

Responsive Management™



CHARACTERISTICS, PARTICIPATION, AND AVIDITY OF GEORGIA LIFETIME LICENSE HOLDERS

Conducted for the Georgia Department of Natural Resources

by Responsive Management

2011

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EXECUTIVE SUMMARY

This project had two purposes: one was to obtain opinion, participatory, and demographic data among holders of Georgia Lifetime Hunting and Fishing Licenses, 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 Georgia Department of Natural Resources. The project entailed a telephone number search, number verification, and a telephone survey from a database of people with any one of seven types of Georgia Lifetime Hunting and Fishing Licenses (hereinafter, these licenses will collectively be referred to as “Lifetime Licenses” and those who have them will be referred to as “Lifetime License holders”). The licenses included in the study are:

- Senior (65+) Lifetime Hunting and Fishing License
- Lifetime Senior Card
- Lifetime Youth Hunting and Fishing License
- Lifetime Veteran Hunting and Fishing License
- Lifetime Senior Discount Hunting and Fishing License
- Lifetime Adult Hunting and Fishing License
- Lifetime Nonresident Grandchild Hunting and Fishing License

SAMPLING PROCEDURES AND DATABASE UPDATING

The database as provided to Responsive Management had names of license holders and some telephone numbers; for some license holders, the telephone number was missing. As part of the project, for those names with numbers, a procedure was conducted to verify the number.

Additionally, an attempt was made to find telephone numbers for those license holders without numbers in the database. These verification and telephone number search procedures collectively can be thought of as Phase 1 of the update.

From this updated database produced by Phase 1, the survey sample was drawn. At the completion of the survey, updated information from the survey itself was also added to the database (Phase 2 of the updating). The final updated database was provided to the Department under separate cover.

PURCHASE OF LICENSES

The first area explored in the survey concerned how the respondents acquired their licenses; the survey found that 55% purchased their license, 32% received it as a gift, and 12% received it free from the Department (a total of 44% acquiring it without personally purchasing it).

PARTICIPATION IN FISHING

The next area of the survey looked at participation in fishing (and hunting, but that latter activity will not be of concern in the executive summary). The survey found that in total, 63% of Lifetime License holders freshwater fished in Georgia in the previous 12 months, and 14% saltwater fished, and 34% did not fish (it sums to more than 100% because 11% of respondents both freshwater and saltwater fished. The above data are summarized in the tabulation below:

Freshwater fished only	52%	Any freshwater: 63%	Any saltwater: 14%
Freshwater and saltwater fished	11%		
Saltwater fished only	3%		
Did not fish	34%		

DISSATISFACTIONS WITH FISHING AND CONSTRAINTS TO PARTICIPATION

Just under half of Lifetime License holders (48%) indicate that nothing takes away from their fishing satisfaction or acts as a constraint to participation. Otherwise, the top responses related to lack of time because of work obligations (10%), access problems to fishing areas (8%), weather (7%), not enough large fish (5%), and health/age (4%).

CONTACT METHODS

One question asked respondents to indicate the best way to contact them, reading a list of choices; they were asked to chose only one. The top choice is telephone (44%), followed by direct mail (33%), and email (18%). The predominance of home telephone and direct mail is partly a reflection of the older ages of Lifetime License holders, in general, relative to Georgia's population as a whole.

The survey found that 65% of Lifetime License holders have Internet access. The obverse is that 35% cannot be contacted (at this time) via the Internet.

FUTURE UPDATES

For future ongoing updates of the database, the research suggests that several factors need to be considered.

- Of the mediums for contacting a population the size of the Lifetime License holder database, telephones will provide the best response rate.
- More than a third of Lifetime License holders (35%) did not have access to the Internet and, therefore, cannot use email for updating information.
- Telephone was the most popular medium for contacting Lifetime License holders—they were specifically asked for their preference: 44% chose telephone, 33% chose direct mail, and 18% chose email.
- A substantial proportion (almost a third) of Lifetime License holders indicate receiving the license as a gift.

Considering the data presented in the report and the factors discussed immediately above, it would appear that the best way to conduct future updates is through a multi-modal approach that allows license holders a suite of ways to update their information. While there are multiple mediums to be used for updating information, there is a deliberate order to the ways that attempted contacts are made, based on likely response rates and cost-effectiveness.

The multi-modal approach to update the information begins with email simply because it is a cost-effective way to update information. However, it is likely that no more than a quarter (likely somewhat less) of the database can be updated in this way; nonetheless, this updates a substantial number of records, leaving fewer to be updated using the more expensive ways.

The second medium used to update the information is through the telephone. In the telephone update procedures, an attempt will be made to contact via telephone each of the remaining license holders who were not contacted by email. This telephone contact procedure will use telephone survey software, and the data can be updated during the interview. After this stage, it is anticipated that a majority of the sample will have been contacted for updated information.

For those records still to be updated, the third medium for updating the information is direct mail, using return cards. The return cards will then be entered into the database using data entry personnel using survey software to enter the updated information. This is the most expensive medium; therefore, it is the medium to be used last.

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1. INTRODUCTION AND METHODOLOGY

This project had two purposes: one was to obtain opinion, participatory, and demographic data among holders of Georgia Lifetime Hunting and Fishing Licenses, 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 Georgia Department of Natural Resources. The project entailed a telephone number search, number verification, and a telephone survey from a database of people with any one of seven types of Georgia Lifetime Hunting and Fishing Licenses (hereinafter, these licenses will collectively be referred to as “Lifetime Licenses” and those who have them will be referred to as “Lifetime License holders”). The licenses included in the study are:

- Senior (65+) Lifetime Hunting and Fishing License
- Lifetime Senior Card
- Lifetime Youth Hunting and Fishing License
- Lifetime Veteran Hunting and Fishing License
- Lifetime Senior Discount Hunting and Fishing License
- Lifetime Adult Hunting and Fishing License
- Lifetime Nonresident Grandchild Hunting and Fishing License*

*There were well less than 50 such licenses in the entire license database from which the sample was pulled. These licenses were not specifically excluded; however, none of them were randomly selected, so none of these types of licenses are included in the final data.

Demographic information was also verified and/or updated during the survey as part of the project. Specific aspects of the project/research methodology are discussed below.

USE OF TELEPHONES FOR THE SURVEY AND THE UPDATING OF DATA

Both of the purposes of this dual project could be satisfied through the use of a telephone surveying system. The updated data provided by respondents was collected using the survey software and a survey questionnaire; the updated data was then transferred to the Department’s database. For the overall 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.

SAMPLING PROCEDURES AND DATABASE UPDATING

The Department provided the Lifetime License holders database, which had been filtered to retain only those license holders between the ages of 16-77. Anglers younger than 16 are not required to be licensed to fish in Georgia; license holders older than 77 are no longer included by the Department toward certification of licensed anglers based on actuarial data. After applying the age filter, the database contained 81,353 records.

The database as provided to Responsive Management had names of license holders and some telephone numbers; for some license holders, the telephone number was missing. As part of the project, for those names with numbers, a procedure was conducted to verify the number. These numbers that were in the original database included both landlines and cell phones.

Additionally, an attempt was made to find telephone numbers for those license holders without numbers in the database. While this procedure most commonly finds a landline (if a number can be found to match the name), the procedure occasionally finds a cell phone number. These verification and telephone number search procedures collectively can be thought of as Phase 1 of the update.

From the database of names and numbers that resulted from the Phase 1 database update, a random sample of 14,999 records were selected for the survey itself. Not all of the 14,999 numbers were tried before the survey had produced the required number of completed interviews. For the survey, 4,333 numbers were contacted to obtain a total of 1,877 completed interviews. Details of the calling effort are shown in Table 1.1. The response rate is 52.1%, based on the values in Table 1.1 and the following formula:

$$\text{Response Rate} = \text{Completed Interviews} / (\text{Determined Eligible} + \text{Indeterminate})$$

Table 1.1. Calling Effort

Verification Status	Number	Calling Effort Result	Number
Determined Eligible	1,932	Completed Interviews	1,877
		Terminated	55
Indeterminate	1,674	Refusal	190
		No Answer / Always Busy (up to 5 calls)	758
		Answering Machine	726
Determined Ineligible	727	Non-Working / Disconnected	354
		Business / Institution	41
		Deaf / Language	21
		No Eligible Respondent	311
Total	4,333		4,333

The numbers of each type of license for which completed interviews were obtained in the random sampling of the database are shown in Table 1.2.

Table 1.2. Number of Completed Interviews of Each License Type

	Number	Percent
Senior (65+) Lifetime Hunting and Fishing License	1,455	77.5
Lifetime Senior Card	163	8.7
Lifetime Senior Discount Hunting and Fishing License	132	7.0
Lifetime Adult Hunting and Fishing License	79	4.2
Lifetime Youth Hunting and Fishing License	47	2.5
Lifetime Veteran Hunting and Fishing License	1	0.1
Lifetime Nonresident Grandchild Hunting and Fishing License	0	0.0
TOTAL	1,877	100

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.

TELEPHONE INTERVIEWING AND DATA COLLECTION 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. When a potential respondent could not be reached on the first call, he or she was called back for a total of up to five attempts. These callbacks were made on different days of the week and at different times of the day.

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. As stated previously, Responsive Management obtained a total of 1,877 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. After the survey, a crosstabulation of the data was run by two groups of license types associated with the respondent in the database: Seniors (had either a Senior (65+) Lifetime Hunting and Fishing License or Lifetime Senior Card) and Other Lifetime License holders (had one of the following four license types: Lifetime Youth Hunting and Fishing License, Lifetime Veteran Hunting and Fishing License, Lifetime Senior Discount Hunting and Fishing License, or Lifetime Adult Hunting and

Fishing License). The sample sizes and percentage of the sample made up of each license type was previously shown in Table 1.2.

A second crosstabulation was run of those two license groups, but only among those who had saltwater fished in Georgia in the previous 12 months (hereinafter referred to as “saltwater anglers” in the text).

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

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval (or higher). For the entire sample of holders of a Georgia Lifetime Fishing and Hunting License, the sampling error is at most plus or minus 2.24 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within plus or minus 2.24 percentage points of each other. Sampling error was calculated using the formula described in Figure 1.1, with a sample size of 1,877 and a population size of 81,353 Georgia Lifetime Fishing and Hunting License holders.

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

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

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

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

Figure 1.1. Sampling Error Equation

2. PURCHASE OF LICENSES

Two questions were asked that pertained to the purchasing of licenses. The first question determined if respondents' Georgia Lifetime Fishing and Hunting License was purchased, acquired as a gift, or received from the Department for free: 55% of Lifetime License holders overall purchased their License, while 44% acquired it as a gift or received it free from the Department (Figure 2.1).

Q13. Did you personally buy your Georgia Lifetime Fishing and Hunting license, or did you receive it as a gift?

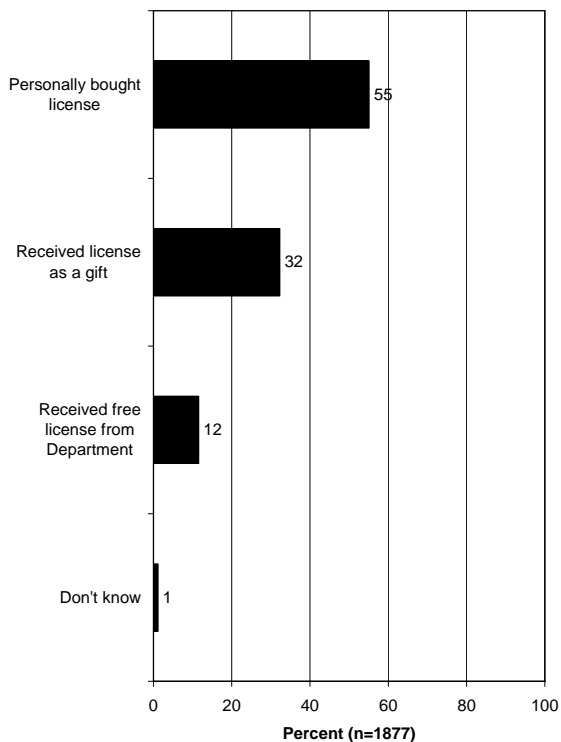


Figure 2.1. Acquisition of Georgia Lifetime Licenses

The crosstabulation by license type found that Other Lifetime License holders (78% purchased) are more likely than Seniors (51% purchased) to have purchased their license (Figure 2.2).

