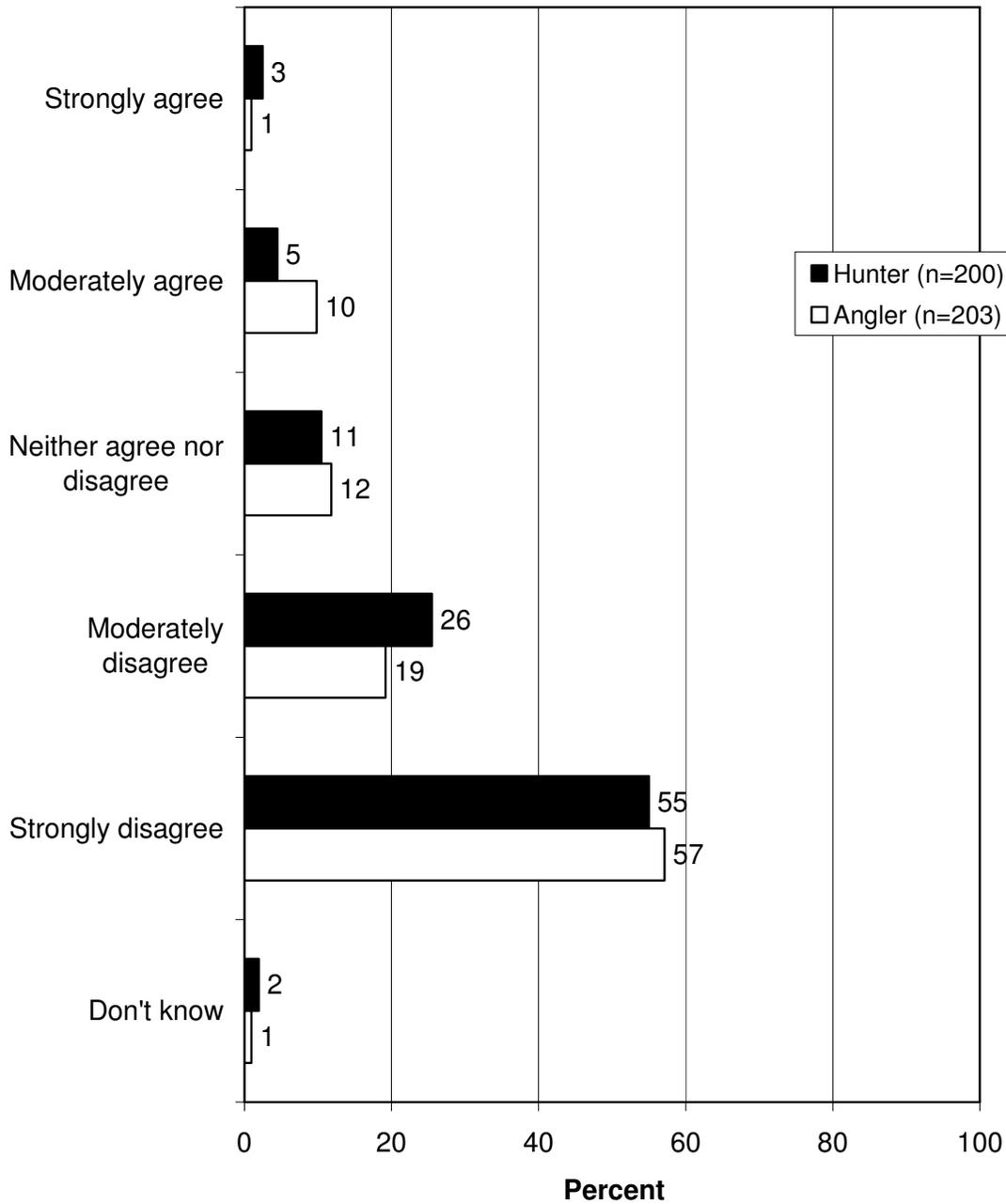
**Q34. Economic development is more important than wildlife.
(Vermont residents.)**



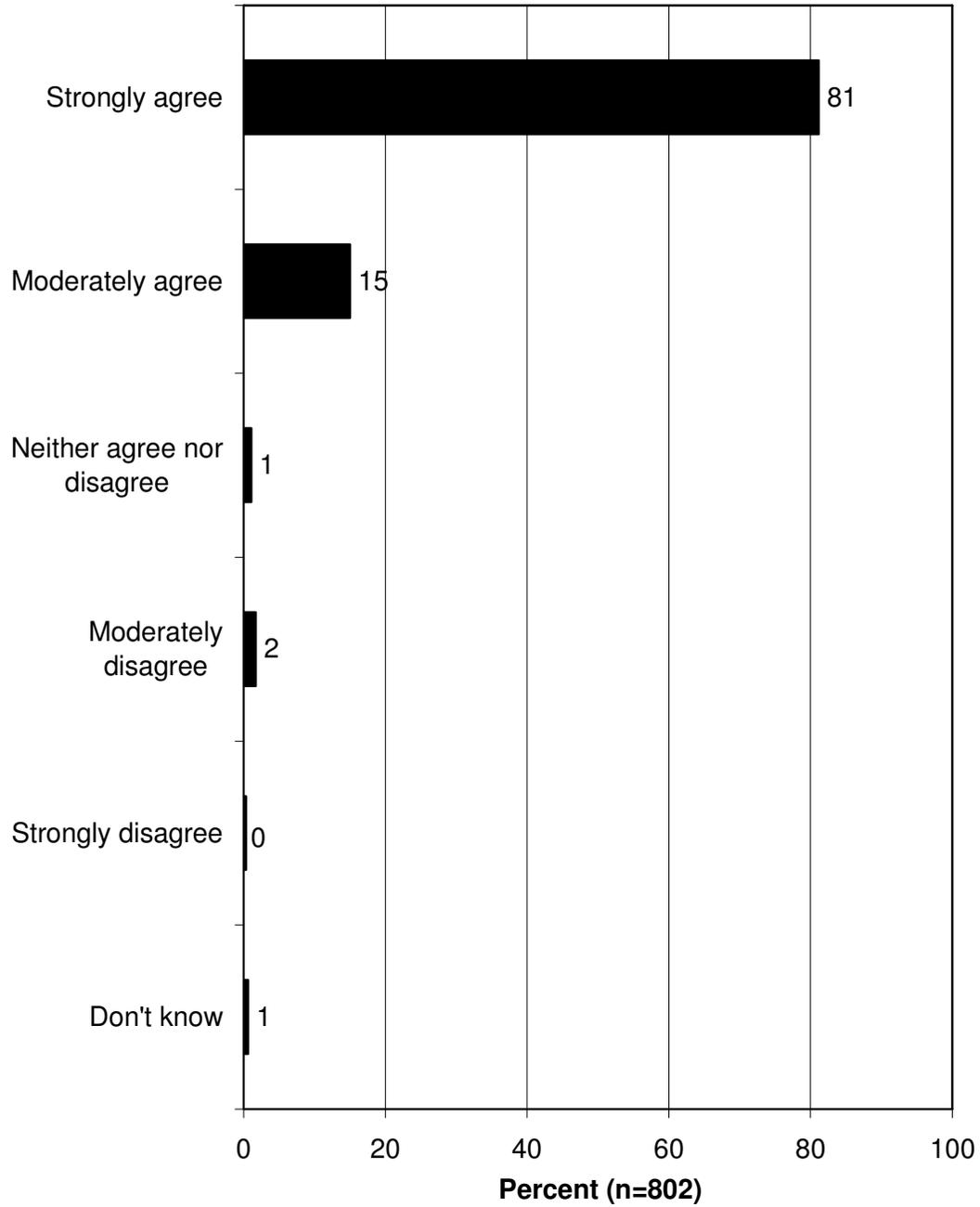
**Q34. Economic development is more important than wildlife.
(Vermont residents.)**



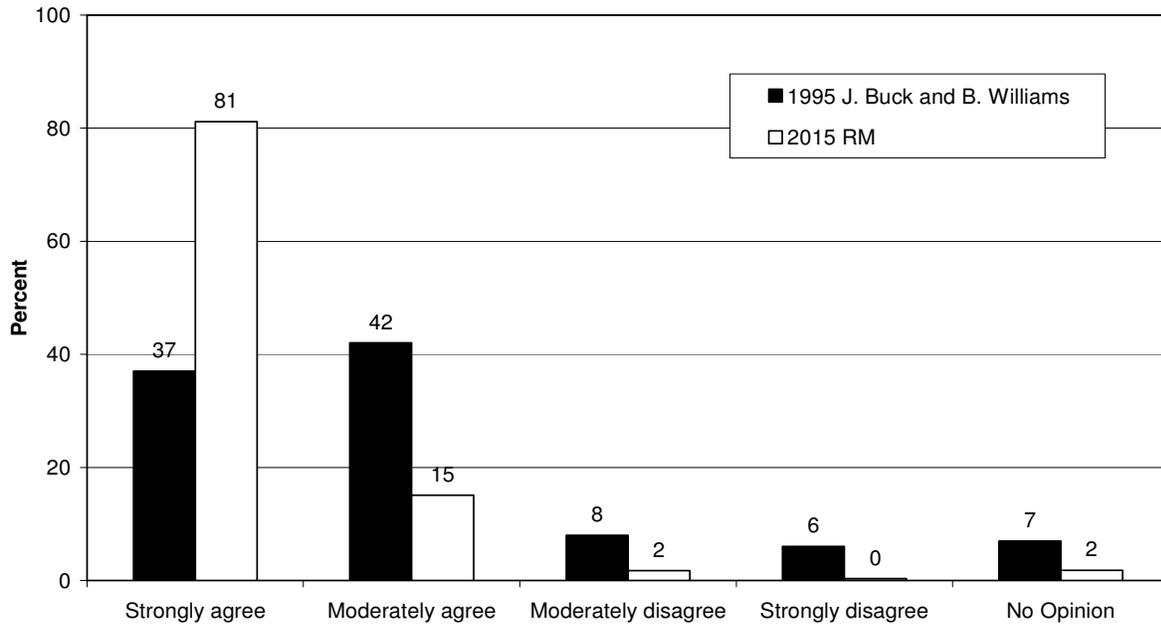
**Q34. Economic development is more important than wildlife.
(Hunters and anglers.)**



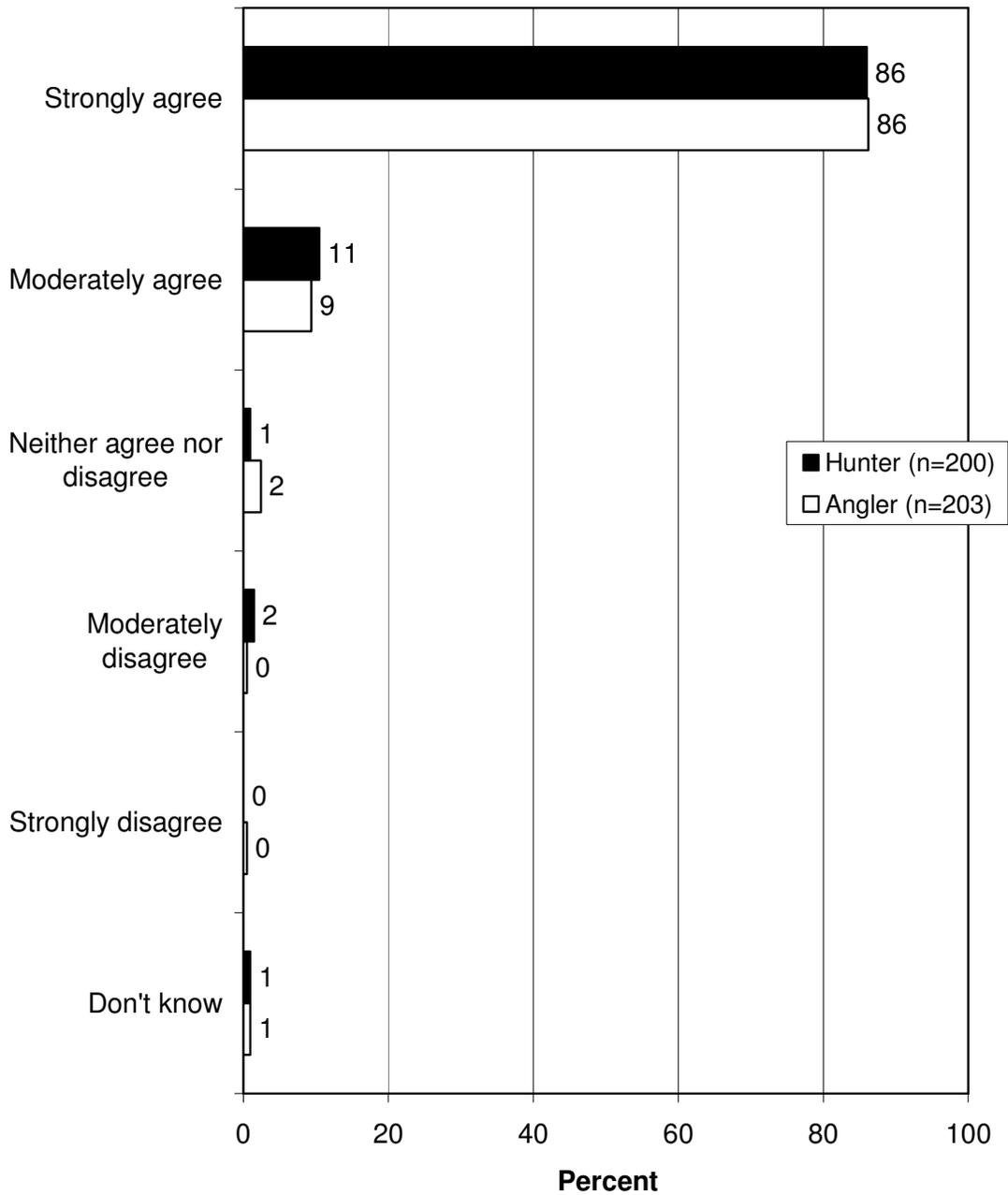
**Q36. Threatened and endangered species must be protected.
(Vermont residents.)**



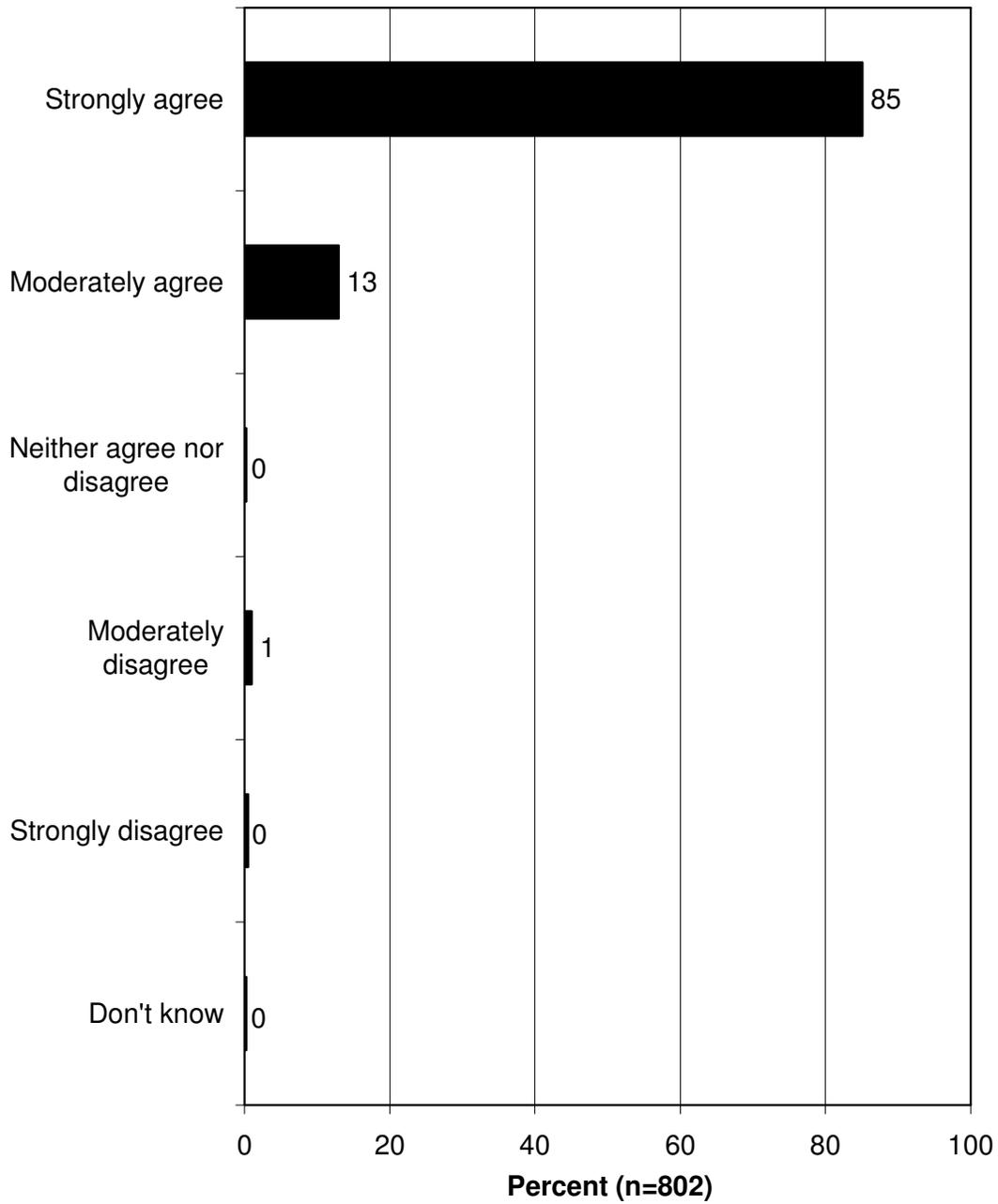
**Q36. Threatened and endangered species must be protected.
(Vermont residents.)**



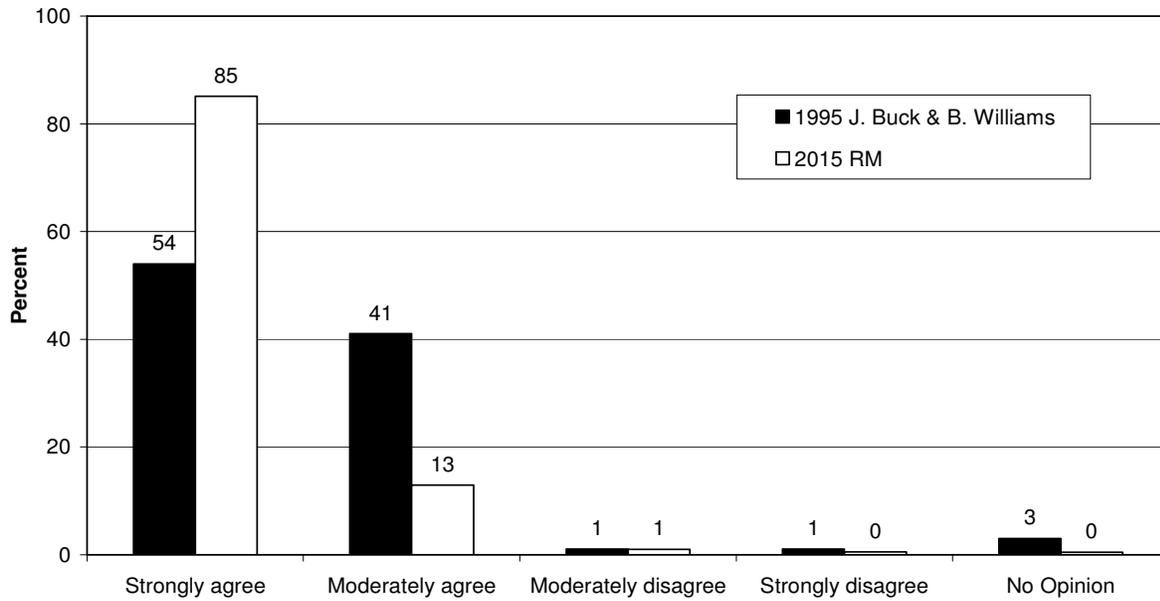
**Q36. Threatened and endangered species must be protected.
(Hunters and anglers.)**



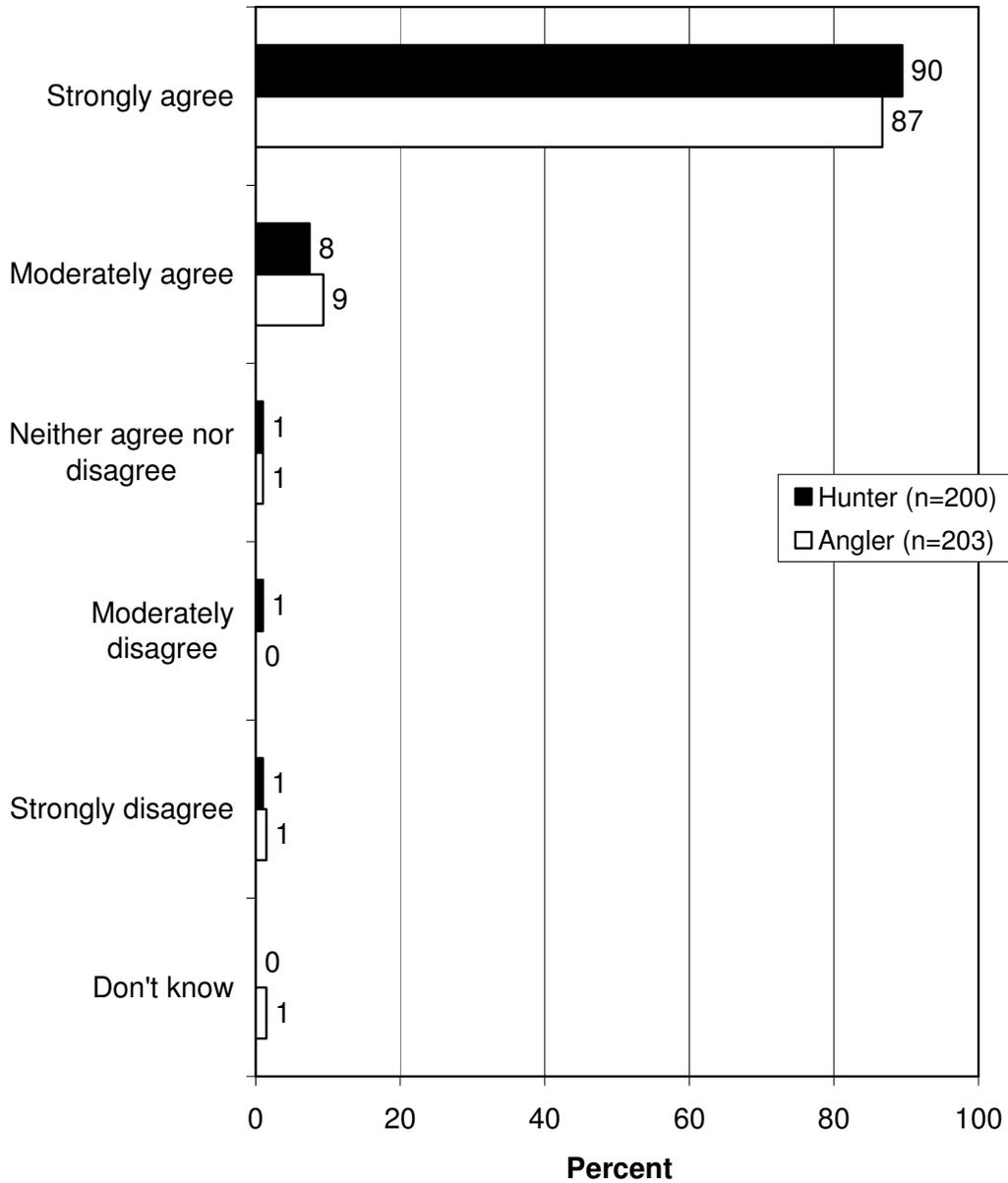
**Q37. Knowing that Vermont's native fish and wildlife populations are healthy and surviving well is very important to me even if I don't get to see them.
(Vermont residents.)**



Q37. Knowing that Vermont's native fish and wildlife populations are healthy and surviving well is very important to me even if I don't get to see them. (Vermont residents.)



**Q37. Knowing that Vermont's native fish and wildlife populations are healthy and surviving well is very important to me even if I don't get to see them.
(Hunters and anglers.)**



OPINIONS ON LAND USE IN VERMONT

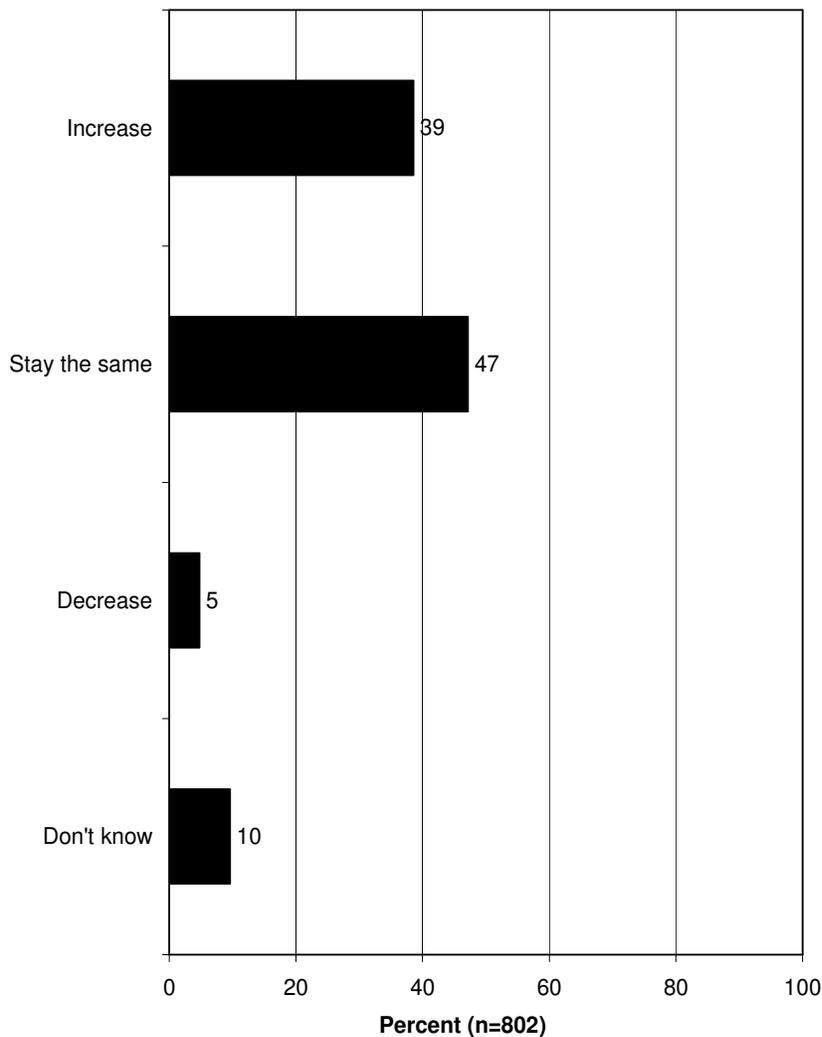
- The survey asked for opinions on the *amount of state-owned land* in Vermont: should it be increased, decreased, or stay the same? It is roughly split between stay the same and increased; very few want it decreased.
 - Most commonly, residents think that the amount of state-owned land should stay the same (47% give this response). Otherwise, residents are much more likely to say that they want it increased (39%) than decreased (5%).
 - Since 1997, the percent of residents who want the amount of state-owned land to increase has declined (61% in 1997 compared to 39% in 2015), with more residents now wanting the amount to stay the same (28% in 1997 versus 47% in 2015).
 - Responses are similar among hunters and anglers. The most common response is stay the same (45% of hunters, 48% of anglers), and those wanting an increase (44% of hunters, 40% of anglers) far outnumber those wanting a decrease (5% of hunters, 6% of anglers).

- Respondents generally think that *state ownership of land is important to maintain biological diversity*. (The survey provided this definition: “Biological diversity is the variety of organisms, including, but not limited to, plants, animals, fish, insects, and micro-organisms like bacteria, represented in Vermont and the habitats and processes that support them.”)
 - The overwhelming majority of residents (89%) think that state ownership of land is important to maintain biological diversity, most of that being in the *very* important response.
 - Hunters and anglers are similar to residents on this question: 90% of hunters think it is important (62% thinking it is *very* important), and 87% of anglers think it is important (61% saying *very* important).

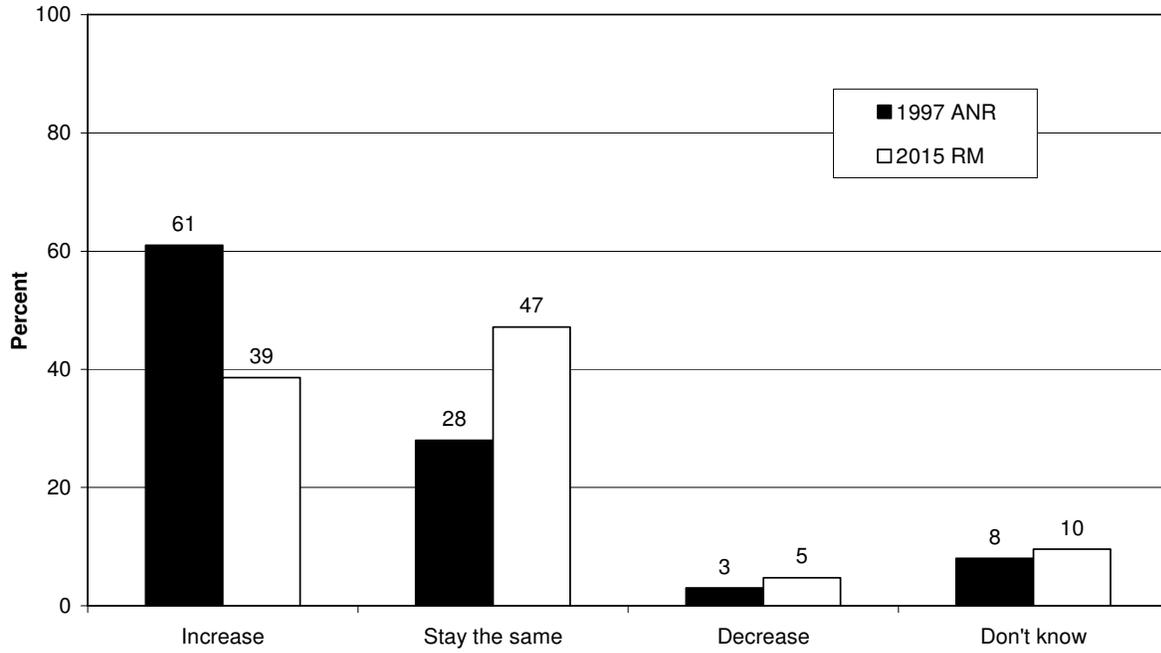
- Respondents overwhelmingly think it is important that *ecologically important habitats and land in Vermont are being protected and preserved*.
 - Among residents, 97% think this is important, including 75% who say it is *very* important. There is little marked change since 2000.

- Residents who most often think this is *very* important are those who live in a large city, urban area, or suburban area (87% stated this) and those with an income less than \$50,000 per year (82%).
- Among hunters, 98% think this is important, including 74% who say it is *very* important, and among anglers, 94% think this is important, including 70% who say it is *very* important.

