

Responsive Management™



CHARACTERISTICS, PARTICIPATION, AND AVIDITY OF SOUTH CAROLINA LIFETIME AND MULTI-YEAR LICENSE HOLDERS

Conducted for the South Carolina Department of Natural Resources

by Responsive Management

2011

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1. INTRODUCTION AND METHODOLOGY

This project had two purposes: one was to obtain public opinion, participatory, and demographic data regarding saltwater fishing, and the second was to update information in a database as part of fulfilling requirements of the national registry of saltwater anglers. The project was conducted for the South Carolina Department of Natural Resources. The study entailed a telephone survey of licensed South Carolina anglers with specific licenses (Lifetime Saltwater, Lifetime Saltwater Add-On, Senior, Gratis, Resident Three-Year Saltwater, and Non-Resident Three-Year Saltwater). Demographic information was also verified and/or updated. Specific aspects of the research methodology are discussed below.

USE OF TELEPHONES FOR THE SURVEY AND THE VERIFICATION OF DATA

Both of the purposes of this dual project could be satisfied through the use of a telephone surveying system. The updated data for that phase of the project was collected using the survey software and a survey questionnaire; the updated data was then transferred to the Department's database. For the project, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones (both landlines and cell phones were called), because of the timeliness of updating information by telephone, and because of the better response rate that is achieved by the use of telephones over the use of the Internet or traditional mail. 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 forms/questionnaires. The sample of licensed anglers was obtained from the Department.

QUESTIONNAIRE DESIGN

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Department. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

TELEPHONE INTERVIEWING FACILITIES

A central survey/data verification 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 this survey and the collection of data.

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. The project was conducted in July and August 2011.

TELEPHONE SURVEY DATA COLLECTION AND QUALITY CONTROL

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

The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. The survey questionnaire itself contained error checkers and computation statements to ensure quality and consistent data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. Responsive Management obtained a total of 1,819 completed interviews.

DATA ANALYSIS

The analysis of the survey data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management. The sample was stratified among the six license types of interest to ensure that a robust sample would be obtained from all six types; this was achieved for five of the six types, while for the sixth type, only 18 respondents were in the original sample, which is too few for statistical significance. For graphs that show results among all respondents together, the data were weighted so that each license

type was properly proportioned in the total. Table 1.1 shows the number of license holders of each type, the number of license holders with usable telephone numbers, the number of completed interviews obtained of each type, and the weight that was applied when the results of the total are shown. Note that a “usable” telephone number does not necessarily mean that the person is eligible for the survey; for instance, some usable telephone numbers were not to the person named in the database, while other usable numbers were to people too young to be surveyed. This is just an example, rather than an inclusive listing, of reasons that a usable number may not reach an eligible respondent.

Table 1.1. License Types, Sample Size, and Weighting

| License Type | Number of Licenses | Number of Usable Telephone Numbers | Number in Sample (Completed Interviews) | Weight |
|---|--------------------|------------------------------------|---|--------|
| Senior License | 70,633 | 62,703 | 564 | 1.367 |
| Gratis License | 91,770 | 74,075 | 577 | 1.737 |
| Resident Three-Year Saltwater License | 3,694 | 2,403 | 530 | 0.076 |
| Lifetime Saltwater Fishing Add-On | 332 | 236 | 96 | 0.038 |
| Non-Resident Three-Year Saltwater License | 150 | 102 | 47 | 0.035 |
| Lifetime Saltwater Fishing License | 18 | 16 | 5 | 0.039 |

The analysis included crosstabulations of many questions by various respondent characteristics, including the type of license and by saltwater fishing participation within the past 2 years. Hereinafter, those respondents who saltwater fished in the past 2 years are referred to as “saltwater anglers.” The crosstabulation by license type uses the license type variable that is associated with the respondent in the sample database; although one license type is associated with each respondent in the database, that respondent may have purchased other licenses. As stated, however, the crosstabulation by license type uses the license identified in the sample database. Only one type of non-resident license type was included in the survey (Non-Resident Three-Year Saltwater License); therefore, these respondents are simply referred to as Non-Residents. The Lifetime Saltwater Fishing License holders are not discussed in the text (because there are only 5 respondents of this type who could be interviewed of the 18 in the sample), but their results are presented on the graphs. By request of the Department, crosstabulations were run of Senior and Gratis License holders who did and did not saltwater fish; these graphs are not discussed in the text but are shown in Appendix A.

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

SAMPLING ERROR

For three of the license types in the study, a *census* was conducted (Lifetime Saltwater Add-On Licenses, Lifetime Saltwater Fishing License, and Non-Resident Three-Year Saltwater License). In other words, rather than pulling a representative sample from the entire group within that license type and calling that sample to make projections about the entire group, an attempt was made to call every person in the group. Because a census rather than a sampling was taken, sampling error does not apply to these groups.

A sampling error was determined for each of the other three license type samples. For Senior License holders, the sampling error is plus or minus 4.11 percent (564 in sample among a total population of 70,633 license holders). For Gratis License holders, the sampling error is plus or minus 4.07 percent (577 in sample among a total population of 91,770 license holders). Finally for Resident Three-Year Saltwater License holders, the sampling error is plus or minus 3.94 percent (530 in sample among a total population of 3,694 license holders). Sampling error was calculated using the formula described in Figure 1.1.

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

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).

Figure 1.1. Sampling Error Equation

2. PURCHASE OF LICENSES

As indicated previously, the survey sample was stratified, and then the total results were weighted so that the various license types would be in proportion to the whole. As shown in Figure 2.1, after weighting, Gratis Licenses (55%) and Senior Licenses (42%) make up most of the licenses among these six types. In the crosstabulation by saltwater fishing participation, saltwater anglers are more likely to have a Senior License or to have a Resident Three-Year License, relative to non-saltwater anglers (Figure 2.2).

Q4. License type (after weighting).

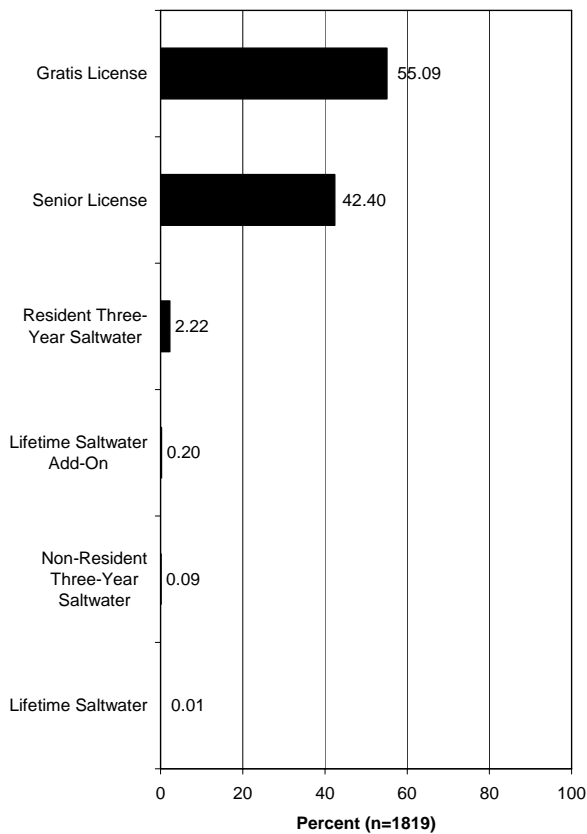


Figure 2.1. License Types Represented in Study

Q4. License type (after weighting).

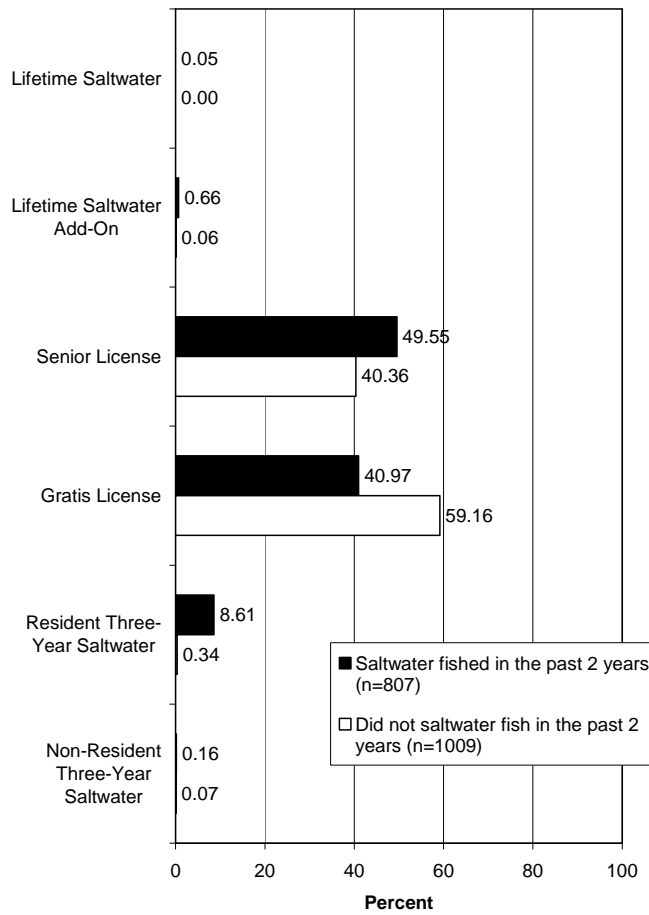


Figure 2.2. License Types Represented in Study (by Saltwater Fishing Participation)

Respondents were asked if they typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina: 12% of respondents do so (Figure 2.3). Saltwater anglers, relative to non-saltwater anglers, are more likely to typically purchase another annual fishing or hunting license, stamp, tag, or permit (18%, compared to 10% of non-saltwater anglers) (Figure 2.4).

Q14. In addition to your license, do you typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina?

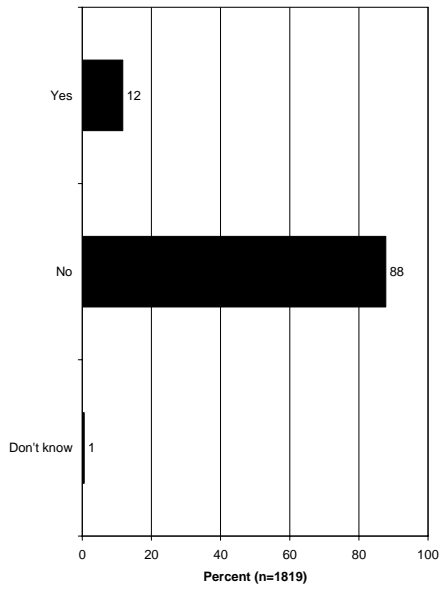


Figure 2.3. Purchase of Other Licenses, Stamps, Tags, or Permits

Q14. In addition to your license, do you typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina?

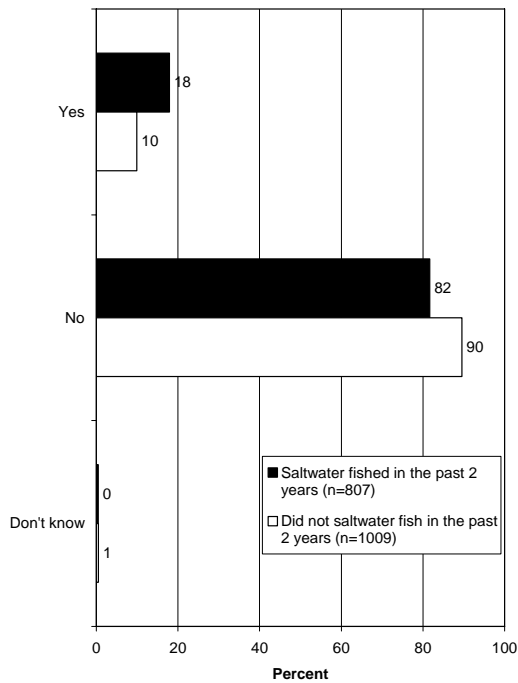


Figure 2.4. Purchase of Other Licenses, Stamps, Tags, or Permits (by Saltwater Fishing Participation)

There was a marked difference in rate of purchase of other licenses, stamps, tags, or permits in the crosstabulation by license type (Figures 2.5 and 2.6). Senior License holders and Gratis License holders are much *less* likely to typically purchase other licenses, relative to holders of Resident Three-Year Saltwater Licenses or Lifetime Saltwater Add-On Licenses. Non-Residents also have a low rate of purchase of other licenses, but still not as low as Senior and Gratis License holders.

Q14. In addition to your license, do you typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina? (Part 1.)

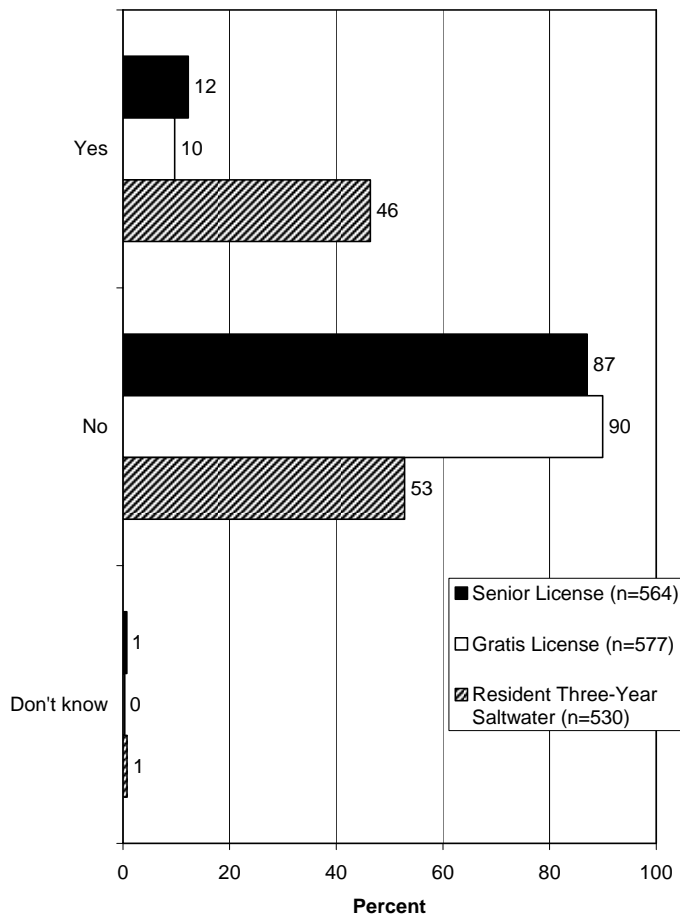


Figure 2.5. Purchase of Other Licenses, Stamps, Tags, or Permits (by License Type, Part 1)

Q14. In addition to your license, do you typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina? (Part 2.)

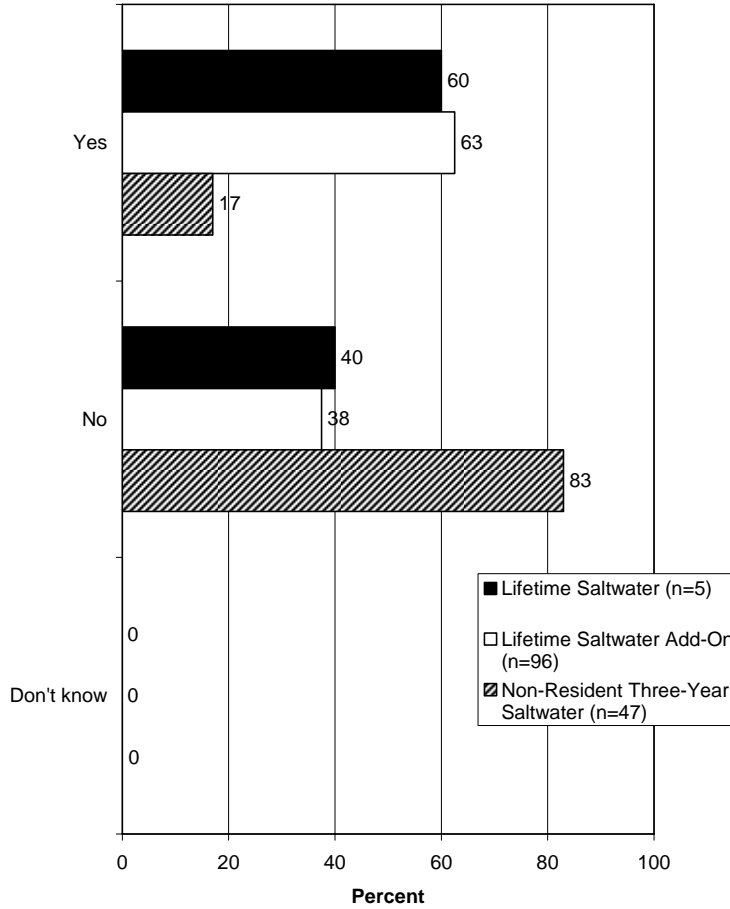


Figure 2.6. Purchase of Other Licenses, Stamps, Tags, or Permits (by License Type, Part 2)

3. PARTICIPATION IN SALTWATER FISHING

The survey asked directly about saltwater fishing participation in South Carolina in two time frames: 2 years and 12 months. Just under a quarter of respondents overall (23%) had saltwater fished in the previous 2 years; 16% had done so within 12 months (Figures 3.1 and 3.2).

Q19. Have you gone saltwater fishing in South Carolina in the past 2 years?

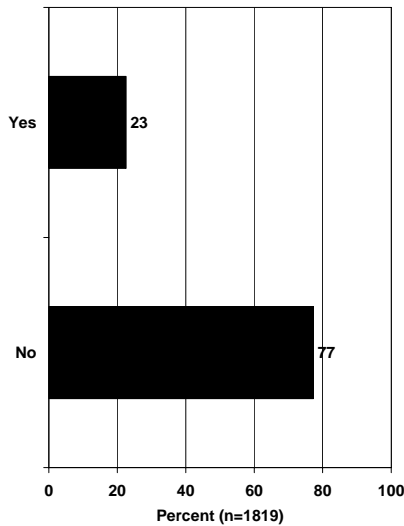


Figure 3.1. Participation in Saltwater Fishing in South Carolina in Past 2 Years

Q23. Saltwater fishing participation in South Carolina in the past 12 months.

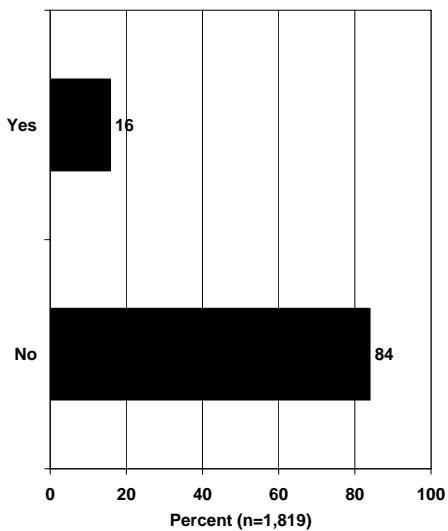


Figure 3.2. Participation in Saltwater Fishing in South Carolina in Past 12 Months

To help determine a rough measure of the churn rate, an analysis was run of those 23% of all respondents who went saltwater fishing in the previous 2 years. Among those respondents who had saltwater fished in the past 2 years, 70% had done so in the past single year (i.e., 12 months), and this suggests a churn rate of at least 30% of saltwater anglers who do not saltwater fish each year (Figure 3.3).

Q23. Saltwater fishing participation in South Carolina in the past 12 months.

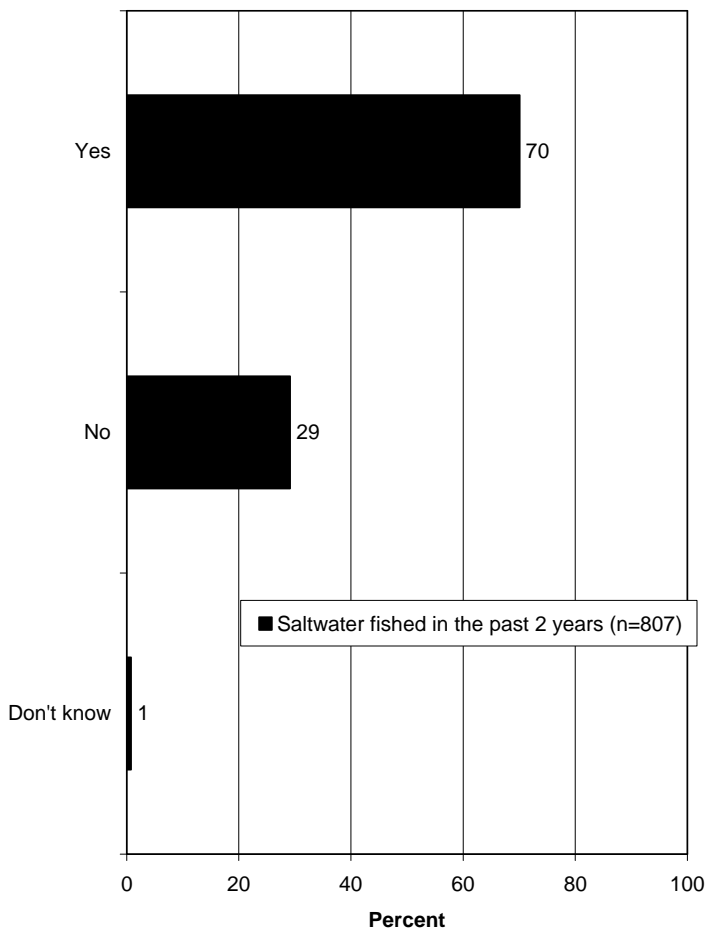


Figure 3.3. Examination of Churn Rate

The rates of saltwater fishing participation in the 2-year time frame among Senior License holders (26%) and Gratis License holders (17%) are, as expected, lower than the rates among those licenses specific to saltwater (which range from 40% to 88%—excluding Lifetime Saltwater License holders) (Figures 3.4 and 3.5). The crosstabulation is also included for the 12-month time frame (Figures 3.6 and 3.7).

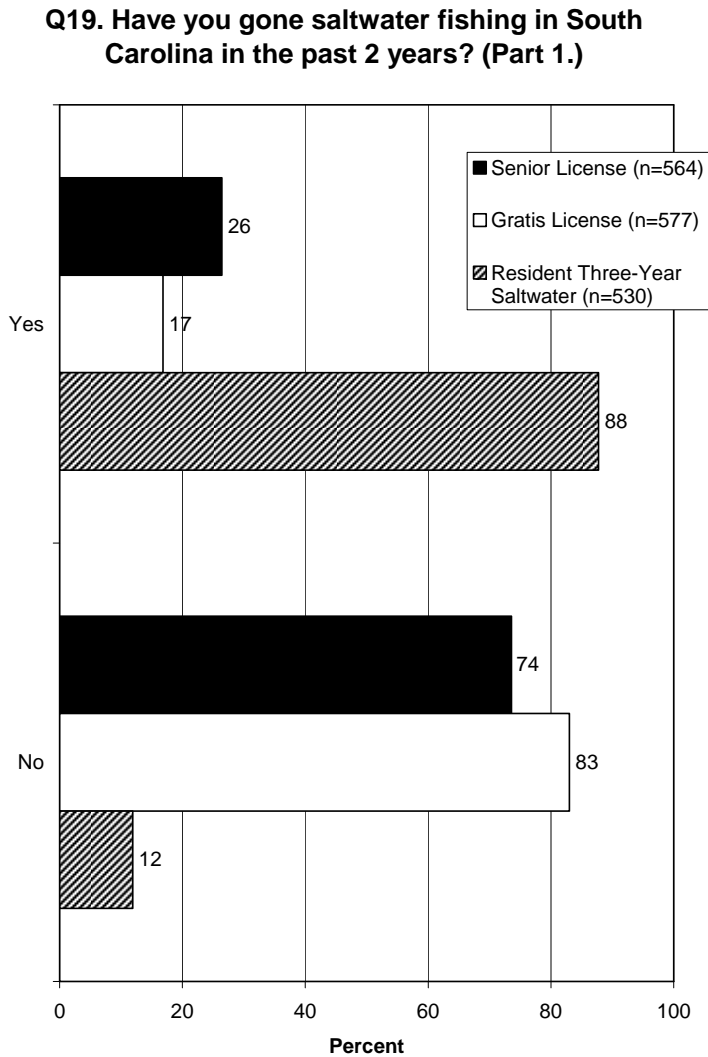


Figure 3.4. Participation in Saltwater Fishing in Past 2 Years (by License Type, Part 1)

Q19. Have you gone saltwater fishing in South Carolina in the past 2 years? (Part 2.)

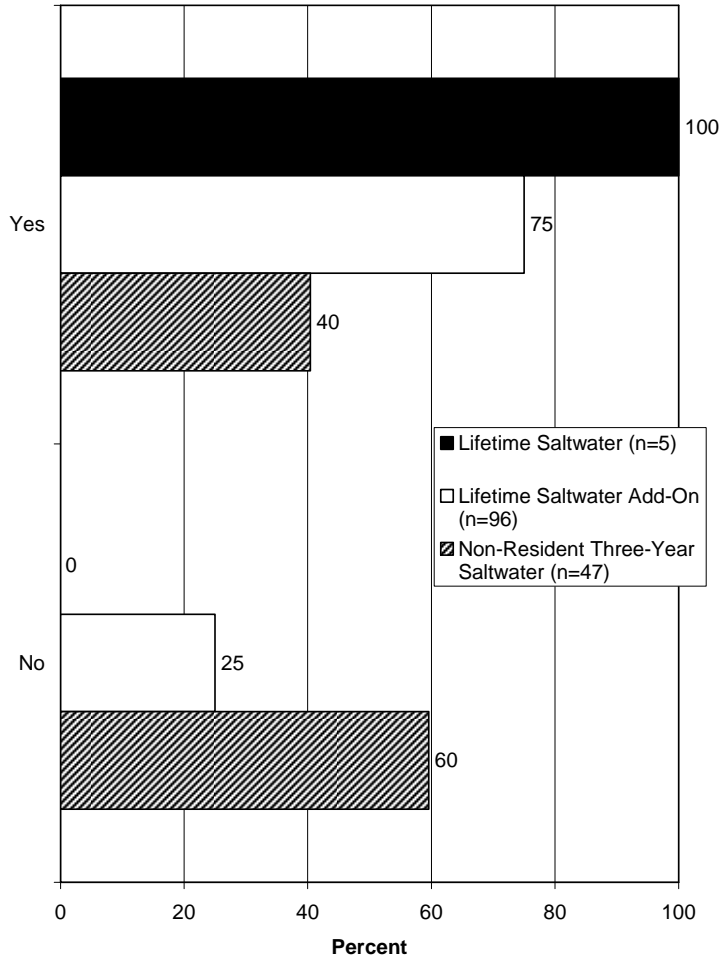


Figure 3.5. Participation in Saltwater Fishing in Past 2 Years (by License Type, Part 2)

Q23. Saltwater fishing participation in South Carolina in the past 12 months.

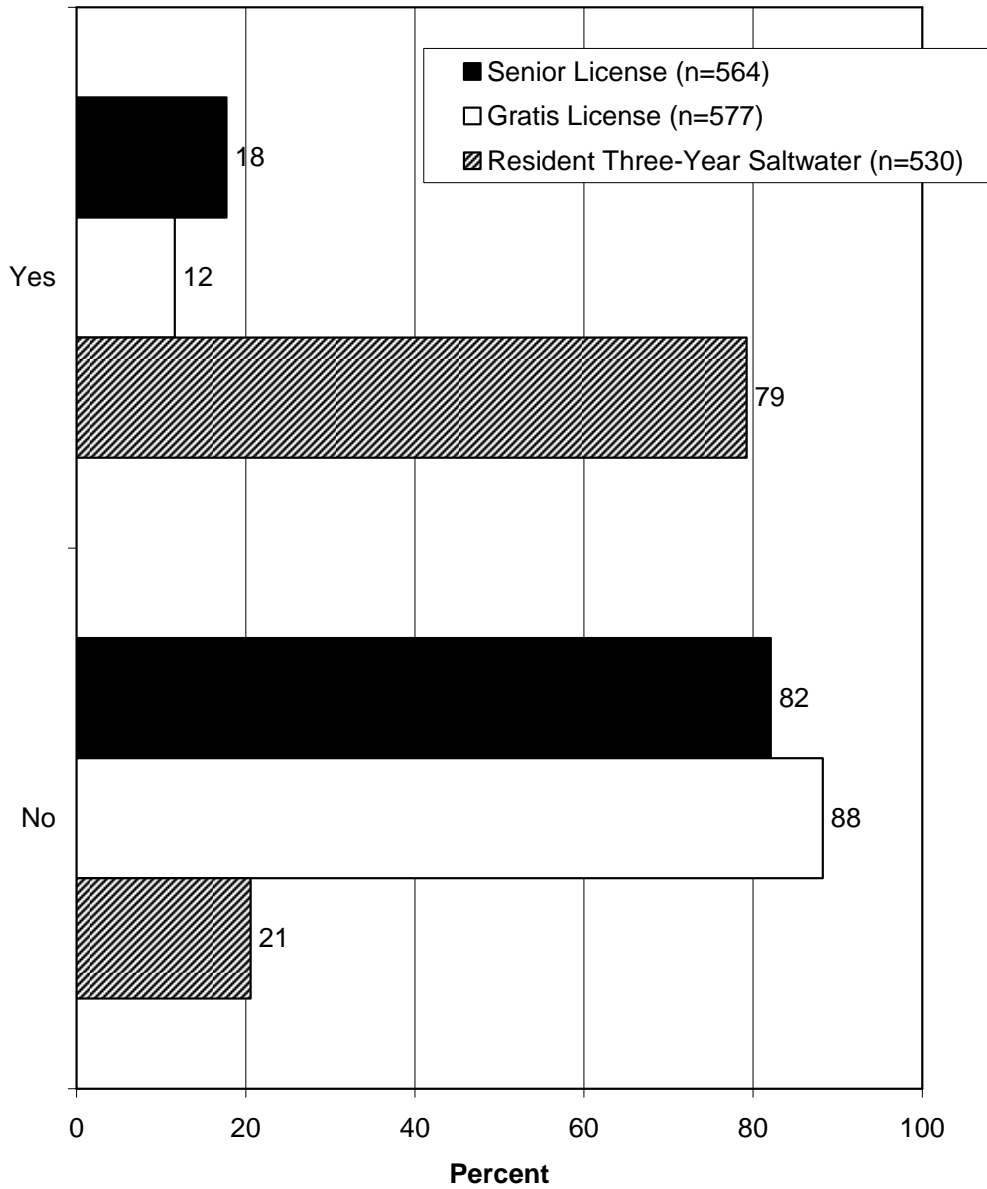


Figure 3.6. Participation in Saltwater Fishing in Past 12 Months (by License Type, Part 1)

Q23. Saltwater fishing participation in South Carolina in the past 12 months.

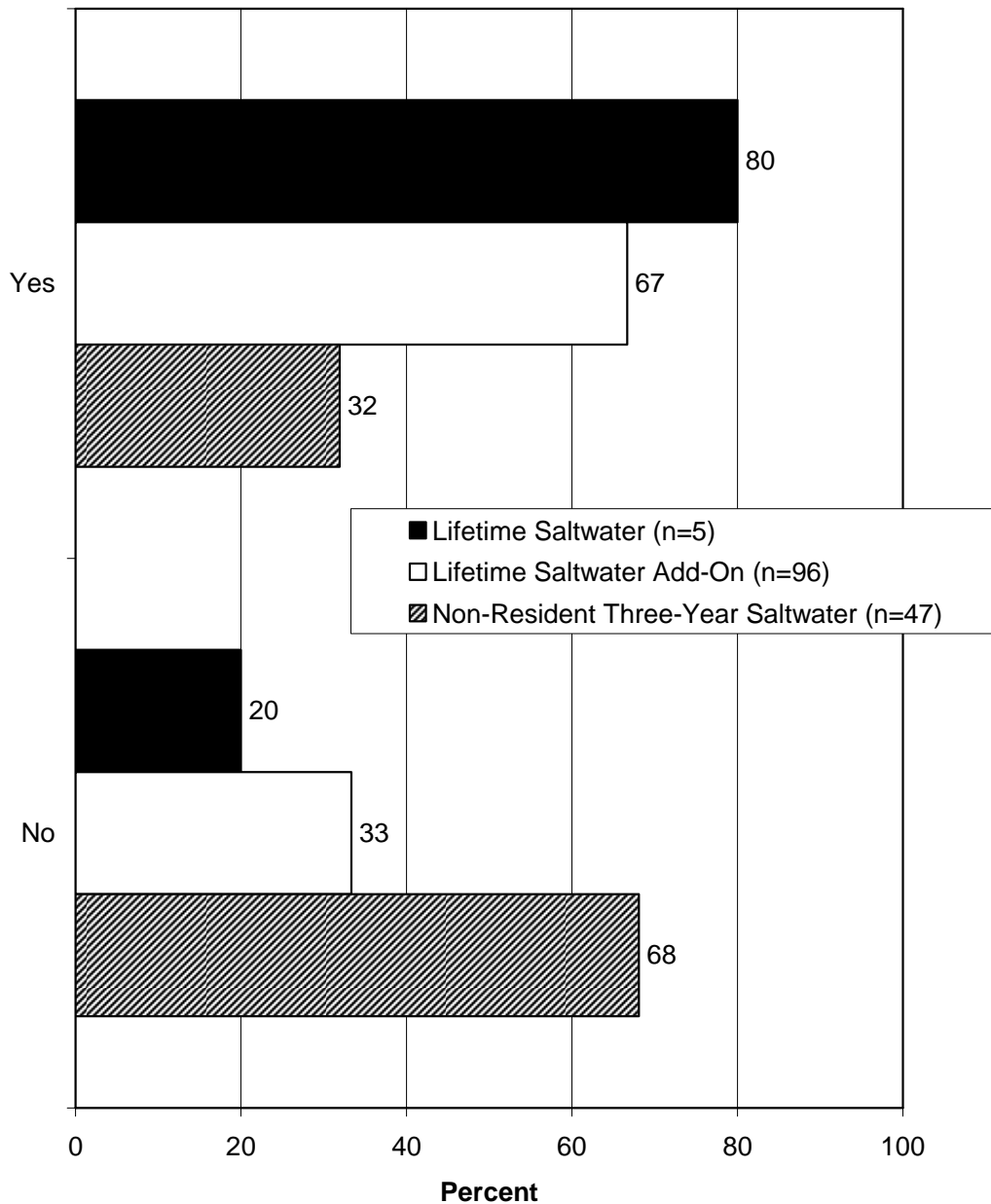


Figure 3.7. Participation in Saltwater Fishing in Past 12 Months (by License Type, Part 2)

Additional follow-up questions asked about the number of saltwater fishing trips taken among saltwater anglers. The majority of them took no more than 5 trips over the previous 2 years (56% were within this range) (Figure 3.8). Nonetheless, there were some quite avid saltwater anglers, with 7% taking more than 30 trips in the previous 2 years. Another question asked about only the previous 12 months, and 30% of saltwater anglers had taken none (i.e., they went saltwater fishing within the past 2 years but not the past 12 months), while 45% were within the range of 1 to 5 trips in the past 12 months (Figure 3.9).

Q20. In total, about how many saltwater fishing trips did you take in South Carolina in the past 2 years? (Asked of those who have taken a fishing trip in South Carolina in the past 2 years.)

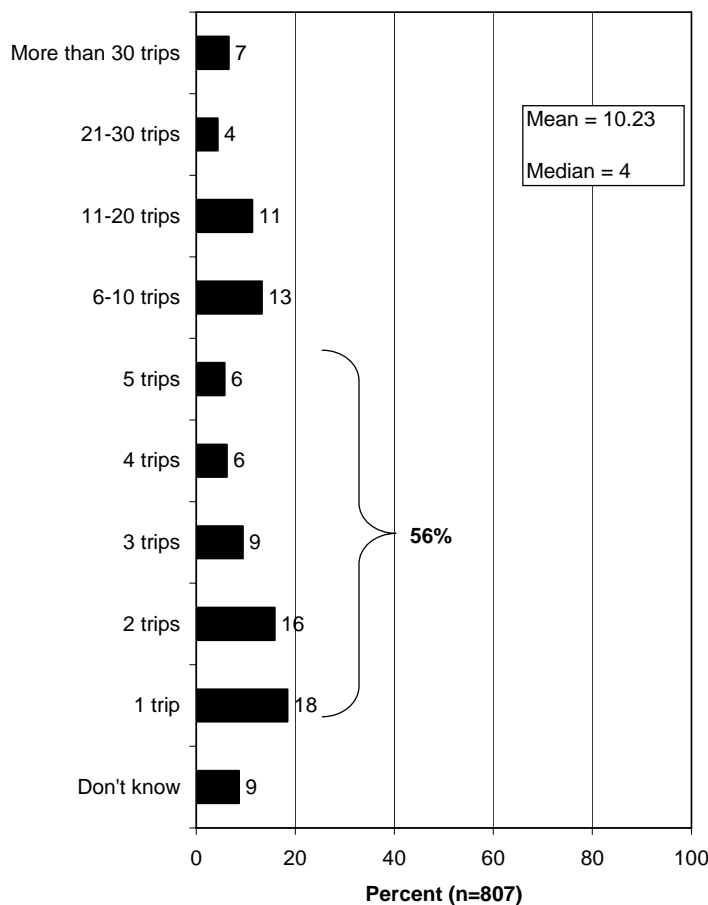


Figure 3.8. Number of Saltwater Trips in Past 2 Years

Q24. In total, about how many saltwater fishing trips did you take in South Carolina in the past 12 months? (Of those who saltwater fished in South Carolina in the past 2 years.)

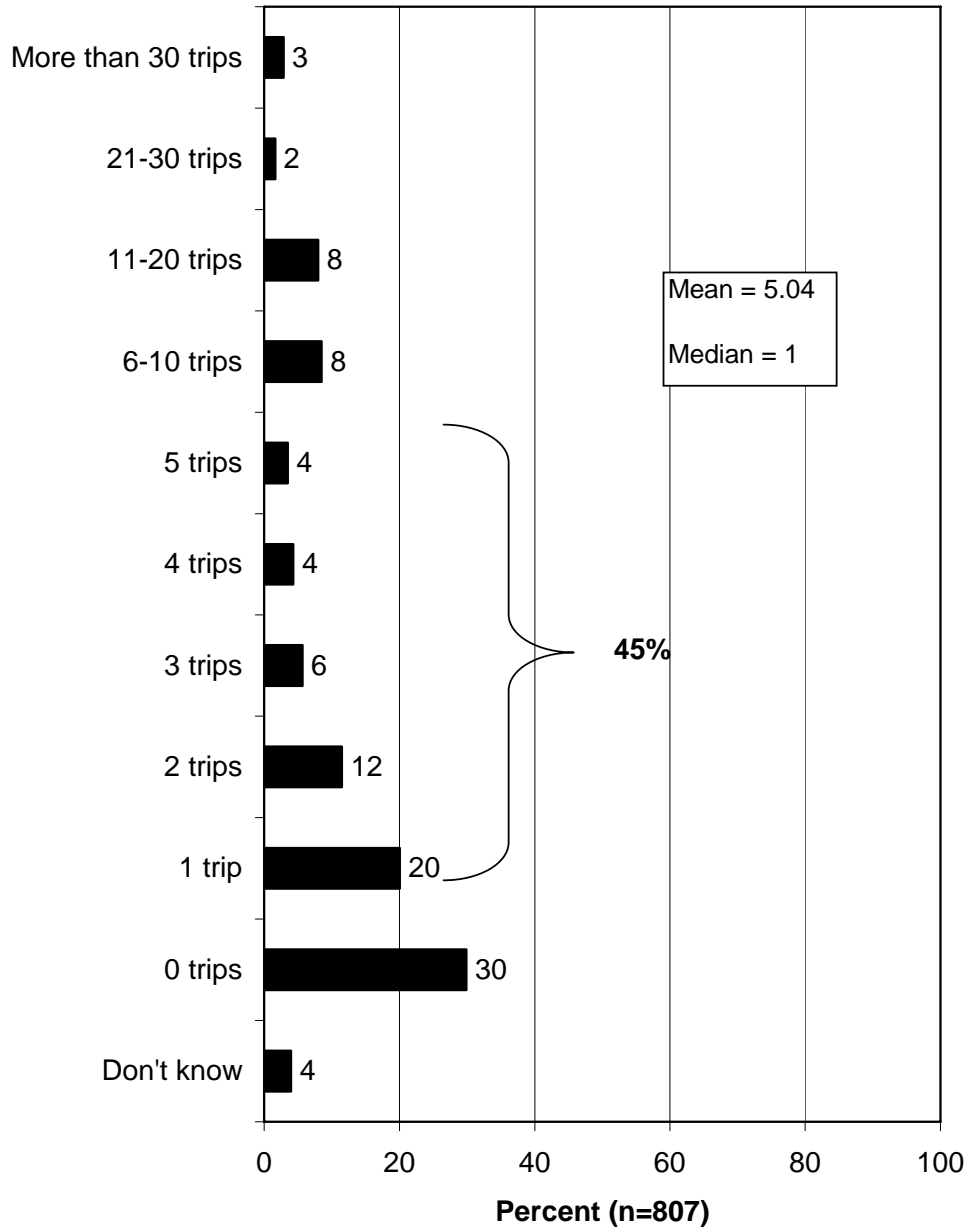


Figure 3.9. Number of Saltwater Trips in Past 12 Months

The crosstabulation by license type found much higher avidity among holders of Resident Three-Year Licenses (mean of 30.26 trips) and Lifetime Saltwater Add-On Licenses (mean of 22.43 trips), compared to other license holders (means of less than 10 trips—ignoring Lifetime Saltwater License holders) (Figures 3.10 and 3.11). The crosstabulation of the question that asked about the 12-month time frame is also shown (Figures 3.12 and 3.13).

Q20. In total, about how many saltwater fishing trips did you take in South Carolina in the past 2 years? (Asked of those who have taken a fishing trip in South Carolina in the past 2 years.) (Part 1.)