Seniors, on the other hand, are more likely than are Other Lifetime License holders to have received their license as a gift or to have received a free license from the Department. Also shown is the crosstabulation by license type among saltwater anglers, with similar results as the first crosstabulation (Figure 2.3).

Q13. Did you personally buy your Georgia Lifetime Fishing and Hunting license or did you receive it as a gift?

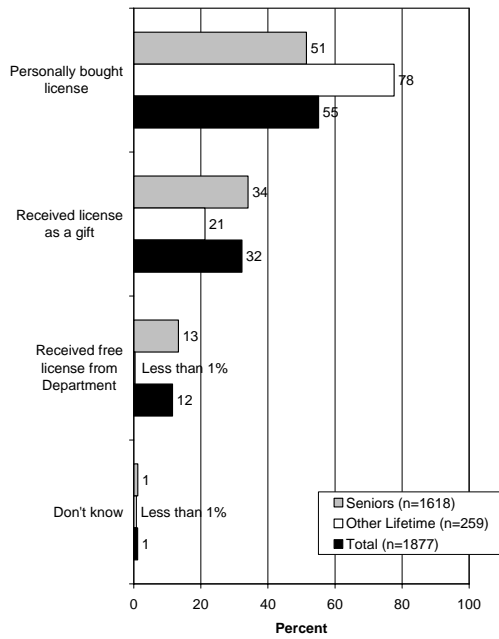


Figure 2.2. Acquisition of Georgia Lifetime Licenses (by License Type)

Q13. Did you personally buy your Georgia Lifetime Fishing and Hunting license, or did you receive it as a gift? (Among those who saltwater fished in Georgia in the past 12 months.)

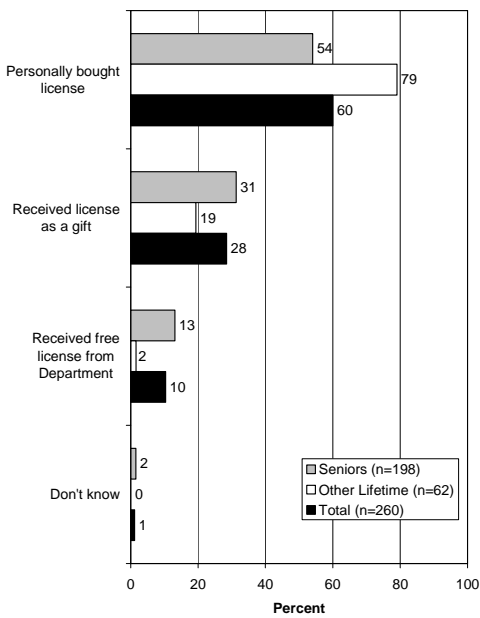


Figure 2.3. Acquisition of Georgia Lifetime Licenses (Saltwater Anglers)

The second question pertaining to purchasing of licenses asked Lifetime License holders if they typically acquire a Harvest Information Program (or HIP) stamp or deer harvest record from the Department each year. Just under a third of Lifetime License holders overall (30%) indicate that they typically do so (Figure 2.4).

Q15. Do you typically acquire a Harvest Information Program, or HIP, stamp or a deer harvest record from the Georgia Department of Natural Resources each year?

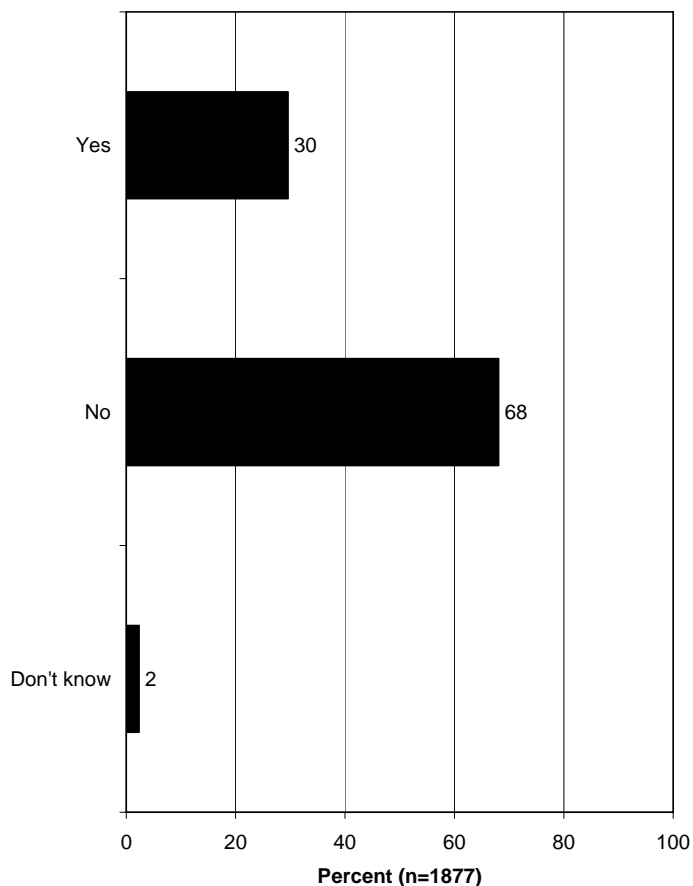


Figure 2.4. Acquisition of HIP Stamp/Deer Harvest Record

The crosstabulation found a substantial difference between Seniors (23% acquire an HIP stamp/record) and Other Lifetime License holders (69% acquire an HIP stamp/record) (Figure 2.5). This difference was even more marked among saltwater anglers (20% among Seniors; 73% among Other Lifetime License holders) (Figure 2.6).

Q15. Do you typically acquire a Harvest Information Program, or HIP, stamp or a deer harvest record from the Georgia Department of Natural Resources each year?

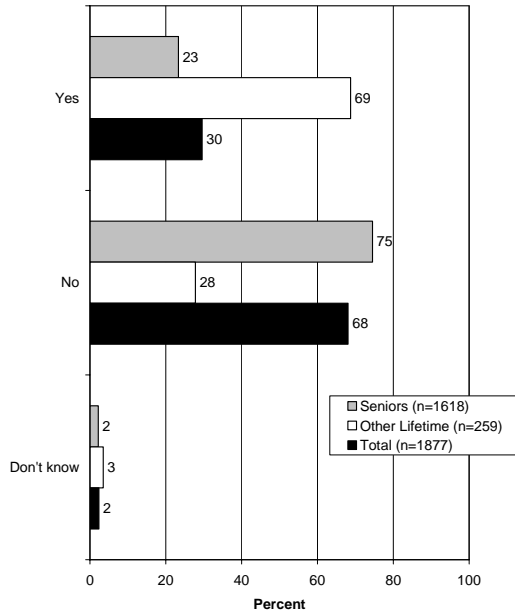


Figure 2.5. Acquisition of HIP Stamp/Deer Harvest Record (by License Type)

Q15. Do you typically acquire a Harvest Information Program, or HIP, stamp or a deer harvest record from the Georgia Department of Natural Resources each year? (Among those who saltwater fished in Georgia in the past 12 months.)

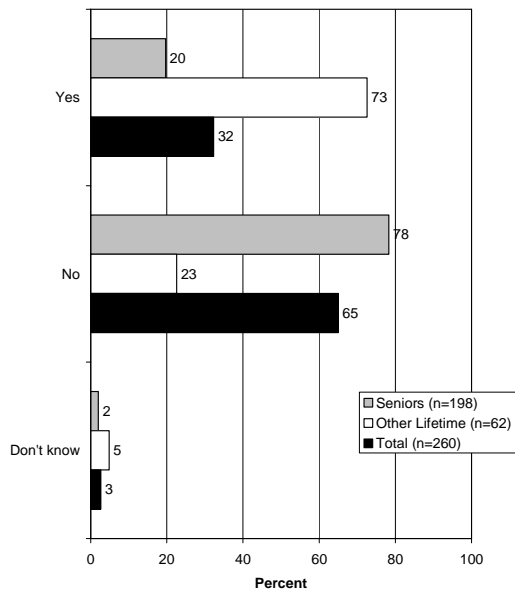


Figure 2.6. Acquisition of HIP Stamp/Deer Harvest Record (Saltwater Anglers)

3. PARTICIPATION IN FISHING AND HUNTING

Lifetime License holders were asked about their participation in hunting, freshwater fishing, and saltwater fishing in the past 12 months (note that some respondents participated in more than one activity). Freshwater fishing was the most popular (63% did so), followed by hunting (32%) and saltwater fishing (14%) (Figure 3.1). Using the data from this question, Lifetime License holders can be put into various fishing groups (ignoring hunting) as follows: 52% of them freshwater fished only, 11% freshwater and saltwater fished, 3% saltwater fished only, and 34% did not fish at all (Figure 3.2). Within each of these fishing groups, Figure 3.2 shows those who hunted and those who did not (this figure is best viewed in color; nonetheless, the data can still be discerned in black and white printing).

Q18. Please tell me if you participated in each of the following in Georgia in the past 12 months, that is, since July of last year. How about...?