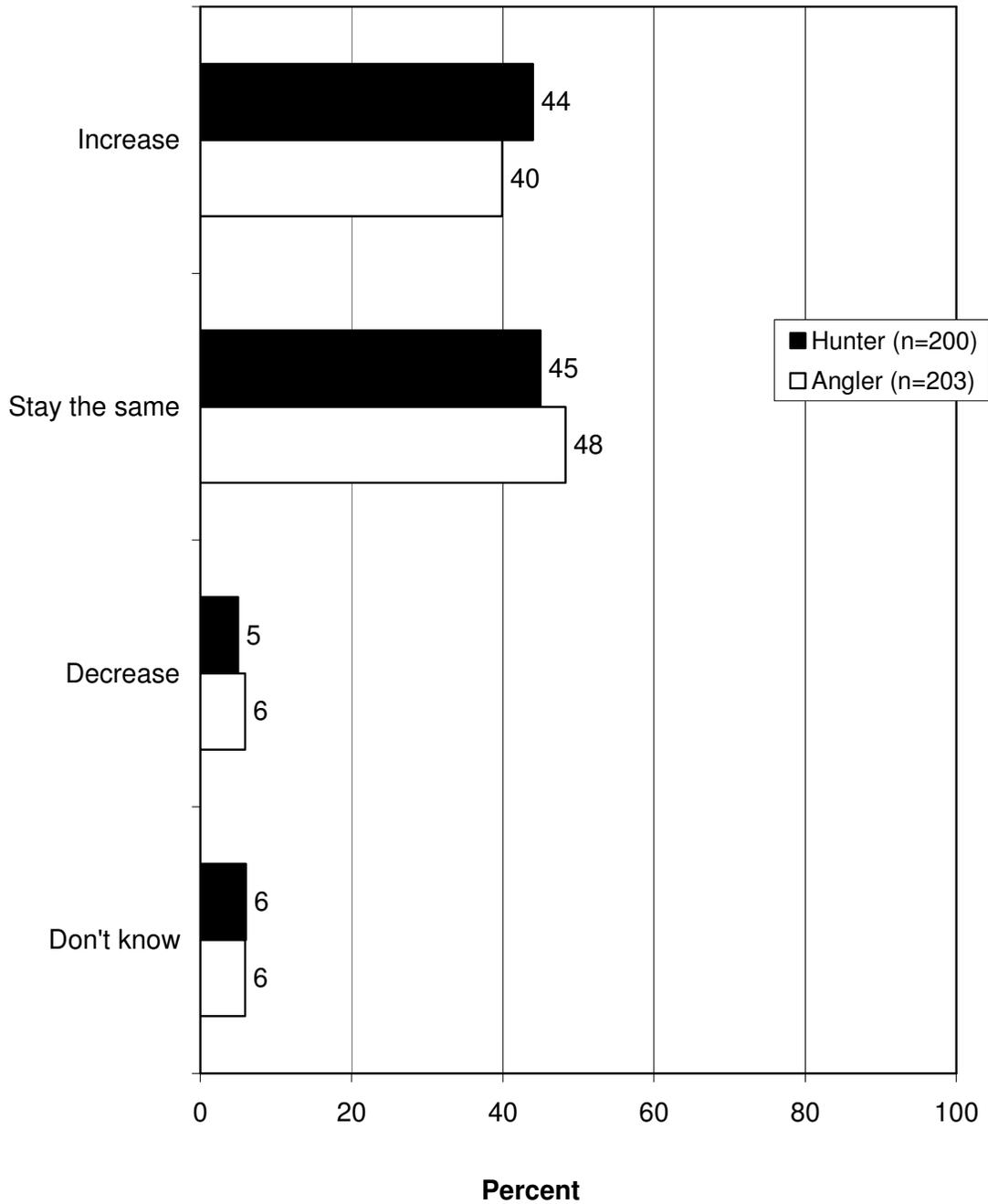
Q40. Do you think the percentage of state-owned land should increase, decrease, or stay the same? (Vermont residents.)



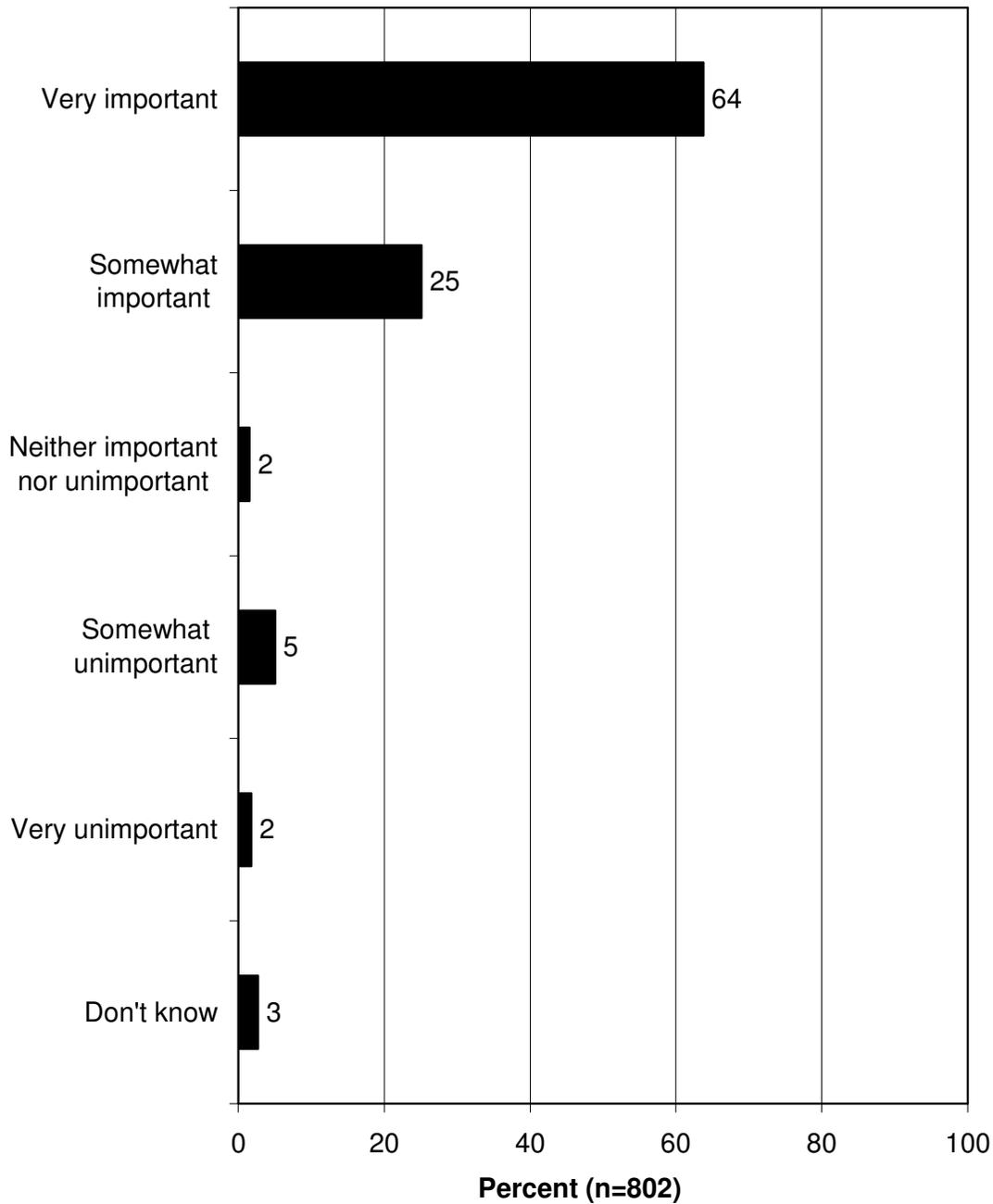
Q40. Do you think the percentage of state-owned land should increase, decrease, or stay the same? (Vermont residents.)



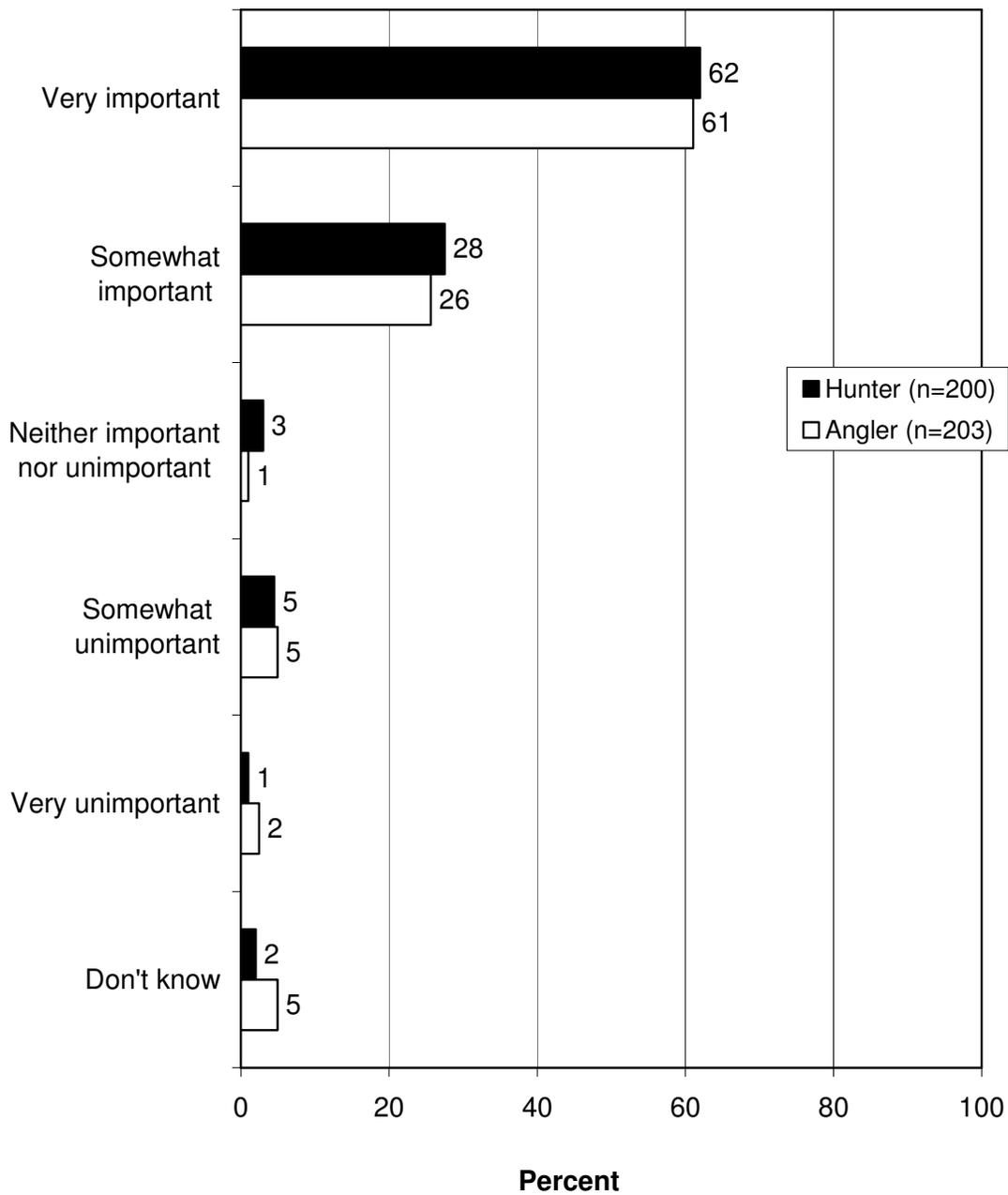
**Q40. Do you think the percentage of state-owned land should increase, decrease, or stay the same?
(Hunters and anglers.)**



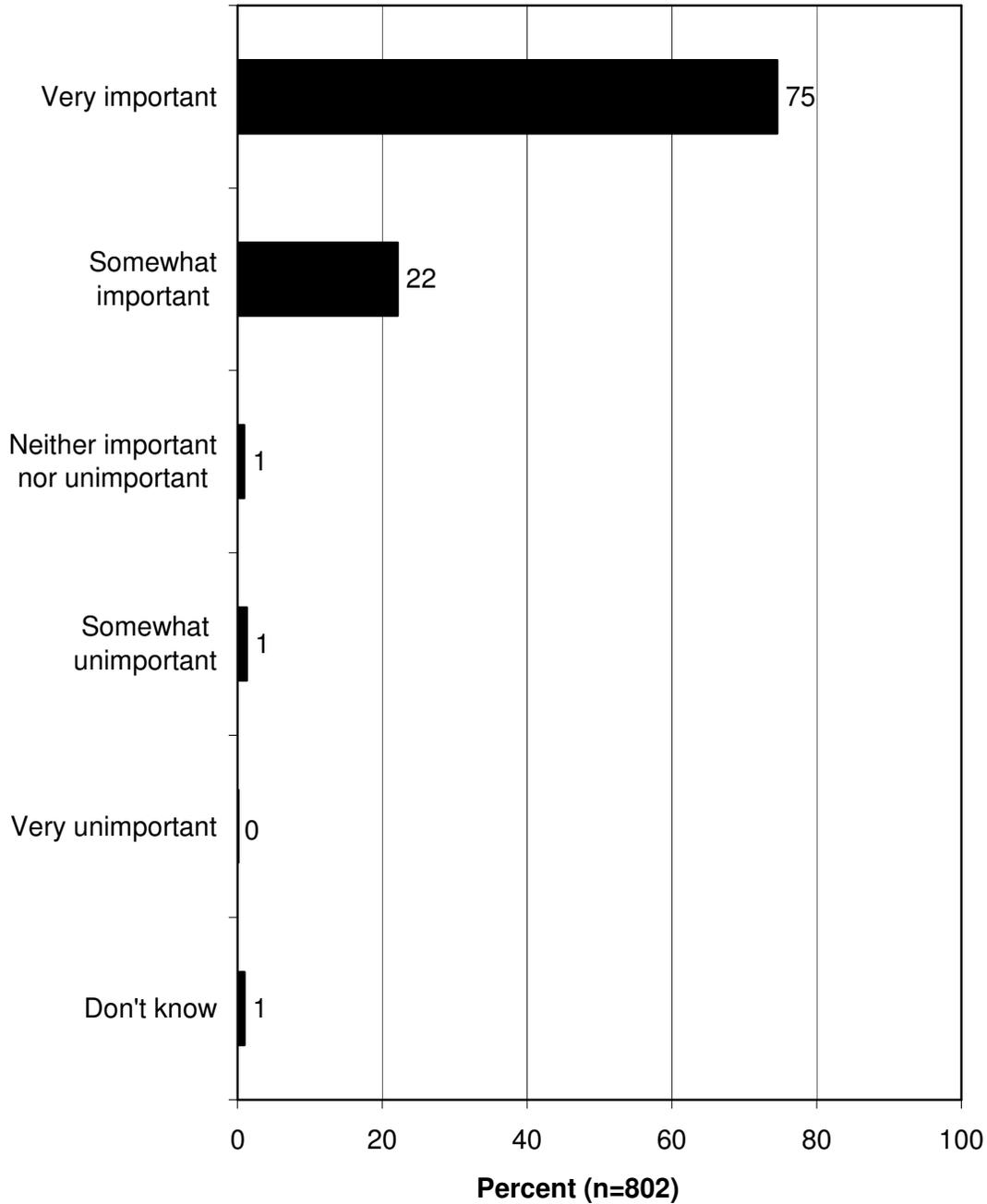
**Q41. Do you think state ownership of land to
maintain biological diversity is important or
unimportant?
(Vermont residents.)**



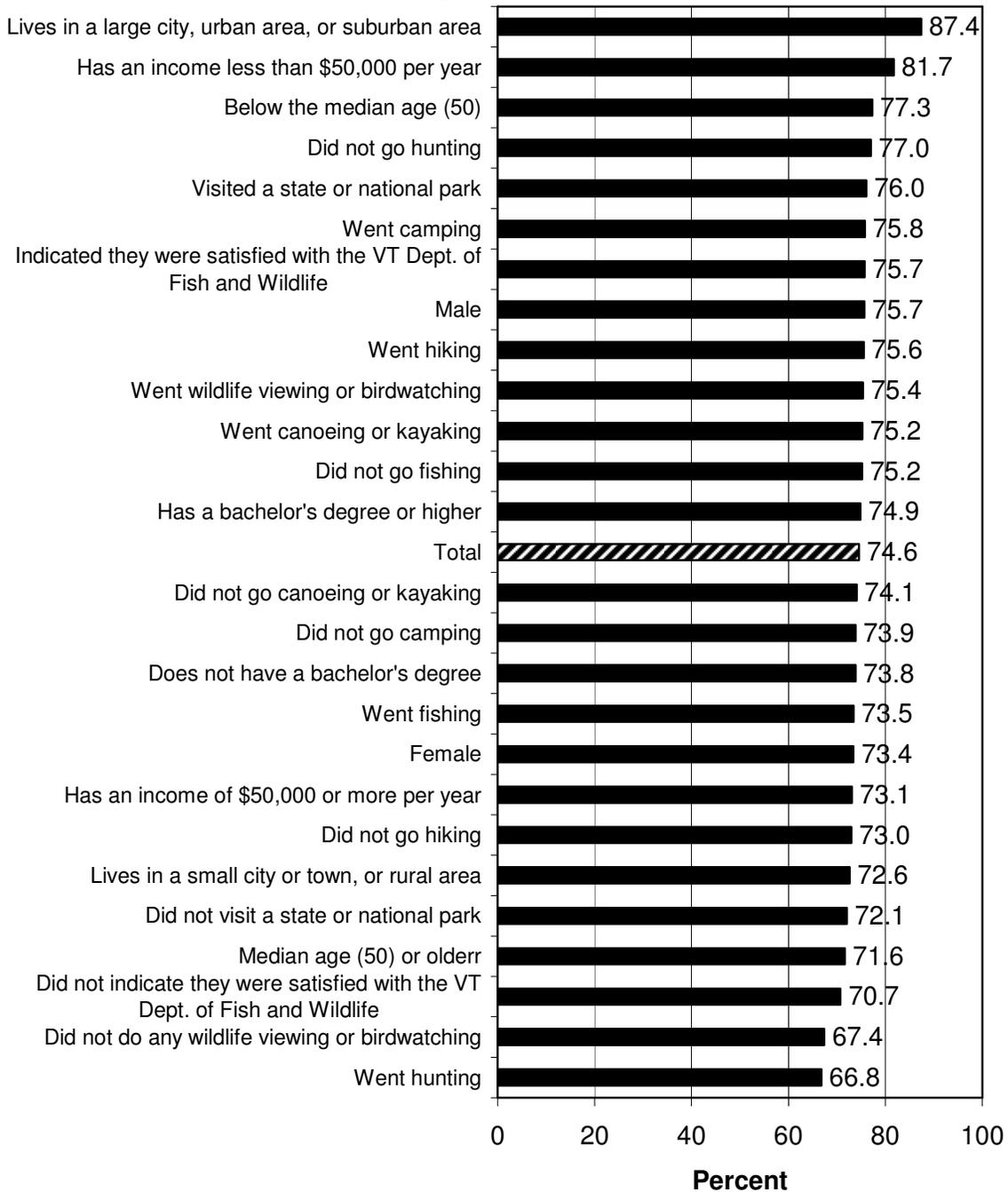
**Q41. Do you think state ownership of land to maintain biological diversity is important or unimportant?
(Hunters and anglers.)**



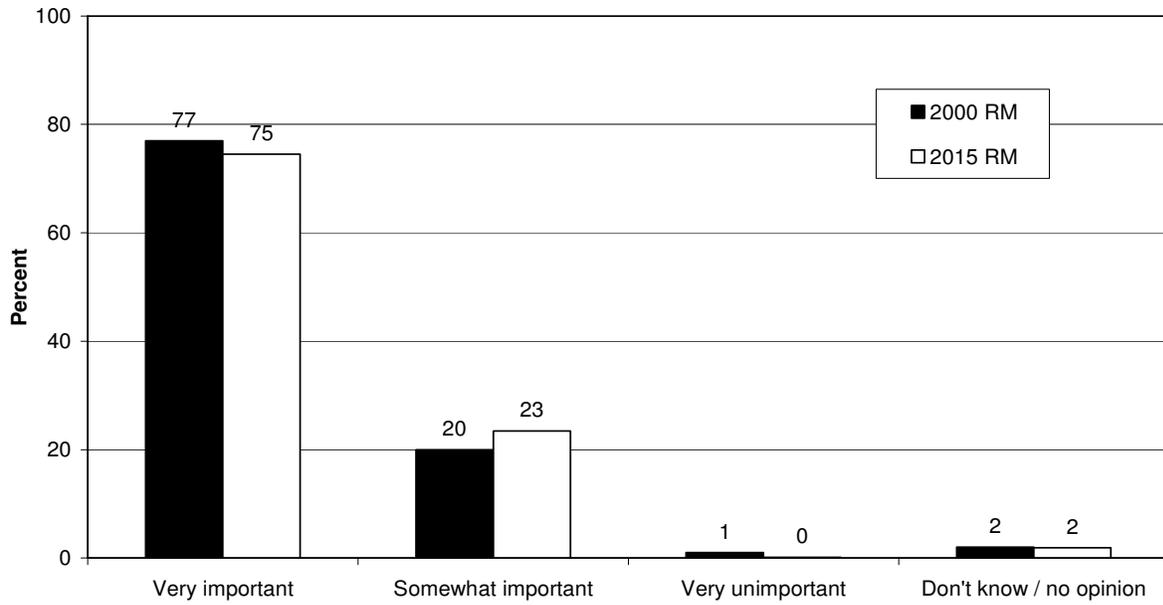
**Q48. How important is it to you that ecologically important habitats and lands in Vermont are being protected and preserved?
(Vermont residents.)**



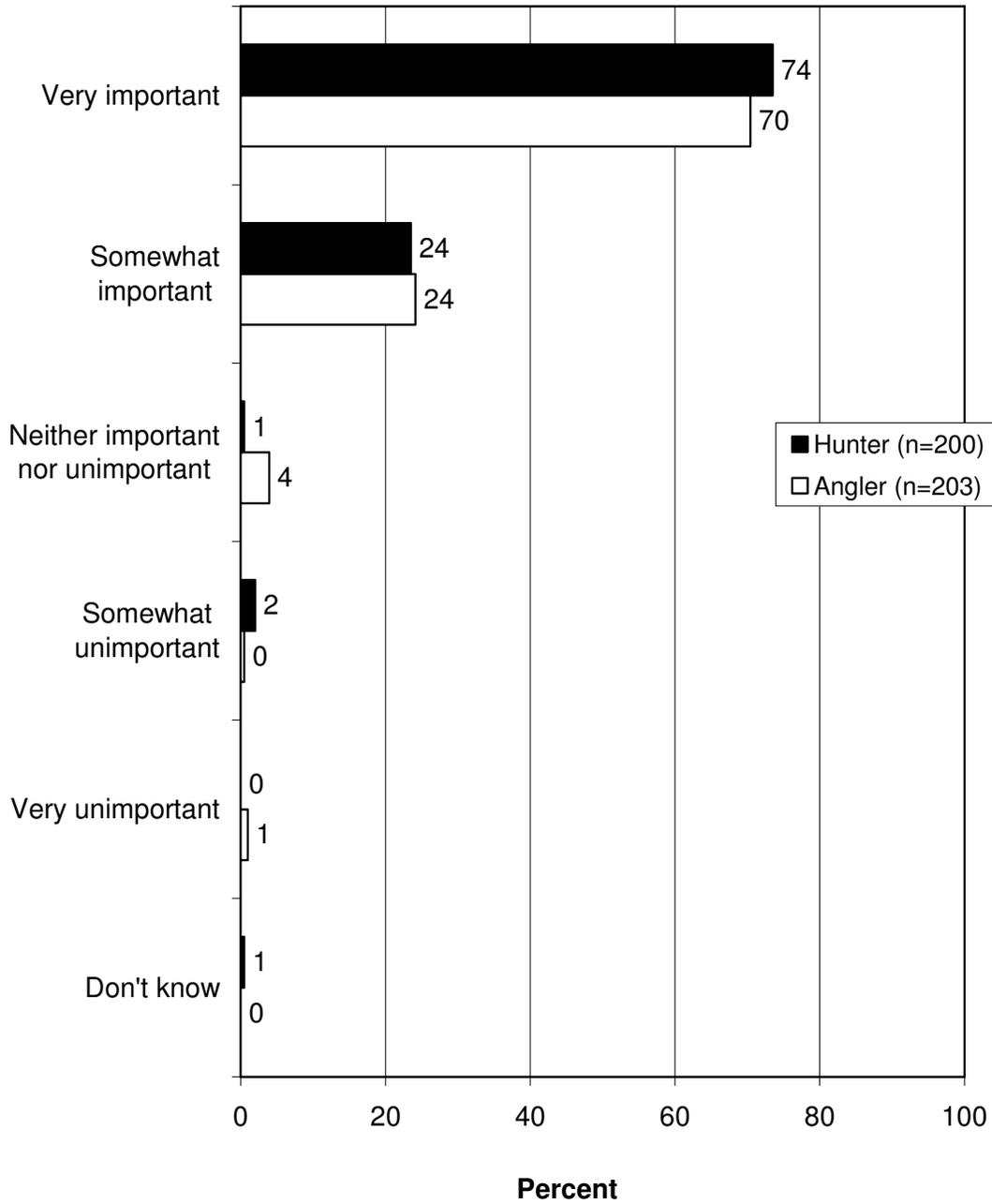
Q48. Percent of residents who think it is very important that ecologically important habitats and lands in Vermont are being protected and preserved.



**Q48. How important is it to you that ecologically important habitats and lands in Vermont are being protected and preserved?
(Vermont residents.)**

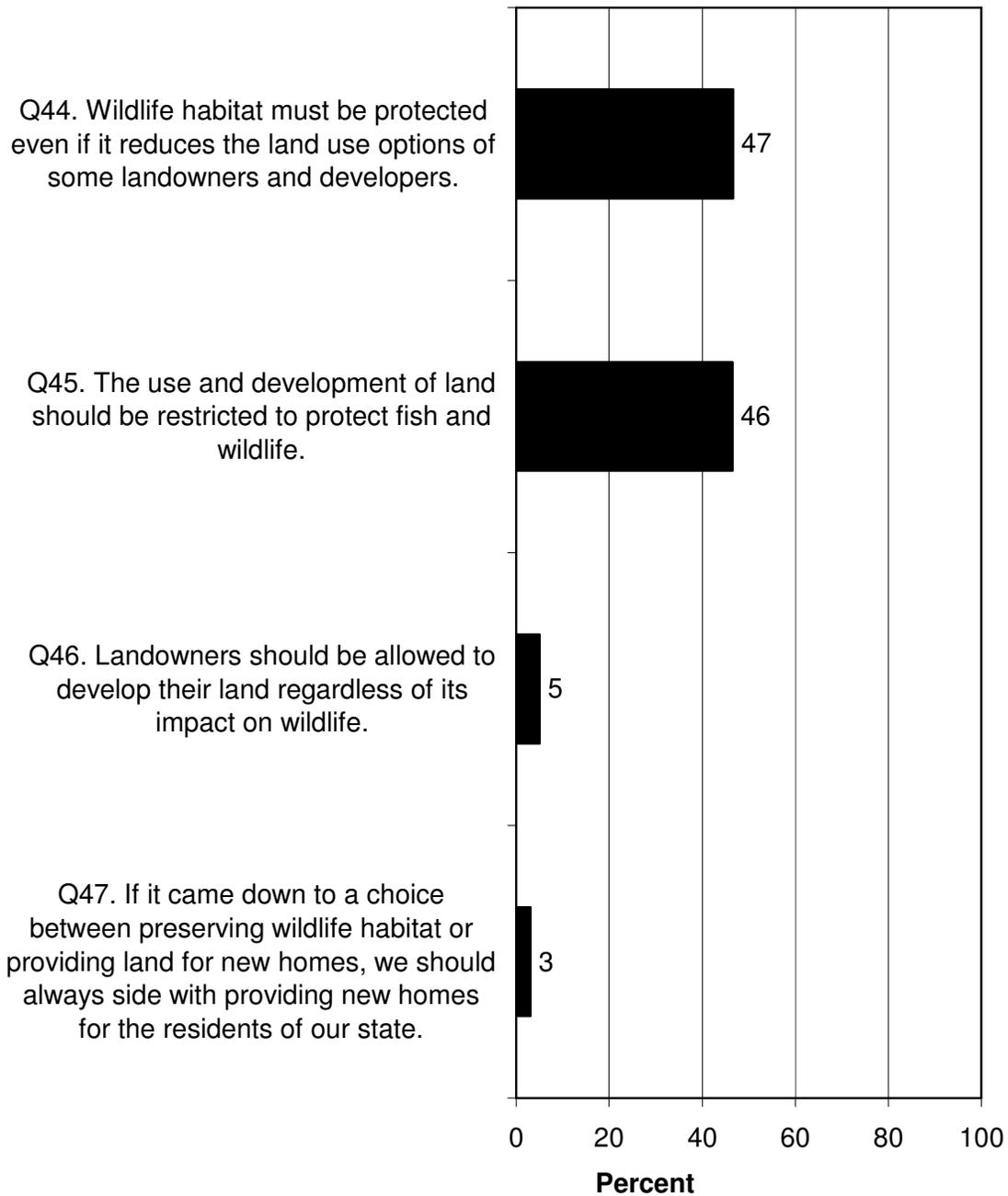


**Q48. How important is it to you that ecologically important habitats and lands in Vermont are being protected and preserved?
(Hunters and anglers.)**

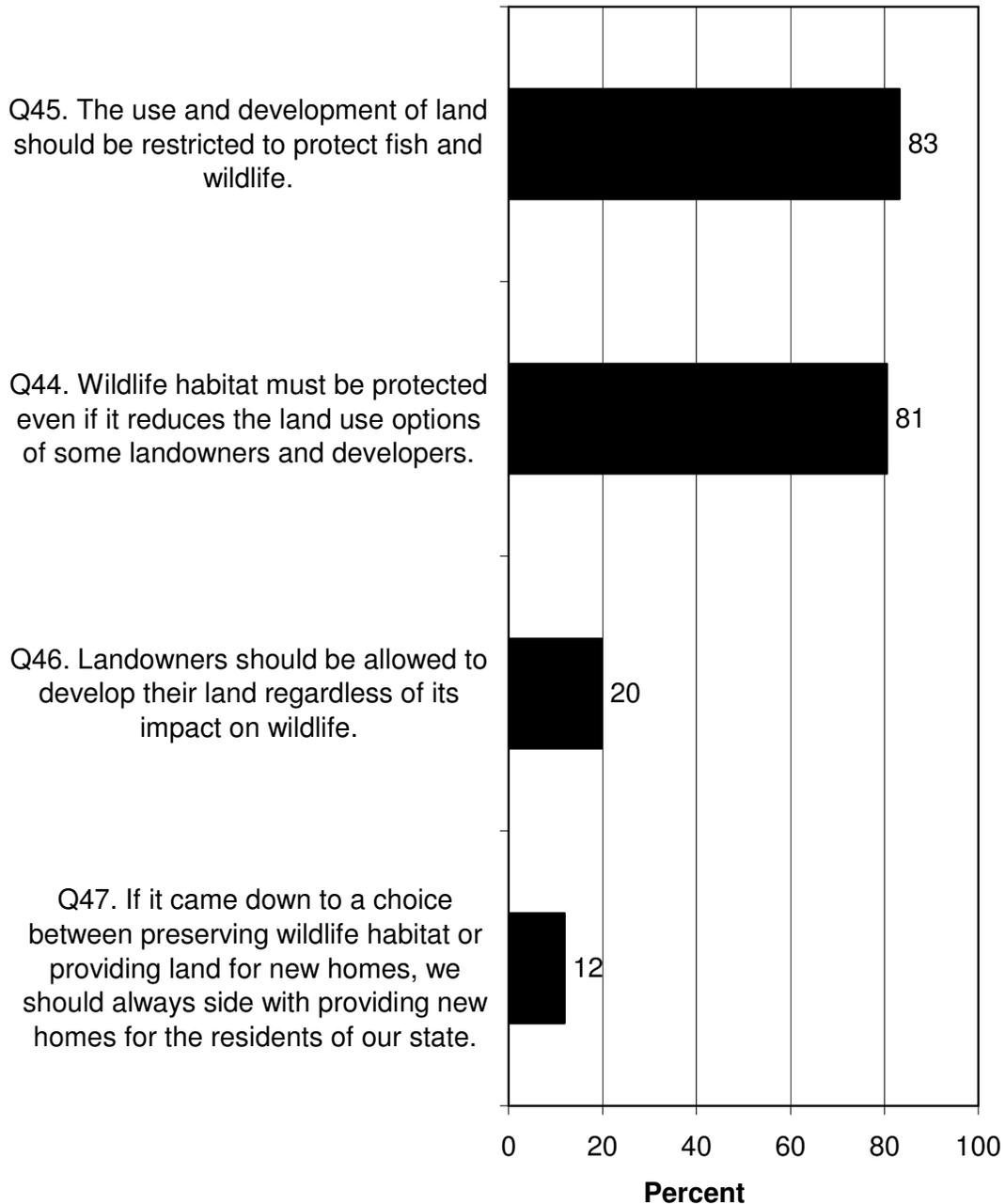


- Finally in this section, the survey presented four statements to respondents that pertain to the tradeoff between land development and habitat protection. For each, respondents indicated if they agree or disagree with it. In general, they side with habitat protection over unfettered use of land.
- Among residents, agreement is high that *the use and development of land should be restricted to protect fish and wildlife* (83%) and that *wildlife habitat must be protected even if it reduces the land use options of some landowners and developers* (81%). However, statements favoring development are *not* well received: disagreement ranges from 74% to 77% on the two statements that favor development over wildlife, as shown on the graphs. There is little marked change since 2003.
 - Hunters and anglers are much the same as residents.

