Responsive Management[™]



GEORGIA SALTWATER ANGLERS' AND GUIDES' ATTITUDES TOWARD SALTWATER FISHING ISSUES

Conducted for the Georgia Department of Natural Resources

by Responsive Management

GEORGIA SALTWATER ANGLERS' AND GUIDES' ATTITUDES TOWARD SALTWATER FISHING ISSUES

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EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Georgia Department of Natural Resources, Coastal Resources Division (CRD) to determine saltwater anglers' and guides' participation in various types of marine fishing, their satisfaction levels, and their attitudes toward CRD management and other marine fishing issues, with an emphasis on red drum and spotted seatrout. The study entailed two scientific multi-modal surveys: one of recreational saltwater anglers and one of professional fishing guides.

The sample of saltwater anglers was provided by the CRD and consisted of licensed resident anglers with saltwater fishing privileges in Georgia. A screener ensured that only those who had saltwater fished in Georgia waters in the past 12 months were interviewed (about 1 in 5 anglers contacted met this criterion). In addition, a list of 134 licensed resident saltwater fishing guides was provided by the CRD. Efforts were made to contact every guide listed in this registry. In this sense, the effort was an attempt at a census rather than a sampling of saltwater fishing guides. As with the angler survey, a screener ensured that only those who provided saltwater guide services in Georgia in the past 12 months were interviewed.

The survey questionnaires (one for telephone and one for online surveying, with slight differences between the surveys for anglers and guides) were developed cooperatively by Responsive Management and the CRD, based on the research team's familiarity with fishing and natural resources. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

Telephone surveying times are Monday through Friday from noon 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. Online surveys could be taken at the convenience of the anglers and guides. Both components of the survey were conducted in November and December 2017. Responsive Management obtained a total of 1,965 completed interviews with recreational saltwater anglers. Of the 134 saltwater fishing guides invited to participate in the survey, 83 of them (62%) completed the survey.

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. Responses to the two surveys of saltwater anglers were weighted slightly before being combined to reflect Georgia saltwater anglers as a whole. However, due to the census approach of contacting saltwater fishing guides, responses to the guide surveys were combined but not weighted.

PARTICIPATION IN AND SATISFACTION WITH SALTWATER FISHING IN GEORGIA

- Regarding the length of saltwater fishing experience for recreational anglers, the mean is 20.5 years and the median is 16 years.
 - For saltwater fishing guides, the mean experience is 15.4 years and the median is 13 years.
- ➤ Over the last 12 months, 83% of saltwater anglers fished inshore waters (defined as rivers and sounds), 59% fished nearshore waters (from the beach up to 3 miles offshore), and 27% fished offshore waters (3 to 200 miles off the coast of Georgia).
 - Among guides, 86% took anglers to inshore waters, 75% took them nearshore, and 60% took them offshore over the past 12 months.
- Anglers were asked to rate the importance of a series of six potential reasons for saltwater fishing in Georgia. Overall, anglers are more likely to value the recreational aspect of the saltwater fishing experience than the need for a successful catch.
 - The top reason rated as *very* important by anglers is "for relaxation" (79% rated this *very* important), followed by "to be with family and friends" (76%) and "to be close to nature" (70%). Further down are "for the sport" (59%) and "to catch fresh fish for food" (42%); at the bottom is "to catch large fish" (27%).

- ➤ In an open-ended question, anglers were asked if anything detracts from their saltwater fishing satisfaction or causes them to participate less; nearly half (46%) said that nothing does.
 - Some of the top constraints mentioned are outside of CRD control, including lack of time (12%), distance or travel time (7%), and weather (5%). Otherwise, 12% of anglers cited restrictive regulations, and 7% mentioned no or poor access to fishing areas.
 - Guides were also asked if anything takes away from their clients' fishing satisfaction. Again, nearly half (48%) said that nothing does. The top negative factors mentioned (at 17% each) are a lack of fish and restrictive regulations.

RATINGS OF THE COASTAL RESOURCES DIVISION

- ➤ Satisfaction with the Coastal Resources Division is high among anglers: 75% are satisfied, while only 4% are dissatisfied and the remainder are neutral.
 - Among guides, 66% are satisfied with the CRD, compared to 14% who are dissatisfied.
- The survey asked saltwater anglers to rate the CRD's performance at four efforts (providing saltwater fishing opportunities, informing the public about saltwater fishing laws and regulations, managing saltwater fisheries resources, and informing the public about conservation). The results are generally positive: from 67% to 74% give ratings of *excellent* or *good* for the four efforts, far exceeding the percentages giving ratings in the lower half of the scale (*fair* or *poor*), which ranged from 17% to 25%. The top-rated effort is providing saltwater fishing opportunities (74% rate it *excellent* or *good*, while 17% rate it *fair* or *poor*); the lowest of the four rated efforts is informing the public about conservation (67%; 25%).
 - Guides were given the same four CRD efforts to rate. Results were favorable (and ranked in the same order), though notably less so compared to anglers' ratings.

- The survey presented eight efforts that the CRD undertakes related to saltwater fishing activities. For each, anglers were asked to rate how important it should be to the CRD (on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important).
 - "Providing public access areas for fishing" is the top-ranked effort, when ranked by the mean score: it had a mean of 9.0.
 - This is followed by a second tier of six mean scores ranging only from 8.3 to 8.6. Because the efforts have different primary goals (educational, ecological, recreational), their ranking is not easily summarized. There is only separation at the bottom of the ranking, where "maintaining the finfish tagging program" received a mean score of 7.6.
 - Guides rated the CRD's priorities differently than anglers did; the top mean ratings from guides were for "conducting fisheries-related research" and "providing marine offshore artificial reefs" (both 8.7), whereas public fishing access is in the middle of their ranking.
- A majority of marine anglers (76%) are satisfied with the current saltwater fishing regulations for Georgia waters, compared to 13% who are dissatisfied.
 - In follow-up, those who said they are dissatisfied were asked why, in an open-ended
 question. The dominant responses are that regulations are too strict and general dislike of
 current limits; also frequently mentioned are that regulations are not scientifically
 supported, that the regulations favor commercial fishing over recreational fishing, and
 that there are closures.
 - Guides are more divided than anglers over current regulations: 52% of guides are satisfied, while 39% are dissatisfied. Two-thirds of dissatisfied guides (66%) feel that regulations are not strict enough, by far the top response.

INSHORE AND NEARSHORE FISHING

- The survey asked about seven specific saltwater fishing activities in inshore and nearshore Georgia waters. (Note that "fishing" here is being used broadly to include such things as shrimping and harvesting shellfish.) Nearly all anglers had fished with a hook and line (97%). Otherwise, popular activities that marine anglers had done in the past 12 months include crabbing (36%) and cast netting for shrimp (34%).
 - Anglers participated in *any* saltwater fishing activity in inshore or nearshore waters a mean of 25.0 days over the past year.
- A large majority of anglers (87%) are satisfied with their saltwater fishing in Georgia inshore and nearshore waters; only 6% are dissatisfied.
 - Likewise, 81% of guides are satisfied with their guiding experiences in inshore and nearshore waters, while 13% are dissatisfied.
- Another measure of satisfaction is whether saltwater anglers think that the quality of fishing in Georgia inshore and nearshore waters has improved or declined over the past 5 years. Results indicate that 22% think the quality has improved, 41% think it is the same, and 14% think that the quality has declined. A relatively substantial percentage do not know (23%).
 - Guides are in a virtual three-way tie: 32% think the quality has improved, 32% think it stayed the same, and 29% think it declined. Only 6% of the guides do not know.

OFFSHORE FISHING

The median number of days of fishing offshore is 3 days (representing the "typical" offshore angler). The mean is higher, at 9.75 days per year; it is brought up higher than the median because of a few marine anglers who are quite avid (5% fished offshore for more than 30 days).

- ➤ A majority of saltwater anglers (58%) are satisfied with fishing offshore in Georgia, compared to only 9% who are dissatisfied; 10% are neutral and a rather large percentage do not know (23%).
 - Again guides are more divided than anglers, as 48% of guides are satisfied and 32% are dissatisfied.
- Regarding the quality of offshore fishing over the past 5 years, about a third of anglers (32%) think it has stayed the same, while slightly more think it has improved (16%) than declined (11%). However, 41% said they do not know.
 - Among offshore guides, 42% think the quality of offshore fishing has stayed the same, 30% think it declined, and 22% think it improved.

NATURAL AND ARTIFICIAL REEFS

- ➤ Of those who fished offshore waters in Georgia, 18% fished Gray's Reef (of that group, the mean days fished is 5.7 and the median is 3).
 - Among offshore guides, 19% guided anglers to this natural reef (mean 9.9; median 3).
- > Over a third of offshore anglers (35%) fished at a Georgia artificial reef in the past year.
 - Most offshore guides (90%) guided anglers to an artificial reef.
- Among inshore anglers, 17% fished at an inshore artificial reef in the past 12 months.
 - Of inshore guides, 30% guided anglers to an inshore artificial reef.

RED DRUM

- A majority of marine anglers (54%) say that they typically fish for red drum in Georgia.
 - Four-fifths of guides (80%) have guided anglers fishing for red drum.
- The mean days of red drum fishing for anglers is 17.9 days, while the median is 10 days.
 - Among guides who guided anglers seeking red drum, the mean is 64.4 days and the median is 50 days.