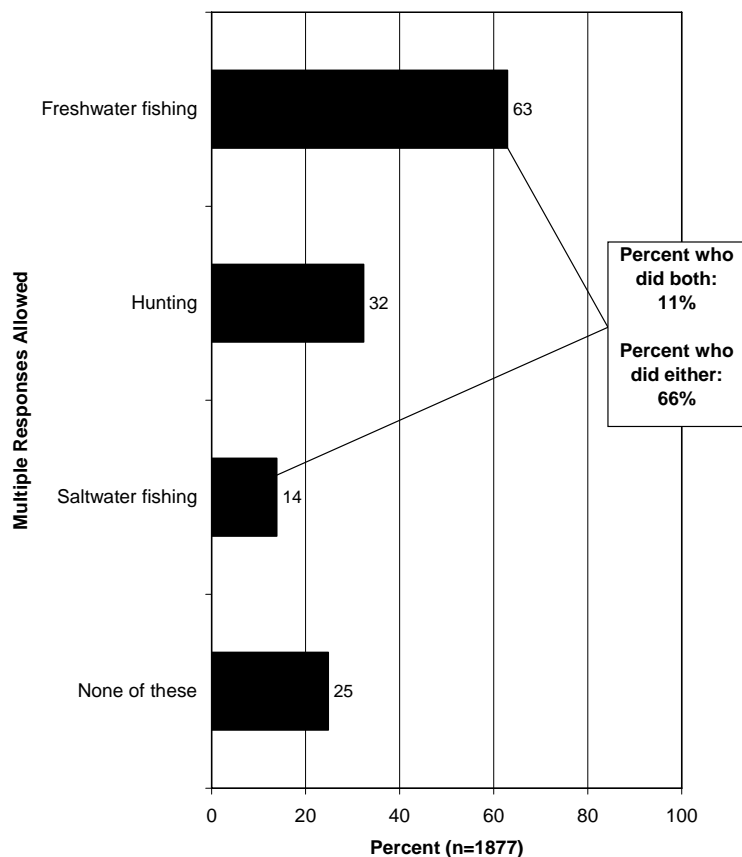


Figure 3.1. Participation in Fishing and Hunting

Breakdown of Activities

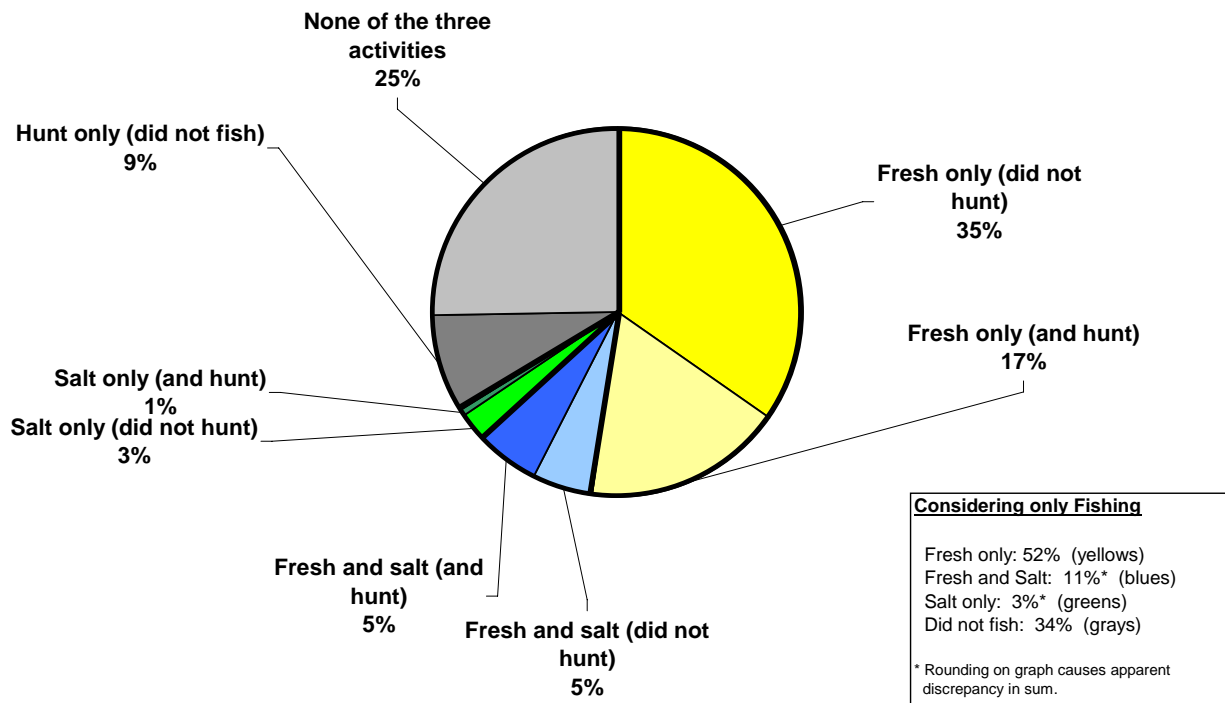


Figure 3.2. Participation in Fishing and Hunting (Exclusive Groups)

In the crosstabulation by license type, Other Lifetime License holders were more likely than were Seniors to have done *any* of the activities, with the disparity being the greatest in hunting, in which 78% of Other Lifetime License holders had participated, compared to 25% of Seniors (Figure 3.3). But even in fishing, Other Lifetime License holders’ rates of participation exceeded Seniors’ rates: freshwater fishing (74% to 61%) and saltwater fishing (24% to 12%). Also shown is the crosstabulation by license type among saltwater anglers (it does not show saltwater fishing participation or “none of these” in the answer set because, by definition, respondents in this crosstabulation had to have saltwater fished) (Figure 3.4).

Q18. Please tell me if you participated in each of the following in Georgia in the past 12 months, that is, since July of last year. How about...?

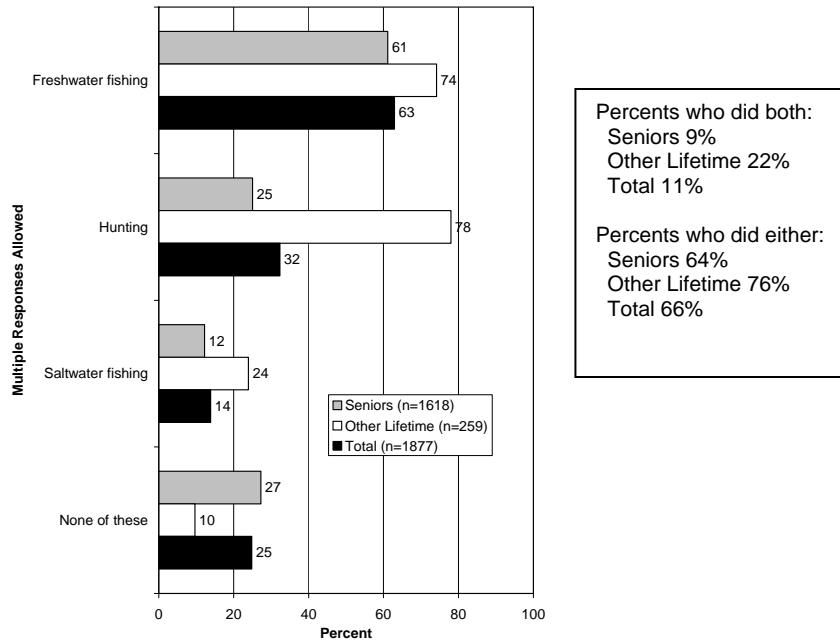


Figure 3.3. Participation in Fishing and Hunting (by License Type)

Q18. Please tell me if you participated in each of the following in Georgia in the past 12 months, that is, since July of last year. How about...? (Among those who saltwater fished in Georgia in the past 12 months.)

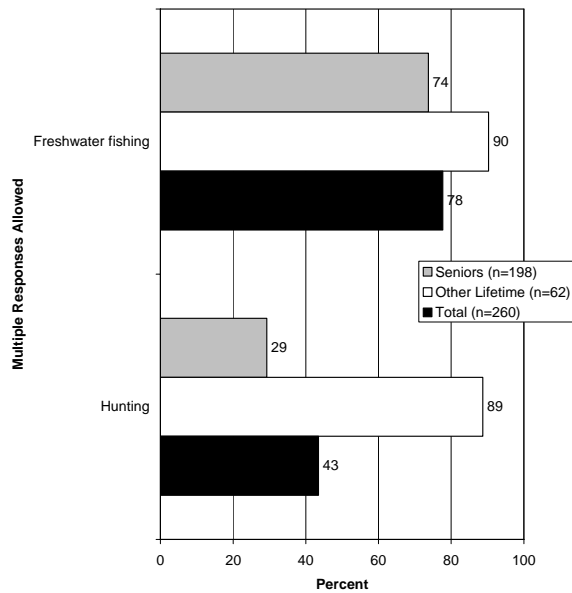


Figure 3.4. Participation in Fishing and Hunting (Saltwater Anglers)

The survey also asked those who saltwater fished to indicate the number of days that they did so in Georgia in the past 12 months (Figure 3.5). The large majority (65%) did so for no more than 5 days. On the other hand, there were some quite avid saltwater anglers: 8% did so for more than 20 days.

**Q19. How many days total during the past 12 months did you go saltwater fishing in Georgia?
(Asked of those who have saltwater fished in Georgia in the past 12 months.)**

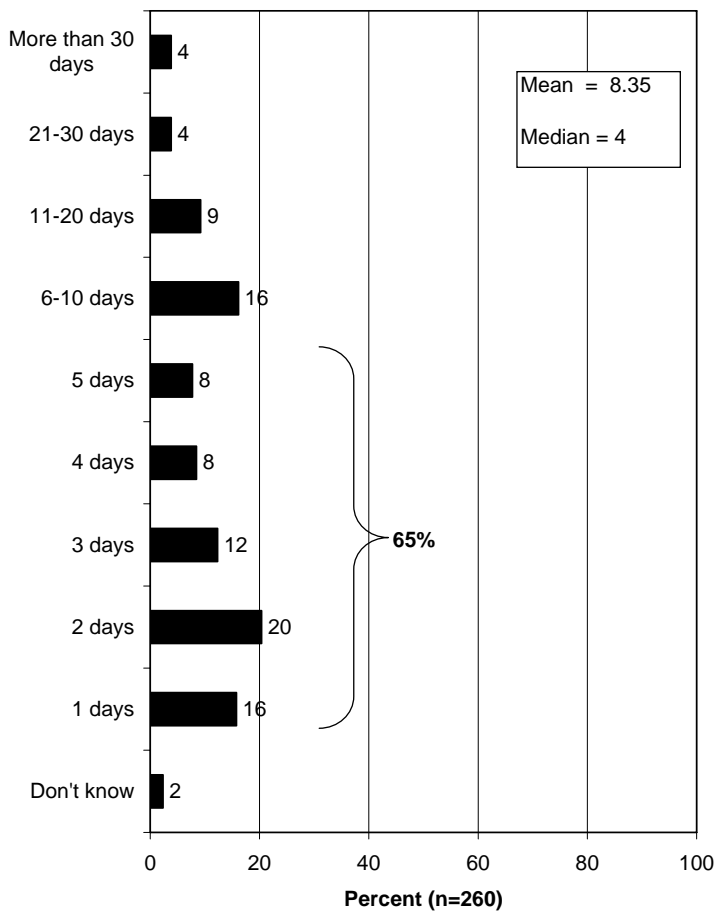


Figure 3.5. Days of Saltwater Fishing Participation

The crosstabulation of days saltwater fished by license type found little appreciable difference between Seniors and Other Lifetime License holders (Figure 3.6).

**Q19. How many days total during the past 12 months did you go saltwater fishing in Georgia?
(Asked of those who have saltwater fished in Georgia in the past 12 months.)**

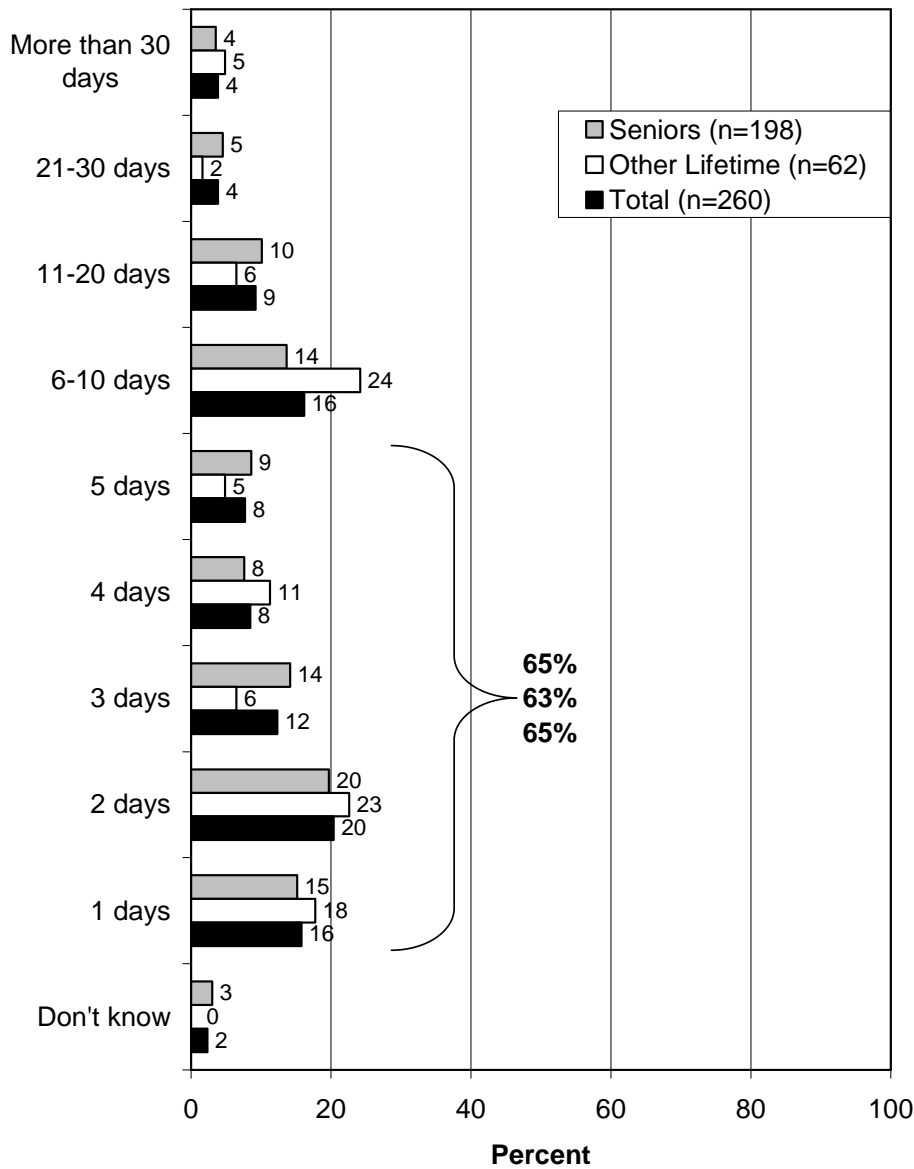


Figure 3.6. Days of Saltwater Fishing Participation (by License Type)

4. DISSATISFACTIONS WITH FISHING AND CONSTRAINTS TO PARTICIPATION

Figure 4.1 shows the answers to the open-ended question about dissatisfactions with saltwater fishing or things that caused the Lifetime License holder to *not* fish as much as he/she wanted to in the past 12 months. An open-ended question is one in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question. Just under half of Lifetime License holders (48%) indicate that nothing takes away from their fishing satisfaction or acts as a constraint to participation. Otherwise, the top responses related to lack of time because of work obligations (10%), access problems to fishing areas (8%), weather (7%), not enough large fish (5%), and health/age (4%). The full listing is shown in the graph in Figure 4.1. Because the listing is so extensive, this graph is shown on a full page.