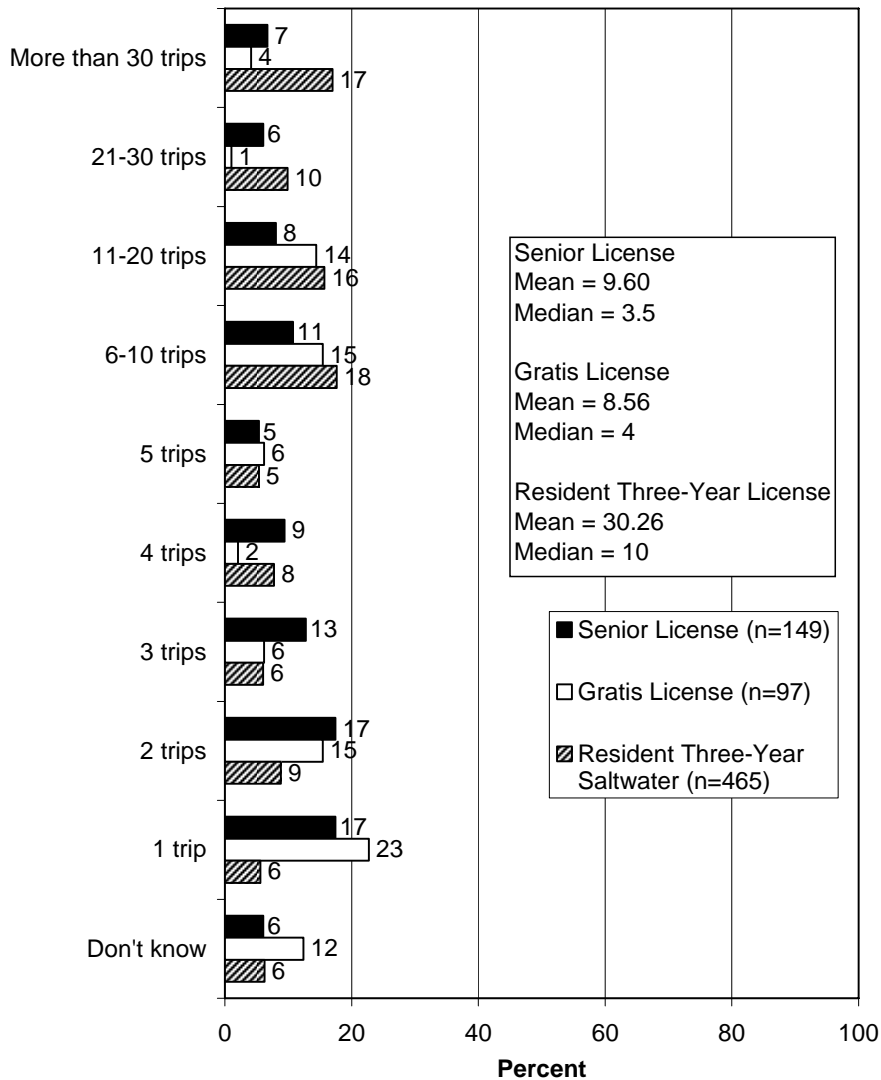


Figure 3.10. Number of Saltwater Trips in Past 2 Years (by License Type, Part 1)

**Q20. In total, about how many saltwater fishing trips did you take in South Carolina in the past 2 years?
(Asked of those who have taken a fishing trip in South Carolina in the past 2 years.) (Part 2.)**

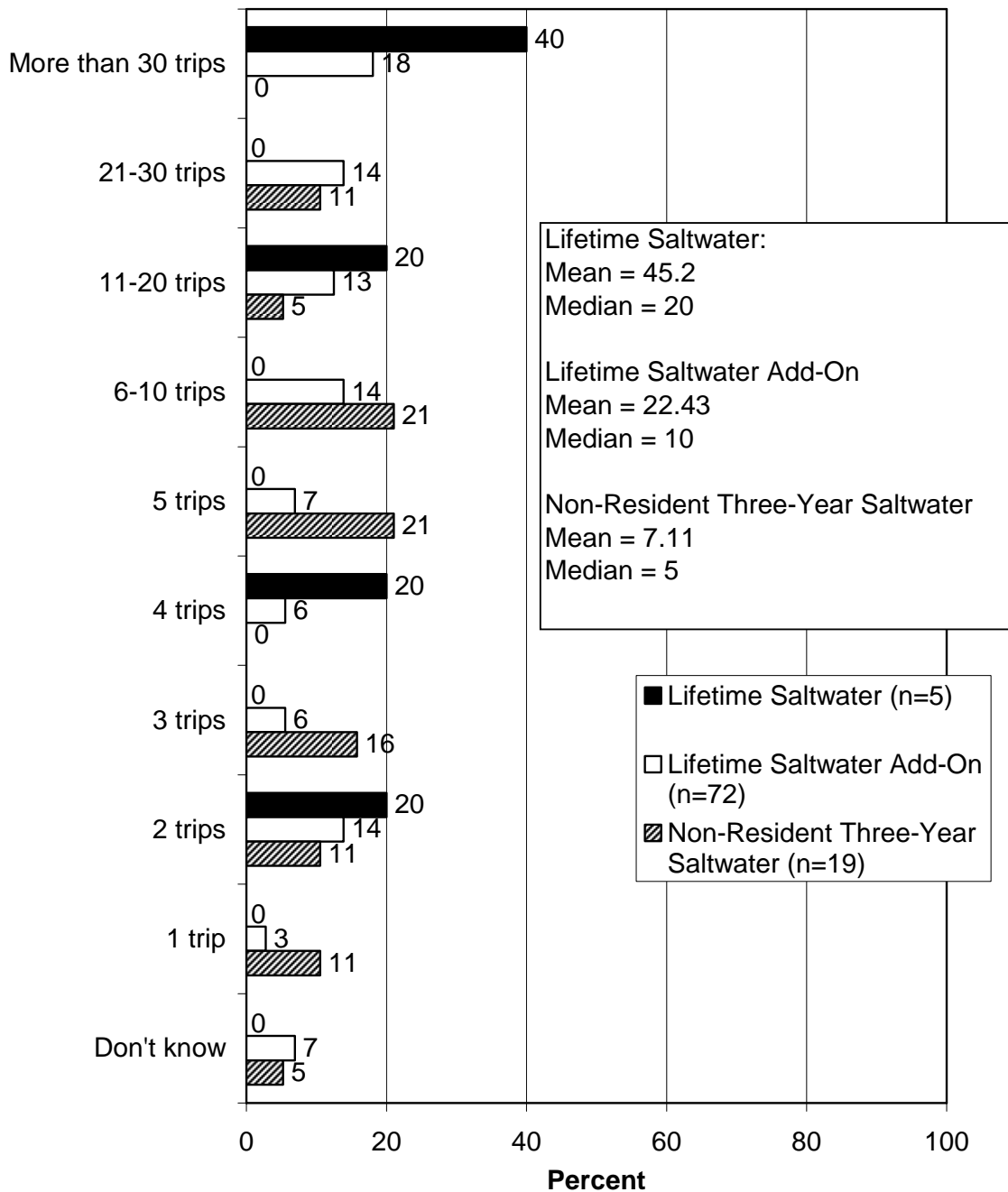


Figure 3.11. Number of Saltwater Trips in Past 2 Years (by License Type, Part 2)

Q24. In total, about how many saltwater fishing trips did you take in South Carolina in the past 12 months? (Of those who saltwater fished in South Carolina in the past 2 years)

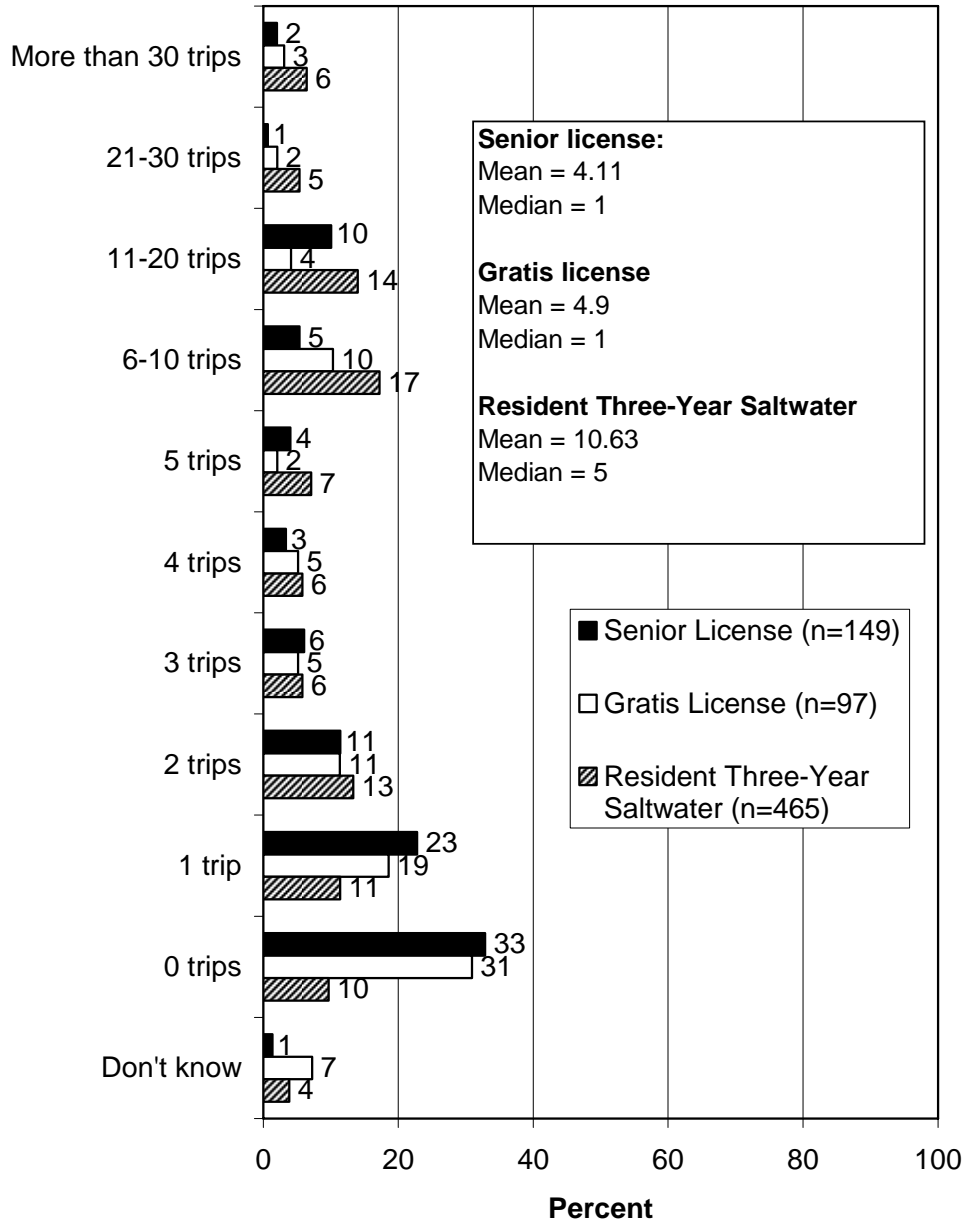


Figure 3.12. Number of Saltwater Trips in Past 12 Months (by License Type, Part 1)

Q24. In total, about how many saltwater fishing trips did you take in South Carolina in the past 12 months? (Of those who saltwater fished in South Carolina in the past 2 years)

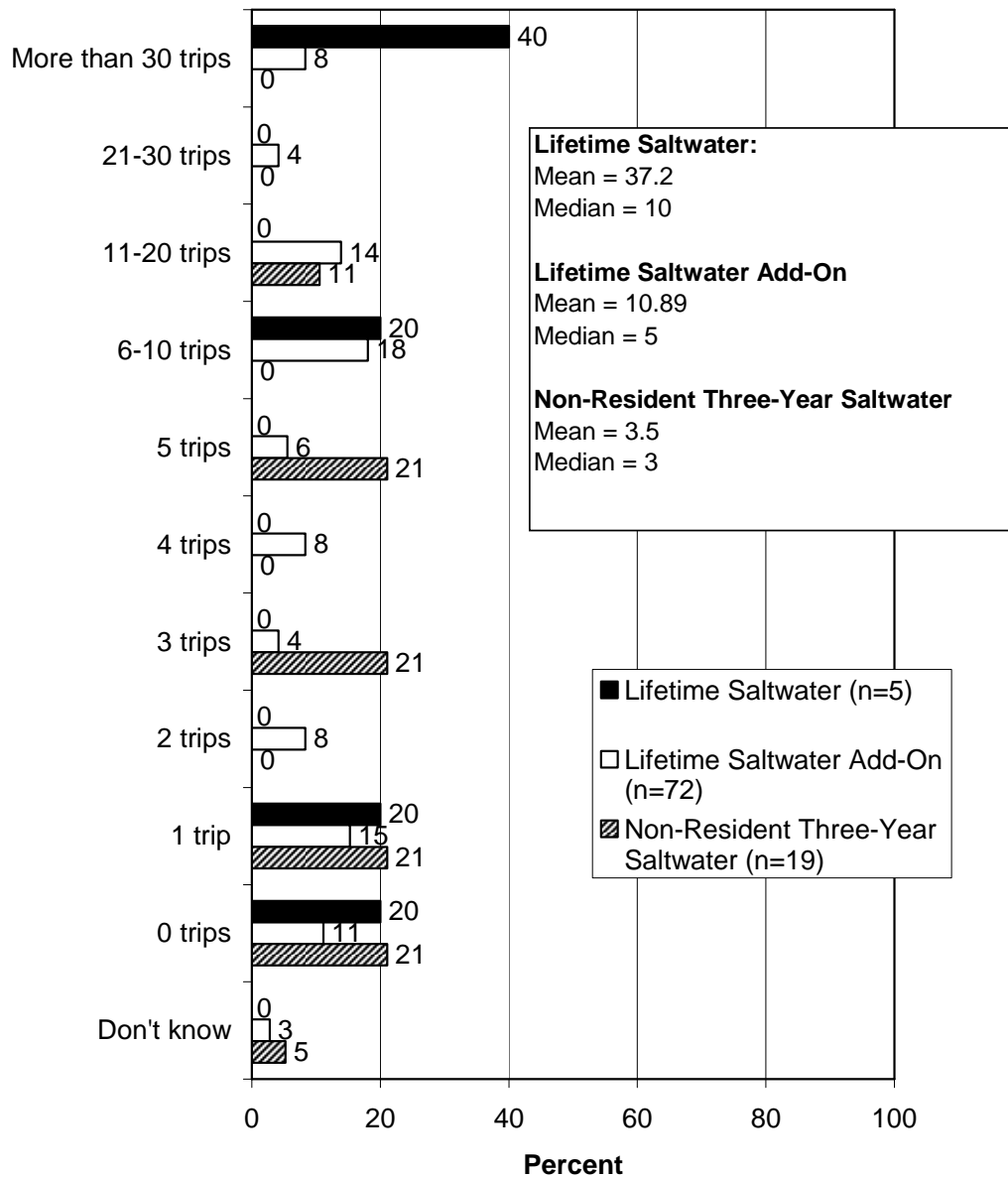


Figure 3.13. Number of Saltwater Trips in Past 12 Months (by License Type, Part 2)

4. PARTICIPATION IN PUBLIC DRAW HUNTS

The overwhelming majority of respondents did *not* apply for a public draw hunt in the previous 3 years: 96% did not do so (Figure 4.1). This runs across all of the crosstabulations (Figures 4.2 through 4.4), with only holders of the Lifetime Saltwater Add-On License having any appreciable amount who applied for a public draw hunt (Figure 4.4).

Q17. How many of the past 3 years have you applied to participate in the Department's public draw hunts?

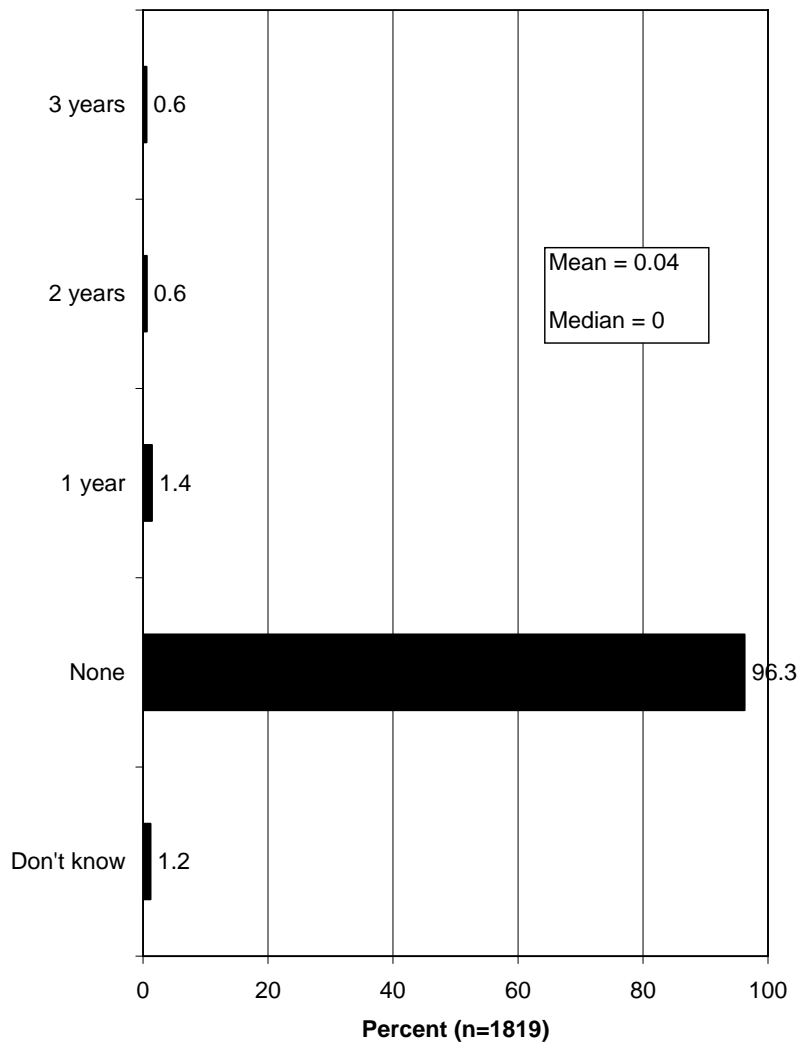


Figure 4.1. Participation in Public Draw Hunts

Q17. How many of the past 3 years have you applied to participate in the Department's public draw hunts?

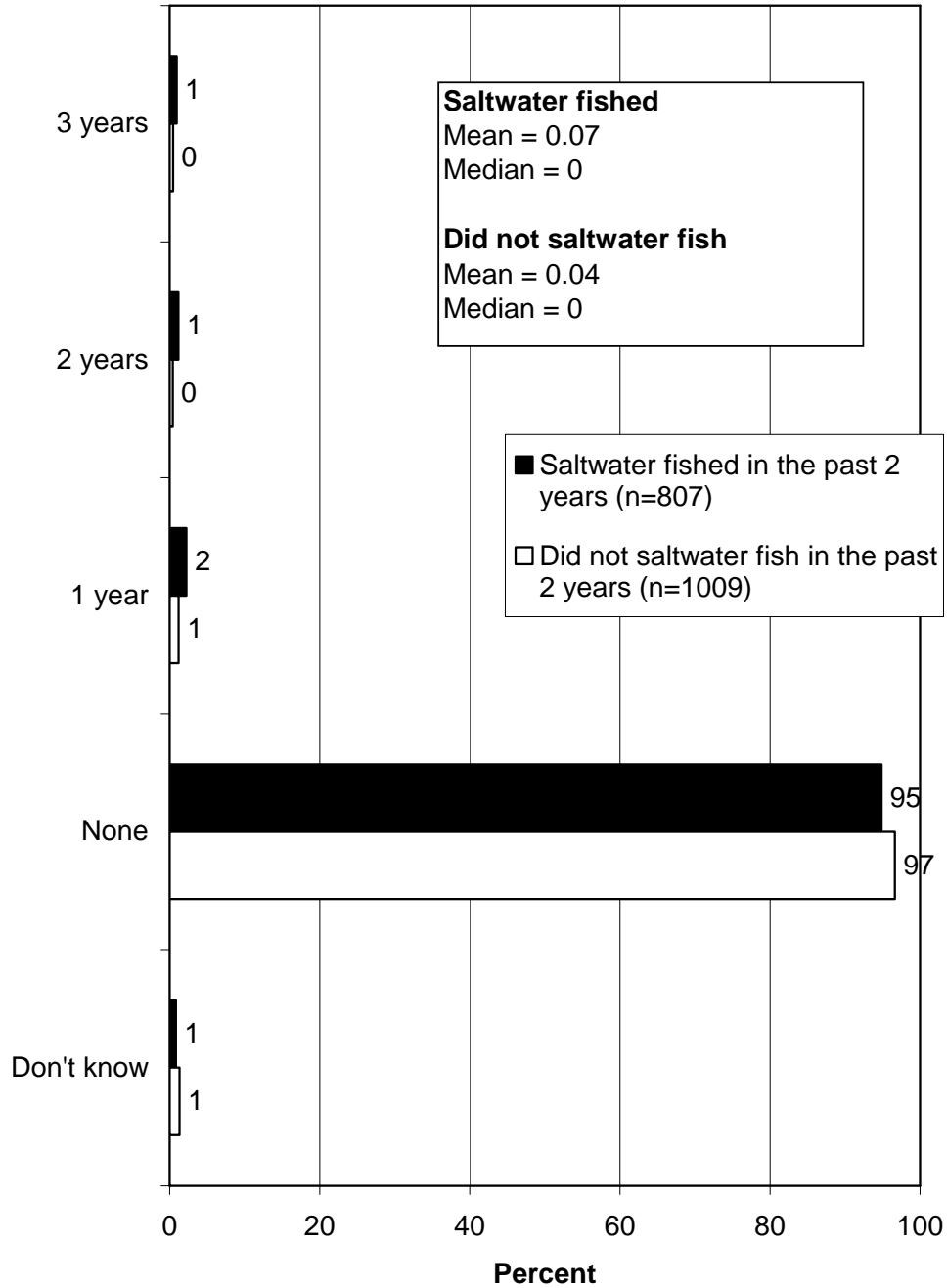


Figure 4.2. Participation in Public Draw Hunts (by Saltwater Fishing Participation)

Q17. How many of the past 3 years have you applied to participate in the Department's public draw hunts? (Part 1.)

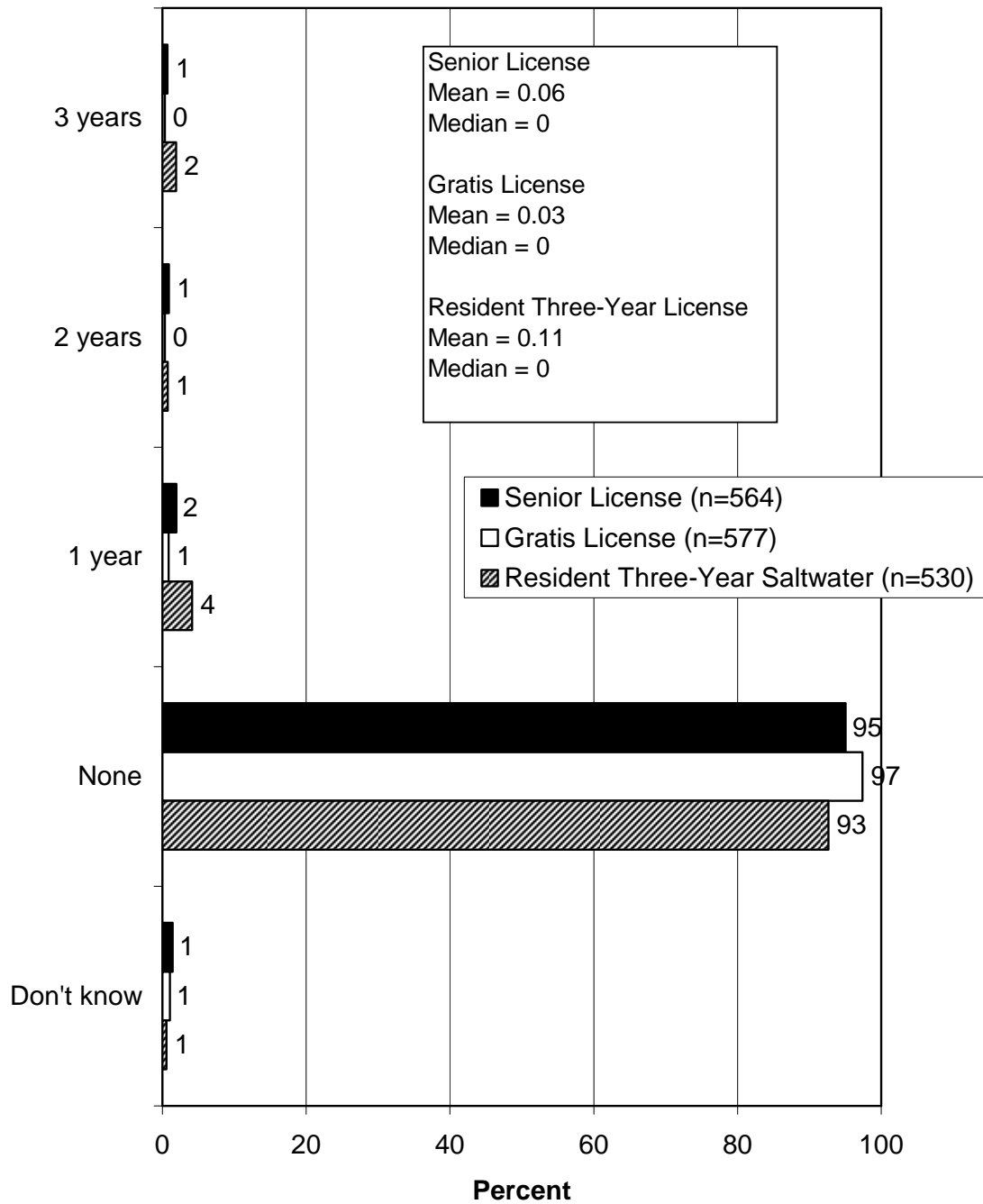


Figure 4.3. Participation in Public Draw Hunts (by License Type, Part 1)

Q17. How many of the past 3 years have you applied to participate in the Department's public draw hunts? (Part 2.)



Figure 4.4. Participation in Public Draw Hunts (by License Type, Part 2)

5. DEMOGRAPHIC, OWNERSHIP, AND OTHER DATA

The majority of respondents overall are male (73%) (Figure 5.1). Saltwater anglers (81%) are even more male-dominated, compared to non-saltwater anglers (70%) (Figure 5.2). All license types are also dominated by males (74% of Senior License holders, 71% of Gratis license holders, and at least 78% of the holders of any other license type) (Figures 5.3 and 5.4).

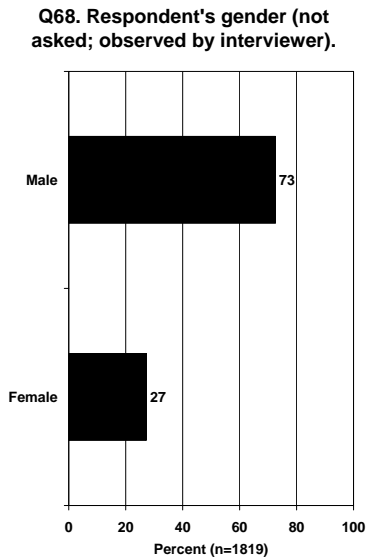


Figure 5.1. Respondent Gender

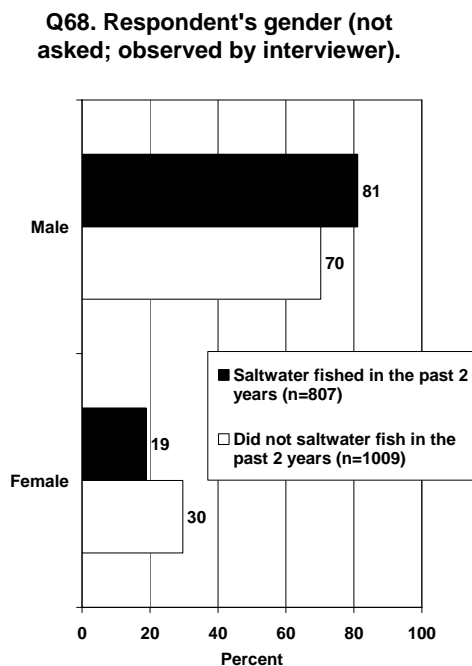


Figure 5.2. Respondent Gender (by Saltwater Fishing Participation)

Q68. Respondent's gender (not asked; observed by interviewer). (Part 1.)

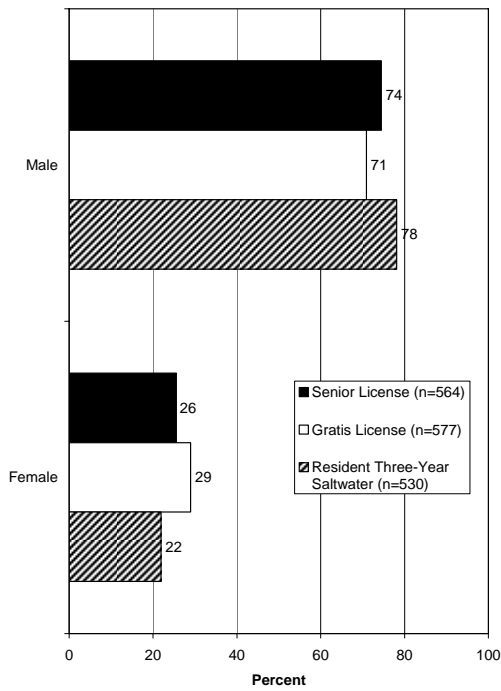


Figure 5.3. Respondent Gender (by License Type, Part 1)

Q68. Respondent's gender (not asked; observed by interviewer). (Part 2.)

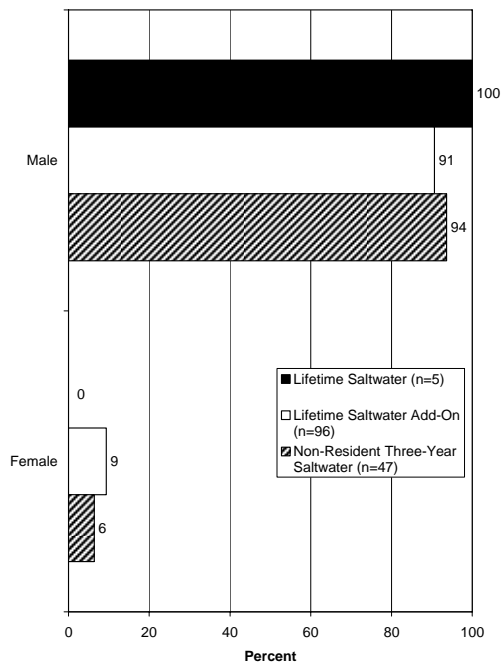


Figure 5.4. Respondent Gender (by License Type, Part 2)

Figures 5.5 through 5.11 show the ages of respondents. Overall, the mean age was 62.93 years. Among saltwater anglers, the mean age is 53.04 years, compared to the mean age of 70.94 years among non-saltwater anglers. There are obvious differences in age in the crosstabulation by license type. Primary among these differences is that Senior Licenses are, by definition, held by older anglers. The mean ages are as follows: Senior Licenses, 70.12 years; Gratis Licenses, 76.99 years; Resident Three-Year Saltwater Licenses, 47.46 years; Lifetime Saltwater Add-On Licenses, 28.23 years, and Non-Resident Three-Year Saltwater Licenses, 53.84 years. Age graphs are presented with two age range categorizations: the traditional census-style, and then one that examines in particular the ages from 65 to 85 years old.

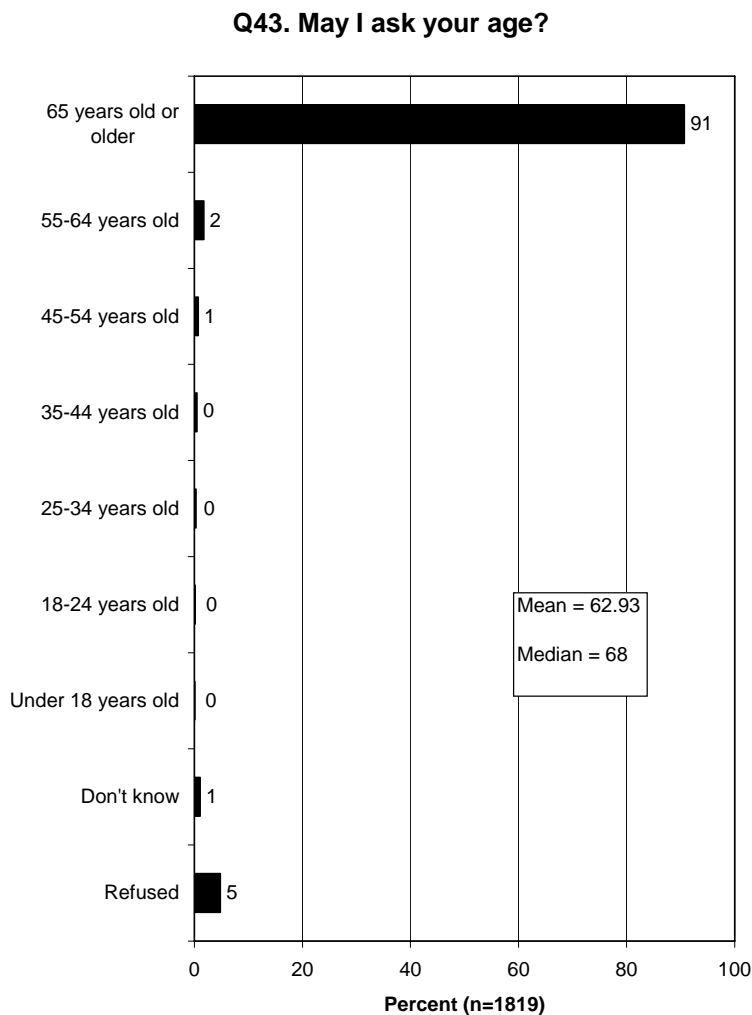


Figure 5.5. Respondent Age

Q43. May I ask your age?

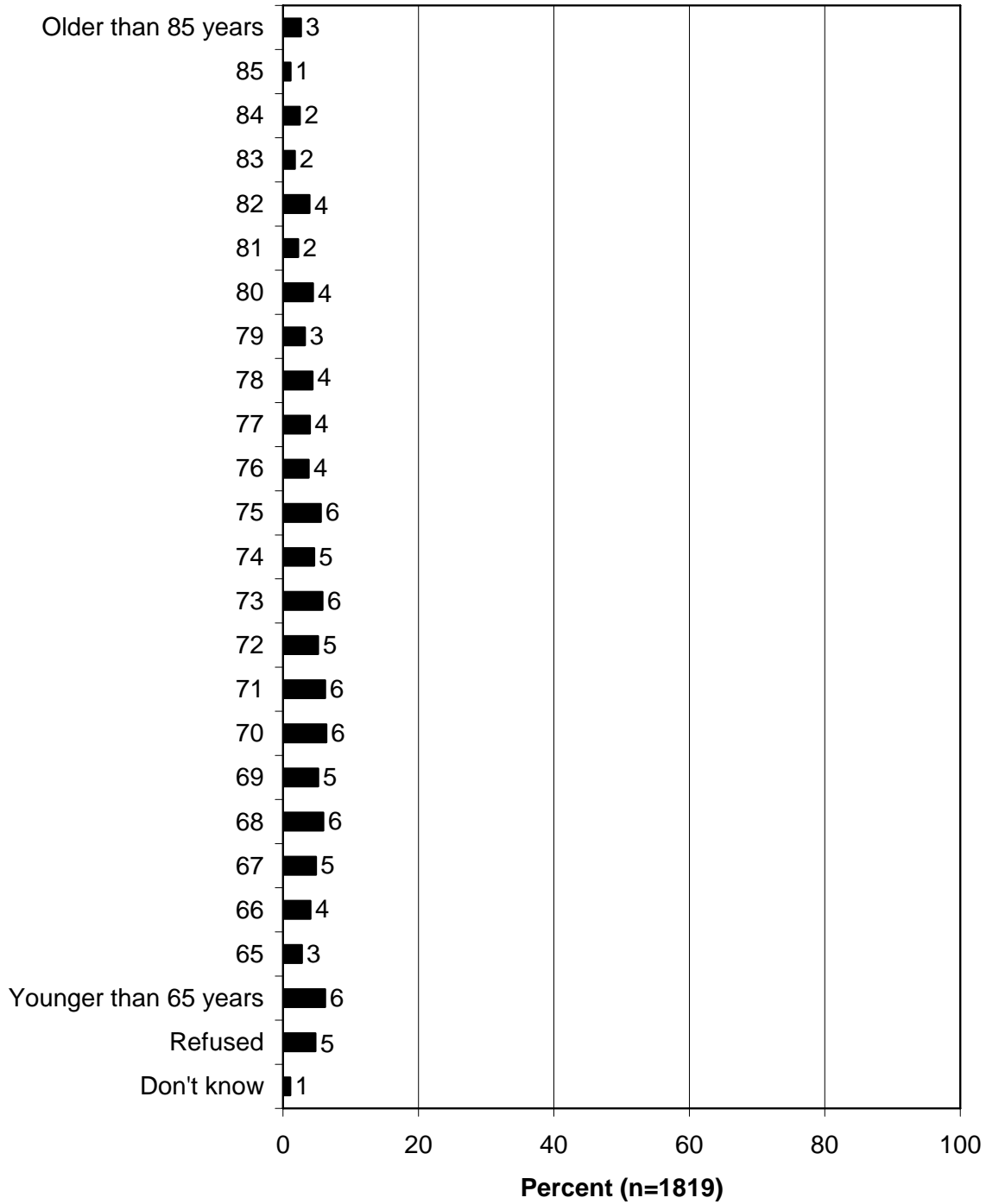


Figure 5.6. Respondent Age (Alternate Age Categories)

Q43. May I ask your age?



Figure 5.7. Respondent Age (by Saltwater Fishing Participation)

Q43. May I ask your age?

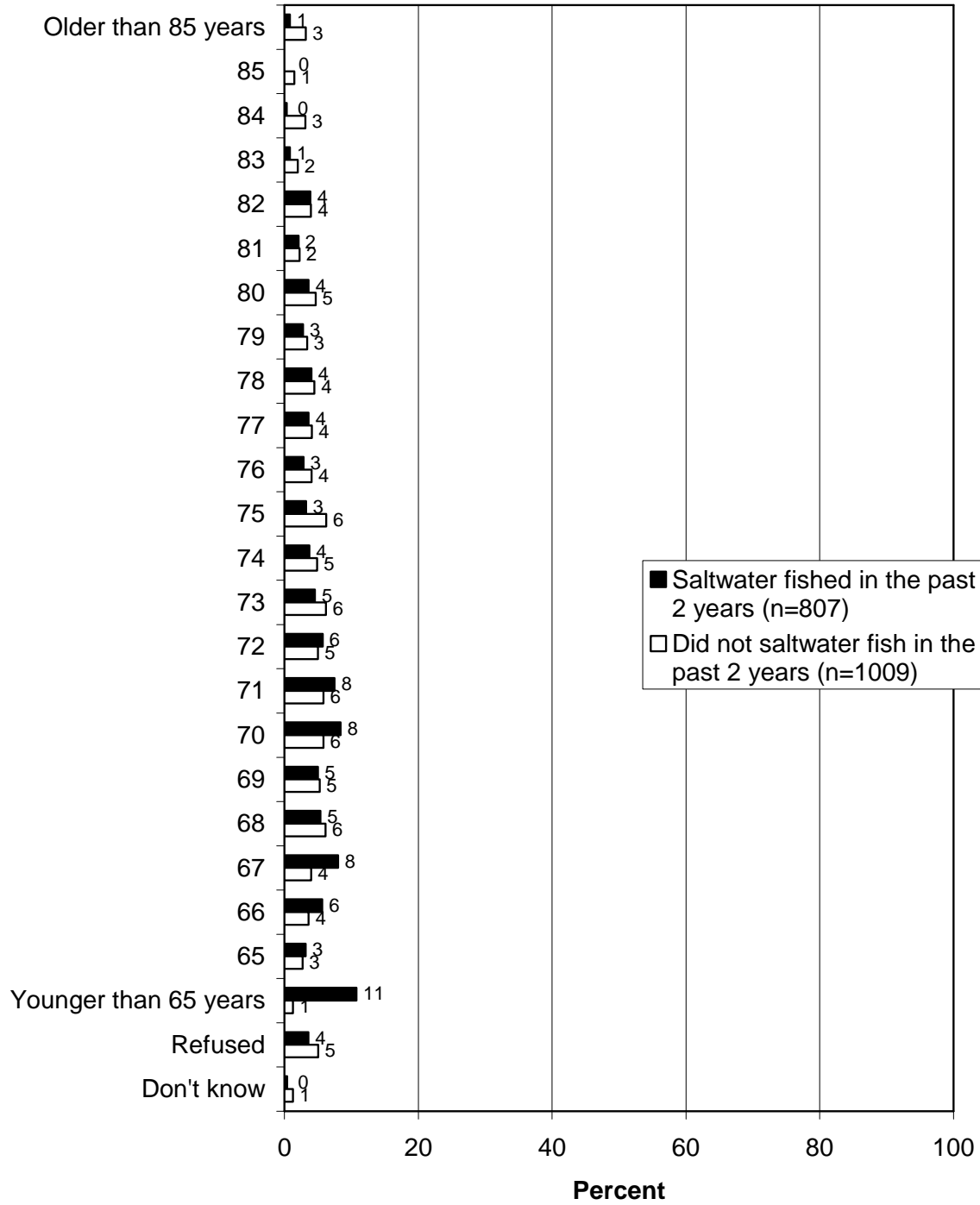


Figure 5.8. Respondent Age (by Saltwater Fishing Participation) (Alternate Age Categories)

Q43. May I ask your age? (Part 1.)

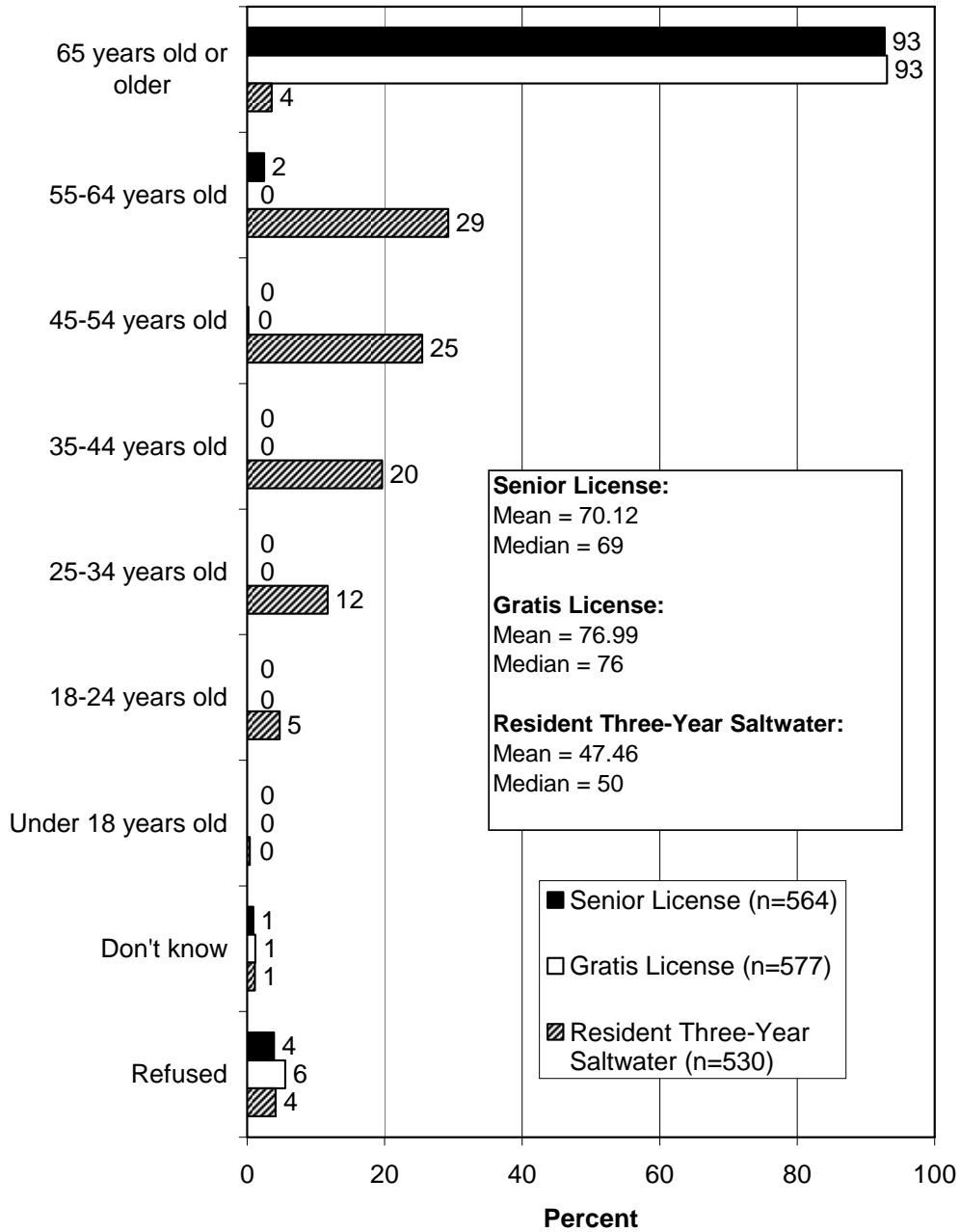


Figure 5.9. Respondent Age (by License Type, Part 1)

Q43. May I ask your age? (Part 2.)

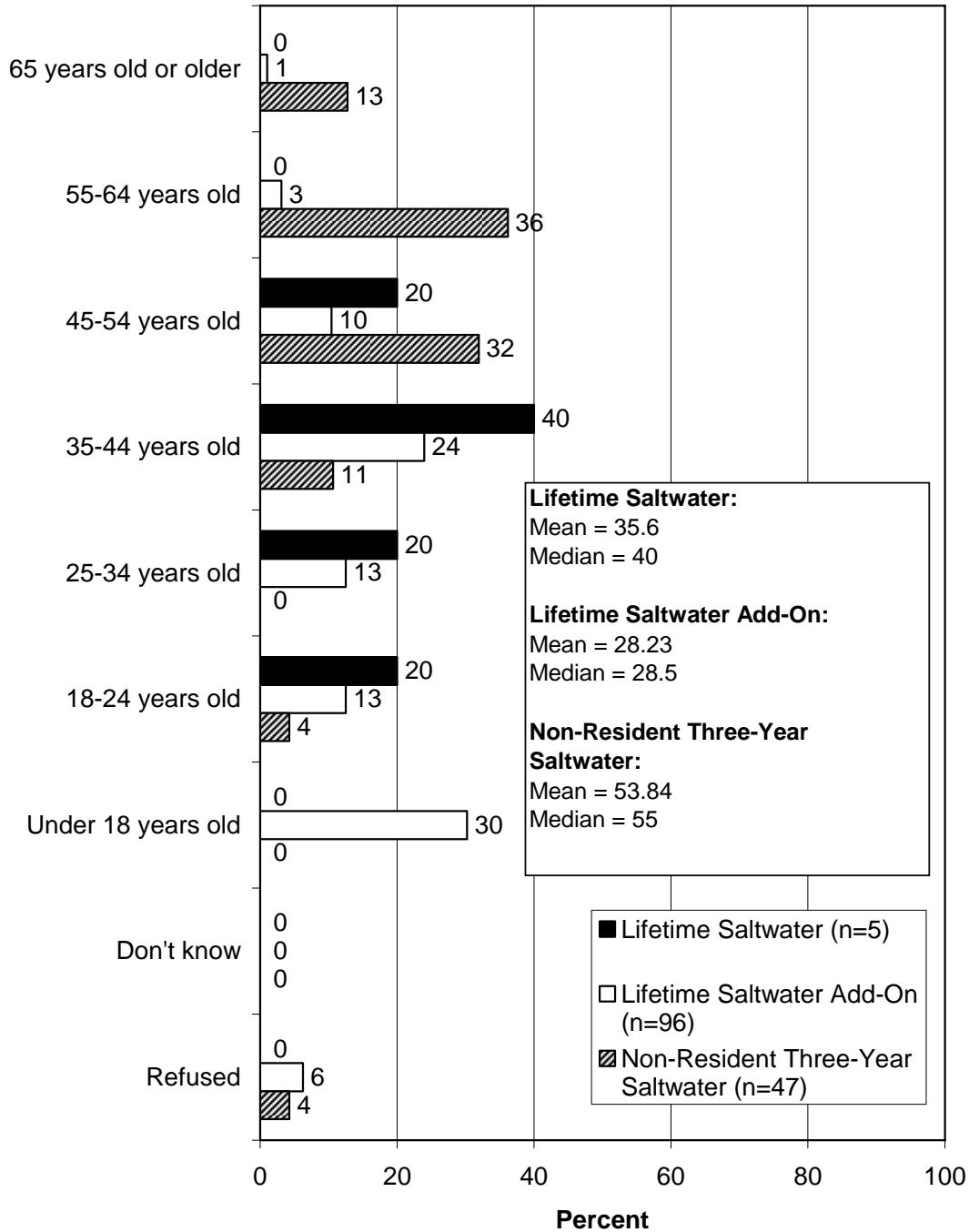


Figure 5.10. Respondent Age (by License Type, Part 2)

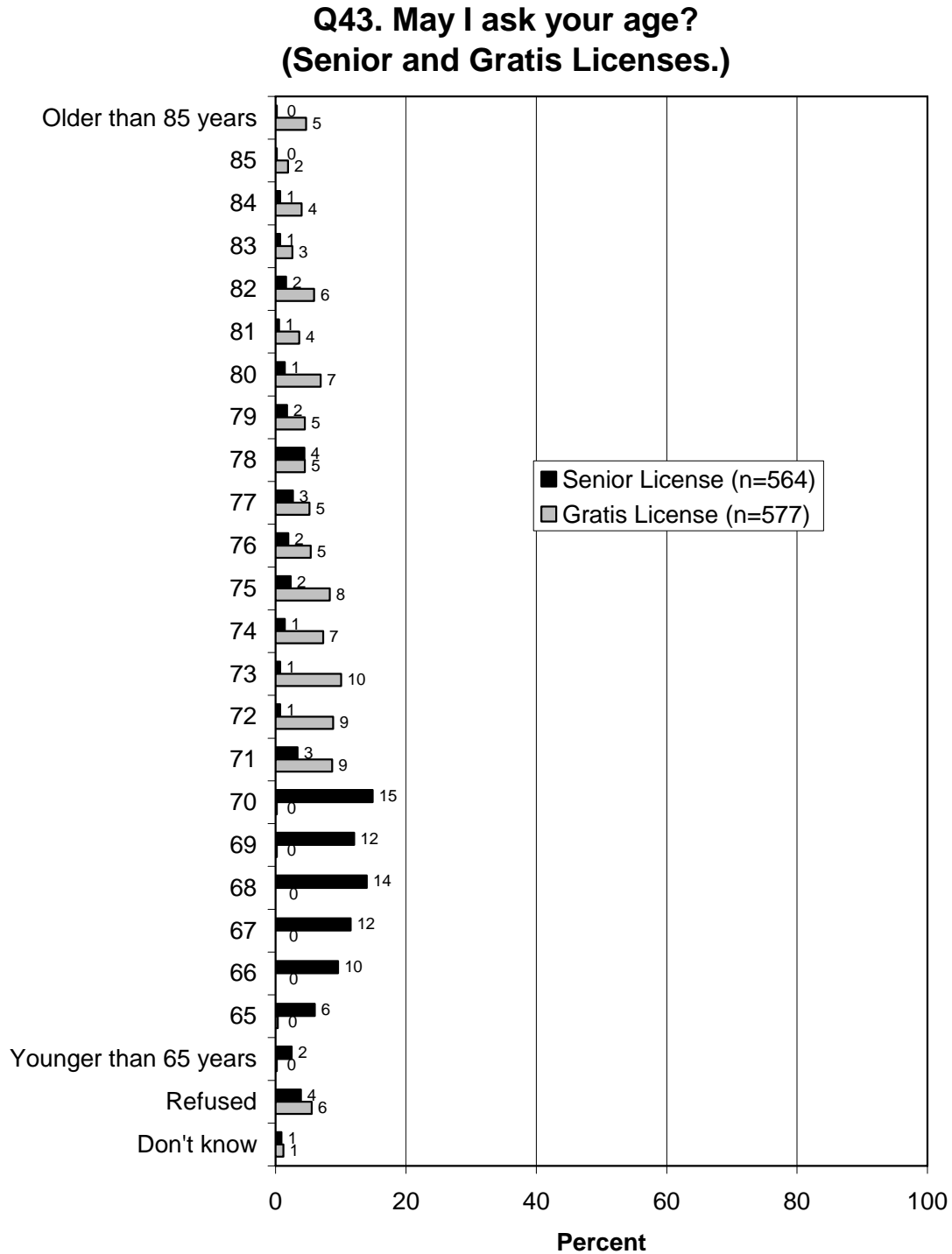


Figure 5.11. Respondent Age (Senior and Gratis Licenses) (Alternate Age Categories)

Whites make up the large majority of respondents overall (83%), distantly followed by blacks/African-Americans (10%) (Figure 5.12). The crosstabulation by saltwater fishing participation found no marked differences (saltwater anglers are 81% white and 12% black/African-American, and non-saltwater anglers are 84% white and 9% black/African-American (Figure 5.13).

Q41. What races or ethnic backgrounds do you consider yourself? Please mention all that apply.