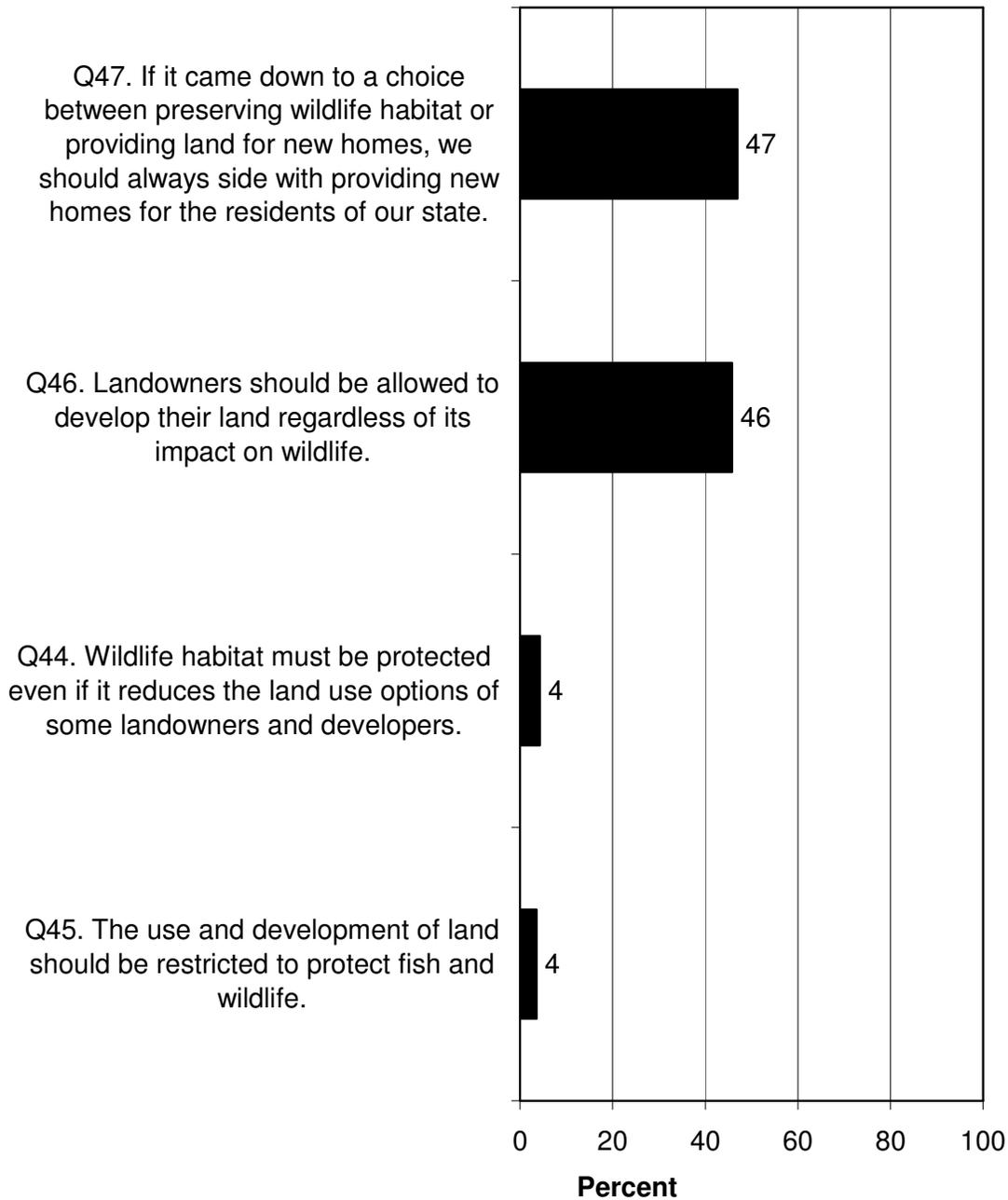
Q44-47: Percent of residents who strongly agree with the following:



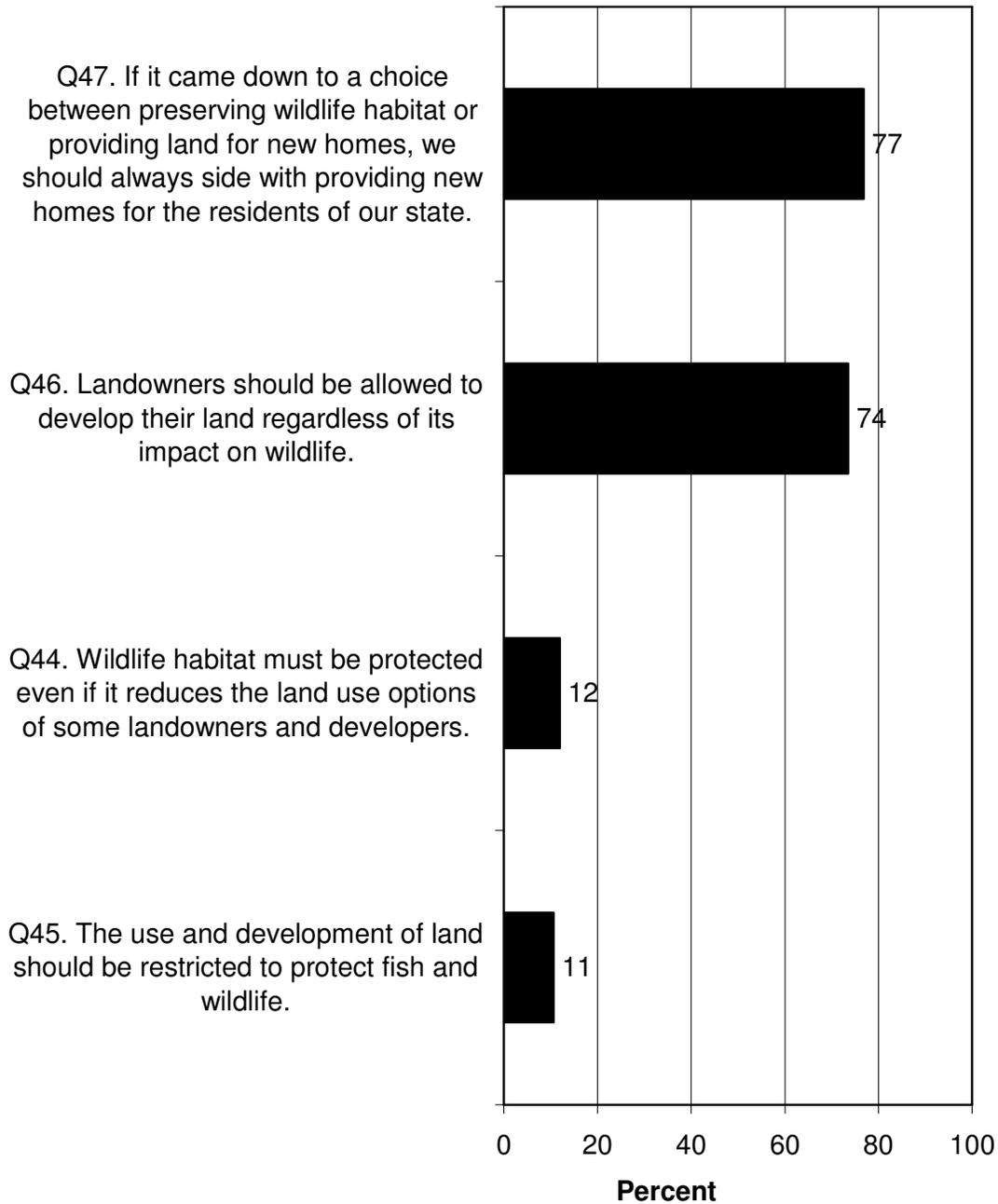
Q44-47: Percent of residents who strongly or moderately agree with the following:



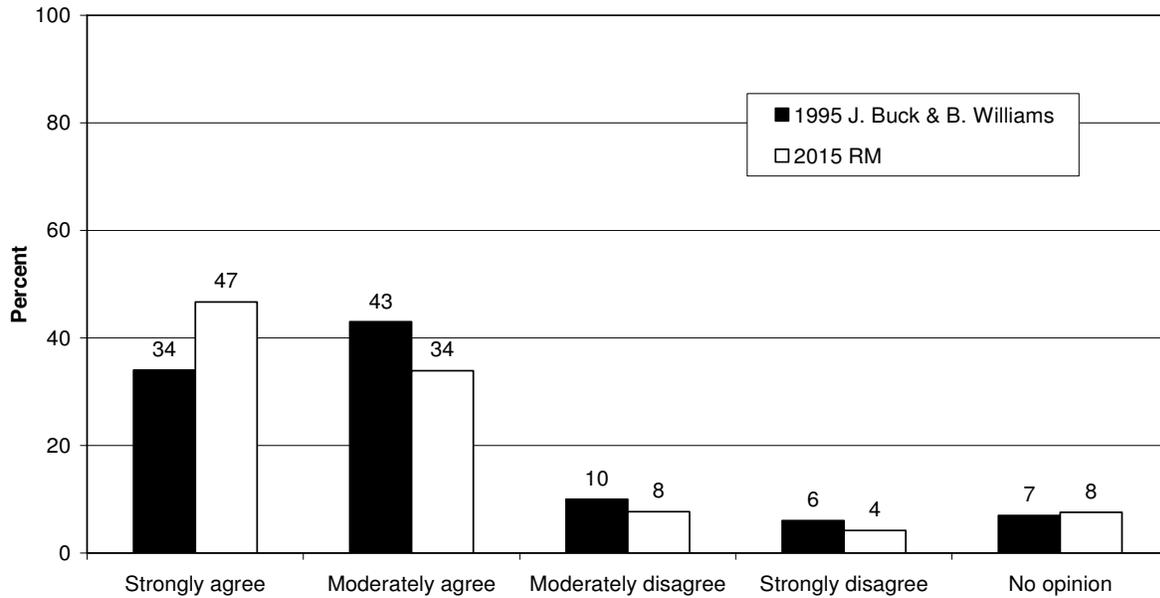
Q44-47: Percent of residents who strongly disagree with the following:



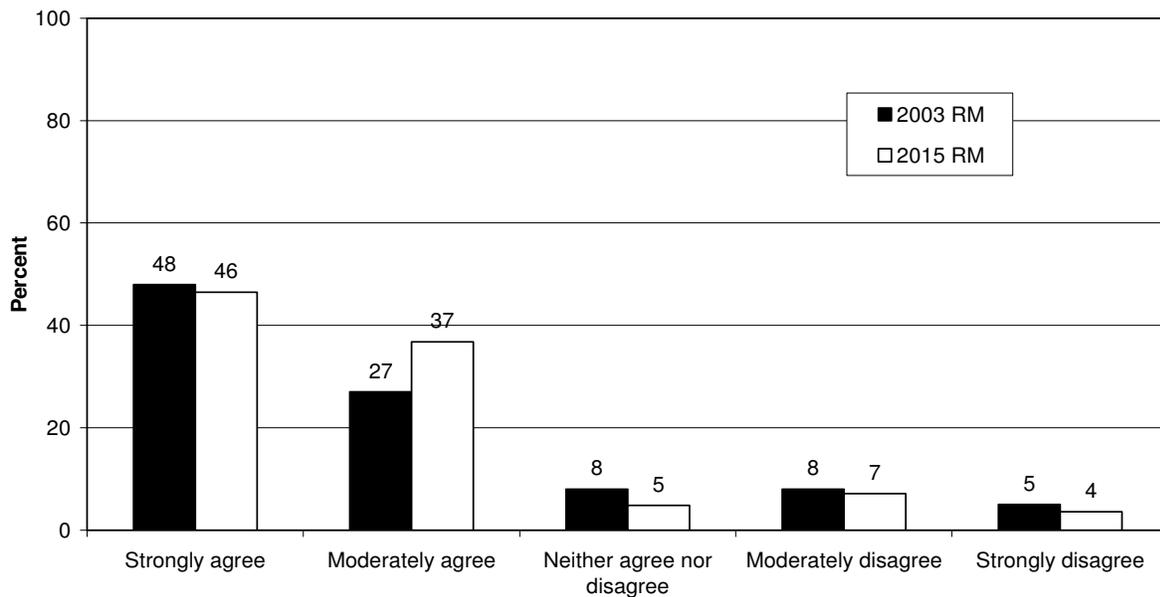
Q44-47: Percent of residents who strongly or moderately disagree with the following:



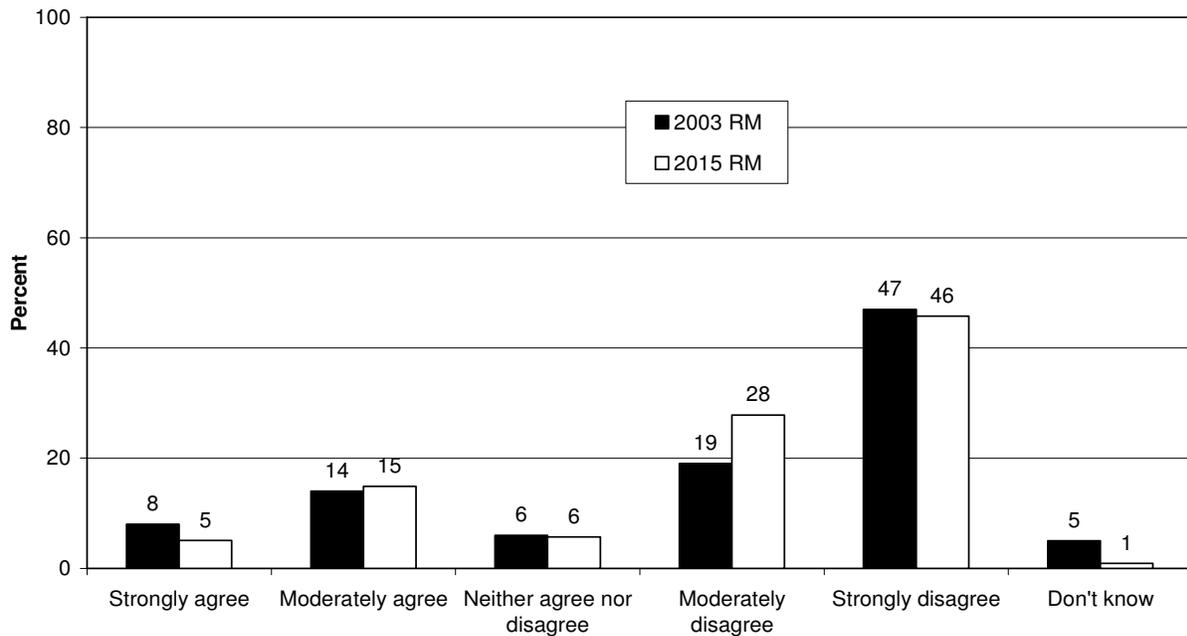
Q44. Wildlife habitat must be protected even if it reduces the land use options of some landowners and developers. (Vermont residents.)



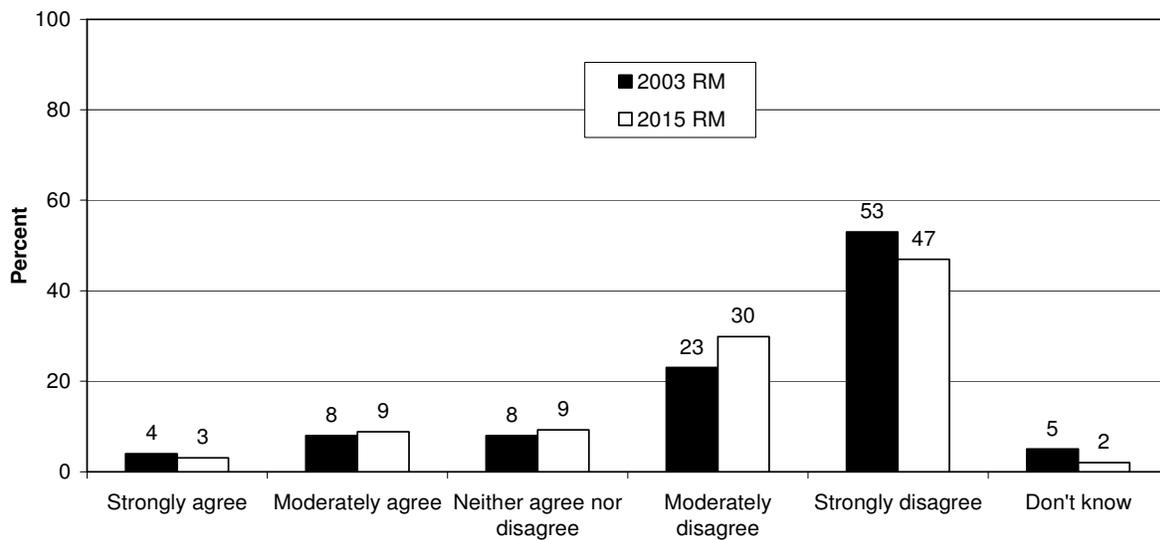
Q45. The use and development of land should be restricted to protect fish and wildlife. (Vermont residents.)



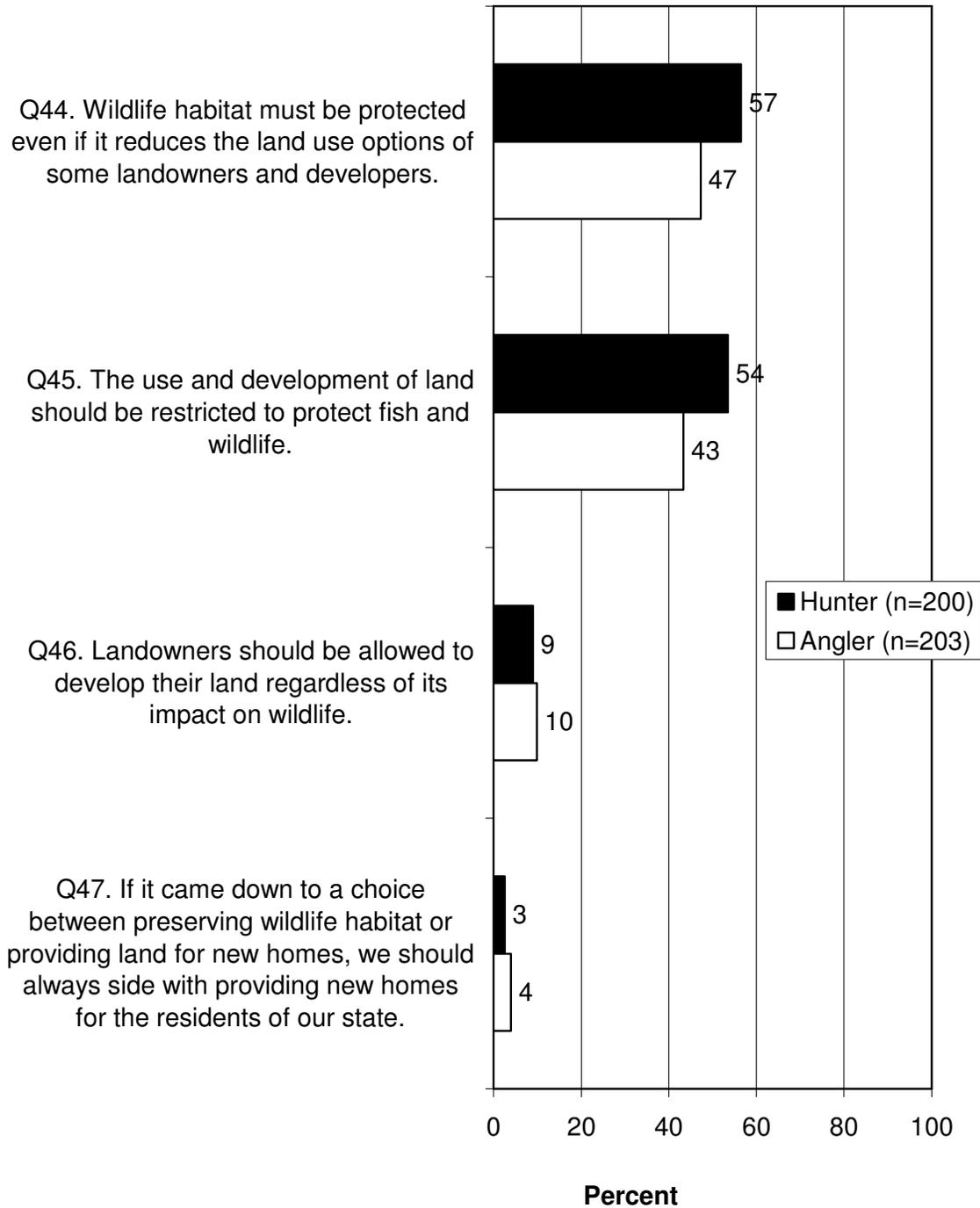
Q46. Landowners should be allowed to develop their land regardless of its impact on wildlife. (Vermont residents.)



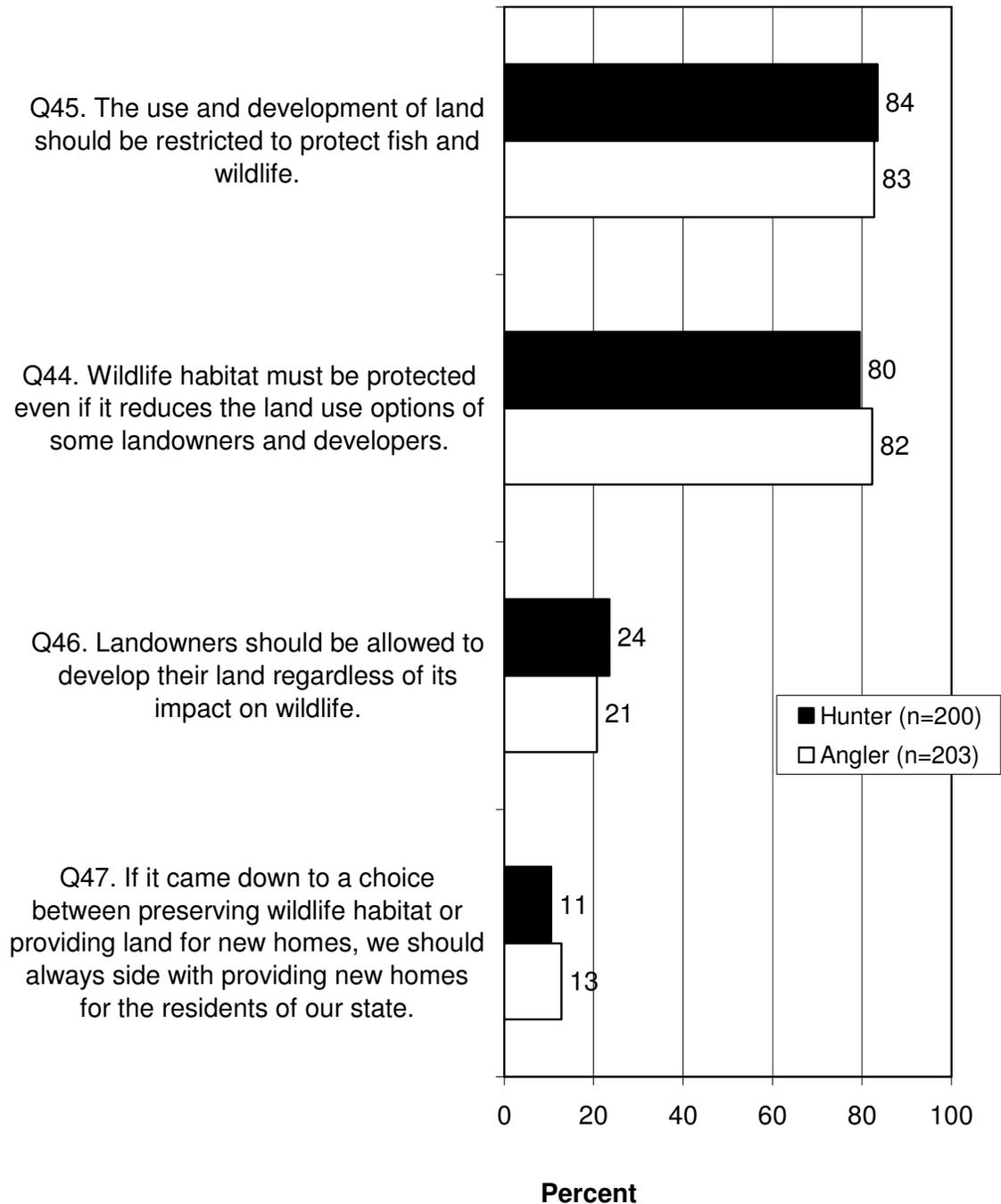
Q47. If it came down to a choice between preserving wildlife habitat or providing land for new homes, we should always side with providing new homes for the residents of our state. (Vermont residents.)



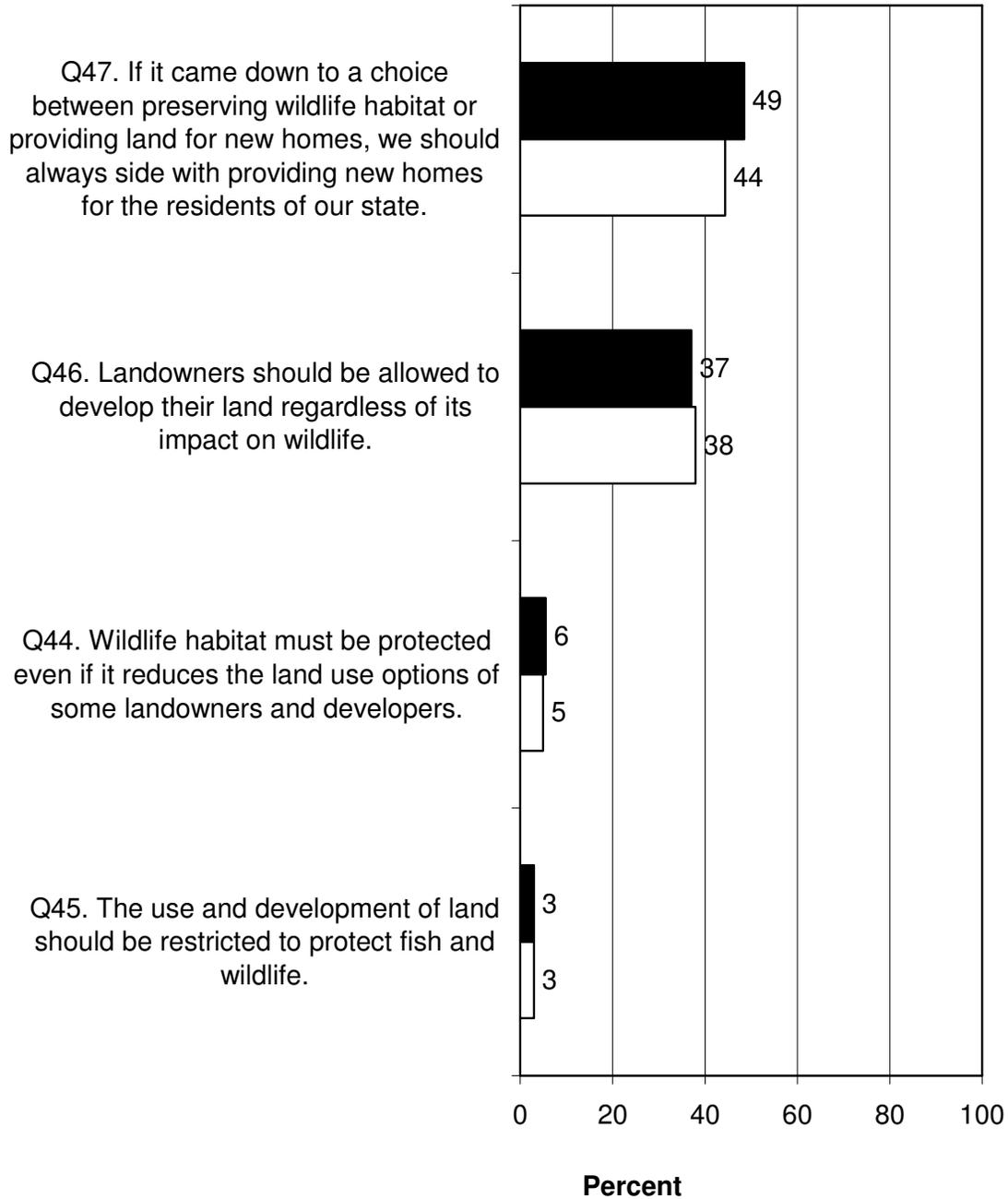
Q44-47: Percent who strongly agree with the following:



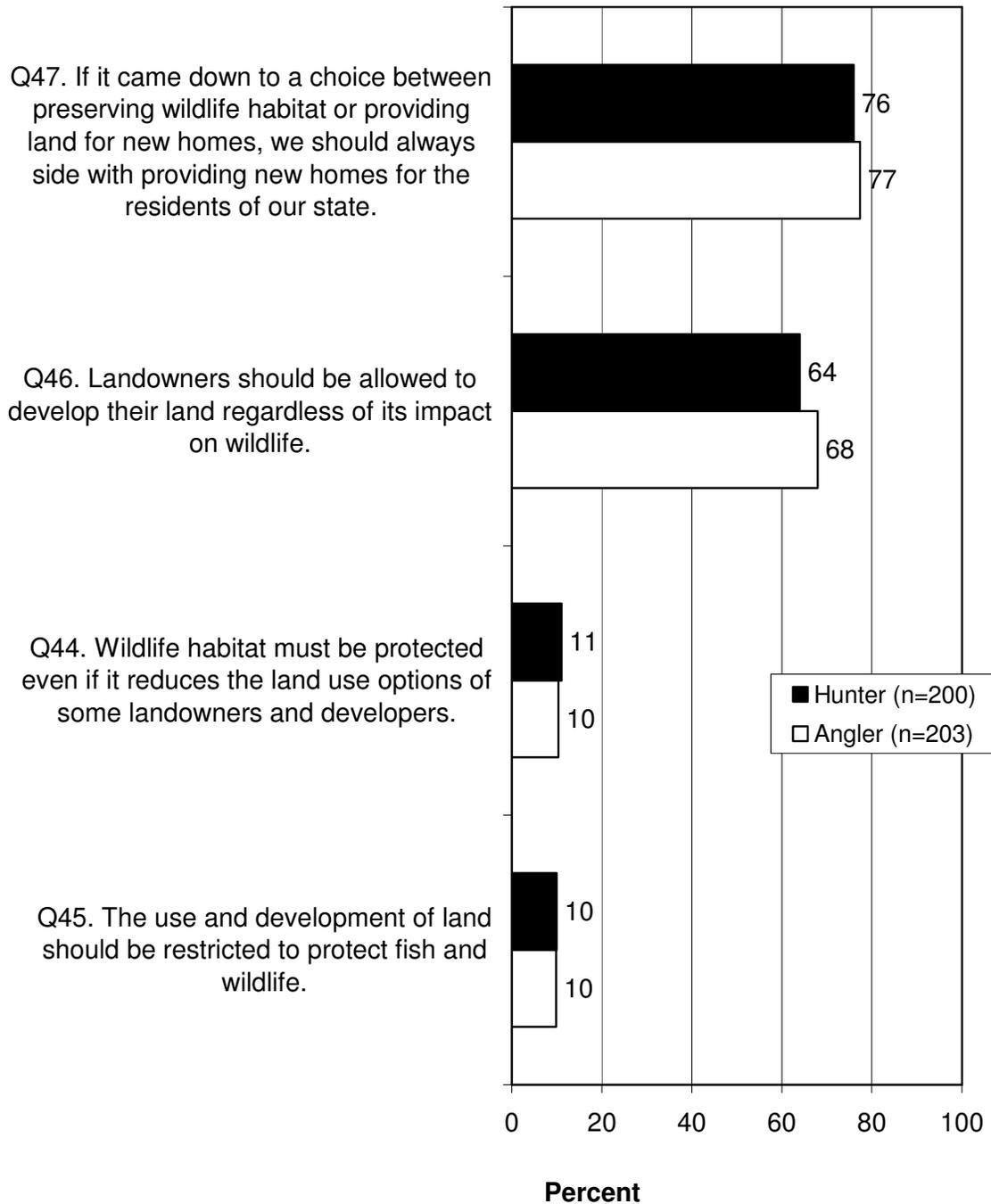
Q44-47: Percent who strongly or moderately agree with the following:



Q44-47: Percent who strongly disagree with the following:



Q44-47: Percent who strongly or moderately disagree with the following:



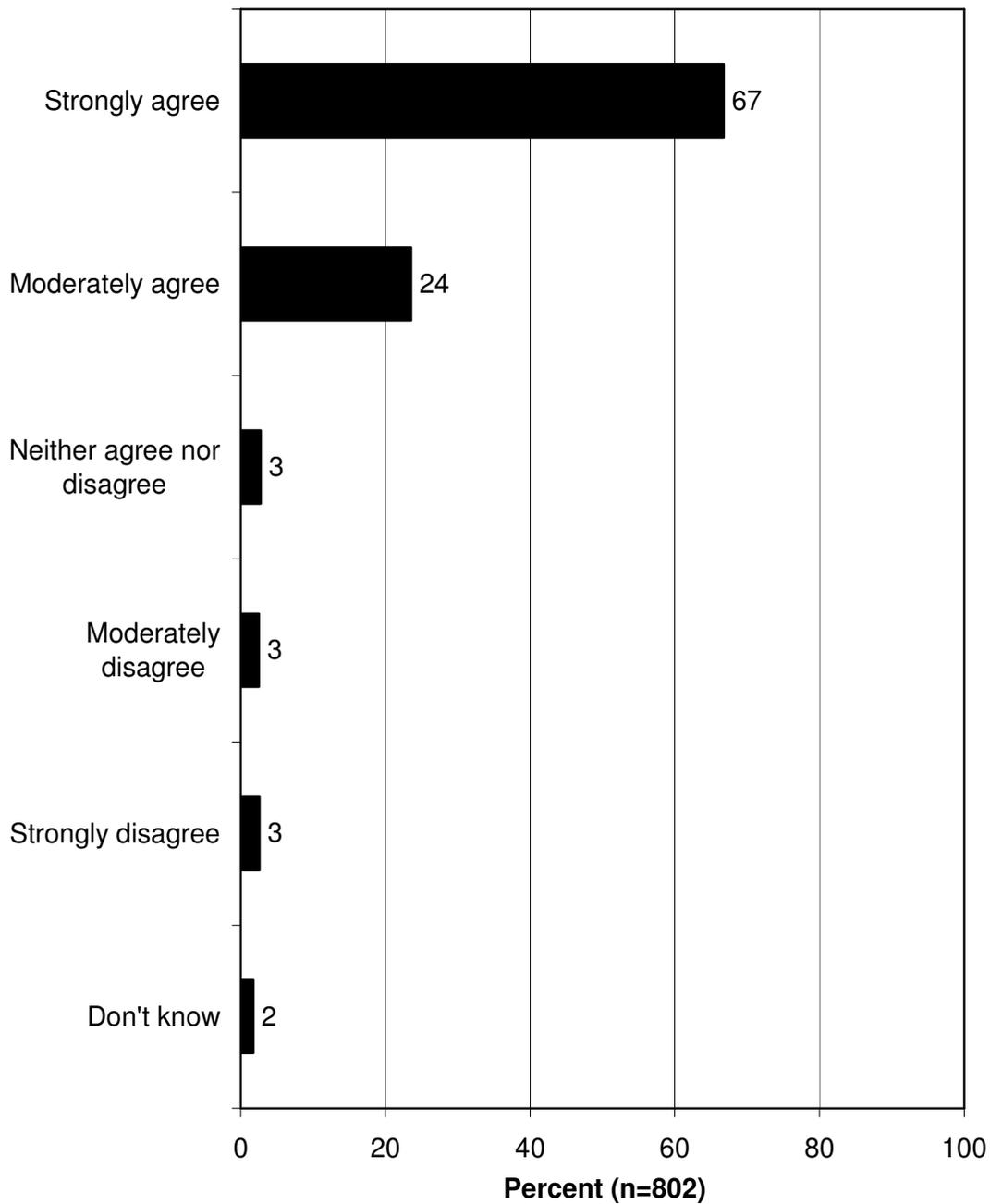
OPINIONS ON DEPARTMENT ACTIONS AS THEY RELATE TO BOTH LAND USE AND FISH/WILDLIFE

- Respondents overwhelmingly agree that *hunting and fishing are part of scientific management of healthy fish and wildlife populations*.
 - Among residents, 91% agree, with 67% *strongly* agreeing. There is little change since 2003.
 - Among recreationists, hunters are almost unanimous (98% agree); with anglers just under that (93% agree).

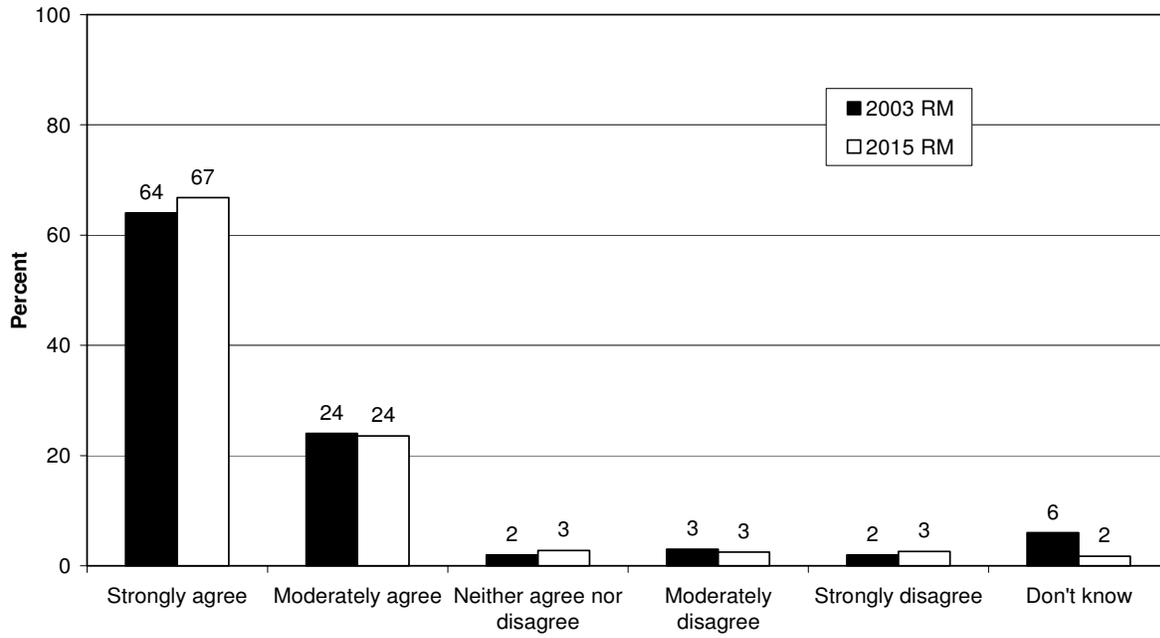
- Respondents generally place much importance on *protecting endangered species*.
 - The huge majority of residents (95%) think protecting endangered species is *very* or *somewhat* important (with 76% saying *very* important). There is little change since 2003.
 - Hunters and anglers are like the general population: 95% of hunters and 97% of anglers place importance on this.

- There is much support for having the Department protect important wildlife habitat by purchasing land.
 - The large majority of residents support (83%); opposition is low (9%). There is little change since 2003.
 - Hunters and anglers generally support (85% and 87%, respectively).

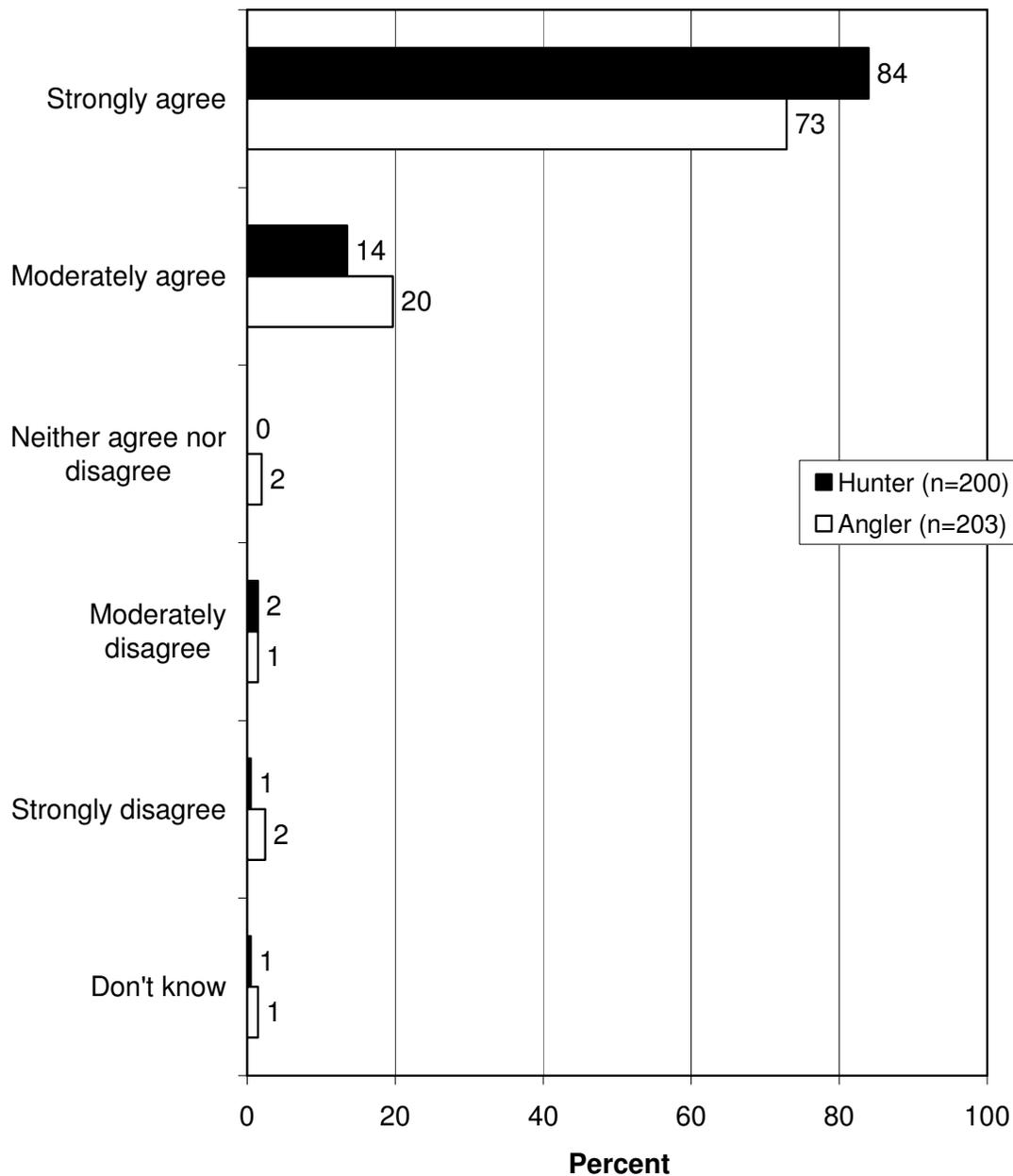
**Q35. Hunting and fishing are part of scientific
management of healthy fish and wildlife
populations.
(Vermont residents.)**



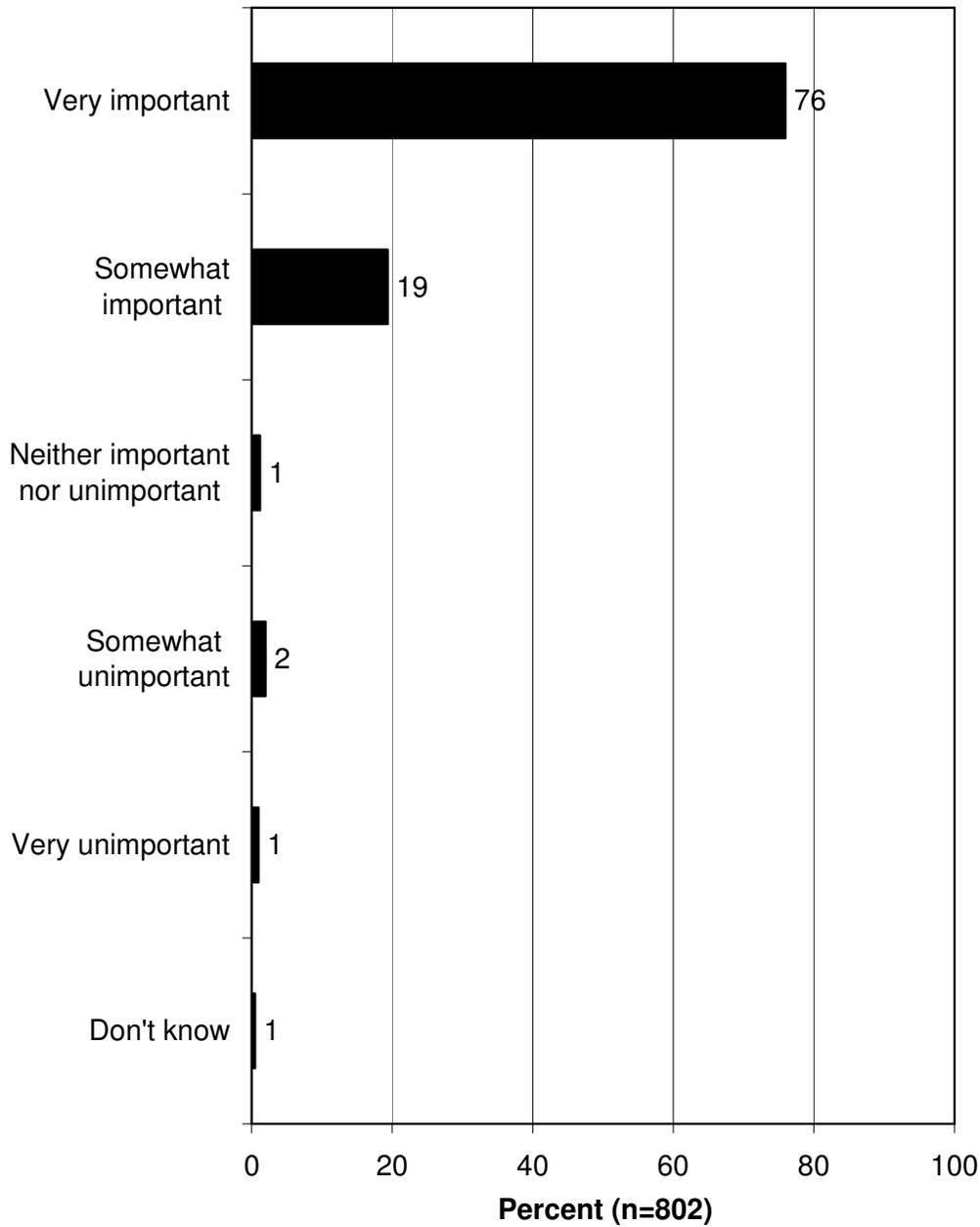
Q35. Hunting and fishing are part of scientific management of healthy fish and wildlife populations. (Vermont residents.)



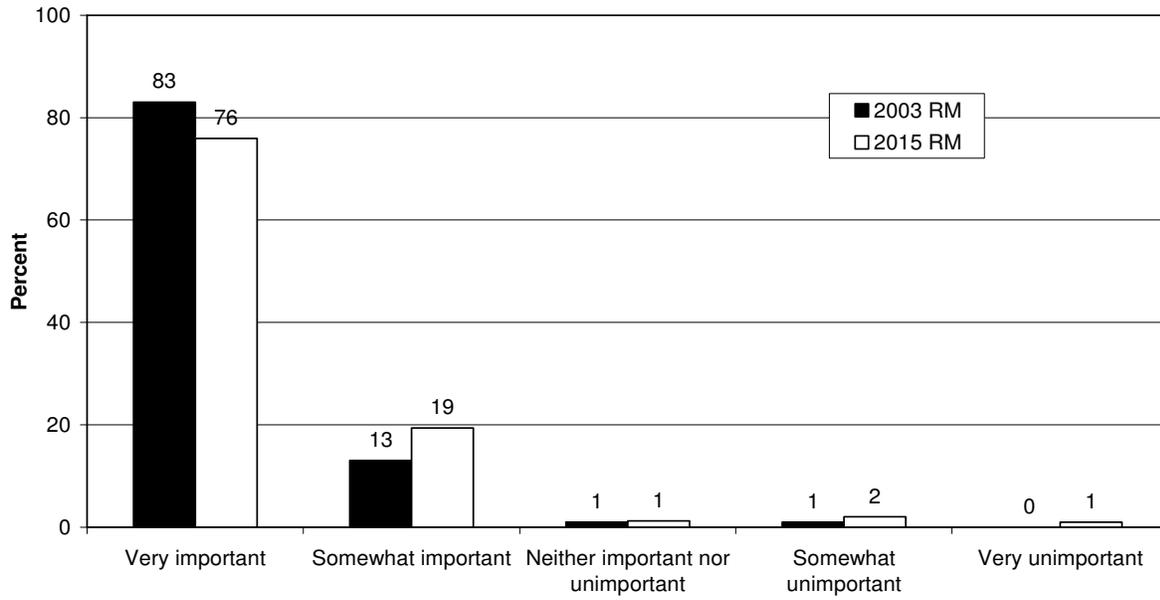
**Q35. Hunting and fishing are part of scientific management of healthy fish and wildlife populations.
(Hunters and anglers.)**



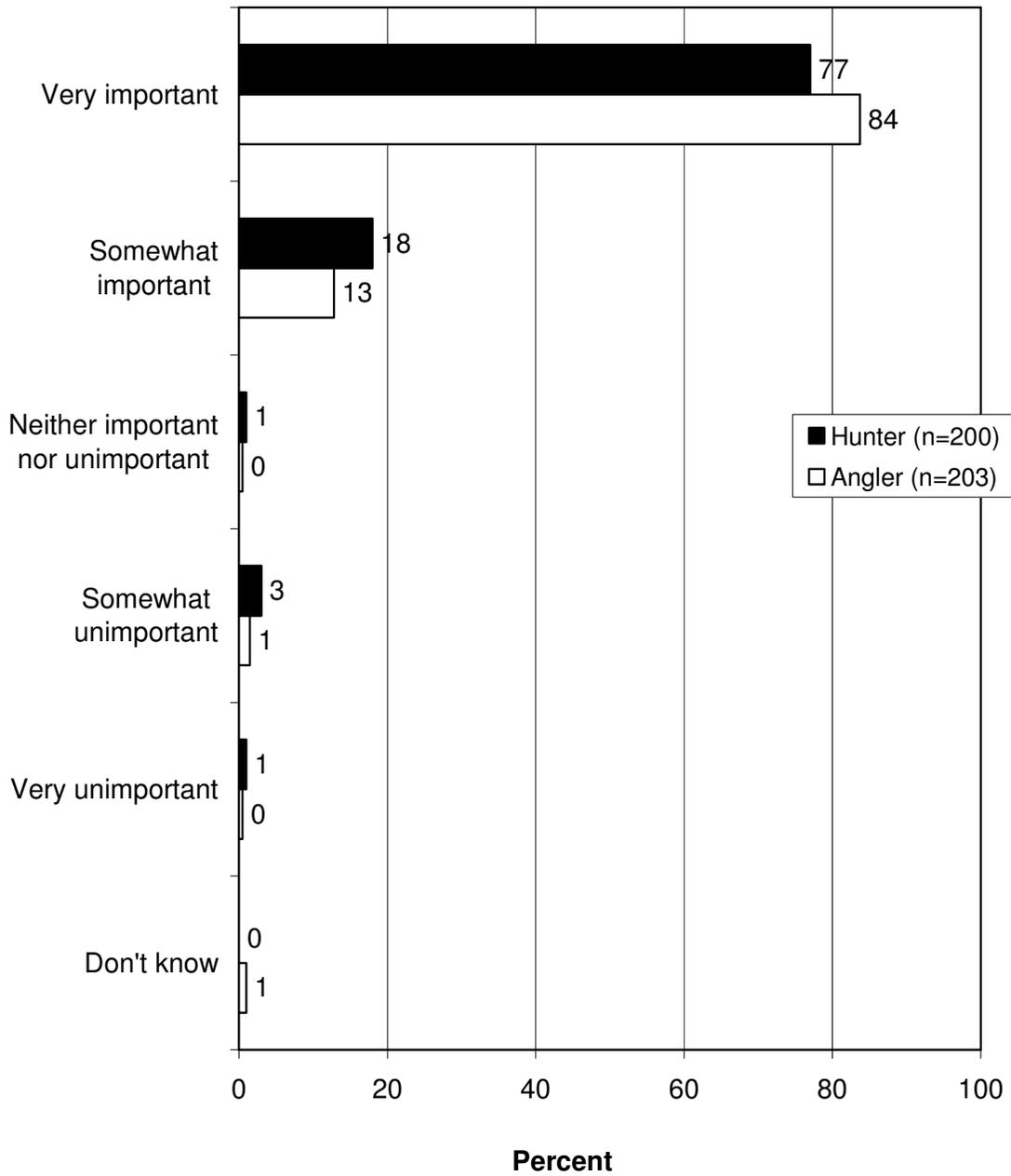
**Q39. Do you think protecting endangered species is an important or unimportant program for the Department?
(Vermont residents.)**



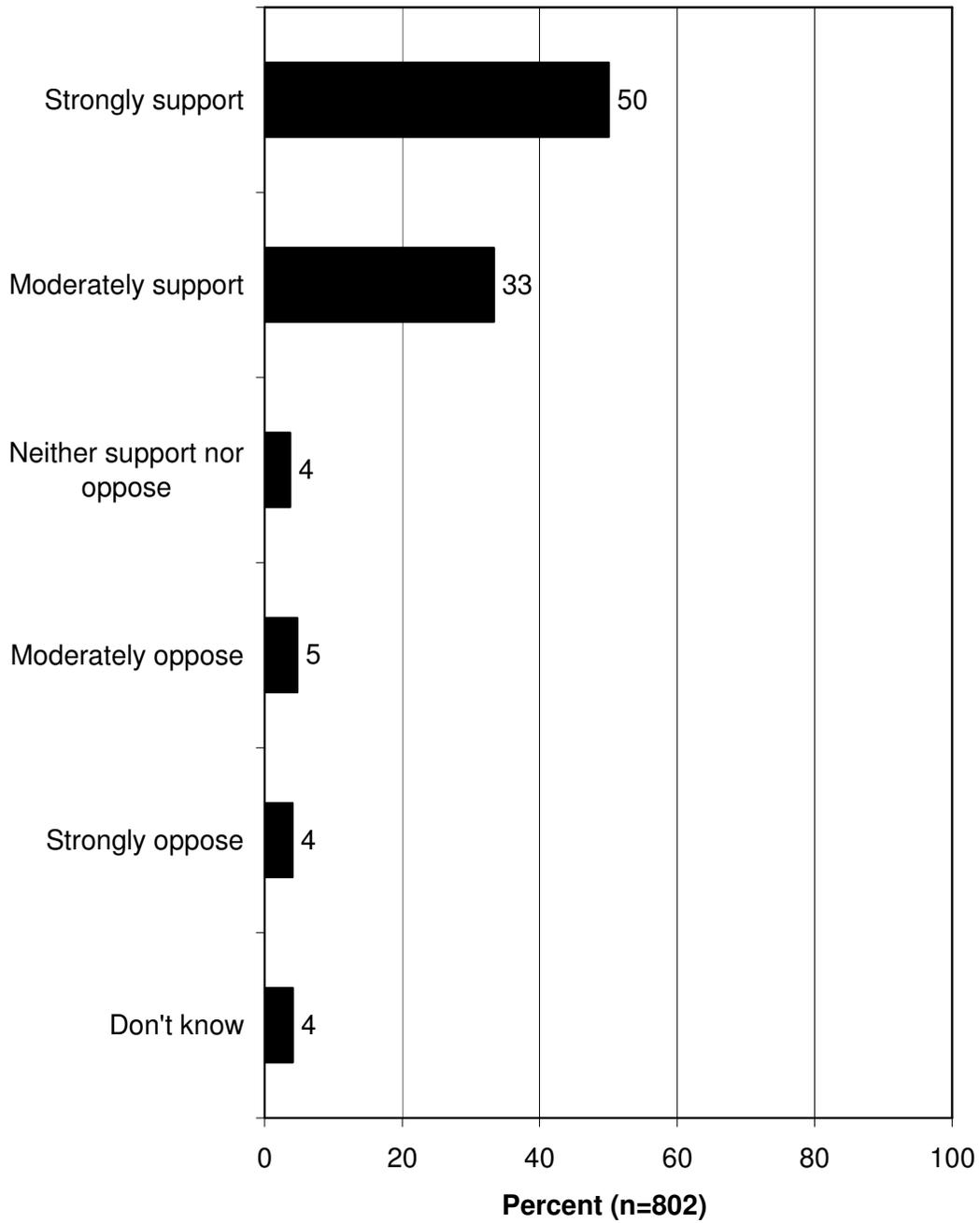
Q39. Do you think protecting endangered species is an important or unimportant program for the Department? (Vermont residents.)



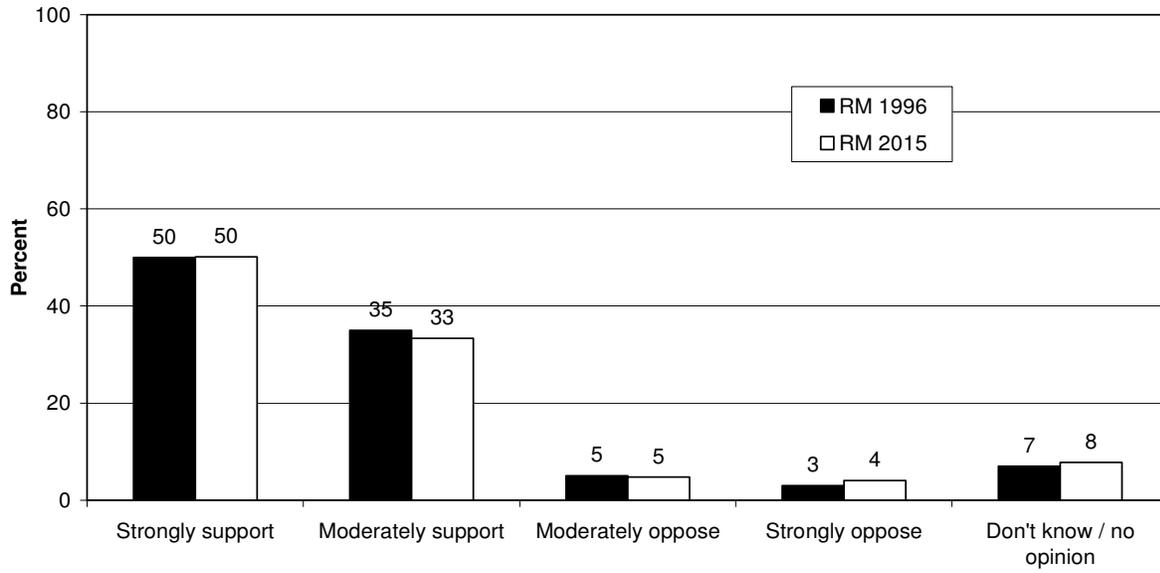
**Q39. Do you think protecting endangered species is an important or unimportant program for the Department?
(Hunters and anglers.)**



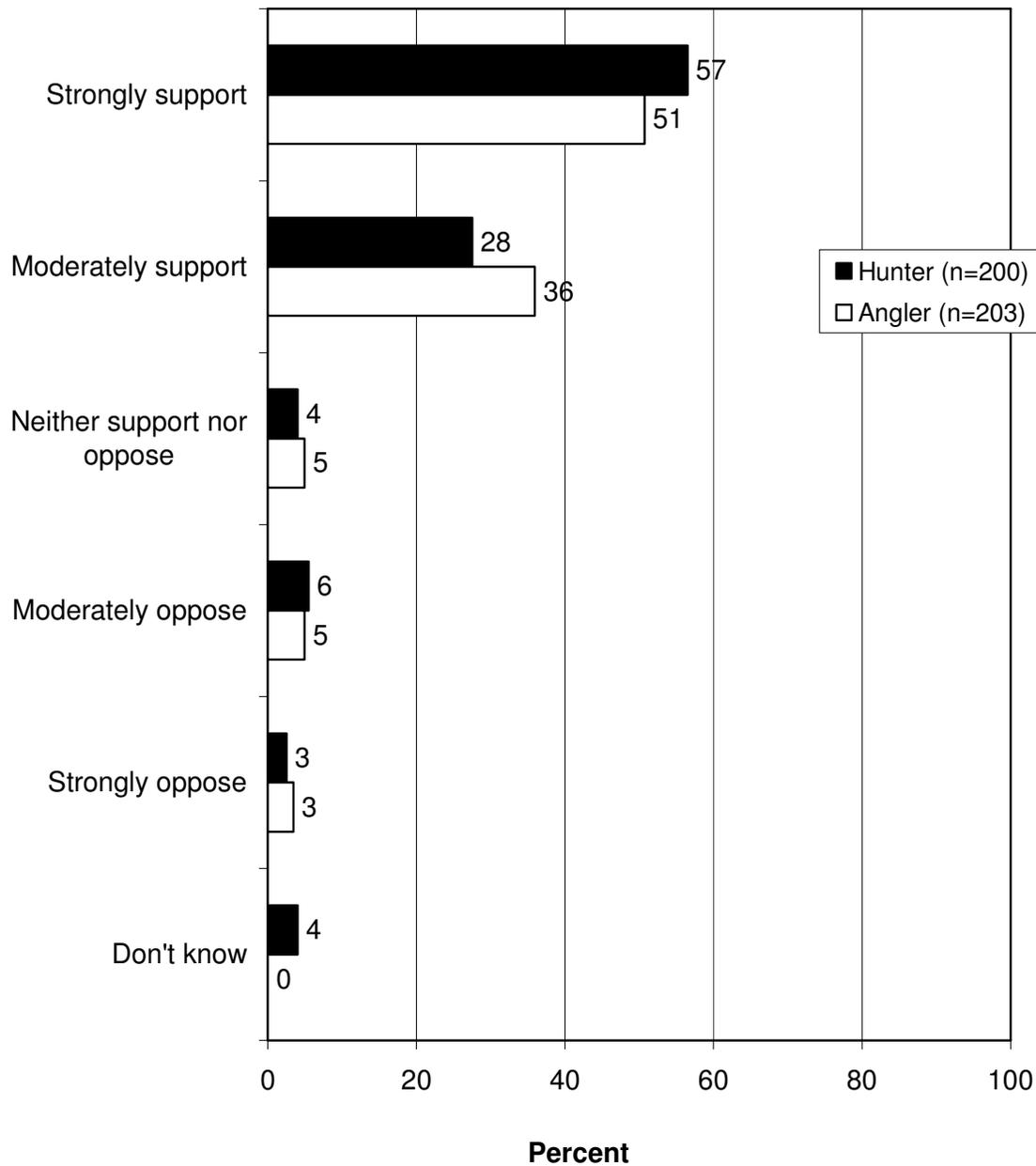
**Q49. Do you support or oppose the Department protecting important wildlife habitat by purchasing land?
(Vermont residents.)**



Q49. Do you support or oppose the Department protecting important wildlife habitat by purchasing land? (Vermont residents.)