The crosstabulation in Figure 4.2 indicates that Other Lifetime License holders are more likely to say that there is a dissatisfaction or constraint. In particular, they are more likely than are Seniors to cite lack of time because of work obligations and access problems. This graph also is shown on a full page.

Q24. Are there any things that have taken away from your saltwater fishing enjoyment or caused you not to saltwater fish as much as you would have liked in Georgia in the past 12 months? (Asked of those who have saltwater fished in Georgia in the past 12 months.)

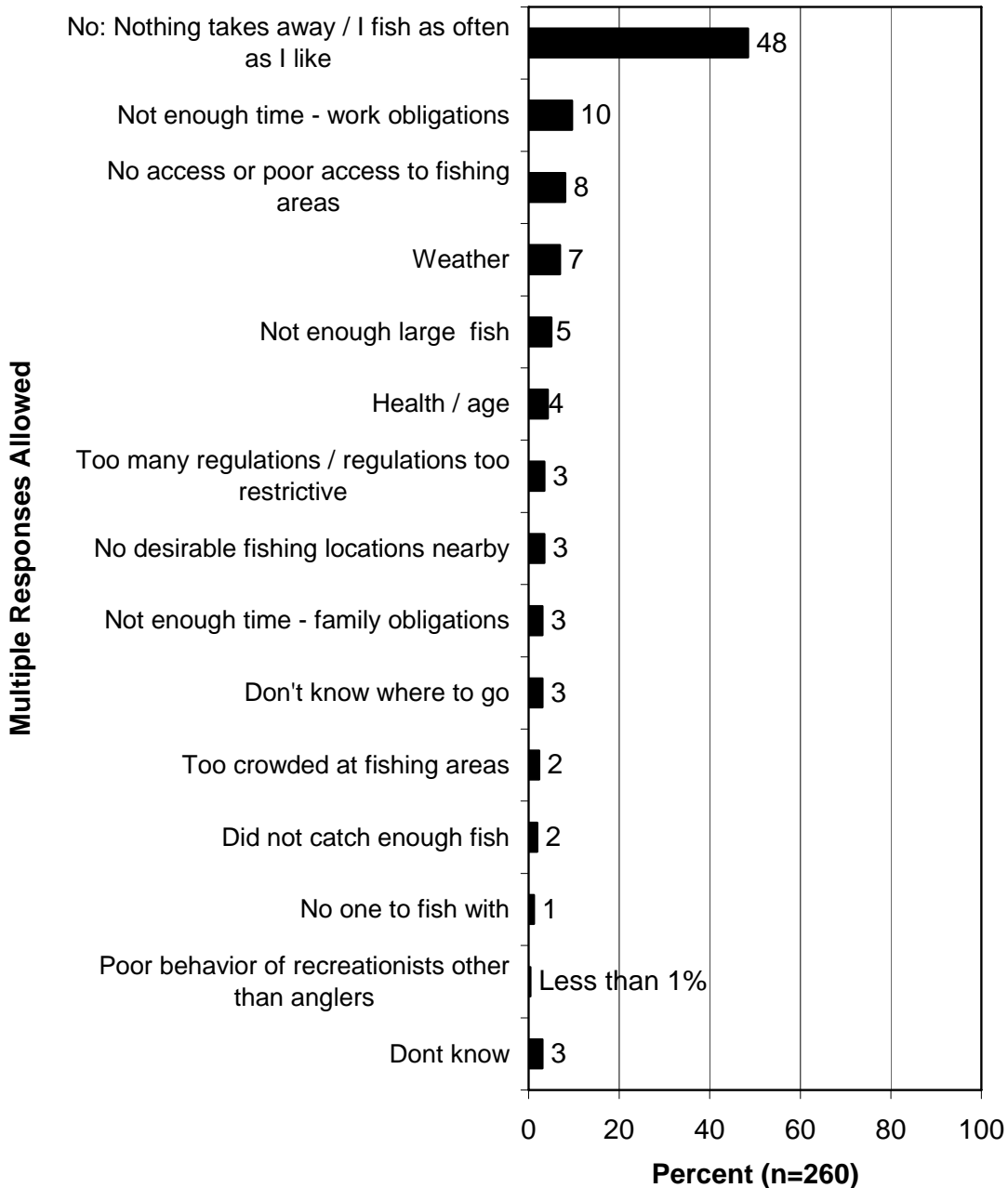


Figure 4.1. Dissatisfactions With and Constraints to Saltwater Fishing Participation

Q24. Are there any things that have taken away from your saltwater fishing enjoyment or caused you not to saltwater fish as much as you would have liked in Georgia in the past 12 months? (Asked of those who have saltwater fished in Georgia in the past 12 months.)

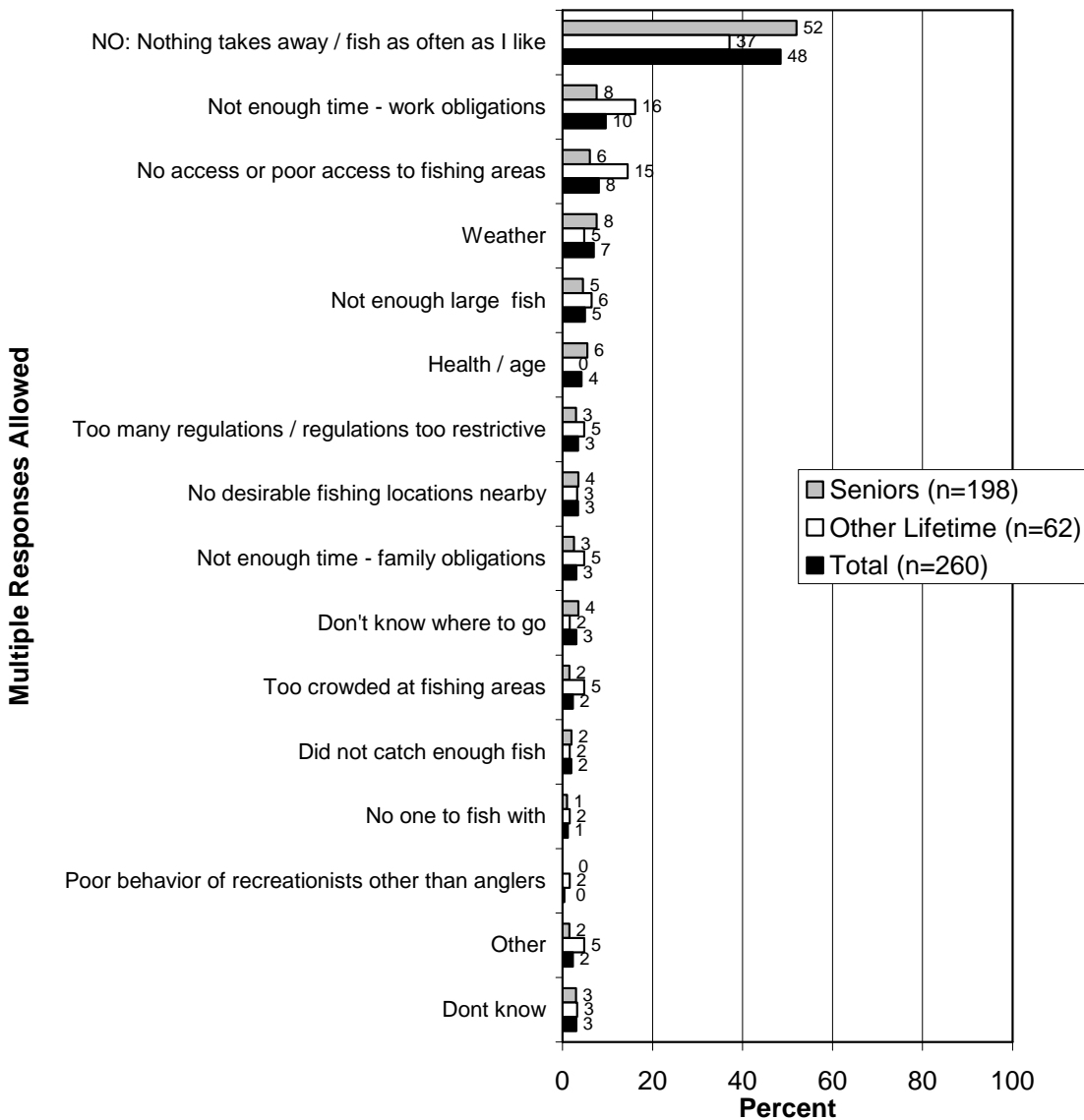


Figure 4.2. Dissatisfactions With and Constraints to Saltwater Fishing Participation (by License Type)

5. DEMOGRAPHIC DATA AND CONTACT METHODS

Most Lifetime License holders are male (81% overall; 78% of Seniors, and 94% of Other Lifetime License holders) (Figures 5.1 and 5.2). The final crosstabulation is shown in Figure 5.3.

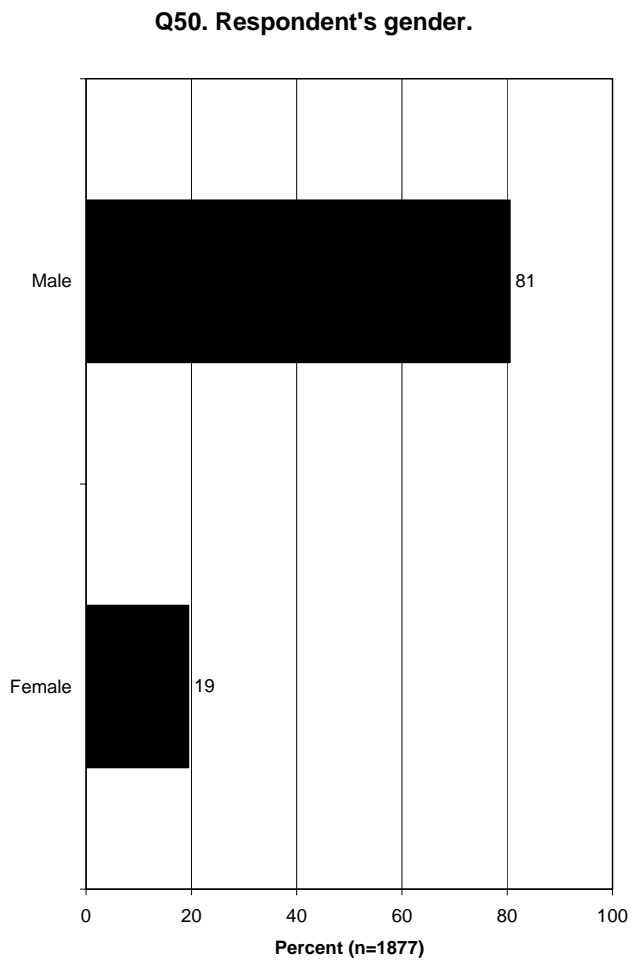


Figure 5.1. Gender of Respondents

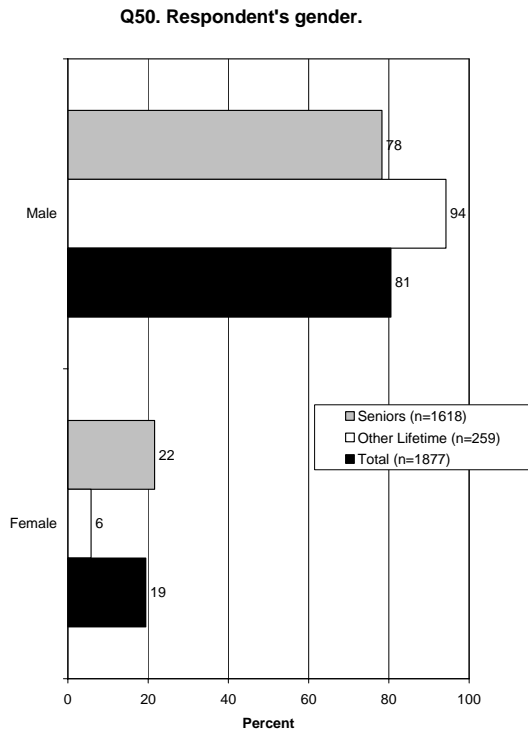


Figure 5.2. Gender of Respondents (by License Type)