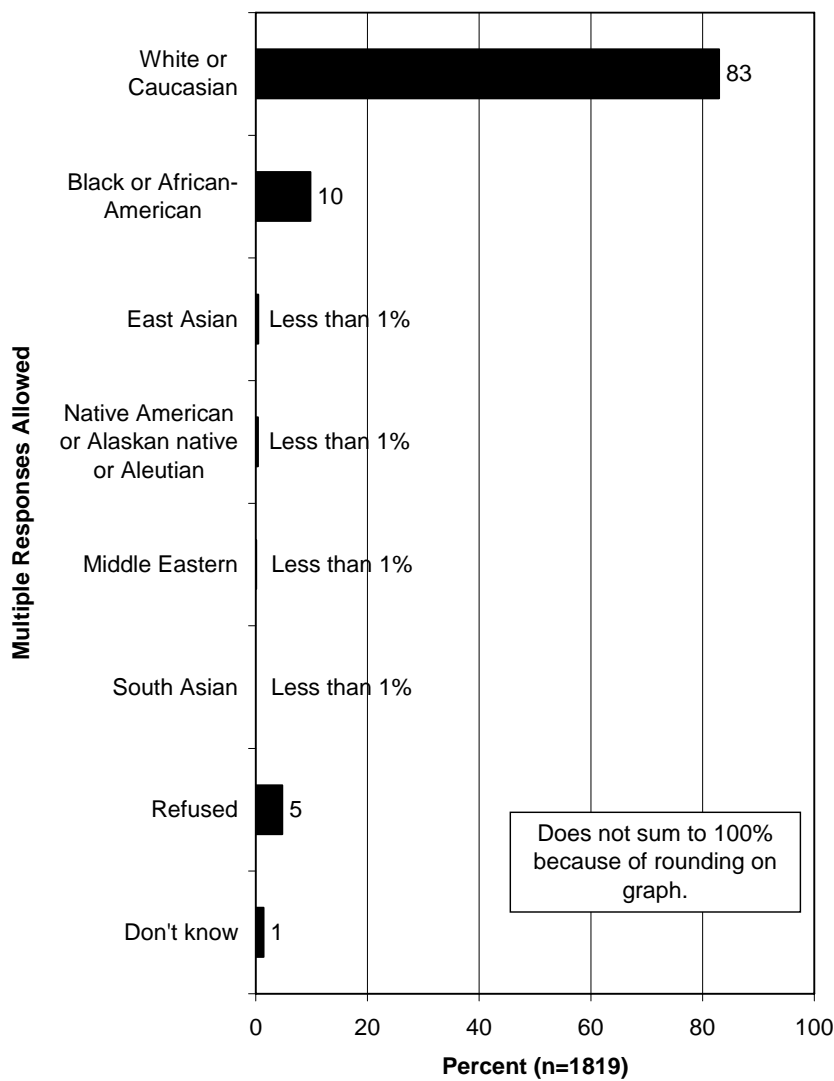


Figure 5.12. Respondent Ethnicity

Q41. What races or ethnic backgrounds do you consider yourself? Please mention all that apply.

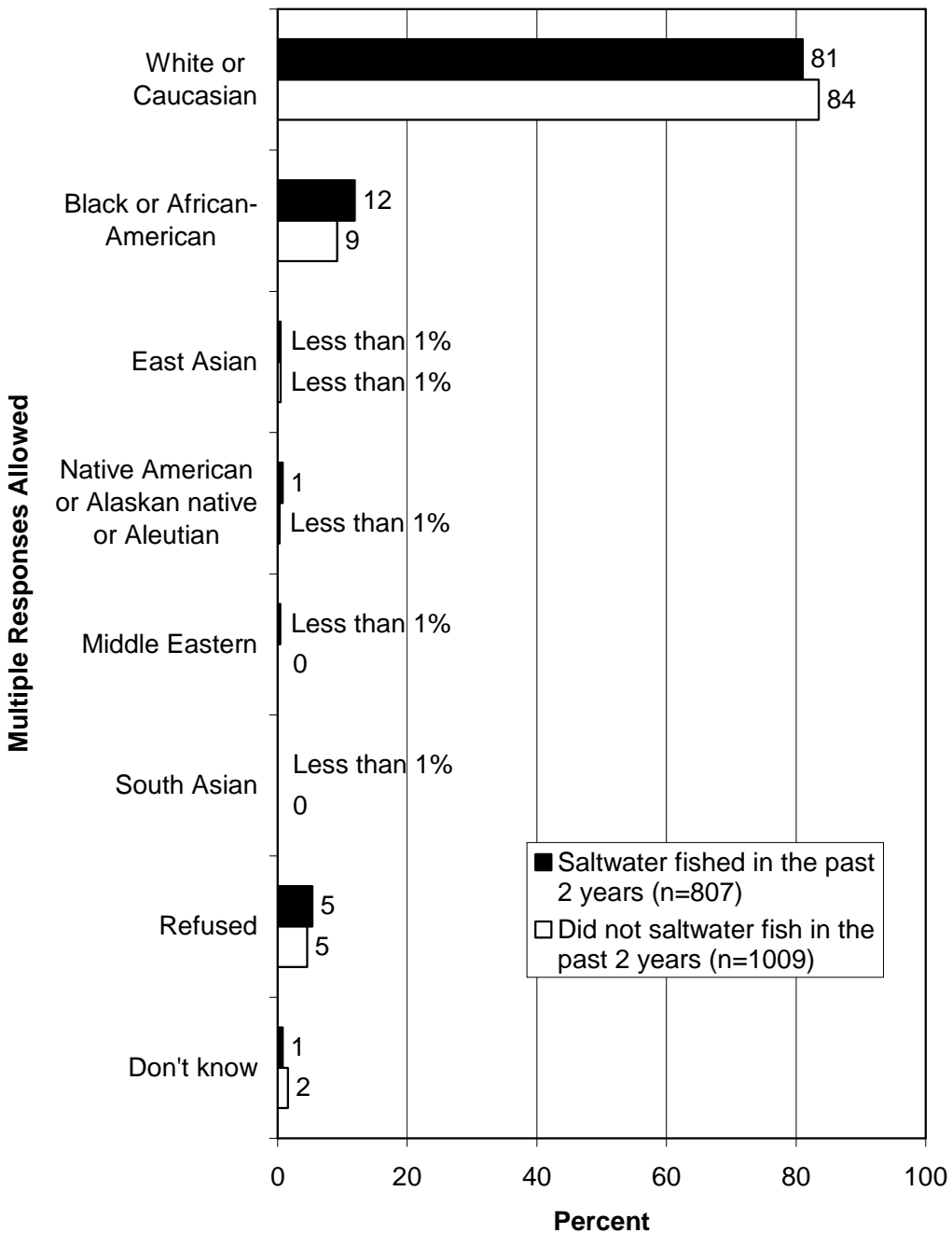


Figure 5.13. Respondent Ethnicity (by Saltwater Fishing Participation)

Respondent ethnicity was also crosstabulated by license type. While Senior and Gratis License holders are about the same as anglers overall (81% to 85% being white and 8% to 11% being black/African-American), holders of the other types are even more dominated by whites (Figures 5.14 and 5.15).

Q41. What races or ethnic backgrounds do you consider yourself? Please mention all that apply. (Part 1.)

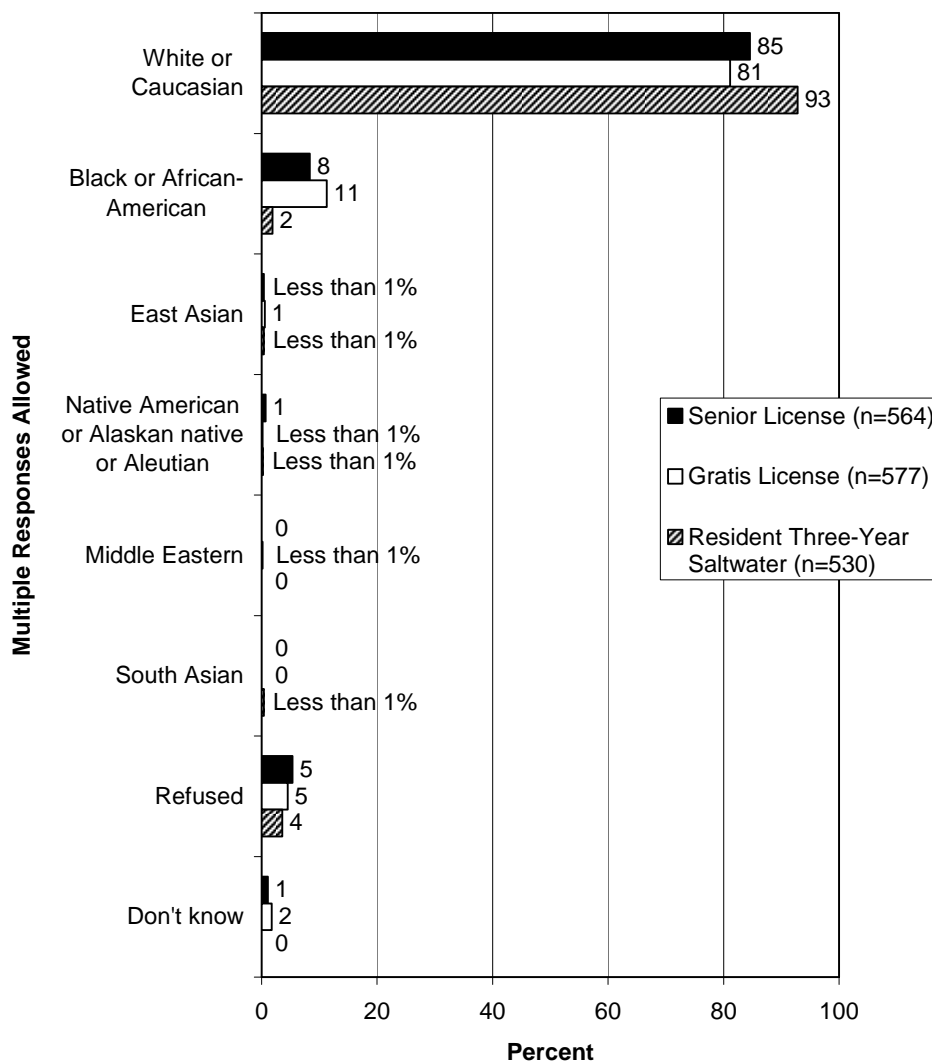


Figure 5.14. Respondent Ethnicity (by License Type, Part 1)

Q41. What races or ethnic backgrounds do you consider yourself? Please mention all that apply. (Part 2.)

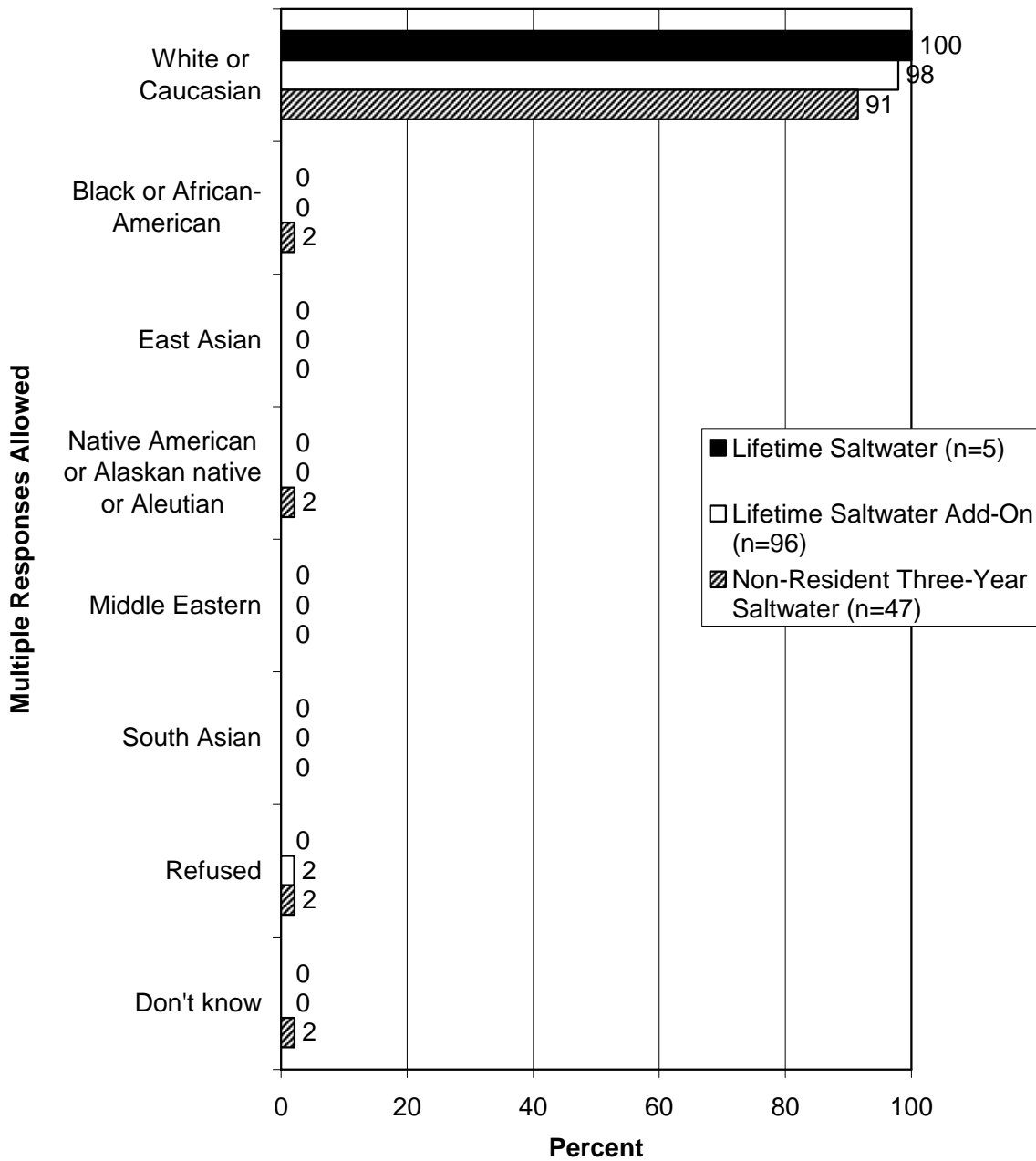


Figure 5.15. Respondent Ethnicity (by License Type, Part 2)

County of residence of respondents is shown in Figures 5.16 through 5.21. The crosstabulation by participation in saltwater fishing found that a markedly higher concentration of saltwater anglers (compared to non-saltwater anglers) reside in Charleston, Beaufort, and Georgetown Counties.

Q34. What county do you live in? (Asked of all South Carolina residents.) (Part 1.)

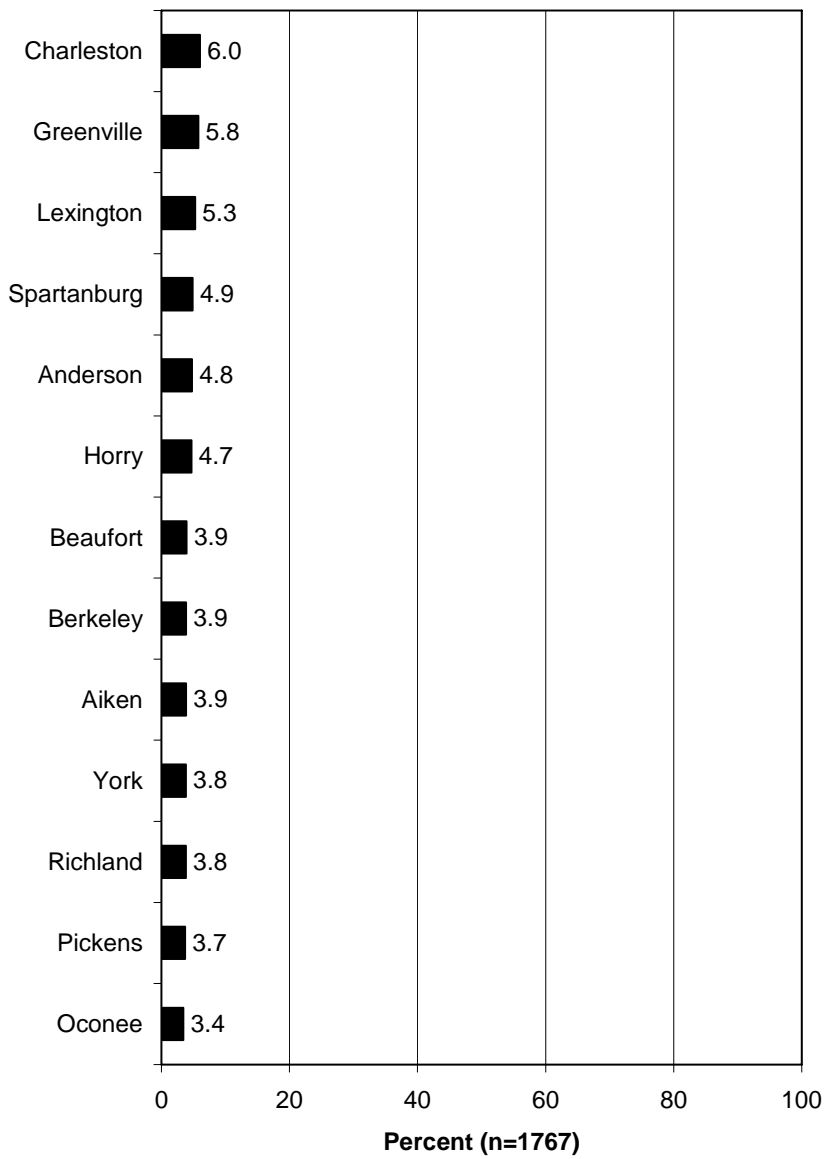


Figure 5.16. County of Residence, Part 1

Q34. What county do you live in? (Asked of all South Carolina residents.) (Part 2.)

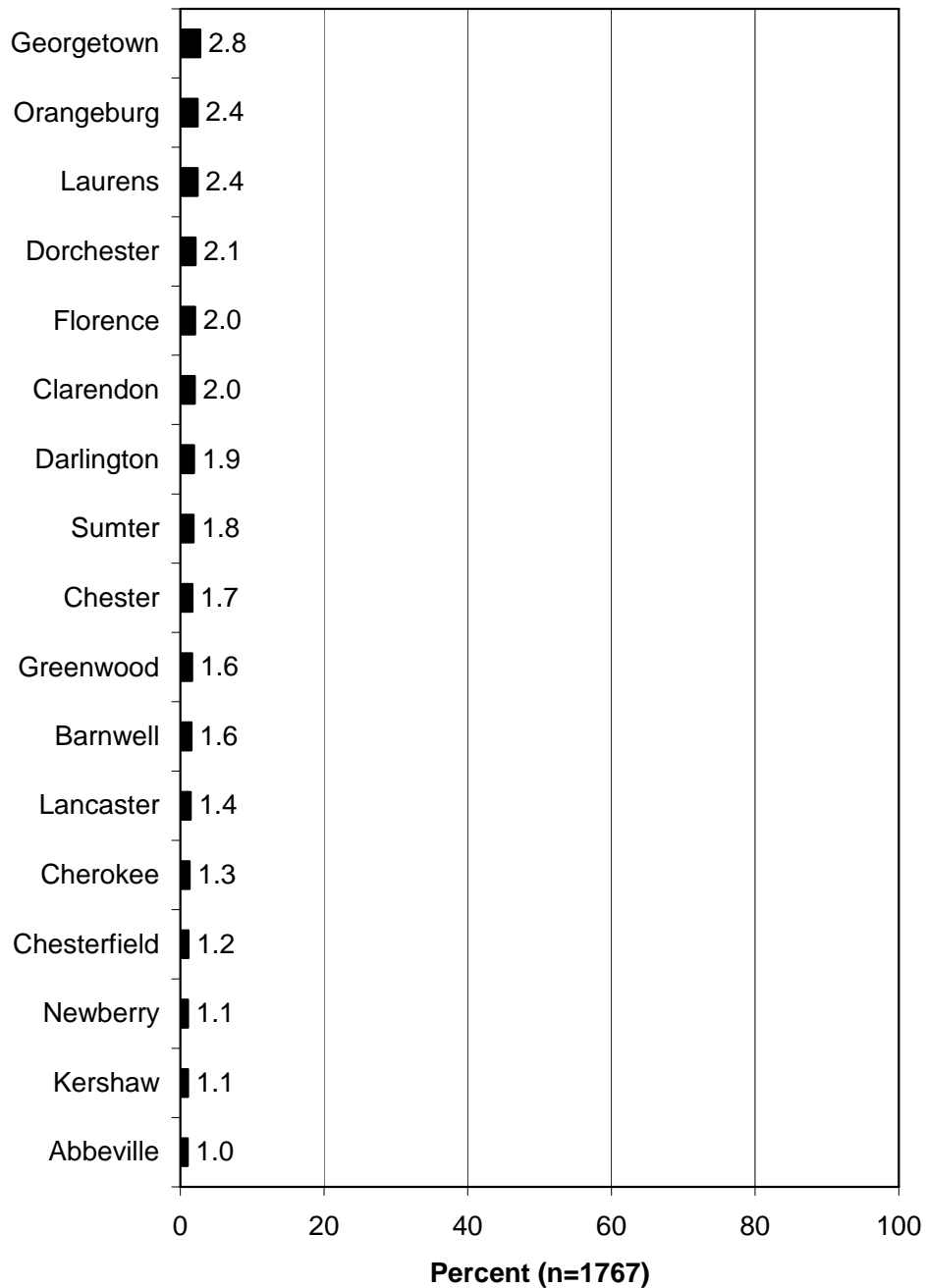


Figure 5.17. County of Residence, Part 2

Q34. What county do you live in? (Asked of all South Carolina residents.) (Part 3.)



Figure 5.18. County of Residence, Part 3

Q34. What county do you live in? (Asked of all South Carolina residents.) (Part 1.)

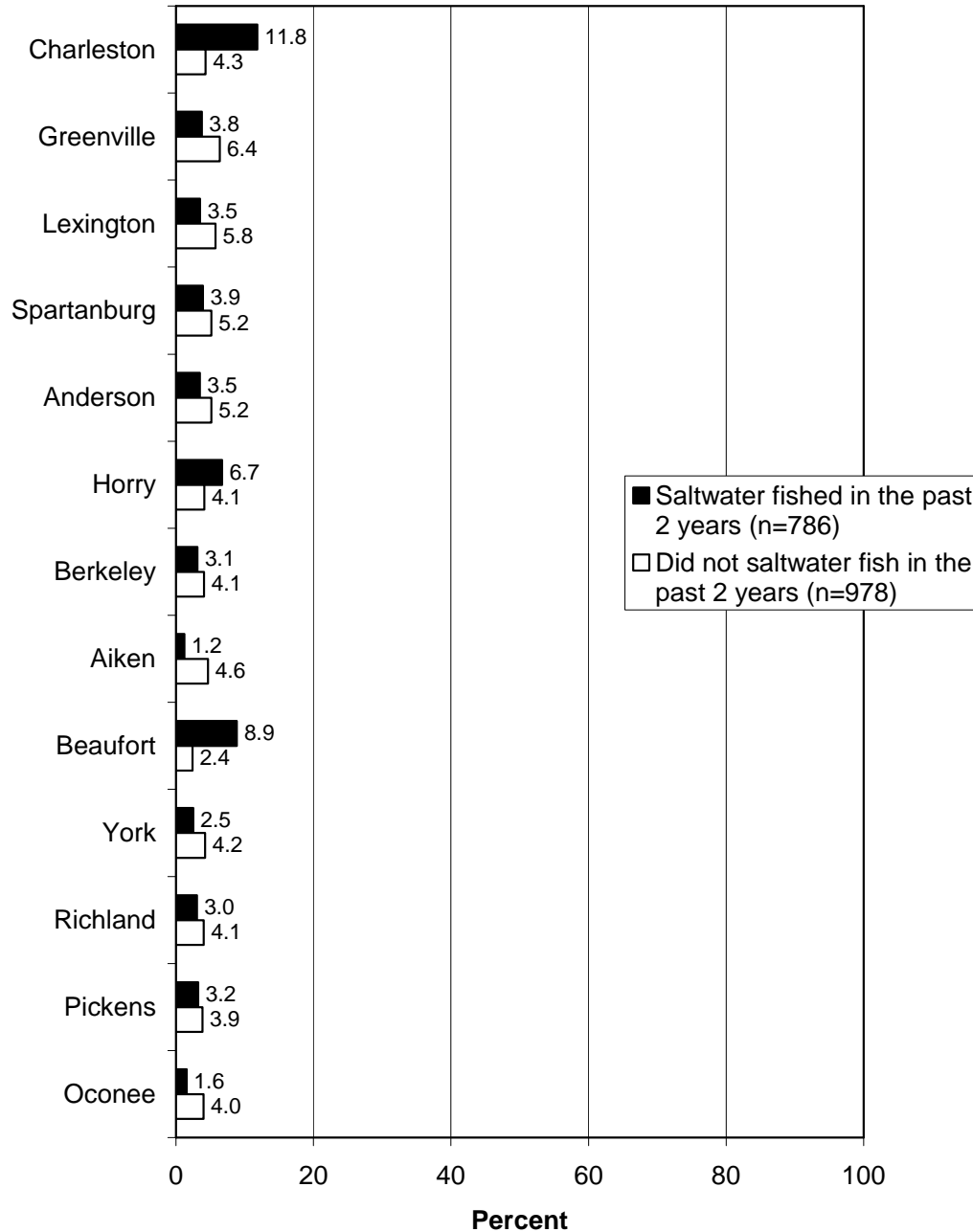


Figure 5.19. County of Residence (by Saltwater Fishing Participation, Part 1)

Q34. What county do you live in? (Asked of all South Carolina residents.) (Part 2.)



Figure 5.20. County of Residence (by Saltwater Fishing Participation, Part 2)

Q34. What county do you live in? (Asked of all South Carolina residents.) (Part 3.)



Figure 5.21. County of Residence (by Saltwater Fishing Participation, Part 3)

For the crosstabulation by license type, graphs were difficult to read because of the large number of counties being crossed by five license types. For this reason, the results are shown in Table 5.1.

Table 5.1. County of Residence Crosstabulated by License Type

| County | Senior License (n=562) | Gratis License (n=576) | Resident Three-Year Saltwater (n=530) | Lifetime Saltwater (n=5) | Lifetime Saltwater Add-On (n=94) |
|--------------|------------------------|------------------------|---------------------------------------|--------------------------|----------------------------------|
| Abbeville | 1.1 | 1.0 | 0.0 | 0.0 | 0.0 |
| Aiken | 3.6 | 4.2 | 2.3 | 0.0 | 0.0 |
| Allendale | 0.7 | 0.2 | 0.2 | 0.0 | 0.0 |
| Anderson | 4.6 | 5.0 | 1.3 | 0.0 | 0.0 |
| Bamberg | 0.7 | 0.7 | 0.2 | 0.0 | 0.0 |
| Barnwell | 0.7 | 2.3 | 0.6 | 0.0 | 0.0 |
| Beaufort | 2.7 | 4.5 | 14.0 | 20.0 | 4.3 |
| Berkeley | 3.4 | 4.2 | 5.5 | 0.0 | 2.1 |
| Calhoun | 1.1 | 0.2 | 0.2 | 0.0 | 1.1 |
| Charleston | 5.3 | 5.4 | 33.8 | 80.0 | 10.6 |
| Cherokee | 1.2 | 1.4 | 0.2 | 0.0 | 0.0 |
| Chester | 2.0 | 1.6 | 0.0 | 0.0 | 0.0 |
| Chesterfield | 0.9 | 1.4 | 0.4 | 0.0 | 2.1 |
| Clarendon | 1.6 | 2.4 | 0.2 | 0.0 | 0.0 |
| Colleton | 0.4 | 1.0 | 1.7 | 0.0 | 1.1 |
| Darlington | 2.0 | 1.9 | 0.8 | 0.0 | 0.0 |
| Dillon | 0.5 | 1.0 | 0.9 | 0.0 | 1.1 |
| Dorchester | 1.2 | 2.8 | 2.8 | 0.0 | 6.4 |
| Edgefield | 0.9 | 0.3 | 0.6 | 0.0 | 0.0 |
| Fairfield | 0.5 | 0.5 | 0.2 | 0.0 | 1.1 |
| Florence | 2.0 | 2.1 | 2.5 | 0.0 | 6.4 |
| Georgetown | 3.2 | 2.4 | 3.4 | 0.0 | 6.4 |
| Greenville | 6.2 | 5.6 | 2.3 | 0.0 | 9.6 |
| Greenwood | 1.6 | 1.7 | 0.6 | 0.0 | 0.0 |
| Hampton | 0.9 | 0.2 | 0.0 | 0.0 | 1.1 |
| Horry | 4.4 | 4.9 | 5.8 | 0.0 | 4.3 |
| Jasper | 0.2 | 0.3 | 0.9 | 0.0 | 1.1 |
| Kershaw | 1.1 | 1.0 | 1.1 | 0.0 | 0.0 |
| Lancaster | 1.8 | 1.2 | 0.6 | 0.0 | 1.1 |
| Laurens | 2.7 | 2.3 | 0.0 | 0.0 | 1.1 |
| Lee | 0.9 | 0.2 | 0.2 | 0.0 | 0.0 |
| Lexington | 6.9 | 4.0 | 4.2 | 0.0 | 7.4 |
| Marion | 0.5 | 0.7 | 0.0 | 0.0 | 0.0 |
| Marlboro | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 |
| McCormick | 0.7 | 0.9 | 0.4 | 0.0 | 0.0 |
| Newberry | 0.9 | 1.2 | 0.8 | 0.0 | 0.0 |
| Oconee | 4.3 | 3.0 | 0.4 | 0.0 | 0.0 |
| Orangeburg | 2.5 | 2.4 | 0.4 | 0.0 | 1.1 |
| Pickens | 4.4 | 3.3 | 0.6 | 0.0 | 0.0 |
| Richland | 3.4 | 4.2 | 3.2 | 0.0 | 9.6 |
| Saluda | 0.9 | 0.0 | 0.0 | 0.0 | 2.1 |
| Spartanburg | 4.4 | 5.4 | 0.6 | 0.0 | 6.4 |
| Sumter | 2.0 | 1.7 | 0.9 | 0.0 | 2.1 |
| Union | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| Williamsburg | 0.7 | 0.5 | 0.2 | 0.0 | 0.0 |
| York | 3.9 | 3.8 | 2.5 | 0.0 | 6.4 |
| Don't know | 2.7 | 3.3 | 2.1 | 0.0 | 4.3 |
| Refused | 1.6 | 1.0 | 0.9 | 0.0 | 0.0 |

Home ownership among the sample was high: 92% of respondents overall indicate that they own their place of residence (Figure 5.22). There is little difference between saltwater anglers (94%) and non-saltwater anglers (91%) (Figure 5.23). The license type crosstabulation found some small differences: while holders of Senior (94%), Gratis (91%), Resident Three-Year Saltwater (89%), and Non-Resident Three-Year Saltwater (96%) Licenses have ownership rates commensurate with respondents overall, holders of Lifetime Saltwater Add-On Licenses (71%) have markedly lower ownership rates (Figures 5.24 and 5.25).

Q35. Do you own or rent your place of residence?

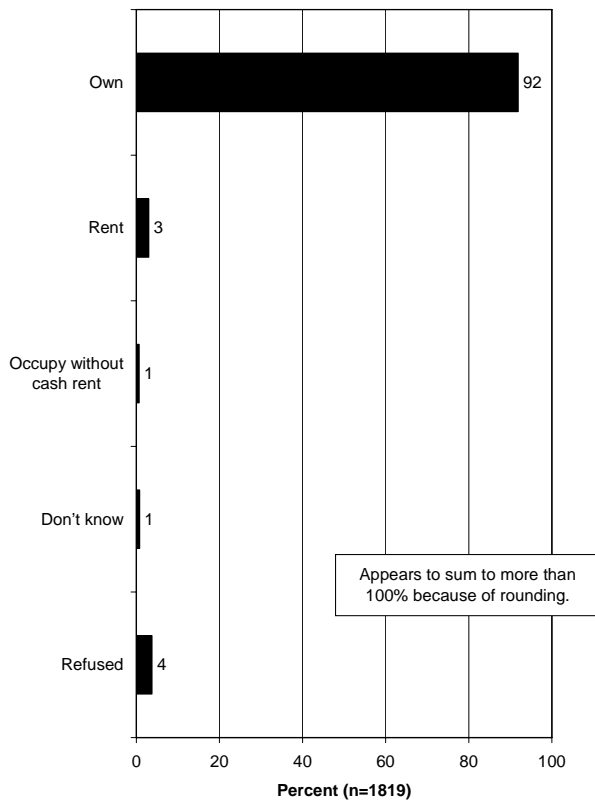


Figure 5.22. Home Ownership

Q35. Do you own or rent your place of residence?

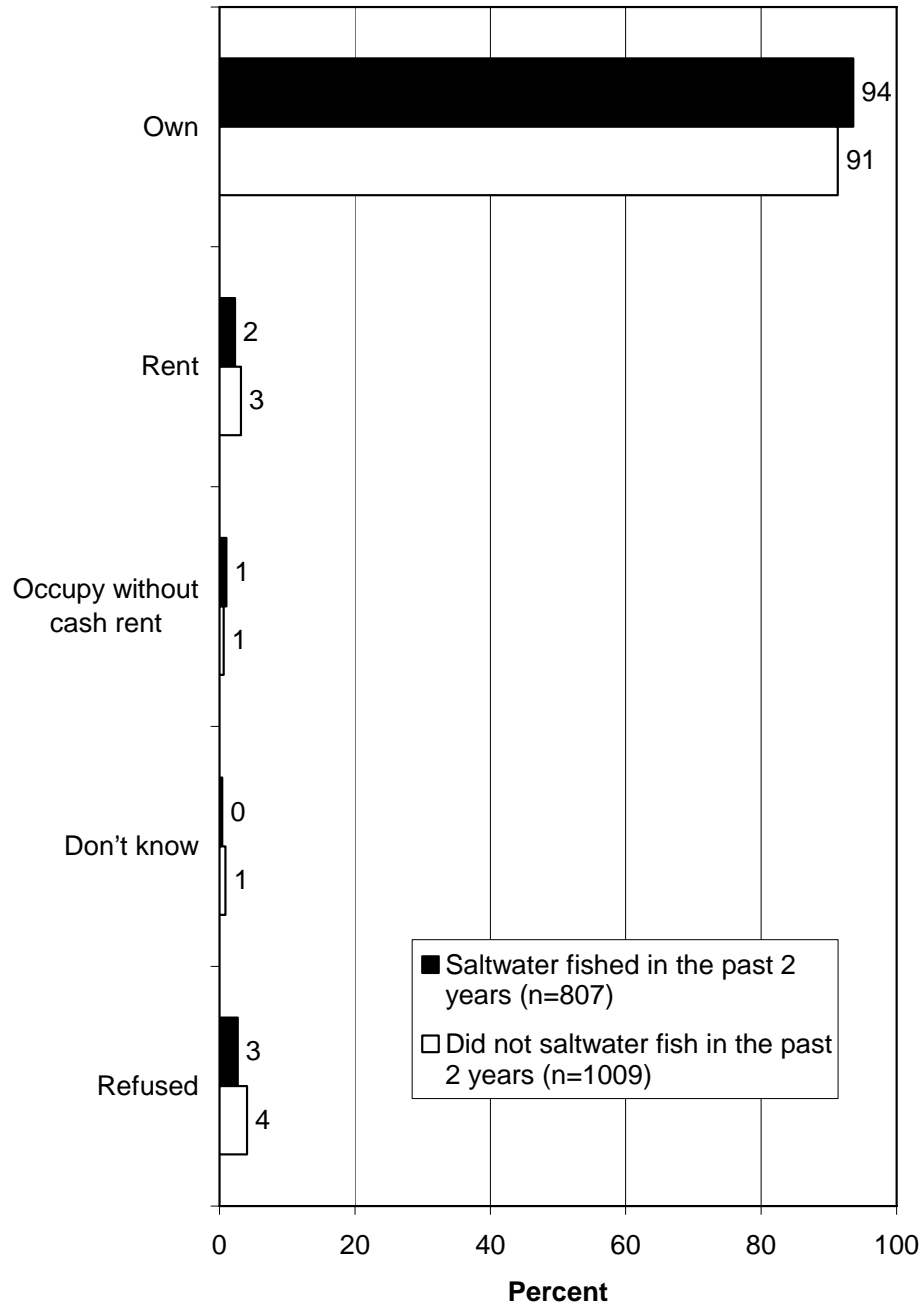


Figure 5.23. Home Ownership (by Saltwater Fishing Participation)

**Q35. Do you own or rent your place of residence?
(Part 1.)**

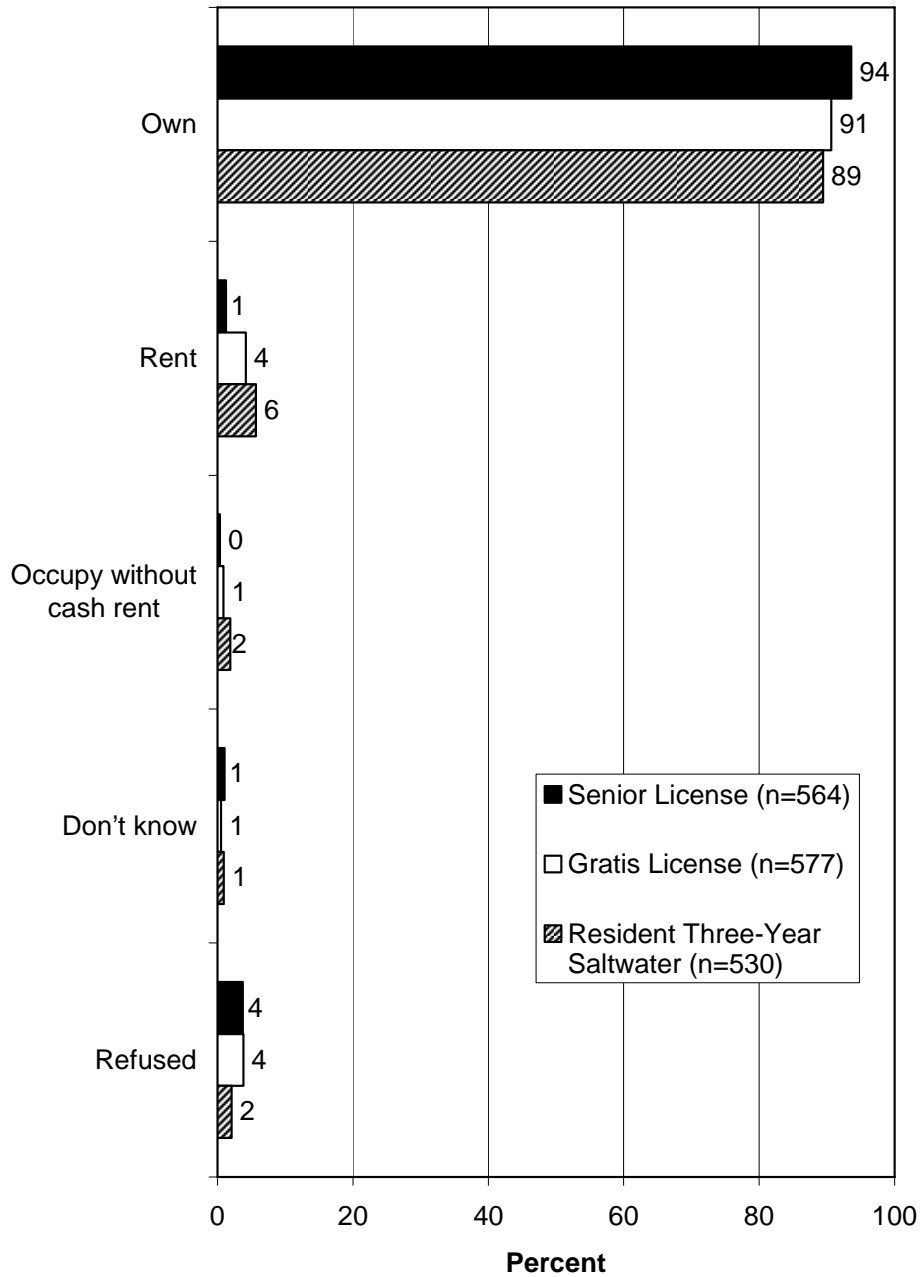


Figure 5.24. Home Ownership (by License Type, Part 1)

**Q35. Do you own or rent your place of residence?
(Part 2.)**

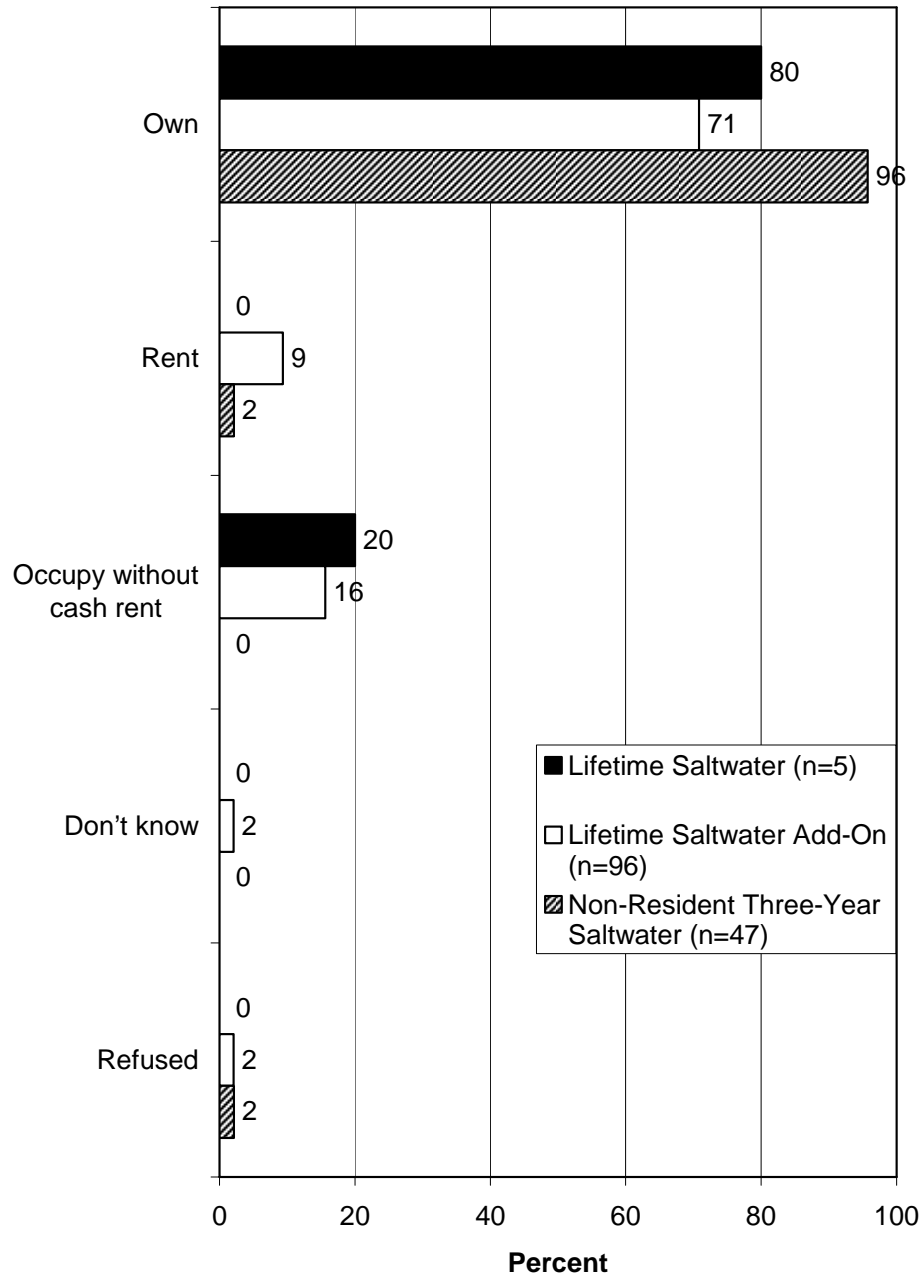


Figure 5.25. Home Ownership (by License Type, Part 2)

Non-Residents were asked a question to determine if they had a place in South Carolina in which they regularly stay, such as whether they own a vacation home in South Carolina or whether they typically visit family or friends and/or vacation in South Carolina (Figure 5.26). This question found that the rate of ownership of a vacation home in South Carolina is at 19%. Meanwhile, 47% typically visit family and/or friends, and 34% typically vacation in South Carolina. In total, 68% typically come to South Carolina each year (i.e., did *not* answer “None of these”).

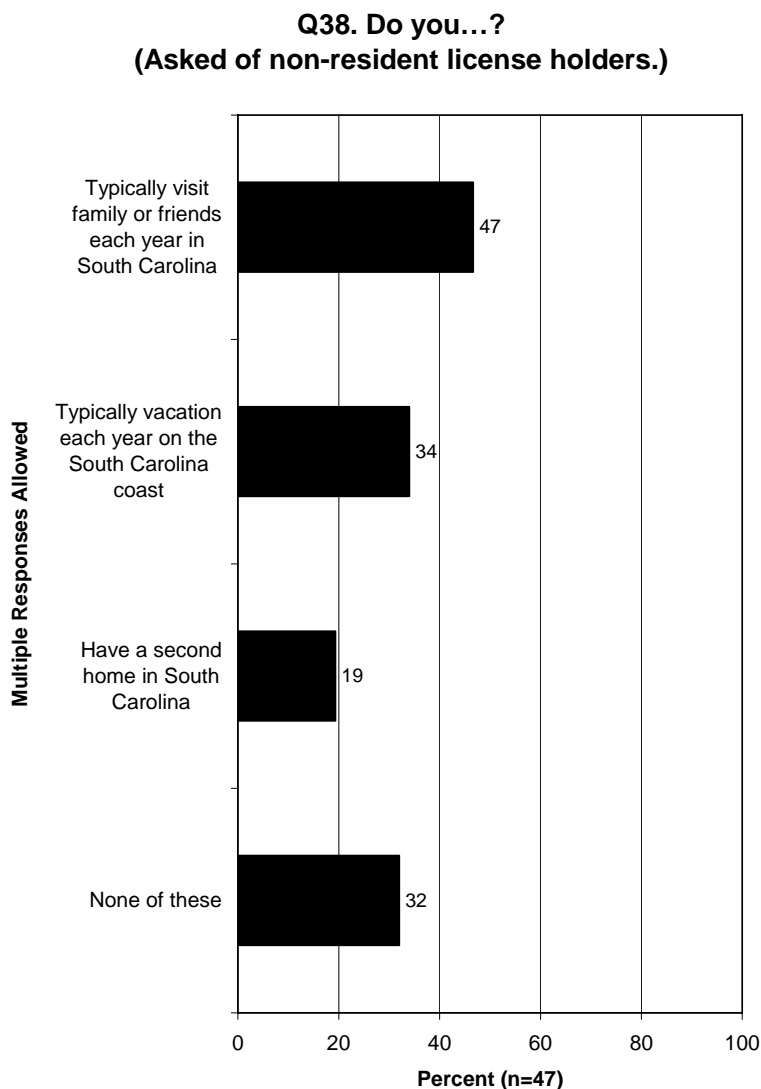


Figure 5.26. Non-Residents' Typical Visits to South Carolina

In the crosstabulation by participation in saltwater fishing, saltwater anglers are more regular visitors of South Carolina than are non-saltwater anglers: 74% of saltwater anglers regularly vacation in or visit family/friends in South Carolina versus 64% on non-saltwater anglers (Figure 5.27). No crosstabulation by license type was run of this question because only one license type received the question (so its results would be identical to the results overall).

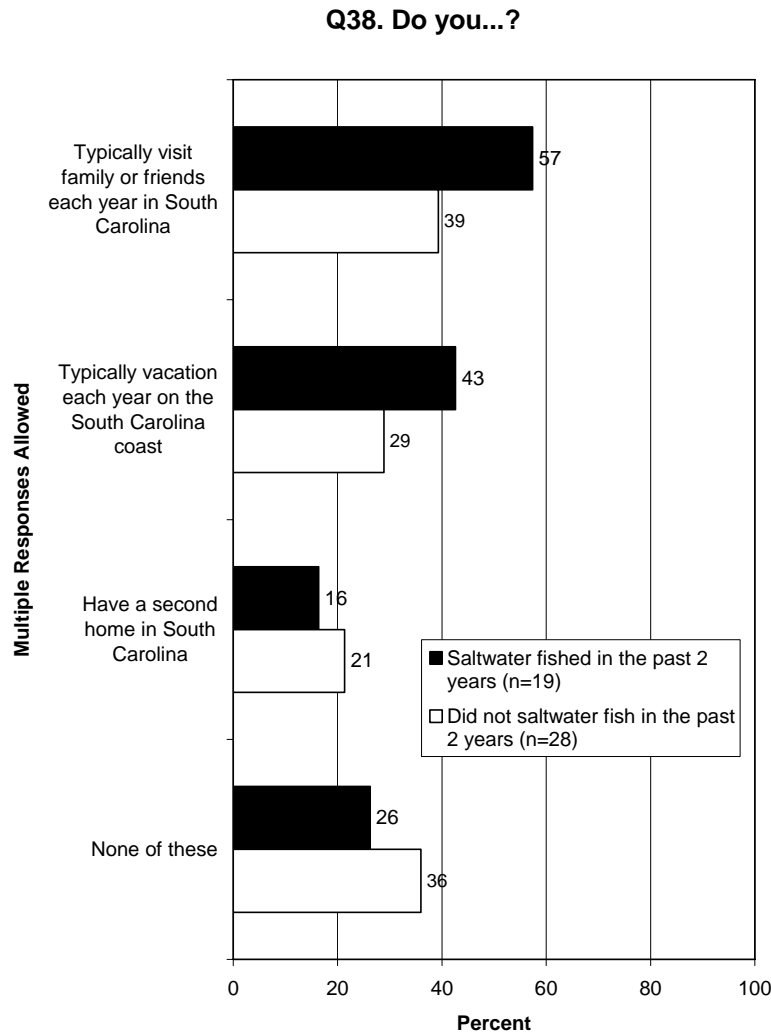


Figure 5.27. Non-Residents' Typical Visits to South Carolina (by Saltwater Fishing Participation)

The survey also asked about ownership of a boat, jet ski, or sailboat that requires registration every 3 years in South Carolina: 35% of respondents overall do so (Figure 5.28). This rate of ownership is markedly higher among saltwater anglers (48%) compared to non-saltwater anglers (32%) (Figure 5.29). In the crosstabulation by license type, holders of Resident Three-Year Saltwater Licenses and Lifetime Saltwater Add-On Licenses had higher rates of boat ownership relative to the other three types (ignoring the Lifetime Saltwater License holders) (Figures 5.30 and 5.31).