- The survey asked about four motivations for fishing for red drum. Recreation was valued above harvest: red drum anglers rate the activity of releasing fish above the three options related to catching fish. Nonetheless, the majority rate each item as *very* or *somewhat* important, ranging from 91% for releasing fish, to 78% to 84% for the three options related to catching fish.
- A majority of red drum anglers were satisfied with their red drum fishing in the past 12 months in Georgia (among those who had fished for red drum in that time period): 75% were satisfied, while only 13% were dissatisfied.
 - Among guides, 73% were satisfied and 24% were dissatisfied.
- Satisfaction with the *number* of red drum the angler catches far exceeds dissatisfaction: 65% are satisfied, while 21% are dissatisfied.
 - Two-thirds of guides (67%) are satisfied with the number of red drum in Georgia, while 30% are dissatisfied. (Note that guides were asked about the number of red drum in the waters, not the number caught.)
- > Satisfaction with the *average size* of red drum the angler catches far exceeds dissatisfaction: 71% are satisfied, while 12% are dissatisfied.
 - A majority of guides (71%) are satisfied with the average size of red drum in Georgia, while 23% are dissatisfied. (Guides were asked about the average size of the fish, not the average size caught.)
- Nearly a quarter of red drum anglers (23%) release all or nearly all of the red drum (of legal size to keep) that they catch. On the other hand, 14% say that they keep all the red drum that they catch. Overall, when asked about the portion of their red drum catch that they release, anglers release half of their catch: the mean percentage released is 56.9%; the median percentage released is 50%.
 - Guides indicated that their clients release legal red drum much more often than not: the mean percentage released is 67.5% and the median is 75%.

- The survey asked red drum anglers if they think the number of red drum in three size categories are increasing, staying the same, or decreasing.
 - Most commonly, red drum anglers think that smaller red drum (less than 23 inches) are increasing (31% say this), compared to the medium size category of red drum (between 23 and 36 inches; 21% of red drum anglers say they are increasing) and large red drum (more than 36 inches; 16% say they are increasing).
 - In contrast, 38% of red drum guides think that red drum within the middle size category are increasing, 34% think smaller red drum are increasing, and 28% think larger red drum are increasing.
- ➤ Currently, the creel limit for red drum in Georgia is 5 per day per person, with a 14- to 23-inch slot limit and year-round harvest. Red drum angler satisfaction with these regulations far exceeds dissatisfaction: 72% are satisfied, while 16% are dissatisfied.
 - On the other hand, red drum guides are more dissatisfied (53%) than satisfied (44%) with the regulations.
- The survey provided a choice of slot size ranges for red drum and asked respondents to select a preference.
 - Red drum anglers most frequently selected a slot size of 14 to 25 inches (27% chose this), while guides most frequently chose 15 to 23 inches (28%).
- ➤ Over half of red drum anglers (56%) would like the creel limit to be 5 fish; this is also the median selection. Otherwise, most commonly, anglers gave a response in the range of 6 to 10 fish (26% gave an answer in this range).
 - Red drum guides, compared to red drum anglers, prefer a lower creel limit: their median is 3 fish, and 51% of the guides preferred either 2 or 3 fish.
- Notably more red drum anglers (54%) would oppose a red drum season than support it (31%); 37% would *strongly* oppose a season for red drum harvest.
 - A majority of red drum guides (62%) oppose a red drum season, compared to 32% in support; 45% *strongly* oppose a season.

- A final question about red drum regulations asked about support for or opposition to the mandatory use of circle hooks to target red drum above 36 inches, with support far exceeding opposition. Among red drum anglers, 67% support, while 15% oppose.
 - Support is even more pronounced among red drum guides: 88% support, while only 8% oppose.

SPOTTED SEATROUT

- ➤ About half of marine anglers (49%) say that they typically fish for spotted seatrout in Georgia.
 - A majority of guides (78%) typically guide anglers fishing for spotted seatrout.
- The mean days of fishing for spotted seatrout is 18.8 days, while the median is 10 days.
 - Guides frequently took anglers fishing for spotted seatrout over the past 12 months: the mean is 75.7 days and the median is 60 days.
- As was done regarding red drum, the survey asked about four motivations for fishing for spotted seatrout. The majority of anglers rate each item about equally as *very* or *somewhat* important, ranging only from 85% to 87%. Looking at *very* important ratings, "to catch spotted seatrout for food" is at the top (46% rating it *very* important), and "releasing fish" is second (43% rating it *very* important), thus making these results different than those for red drum.
- A large majority of spotted seatrout anglers were satisfied with their spotted seatrout fishing in the past 12 months: 76% were satisfied, while only 11% were dissatisfied (in follow-up, dissatisfied anglers said catching more or larger fish and a lower size limit would increase satisfaction).
 - Among spotted seatrout guides, 83% were satisfied, while only 8% were dissatisfied.

- Satisfaction with the *number* of spotted seatrout the angler catches far exceeds dissatisfaction: 69% are satisfied, while 18% are dissatisfied.
 - Guides are more satisfied than anglers regarding the number: 84% are satisfied, while 10% are dissatisfied.
- Satisfaction with the *average size* of spotted seatrout the angler catches far exceeds dissatisfaction: 65% are satisfied, while 20% are dissatisfied.
 - Guides are very close to anglers on this question: 63% are satisfied and 22% are dissatisfied.
- Regarding spotted seatrout of legal size, 11% of spotted seatrout anglers release all or nearly all that they catch, whereas 19% keep all that they catch. The median percentage released is 50%.
 - Guides indicated that their clients release a median of 40% of legal spotted seatrout, and no guides indicated that their clients released all or nearly all that they caught.
- ➤ The survey informed respondents that, in January 2016, the minimum size for keeping spotted seatrout in Georgia increased to 14 inches.
 - By a 2-to-1 margin (42% positive to 20% negative), more anglers believe this rule change is a positive rather than a negative.
 - Nearly two-thirds of guides (63%) believe the change is positive, compared to 14% who believe it is negative.
- > Spotted seatrout anglers are divided on whether they support or oppose a hypothetical slot limit for the species, similar to the slot limit for red drum (i.e., there would be both a minimum and maximum length limit): 43% support and 39% oppose.
 - Guides are more supportive than anglers for a slot limit: 61% of guides support this, while 31% oppose.
- Respondents were asked, if a slot limit were created for spotted seatrout, if they would support an upper limit of 18 inches.
 - A majority of anglers (53%) oppose this, while 30% support it.
 - Guides are divided between support (49%) and opposition (46%).

- Respondents were next asked if they would support a maximum limit of 20 inches.
 - Anglers are divided between support (41%) and opposition (43%).
 - There are notably more guides in support (57%) than opposition (37%).
- The survey asked respondents, if a slot limit were created for spotted seatrout, if they would support or oppose allowing the harvest of one fish above the maximum length limit.
 - About two-thirds of seatrout anglers (68%) support this, while 17% oppose.
 - Compared to anglers, guides expressed a similar amount of support (66%) but more opposition (30%).

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INTRODUCTION AND METHODOLOGY

This study was conducted for the Georgia Department of Natural Resources, Coastal Resources Division (CRD) to determine saltwater anglers' and guides' participation in various types of marine fishing, their satisfaction levels, and their attitudes toward CRD management and other marine fishing issues, with an emphasis on red drum and spotted seatrout. The study entailed two scientific multi-modal surveys: one of recreational saltwater anglers and one of professional fishing guides. Specific aspects of the research methodology are discussed below.

SURVEY SAMPLE

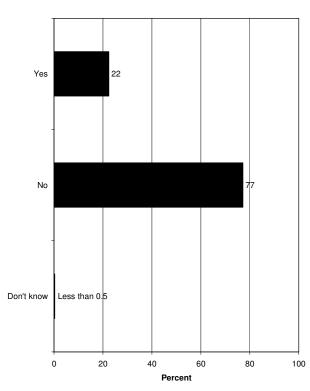
The sample of saltwater anglers was provided by the CRD and consisted of licensed resident anglers with saltwater fishing privileges in Georgia, either those provided by a specific license or those provided as part of a combination license. The sample was edited to remove multiple entries and to limit cases to adults age 16 or older. Next, a probability-based selection process was used to ensure that each angler had an equal chance of being contacted. This process ensured that the sample was valid because every angler had a known chance of being contacted for the survey.

A screener ensured that only those who had saltwater fished in Georgia waters in the past 12 months were interviewed. As the graph on the following page shows, about 1 in 5 of those with saltwater fishing privileges were eligible to take the survey.

In addition, a list of 134 licensed resident saltwater fishing guides was provided by the CRD. Efforts were made to contact every guide listed in this registry. In this sense, the effort was an attempt at a census rather than a sampling of saltwater fishing guides. As with the angler survey, a screener ensured that only those who provided saltwater guide services in Georgia in the past 12 months were interviewed.

Responsive Management obtained a total of 1,965 completed interviews with recreational saltwater anglers. In the survey of recreational saltwater anglers, 5% of the telephone contacts terminated the survey before completing, and 17% of the email contacts terminated the survey before completing; these terminated surveys were not used in the final dataset of 1,965

completed interviews. Of the 134 saltwater fishing guides invited to participate in the survey, 83 of them (62%) completed the survey.



Q7. Have you been saltwater fishing in Georgia in the past 12 months? (Asked of those with saltwater fishing privileges.)