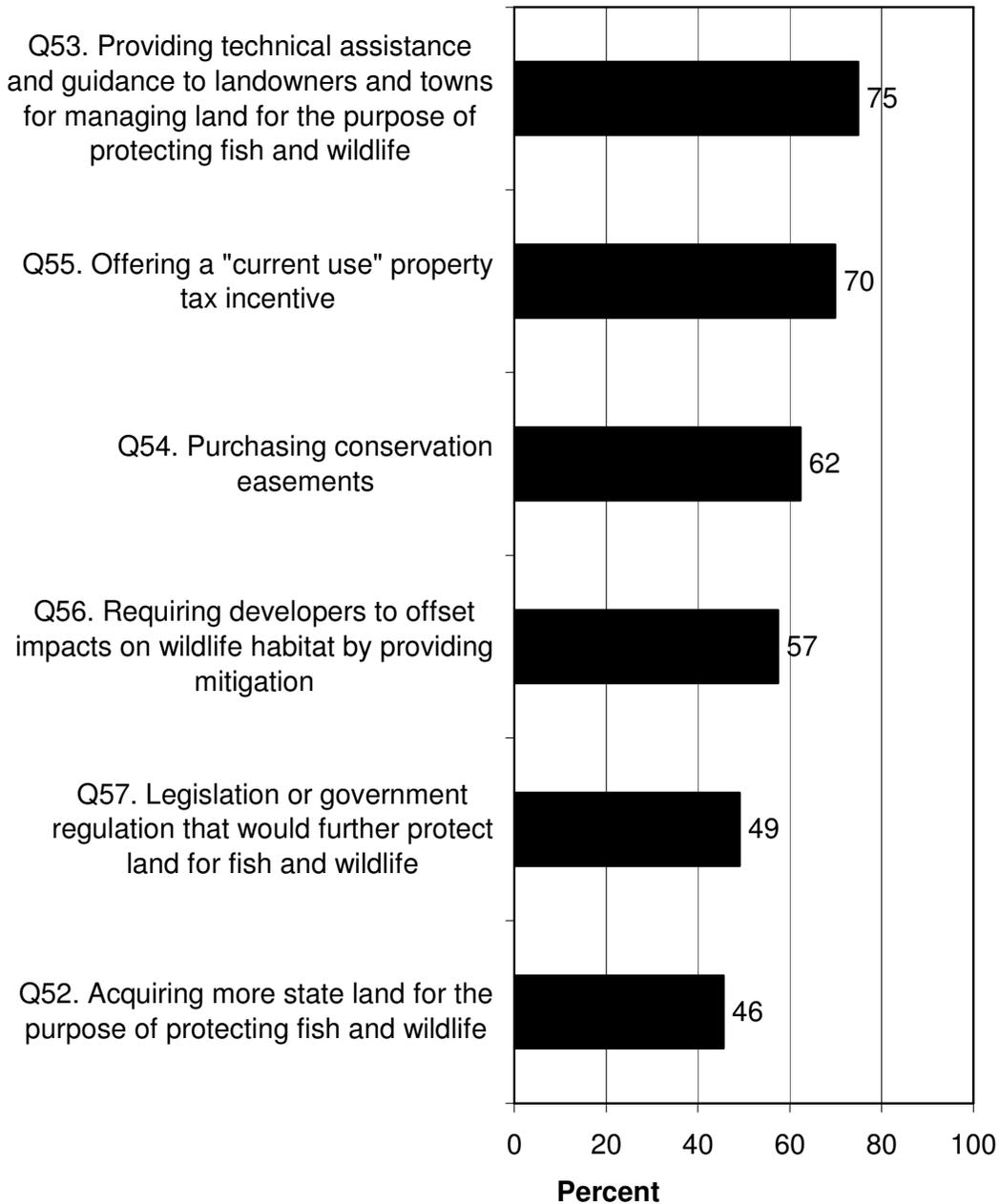


**Q49. Do you support or oppose the Department protecting important wildlife habitat by purchasing land?
(Hunters and anglers.)**

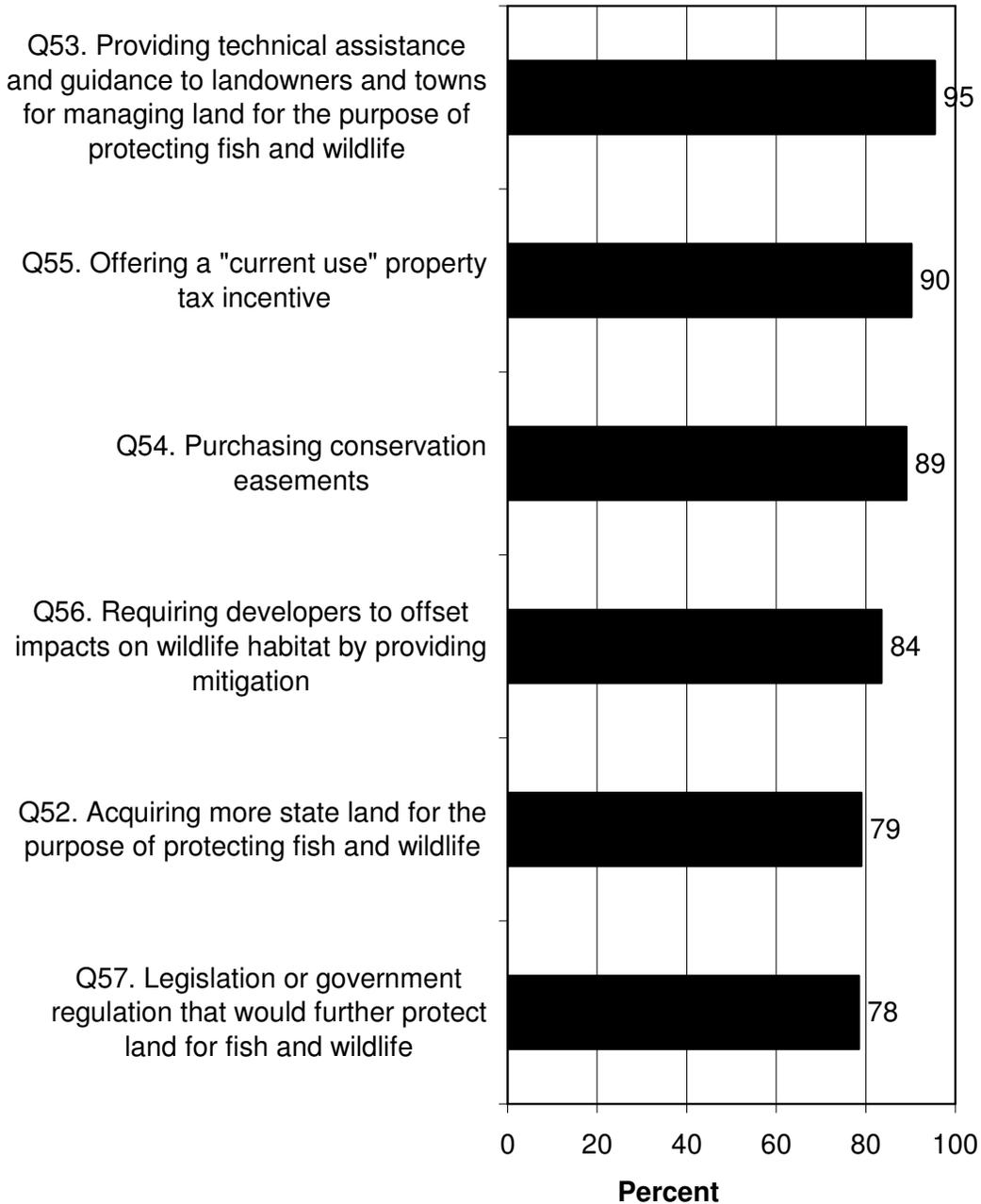


- The survey presented six possible strategies for protecting land for fish and wildlife. For each strategy, respondents rated their level of support for it or opposition to it. (Prior to the question, they were given this introduction: The Vermont Fish and Wildlife Department uses its funding and personnel to support a wide variety of programs, including outdoor recreation, fish and wildlife management and protection, and land conservation. Having both enough land and high quality land is important for fish and wildlife management and protection. Increasing or improving conservation efforts will require additional expenditures.)
 - Residents most favor the provision of technical assistance/guidance (75% strongly support) and tax incentives (70%). Furthermore, the purchase of conservation easements (62%) is favored over outright purchase of land (46%). (Note that when looking at strong or moderate support, the percentages are very high—from 78% to 95%.) In the middle are two strategies that entail more regulation.
 - Support for the Department acquiring more state land has slightly decreased since 1996.
 - Hunters and anglers also show the most support for technical assistance/guidance and tax incentives. In the middle are requiring developers to provide mitigation actions and the purchase of conservation easements. At the bottom for hunters and anglers are purchasing more state land and more government regulations.

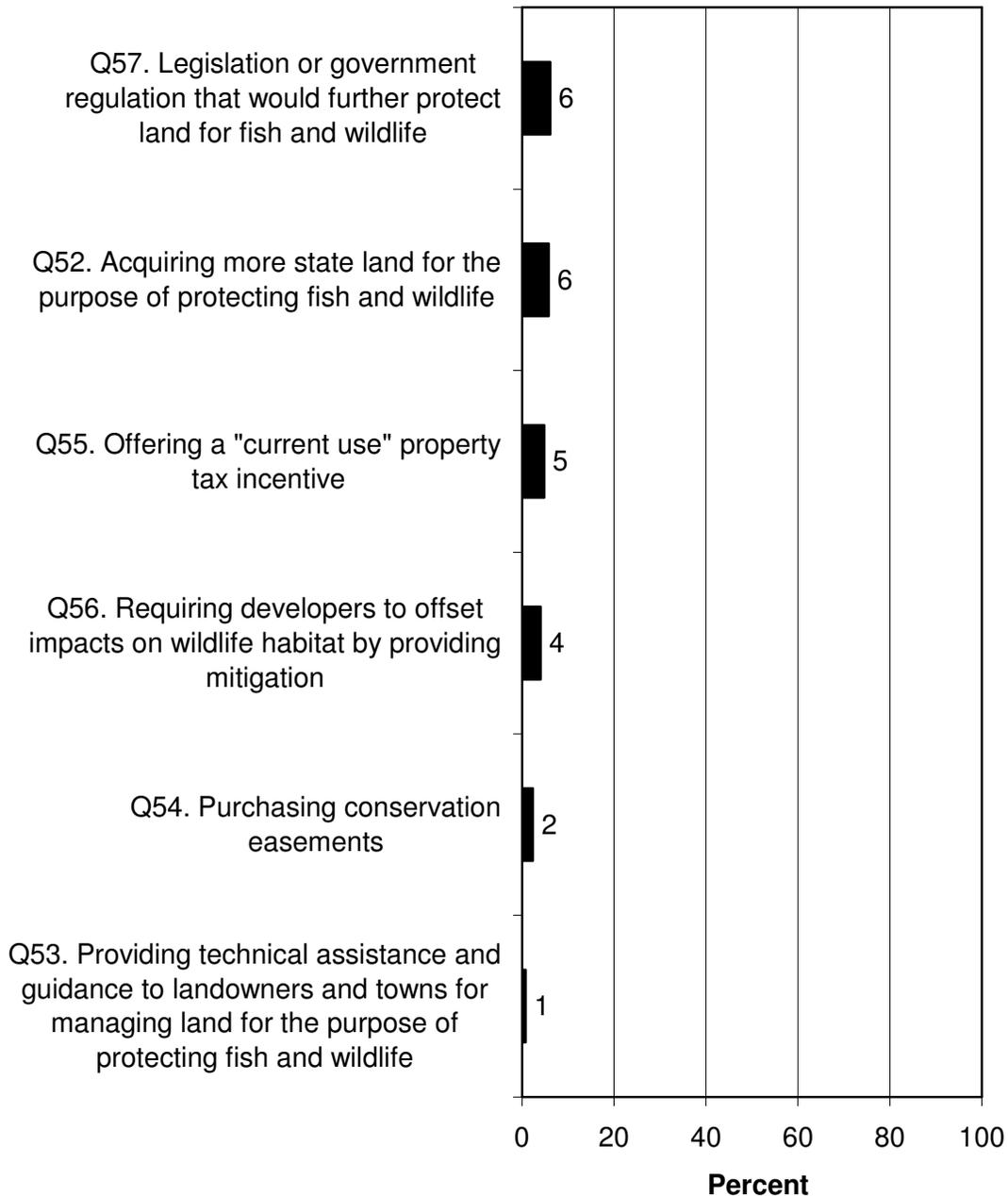
Q52-57: Percent of residents who strongly support each of the following strategies for protecting land for fish and wildlife:



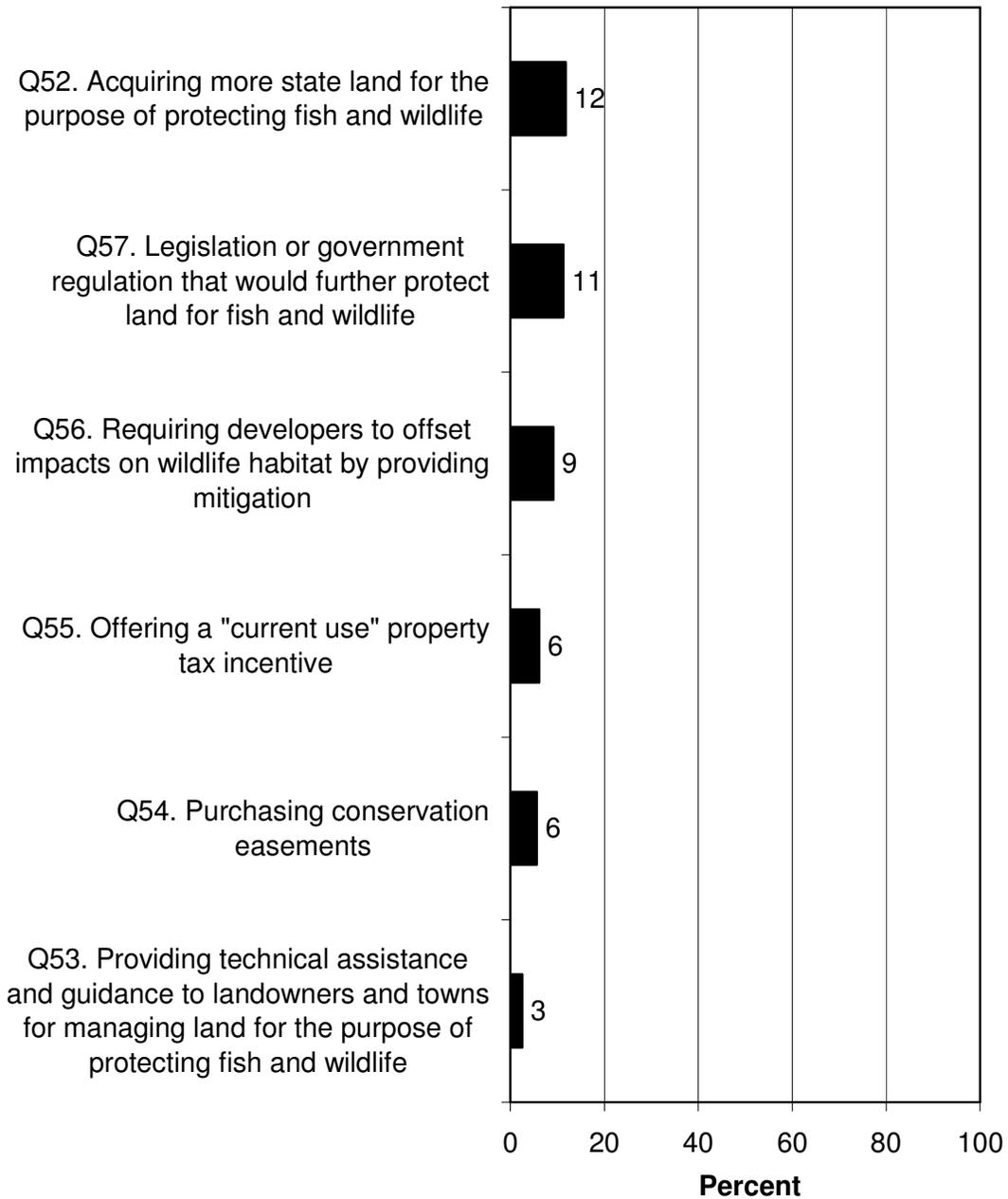
Q52-57: Percent of residents who strongly or moderately support each of the following strategies for protecting land for fish and wildlife:



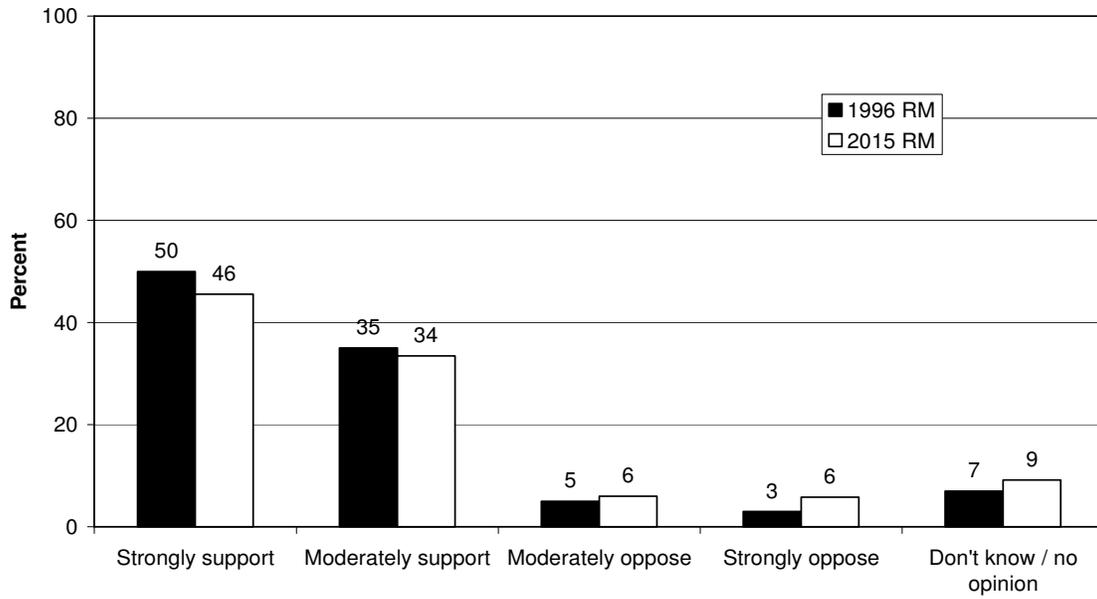
Q52-57: Percent of residents who strongly oppose each of the following strategies for protecting land for fish and wildlife:



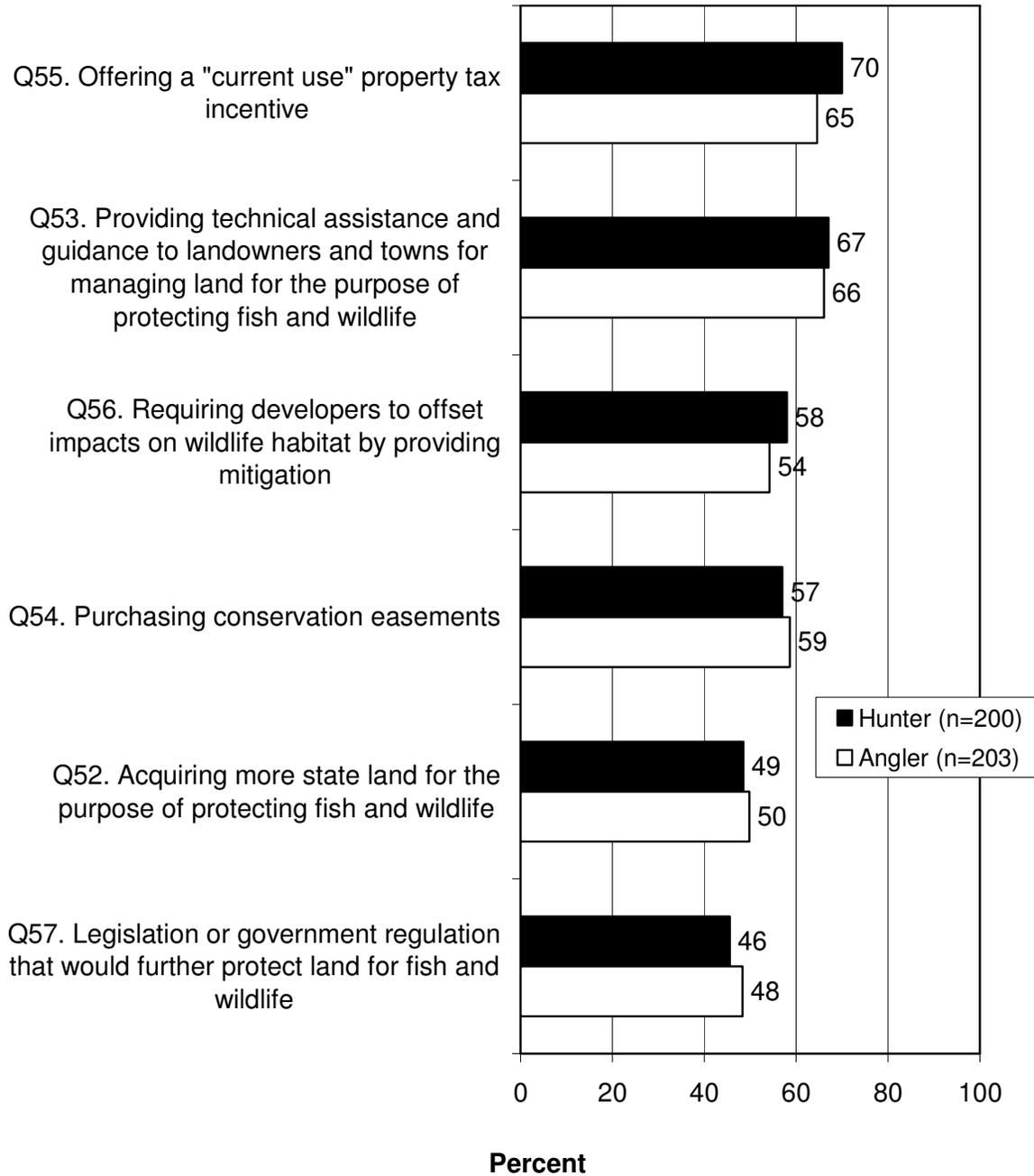
Q52-57: Percent of residents who strongly or moderately oppose each of the following strategies for protecting land for fish and wildlife:



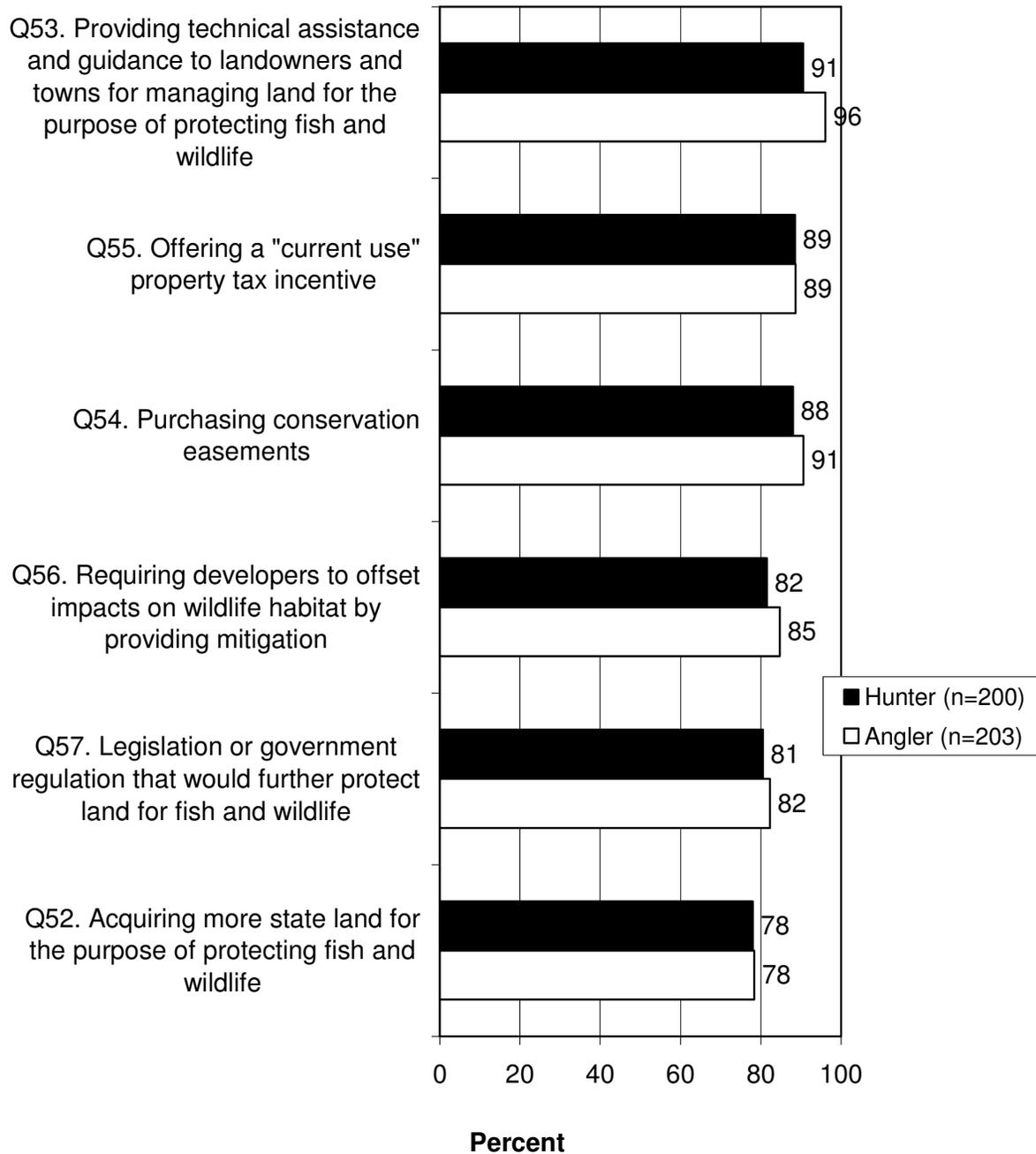
Q52. Do you support or oppose the Vermont Fish and Wildlife Department acquiring more state land for the purpose of protecting fish and wildlife? (Vermont residents.)



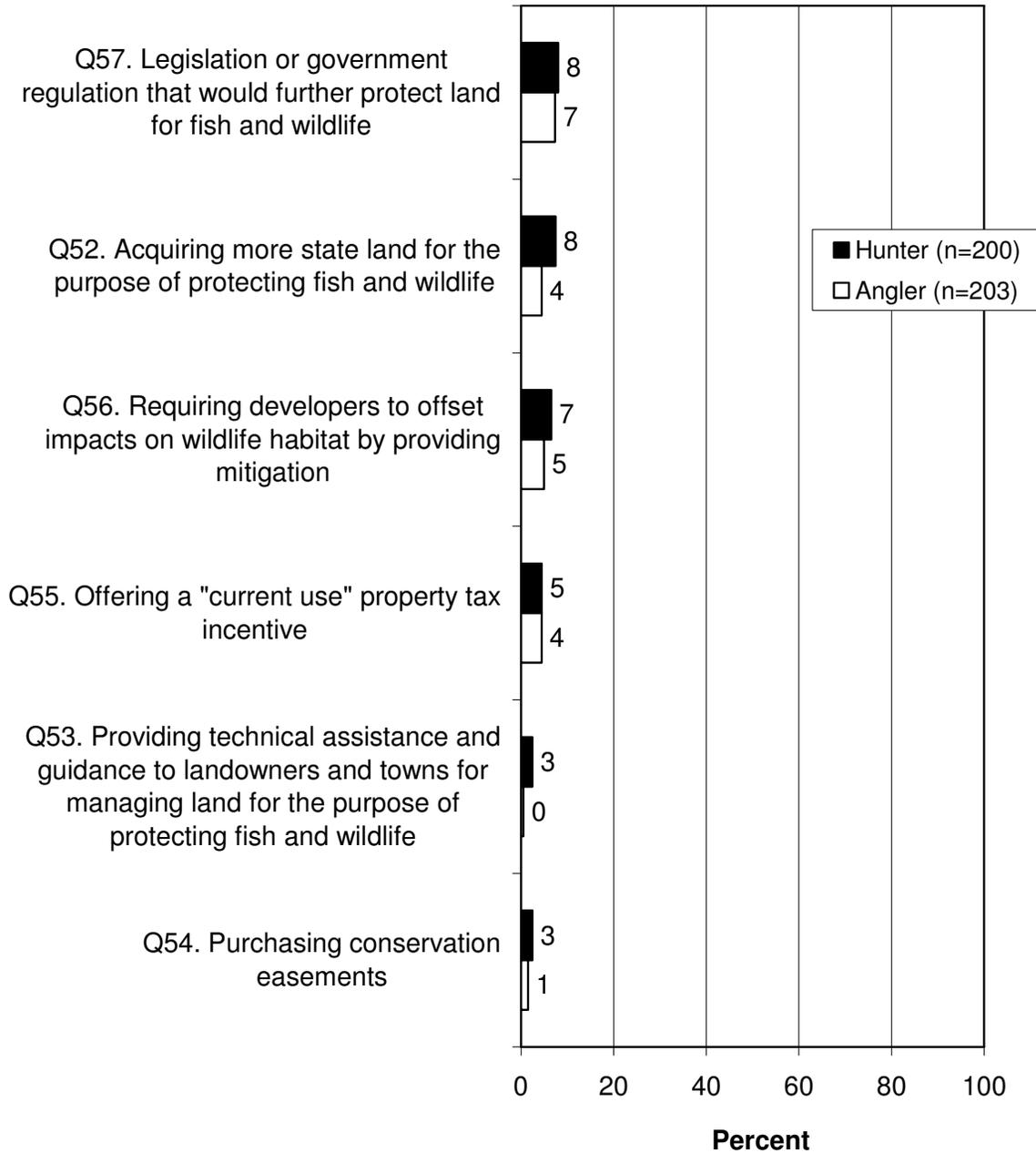
Q52-57: Percent who strongly support each of the following strategies for protecting land for fish and wildlife:



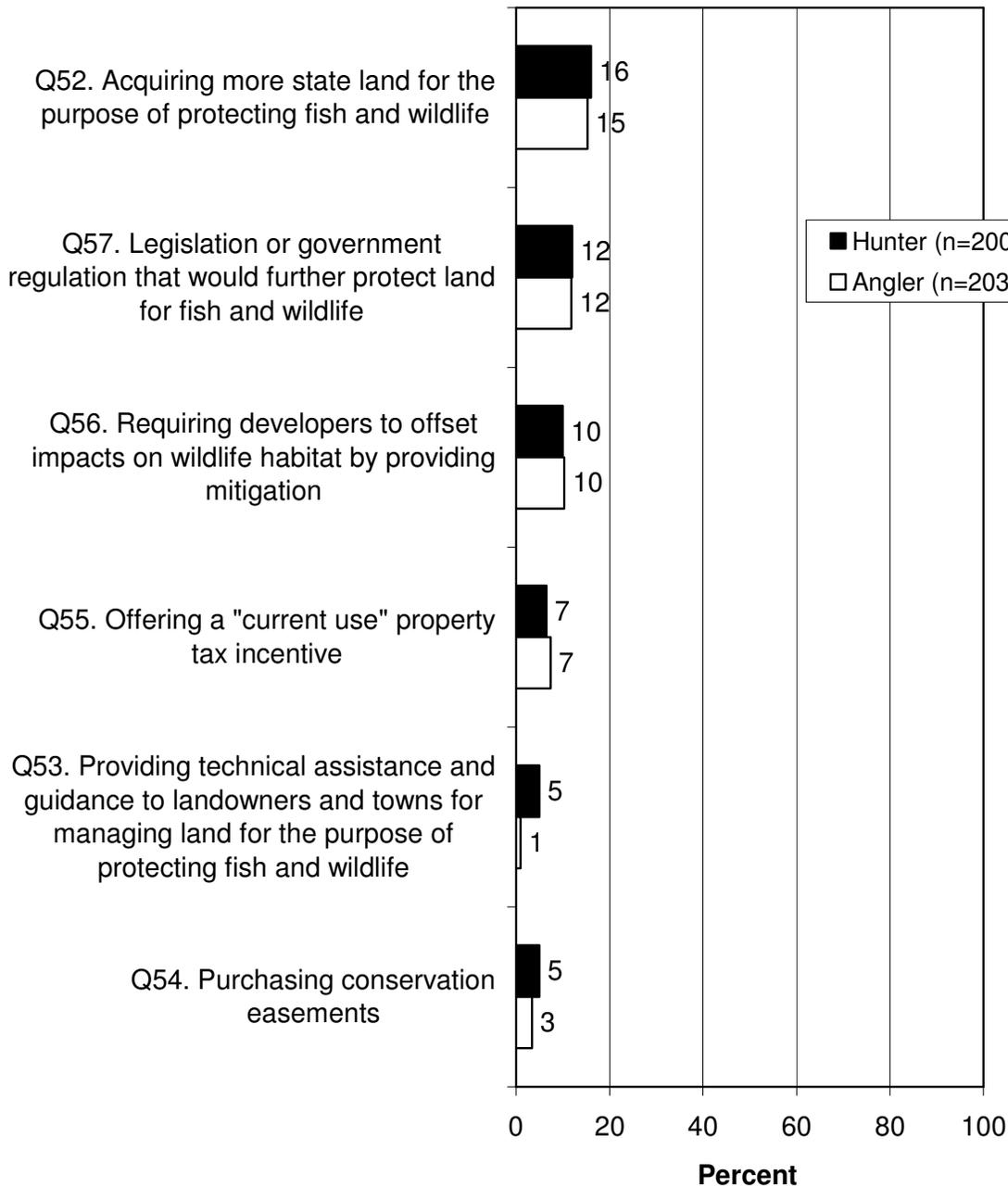
Q52-57: Percent who strongly or moderately support each of the following strategies for protecting land for fish and wildlife:



Q52-57: Percent who strongly oppose each of the following strategies for protecting land for fish and wildlife:



Q52-57: Percent who strongly or moderately oppose each of the following strategies for protecting land for fish and wildlife:



FUNDING OF FISH AND WILDLIFE MANAGEMENT

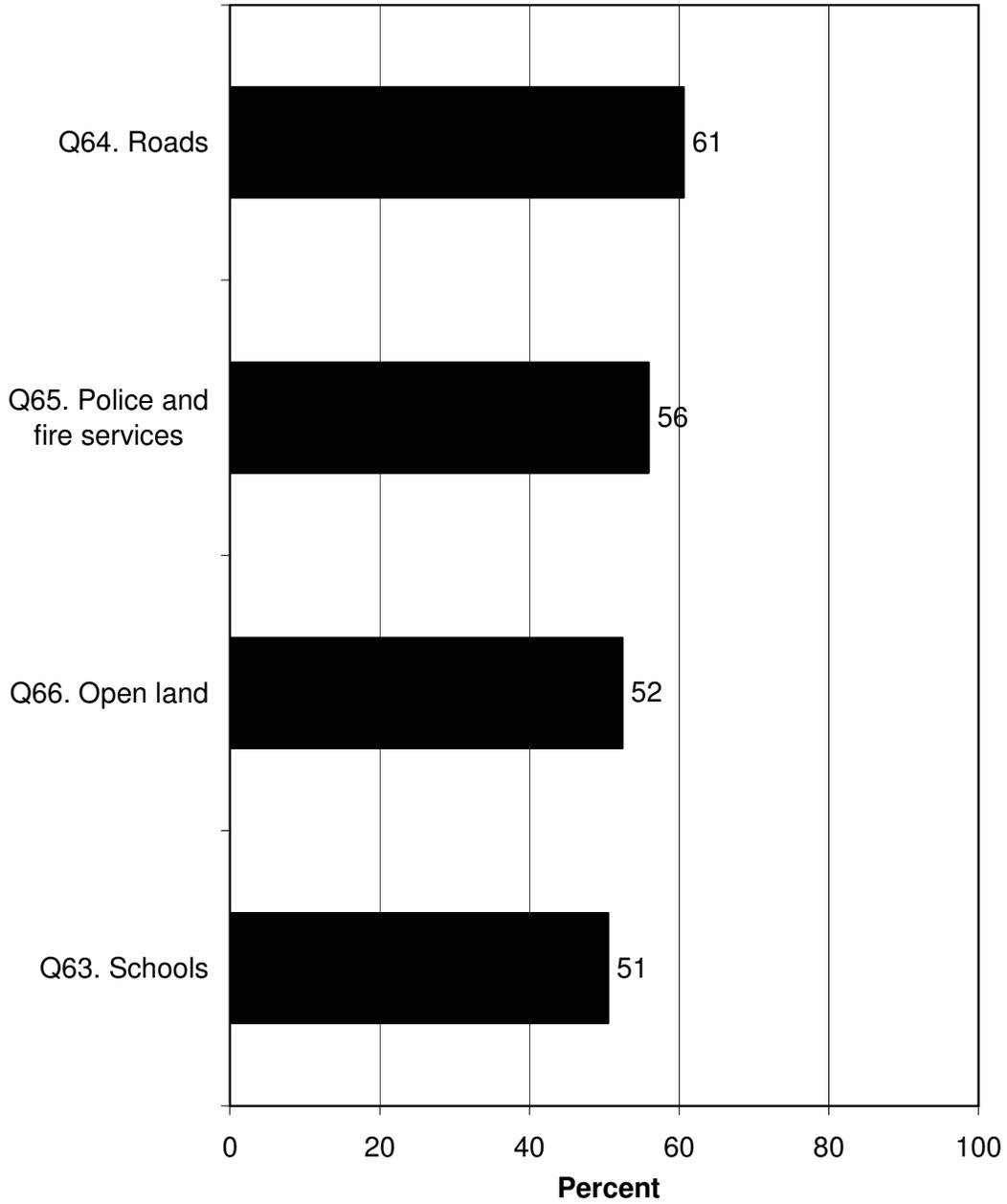
- The survey listed four items to see where *open land* falls on the spectrum (the other items were police/fire services, roads, and schools). Respondents were asked if they would be willing to pay an extra percentage in taxes for each.
 - The top of the list among residents is roads (61% would pay extra in taxes for them) and police/fire services (56%). These are both slightly above open land (52%) and schools (51%).
 - Similar surveys were conducted in 1990, 1995, and 2000. Respondents' willingness to pay extra taxes for open land has remained relatively stable over the years, while it has steadily increased for roads and police/fire services.
 - While the percentage of hunters saying that they would pay extra taxes for open land is about the same as among residents, their ranking of it is higher than the ranking among residents. Anglers also say open land at about the same rate as do residents, but they rank open land last in the items for which they would pay more taxes.

- Respondents are split between wanting funding for fish and wildlife conservation programs to be *increased* or *remain the same* (with very few wanting funding to be *decreased*).
 - Among residents, 44% want funding to *remain the same* (the most common response), while 38% want it *increased*; only 2% want it *decreased*. There is little change since 1995.
 - Residents most likely to want funding *increased* are those who went canoeing or kayaking in the past 12 months (45% stated this) and those who went camping (43%).
 - Hunters and anglers are even more in the conservationist camp: 48% of hunters and 49% of anglers want funding to *remain the same*; meanwhile, 44% of hunters and 41% of anglers want funding *increased* (the *decreased* responses are at 2% and 3%).

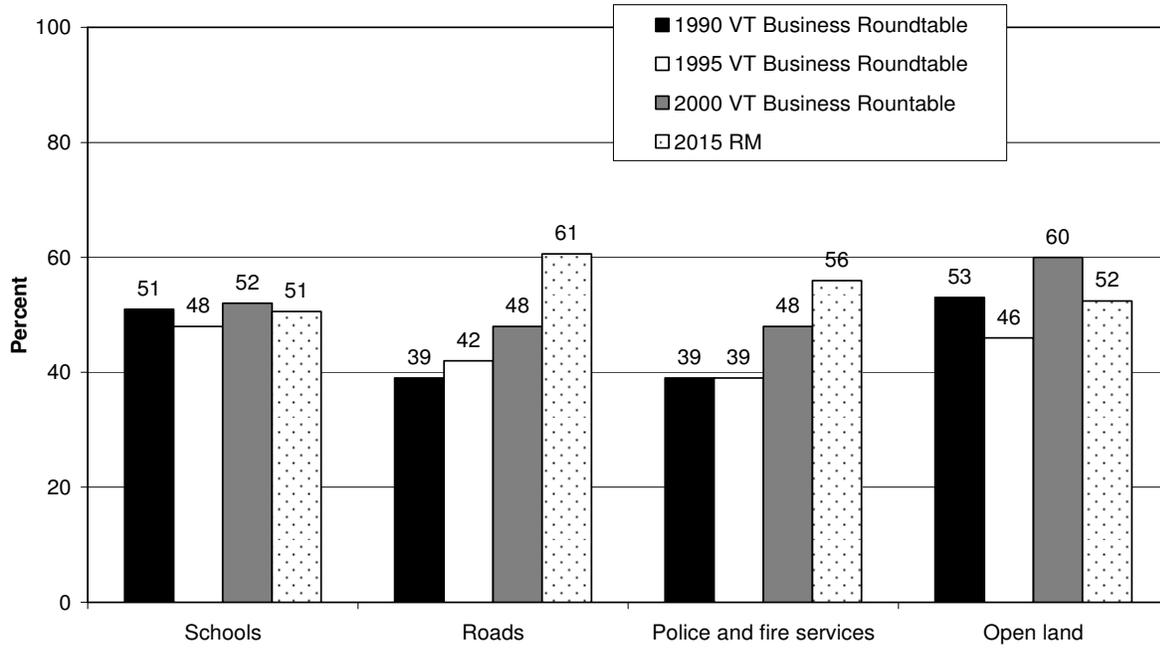
- Finally, five funding options were presented in the survey. Respondents were told that the funding would be used for *a land conservation initiative to ensure the future of fish and wildlife populations, habitat, and public access to lands for recreation*. For each, respondents were asked if they would support or oppose it.

- A majority of residents strongly or moderately support three of the five taxes: a one-eighth of 1% increase in the state general sales tax, a state tax on sporting equipment, and a bond (support ranges from 59% to 61%). There is less than a majority who support a parking fee on state lands or a registration fee for kayaks and canoes.
- Hunters' and anglers' opinions mirror those of residents. At the top is the bond, followed by the one-eighth of 1% sales tax and the tax on sporting equipment. At the bottom are the registration fee for kayaks/canoes and the parking fee.

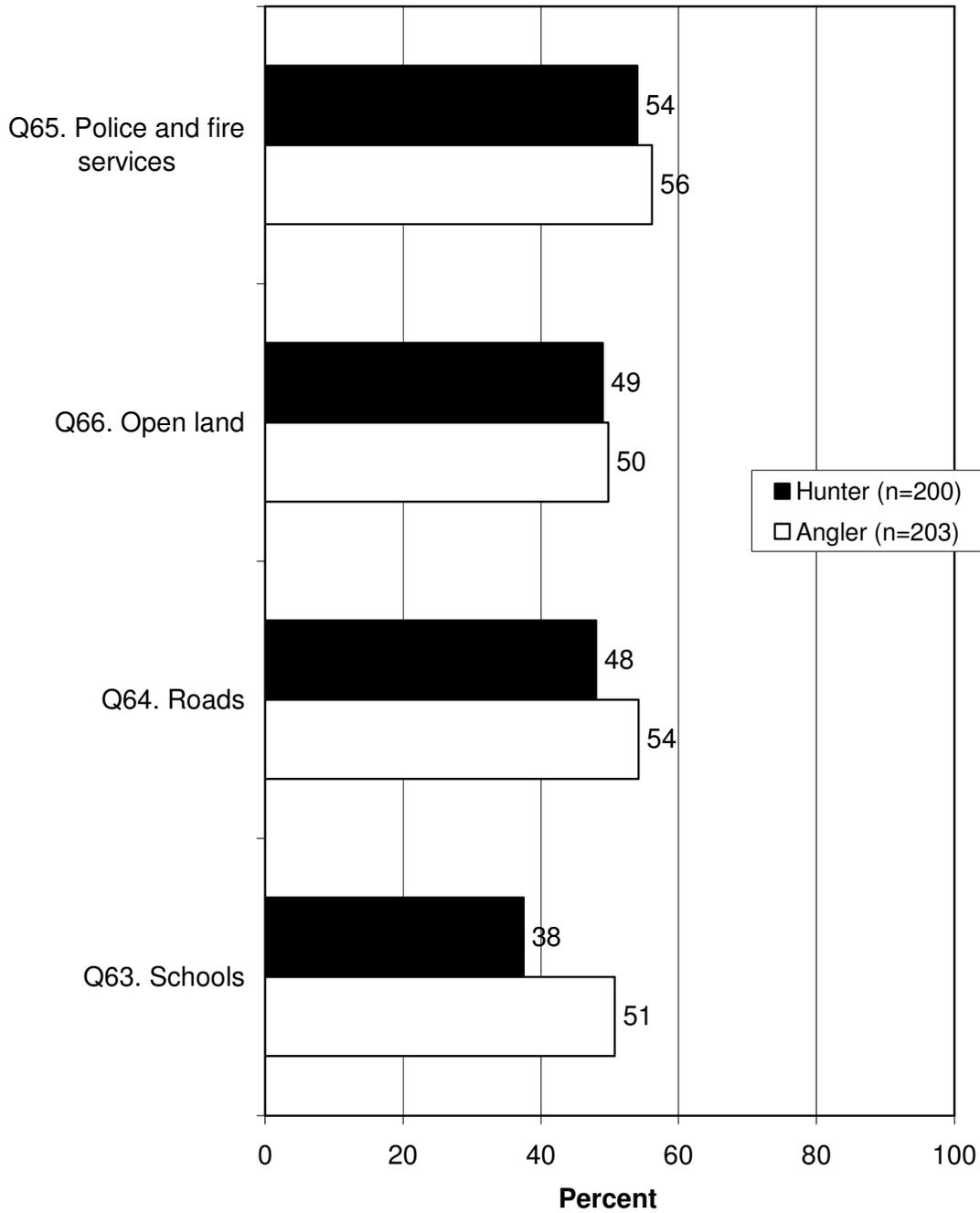
Q63-66: Percent of residents who are willing to pay an extra percentage in taxes for each of the following:



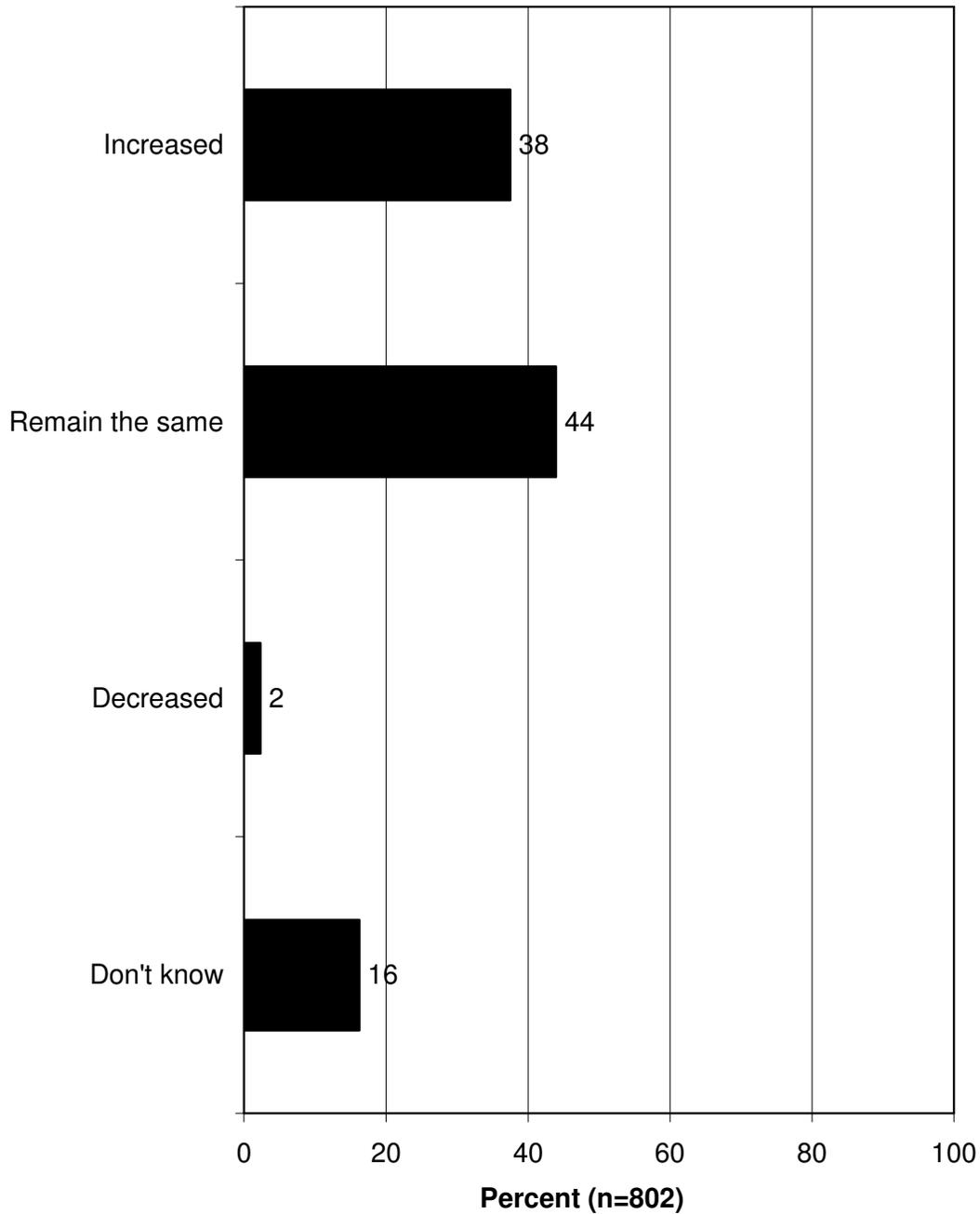
Q63-Q66. Percent of residents who are willing to pay an extra percentage in taxes for each of the following:



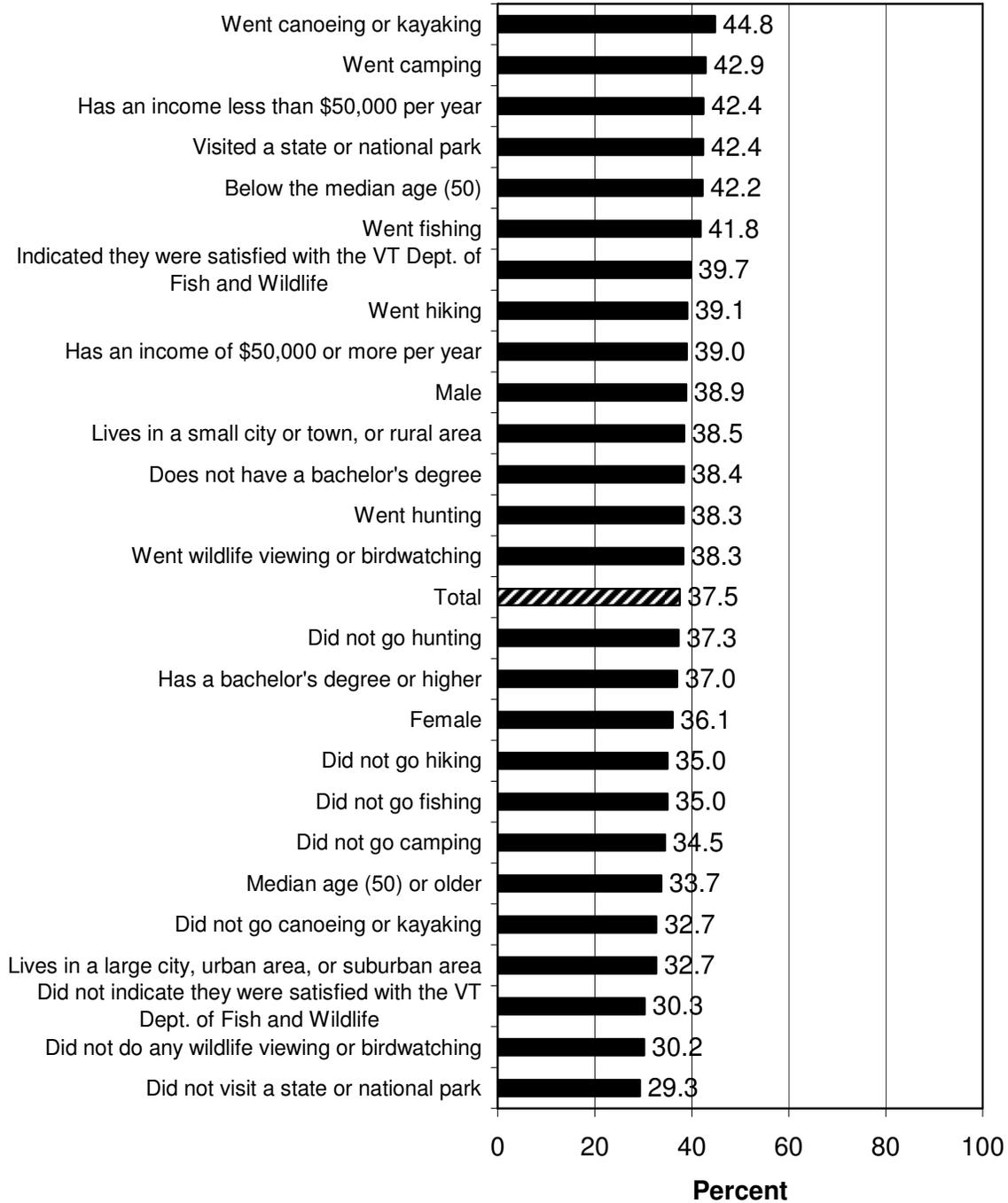
Q63-66: Percent who are willing to pay an extra percentage in taxes for each of the following:



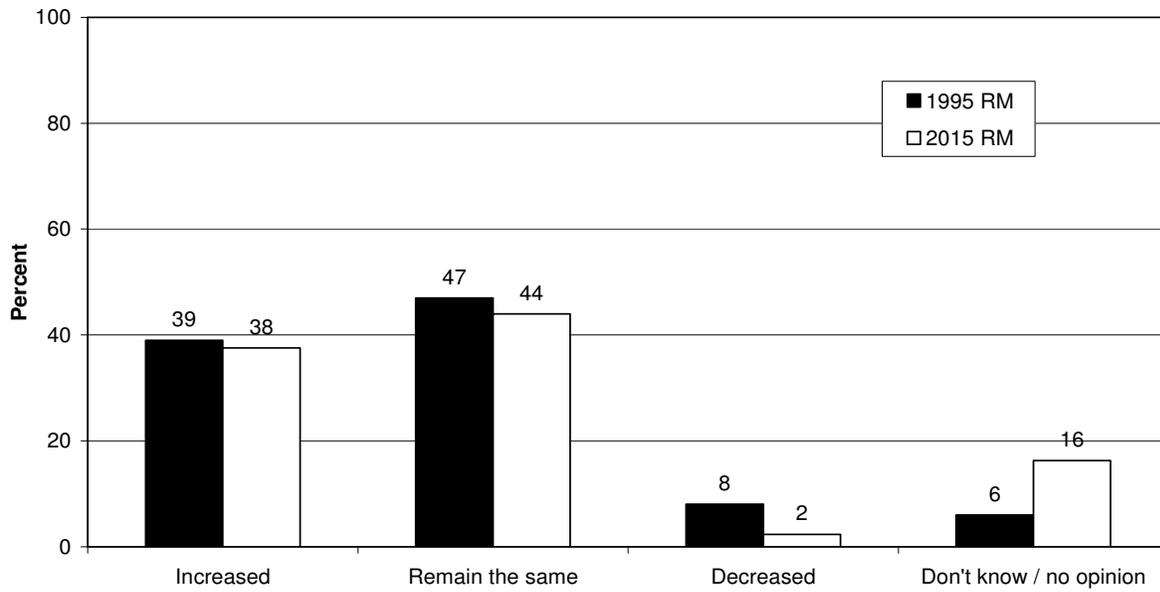
**Q67. Should funding for fish and wildlife conservation programs be increased, decreased, or remain the same?
(Vermont residents.)**



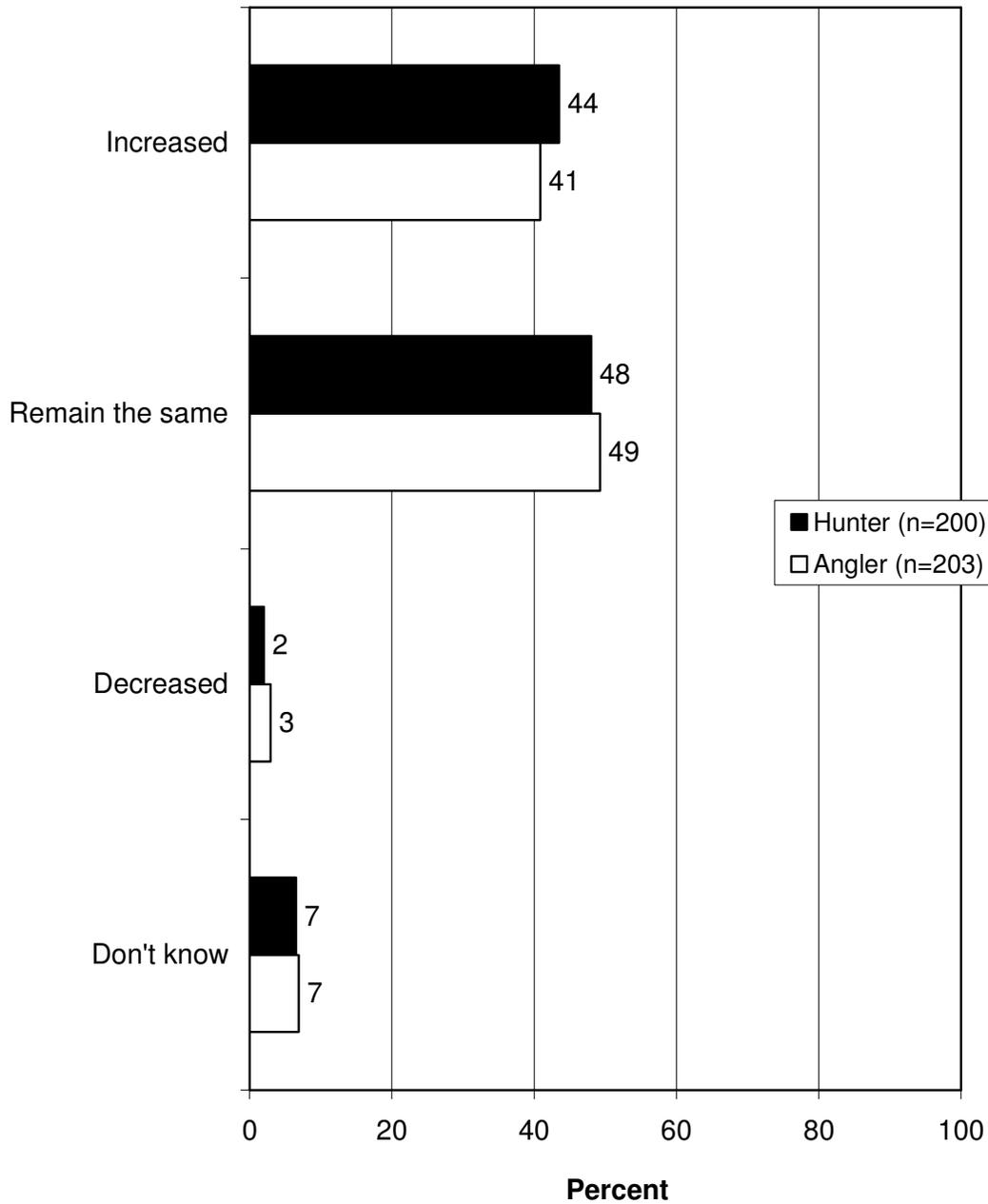
Q67. Percent of residents who think funding for fish and wildlife conservation programs should be increased.