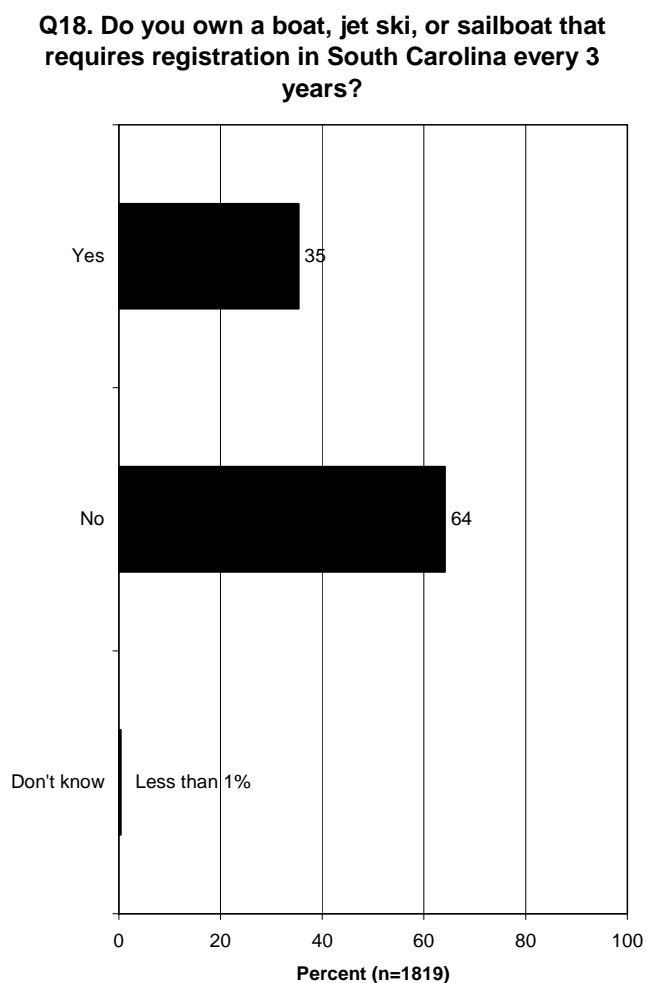


Figure 5.28. Boat Ownership

Q18. Do you own a boat, jet ski, or sailboat that requires registration in South Carolina every 3 years?

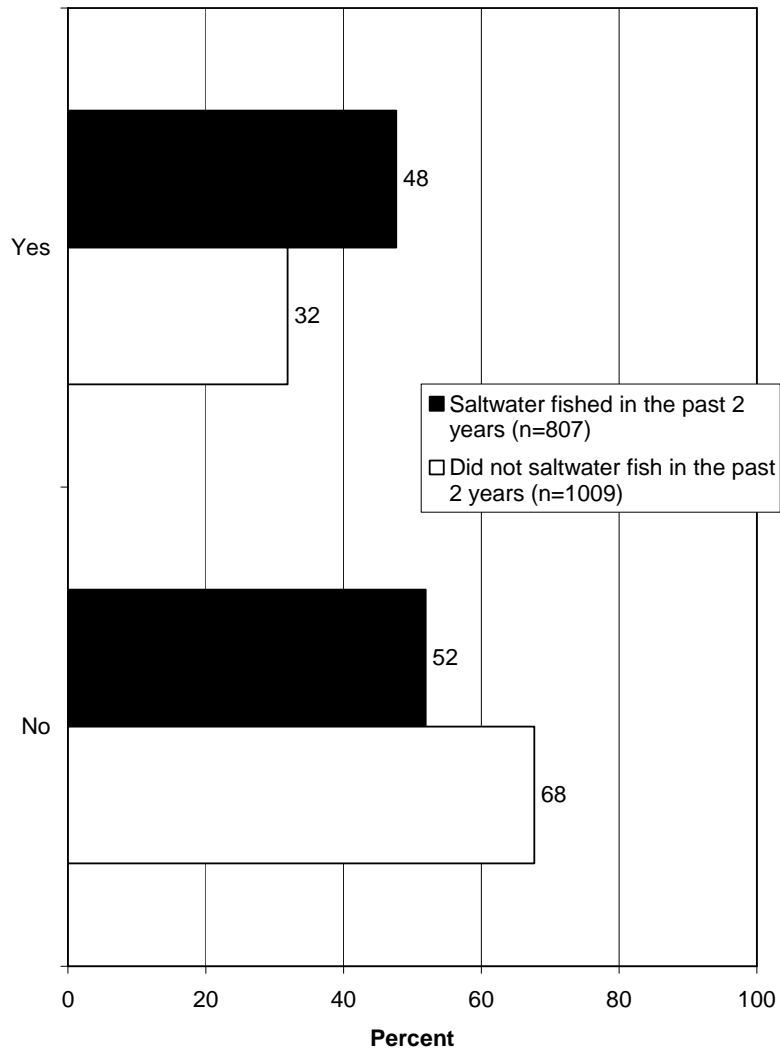


Figure 5.29. Boat Ownership (by Saltwater Fishing Participation)

Q18. Do you own a boat, jet ski, or sailboat that requires registration in South Carolina every 3 years? (Part 1.)

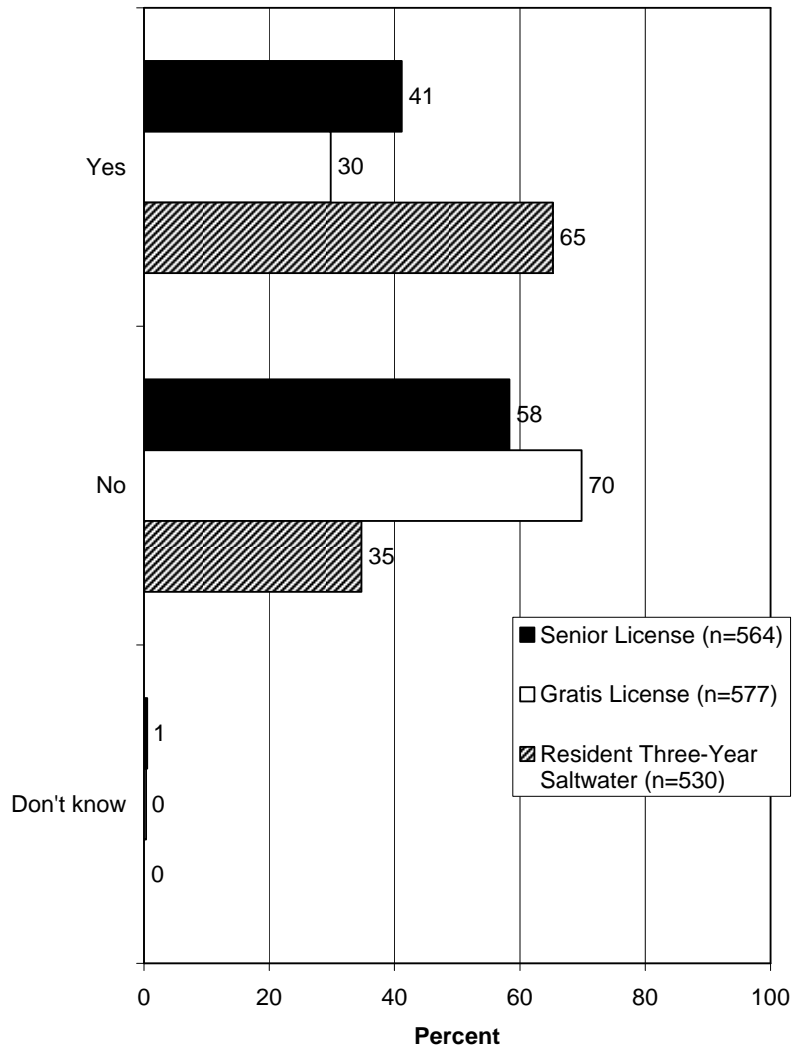


Figure 5.30. Boat Ownership (by License Type, Part 1)

Q18. Do you own a boat, jet ski, or sailboat that requires registration in South Carolina every 3 years? (Part 2.)

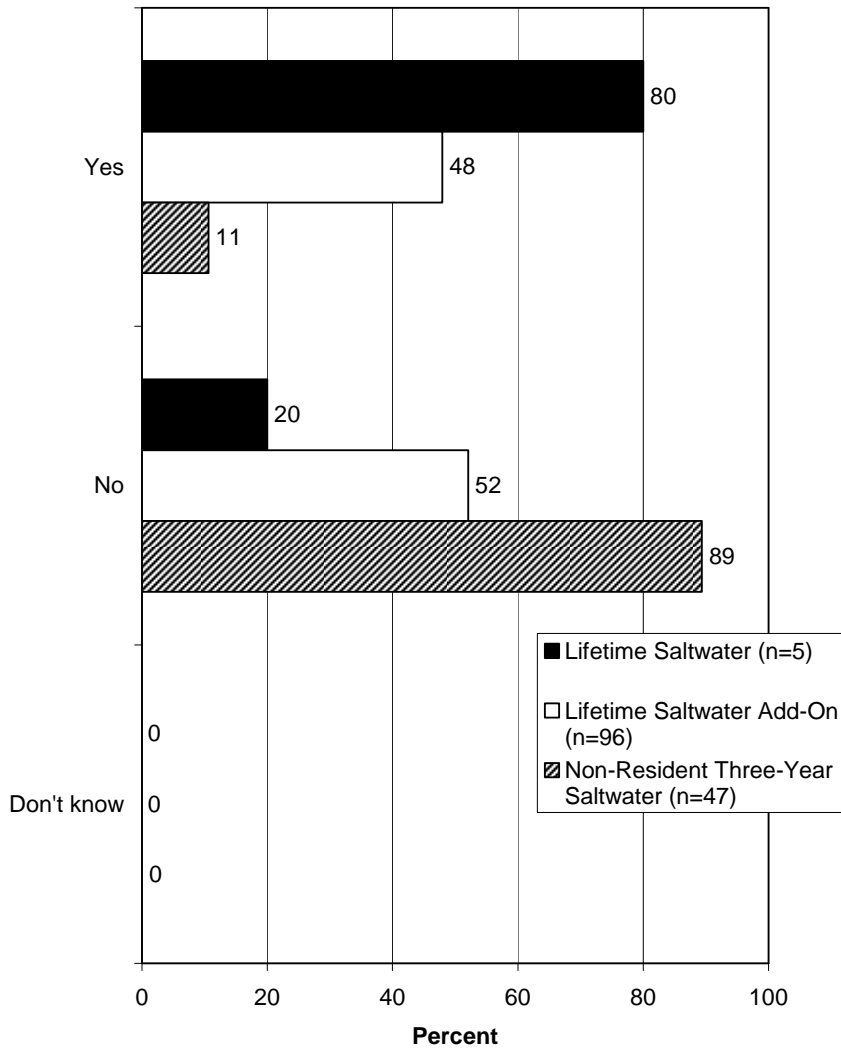


Figure 5.31. Boat Ownership (by License Type, Part 2)

In the question about having a valid South Carolina driver’s license or state-issued ID card, nearly all respondents indicated that they have one: 98% of respondents overall, 98% of saltwater anglers and non-saltwater anglers, and at least 97% of holder of all license types except Lifetime Saltwater Add-On Licenses (who are at 77%)—note that Non-Residents were not asked this question (Figures 5.32 through 5.35).

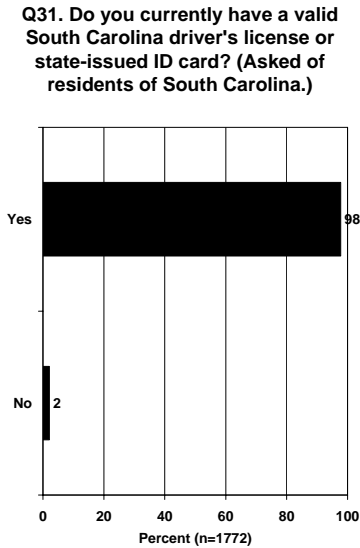


Figure 5.32. Driver’s License Possession

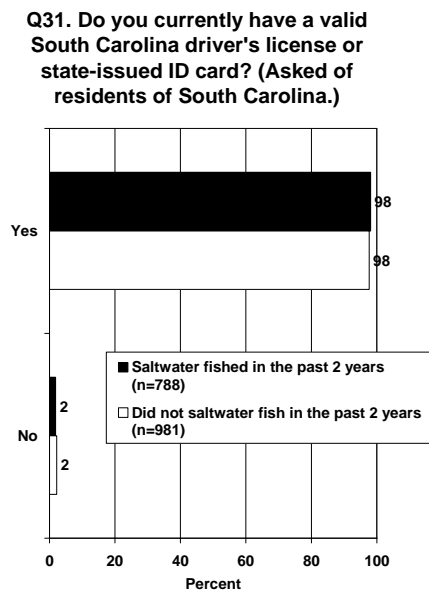


Figure 5.33. Driver’s License Possession (by Saltwater Fishing Participation)

Q31. Do you currently have a valid South Carolina driver's license or state-issued ID card? (Asked of residents of South Carolina.) (Part 1.)

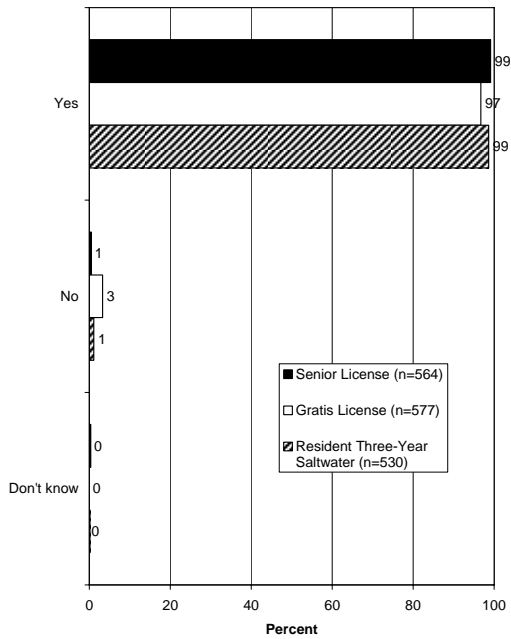


Figure 5.34. Driver's License Possession (by License Type, Part 1)

Q31. Do you currently have a valid South Carolina driver's license or state-issued ID card? (Asked of residents of South Carolina.) (Part 2.)

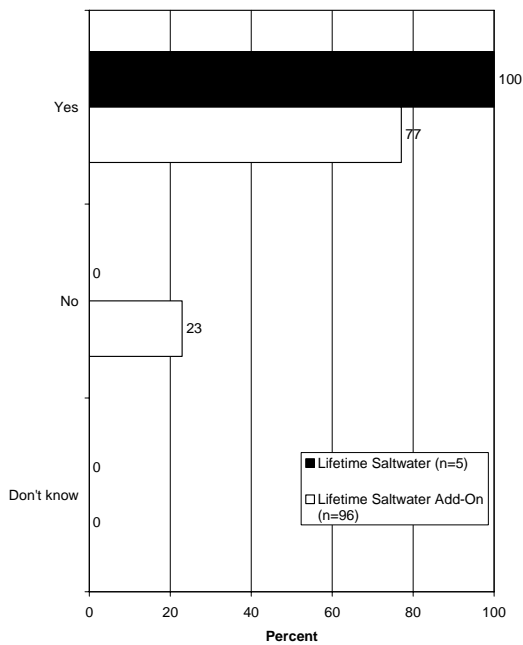


Figure 5.35. Driver's License Possession (by License Type, Part 2)

Another question about ownership of a vehicle registered in South Carolina found that a large majority of all respondents own one: 93% (Figure 5.36). Among saltwater anglers, 96% own one, while 92% of non-saltwater anglers own one (Figure 5.37). Finally, ownership rates are above 90% for holders of all license types except Lifetime Saltwater Add-On Licenses (67%)—again note that Non-Residents were not asked this question (Figures 5.38 and 5.39).

Q32. Do you currently have a vehicle registered in South Carolina? (Asked of residents of South Carolina.)

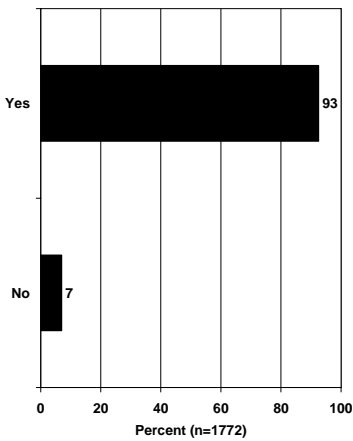


Figure 5.36. Vehicle Ownership

Q32. Do you currently have a vehicle registered in South Carolina? (Asked of residents of South Carolina.)

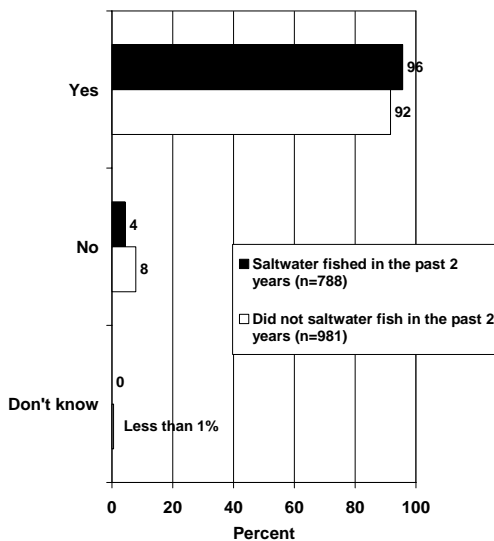


Figure 5.37. Vehicle Ownership (by Saltwater Fishing Participation)

Q32. Do you currently have a vehicle registered in South Carolina? (Asked of residents of South Carolina.) (Part 1.)

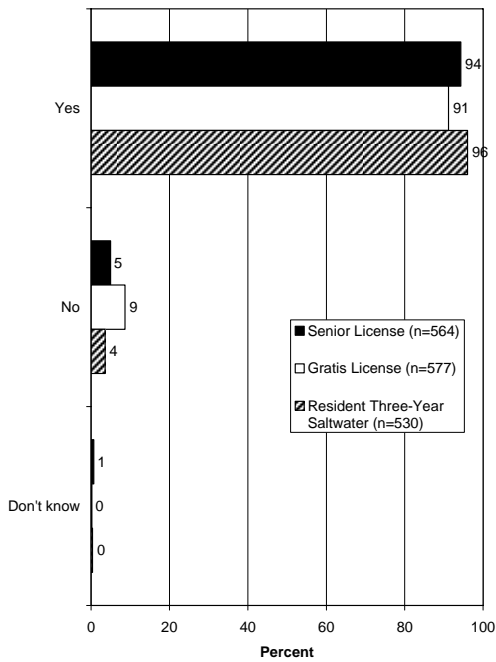


Figure 5.38. Vehicle Ownership (by License Type, Part 1)

Q32. Do you currently have a vehicle registered in South Carolina? (Asked of residents of South Carolina.) (Part 2.)

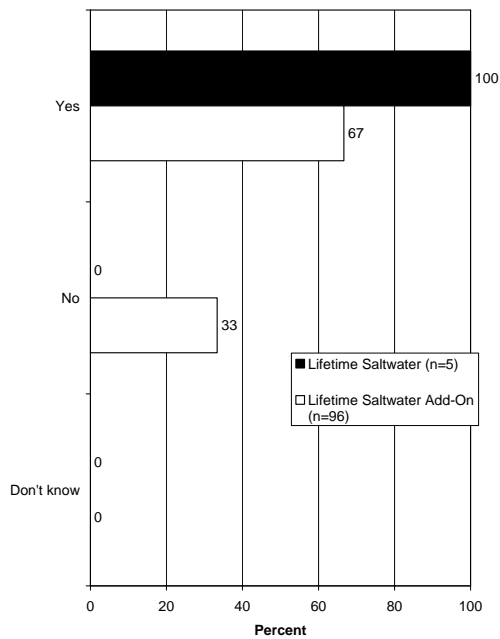


Figure 5.39. Vehicle Ownership (by License Type, Part 2)

One question asked respondents to indicate the best way for the Department to contact them about fishing issues. The most popular mediums among this group are the home telephone (44%) and direct mail (37%) (Figure 5.40). Perhaps a reflection of the older skew of holders of these types of licenses in the overall sample, email (10%) and cell phone (2%) are not as popular.

Q27. What is the best way for the Department to contact you with information about fishing issues?

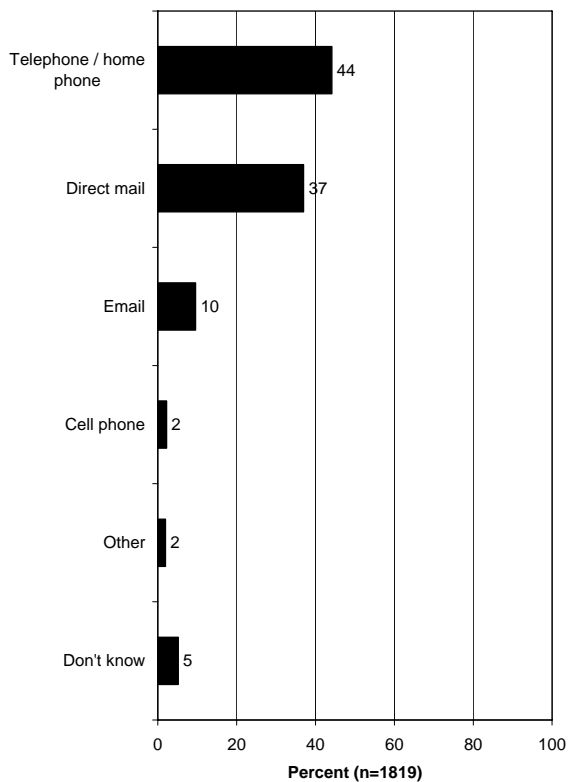


Figure 5.40. Best Contact Method

The crosstabulation by saltwater fishing participation found that saltwater anglers are more likely than non-saltwater anglers to prefer email (22% to 6%) or cell phone (5% to 1%) (Figure 5.41).

Q27. What is the best way for the Department to contact you with information about fishing issues?

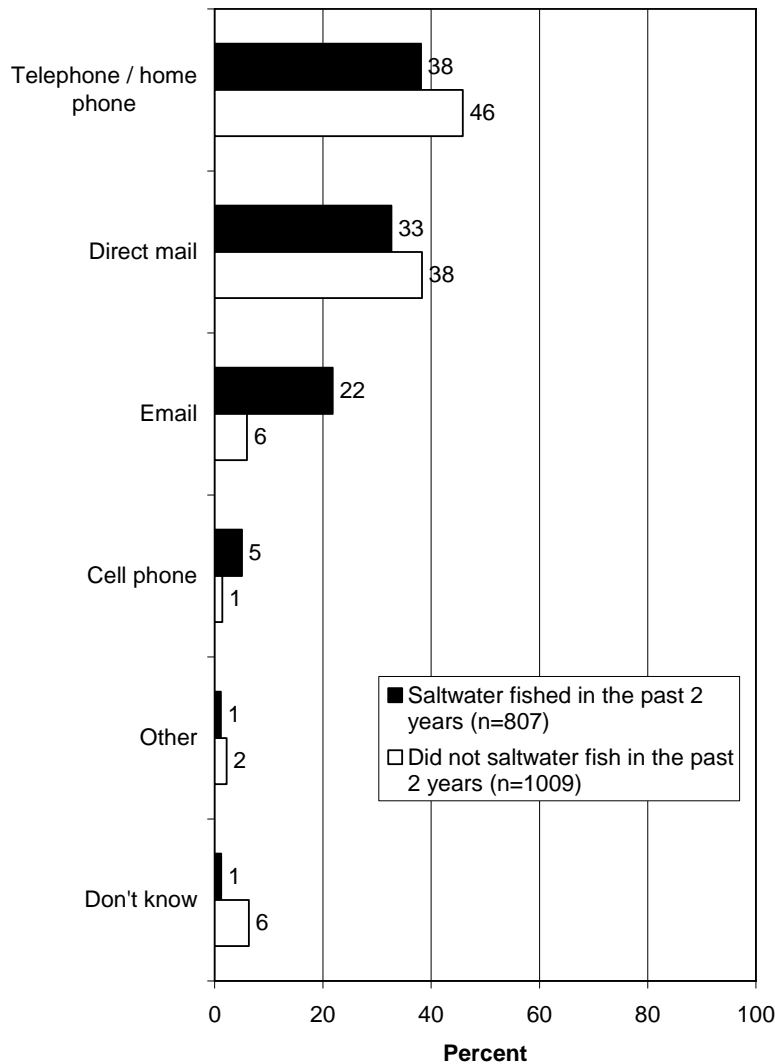


Figure 5.41. Best Contact Method (by Saltwater Fishing Participation)

In the crosstabulation by license type (Figures 5.42 and 5.43), Senior and Gratis License holders are more traditional, so to speak, in their choice of contact method, preferring home telephone and direct mail over the other methods. This is in contrast to holders of Resident Three-Year Saltwater Licenses, Lifetime Saltwater Add-On Licenses, and Non-Resident Three-Year Saltwater Licenses, with the majority of the latter group preferring email.

**Q27. What is the best way for the Department to contact you with information about fishing issues?
(Part 1.)**

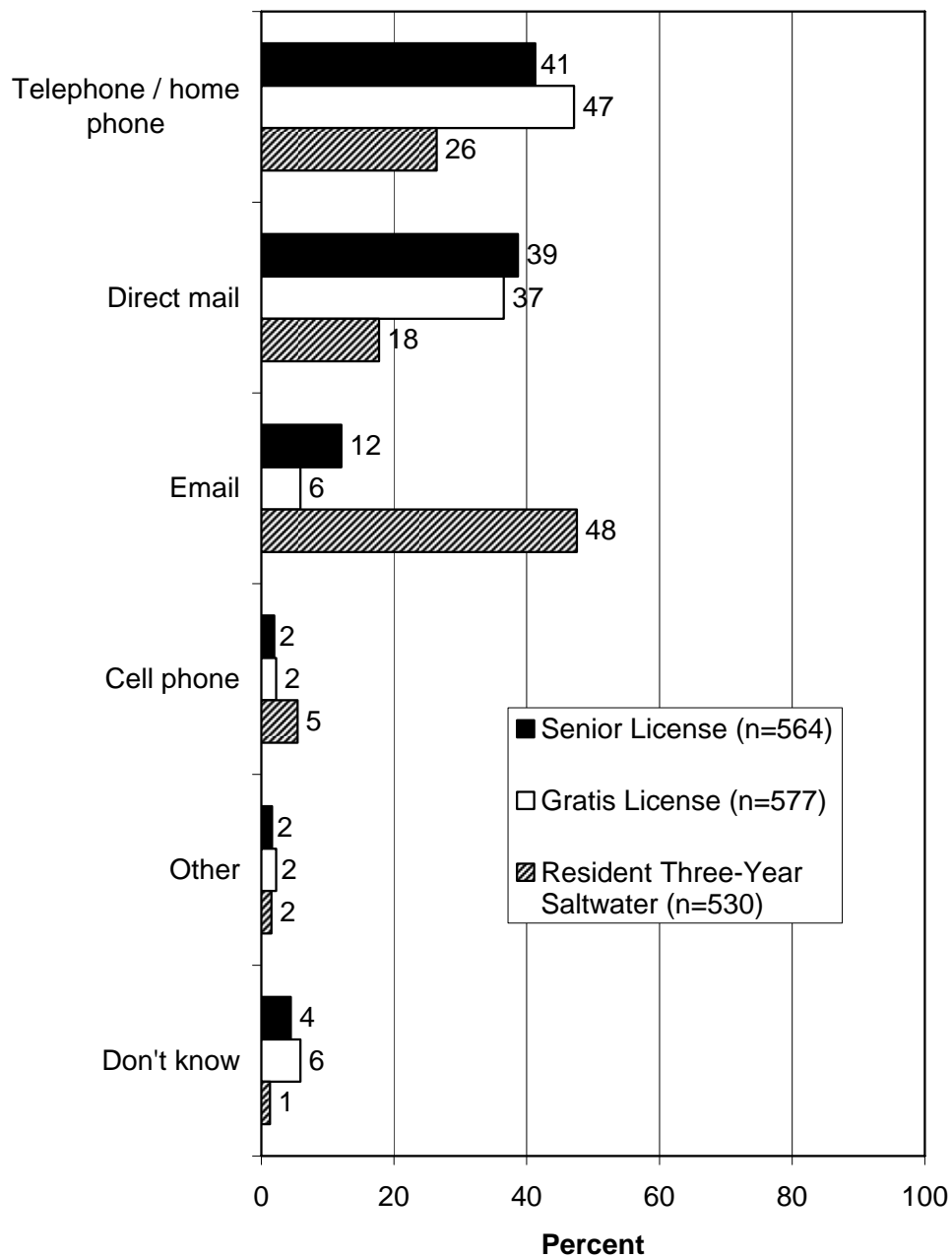


Figure 5.42. Best Contact Method (by License Type, Part 1)

**Q27. What is the best way for the Department to contact you with information about fishing issues?
(Part 2.)**

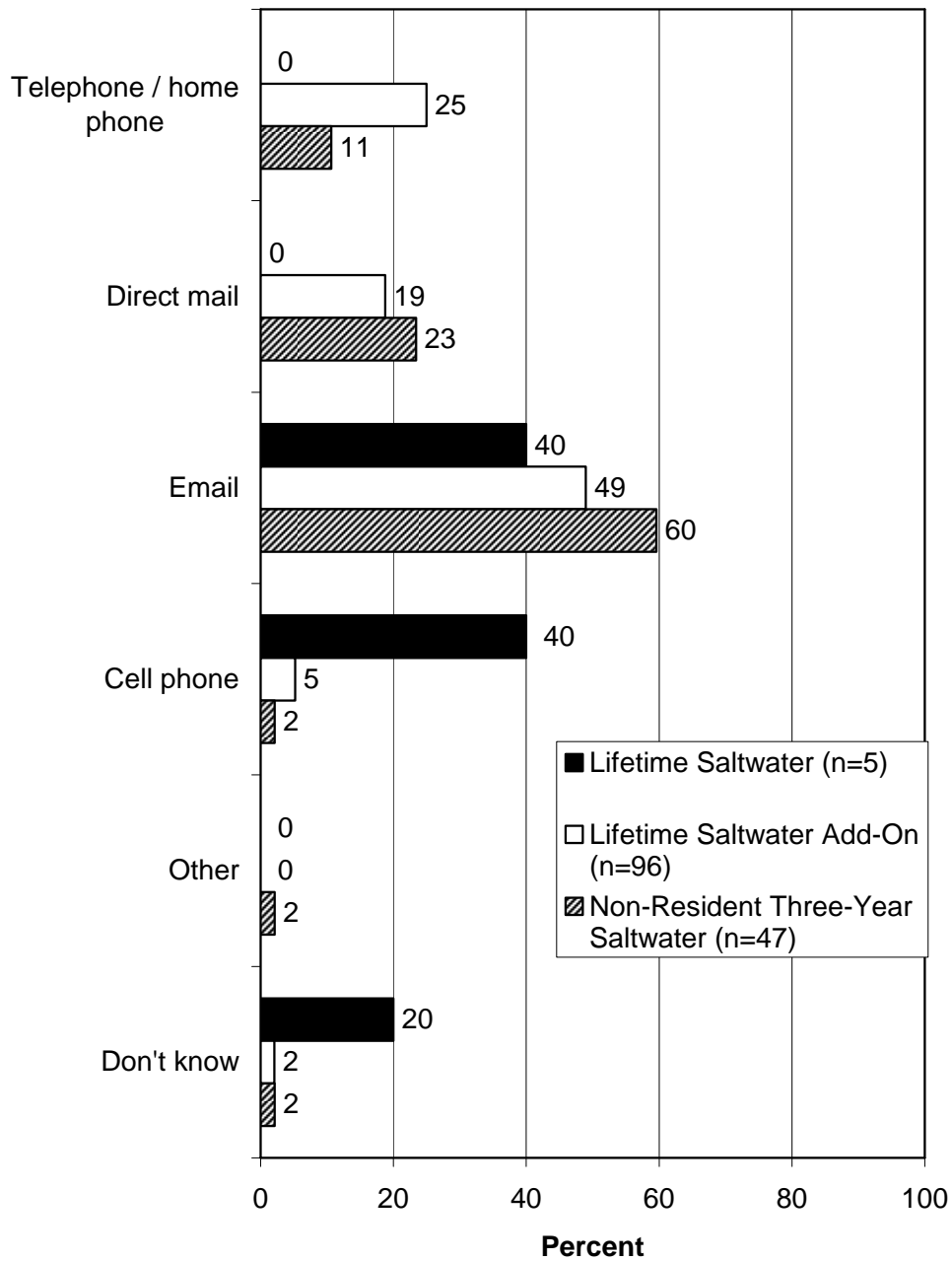


Figure 5.43. Best Contact Method (by License Type, Part 2)

About half of the sample overall (48%) had access to the Internet (Figure 5.44). This rate was much higher among saltwater anglers (68%) than among non-saltwater anglers (42%) (Figure 5.45). Meanwhile, Senior (55%) and Gratis (40%) License holders had lower rates of having Internet access compared to holders of the other license types (85% or more) (Figures 5.46 and 5.47).

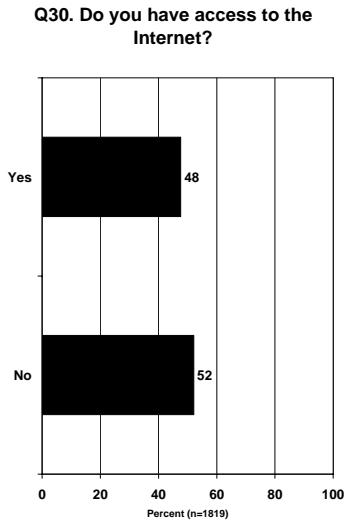


Figure 5.44. Internet Access

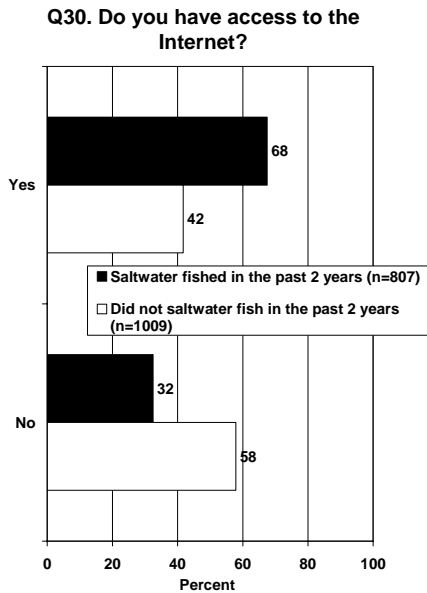


Figure 5.45. Internet Access (by Saltwater Fishing Participation)

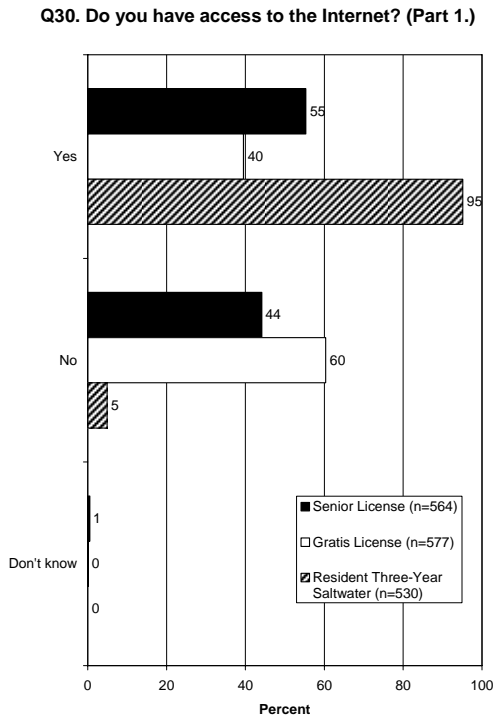


Figure 5.46. Internet Access (by License Type, Part 1)

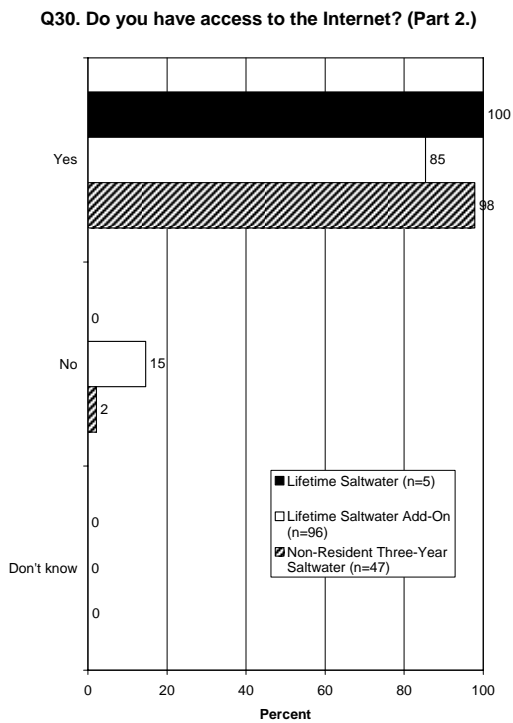


Figure 5.47. Internet Access (by License Type, Part 2)

Just under half of all respondents (48%) indicated that they submitted a change-of-address form to the U.S. Postal Service at some time in the past when they have moved, while 49% have not (Figure 5.48). This rate of submitting a change-of-address form is slightly higher among saltwater anglers (54%) (Figure 5.49). Finally, in looking at differences among license types, holders of Resident Three-Year Saltwater Licenses, Lifetime Saltwater Add-On Licenses, and Non-Resident Three-Year Saltwater Licenses all have relatively high rates of submitting the forms (Figures 5.50 and 5.51).

Q33. When you have moved in the past, have you ever submitted a change of address form to the U.S. Postal Service?

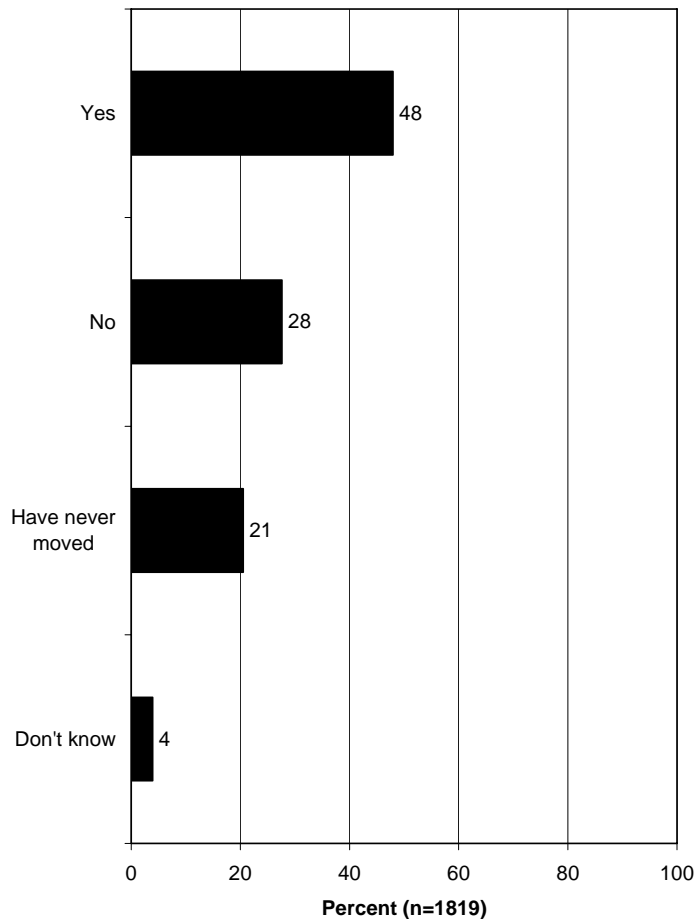


Figure 5.48. Use of Change-of Address Forms

Q33. When you have moved in the past, have you ever submitted a change of address form to the U.S. Postal Service?

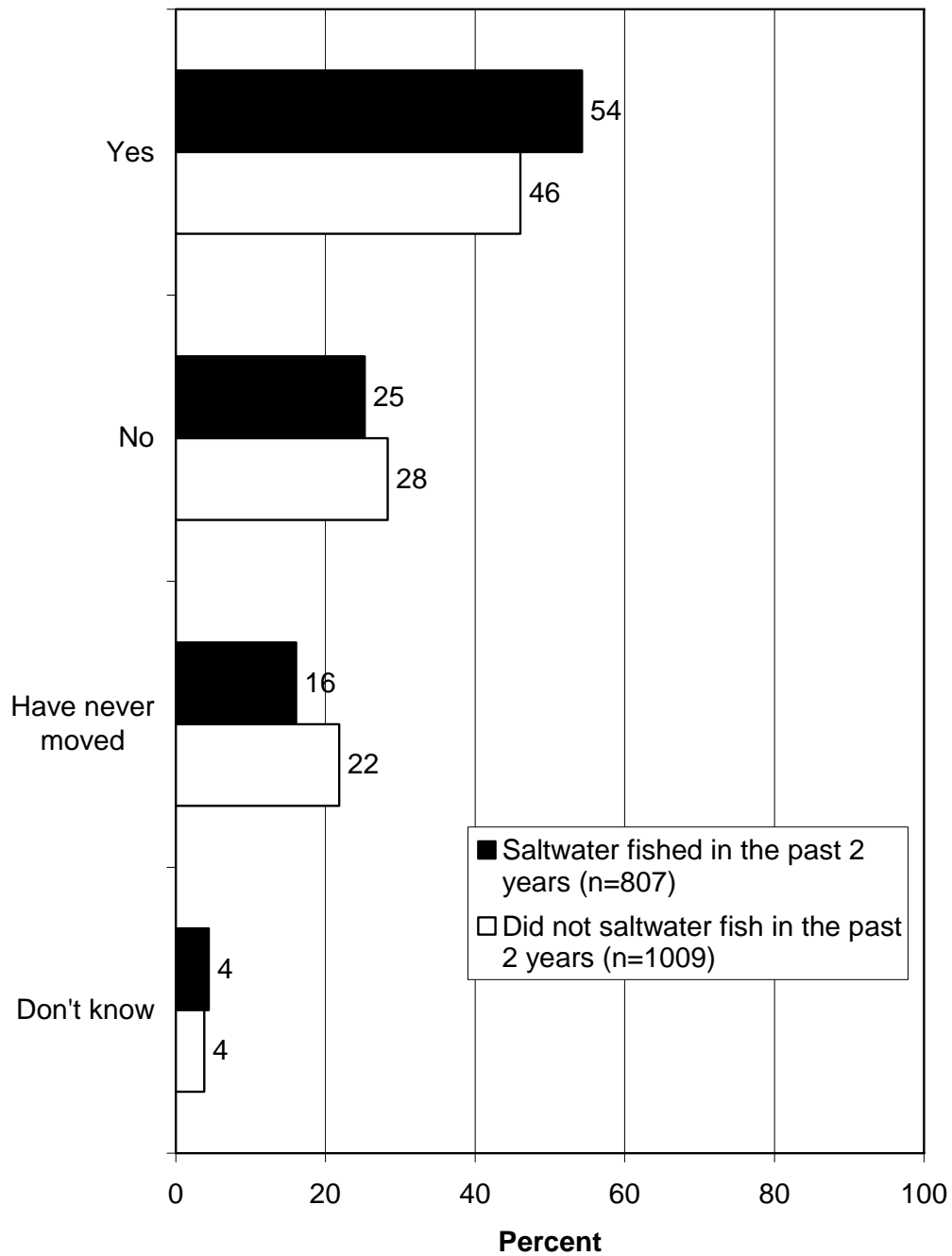


Figure 5.49. Use of Change-of Address Forms (by Saltwater Fishing Participation)

Q33. When you have moved in the past, have you ever submitted a change of address form to the U.S. Postal Service? (Part 1.)

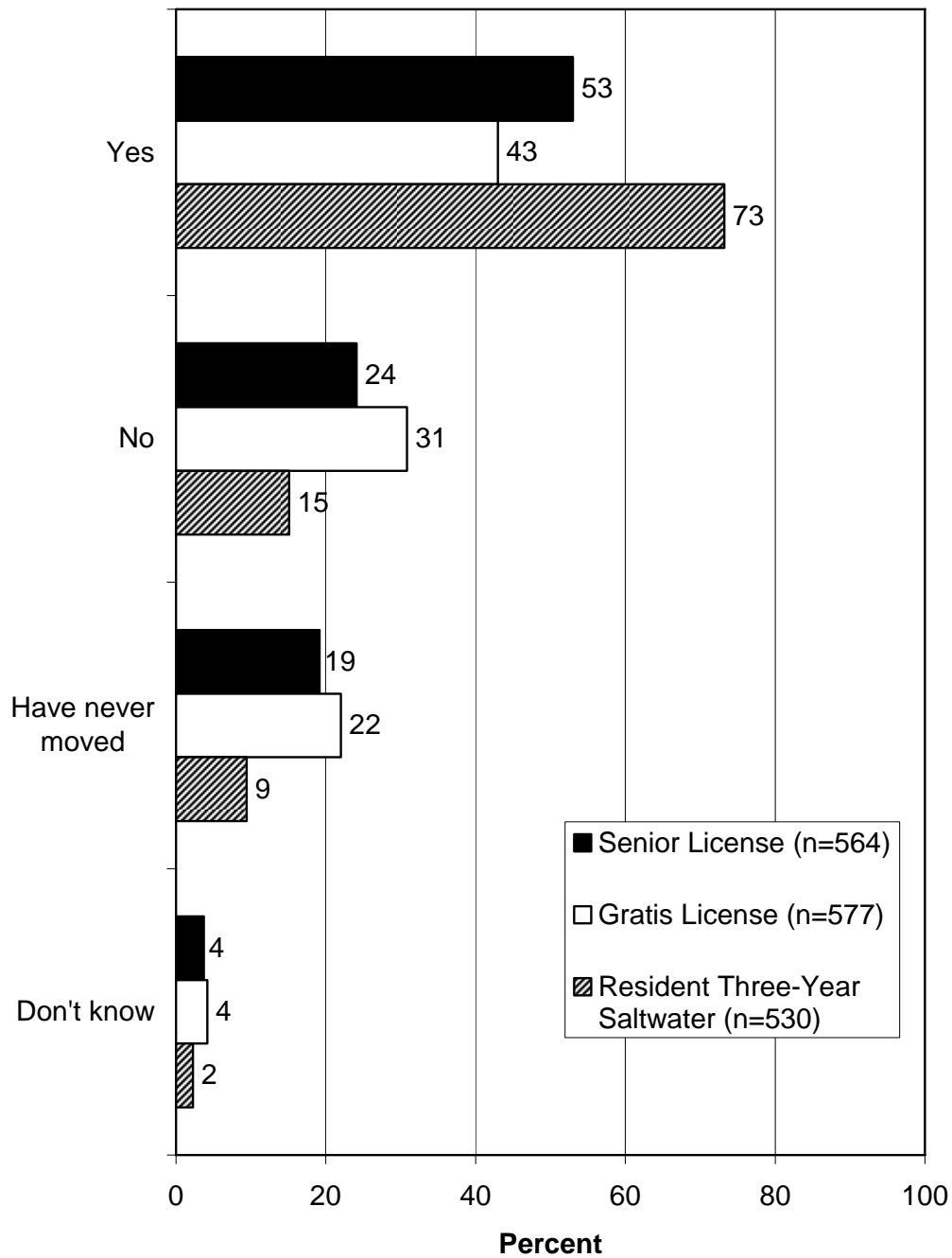


Figure 5.50. Use of Change-of Address Forms (by License Type, Part 1)

Q33. When you have moved in the past, have you ever submitted a change of address form to the U.S. Postal Service? (Part 2.)