USE OF THE MULTI-MODAL SURVEY

For the initial attempts to contact saltwater anglers and guides, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among anglers and guides in the sample (both landlines and cell phones were called). Additionally, telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective. Telephone surveys also have better representation of the sample than do surveys that are read by the respondent (i.e., mail and Internet surveys) because the latter can potentially systematically exclude those who are not literate enough to complete the surveys or who would be intimidated by having to complete a written survey—by an estimate of the U.S. Department of Education's National Institute of Literacy (2016), up to 43% of the general

population read no higher than a "basic level," suggesting that they would be reticent to complete a survey that they have to read to themselves. Finally, telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

However, for complete coverage, it was also necessary to collect data through online surveys. This was particularly important because many anglers and guides in the samples did not have a telephone number available. (A phone match was performed for records that did not include a telephone number; a portion of missing numbers were successfully obtained through this process.) Emails were sent to all who had an email address but no telephone number, as well as those who had not been reached by telephone after multiple attempts. The emails were sent on behalf of the CRD, assuring potential respondents of the legitimacy of the survey. Those who were contacted by email were provided a unique personal link to the survey, and the survey could only be taken through this email link. In other words, it was not possible for just anybody surfing the Internet to take the survey. This also ensured that a person could take the survey only once.

Note that there was some fluidity of methods, because the email provided a number that people could call if they preferred to do the survey that way, so some in the sample as email respondents ended up completing the survey by telephone. Additionally, some respondents were called on the telephone, but then they completed the survey online prompted by the telephone call, so these respondents from the telephone sample ended up completing the survey online.

QUESTIONNAIRE DESIGN

The survey questionnaires (one for telephone and one for online surveying, with slight differences between the surveys for anglers and guides) were developed cooperatively by Responsive Management and the CRD, based on the research team's familiarity with fishing and natural resources. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

SURVEYING FACILITIES

A central survey center at the Responsive Management office allowed for rigorous quality control over the interviews and online data collection. Responsive Management maintains its own in-house telephone interviewing and data collection facilities. These facilities are staffed by interviewers and data managers with experience conducting computer-assisted telephone interviews and online surveys on the subjects of fishing and other outdoor recreation.

To ensure the integrity of the telephone portion of the survey, 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. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaire.

INTERVIEWING DATES AND TIMES

Telephone surveying times are Monday through Friday from noon to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A multiple-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. Online surveys could be taken at the convenience of the anglers and guides. Both components of the survey were conducted in November and December 2017.

SURVEY DATA COLLECTION AND QUALITY CONTROL

The software used for telephone data collection was Questionnaire Programming Language (QPL). The telephone survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey questionnaires were

programmed so that QPL branched, coded, and substituted phrases in the surveys based on previous responses to ensure the integrity and consistency of the data collection.

The online data were downloaded by Responsive Management's database by the standard exporting software provided by the online surveying vendor.

The Survey Center Managers and statisticians monitored the data collection to ensure the integrity of the data, 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 questionnaires contained error checkers and computation statements to ensure quality and consistent data. After obtaining the completed questionnaires (the telephone and online versions), the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness.

DATA ANALYSIS

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. Responses to the two surveys of saltwater anglers were weighted slightly before being combined to reflect Georgia saltwater anglers as a whole. However, due to the census approach of contacting saltwater fishing guides, responses to the guide surveys were combined but not weighted.

SAMPLING ERROR

Throughout this report, findings of the saltwater angler survey are reported at a 95% confidence interval. For the entire sample of saltwater anglers, the sampling error is at most plus or minus 2.21 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 2.21 percentage points of each other. Sampling error was calculated using the formula described below, with a sample size of 1,965 and a population size of 666,379 saltwater anglers.

Sampling Error Equation

$$B = \left(\sqrt{\frac{N_p(.25)}{N_s} - .25}\right) (1.96)$$
Where: B = maximum sampling error (as decimal)
$$N_p = \text{population size (i.e., total number who could be surveyed)}$$

$$N_S = \text{sample size (i.e., total number of respondents surveyed)}$$

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 <u>maximum</u> sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

Due to the census approach of contacting saltwater fishing guides, calculation of a sampling error did not apply.

ADDITIONAL INFORMATION ABOUT THE PRESENTATION OF RESULTS IN THE REPORT

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

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

Some graphs show an average, either the mean or median (or both). The mean is simply the sum of all numbers divided by the number of respondents. Because outliers (extremely high or low numbers relative to most of the other responses) may skew the mean, the median may be shown. The median is the number at which half the sample is above and the other half is below. In other words, a median of 150 means that half the sample gave an answer of more than 150 and the other half gave an answer of less than 150.

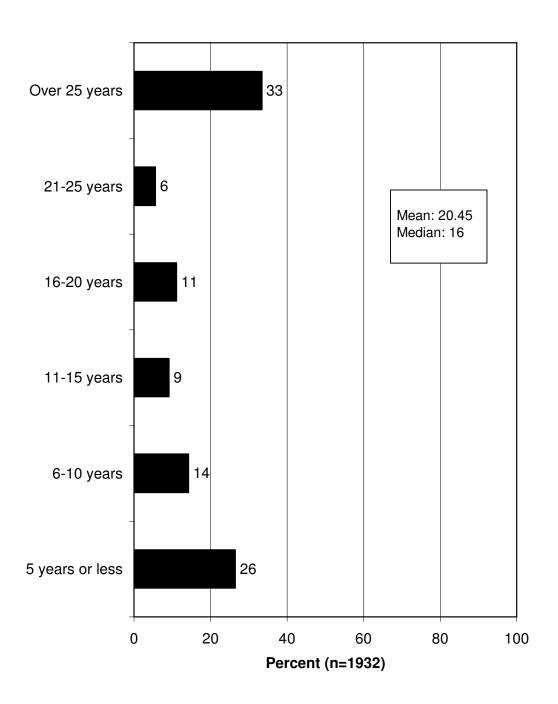
Most graphs show results rounded to the nearest integer; however, all data are stored in decimal format, and all calculations are performed on unrounded numbers. For this reason, some results may not sum to exactly 100% because of this rounding on the graphs. Additionally, rounding may cause apparent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

The two surveys are mostly equivalent, with slightly different wording for anglers and guides. For each survey question shared between the groups, results of the recreational saltwater angler survey are shown first, followed by results of the saltwater fishing guide survey.

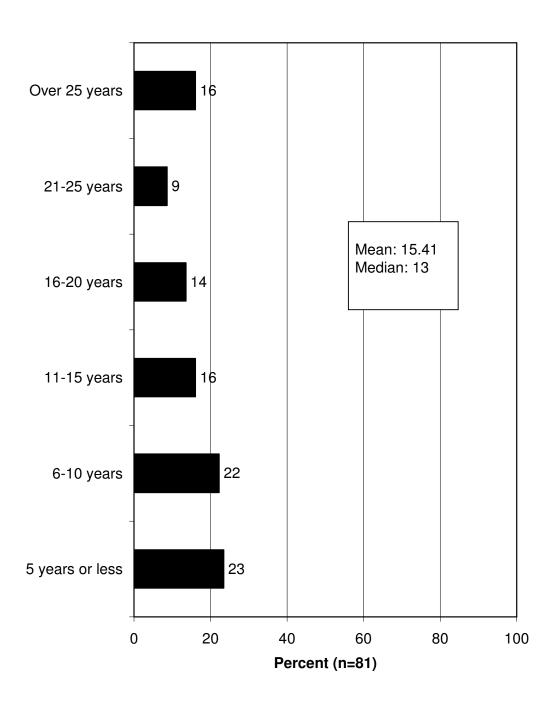
PARTICIPATION IN AND SATISFACTION WITH SALTWATER FISHING IN GEORGIA

- Regarding the length of saltwater fishing experience for recreational anglers, the mean is 20.5 years and the median is 16 years.
 - For saltwater fishing guides, the mean experience is 15.4 years and the median is 13 years.
- ➤ Over the last 12 months, 83% of saltwater anglers fished inshore waters (defined as rivers and sounds), 59% fished nearshore waters (from the beach up to 3 miles offshore), and 27% fished offshore waters (3 to 200 miles off the coast of Georgia).
 - Among guides, 86% took anglers to inshore waters, 75% took them nearshore, and 60% took them offshore over the past 12 months.
- Anglers were asked to rate the importance of a series of six potential reasons for saltwater fishing in Georgia. Overall, anglers are more likely to value the recreational aspect of the saltwater fishing experience than the need for a successful catch.
 - The top reason rated as *very* important by anglers is "for relaxation" (79% rated this *very* important), followed by "to be with family and friends" (76%) and "to be close to nature" (70%). Further down are "for the sport" (59%) and "to catch fresh fish for food" (42%); at the bottom is "to catch large fish" (27%).
 - o Percentages are much closer when *very* important and *somewhat* important are combined.
 - Series graphs are shown for: *very* important, *very* important or *somewhat* important combined, *not at all* important, and all responses combined.
- In an open-ended question, anglers were asked if anything detracts from their saltwater fishing satisfaction or causes them to participate less; nearly half (46%) said that nothing does.
 - Some of the top constraints mentioned are outside of CRD control, including lack of time (12%), distance or travel time (7%), and weather (5%). Otherwise, 12% of anglers cited restrictive regulations and 7% mentioned no or poor access to fishing areas.
 - Guides were also asked if anything takes away from their clients' fishing satisfaction. Again, nearly half (48%) said that nothing does. The top negative factors mentioned (at 17% each) are a lack of fish and restrictive regulations.