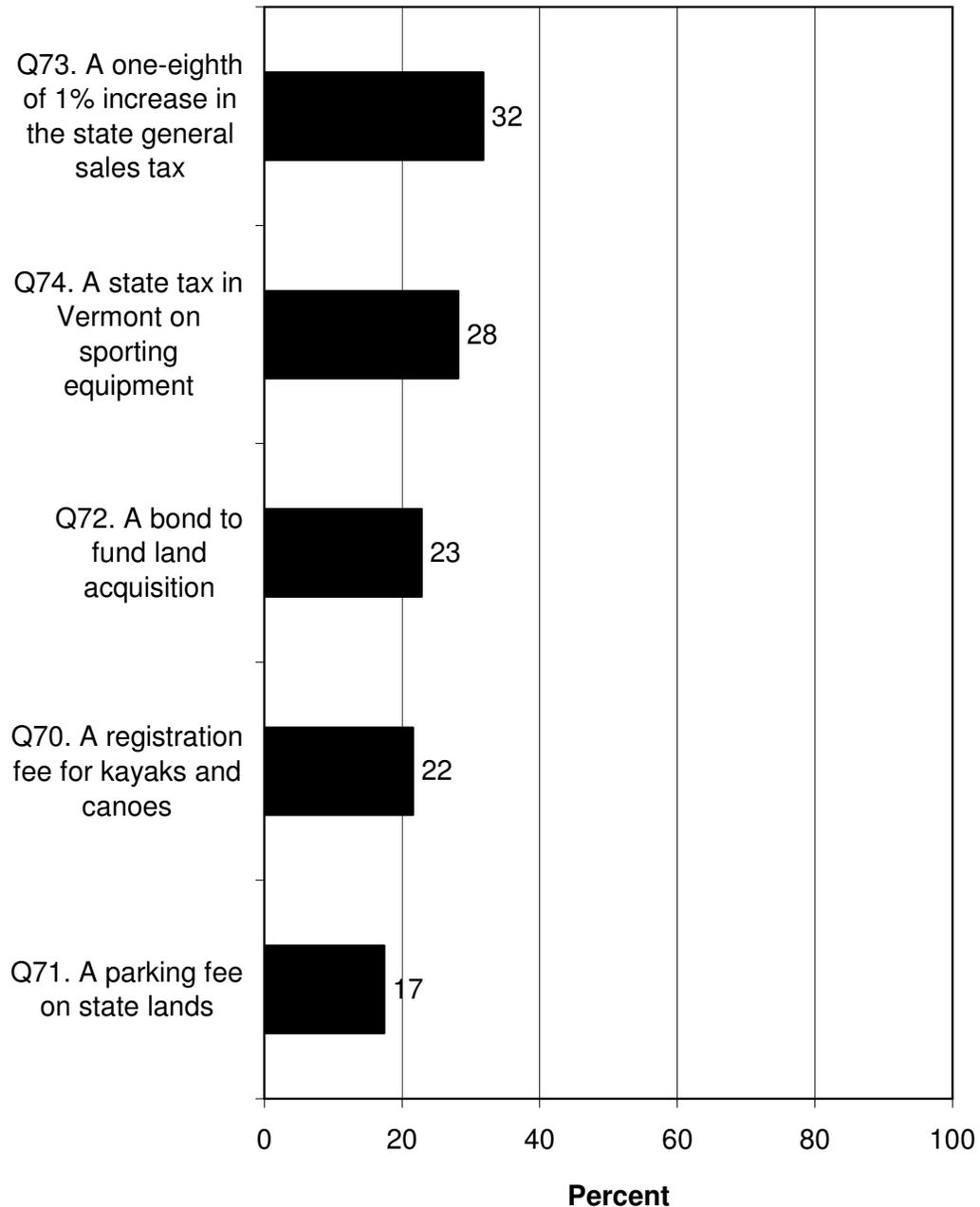
**Q67. Should funding for fish and wildlife conservation programs be increased, decreased, or remain the same?
(Vermont residents.)**



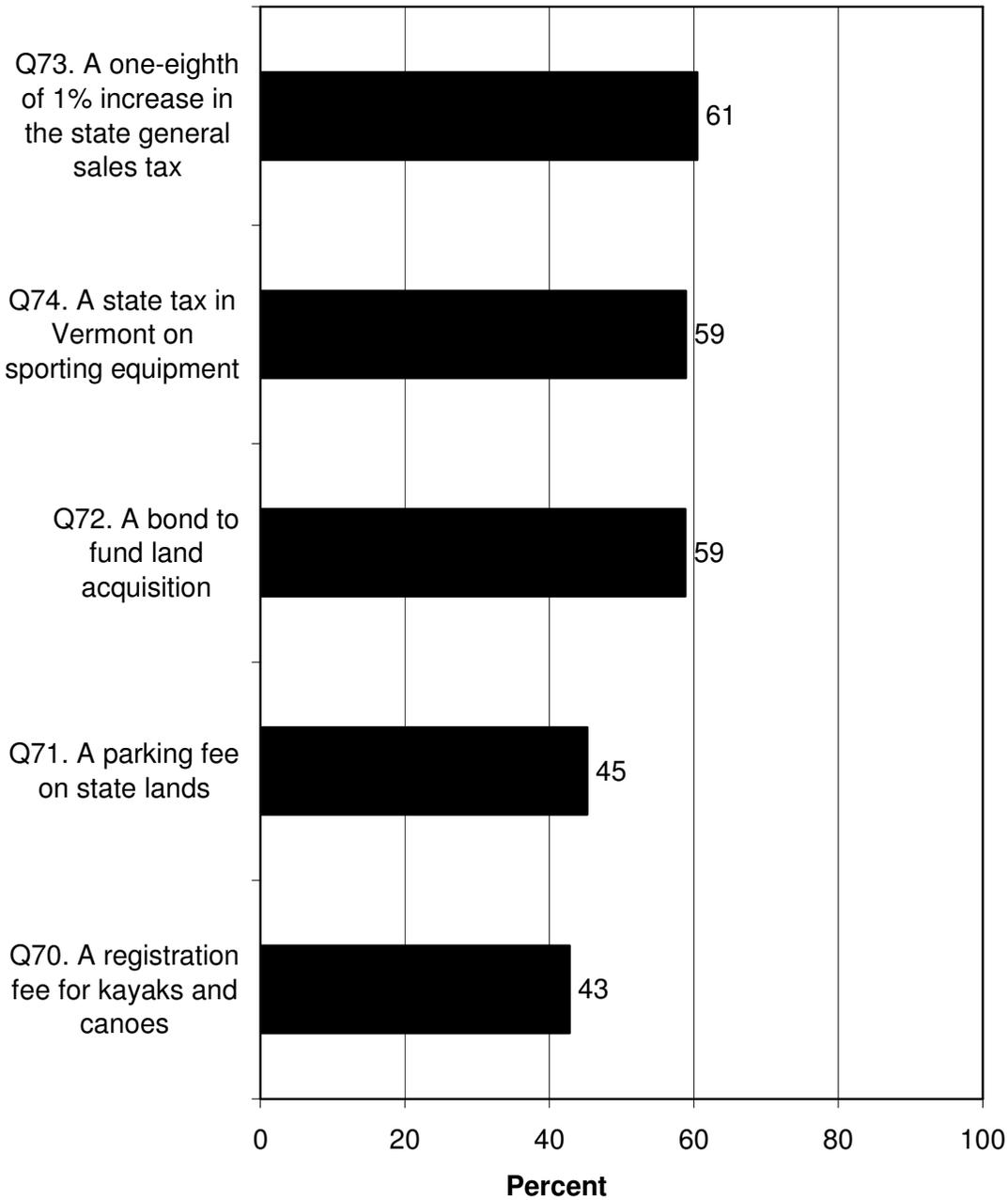
Q67. Should funding for fish and wildlife conservation programs be increased, decreased, or remain the same? (Hunters and anglers.)



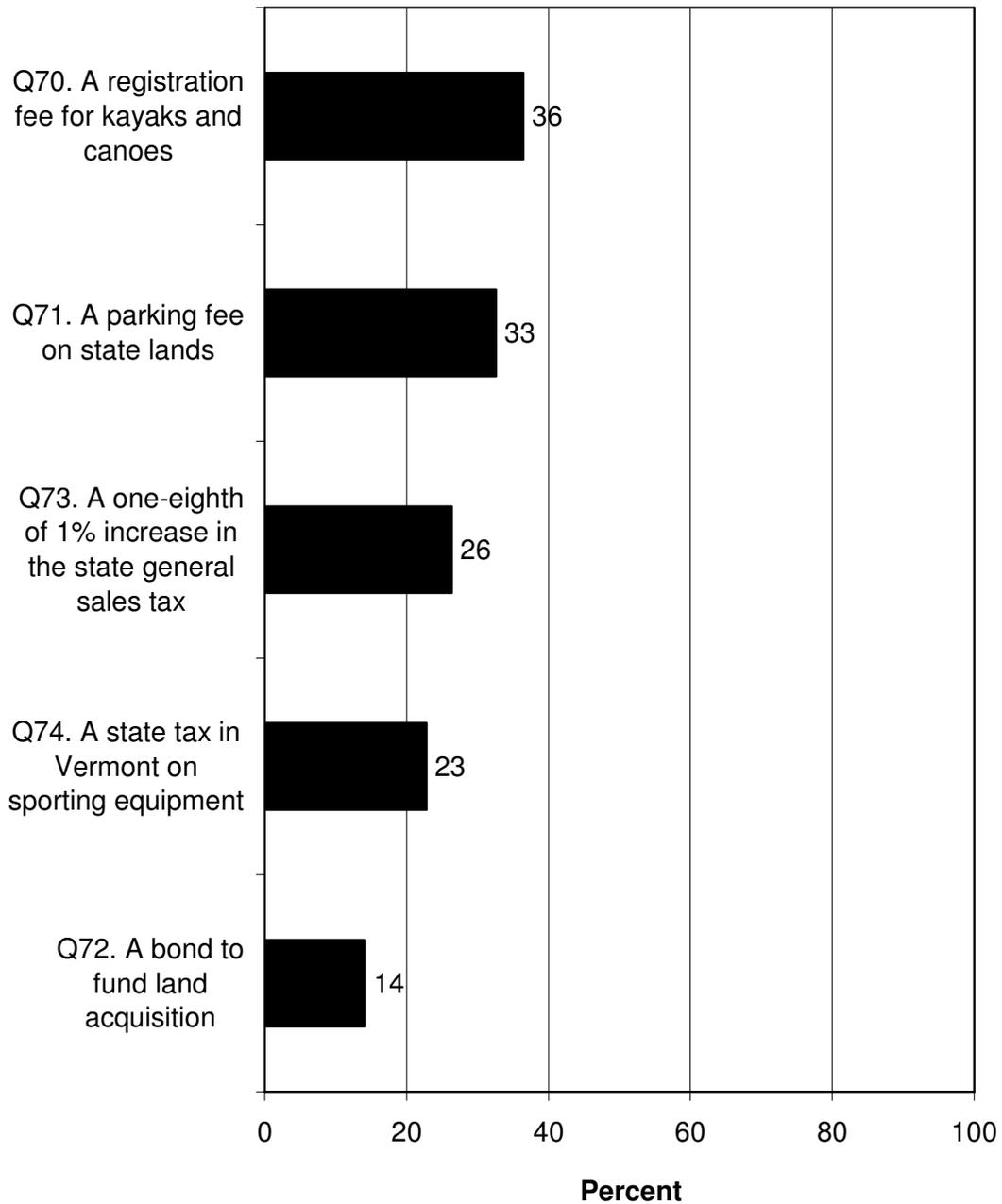
Q70-74: Percent of residents who strongly support each of the following to provide funding for a land conservation initiative:



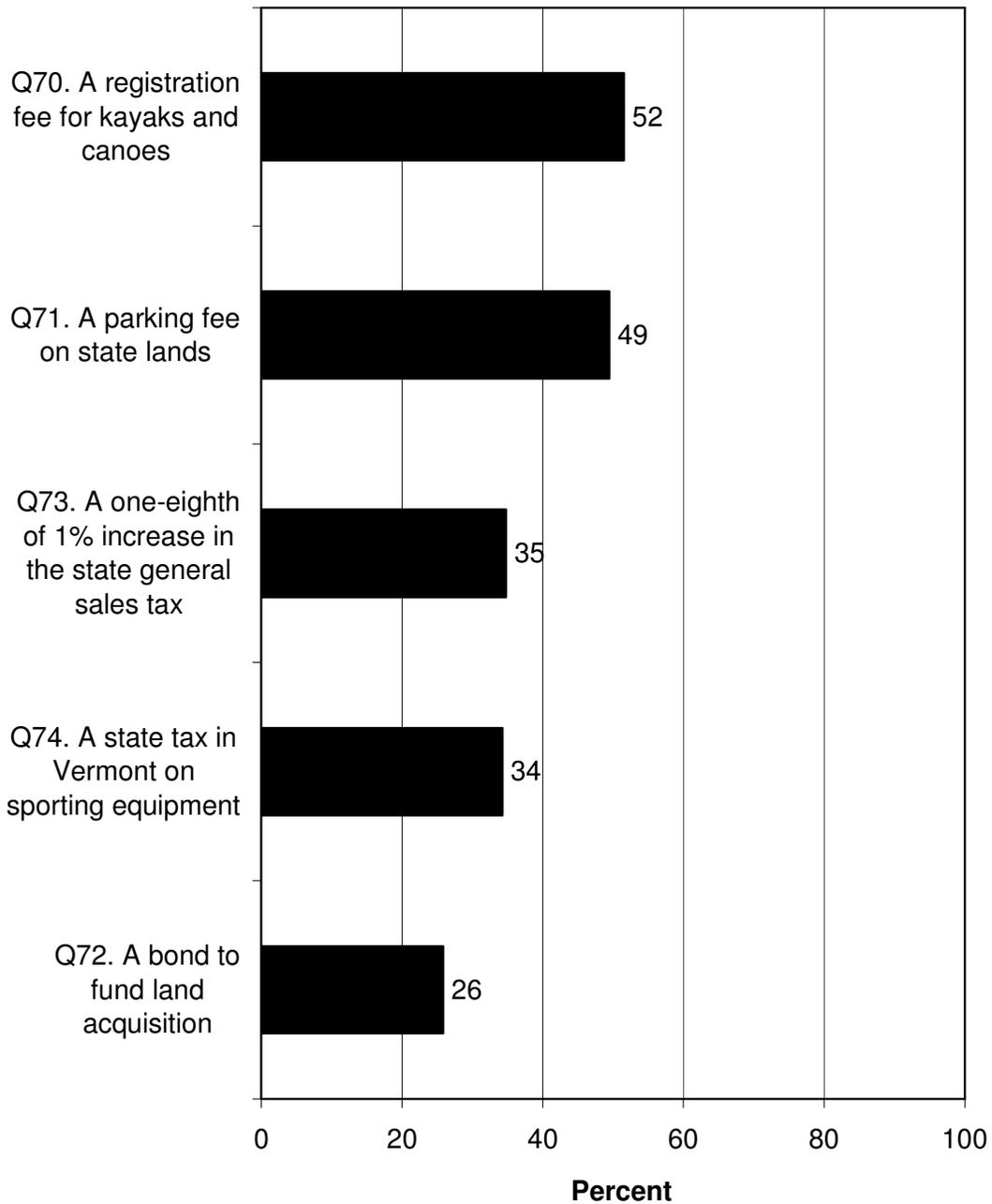
Q70-74: Percent of residents who strongly or moderately support each of the following to provide funding for a land conservation initiative:



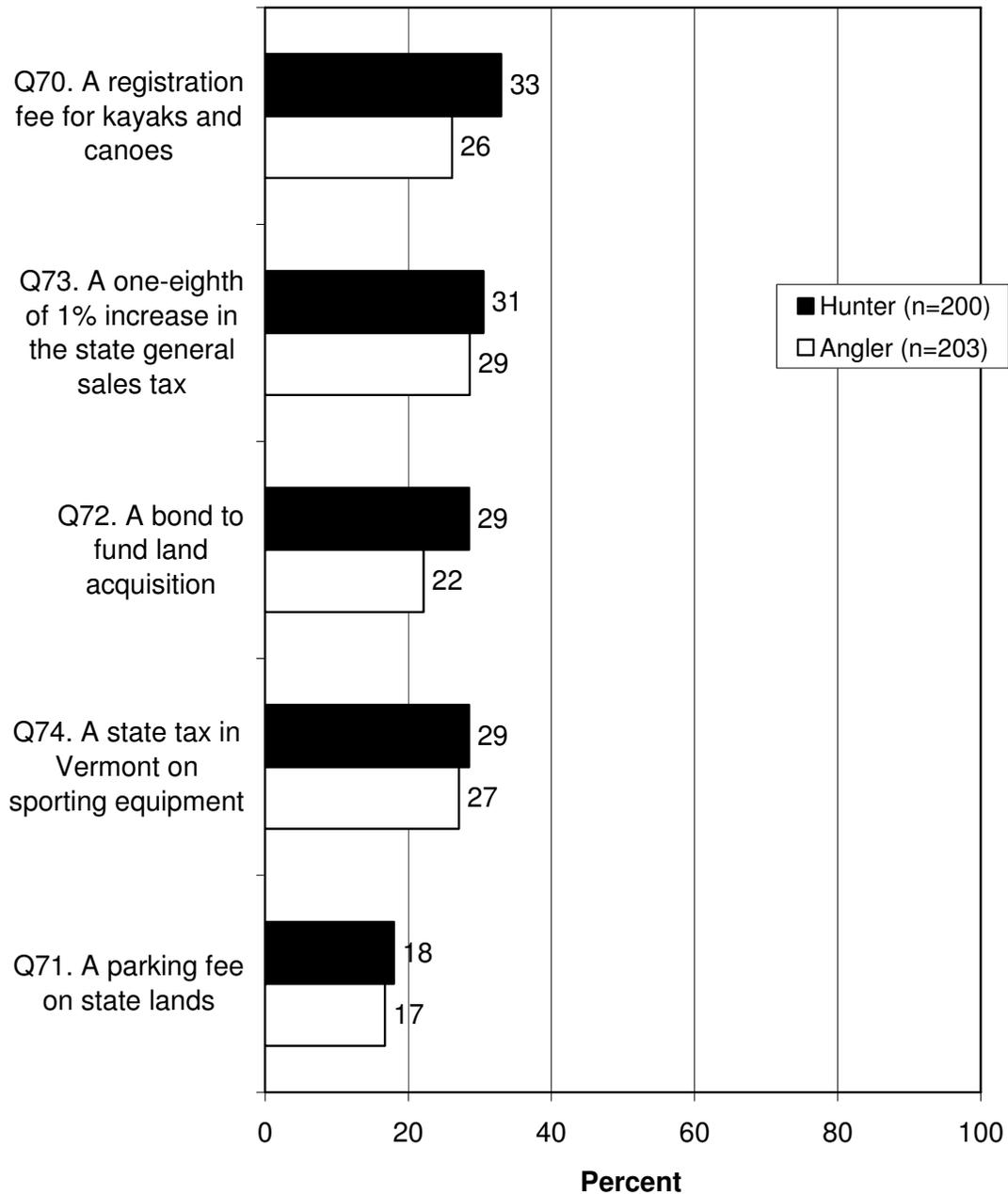
Q70-74: Percent of residents who strongly oppose each of the following to provide funding for a land conservation initiative:



Q70-74: Percent of residents who strongly or moderately oppose each of the following to provide funding for a land conservation initiative:



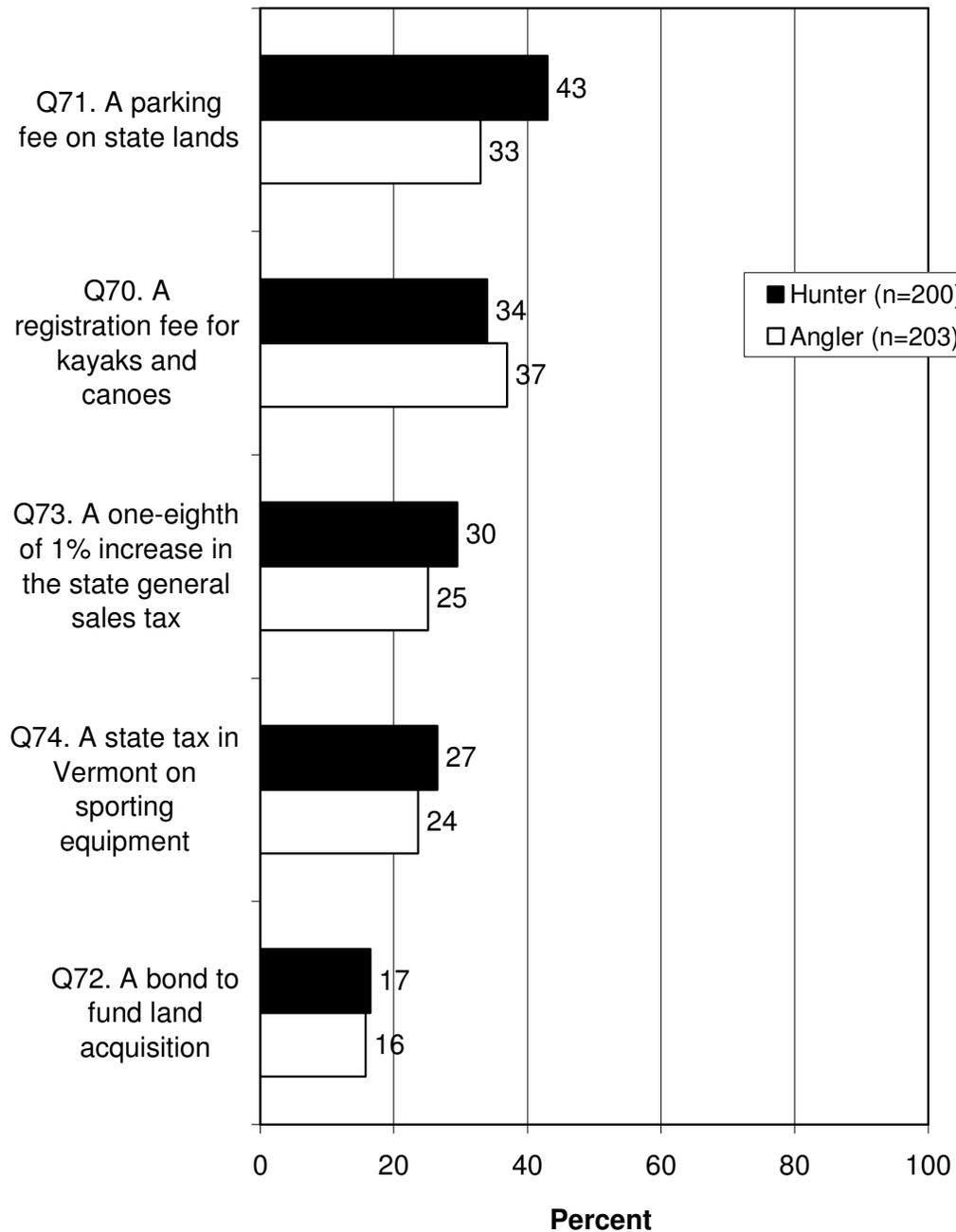
Q70-74: Percent who strongly support each of the following to provide funding for a land conservation initiative:



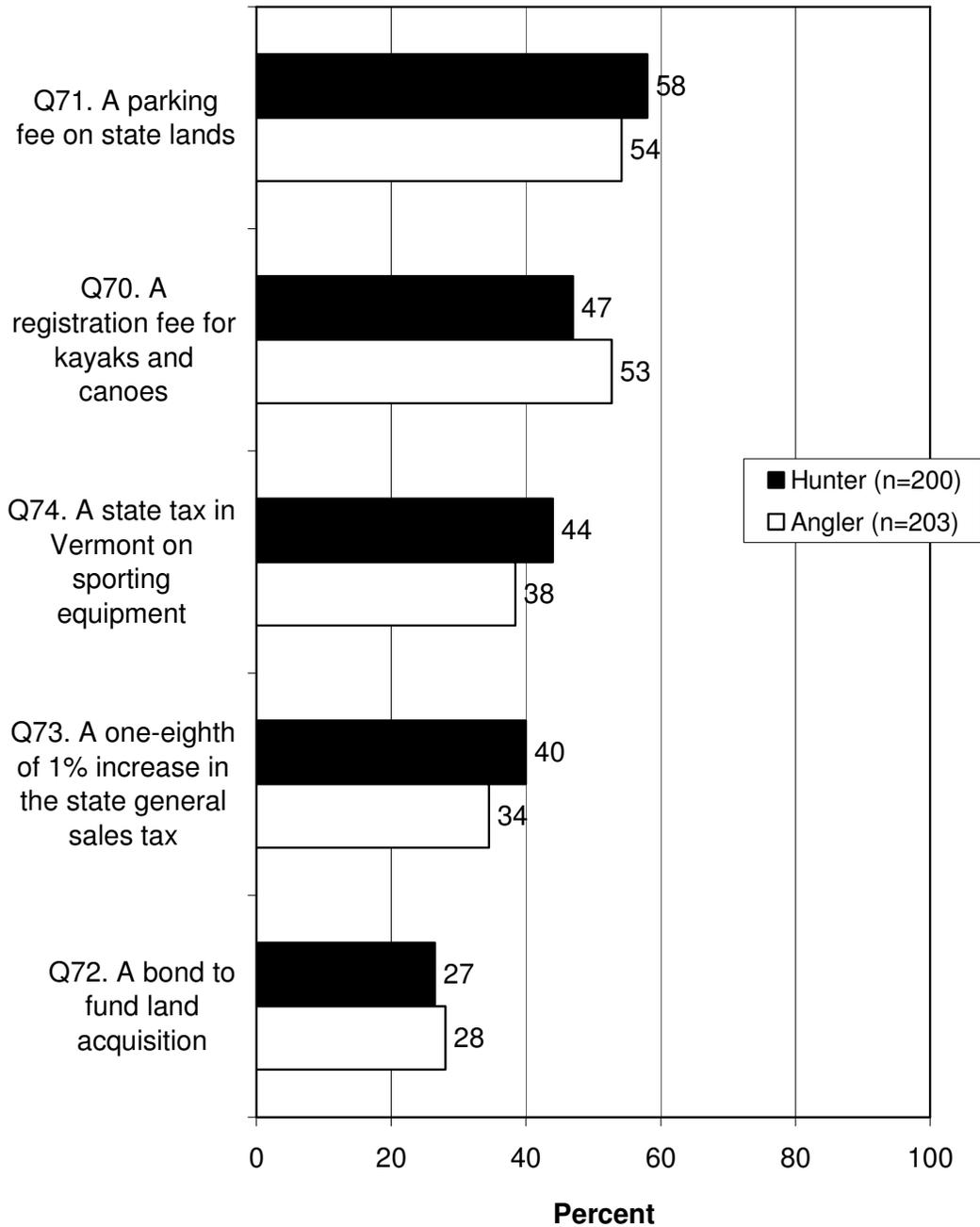
Q70-74: Percent who strongly or moderately support each of the following to provide funding for a land conservation initiative:



Q70-74: Percent who strongly oppose each of the following to provide funding for a land conservation initiative:



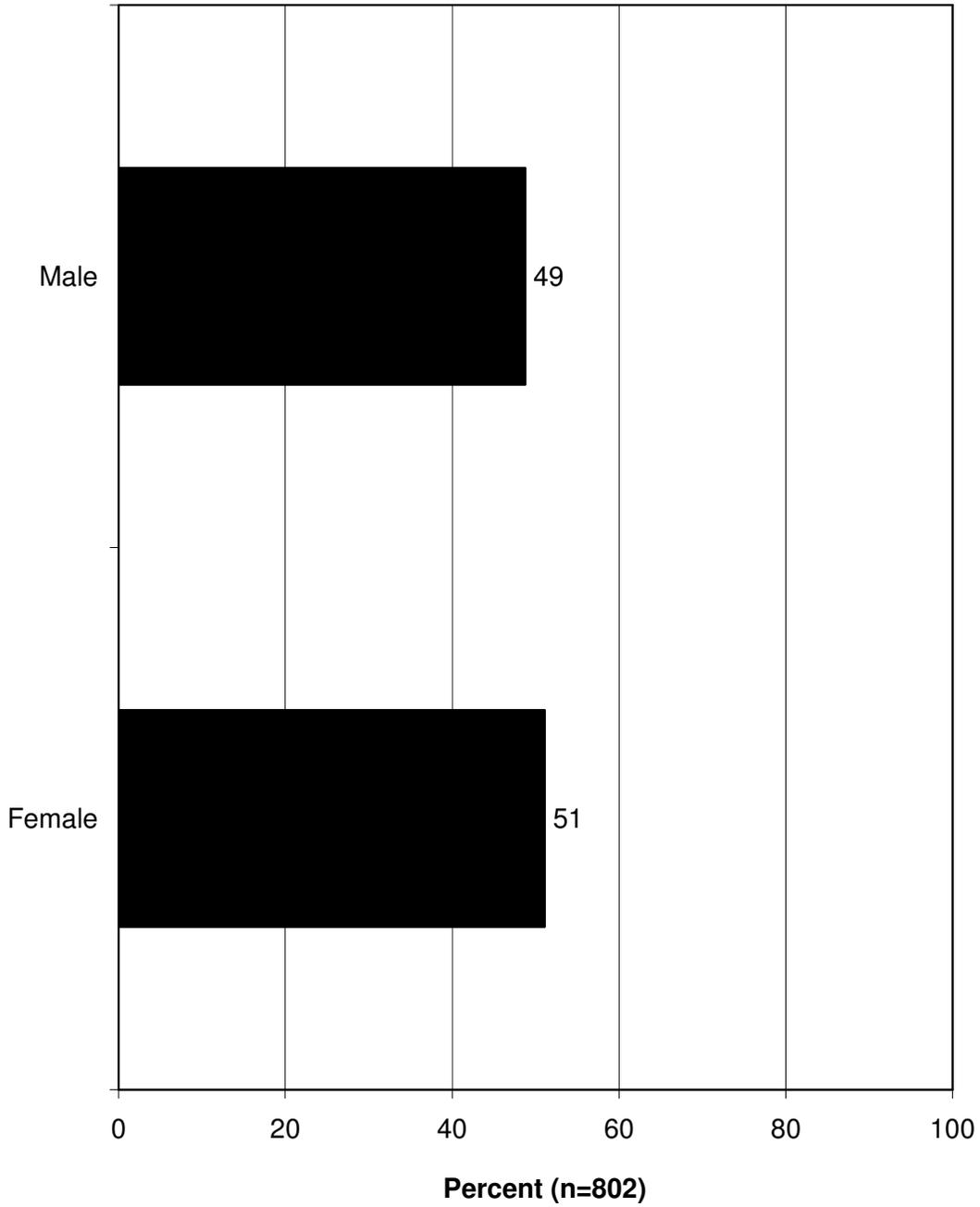
Q70-74: Percent who strongly or moderately oppose each of the following to provide funding for a land conservation initiative:



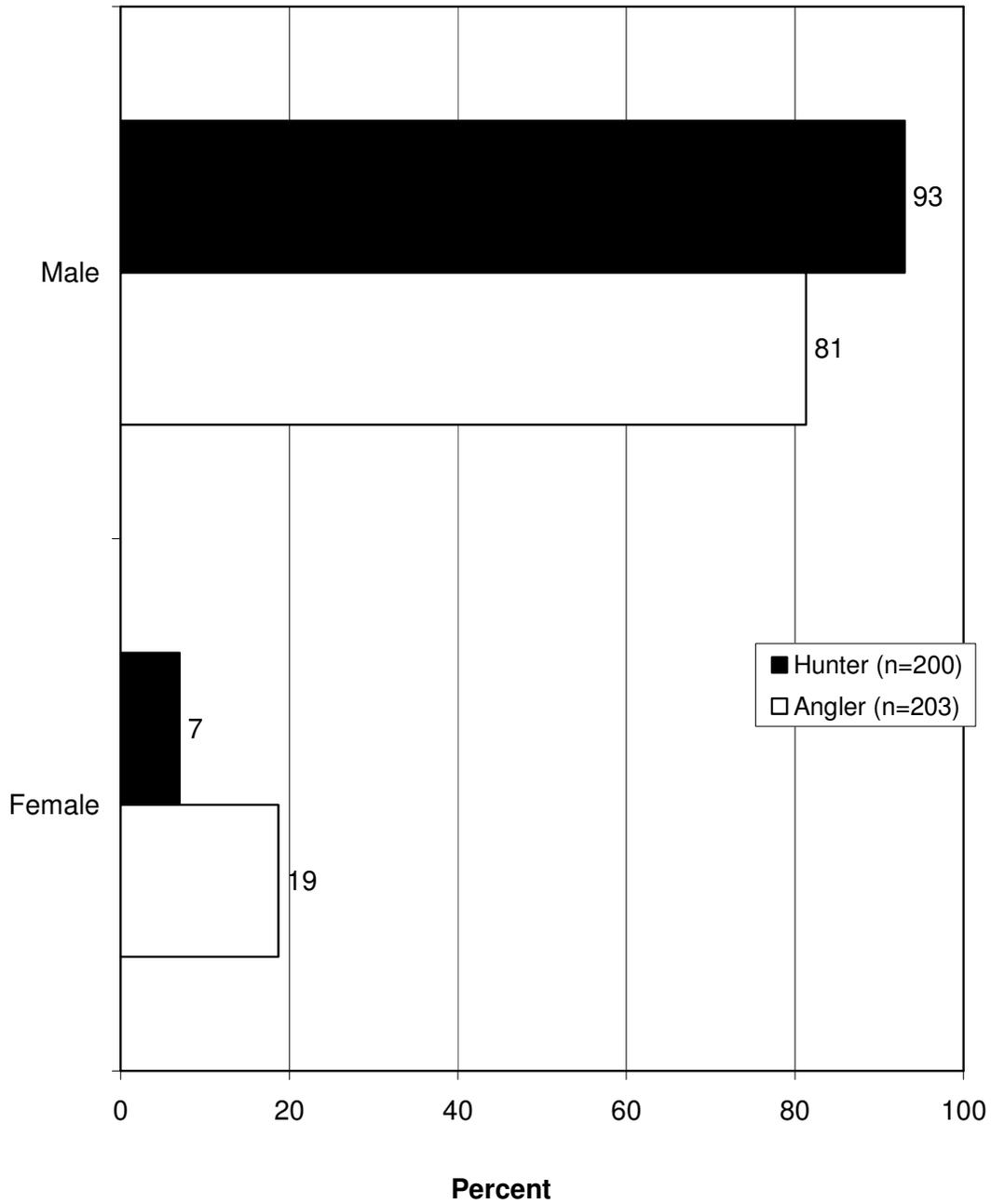
DEMOGRAPHIC QUESTIONS

- Demographic data are shown in this section.
 - Gender.
 - The resident survey is evenly split between men (49%) and women (51%), while the licensed recreationists are overwhelmingly male (93% of hunters and 81% of anglers).
 - Age.
 - The mean age of residents is 47.83 years old. Likewise, hunters have a mean age of 47.26 years, while anglers are slightly younger (44.77 years).
 - Place of residence.
 - Residents most often live in a rural area not on a farm (43% stated this) or in a small city or town (32%). Hunters and anglers had similar responses.
 - Education.
 - Regarding levels of education, residents most often have a bachelor's degree (30% stated this) or are a high school graduate or equivalent (23%).
 - Hunters (47%) and anglers (44%) most often are a high school graduate or equivalent.
 - Household income.
 - Residents skew toward the higher income brackets slightly more than hunters or anglers.