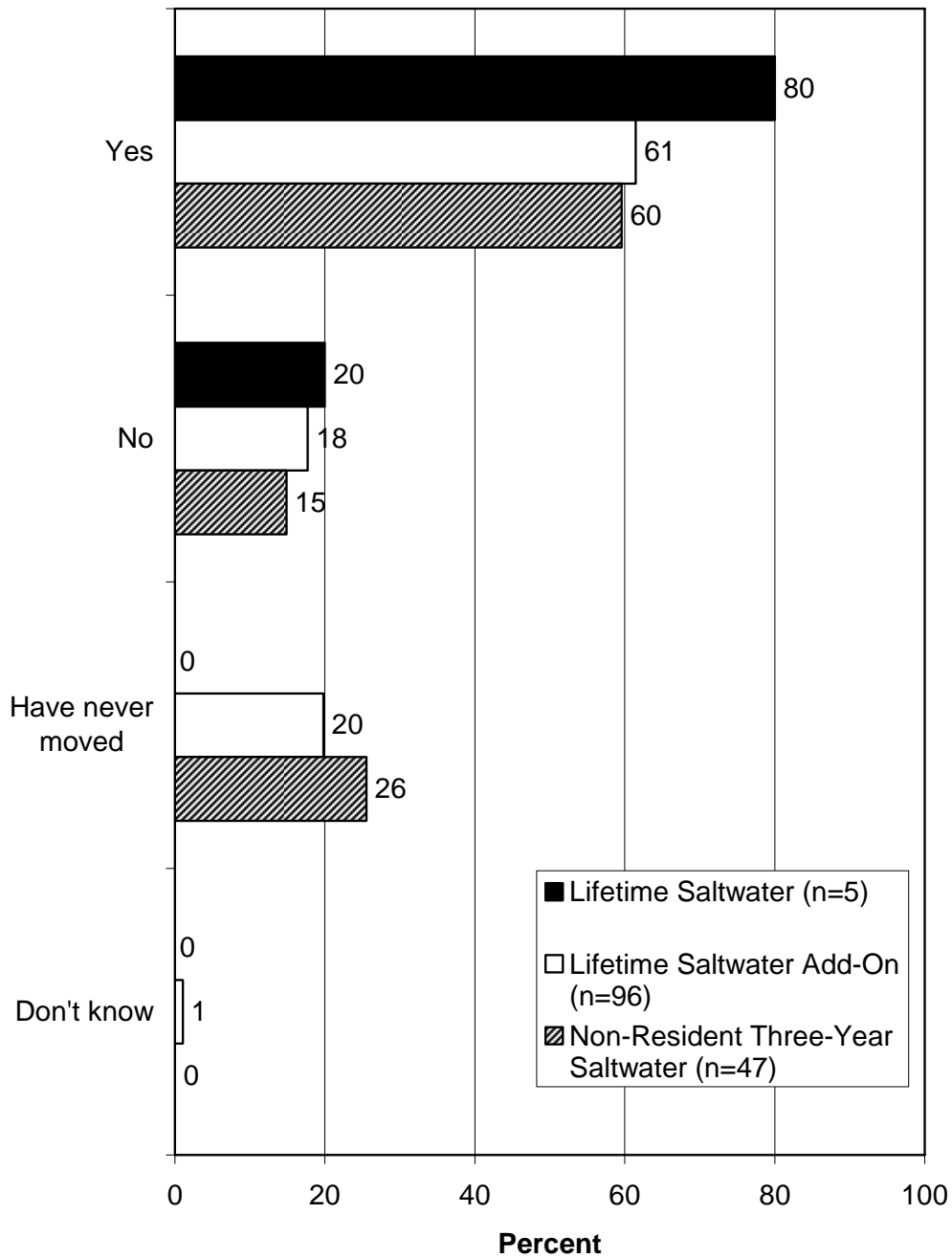


Figure 5.51. Use of Change-of Address Forms (by License Type, Part 2)

6. UPDATED DATA COLLECTED

One part of the overall project entailed updating data of saltwater anglers as part of the requirements of the national registry of saltwater anglers. The first step in doing so entailed matching names in the database with telephone numbers, either verifying existing telephone numbers or adding new numbers for those records that did not have them. This was done prior to the survey.

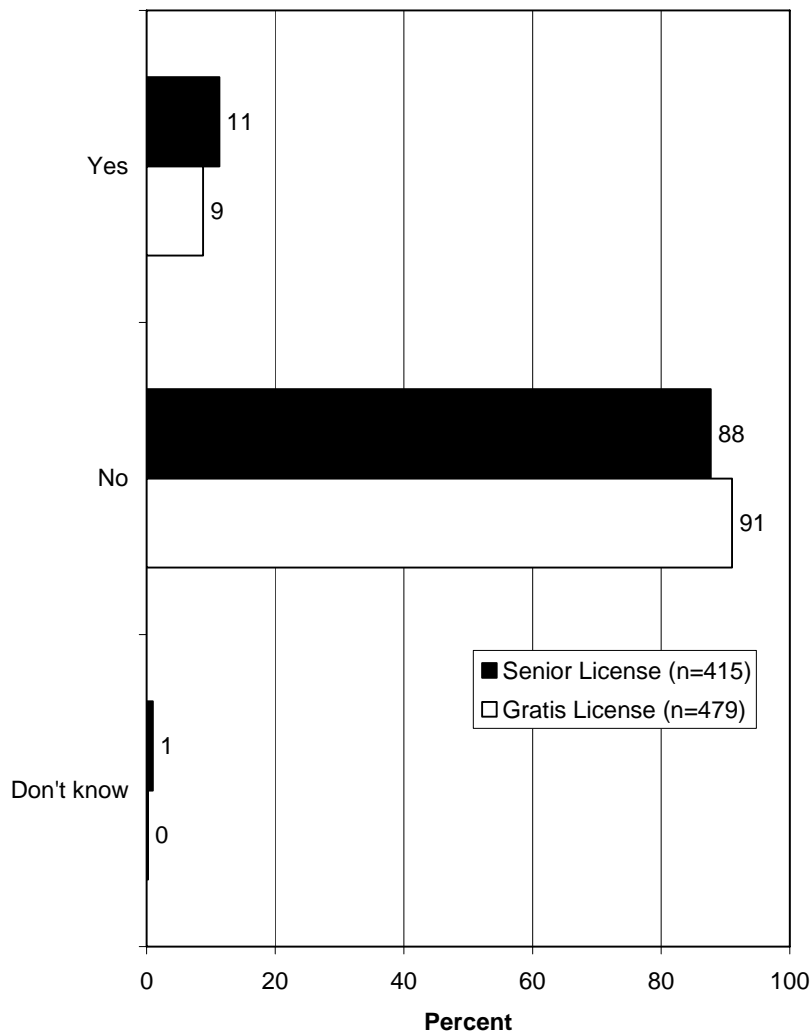
During the survey itself, respondents were asked if we could update data as part of the requirements of the national registry of saltwater anglers. If they were amenable to providing updated data (and 98% agreed to do so), they were asked to verify their mailing address, email address, telephone number, and type of telephone number (i.e., home/land line or cell phone). Any incorrect information in the database was changed; any missing data in the database was newly entered. This information was then provided under separate cover to the Department.

In total, 55,576 telephone numbers were added to the database in the pre-survey effort. Subsequently, 98 new or updated telephone numbers were provided through the survey. Additionally, the survey provided 460 new email addresses and 86 new postal addresses.

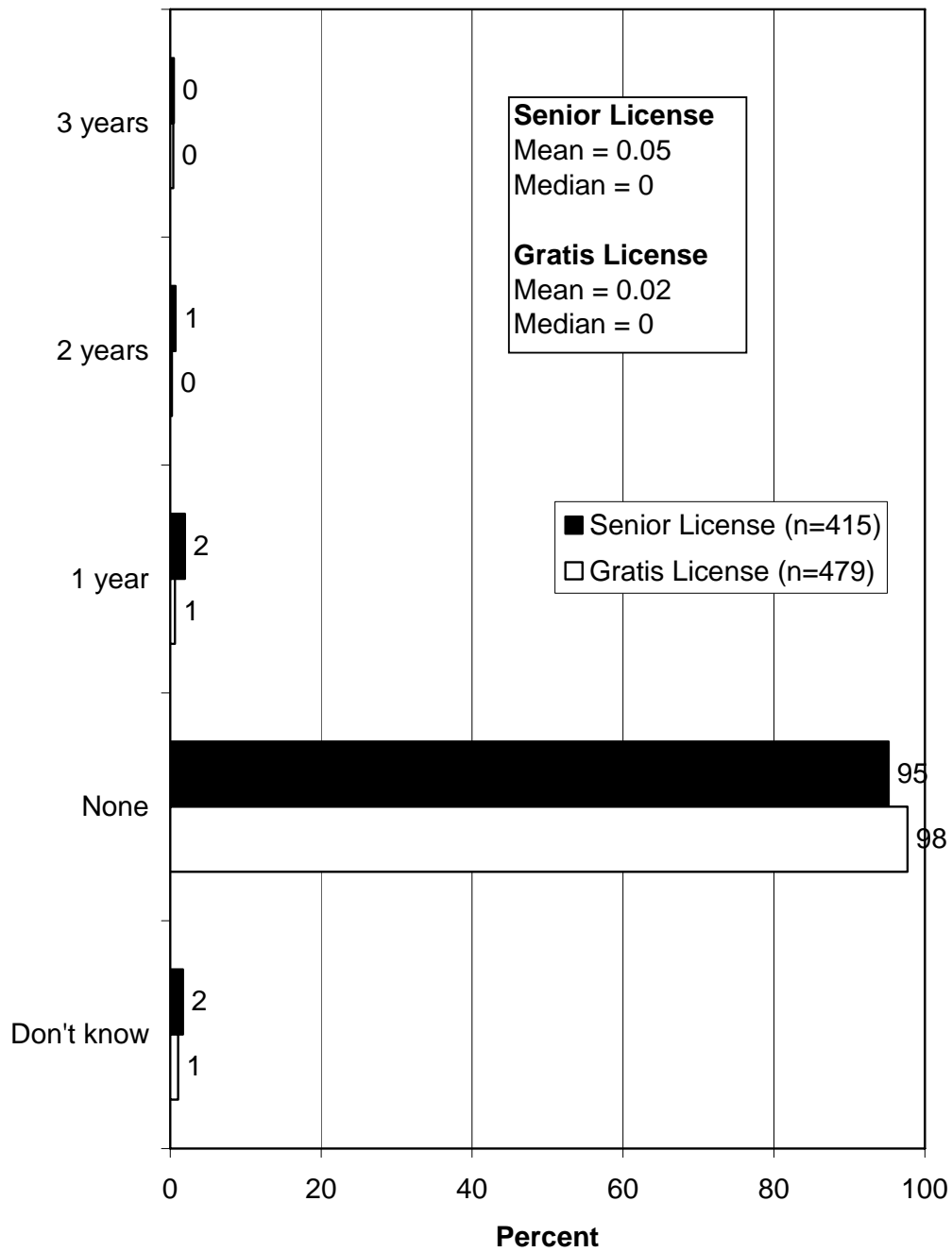
APPENDIX A: COMPARISON OF SENIOR AND GRATIS LICENSE HOLDERS WHO DID NOT SALTWATER FISH

The following graphs are among Senior and Gratis License holders who did *not* saltwater fish, showing a comparison of the two license types. They are presented in survey question order.

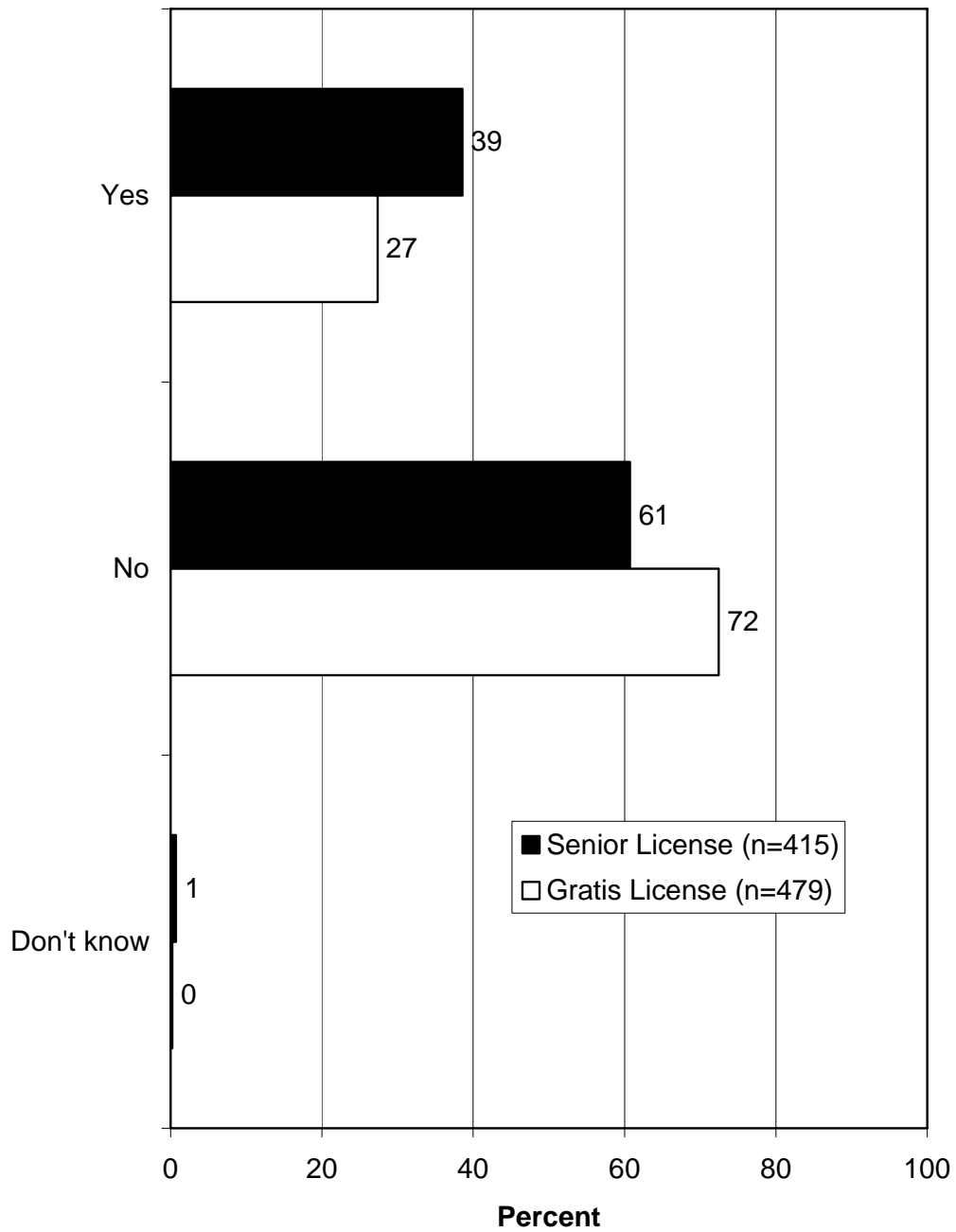
Q14. In addition to your license, do you typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina? (Of those who did not saltwater fish.)



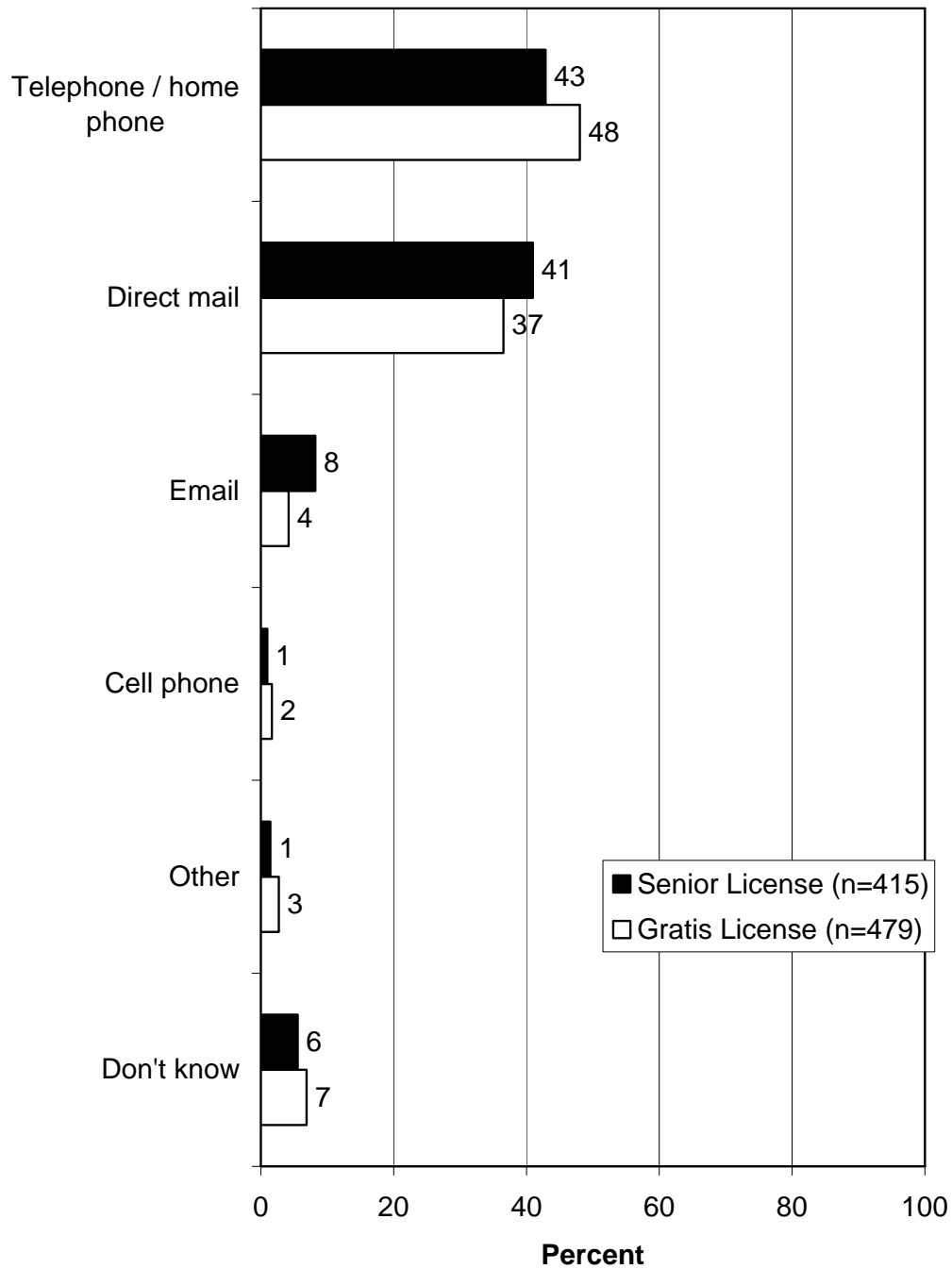
Q17. How many of the past 3 years have you applied to participate in the Department's public draw hunts? (Of those who did not saltwater fish.)



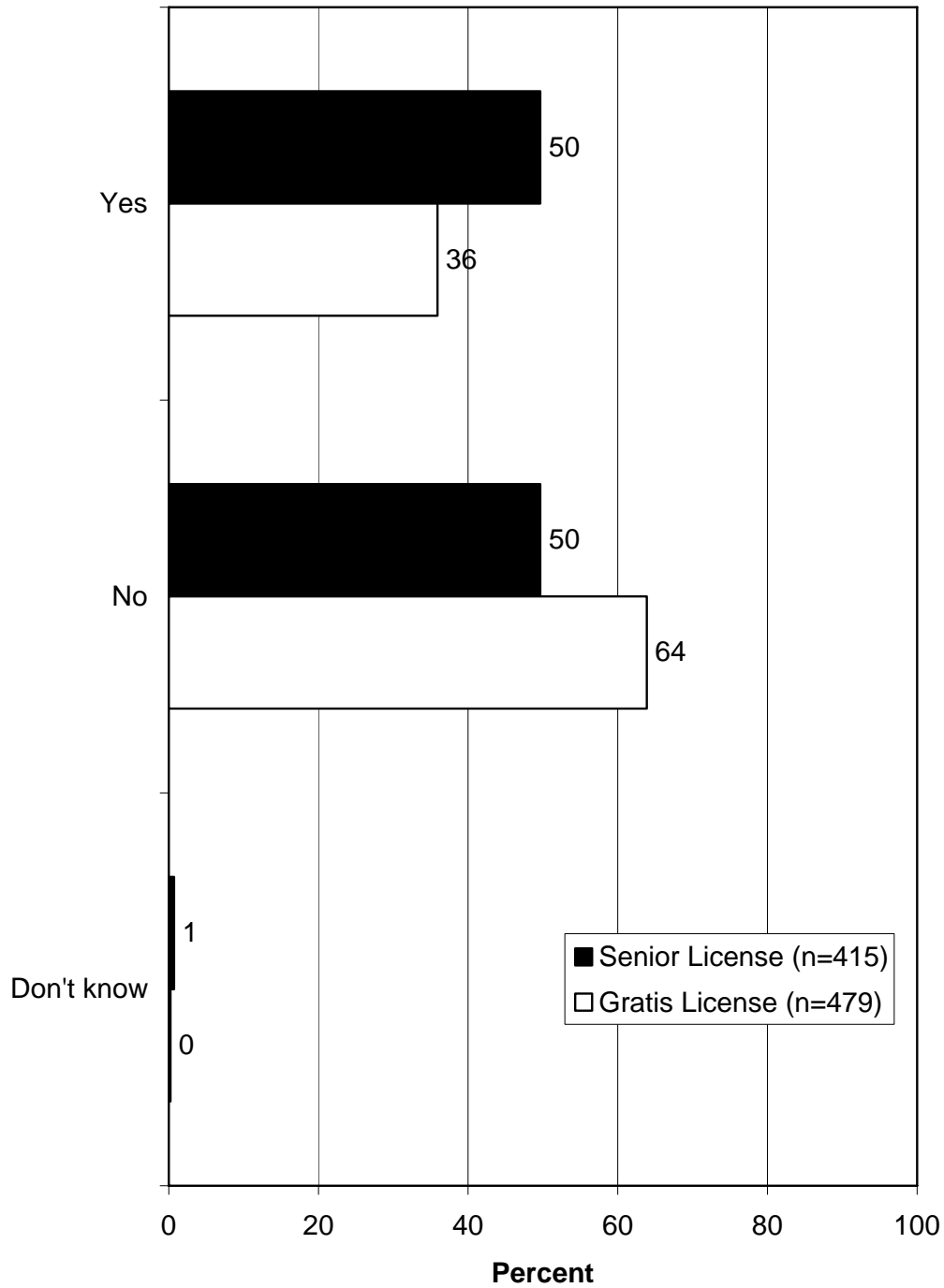
Q18. Do you own a boat, jet ski, or sailboat that requires registration in South Carolina every 3 years? (Of those who did not saltwater fish.)



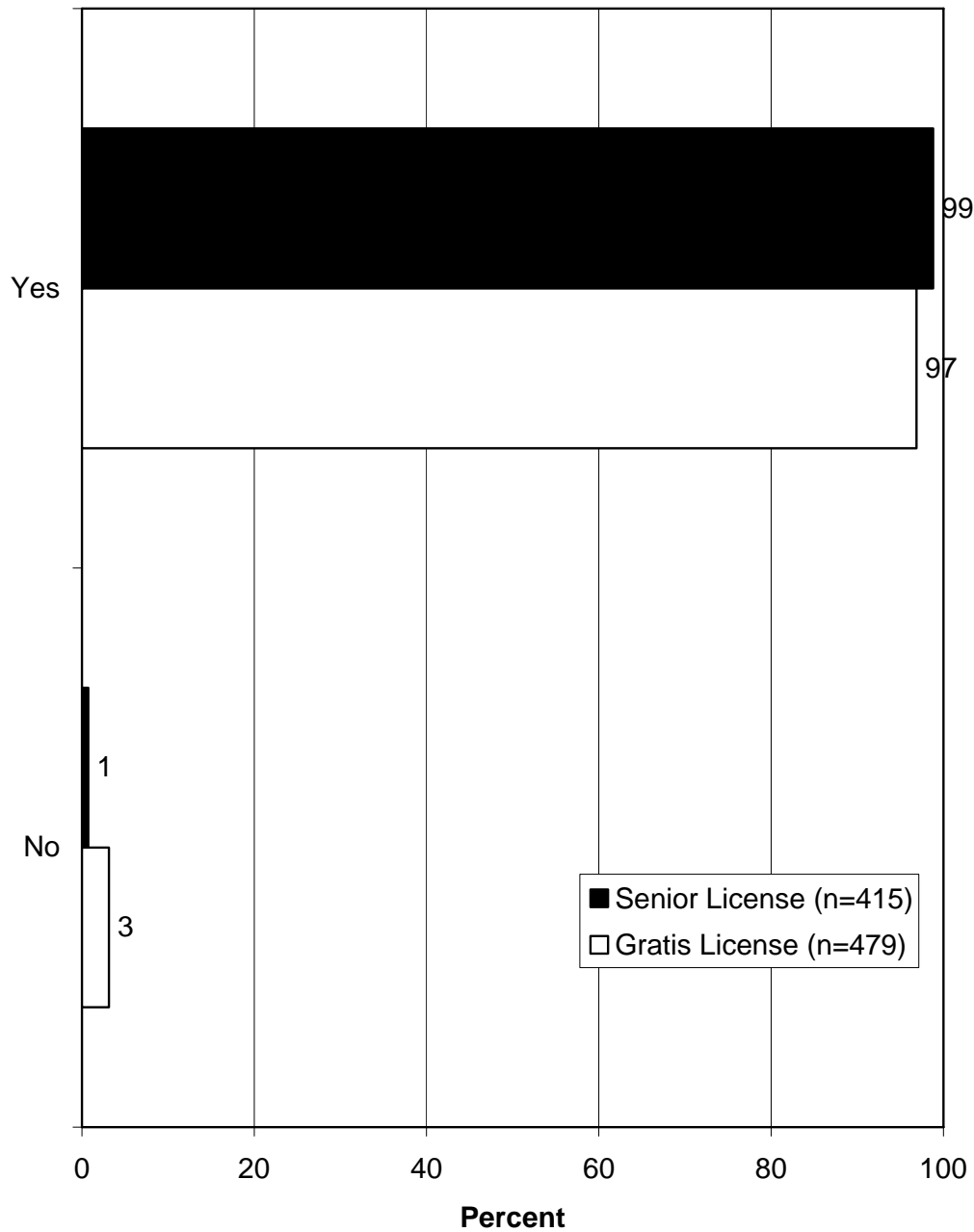
**Q27. What is the best way for the Department to contact you with information about fishing issues?
(Of those who did not saltwater fish.)**



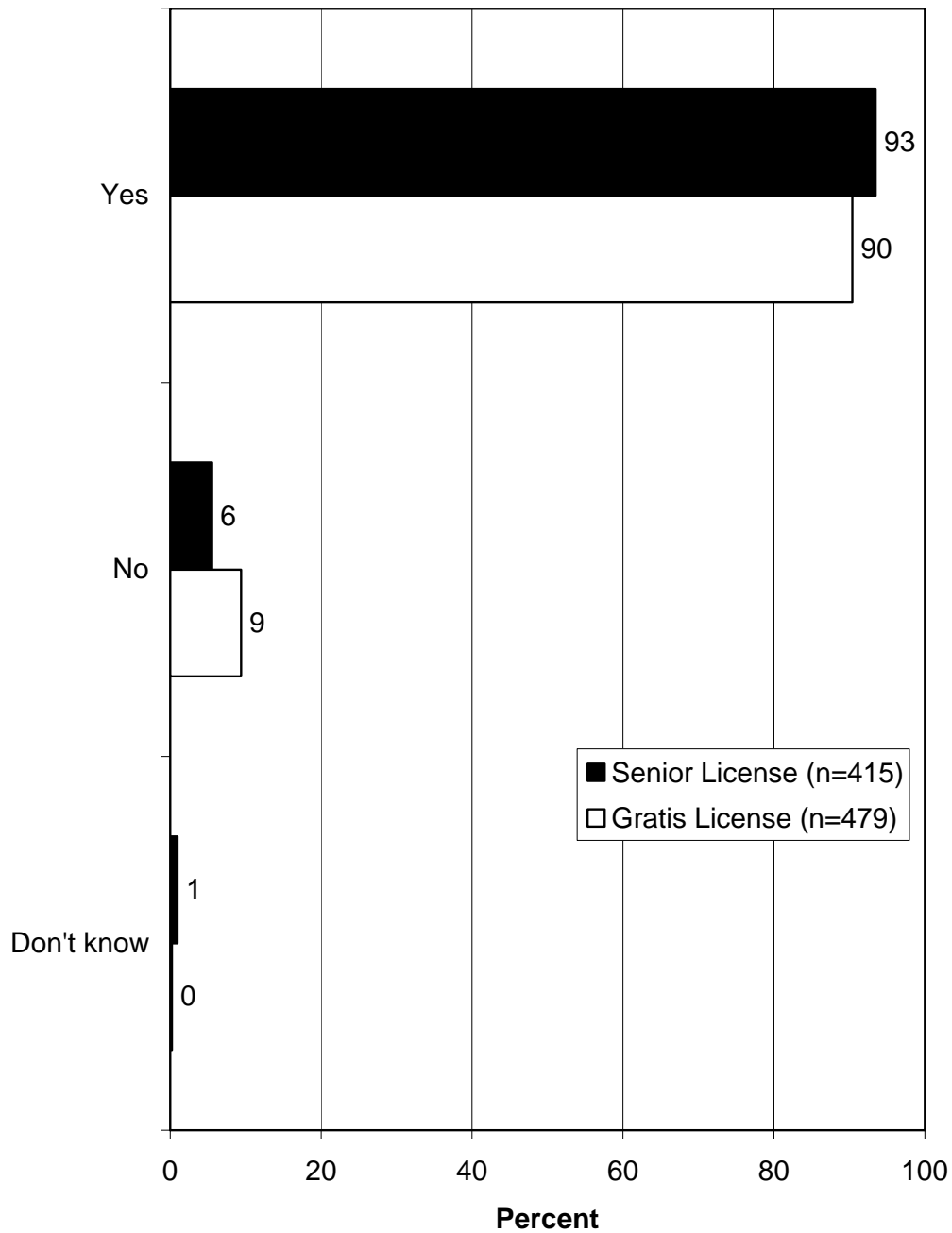
Q30. Do you have access to the Internet? (Of those who did not saltwater fish.)



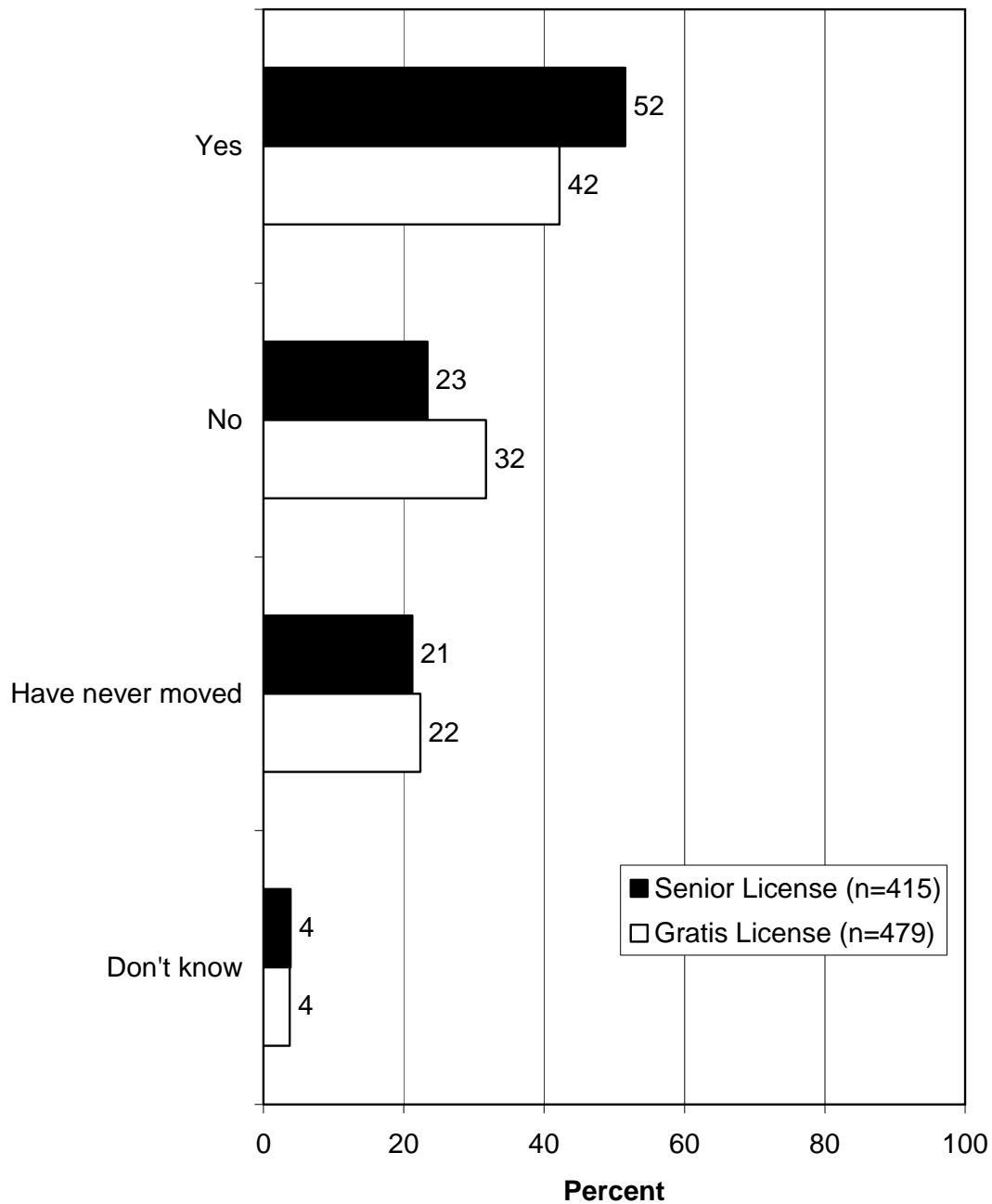
Q31. Do you currently have a valid South Carolina driver's license or state-issued ID card? (Asked of residents of South Carolina.) (Of those who did not saltwater fish.)



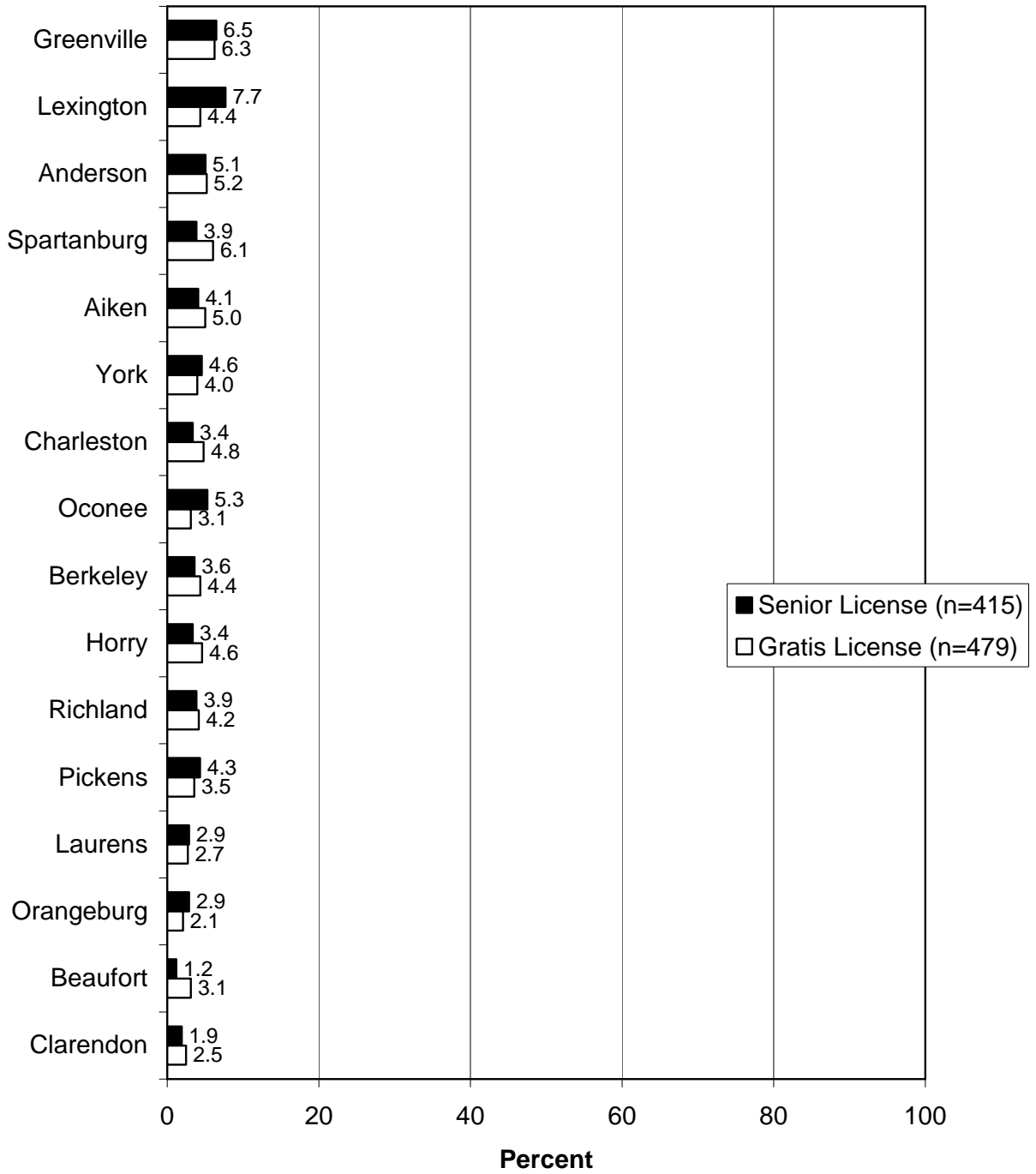
Q32. Do you currently have a vehicle registered in South Carolina? (Asked of residents of South Carolina.) (Of those who did not saltwater fish.)



Q33. When you have moved in the past, have you ever submitted a change of address form to the U.S. Postal Service? (Of those who did not saltwater fish.)



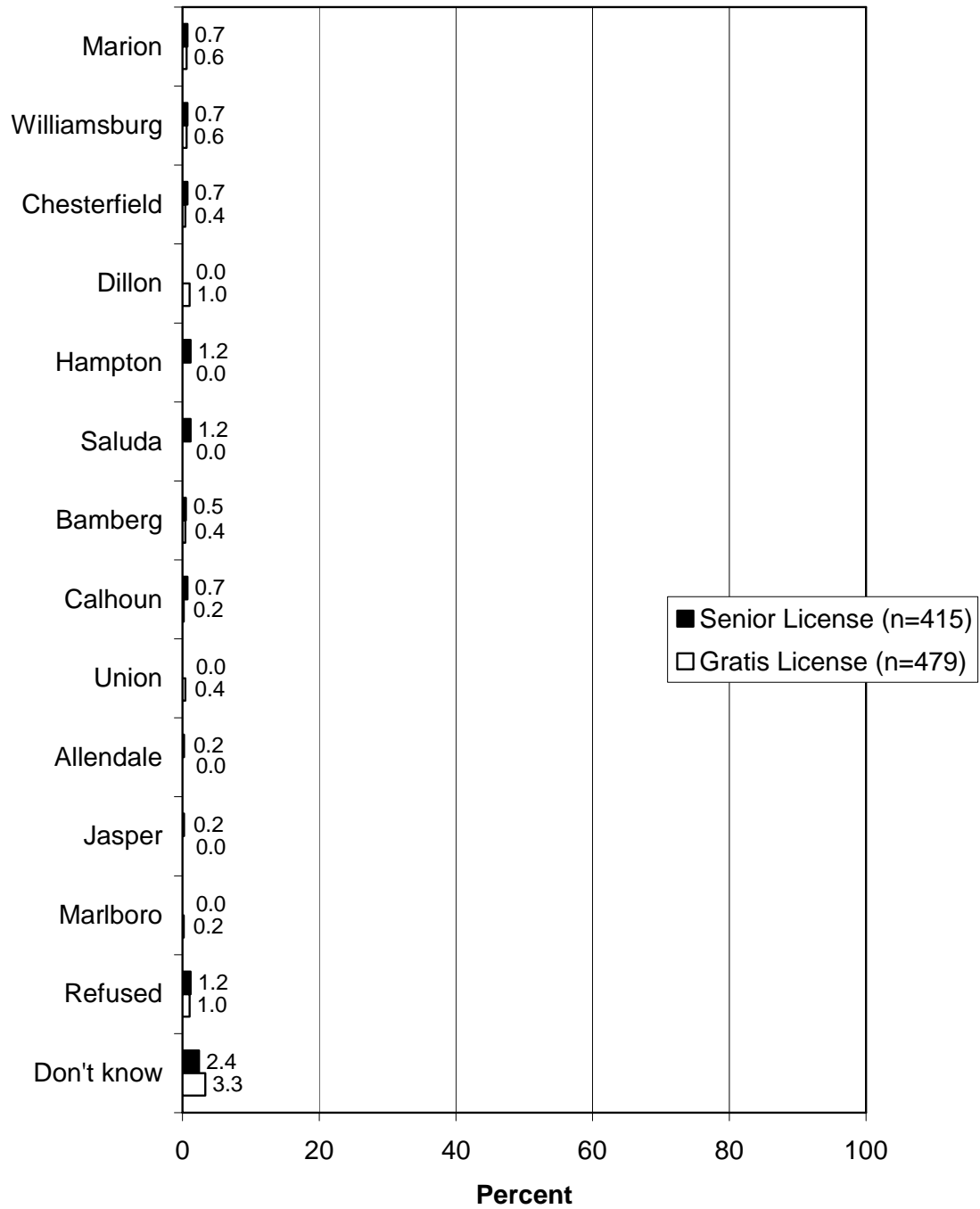
Q34. What county do you live in? (Part 1.) (Of those who did not saltwater fish.)



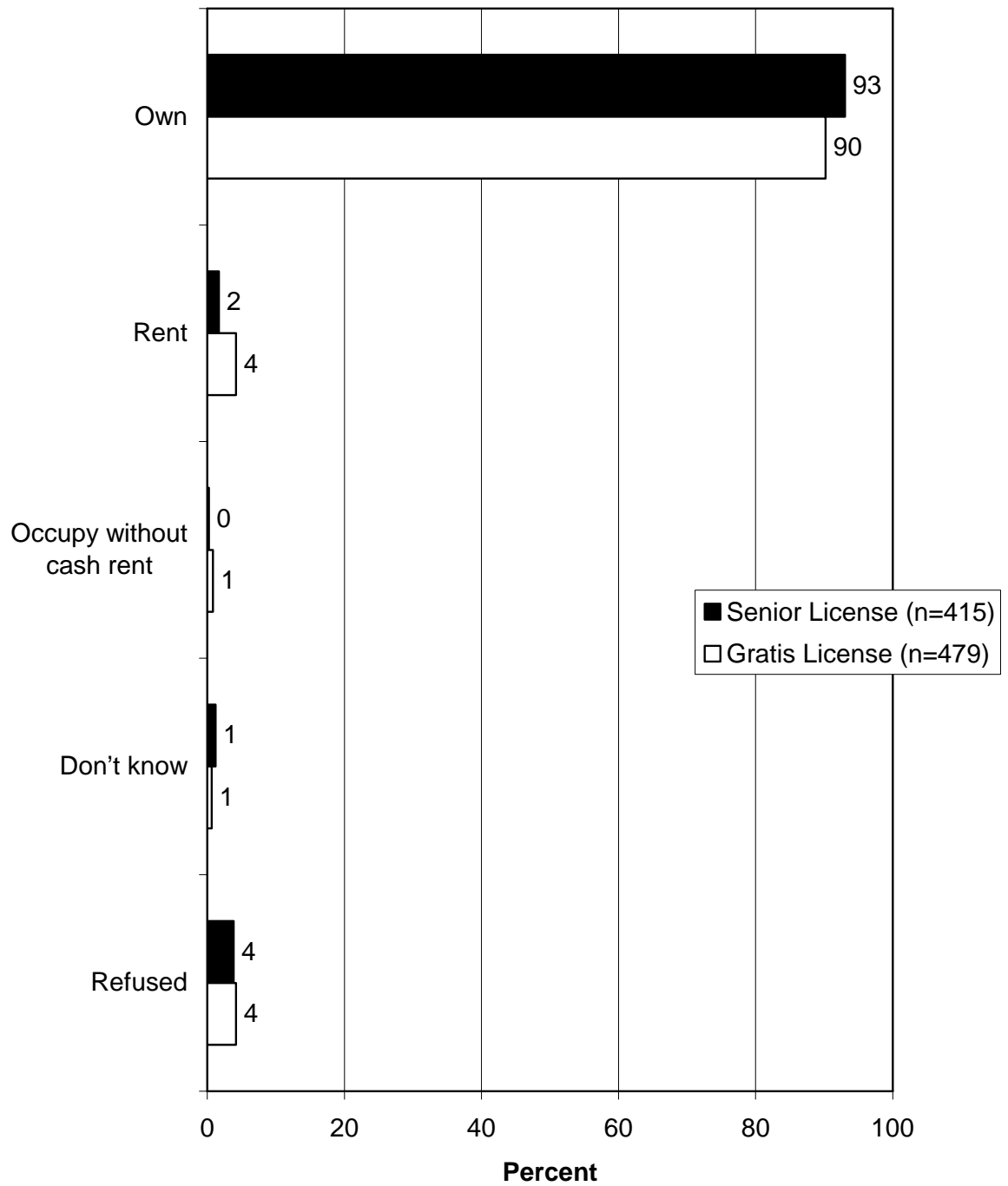
Q34. What county do you live in? (Part 2.) (Of those who did not saltwater fish.)