Q9. How many years have you been saltwater fishing in or out of Georgia? (Saltwater anglers)



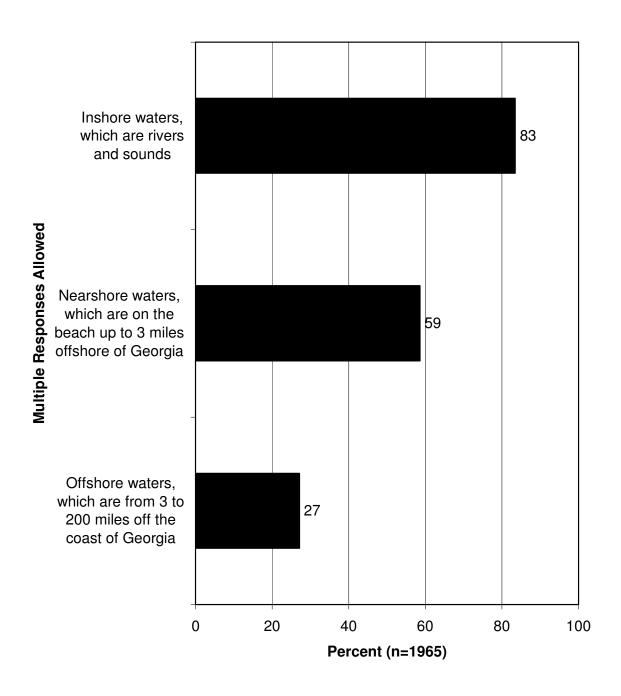
Q9. How many years have you been a saltwater fishing guide in or out of Georgia? (Guides)



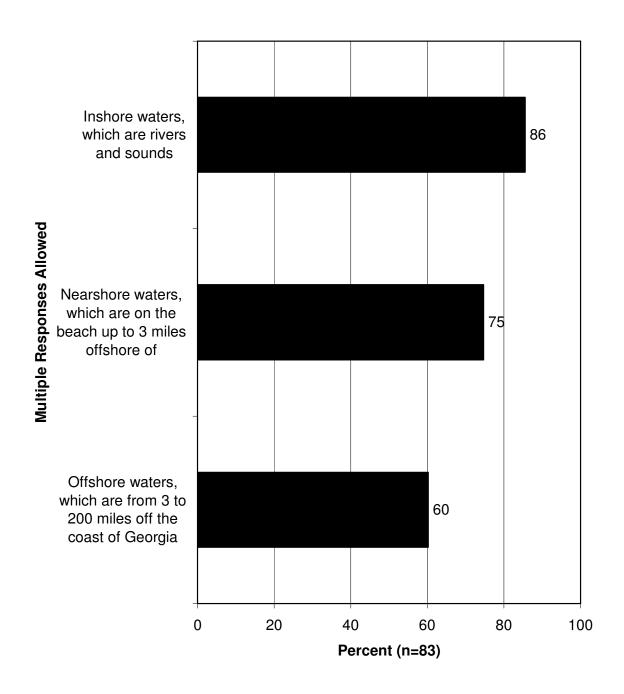
Q14. Which of the following types of waters did you saltwater fish in Georgia in the past 12 months?

Please name all that apply. What about...?

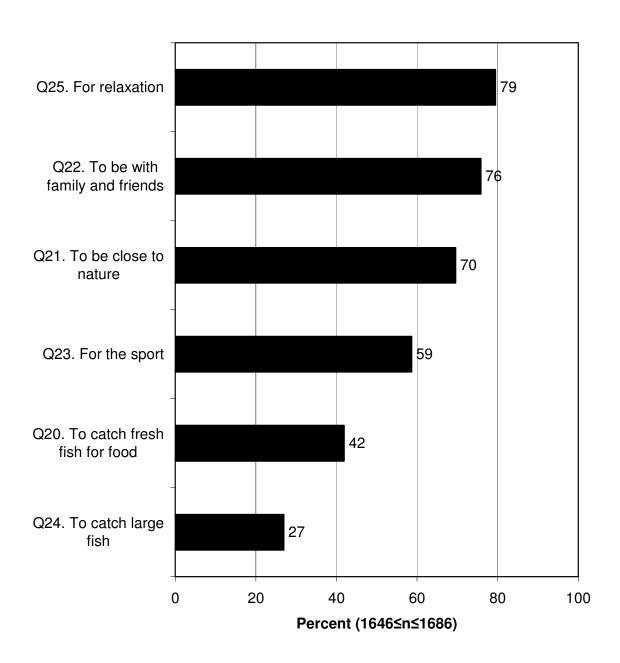
(Saltwater anglers)



Q17. In which of the following types of waters did you guide saltwater anglers in Georgia in the past 12 months? Please name all that apply. What about...? (Guides)

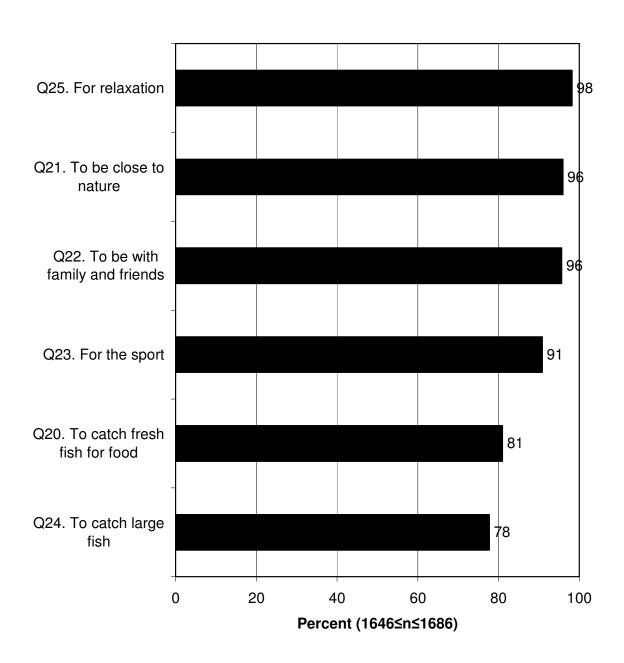


Q20-Q25. Percent of respondents who rated the importance of the following reasons for saltwater fishing in Georgia over the past 12 months as very important to them: (Saltwater anglers)

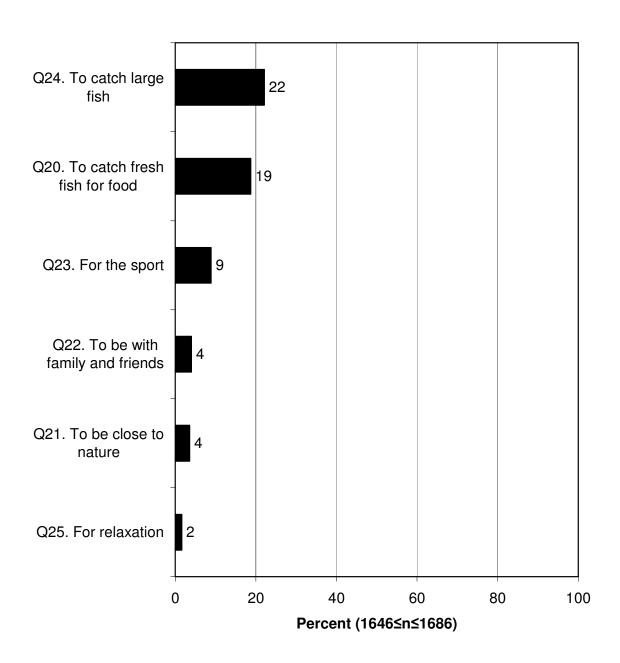


Q20-Q25. Percent of respondents who rated the importance of the following reasons for saltwater fishing in Georgia over the past 12 months as very important or somewhat important to them:

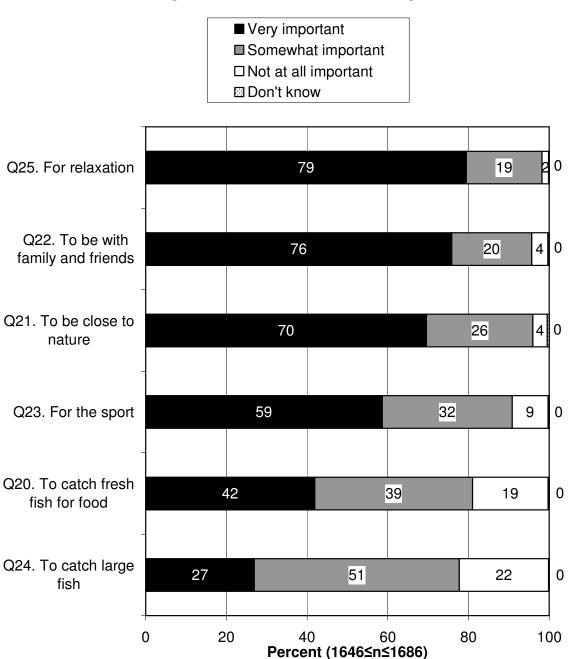
(Saltwater anglers)



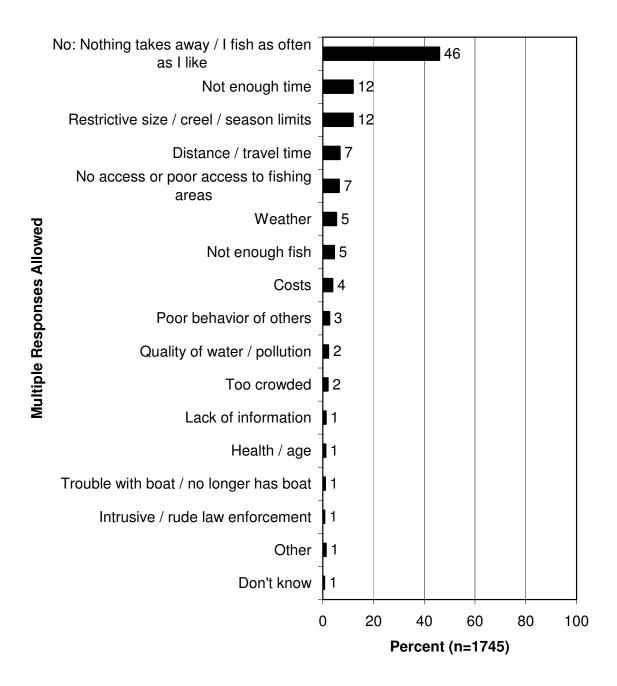
Q20-Q25. Percent of respondents who rated the importance of the following reasons for saltwater fishing in Georgia over the past 12 months as not at all important to them: (Saltwater anglers)