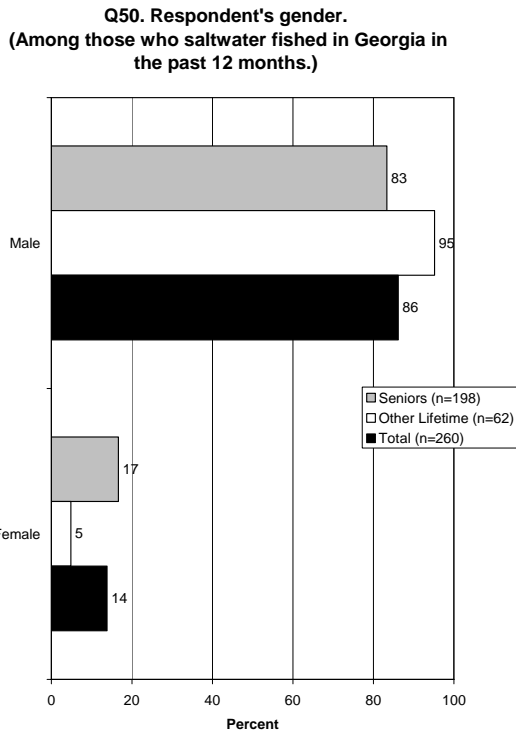


Figure 5.3. Gender of Respondents (Saltwater Anglers)

Counties of residence are included in the data. Figure 5.4 shows the top 20 counties among Lifetime License holders; the full listing follows in Table 5.1. In addition, the top 15 counties of residence among saltwater anglers are shown in Figure 5.5; the full listing among saltwater anglers is shown in Table 5.2.



Figure 5.4. Top 20 Counties of Residence of Lifetime License Holders

Table 5.1. Counties of Residence of Lifetime License Holders

County	%	County	%	County	%	County	%
Appling	0.43	Crisp	0.37	Jefferson	0.37	Rockdale	0.96
Atkinson	0.05	Dade	0.27	Jenkins	0.16	Schley	0.11
Bacon	0.16	Dawson	0.32	Johnson	0.05	Screven	0.37
Baker	0.11	Decatur	0.59	Jones	0.48	Seminole	0.16
Baldwin	0.69	DeKalb	1.92	Lamar	0.21	Spalding	0.85
Banks	0.43	Dodge	0.48	Laurens	0.80	Stephens	0.37
Barrow	1.01	Dooly	0.11	Lee	0.53	Stewart	0.11
Bartow	1.17	Dougherty	1.23	Liberty	0.80	Sumter	0.32
Ben Hill	0.37	Douglas	0.75	Lincoln	0.48	Talbot	0.05
Berrien	0.16	Early	0.16	Lowndes	0.96	Taliaferro	0.11
Bibb	1.28	Effingham	0.91	Lumpkin	0.69	Tattnall	0.59
Bleckley	0.27	Elbert	0.48	Macon	0.27	Taylor	0.16
Brantley	0.37	Emanuel	0.48	Madison	0.32	Telfair	0.16
Brooks	0.27	Evans	0.32	Marion	0.16	Terrell	0.11
Bryan	0.69	Fannin	0.91	McDuffie	0.59	Thomas	0.59
Bulloch	0.69	Fayette	1.39	McIntosh	0.21	Tift	0.32
Burke	0.37	Floyd	1.01	Meriwether	0.27	Toombs	0.37
Butts	0.37	Forsyth	1.60	Miller	0.21	Towns	0.37
Calhoun	0.16	Franklin	0.69	Mitchell	0.21	Treutlen	0.27
Camden	0.91	Fulton	2.02	Monroe	0.64	Troup	0.91
Candler	0.21	Gilmer	0.96	Montgomery	0.05	Turner	0.16
Carroll	1.23	Glynn	1.12	Morgan	0.59	Twiggs	0.16
Catoosa	0.59	Gordon	1.01	Murray	0.11	Union	0.64
Charlton	0.05	Grady	0.37	Muscogee	1.39	Upson	0.32
Chatham	2.40	Greene	0.43	Newton	1.07	Walker	0.80
Chattahoochee	0.16	Gwinnett	3.04	Oconee	0.48	Walton	1.44
Chattooga	0.05	Habersham	0.75	Oglethorpe	0.21	Ware	0.75
Cherokee	2.24	Hall	1.81	Paulding	1.17	Washington	0.27
Clarke	0.48	Hancock	0.27	Peach	0.21	Wayne	0.53
Clay	0.11	Haralson	0.48	Pickens	0.75	Webster	0.05
Clayton	0.69	Harris	0.37	Pierce	0.91	White	0.48
Clinch	0.05	Hart	0.85	Pike	0.37	Whitfield	0.75
Cobb	4.16	Heard	0.11	Polk	0.43	Wilcox	0.16
Coffee	0.64	Henry	1.49	Pulaski	0.11	Wilkes	0.32
Colquitt	0.32	Houston	1.65	Putnam	0.96	Wilkinson	0.05
Columbia	2.24	Irwin	0.27	Quitman	0.11	Worth	0.69
Cook	0.27	Jackson	0.91	Rabun	0.27	Refused	3.78
Coweta	0.96	Jasper	0.37	Randolph	0.05	Don't know	2.34
Crawford	0.32	Jeff Davis	0.37	Richmond	1.70		

Q43. What county do you live in? (Shows top 15 counties.) (Among those who saltwater fished in the past 12 months.)

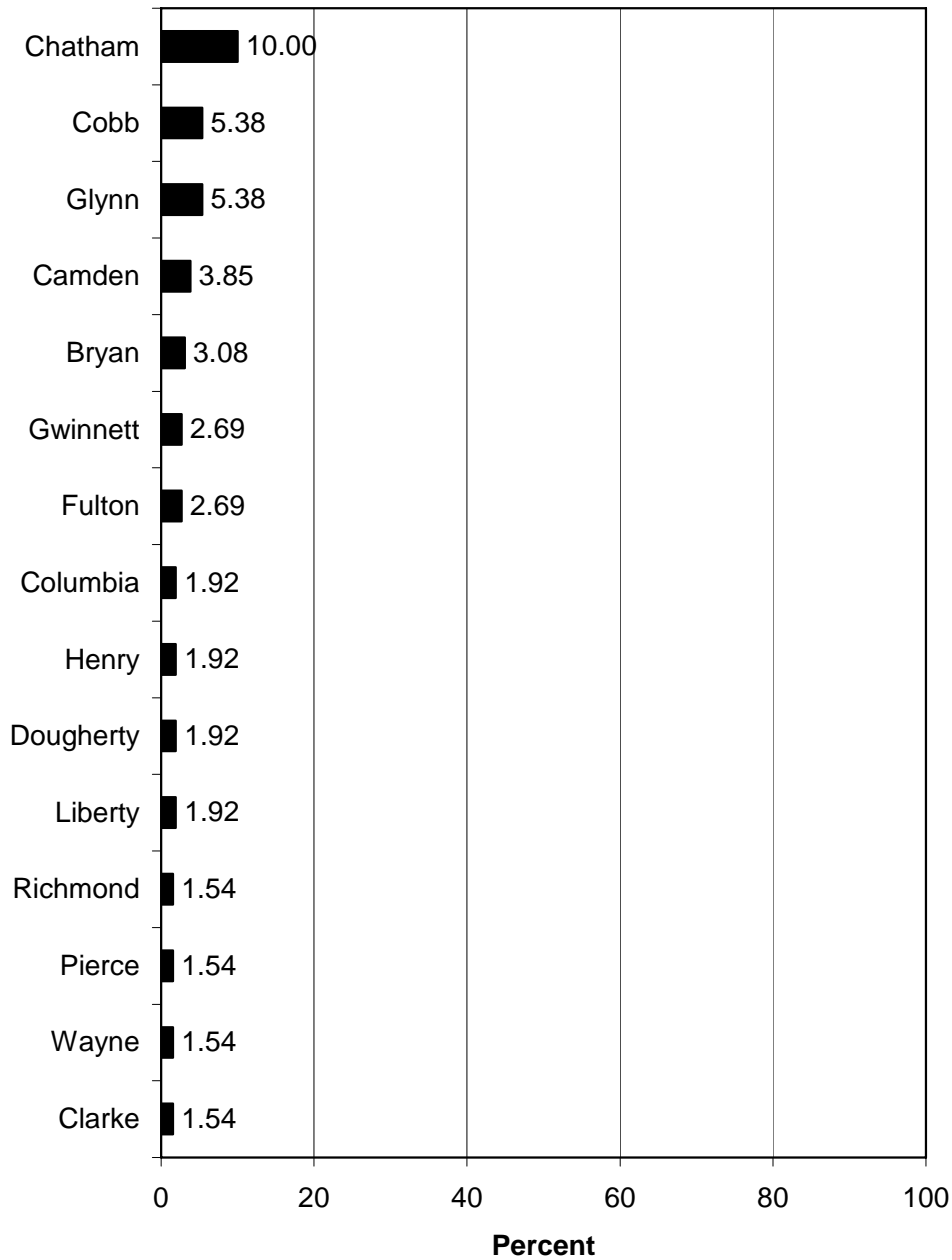


Figure 5.5. Top 15 Counties of Residence (Saltwater Anglers)

Table 5.2. Counties of Residence (Saltwater Anglers)