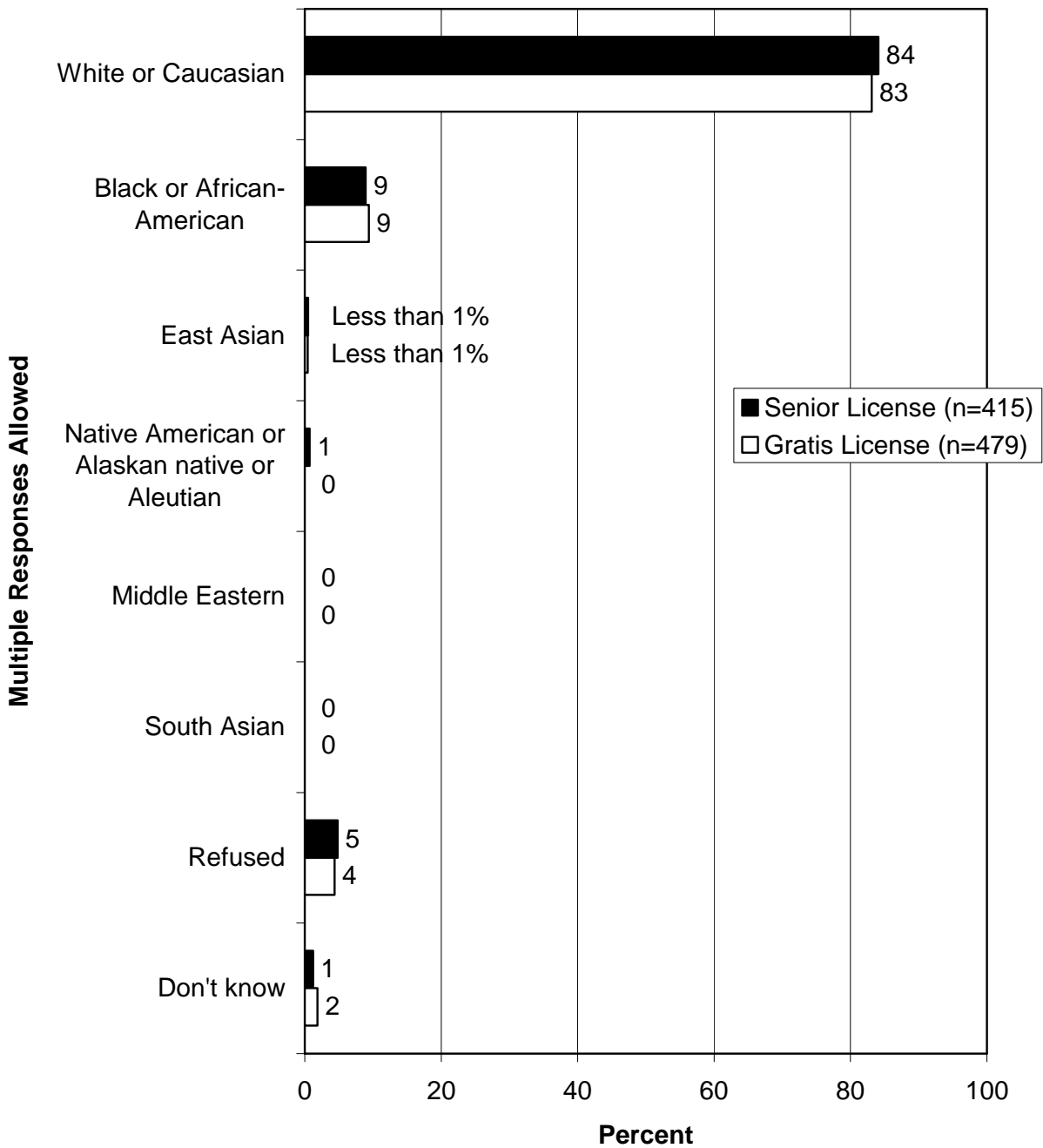
Q34. What county do you live in? (Part 3.) (Of those who did not saltwater fish.)



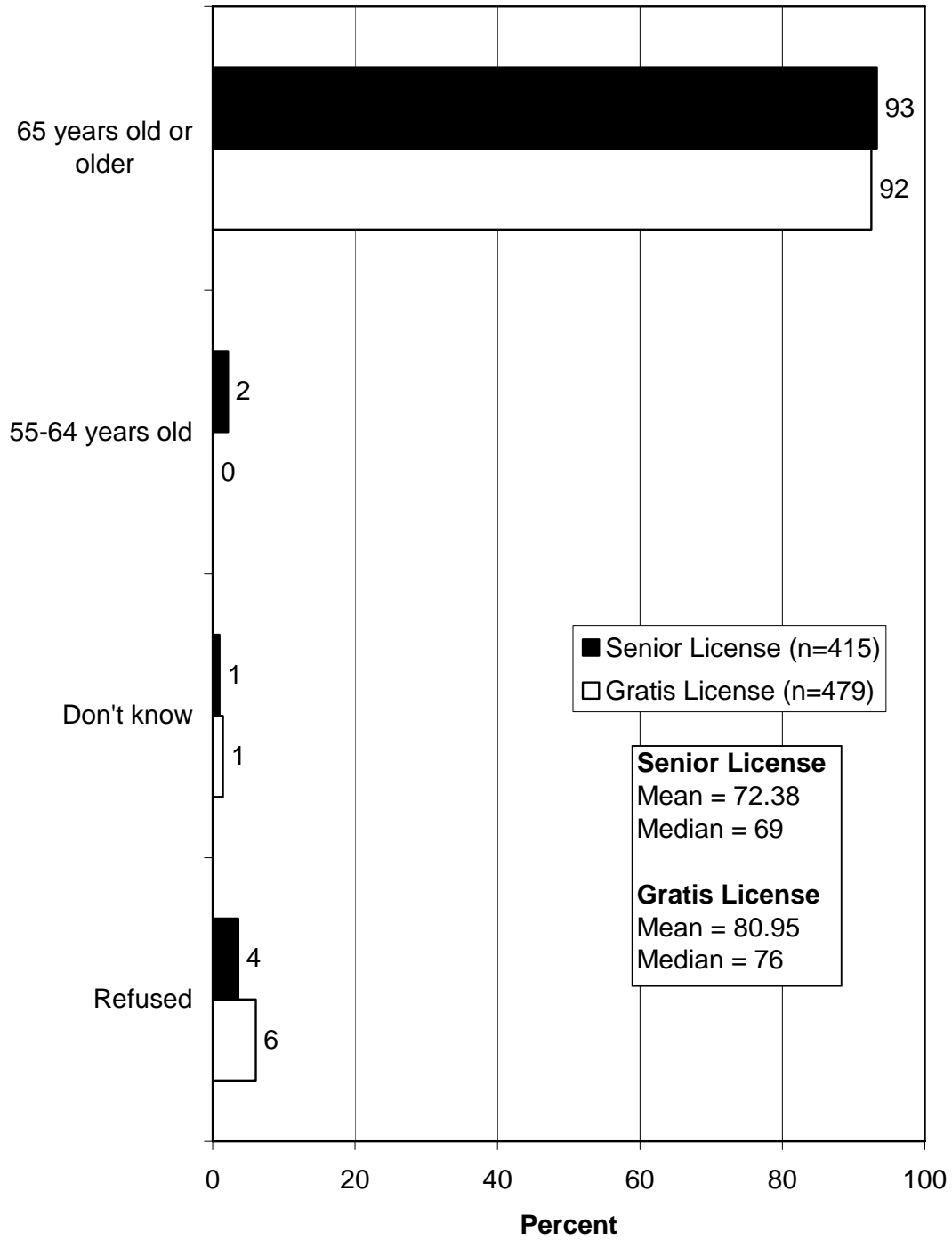
**Q35. Do you own or rent your place of residence?
(Of those who did not saltwater fish.)**



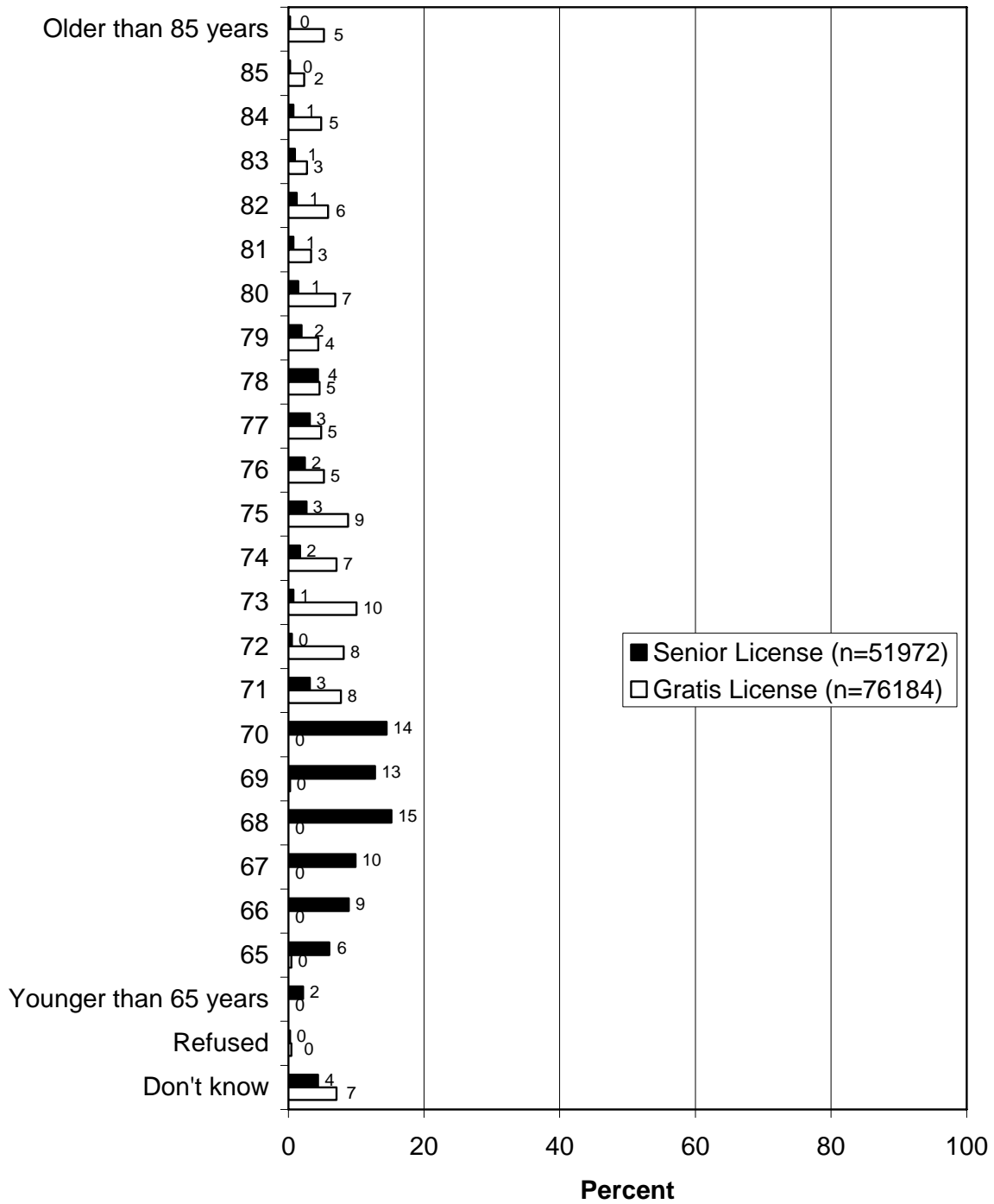
**Q41. What races or ethnic backgrounds do you consider yourself? Please mention all that apply.
(Of those who did not saltwater fish.)**



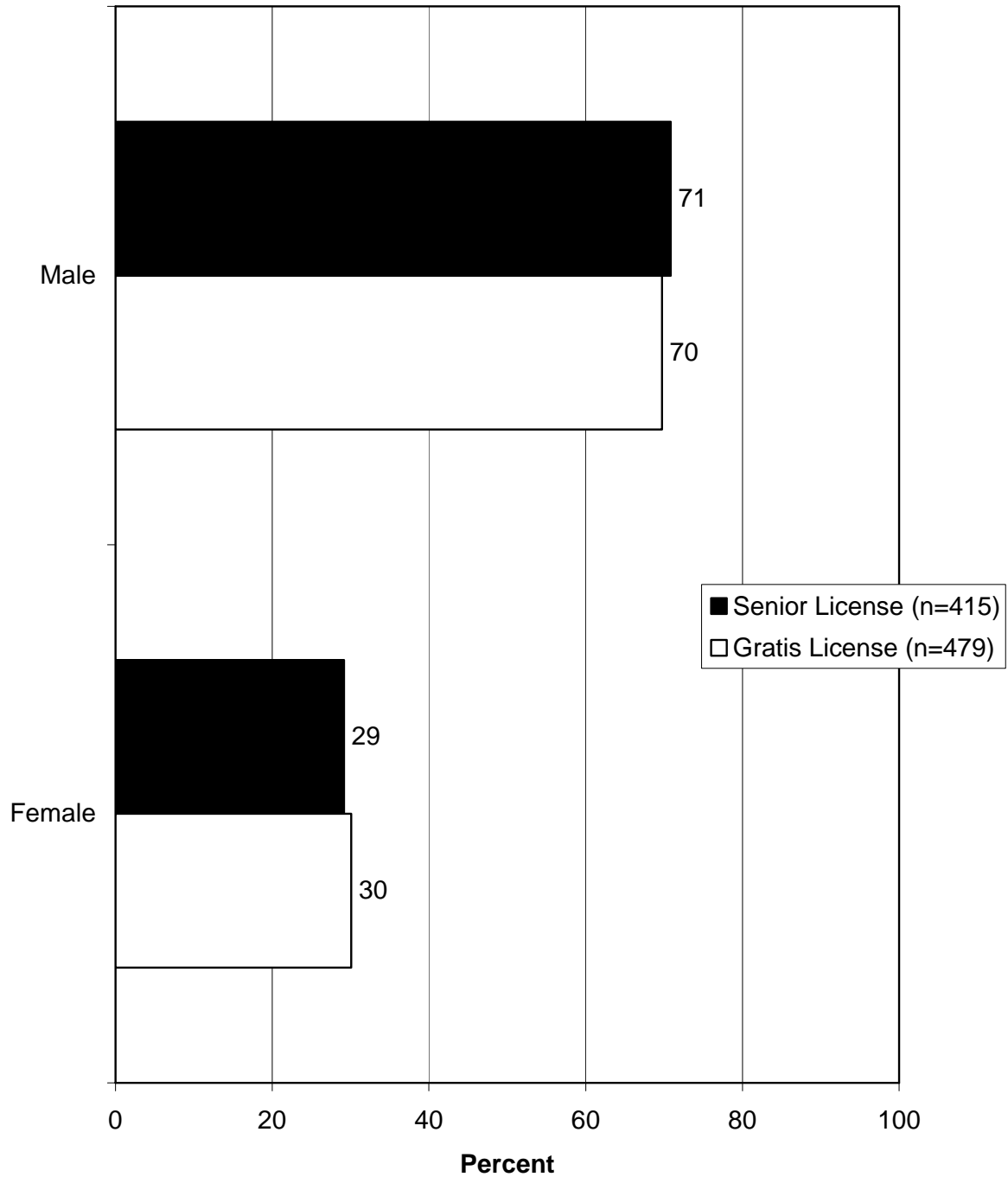
Q43. May I ask your age? (Of those who did not saltwater fish.)



Q43. May I ask your age?
(Of those who did not saltwater fish.)



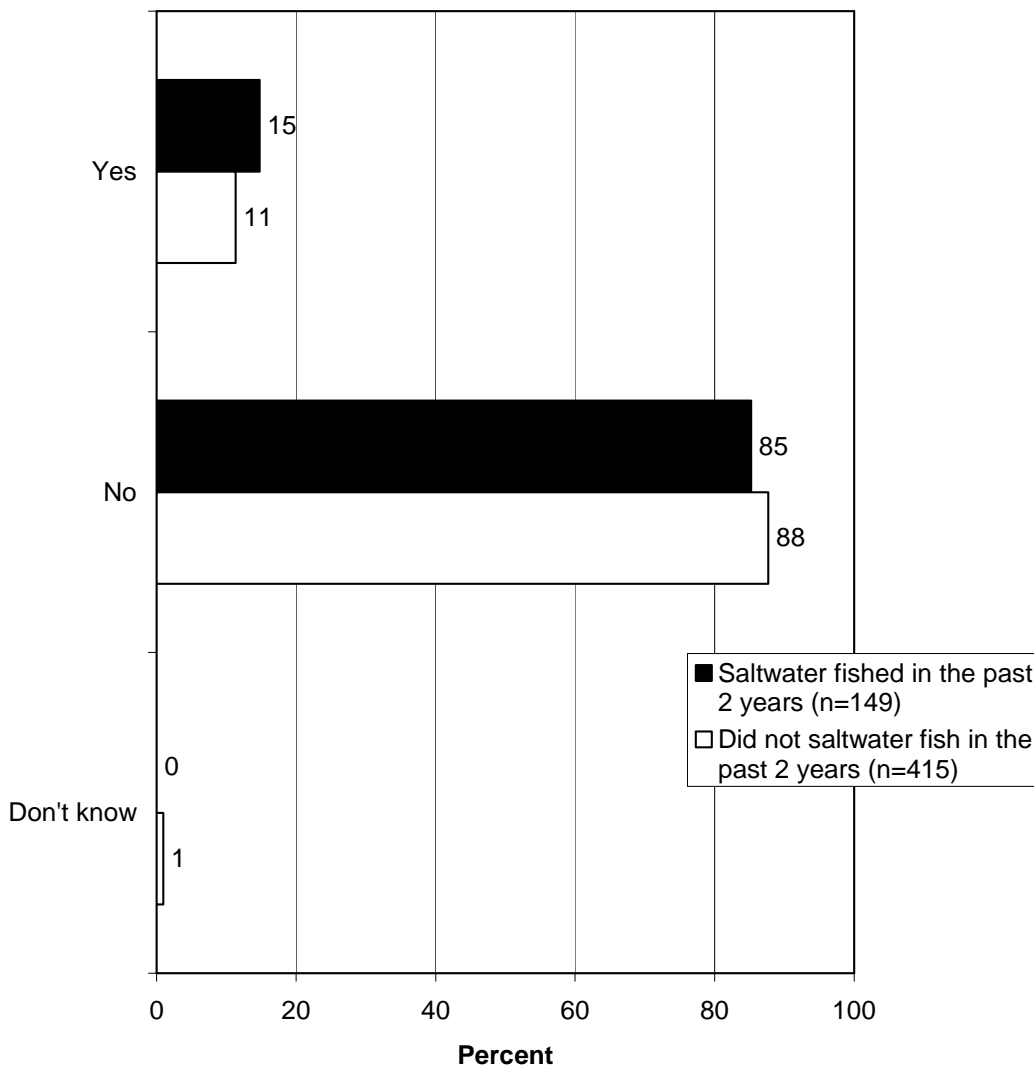
Q68. Respondent's gender (not asked; observed by interviewer). (Of those who did not saltwater fish.)



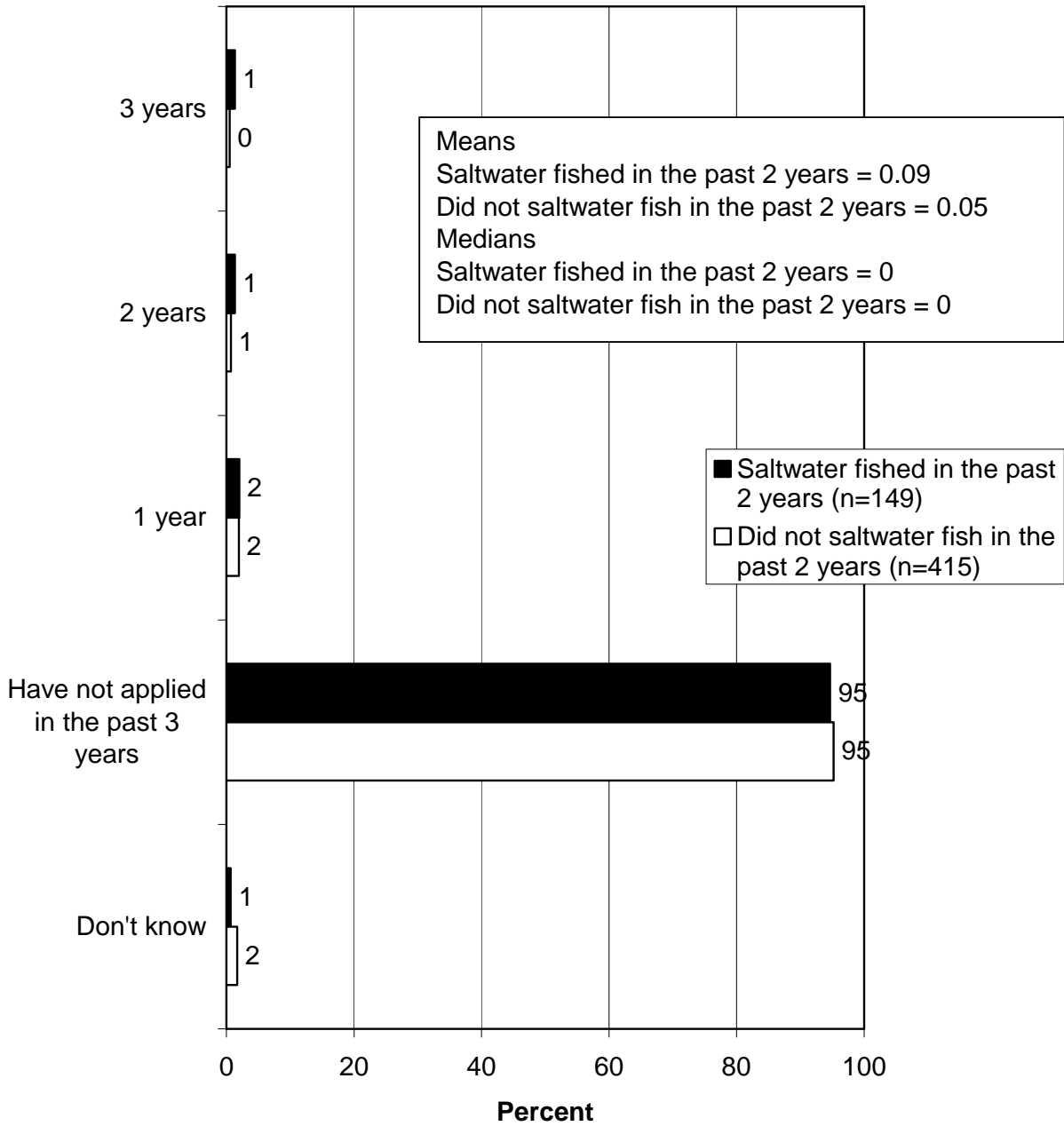
APPENDIX B: SENIOR LICENSE HOLDERS CROSSTABULATED BY SALTWATER FISHING PARTICIPATION

The following graphs show Senior License holders crosstabulated by saltwater fishing participation. They are presented in survey question order.

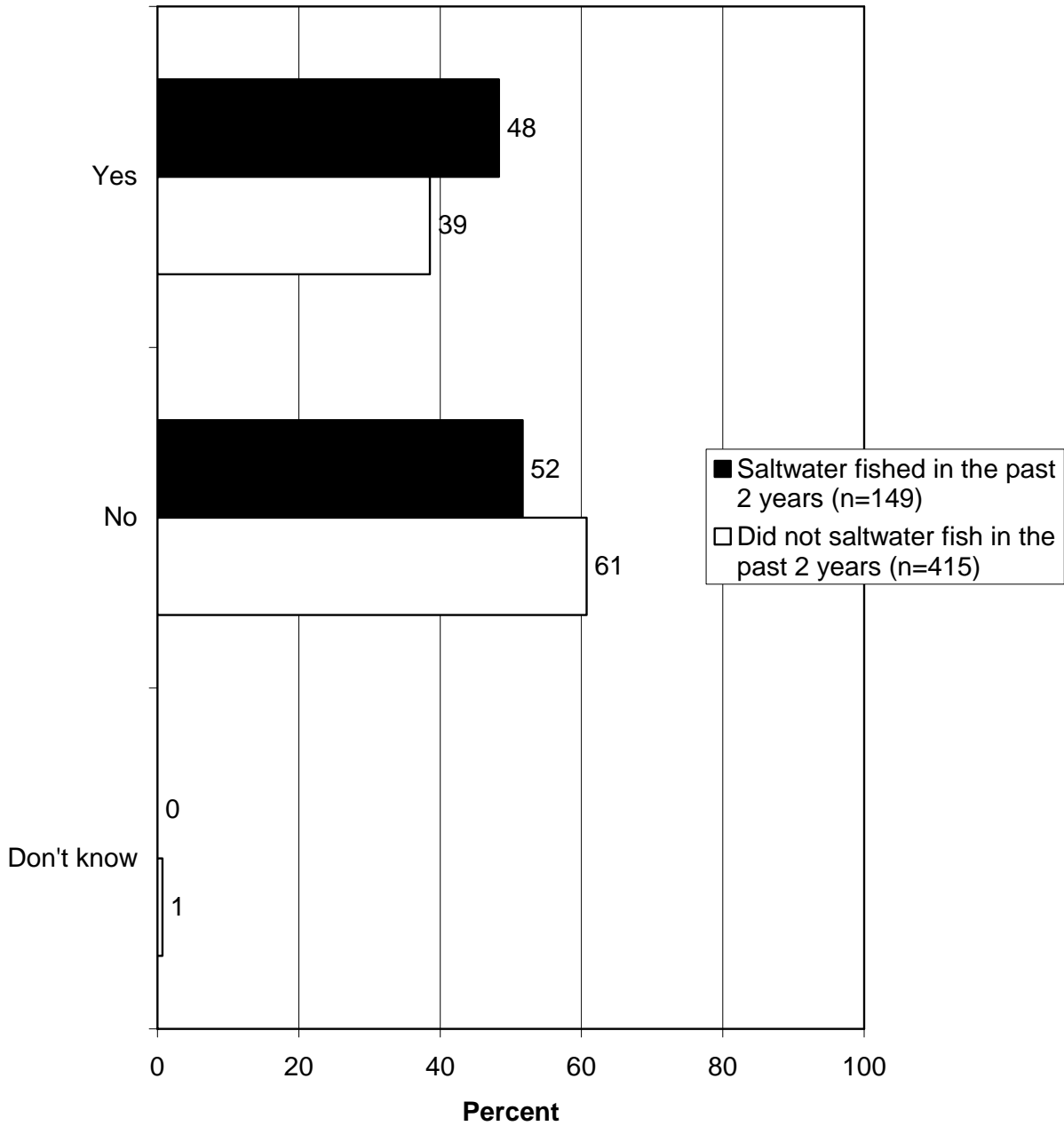
**Q14. In addition to the license I just mentioned, do you typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina?
(Senior License holders.)**



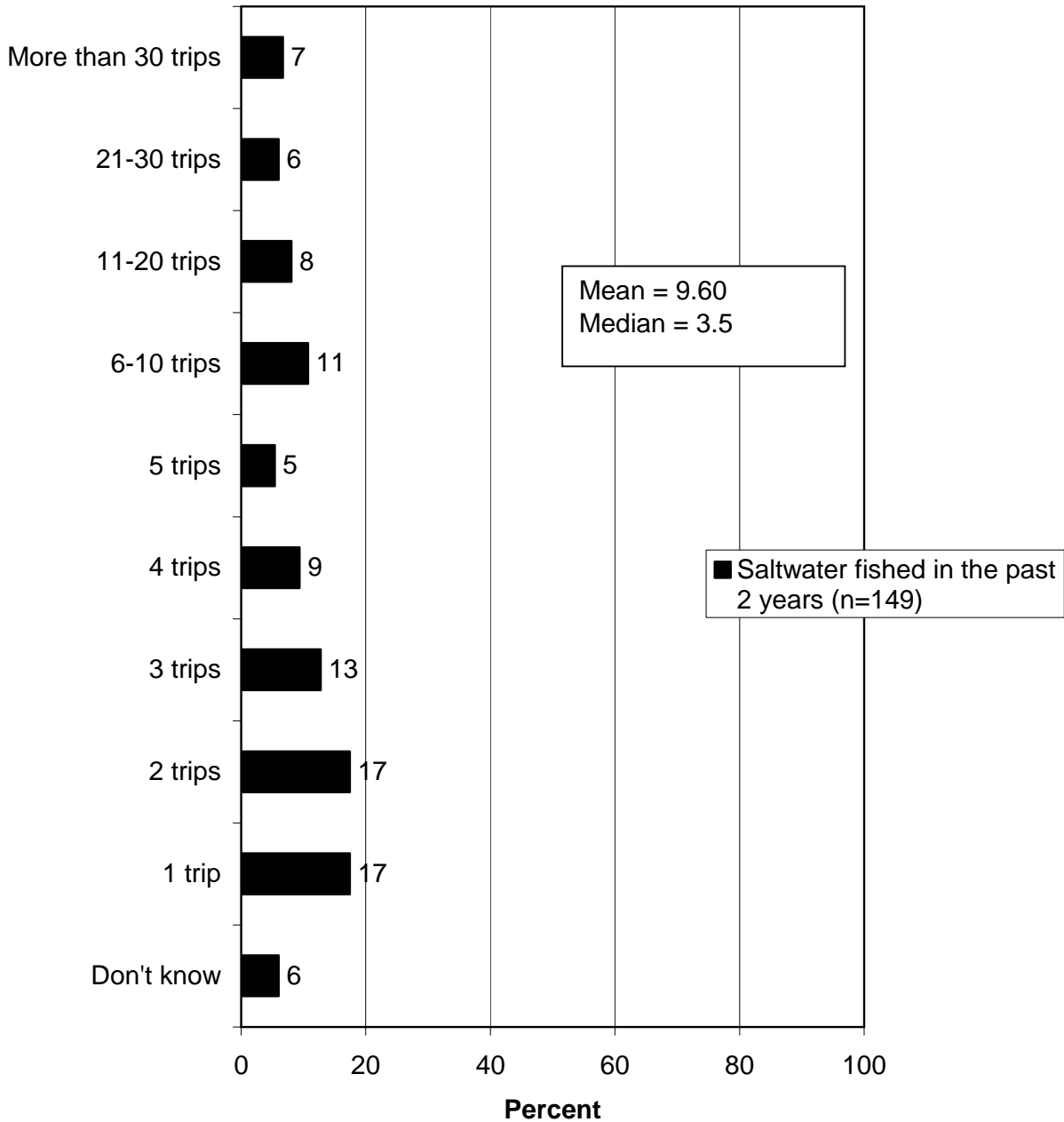
Q15. How many of the past 3 years have you applied to participate in the Department's public draw hunts? (Senior License holders.)



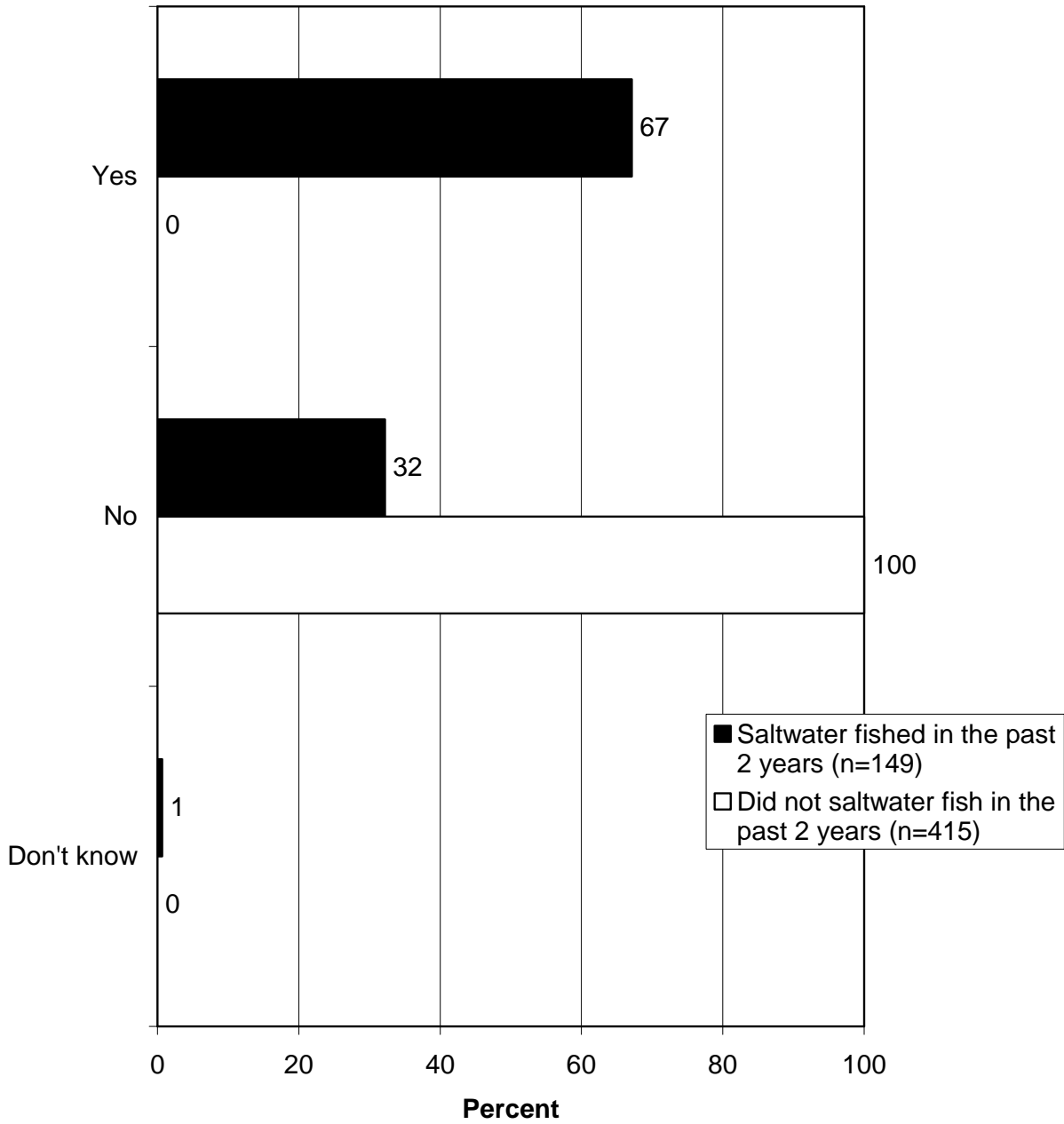
**Q18. Do you own a boat, jet ski, or sailboat that requires registration in South Carolina every 3 years?
(Senior License holders.)**



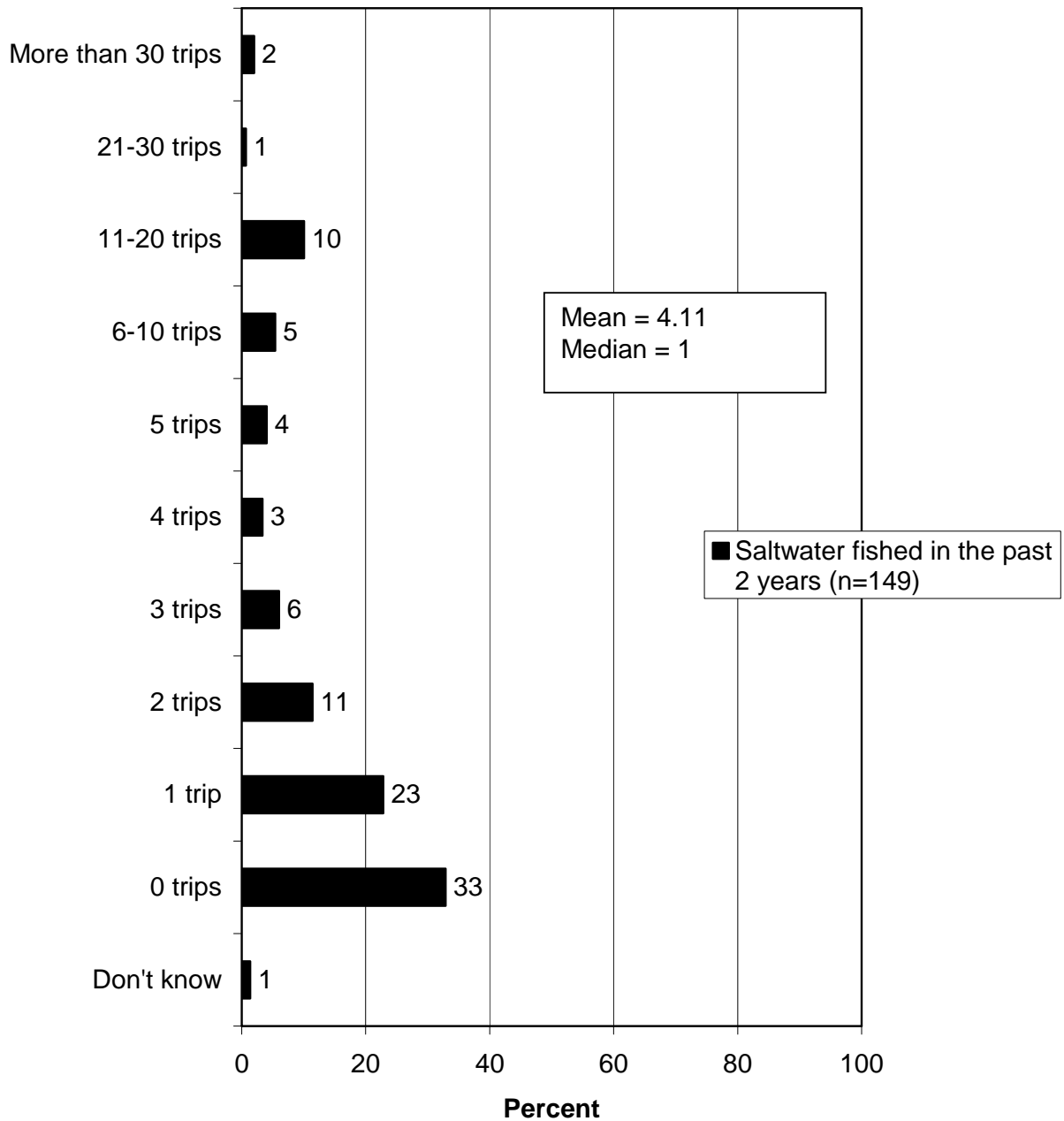
**Q20. In total, about how many saltwater fishing trips did you take in South Carolina in the past 2 years?
(Senior License holders.)**



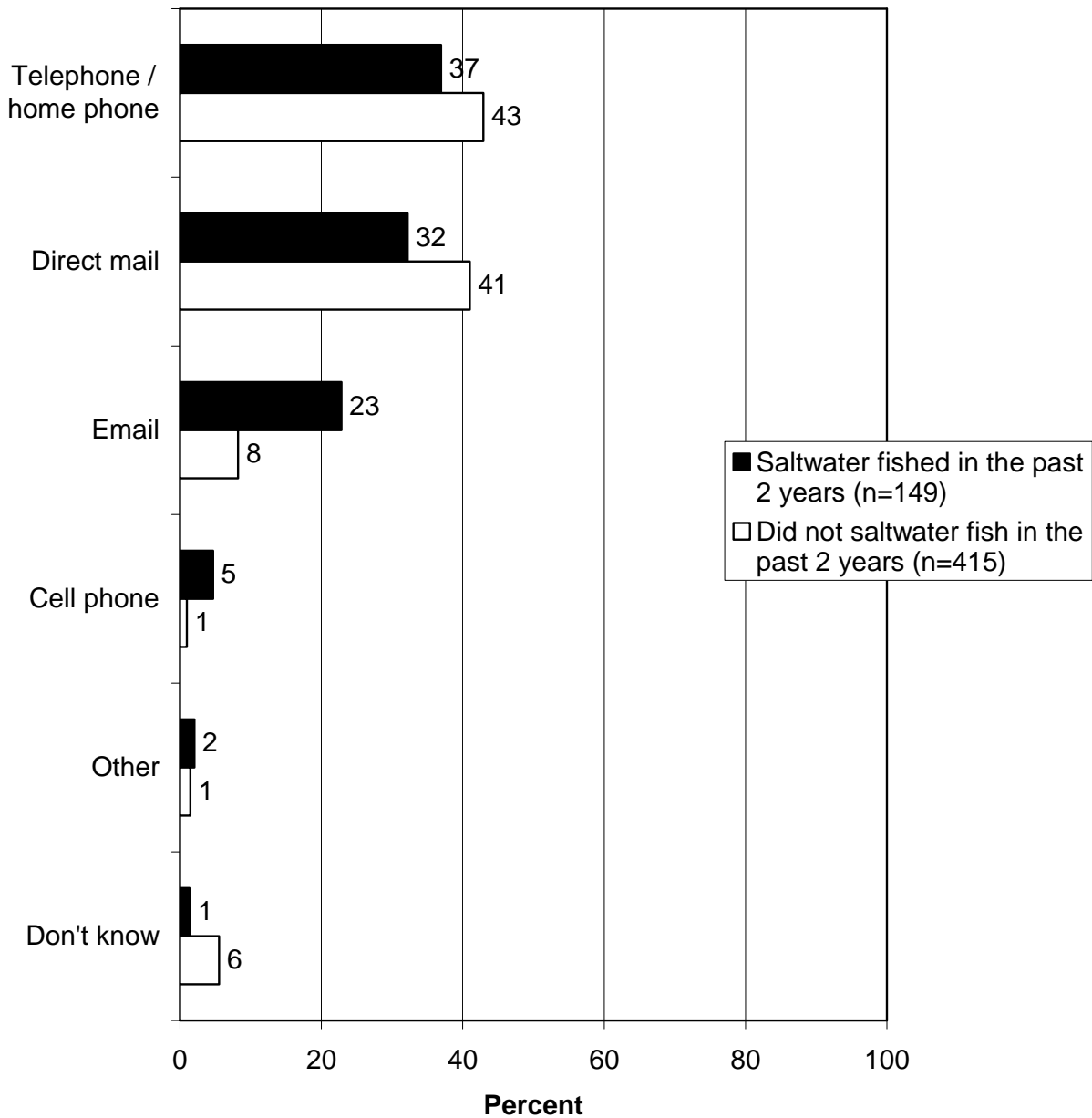
**Q23. Specifically, have you gone saltwater fishing in South Carolina in the past 12 months?
(Senior License holders.)**



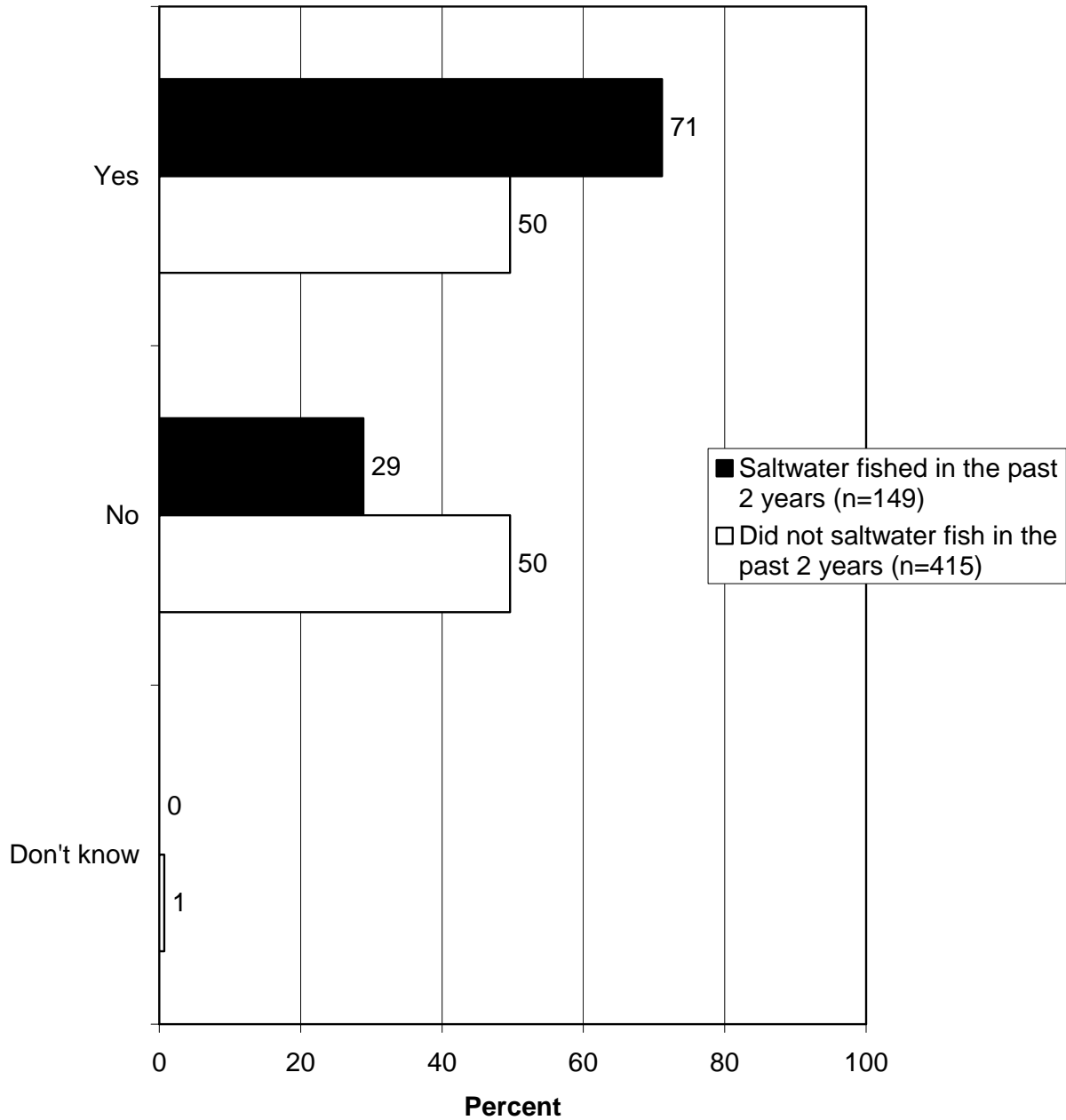
**Q24. In total, about how many saltwater fishing trips did you take in South Carolina in the past 12 months?
(Senior License holders.)**



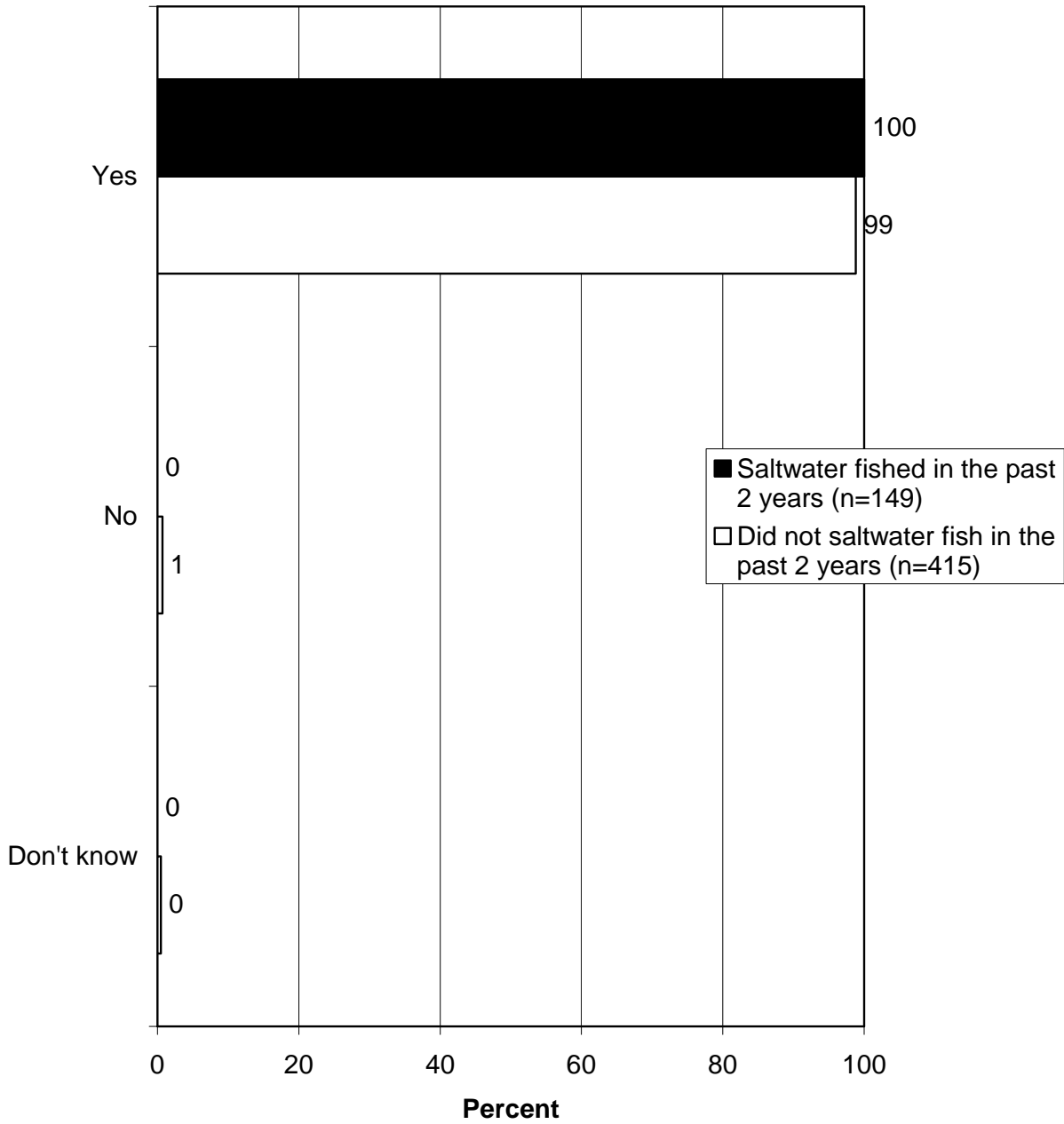
**Q27. What is the best way for the Department to contact you with information about fishing issues?
We are not sending information at this time; we are just identifying preferences.
(Senior License holders.)**