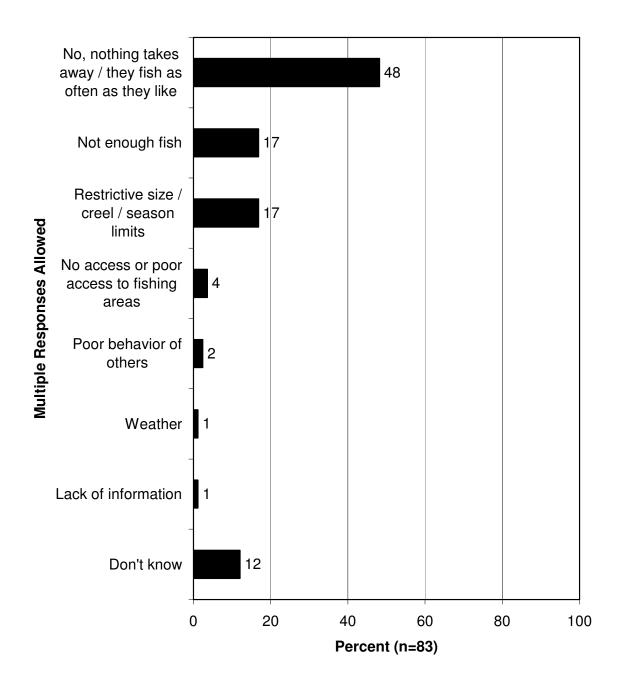
Q20-Q25. Percent of respondents who rated the importance of the following reasons for saltwater fishing in Georgia over the past 12 months as [rating] to them: (Saltwater anglers)



Q28. In general, are there any things that take away from your saltwater fishing satisfaction or cause you not to fish as much as you would like in saltwater in Georgia? (Saltwater anglers)



Q23. In general, are there any things that take away from your client's saltwater fishing satisfaction in Georgia? (Guides)

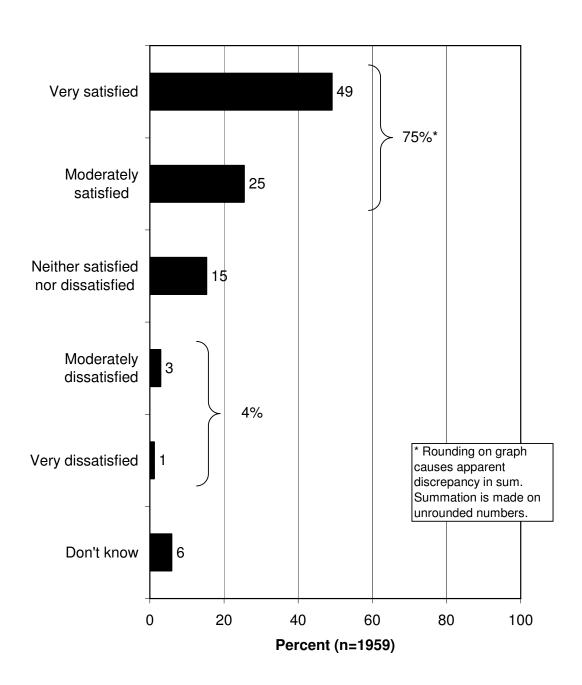


RATINGS OF THE COASTAL RESOURCES DIVISION

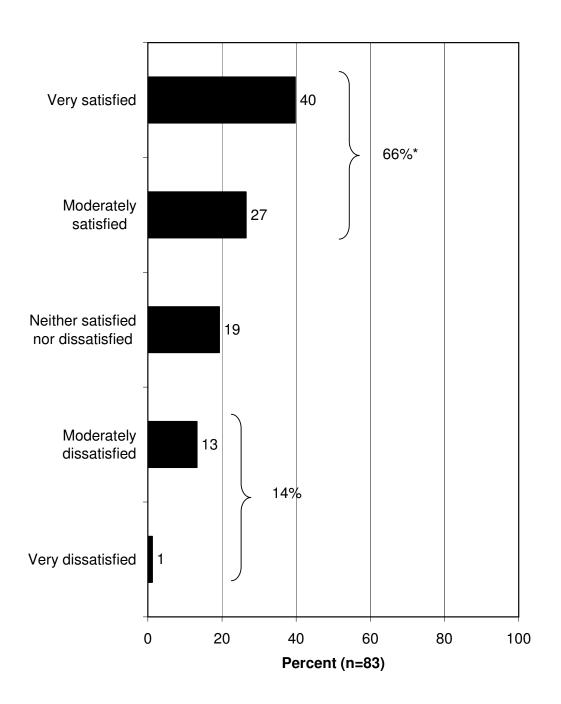
- ➤ Satisfaction with the Coastal Resources Division is high among anglers with the Coastal Resources Division: 75% are satisfied, while only 4% are dissatisfied and the remainder are neutral.
 - Among guides, 66% are satisfied with the CRD, compared to 14% who are dissatisfied.
- The survey asked saltwater anglers to rate the CRD's performance at four efforts (providing saltwater fishing opportunities, informing the public about saltwater fishing laws and regulations, managing saltwater fisheries resources, and informing the public about conservation). The results are generally positive: from 67% to 74% give ratings of *excellent* or *good* for the four efforts, far exceeding the percentages giving ratings in the lower half of the scale (*fair* or *poor*), which ranged from 17% to 25%. The top-rated effort is providing saltwater fishing opportunities (74% rate it *excellent* or *good*, while 17% rate it *fair* or *poor*); the lowest of the four rated efforts is informing the public about conservation (67%; 25%).
 - Guides were given the same four CRD efforts to rate. Results were favorable (and ranked in the same order), though notably less so compared to anglers' ratings.
- The survey presented eight efforts that the CRD undertakes related to saltwater fishing activities. For each, anglers were asked to rate how important it should be to the CRD (on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important).
 - "Providing public access areas for fishing" is the top-ranked effort, when ranked by the mean score: it had a mean of 9.0.
 - This is followed by a second tier of six mean scores ranging only from 8.3 to 8.6. Because the efforts have different primary goals (educational, ecological, recreational), their ranking is not easily summarized. There is only separation at the bottom of the ranking, where "maintaining the finfish tagging program" received a mean score of 7.6.
 - Guides rated the CRD's priorities differently than anglers did; the top mean ratings from guides were for "conducting fisheries-related research" and "providing marine offshore artificial reefs" (both 8.7), whereas public fishing access is in the middle of their ranking.

- A majority of marine anglers (76%) are satisfied with the current saltwater fishing regulations for Georgia waters, compared to 13% who are dissatisfied.
 - In follow-up, those anglers who said they are dissatisfied were asked why, in an openended question. The dominant responses are that regulations are too strict and general dislike of current limits. Also common are statements that regulations are not scientifically supported, that the regulations favor commercial fishing over recreational fishing, and that there are closures.
 - Guides are more divided than anglers over current regulations: 52% of guides are satisfied, while 39% are dissatisfied. Two-thirds of dissatisfied guides (66%) feel that regulations are not strict enough, by far the top response.

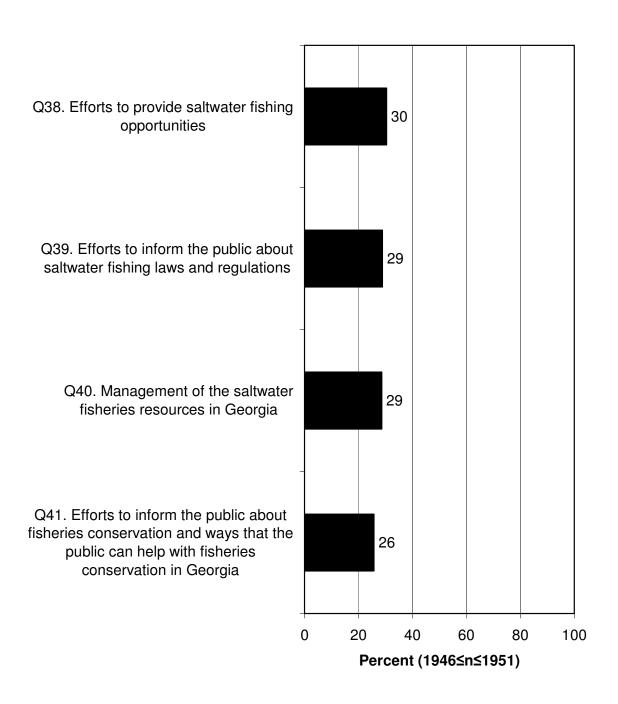
Q17. Overall, are you satisfied or dissatisfied with the Coastal Resources Division, which is a division of the Georgia Department of Natural Resources? (Saltwater anglers)