County	%	County	%	County	%	County	%
Appling	0.38	Crisp	0.00	Jefferson	0.77	Rockdale	0.38
Atkinson	0.00	Dade	0.00	Jenkins	0.00	Schley	0.00
Bacon	0.38	Dawson	0.38	Johnson	0.00	Screven	0.77
Baker	0.38	Decatur	0.38	Jones	0.00	Seminole	0.00
Baldwin	0.00	DeKalb	1.15	Lamar	0.77	Spalding	0.77
Banks	0.00	Dodge	0.00	Laurens	0.77	Stephens	0.00
Barrow	0.38	Dooly	0.00	Lee	0.77	Stewart	0.00
Bartow	1.15	Dougherty	1.92	Liberty	1.92	Sumter	0.00
Ben Hill	0.00	Douglas	0.77	Lincoln	0.38	Talbot	0.00
Berrien	0.00	Early	0.00	Lowndes	0.38	Taliaferro	0.00
Bibb	0.00	Effingham	1.15	Lumpkin	0.00	Tattnall	0.38
Bleckley	0.77	Elbert	0.38	Macon	0.38	Taylor	0.00
Brantley	1.15	Emanuel	0.38	Madison	0.38	Telfair	0.00
Brooks	0.00	Evans	0.38	Marion	0.00	Terrell	0.38
Bryan	3.08	Fannin	0.38	McDuffie	0.38	Thomas	0.77
Bulloch	1.15	Fayette	0.77	McIntosh	0.77	Tift	0.00
Burke	0.38	Floyd	1.15	Meriwether	0.00	Toombs	0.38
Butts	0.77	Forsyth	1.15	Miller	0.00	Towns	0.00
Calhoun	0.38	Franklin	0.38	Mitchell	0.00	Treutlen	0.38
Camden	3.85	Fulton	2.69	Monroe	0.38	Troup	0.38
Candler	0.00	Gilmer	0.77	Montgomery	0.00	Turner	0.00
Carroll	0.38	Glynn	5.38	Morgan	0.77	Twiggs	0.00
Catoosa	0.00	Gordon	0.38	Murray	0.00	Union	0.38
Charlton	0.38	Grady	0.00	Muscogee	1.15	Upson	0.77
Chatham	10.00	Greene	0.38	Newton	0.77	Walker	0.00
Chattahoochee	0.00	Gwinnett	2.69	Oconee	0.38	Walton	1.15
Chattooga	0.00	Habersham	1.15	Oglethorpe	0.00	Ware	0.77
Cherokee	1.15	Hall	0.00	Paulding	0.38	Washington	0.00
Clarke	1.54	Hancock	0.38	Peach	0.00	Wayne	1.54
Clay	0.00	Haralson	0.38	Pickens	0.38	Webster	0.00
Clayton	0.38	Harris	0.00	Pierce	1.54	White	0.00
Clinch	0.00	Hart	0.38	Pike	0.00	Whitfield	0.38
Cobb	5.38	Heard	0.00	Polk	0.38	Wilcox	0.00
Coffee	1.15	Henry	1.92	Pulaski	0.00	Wilkes	0.38
Colquitt	1.15	Houston	1.15	Putnam	1.15	Wilkinson	0.00
Columbia	1.92	Irwin	0.00	Quitman	0.00	Worth	0.38
Cook	0.38	Jackson	0.77	Rabun	0.38	Refused	1.15
Coweta	0.77	Jasper	0.38	Randolph	0.00	Don't know	2.31
Crawford	0.38	Jeff Davis	0.38	Richmond	1.54		

The crosstabulation of counties by license type is shown in Figure 5.6, limited to the top 20 counties overall. The full listing is included in Table 5.3.

Q43. What county do you live in? (Shows top 20 counties.)

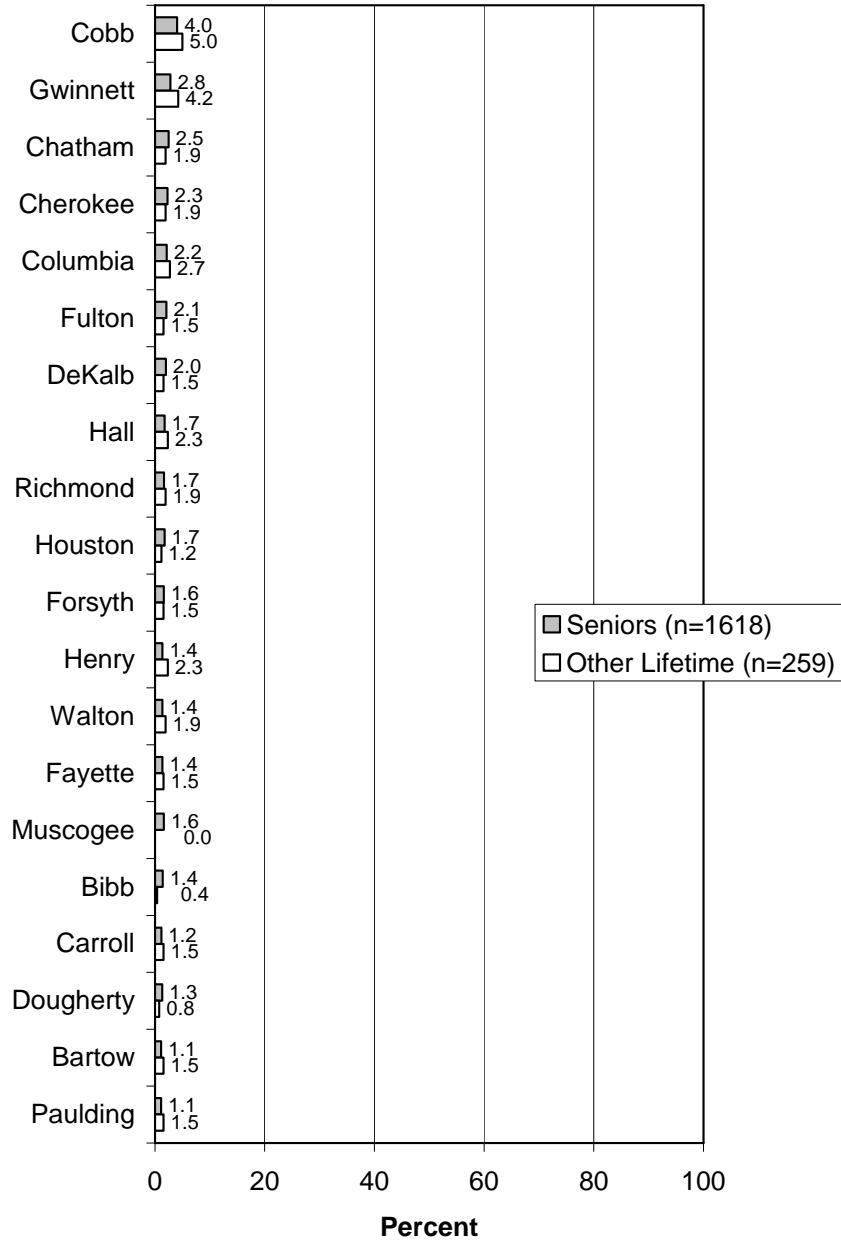


Figure 5.6. Top 20 Counties of Residence (by License Type)

Table 5.3. Counties of Residence (by License Type)

County	Seniors	Lifetime	County	Seniors	Lifetime	County	Seniors	Lifetime
Appling	0.49	0.00	Evans	0.31	0.39	Oglethorpe	0.25	0.00
Atkinson	0.06	0.00	Fannin	0.93	0.77	Paulding	1.11	1.54
Bacon	0.19	0.00	Fayette	1.36	1.54	Peach	0.19	0.39
Baker	0.12	0.00	Floyd	0.93	1.54	Pickens	0.68	1.16
Baldwin	0.68	0.77	Forsyth	1.61	1.54	Pierce	0.87	1.16
Banks	0.31	1.16	Franklin	0.74	0.39	Pike	0.43	0.00
Barrow	0.99	1.16	Fulton	2.10	1.54	Polk	0.37	0.77
Bartow	1.11	1.54	Gilmer	0.80	1.93	Pulaski	0.12	0.00
Ben Hill	0.37	0.39	Glynn	1.11	1.16	Putnam	0.93	1.16
Berrien	0.19	0.00	Gordon	0.87	1.93	Quitman	0.12	0.00
Bibb	1.42	0.39	Grady	0.43	0.00	Rabun	0.19	0.77
Bleckley	0.25	0.39	Greene	0.43	0.39	Randolph	0.06	0.00
Brantley	0.37	0.39	Gwinnett	2.84	4.25	Richmond	1.67	1.93
Brooks	0.31	0.00	Habersham	0.62	1.54	Rockdale	1.05	0.39
Bryan	0.62	1.16	Hall	1.73	2.32	Schley	0.12	0.00
Bulloch	0.68	0.77	Hancock	0.25	0.39	Screven	0.37	0.39
Burke	0.37	0.39	Haralson	0.56	0.00	Seminole	0.12	0.39
Butts	0.31	0.77	Harris	0.37	0.39	Spalding	0.87	0.77
Calhoun	0.19	0.00	Hart	0.74	1.54	Stephens	0.43	0.00
Camden	0.99	0.39	Heard	0.12	0.00	Stewart	0.12	0.00
Candler	0.25	0.00	Henry	1.36	2.32	Sumter	0.37	0.00
Carroll	1.17	1.54	Houston	1.73	1.16	Talbot	0.06	0.00
Catoosa	0.62	0.39	Irwin	0.31	0.00	Taliaferro	0.12	0.00
Charlton	0.06	0.00	Jackson	0.80	1.54	Tattnall	0.68	0.00
Chatham	2.47	1.93	Jasper	0.37	0.39	Taylor	0.19	0.00
Chattahoochee	0.12	0.39	Jeff Davis	0.43	0.00	Telfair	0.19	0.00
Chattooga	0.06	0.00	Jefferson	0.31	0.77	Terrell	0.12	0.00
Cherokee	2.29	1.93	Jenkins	0.12	0.39	Thomas	0.56	0.77
Clarke	0.56	0.00	Johnson	0.06	0.00	Tift	0.25	0.77
Clay	0.12	0.00	Jones	0.56	0.00	Toombs	0.37	0.39
Clayton	0.49	1.93	Lamar	0.19	0.39	Towns	0.43	0.00
Clinch	0.06	0.00	Laurens	0.80	0.77	Treutlen	0.31	0.00
Cobb	4.02	5.02	Lee	0.56	0.39	Troup	0.99	0.39
Coffee	0.68	0.39	Liberty	0.93	0.00	Turner	0.19	0.00
Colquitt	0.37	0.00	Lincoln	0.49	0.39	Twiggs	0.19	0.00
Columbia	2.16	2.70	Lowndes	0.99	0.77	Union	0.74	0.00
Cook	0.25	0.39	Lumpkin	0.74	0.39	Upson	0.37	0.00
Coweta	0.99	0.77	Macon	0.25	0.39	Walker	0.74	1.16
Crawford	0.31	0.39	Madison	0.37	0.00	Walton	1.36	1.93
Crisp	0.43	0.00	Marion	0.19	0.00	Ware	0.68	1.16
Dade	0.31	0.00	McDuffie	0.68	0.00	Washington	0.25	0.39
Dawson	0.37	0.00	McIntosh	0.19	0.39	Wayne	0.49	0.77
Decatur	0.62	0.39	Meriwether	0.25	0.39	Webster	0.06	0.00
DeKalb	1.98	1.54	Miller	0.25	0.00	White	0.49	0.39
Dodge	0.56	0.00	Mitchell	0.25	0.00	Whitfield	0.68	1.16
Dooly	0.12	0.00	Monroe	0.56	1.16	Wilcox	0.19	0.00
Dougherty	1.30	0.77	Montgomery	0.06	0.00	Wilkes	0.37	0.00
Douglas	0.68	1.16	Morgan	0.56	0.77	Wilkinson	0.06	0.00
Early	0.19	0.00	Murray	0.06	0.39	Worth	0.68	0.77
Effingham	0.87	1.16	Muscogee	1.61	0.00	Refused	3.96	2.70
Elbert	0.43	0.77	Newton	0.99	1.54	Don't know	2.29	2.70
Emanuel	0.37	1.16	Oconee	0.37	1.16			

One question asked respondents to indicate the best way to contact them, reading a list of choices; they were asked to choose only one. The top choice is telephone (44%), followed by direct mail (33%), and email (18%) (Figure 5.7). The predominance of home telephone and direct mail is partly a reflection of the older ages of Lifetime License holders, in general, relative to Georgia's population as a whole.

Q26. What is the best way for the Department to contact you with information about fishing issues?