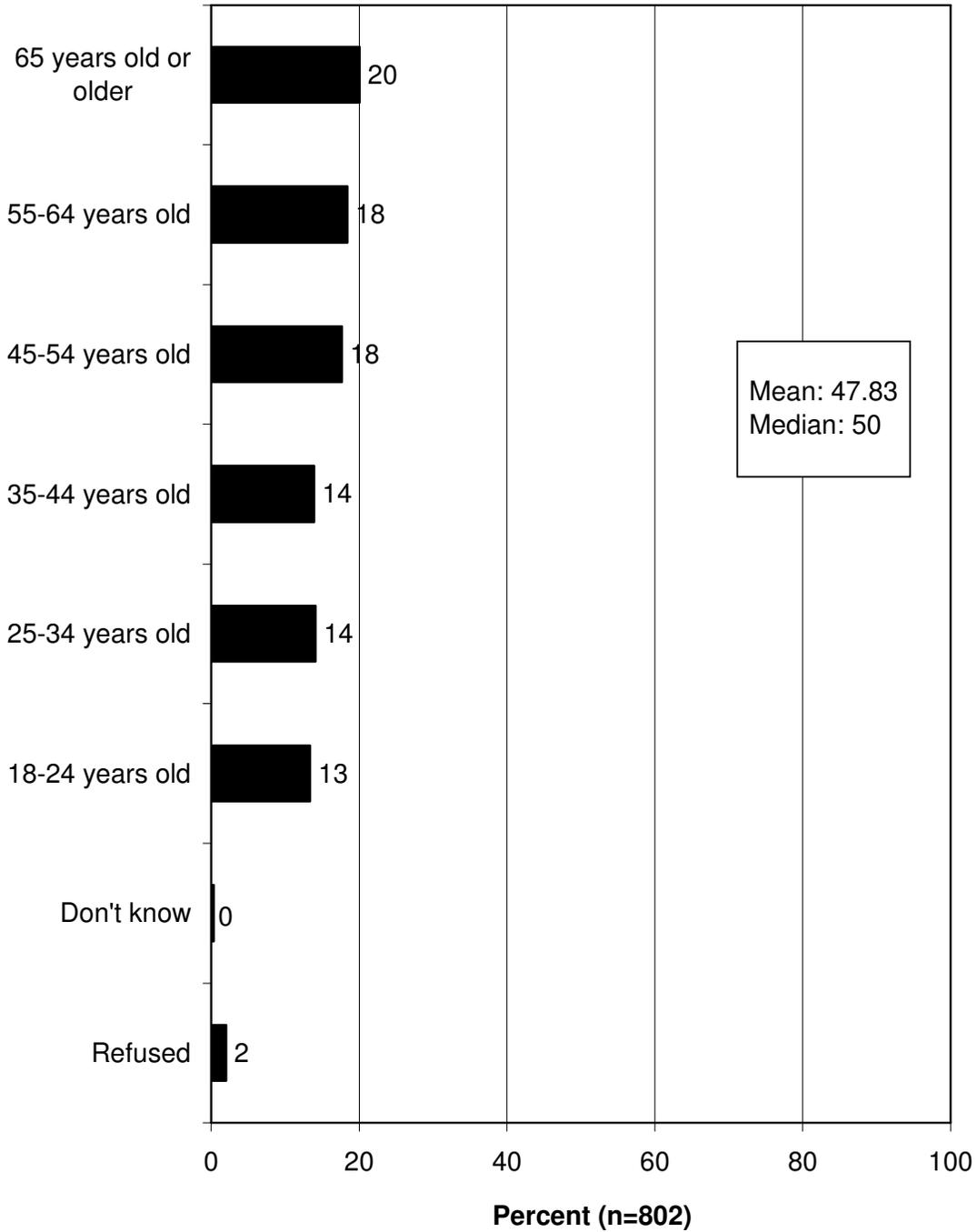
**Q86. Respondent's gender (observed by interviewer; not asked).
(Vermont residents.)**



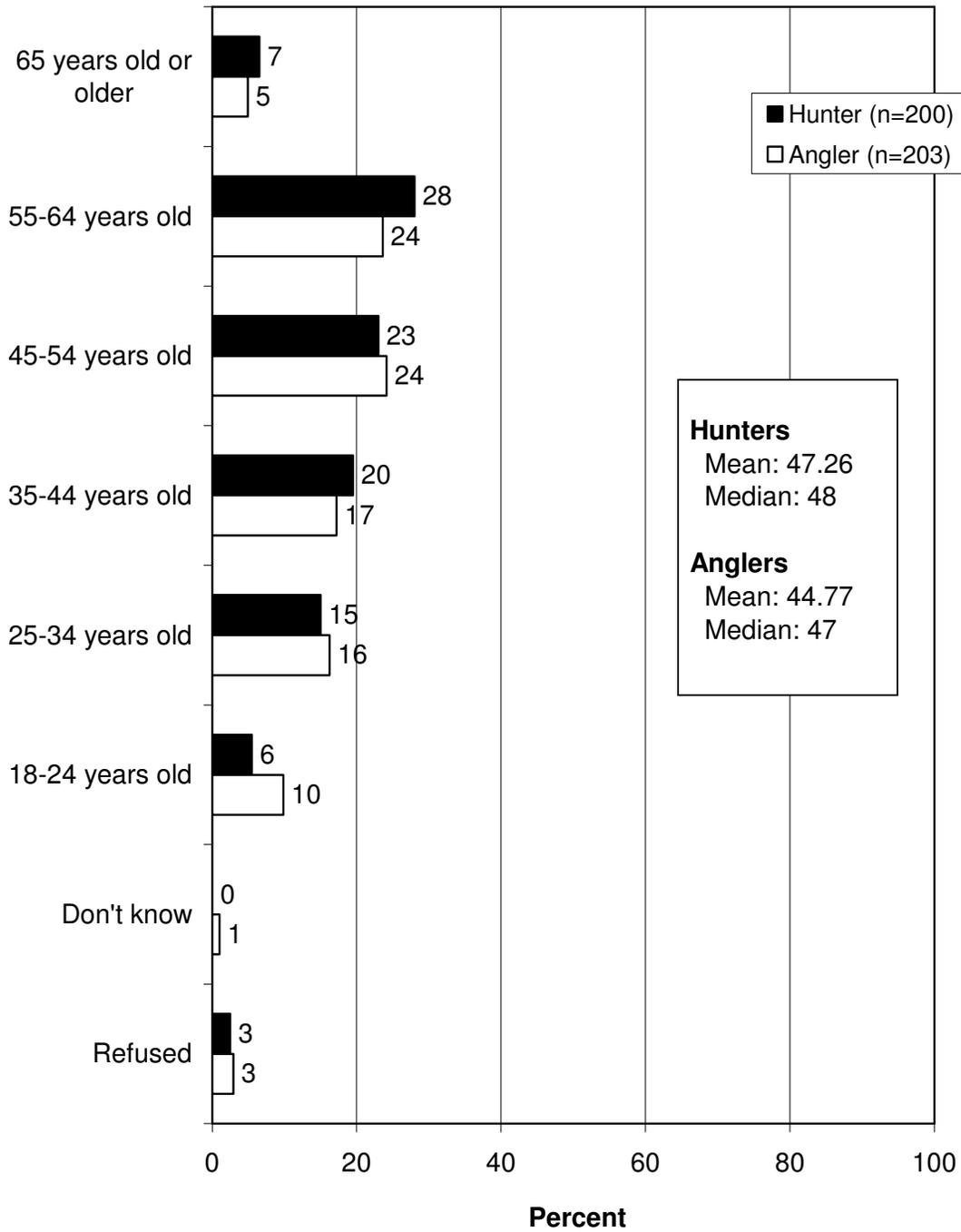
**Q86. Respondent's gender (observed by interviewer; not asked).
(Hunters and anglers.)**



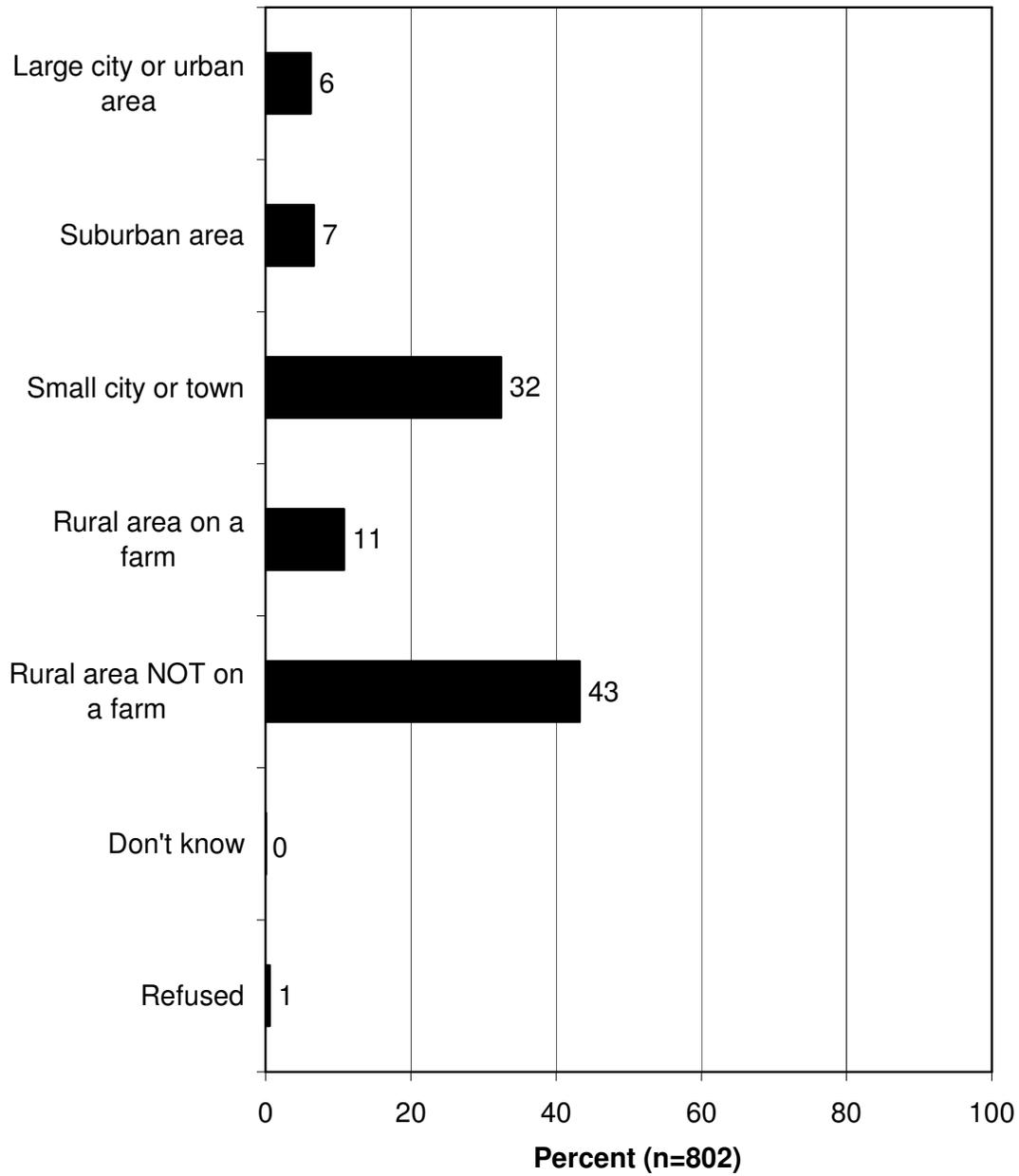
Q80. May I ask your age? (Vermont residents.)



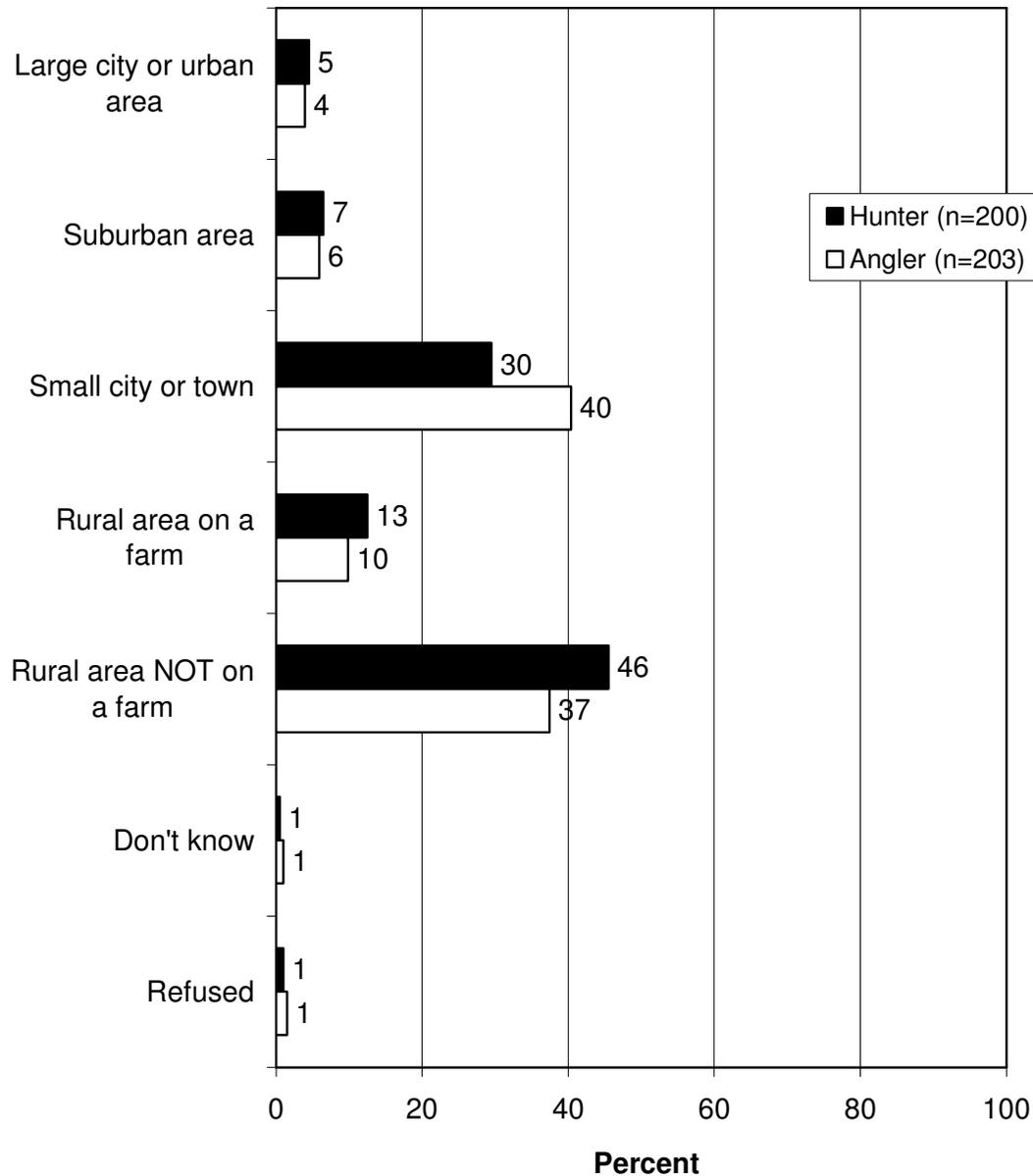
Q80. May I ask your age? (Hunters and anglers.)



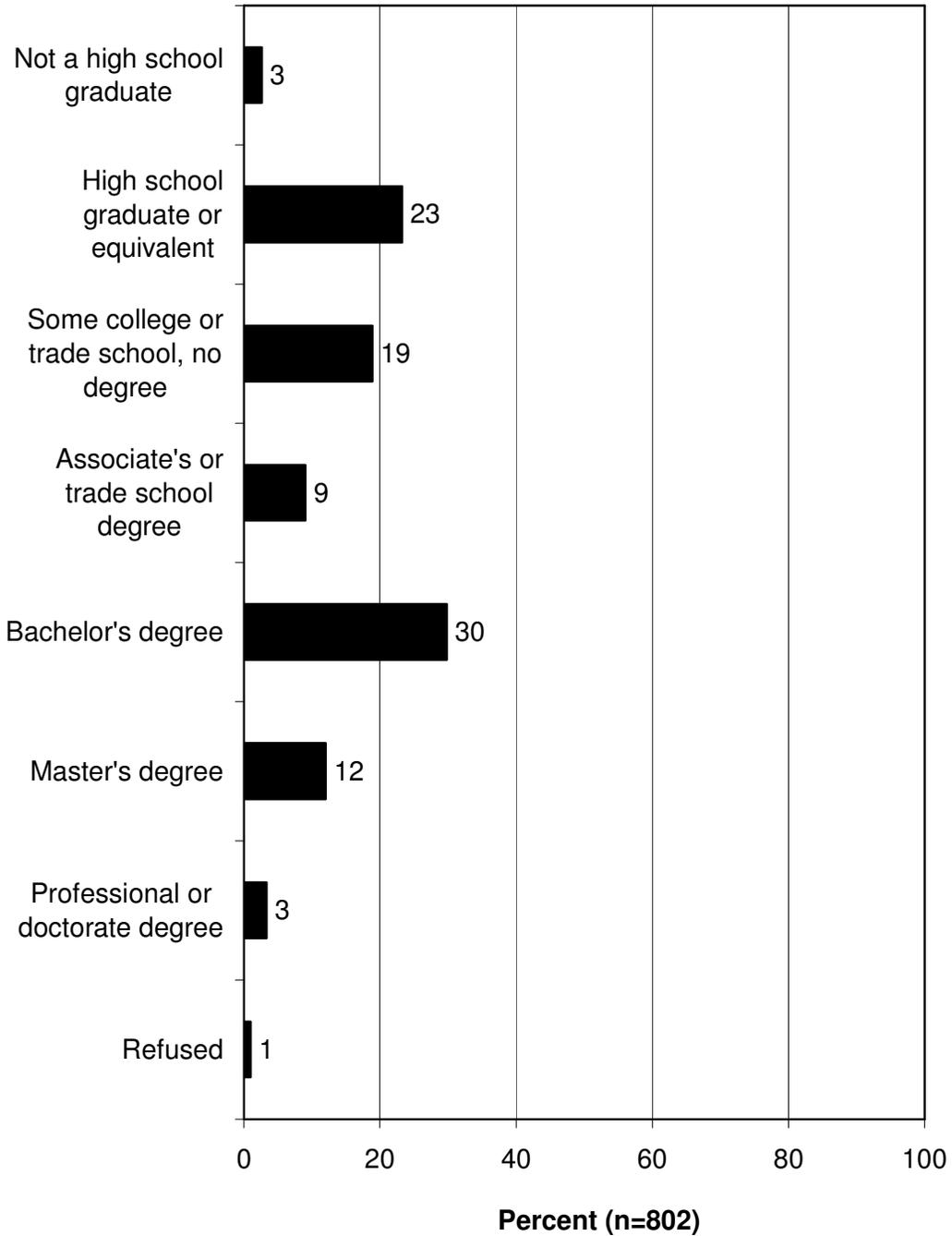
**Q77. Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm, or a rural area not on a farm?
(Vermont residents.)**



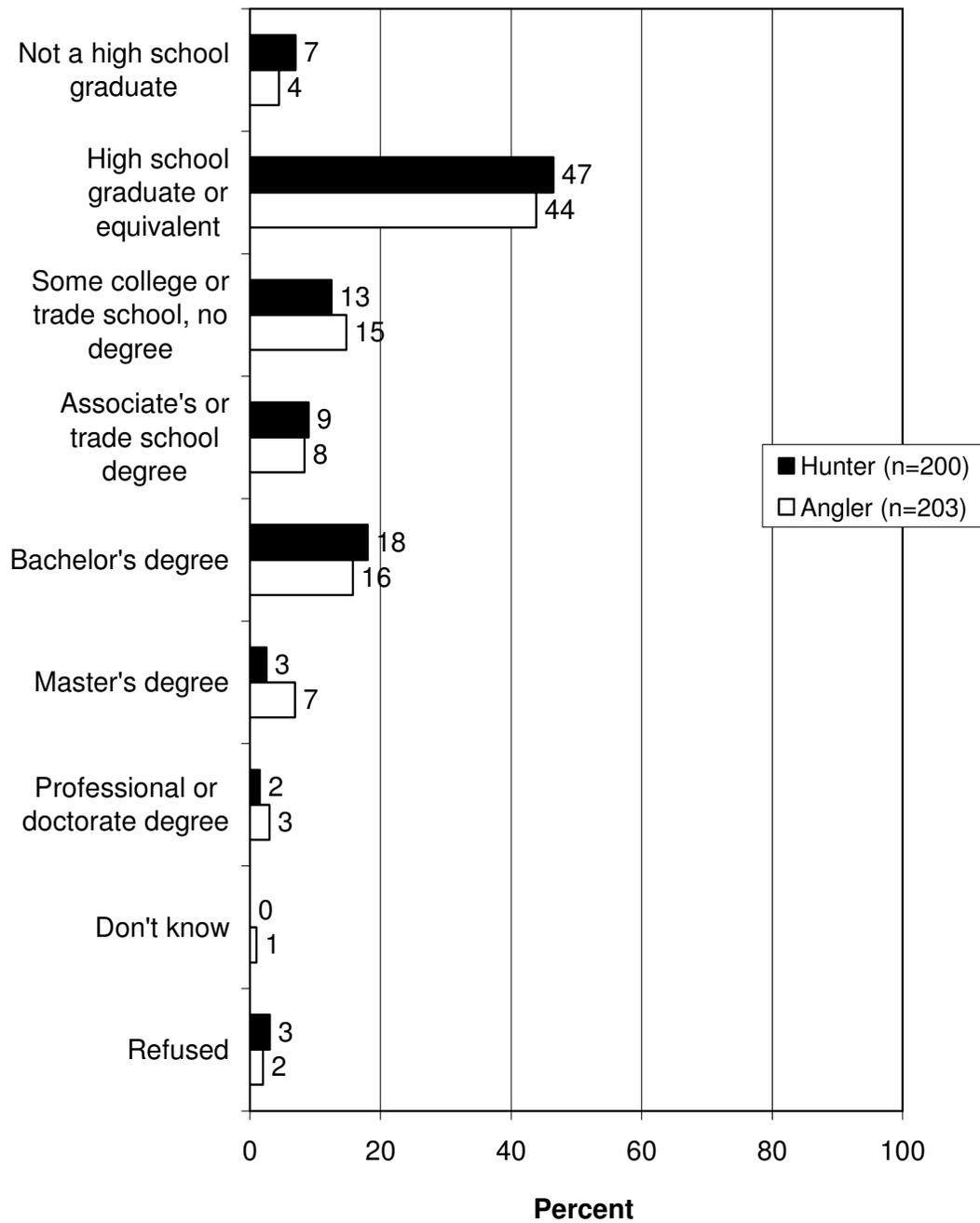
Q77. Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm, or a rural area not on a farm?
(Hunters and anglers.)



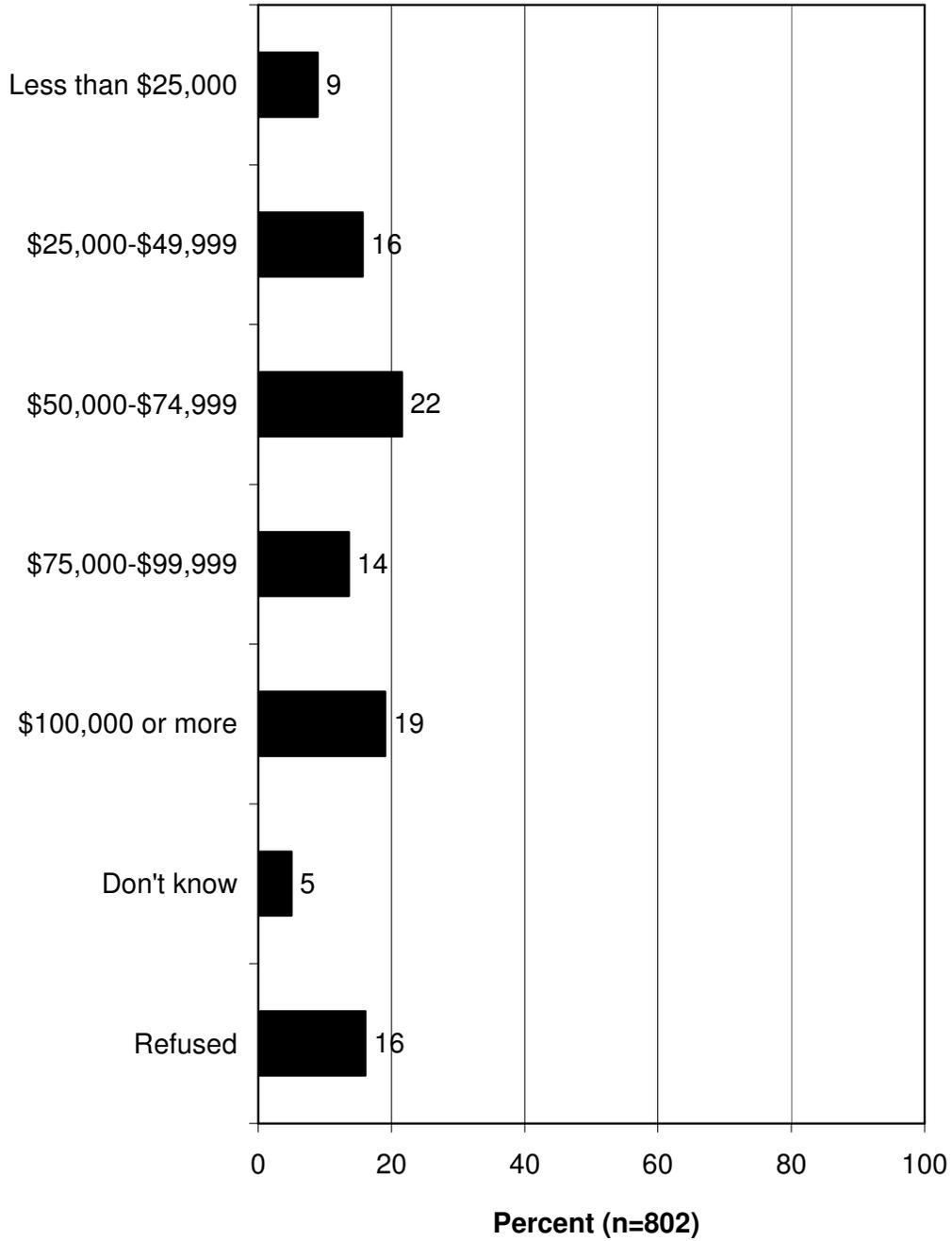
**Q78. What is the highest level of education you have completed?
(Vermont residents.)**



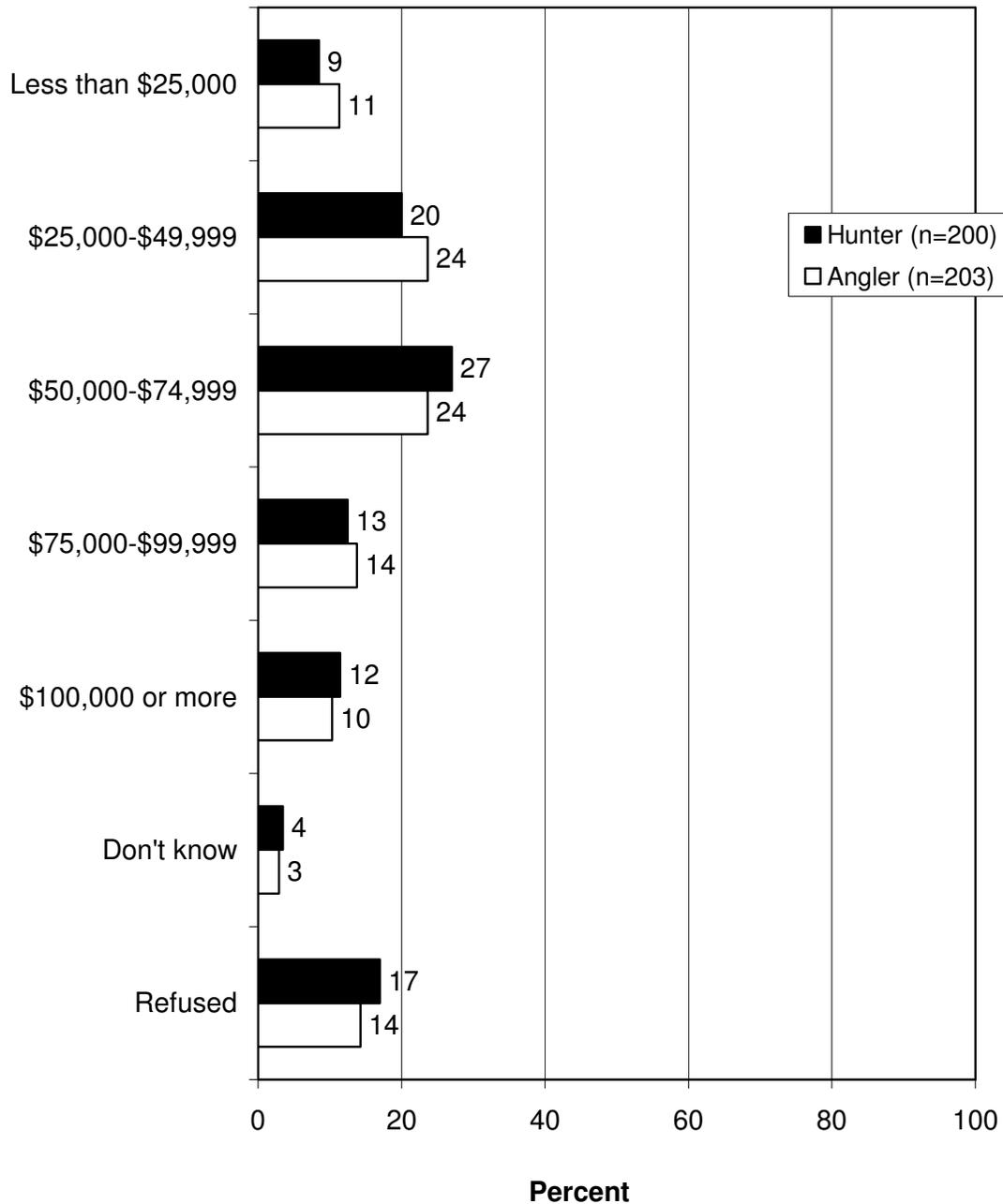
**Q78. What is the highest level of education you have completed?
(Hunters and anglers.)**



**Q79. Which of these categories best describes your total household income before taxes last year?
(Vermont residents.)**



**Q79. Which of these categories best describes your total household income before taxes last year?
(Hunters and anglers.)**



ABOUT RESPONSIVE MANAGEMENT

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

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

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

Specializing in research on public attitudes toward natural resource and outdoor recreation issues, Responsive Management has completed a wide range of projects during the past 25 years, including dozens of studies of hunters, anglers, wildlife viewers, boaters, park visitors, historic site visitors, hikers, birdwatchers, campers, and rock climbers. Responsive Management has conducted studies on endangered species; waterfowl and wetlands; and the reintroduction of large predators such as wolves, grizzly bears, and the Florida panther.

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

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

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

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

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www.responsivemanagement.com