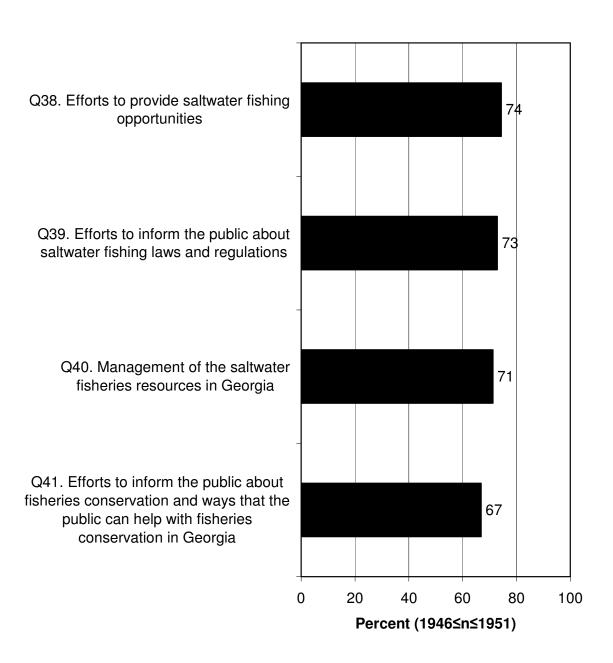
Q20. Overall, are you satisfied or dissatisfied with the Coastal Resources Division, which is a division of the Georgia Department of Natural Resources? (Guides)



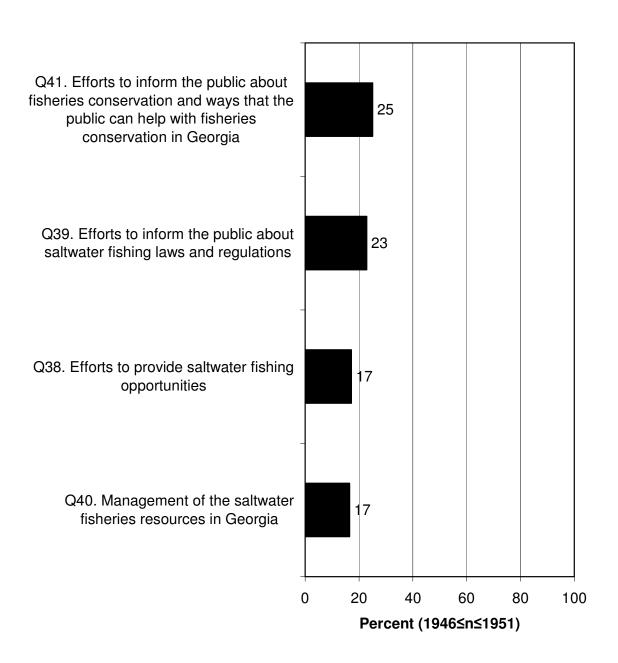
Q38-Q41. Percent of respondents who rated the Coastal Resources Division excellent in each of the following areas: (Saltwater anglers)



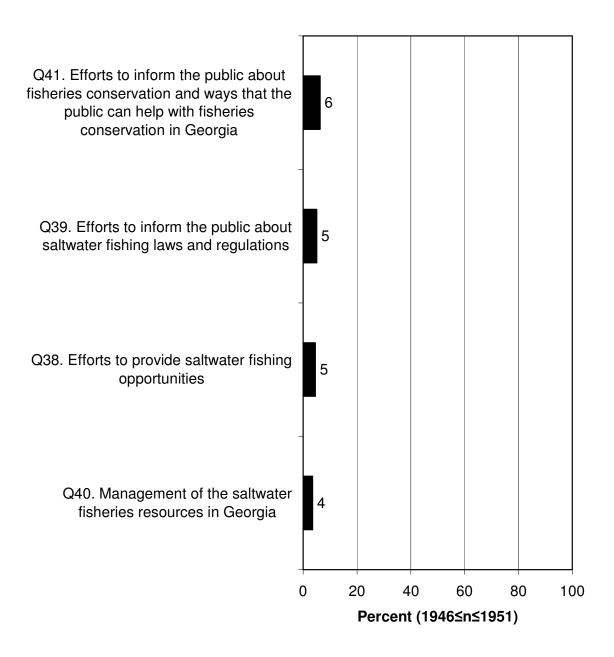
Q38-Q41. Percent of respondents who rated the Coastal Resources Division excellent or good in each of the following areas: (Saltwater anglers)



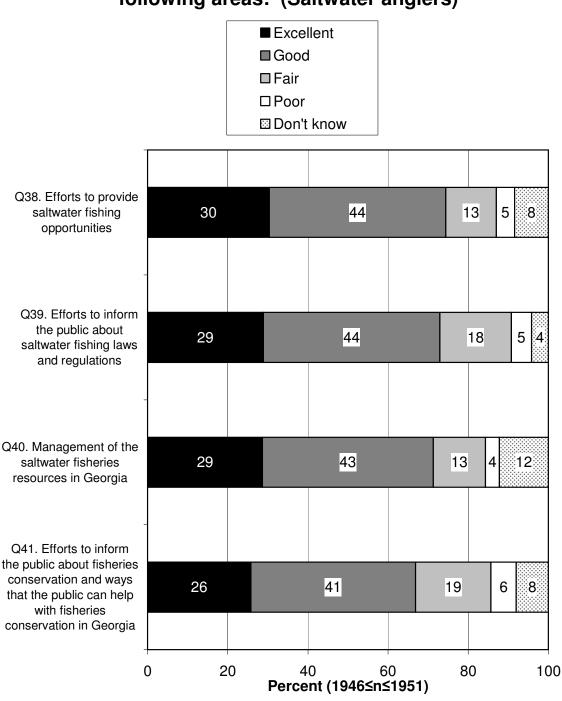
Q38-Q41. Percent of respondents who rated the Coastal Resources Division fair or poor in each of the following areas: (Saltwater anglers)



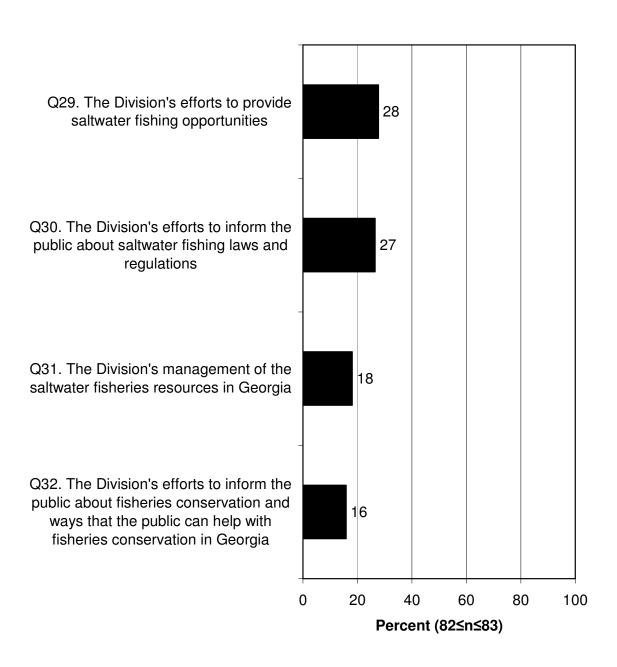
Q38-Q41. Percent of respondents who rated the Coastal Resources Division poor in each of the following areas: (Saltwater anglers)



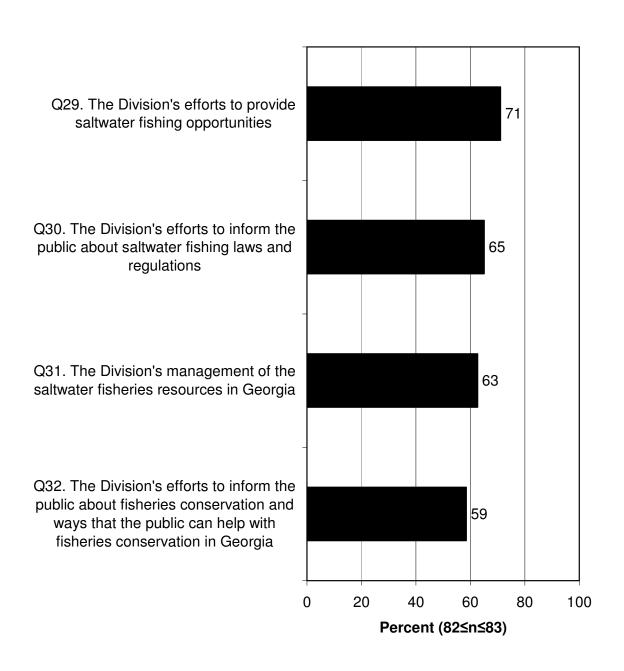
Q38-Q41. Percent of respondents who rated the Coastal Resources Division [rating] in each of the following areas: (Saltwater anglers)



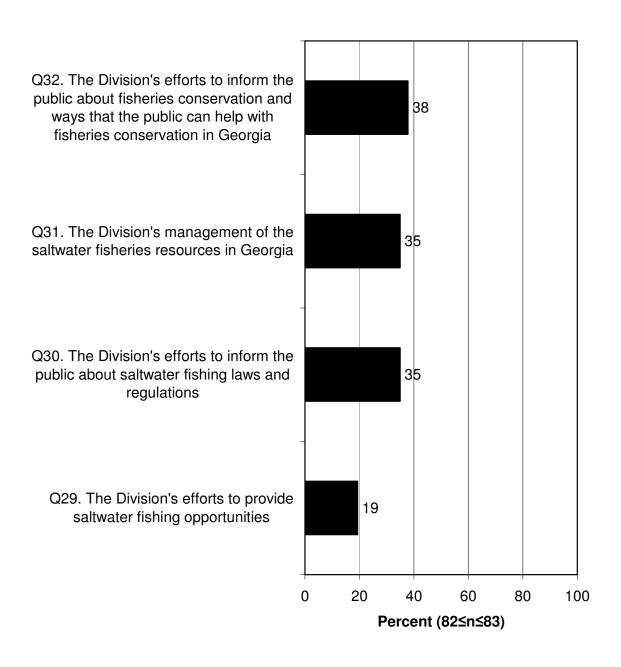
Q29-Q32. Percent of respondents who rated the Coastal Resources Division excellent in each of the following areas: (Guides)