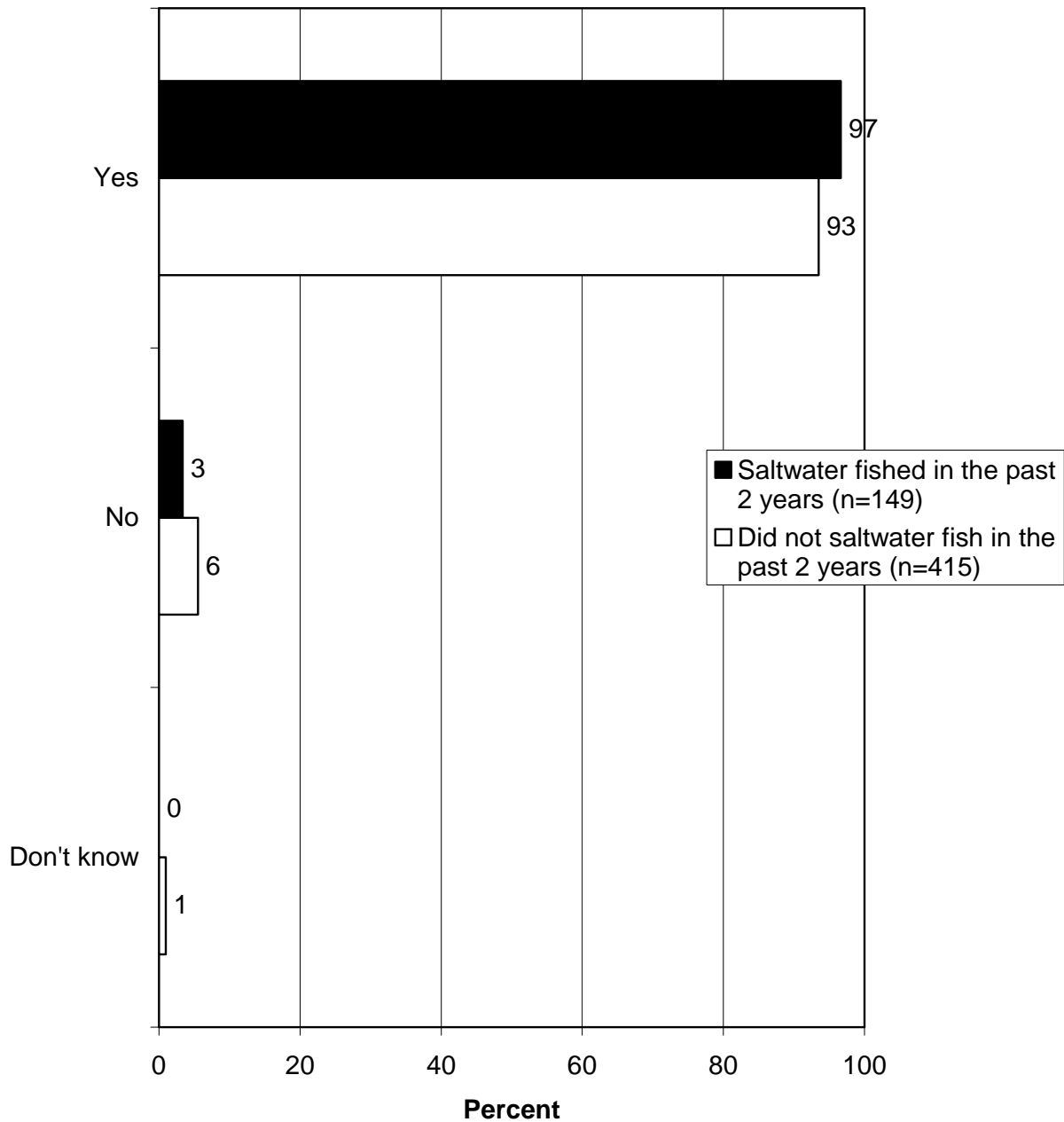
**Q30. Do you have access to the Internet?
(Senior License holders.)**



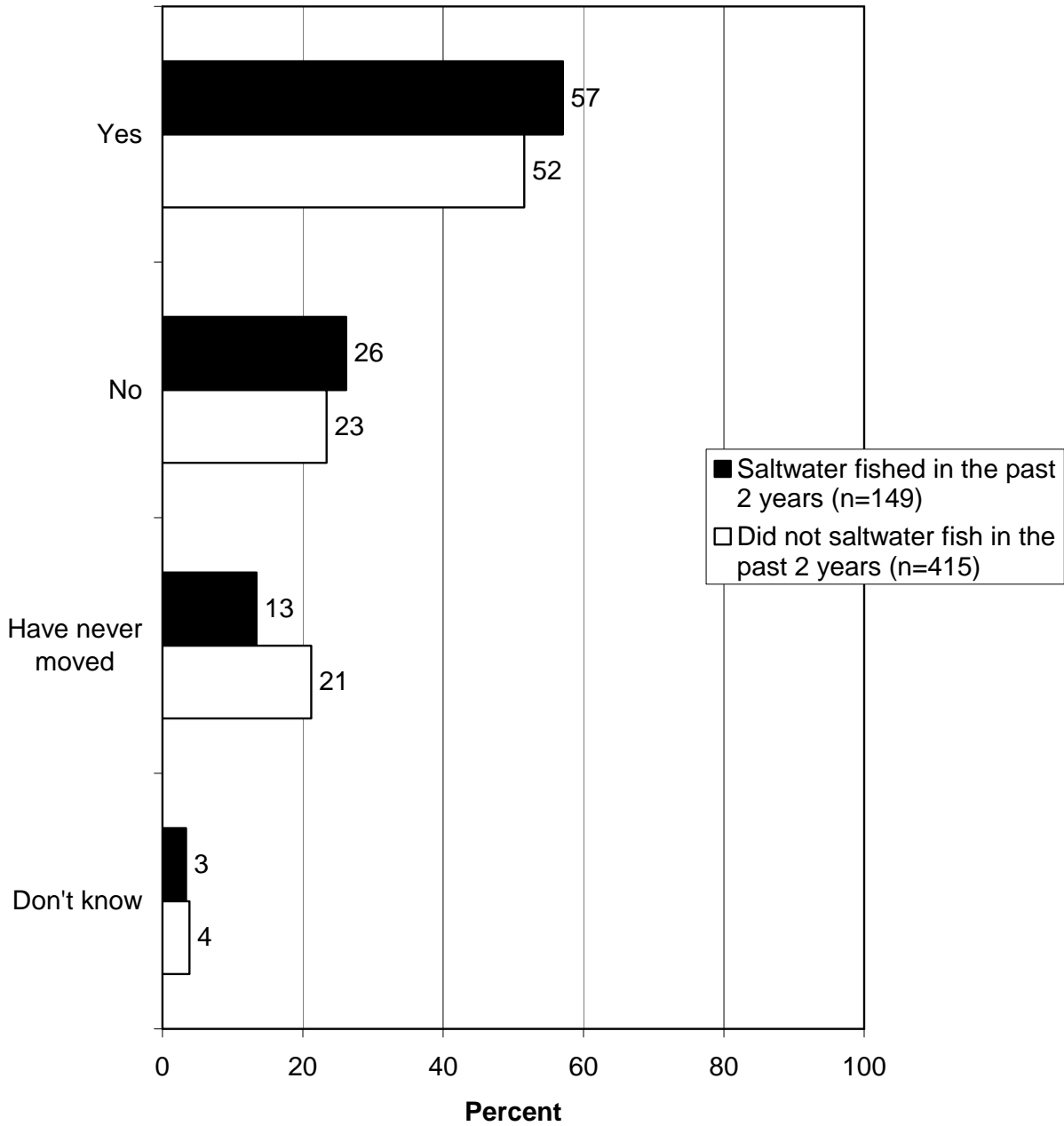
**Q31. Do you currently have a valid South Carolina driver's license or state-issued ID card?
(Senior License holders.)**



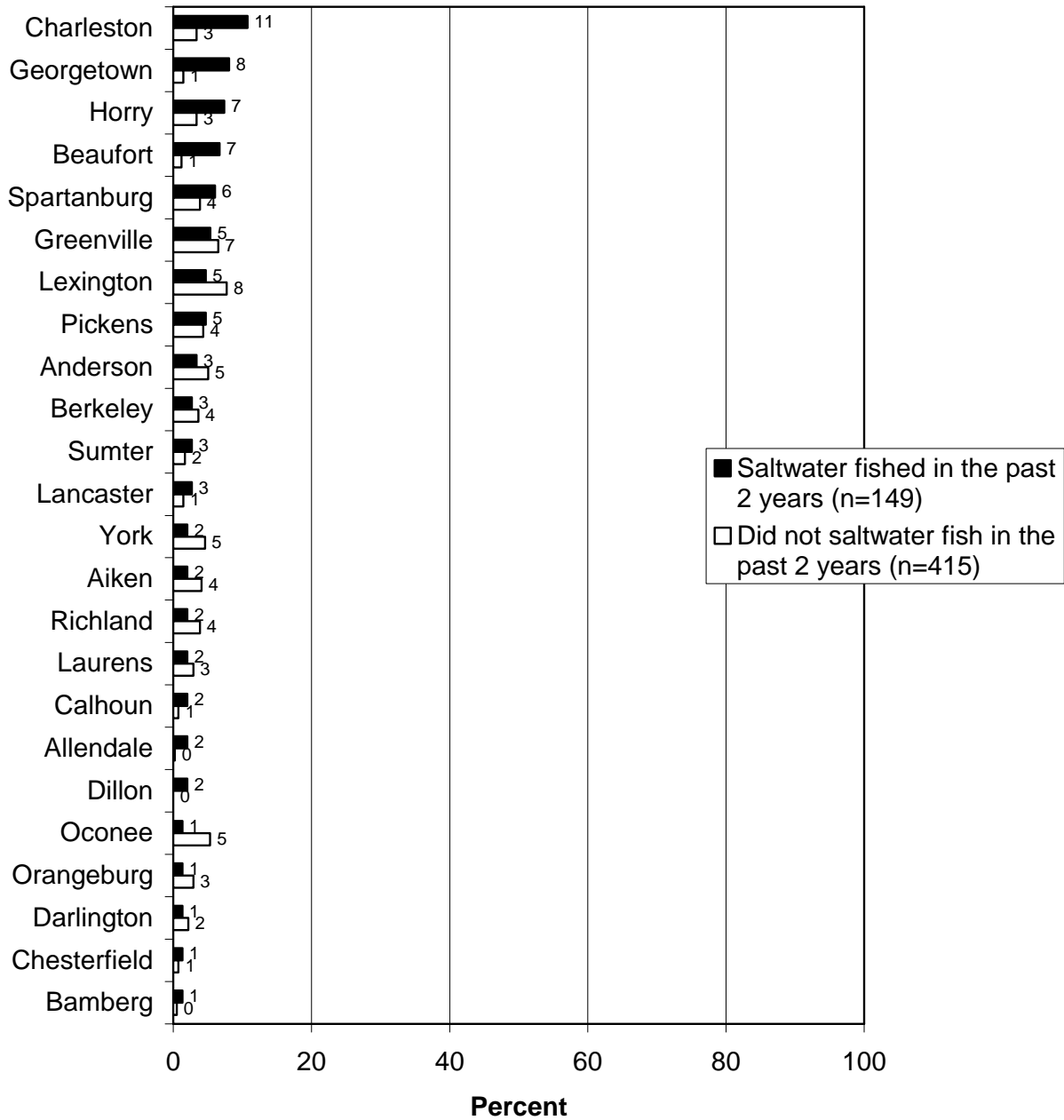
**Q32. Do you currently have a vehicle registered in South Carolina?
(Senior License holders.)**



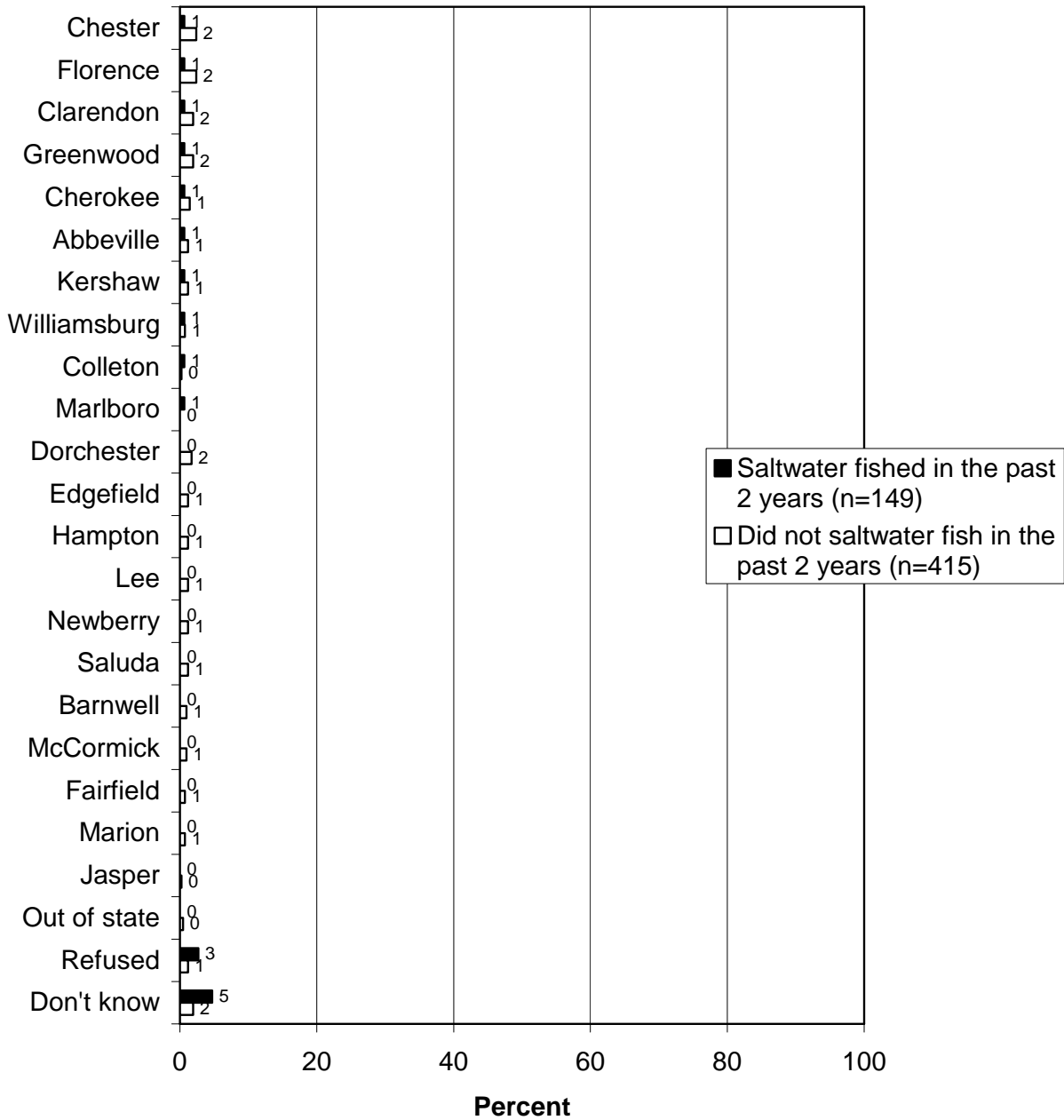
**Q33. When you have moved in the past, have you ever submitted a change of address form to the U.S. Postal Service?
(Senior License holders.)**



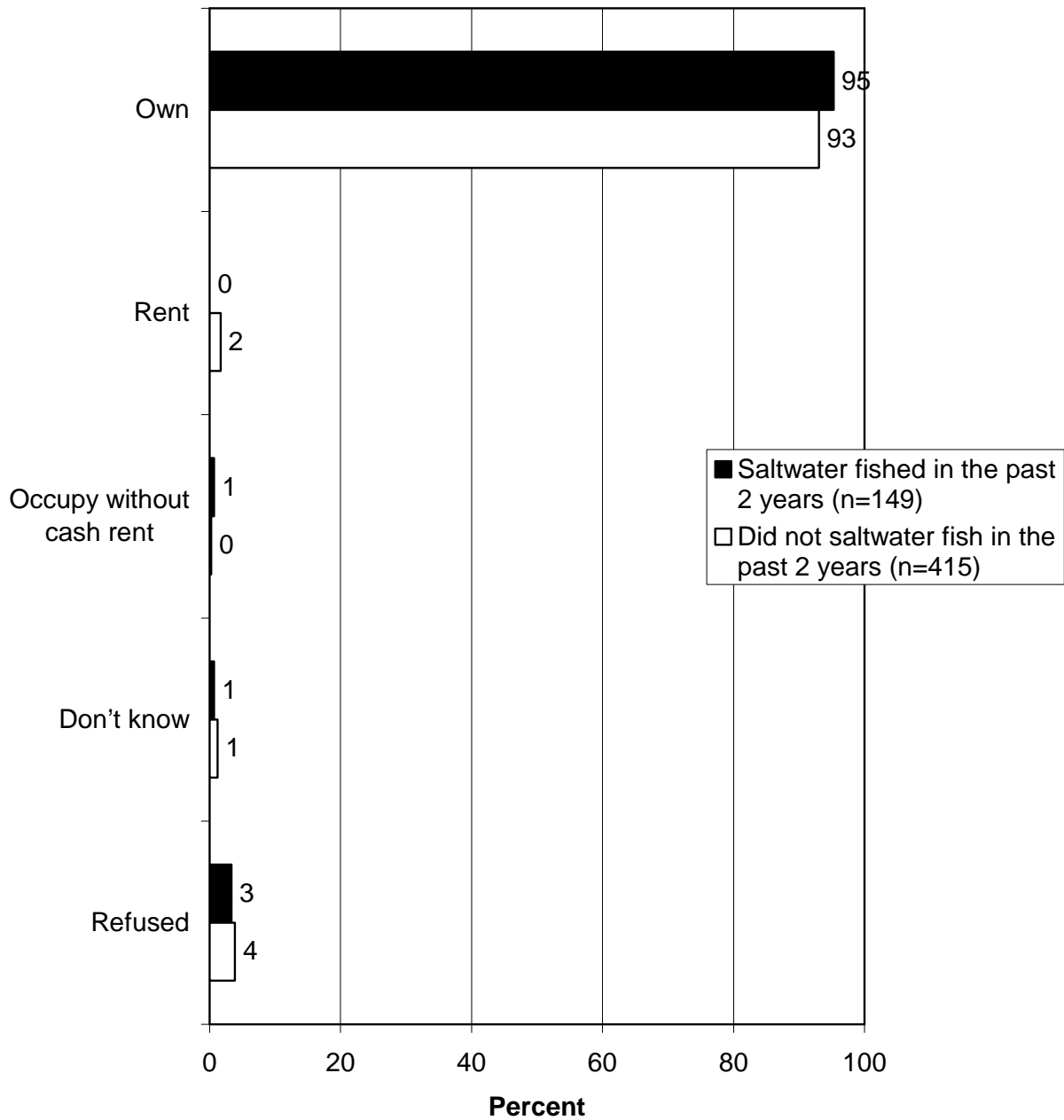
**Q34. What county do you live in?
(Senior License holders.)
(Part 1)**



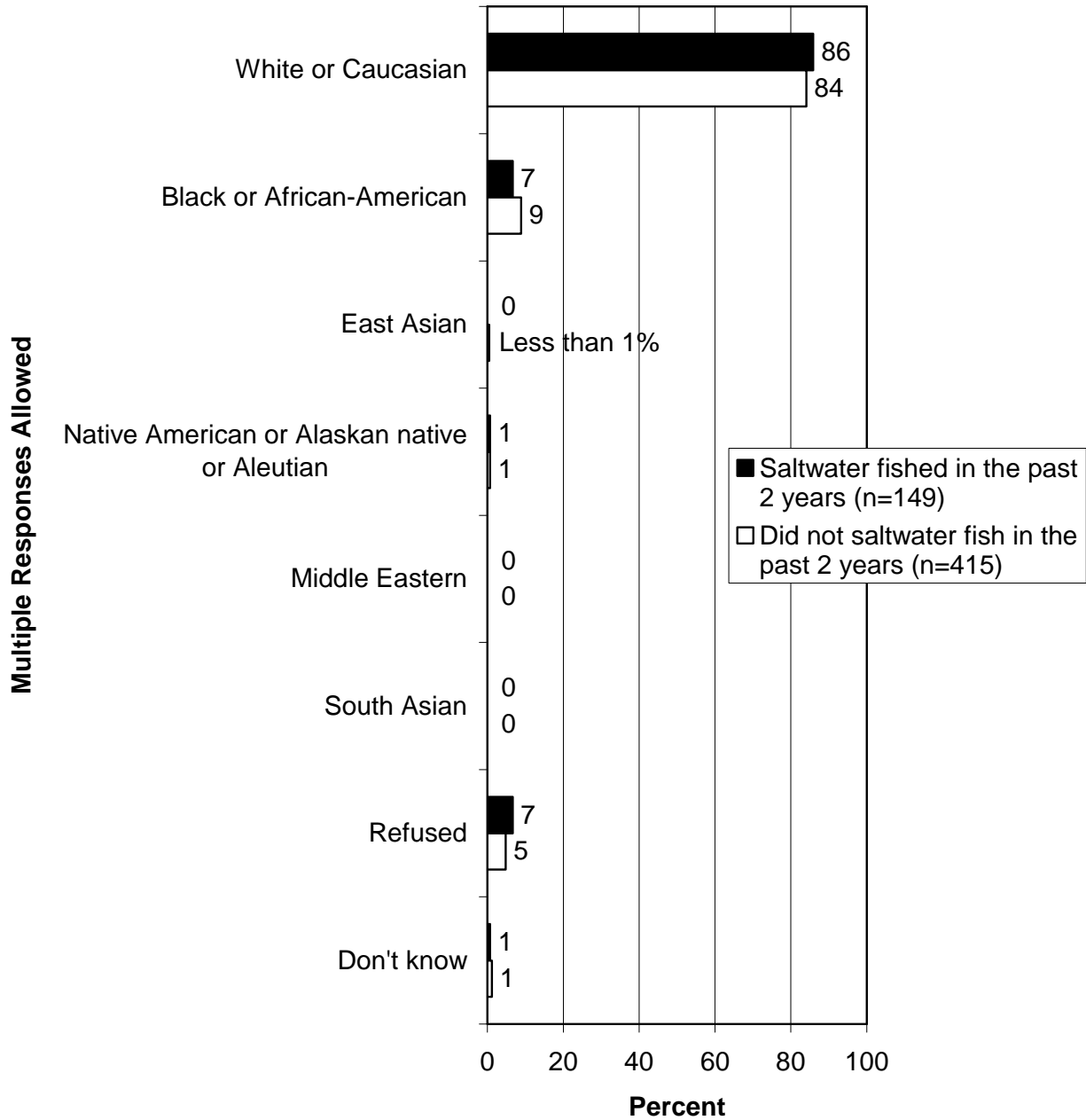
**Q34. What county do you live in?
(Senior License holders.)
(Part 2)**



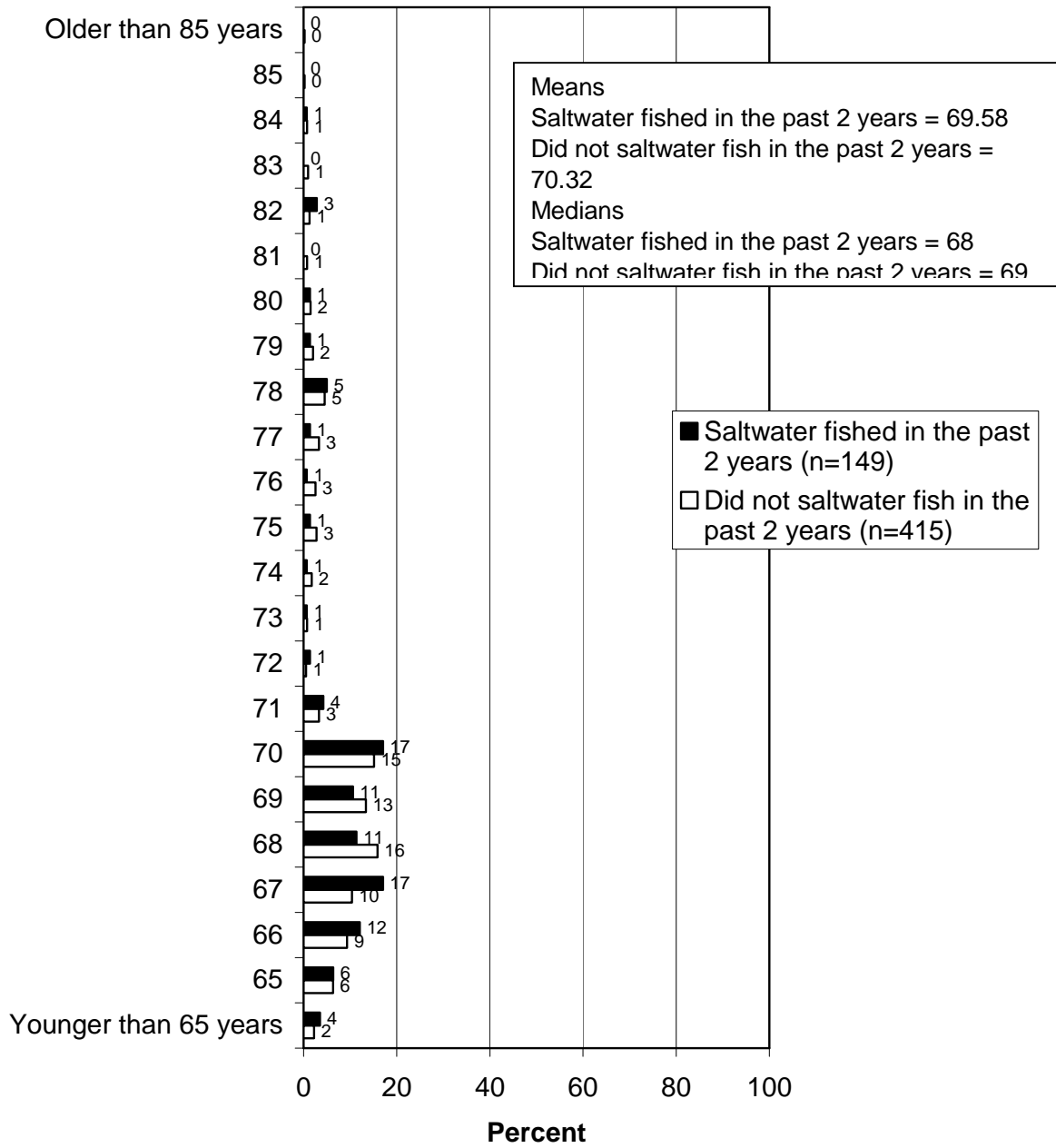
**Q35. Do you own or rent your place of residence?
(Senior License holders.)**



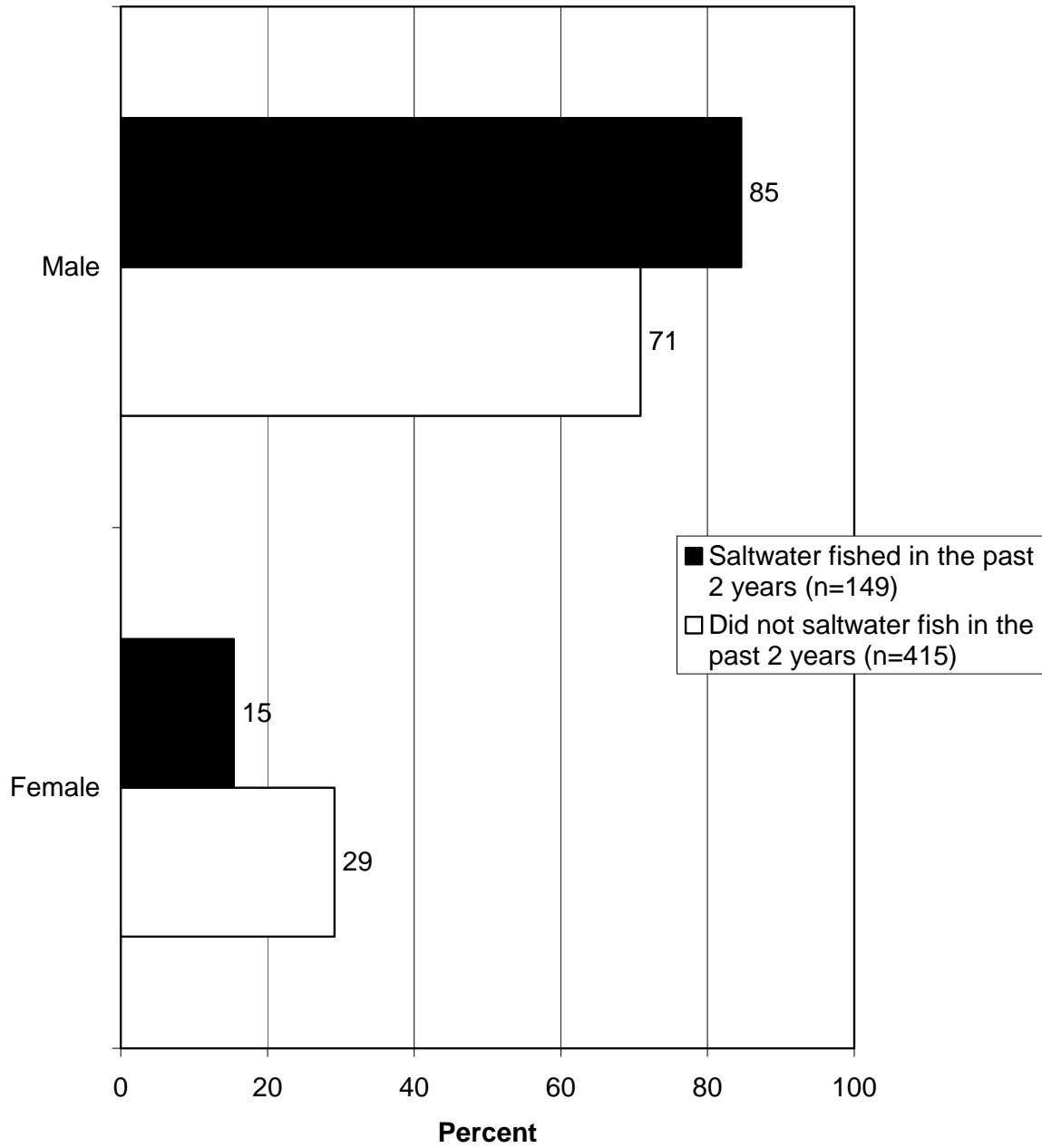
Q41. What races or ethnic backgrounds do you consider yourself? Please mention all that apply. (Senior License holders.)



Q43. Respondent's age. (Senior License holders.)



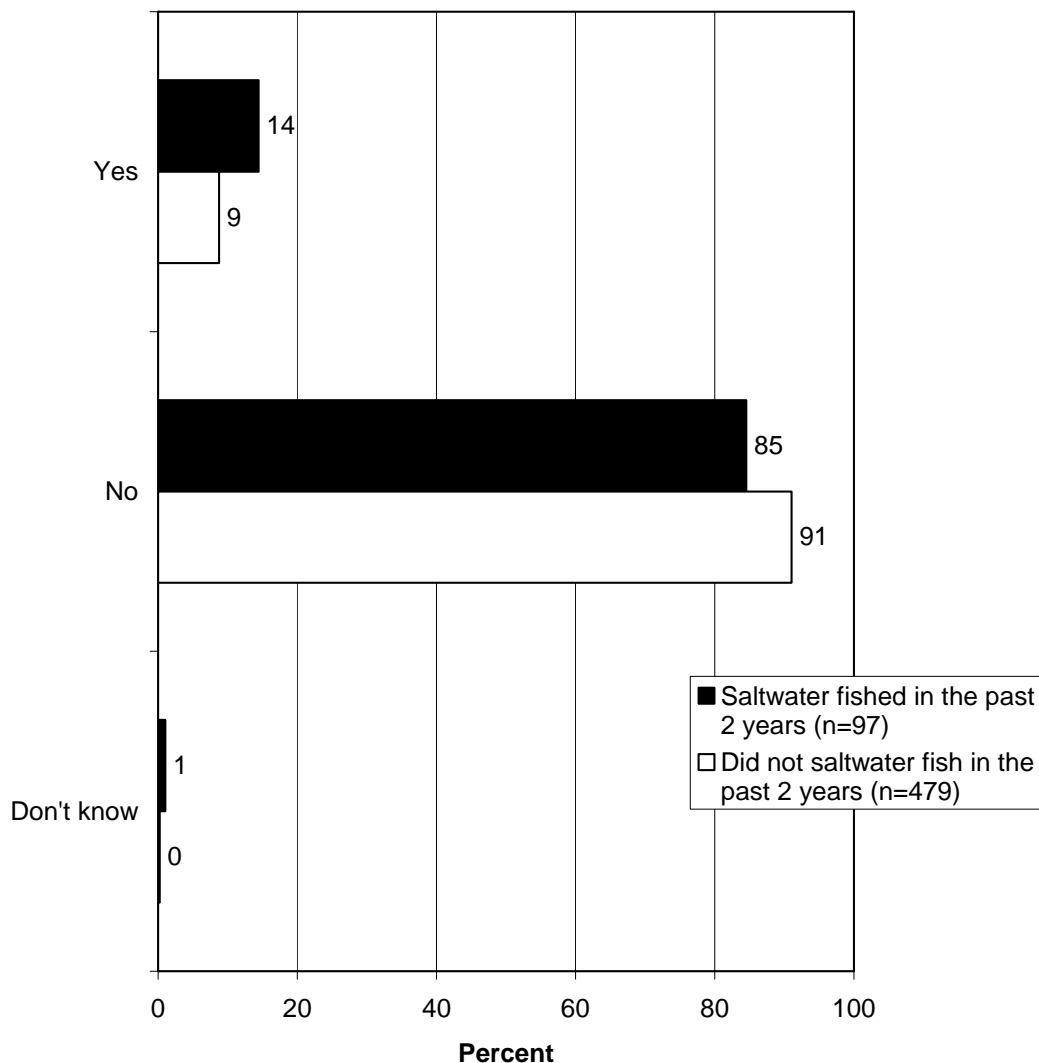
**Q68. Respondent's gender (observed by interviewer; not asked).
(Senior License holders.)**



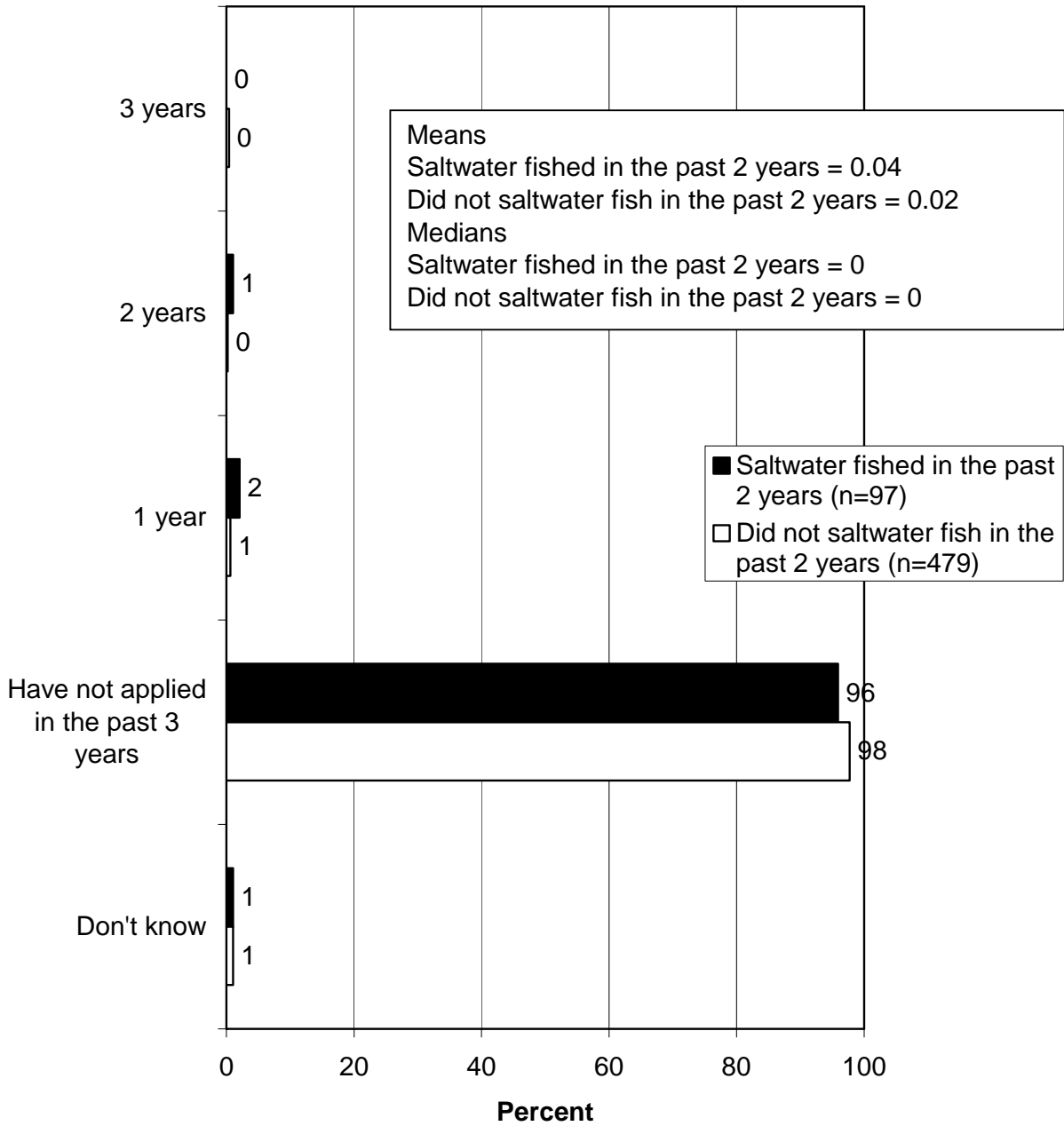
APPENDIX C: GRATIS LICENSE HOLDERS CROSSTABULATED BY SALTWATER FISHING PARTICIPATION

The following graphs show Gratis License holders crosstabulated by saltwater fishing participation. They are presented in survey question order.

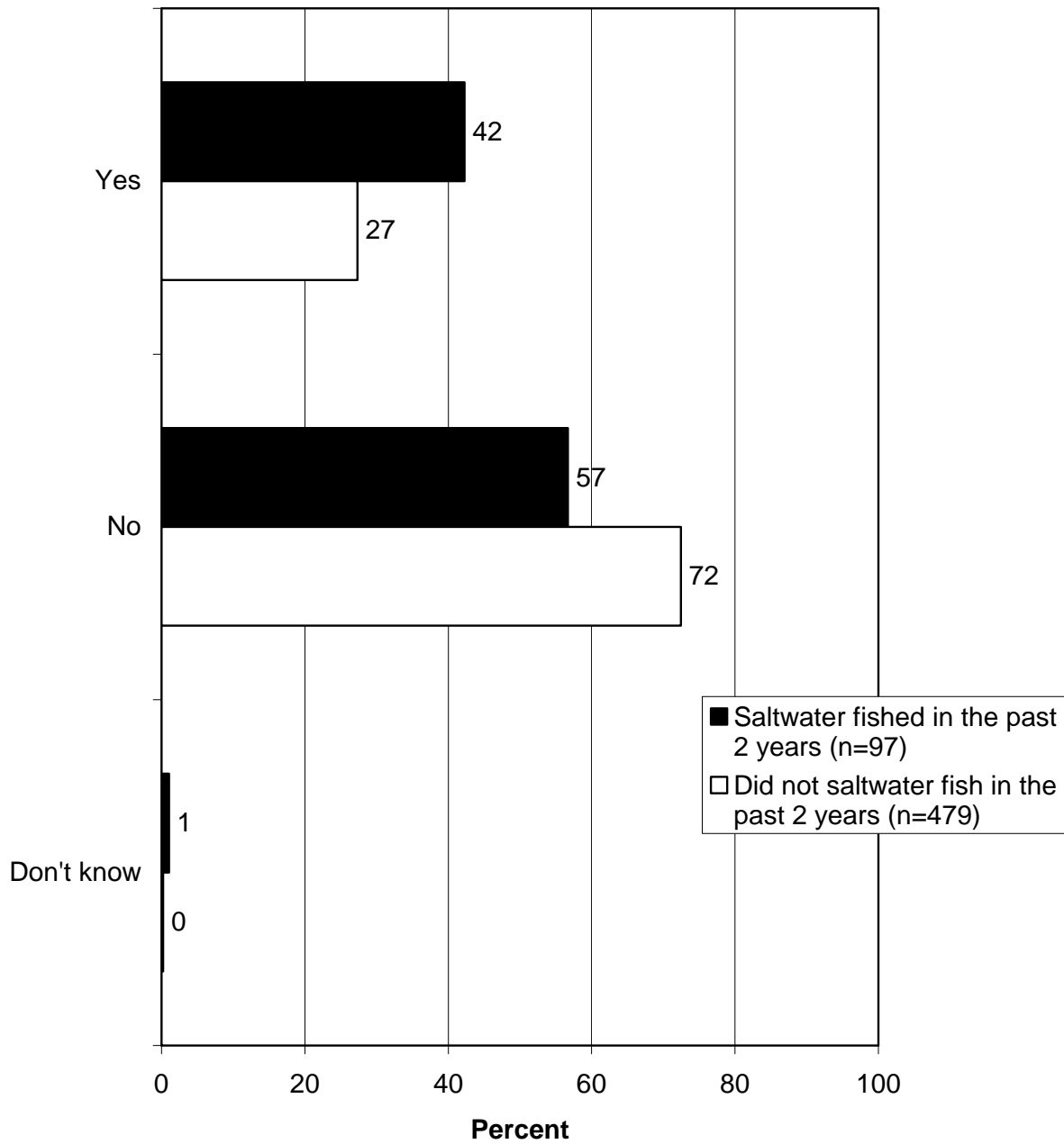
**Q14. In addition to the license I just mentioned, do you typically purchase any other annual fishing or hunting licenses, stamps, tags, or permits in South Carolina?
(Gratis License holders.)**



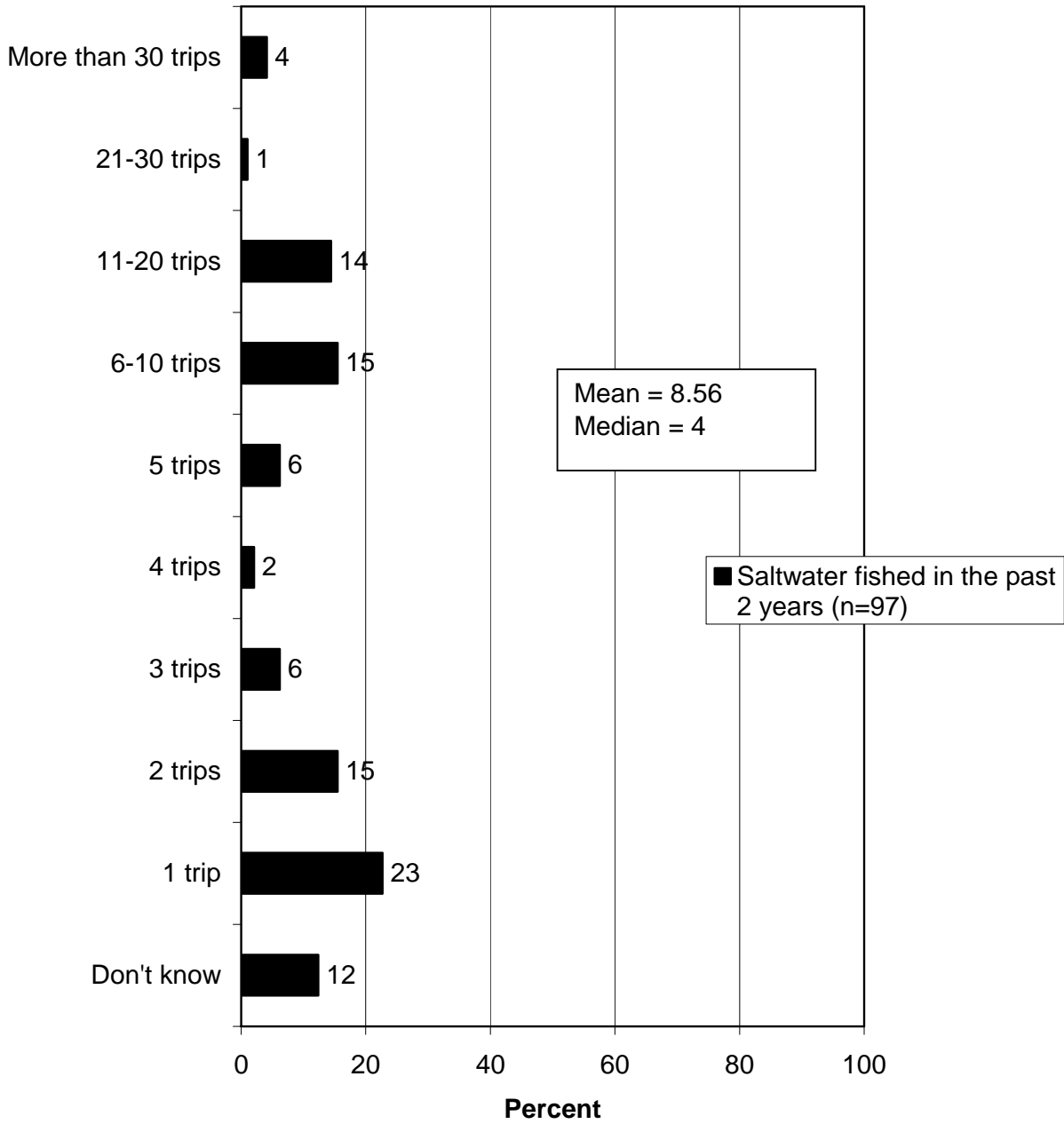
Q15. How many of the past 3 years have you applied to participate in the Department's public draw hunts? (Gratis License holders.)