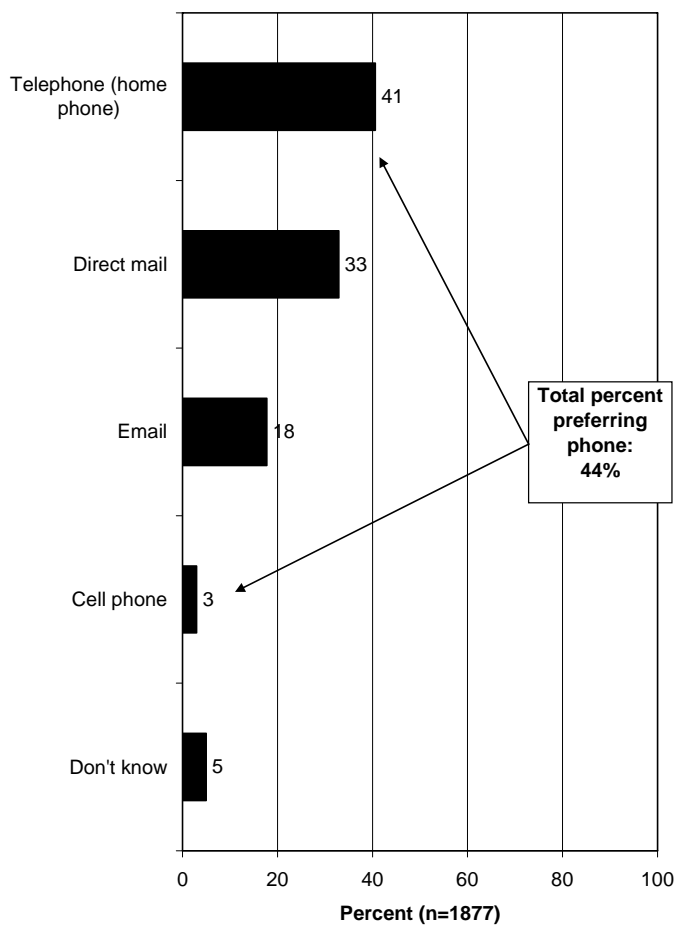


Figure 5.7. Best Contact Method

Other Lifetime License holders are slightly more likely, compared to Seniors, to prefer email or cell phone (Figure 5.8). In general, saltwater anglers are more likely, relative to Lifetime License holders who did not saltwater fish, to prefer email or cell phones, regardless of license type (compare Figures 5.9 and 5.8).

Q26. What is the best way for the Department to contact you with information about fishing issues?

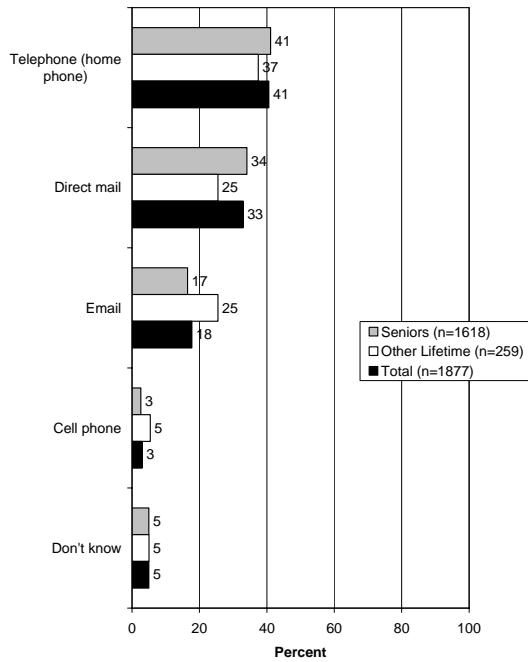


Figure 5.8. Best Contact Method (by License Type)

Q26. What is the best way for the Department to contact you with information about fishing issues?
 (Among those who saltwater fished in Georgia in the past 12 months.)

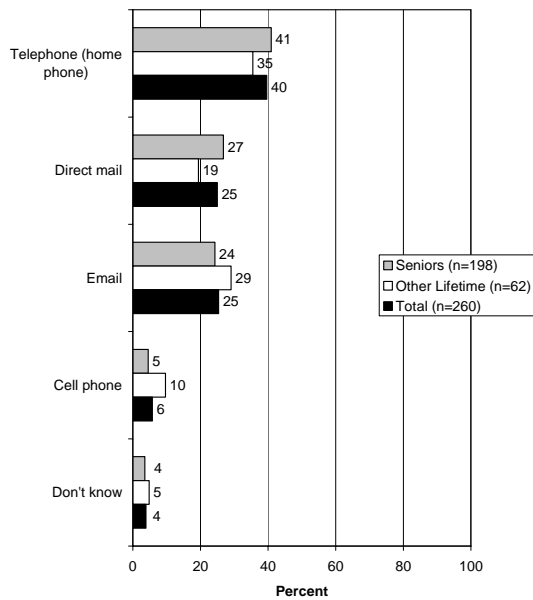


Figure 5.9. Best Contact Method (Saltwater Anglers)

The survey found that 65% of Lifetime License holders have Internet access (Figure 5.10). In the crosstabulation, Other Lifetime License holders (81%) more often have Internet access than do Seniors (62%) (Figure 5.11). Again, saltwater anglers have slightly greater rates of Internet access compared to those who did not fish in saltwater (compare Figures 5.12 and 5.11).

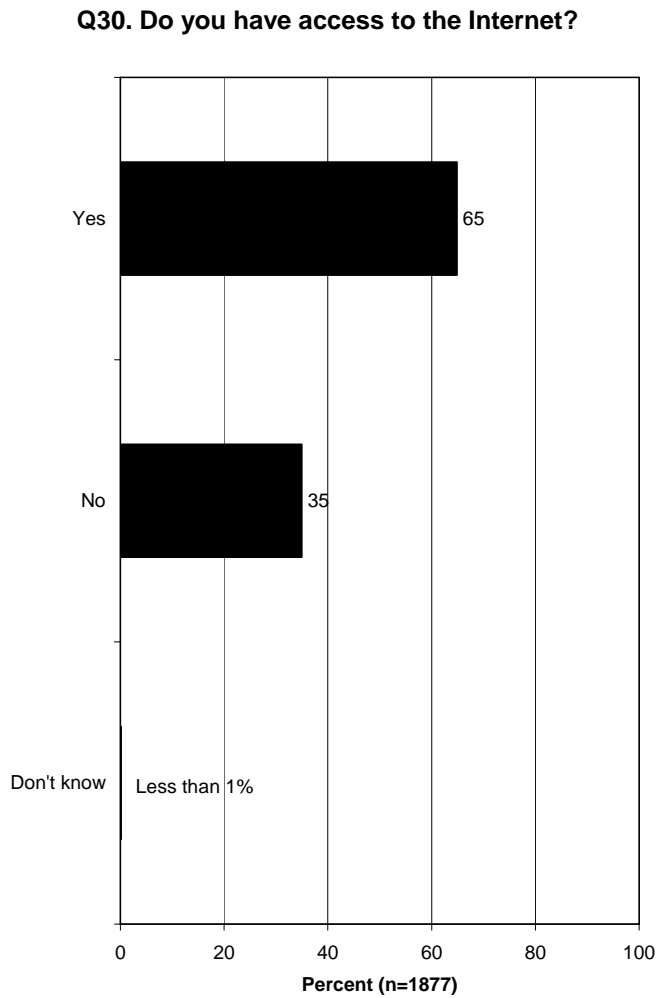


Figure 5.10. Rate of Having Internet Access

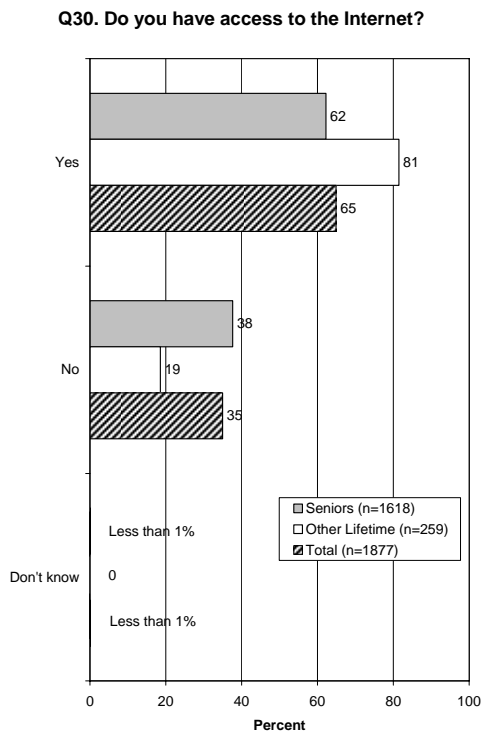


Figure 5.11. Rate of Having Internet Access (by License Type)

Q30. Do you have access to the Internet?
 (Among those who saltwater fished in Georgia in the past 12 months.)

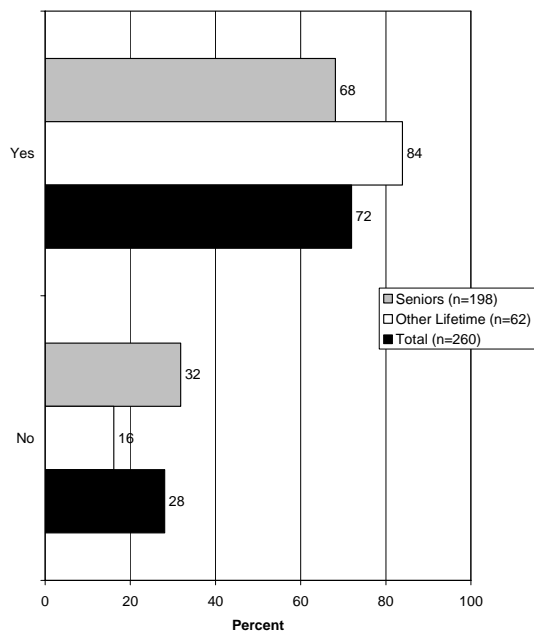


Figure 5.12. Rate of Having Internet Access (Saltwater Anglers)

Nearly all Lifetime License holders indicate that they have a valid Georgia driver's license or a state-issued ID card: 99% do so (Figure 5.13). This is true across license types and regardless of saltwater fishing participation (Figures 5.14 and 5.15).

Q31. Do you currently have a valid Georgia driver's license or state-issued ID card?

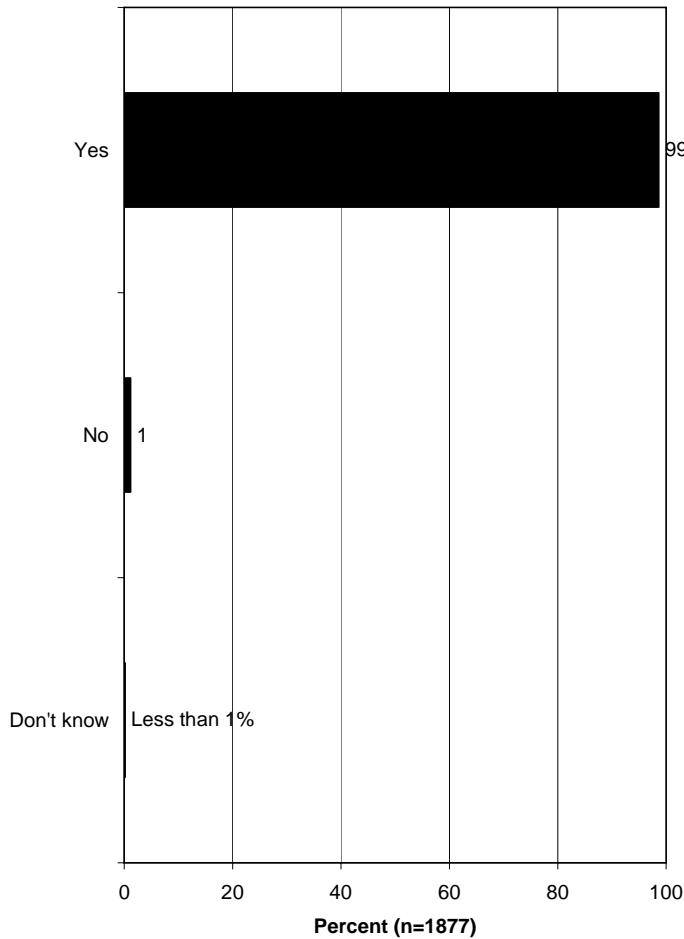


Figure 5.13. Possession of a Valid Driver's License/ID Card

Q31. Do you currently have a valid Georgia driver's license or state-issued ID card?