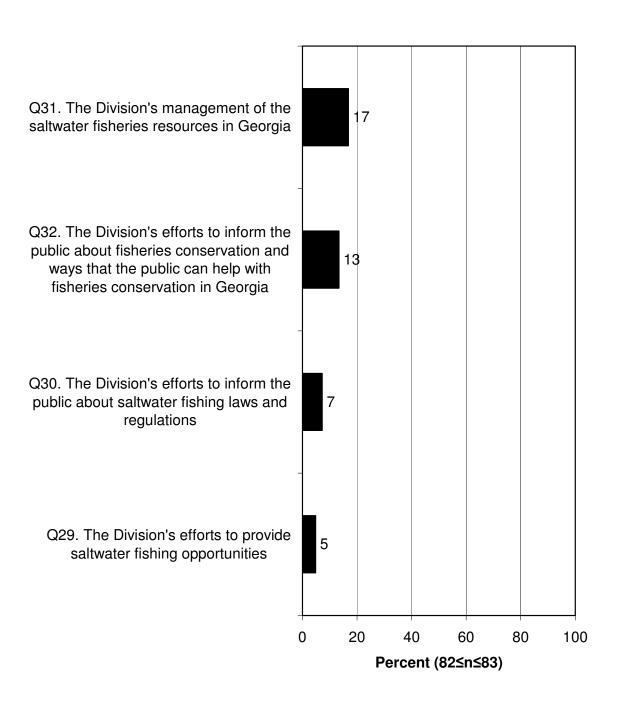
Q29-Q32. Percent of respondents who rated the Coastal Resources Division excellent or good in each of the following areas: (Guides)



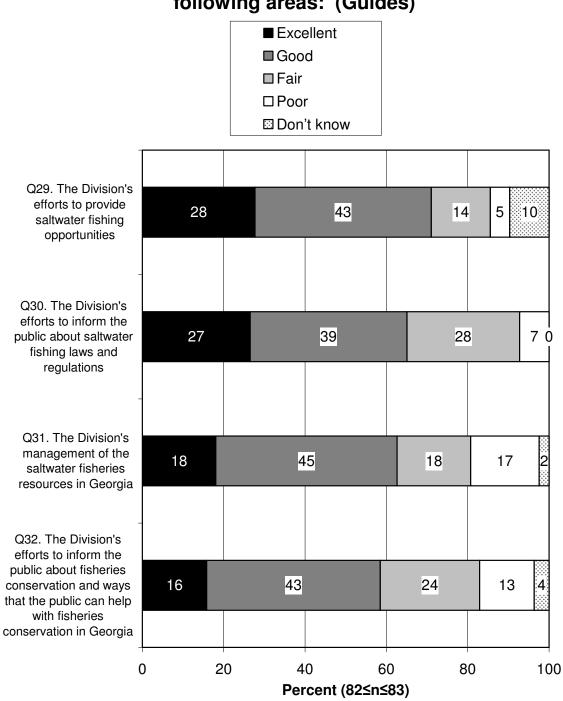
Q29-Q32. Percent of respondents who rated the Coastal Resources Division fair or poor in each of the following areas: (Guides)



Q29-Q32. Percent of respondents who rated the Coastal Resources Division poor in each of the following areas: (Guides)

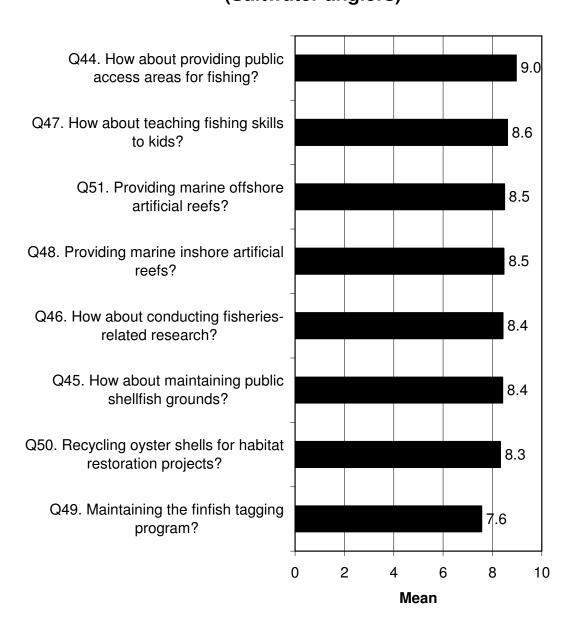


Q29-Q32. Percent of respondents who rated the Coastal Resources Division [rating] in each of the following areas: (Guides)



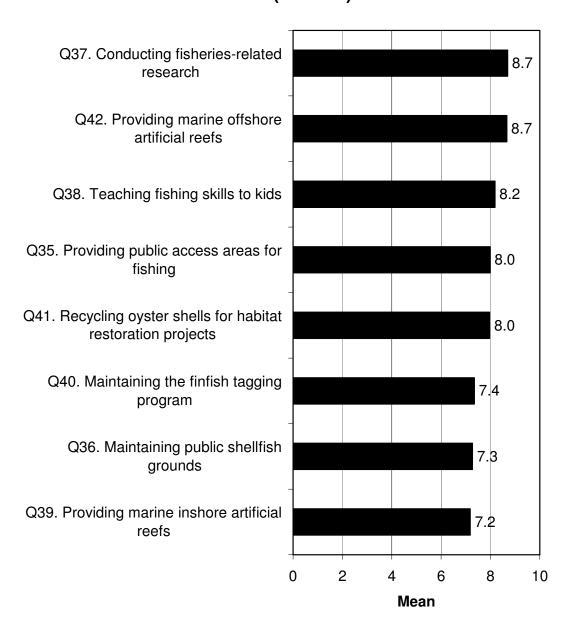
Q44-Q51. Mean ratings of importance that anglers think each of the following should be for the Coastal Resources Division, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important:

(Saltwater anglers)



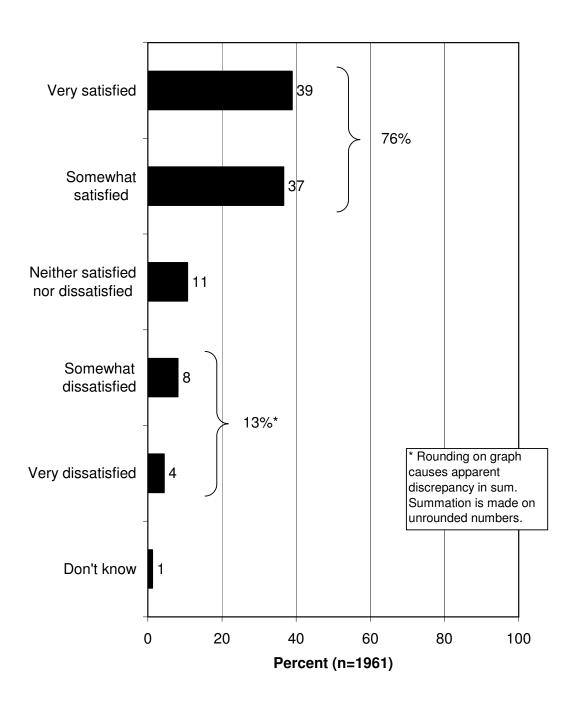
Q35-Q42. Mean ratings of importance that guides think each of the following should be for the Coastal Resources Division, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important:

(Guides)



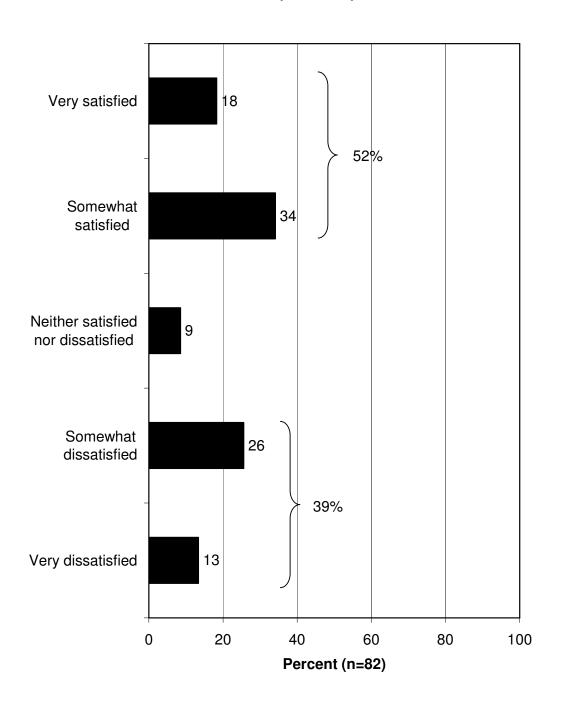
Q30. Overall, are you satisfied or dissatisfied with the current saltwater fishing regulations for Georgia waters?