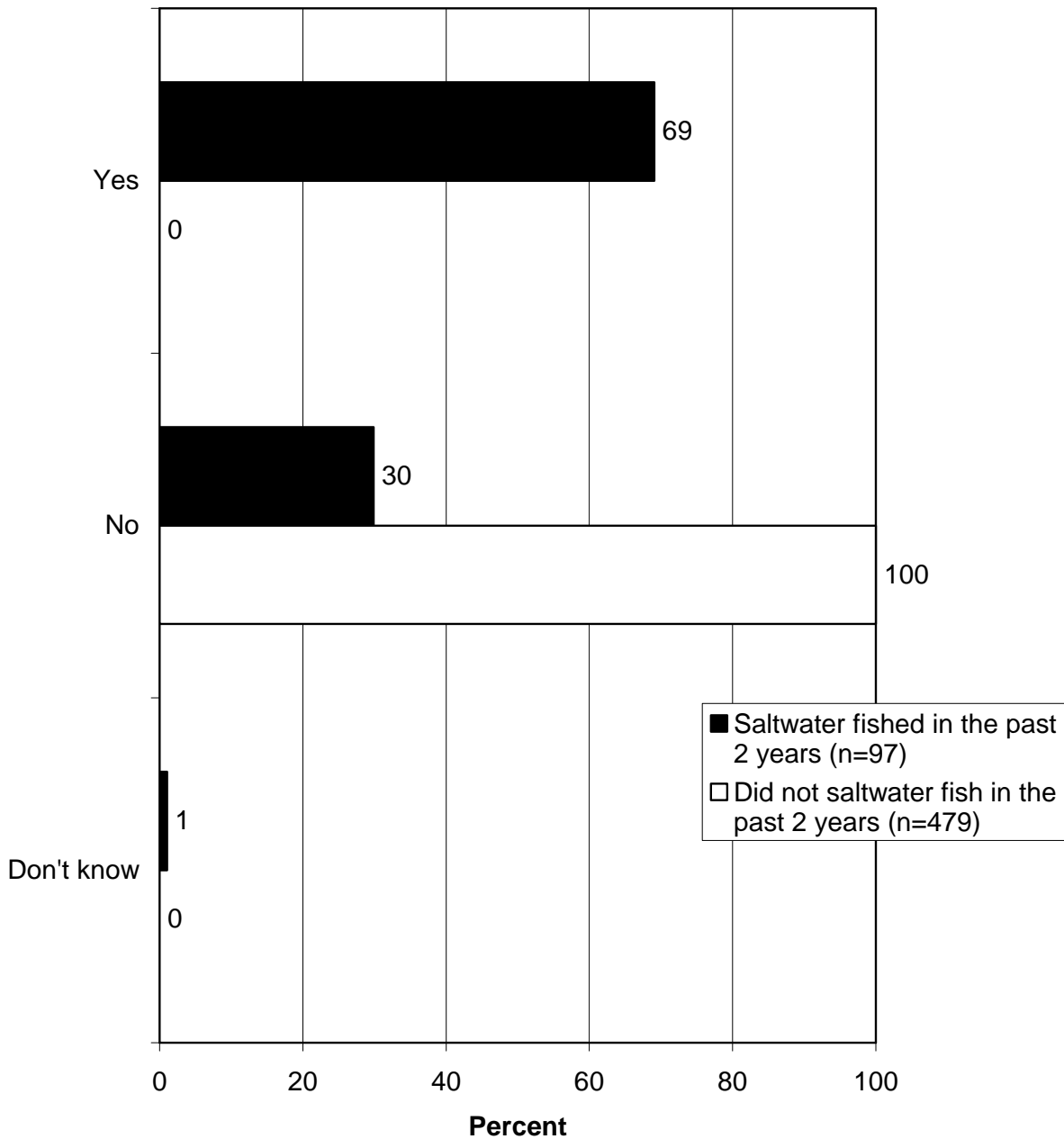
**Q18. Do you own a boat, jet ski, or sailboat that requires registration in South Carolina every 3 years?
(Gratis License holders.)**



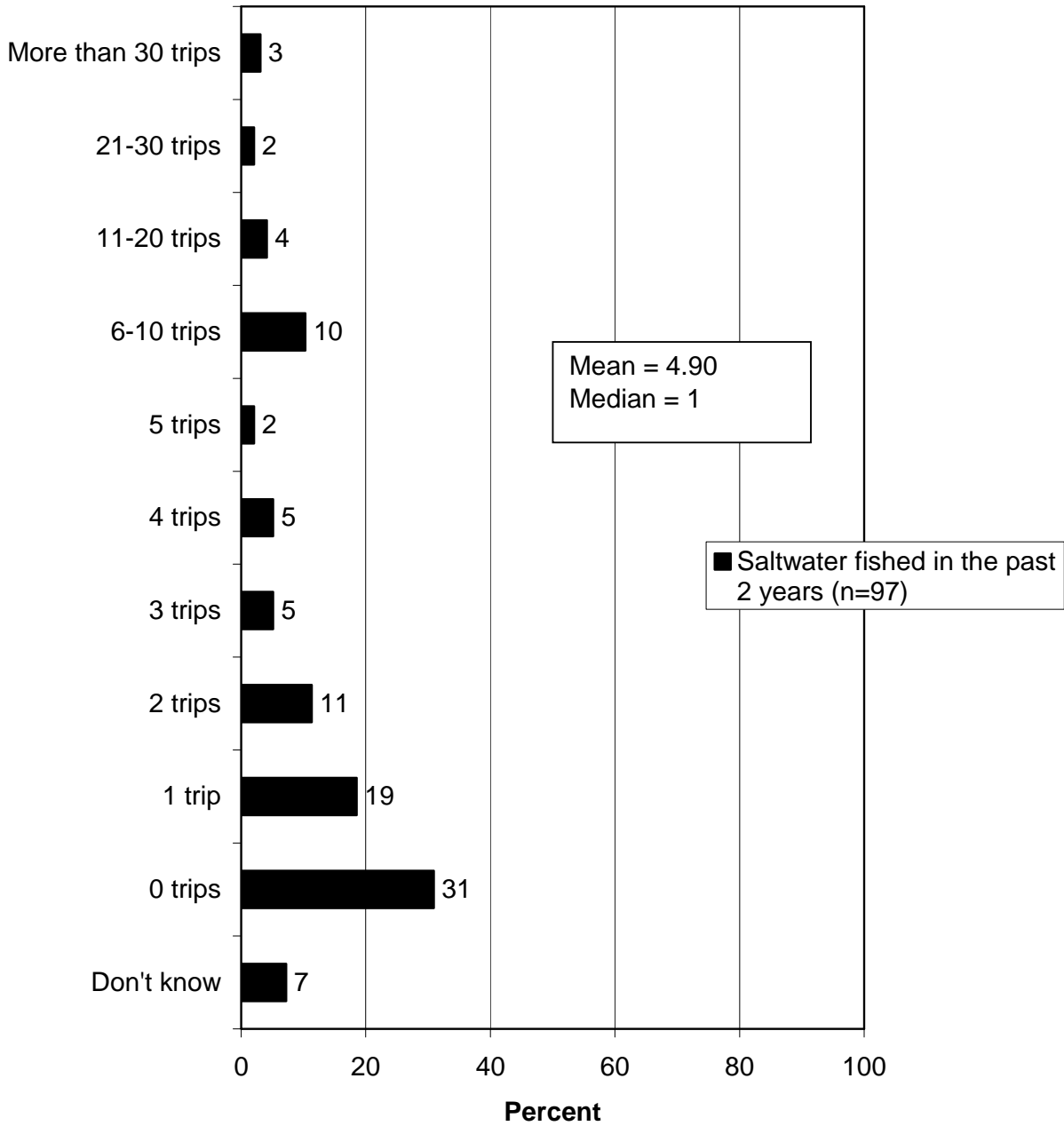
**Q20. In total, about how many saltwater fishing trips did you take in South Carolina in the past 2 years?
(Gratis License holders.)**



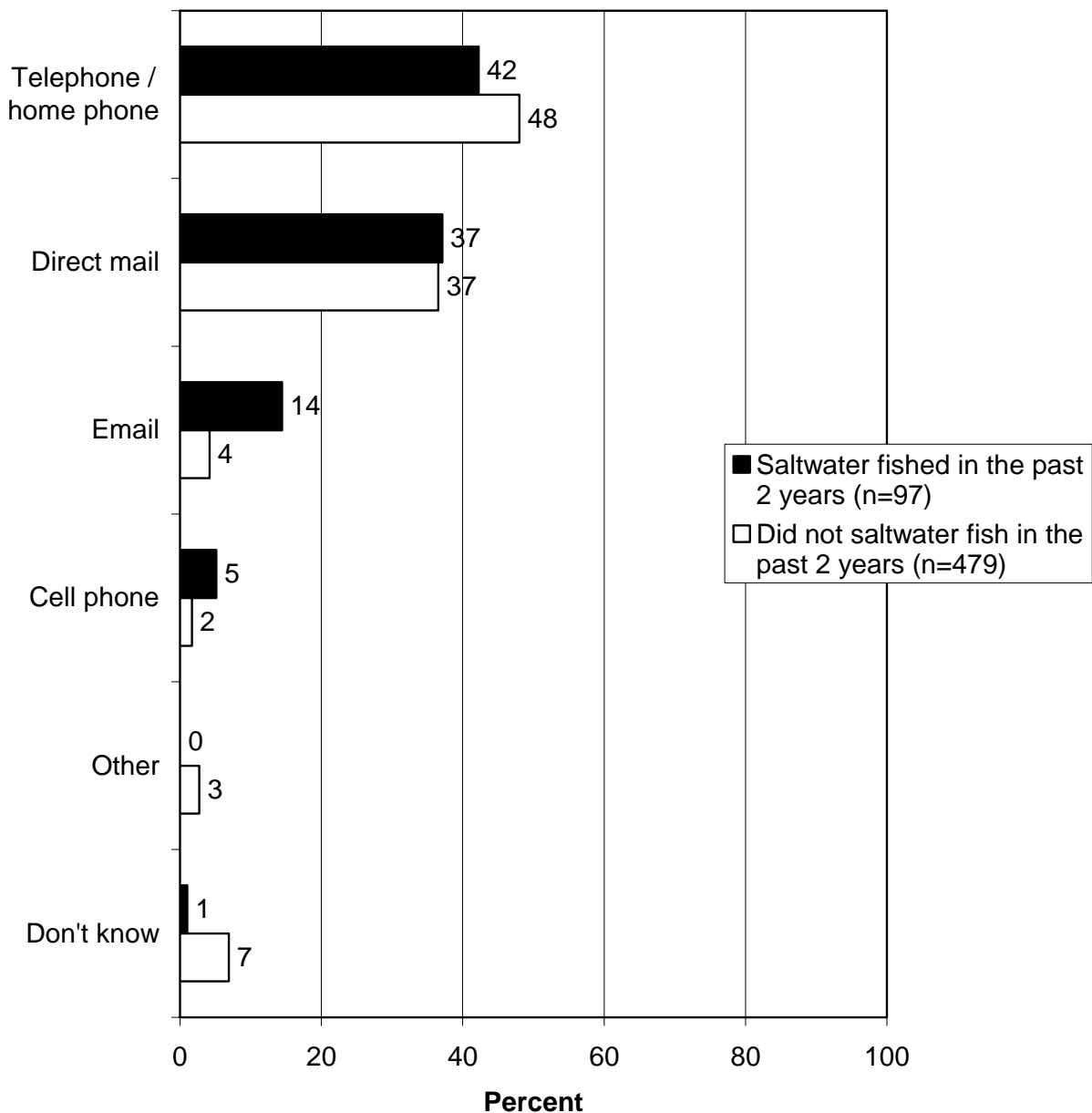
**Q23. Specifically, have you gone saltwater fishing
in South Carolina in the past 12 months?
(Gratis License holders.)**



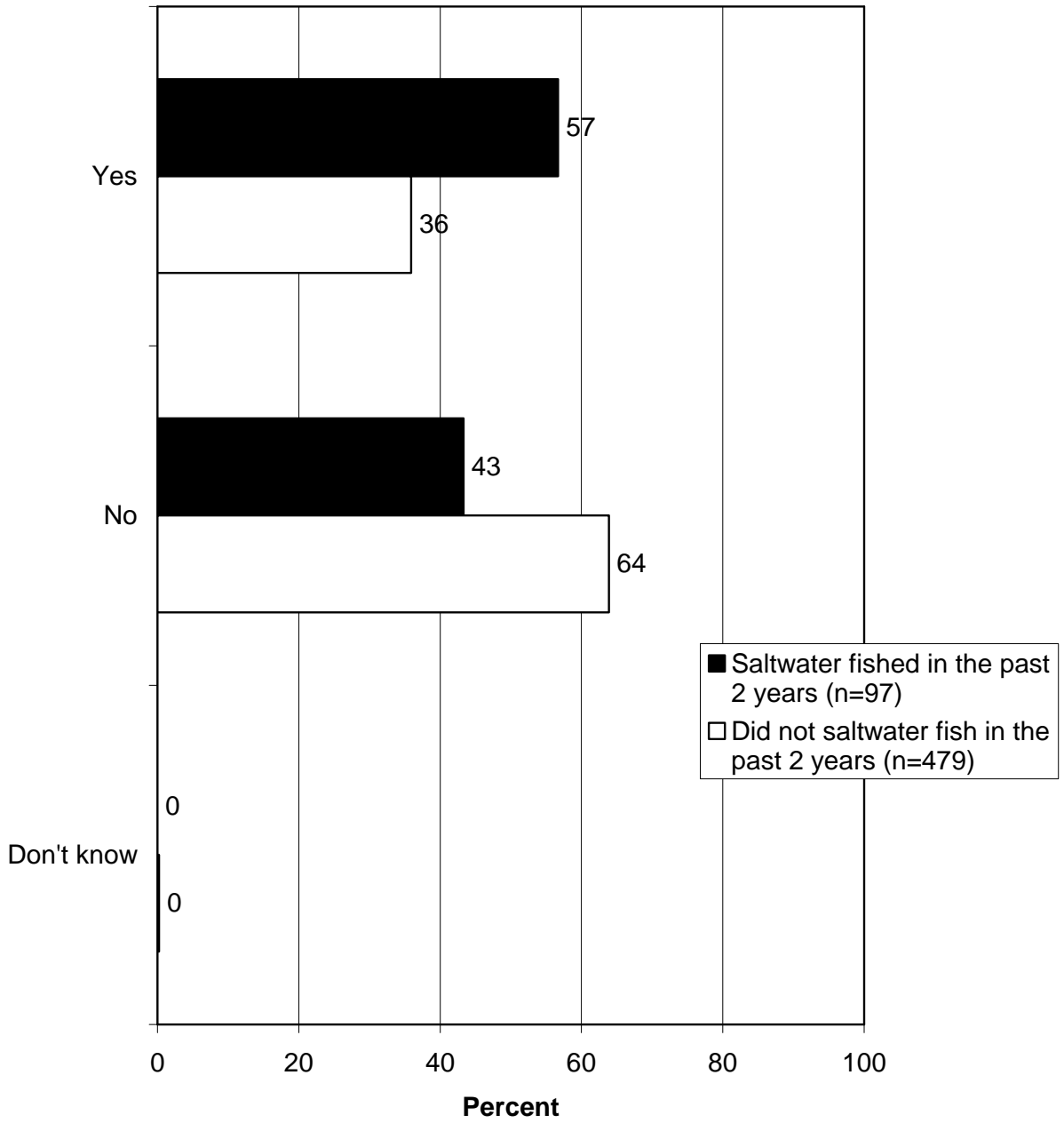
**Q24. In total, about how many saltwater fishing trips did you take in South Carolina in the past 12 months?
(Gratis License holders.)**



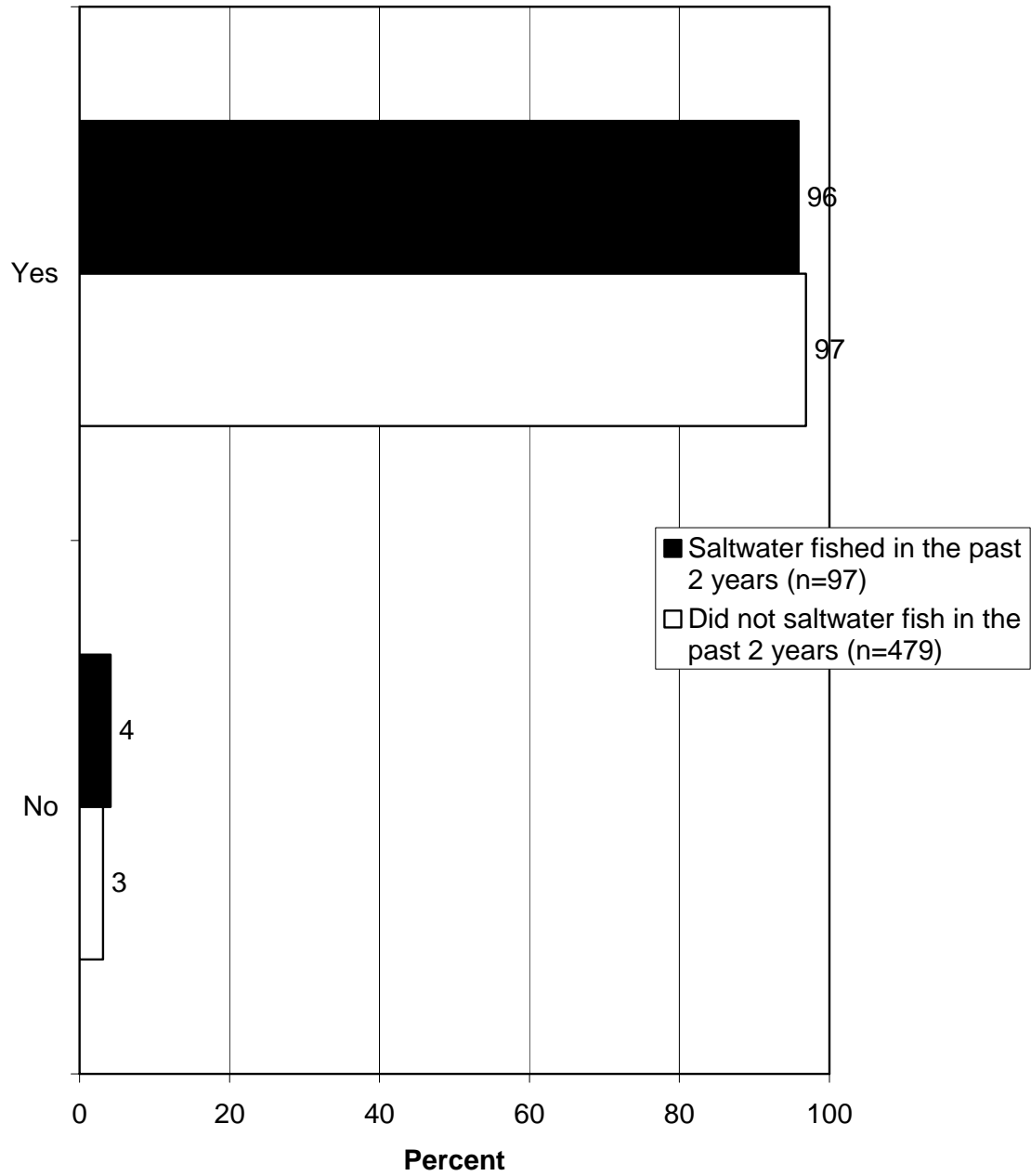
**Q27. What is the best way for the Department to contact you with information about fishing issues?
We are not sending information at this time; we are just identifying preferences.
(Gratis License holders.)**



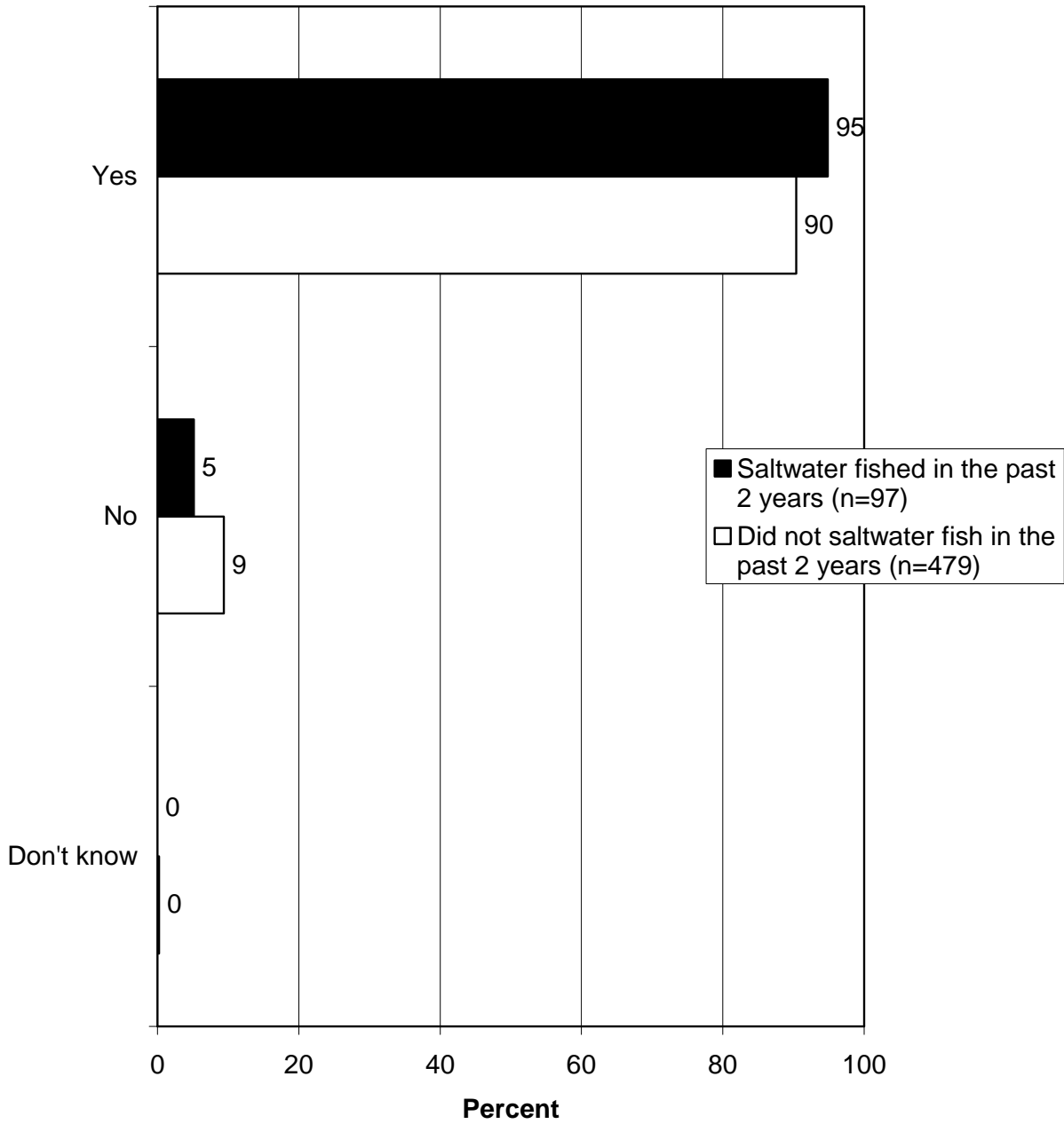
**Q30. Do you have access to the Internet?
(Gratis License holders.)**



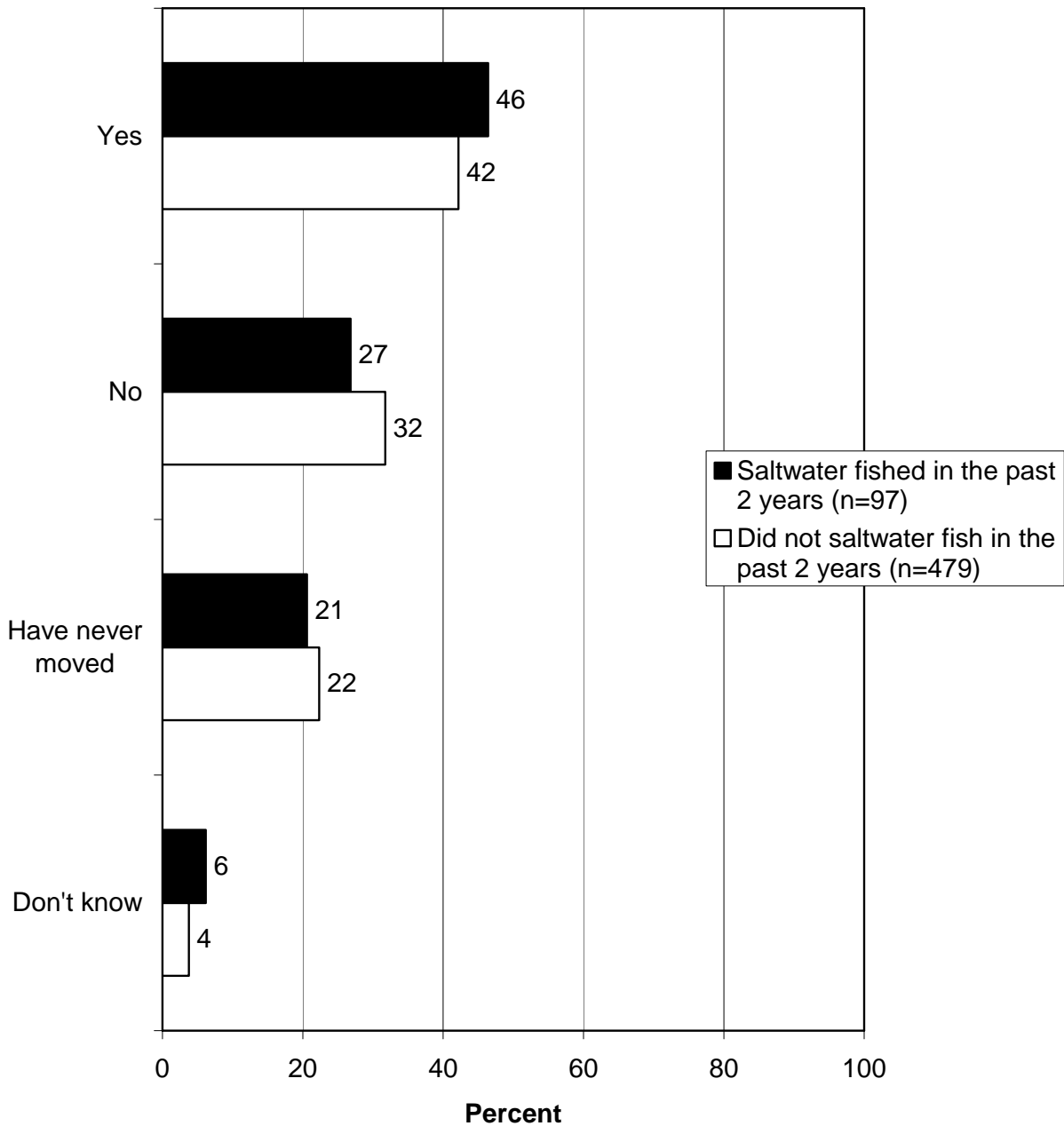
**Q31. Do you currently have a valid South Carolina driver's license or state-issued ID card?
(Gratis License holders.)**



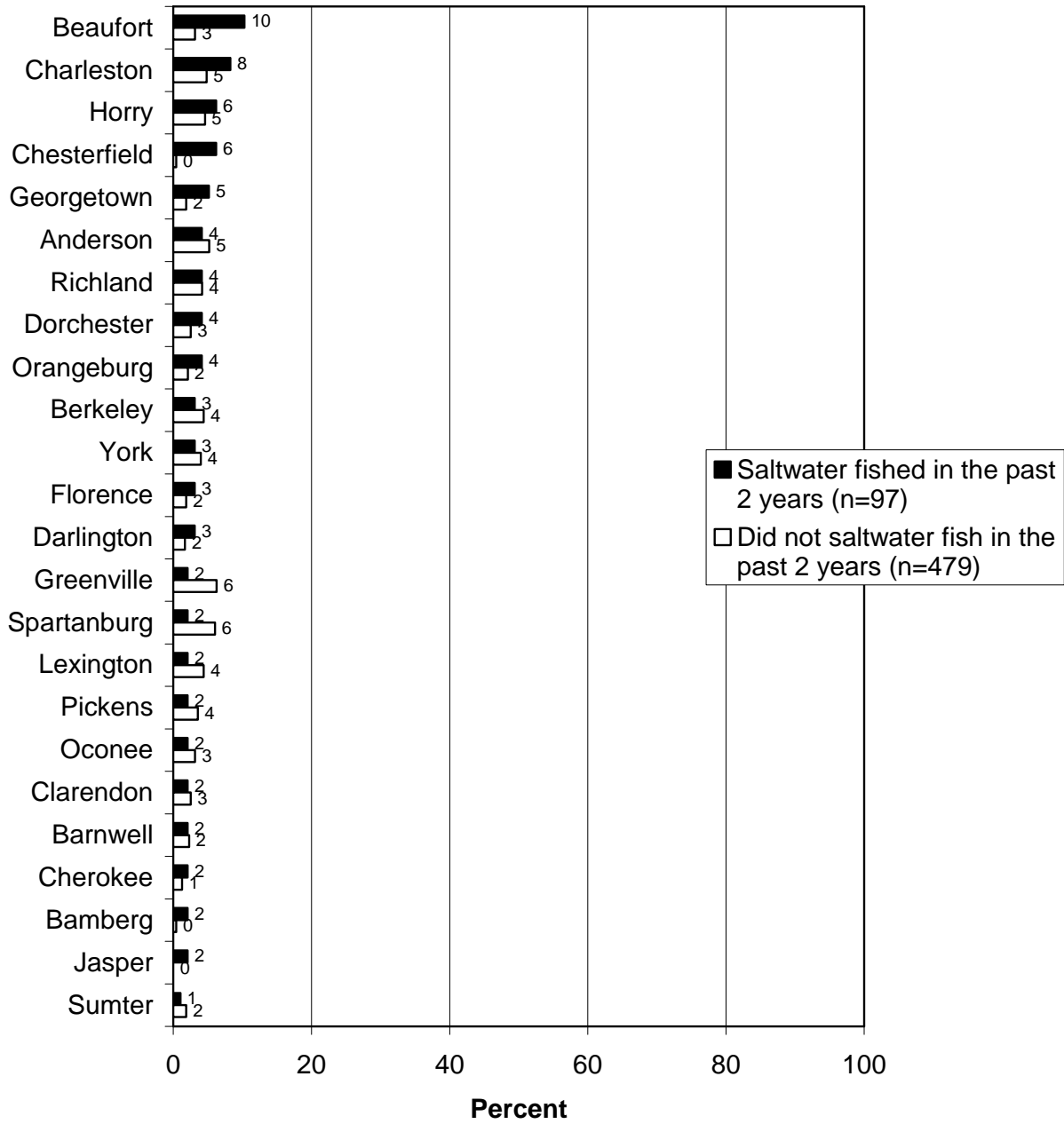
**Q32. Do you currently have a vehicle registered in South Carolina?
(Gratis License holders.)**



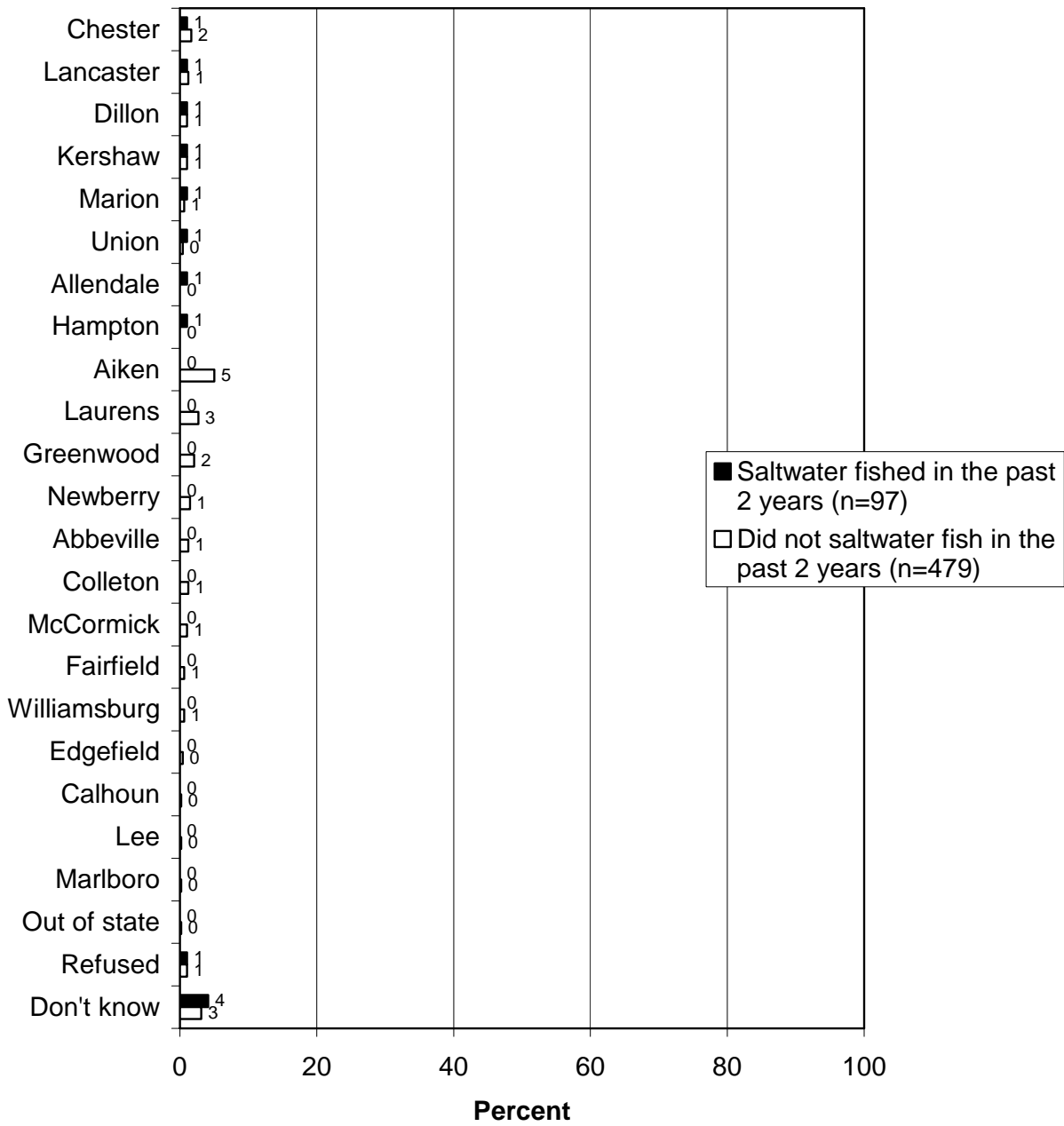
**Q33. When you have moved in the past, have you ever submitted a change of address form to the U.S. Postal Service?
(Gratis License holders.)**



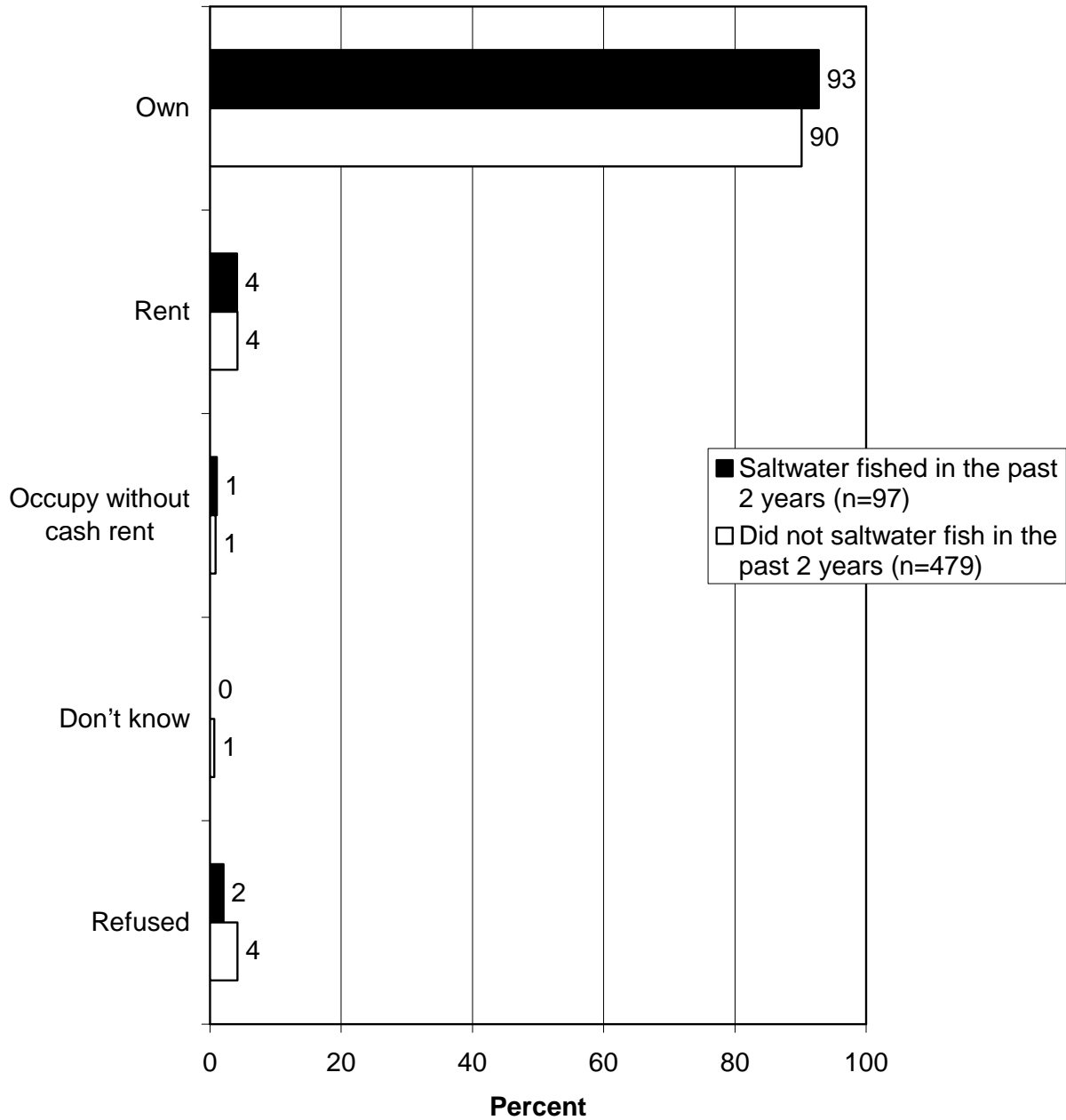
**Q34. What county do you live in?
(Gratis License holders.)
(Part 1)**



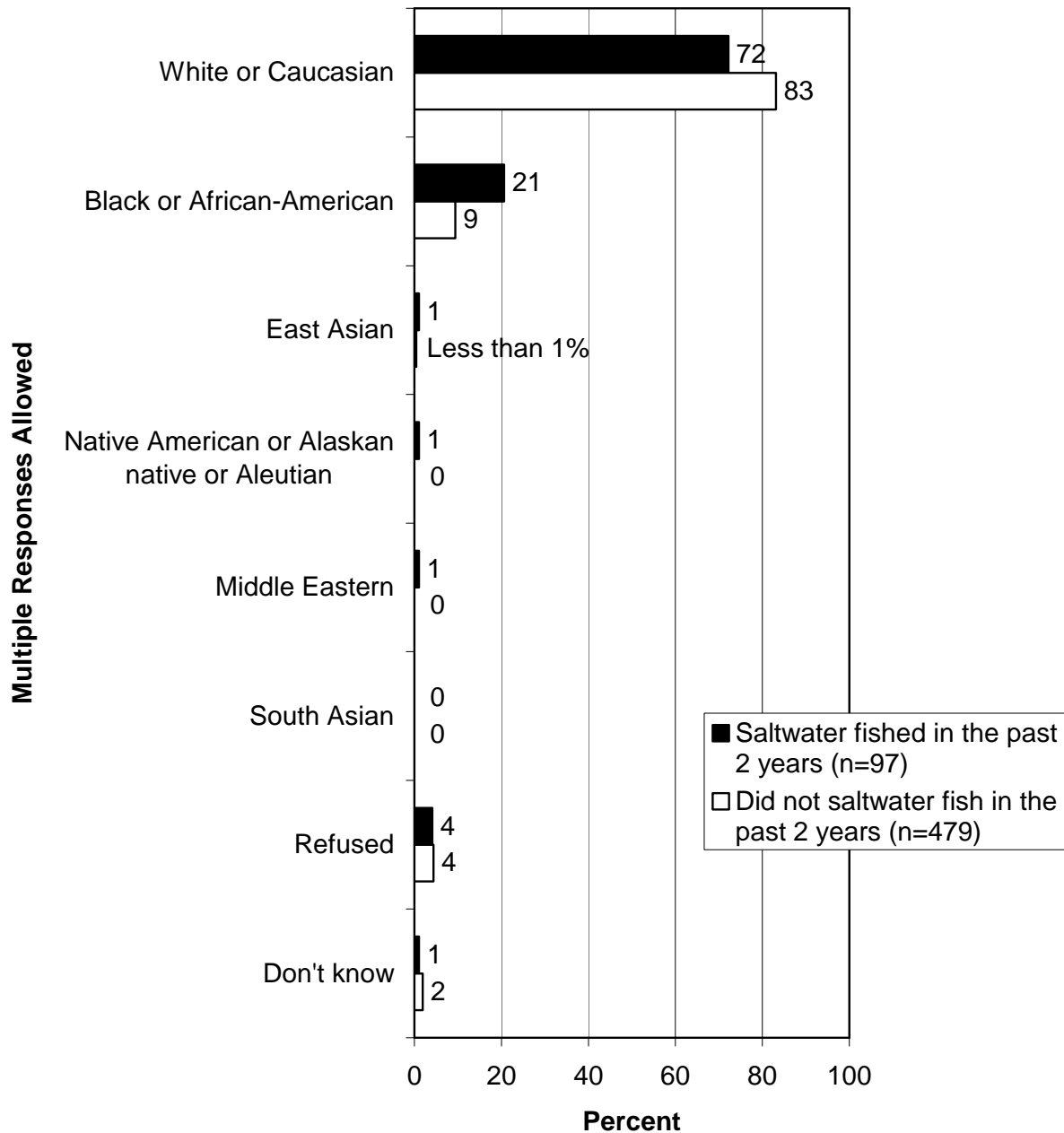
**Q34. What county do you live in?
(Gratis License holders.)
(Part 2)**



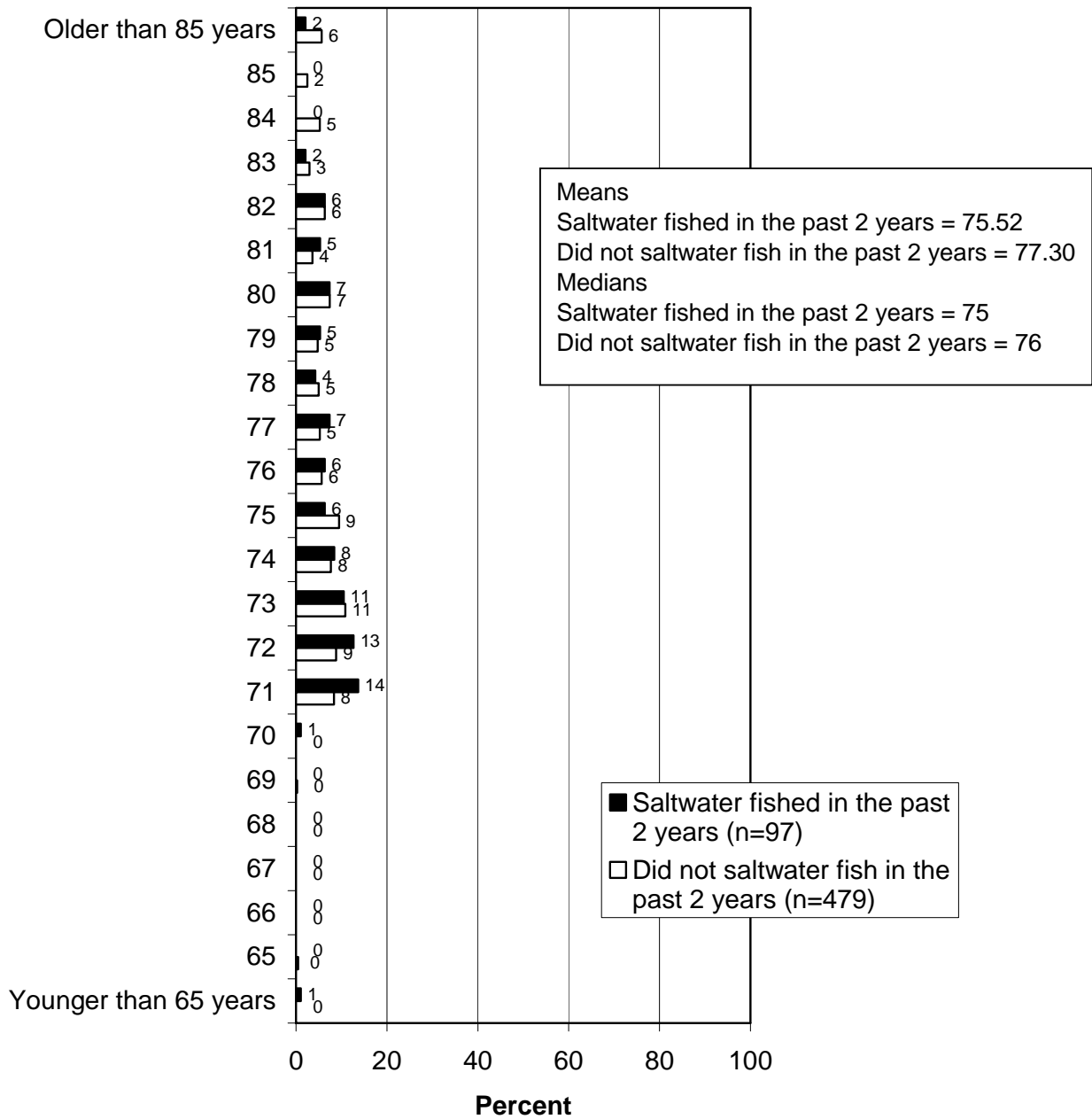
**Q35. Do you own or rent your place of residence?
(Gratis License holders.)**



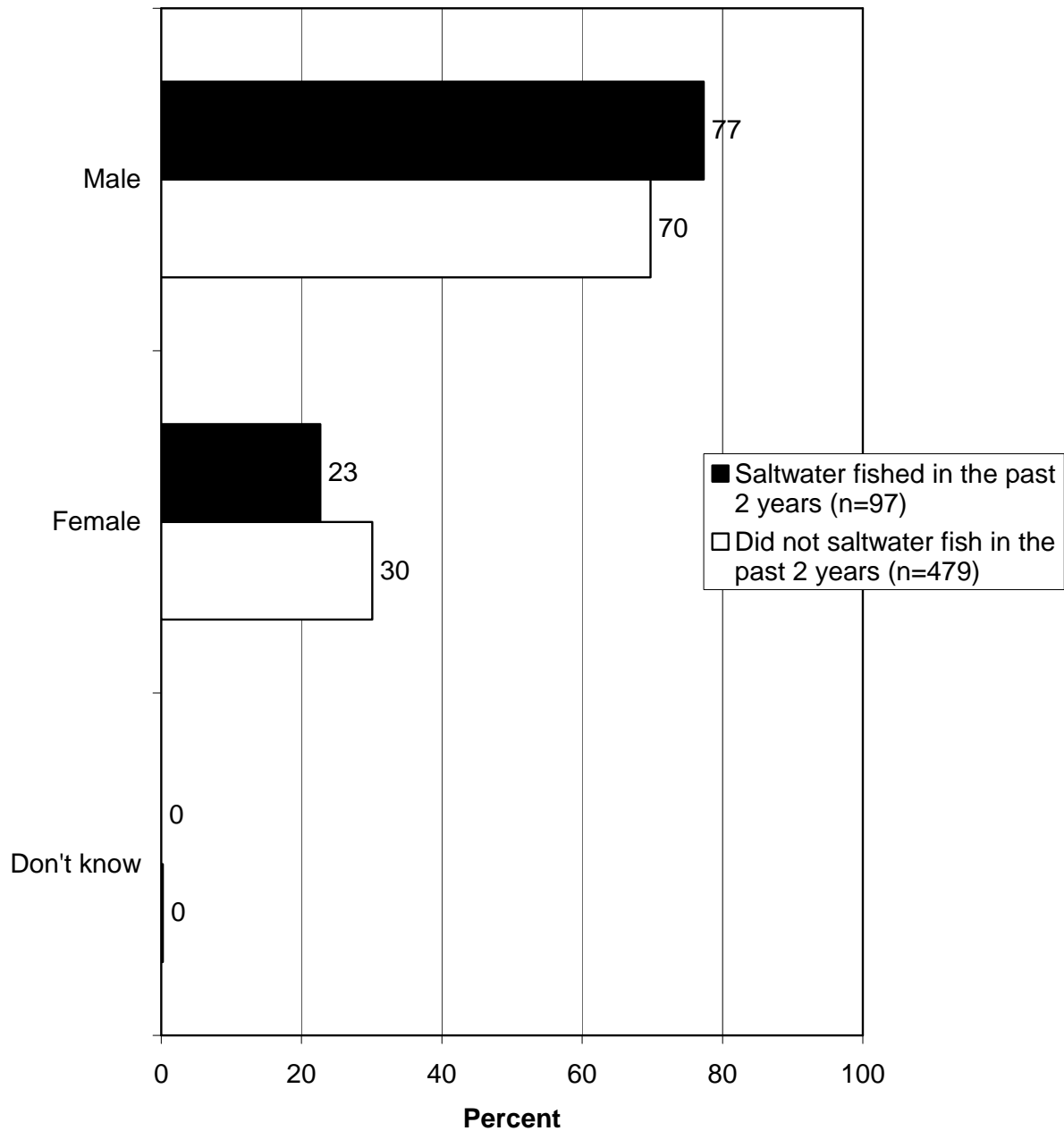
**Q41. What races or ethnic backgrounds do you consider yourself? Please mention all that apply.
(Gratis License holders.)**



Q43. Respondent's age. (Gratis License holders.)



**Q68. Respondent's gender (observed by interviewer; not asked).
(Gratis License holders.)**



ABOUT RESPONSIVE MANAGEMENT

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

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

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

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

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

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management routinely conducts surveys in Spanish and has also conducted surveys and focus groups in Chinese, Korean, Japanese, and Vietnamese.

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

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www.responsivemanagement.com