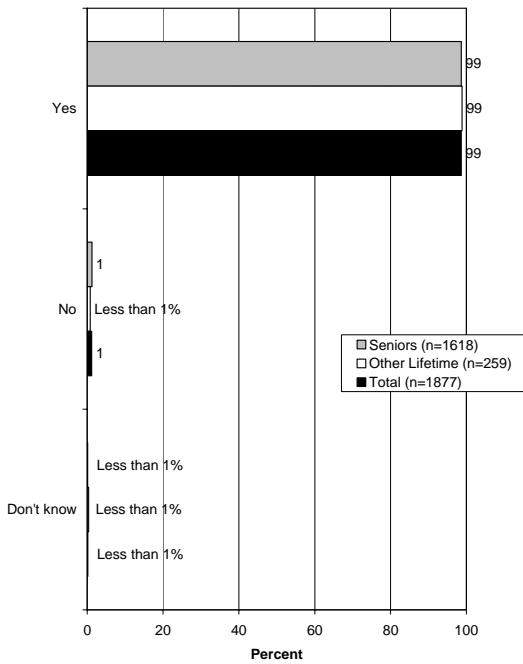


Figure 5.14. Possession of a Valid Driver's License/ID Card (by License Type)

Q31. Do you currently have a valid Georgia driver's license or state-issued ID card? (Among those who saltwater fished in Georgia in the past 12 months.)

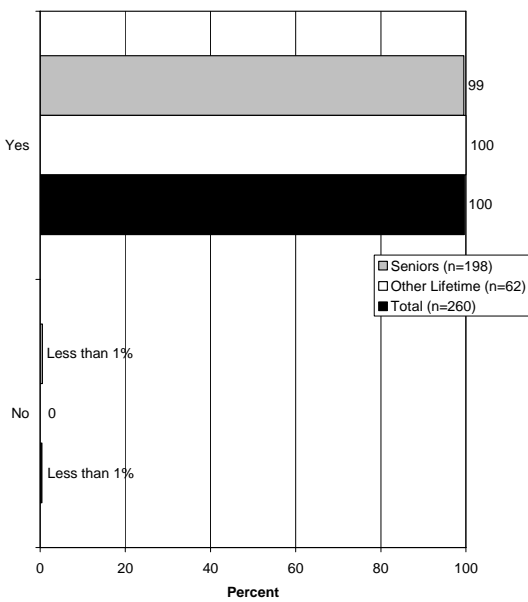


Figure 5.15. Possession of a Valid Driver's License/ID Card (Saltwater Anglers)

Vehicle ownership rates were high: 95% of Lifetime License holders own a vehicle registered in Georgia (Figure 5.16). The crosstabulations found that all groups were almost identical (Figures 5.17 and 5.18).

Q32. Do you currently have a vehicle registered in Georgia?

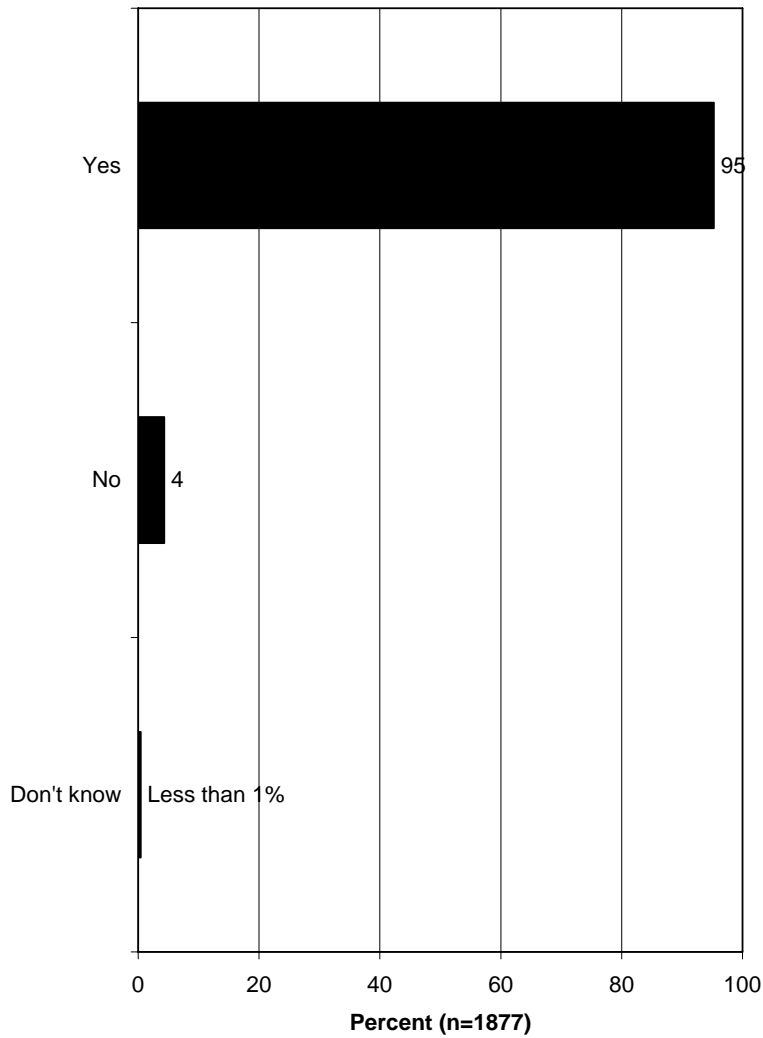


Figure 5.16. Ownership of a Registered Vehicle

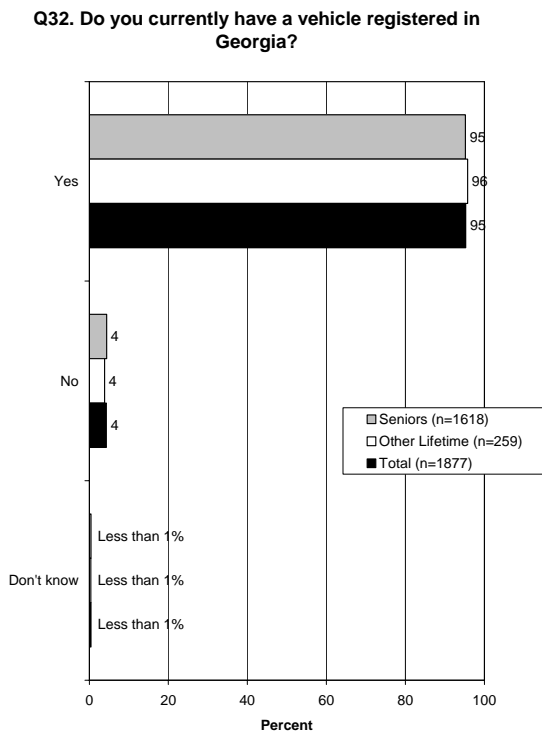


Figure 5.17. Ownership of a Registered Vehicle (by License Type)

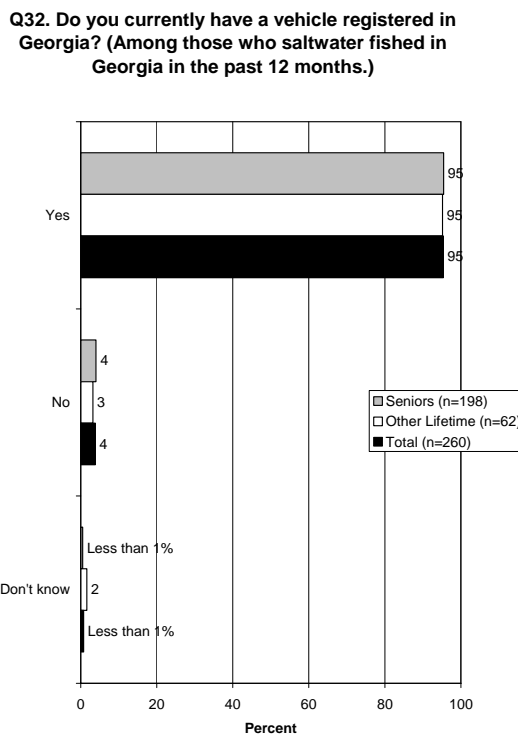


Figure 5.18. Ownership of a Registered Vehicle (Saltwater Anglers)

6. COLLECTION OF UPDATED DATA

Part of the project objective was to update the license database. The original database contained names of license holders and telephone numbers for only some of them. The project effort included the addition of telephone numbers to those records that did not previously have one, when a telephone number could be identified. Additionally, for those records that contained a telephone number, an attempt was made to verify that the telephone number shown in the database was to a working telephone. This can be thought of as the Phase 1 of updating the database.

From this updated database produced by Phase 1, the survey sample was drawn. At the completion of the survey, updated information from the survey itself was also added to the database (Phase 2 of the updating); this information was obtained during the survey as explained below.

During the survey, respondents were asked if their data could be updated as part of the requirements of the national registry of saltwater anglers. If they were amenable to providing updated data, they were asked to verify their mailing address, best telephone number to contact them, type of telephone number (i.e., home/land line or cell phone), and their date of birth. Any incorrect information in the database was changed; any missing data in the database was newly entered.

The updated database from the telephone number search and telephone number verification in Phase 1 and the survey in Phase 2 was then provided under separate cover to the Department.

For future ongoing updates of the database, the research suggests that several factors need to be considered.

- Of the mediums for contacting a population the size of the Lifetime License holder database, telephones will provide the best response rate. (Regarding contact by mail: many people discard or misplace information return cards, and response rates are generally lower than with telephone contacts. Regarding email: a substantial proportion of the general population does not have access to email.)

- More than a third of Lifetime License holders (35%) did not have access to the Internet and, therefore, cannot use email for updating information.
- Telephone was the most popular medium for contacting Lifetime License holders—they were specifically asked for their preference: 44% chose telephone, 33% chose direct mail, and 18% chose email.
- A substantial proportion (almost a third) of Lifetime License holders indicate receiving the license as a gift.

Considering the data presented in the report and the factors discussed immediately above, it would appear that the best way to conduct future updates is through a multi-modal approach that allows license holders a suite of ways to update their information. While there are multiple mediums to be used for updating information, there is a deliberate order to the ways that attempted contacts are made, based on likely response rates and cost-effectiveness.

The multi-modal approach to update the information begins with email simply because it is a cost-effective way to update information. However, it is likely that no more than a quarter (likely somewhat less) of the database can be updated in this way; nonetheless, this updates a substantial number of records, leaving fewer to be updated using the more expensive ways.

The second medium used to update the information is through the telephone. In cost, it falls between email updating and postal service mail. In the telephone update procedures, an attempt will be made to contact via telephone each of the remaining license holders who were not contacted by email. This telephone contact procedure will use telephone survey software, and the data can be updated during the interview (a cost-effective procedure first encourages the telephone respondent to go to a website, with the help of the telephone interviewer; otherwise, the telephone interviewer inputs the information). After this stage, it is anticipated that a majority of the sample will have been contacted for updated information. While telephone contacts are more expensive than email contacts, they are less expensive than the third medium discussed below for that remaining portion of the sample yet to be updated.

The third medium for updating the information of those license holders who still remain to be updated is direct mail, using return cards. (As in the telephone interviews, the return card first encourages the respondent to either go to a website for updating the information or use the telephone call center number.) The return cards will then be entered into the database using data entry personnel using survey software to enter the updated information. This is the most expensive medium; therefore, it is the medium to be used last.

It is likely that this multi-modal approach will provide updated data for a large majority of the sample. Nonetheless, the Department should anticipate that a small portion of license holders in the database will not be able to be contacted.

The Department may also consider an activation procedure for Lifetime Licenses. Because a substantial portion of Lifetime licenses are acquired as gifts, a telephone number for “activating” the license could be instituted to obtain initial information on these license holders using a call center. (In-person purchasers could provide information at the time of purchase that could be inputted into a computer system at that time, or they could “activate” the license using the telephone call center system or return card. Internet purchasers could input the data into their computer at the time of purchase.)

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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