(Saltwater anglers)

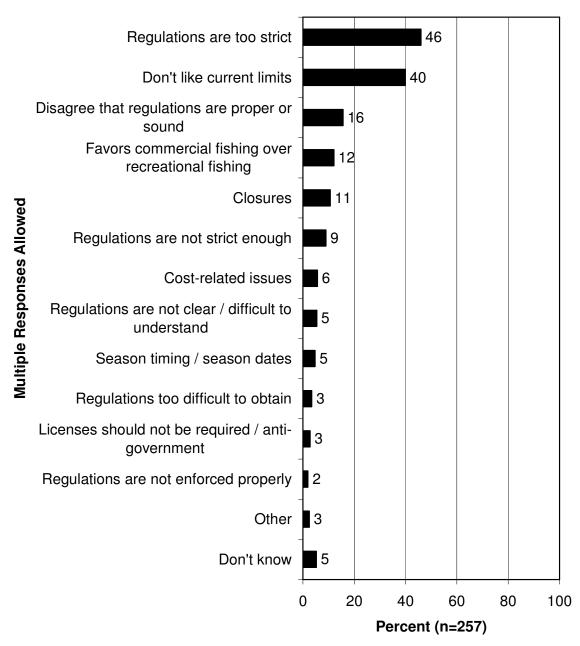


Q25. Overall, are you satisfied or dissatisfied with the current saltwater fishing regulations for Georgia waters?

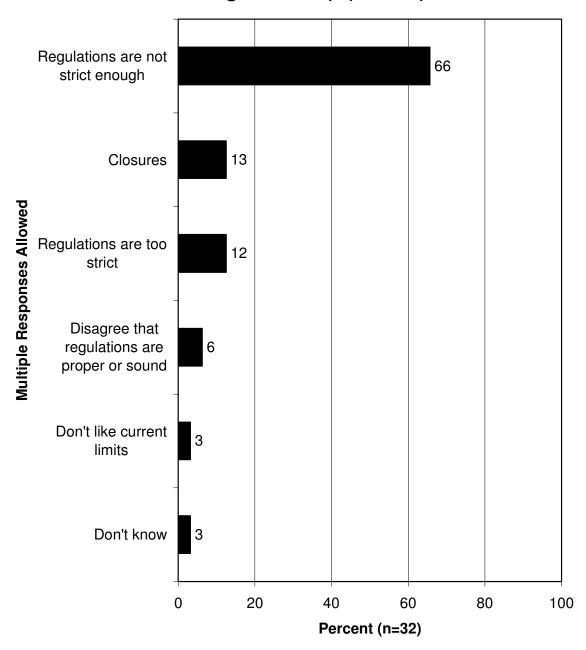
(Guides)



Q33. Why are you dissatisfied with current saltwater fishing regulations for Georgia waters? (Asked of those who indicated being dissatisfied with the current salwater fishing regulations for Georgia waters.) (Saltwater anglers)



Q26. Why are you dissatisfied with current saltwater fishing regulations for Georgia waters? (Asked of those who indicated being dissatisfied with the current salwater fishing regulations for Georgia waters.) (Guides)

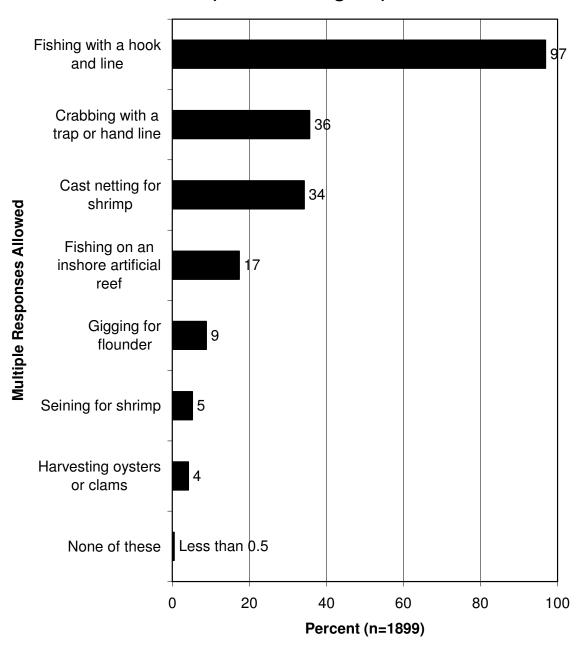


INSHORE AND NEARSHORE FISHING

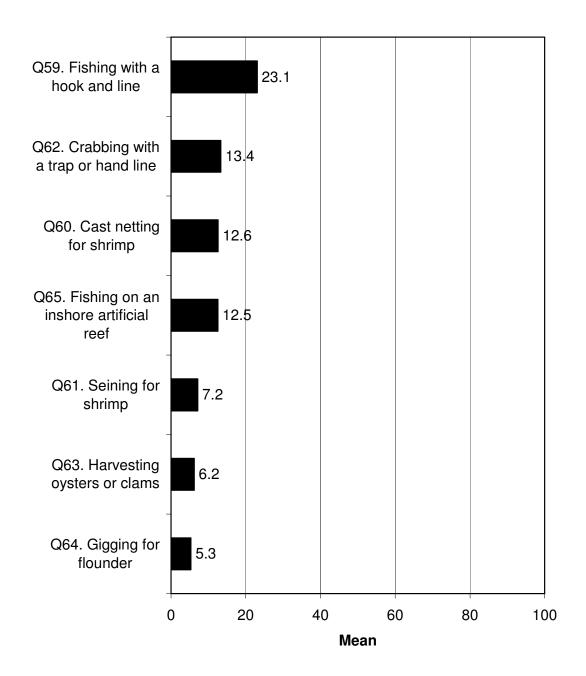
- The survey asked about seven specific saltwater fishing activities in inshore and nearshore Georgia waters. (Note that "fishing" here is being used broadly to include such things as shrimping and harvesting shellfish.) Nearly all anglers had fished with a hook and line (97%). Otherwise, popular activities that marine anglers had done in the past 12 months include crabbing (36%) and cast netting for shrimp (34%).
 - The mean number of days that anglers spent doing each activity over the past year is shown in a series graph, with hook-and-line fishing being the top ranked activity (mean of 23.1 days).
 - Individual graphs are shown for each of the following fishing activities: hook and line fishing, cast netting for shrimp, seining for shrimp, crabbing, harvesting oysters or clams, flounder gigging, and fishing at an artificial reef.
 - Anglers participated in *any* saltwater fishing activity in inshore or nearshore waters a mean of 25.0 days over the past year.
- A large majority of anglers (87%) are satisfied with their saltwater fishing in Georgia inshore and nearshore waters; only 6% are dissatisfied.
 - Likewise, 81% of guides are satisfied with their guiding experiences in inshore and nearshore waters, while 13% are dissatisfied.
- Another measure of satisfaction is whether saltwater anglers think that the quality of fishing in Georgia inshore and nearshore waters has improved or declined over the past 5 years.

 Results indicate that 22% think the quality has improved, 41% think it is the same, and 14% think that the quality has declined. A relatively substantial percentage do not know (23%).
 - Guides are in a virtual three-way tie: 32% think the quality has improved, 32% think it stayed the same, and 29% think it declined. Only 6% of the guides do not know.

Q58. Which of the following saltwater fishing activities did you do during the past 12 months in Georgia inshore and nearshore waters? (Asked of those who fished in inshore or nearshore waters.) (Saltwater anglers)

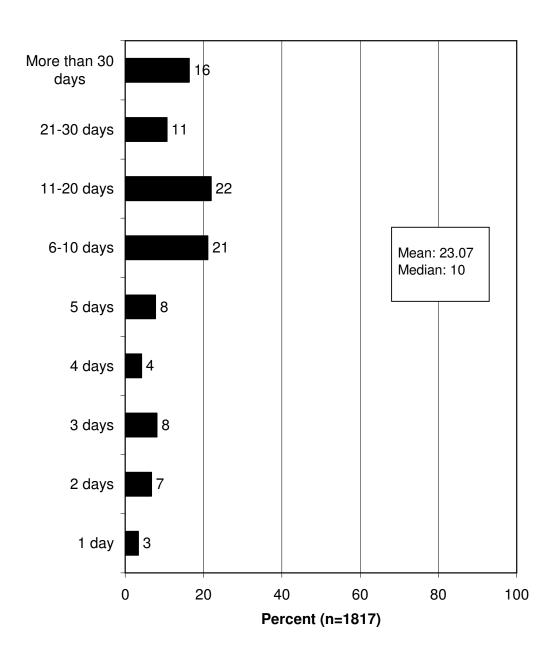


Q59-Q65. Mean number of days that anglers who fished in inshore or nearshore waters did for each of the following activities in the past 12 months: (Saltwater anglers)

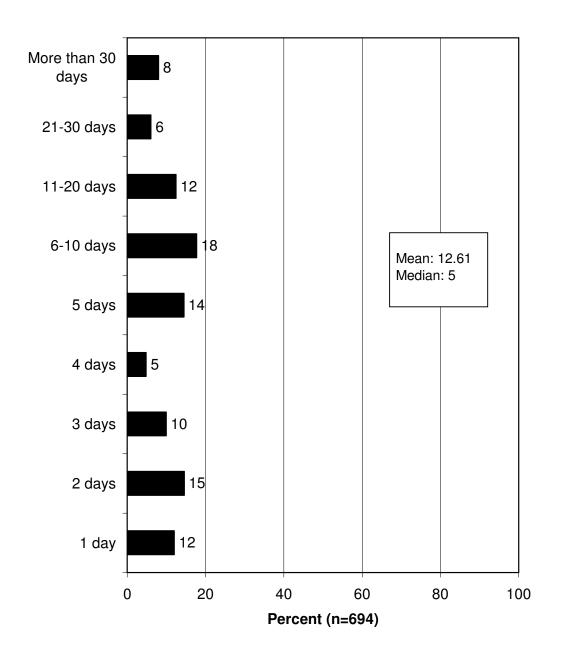


Q59. How many days did you fish with a hook and line in Georgia inshore or nearshore waters in the past 12 months? (Asked of those who fished with a hook and line in inshore or nearshore waters.)

(Saltwater anglers)

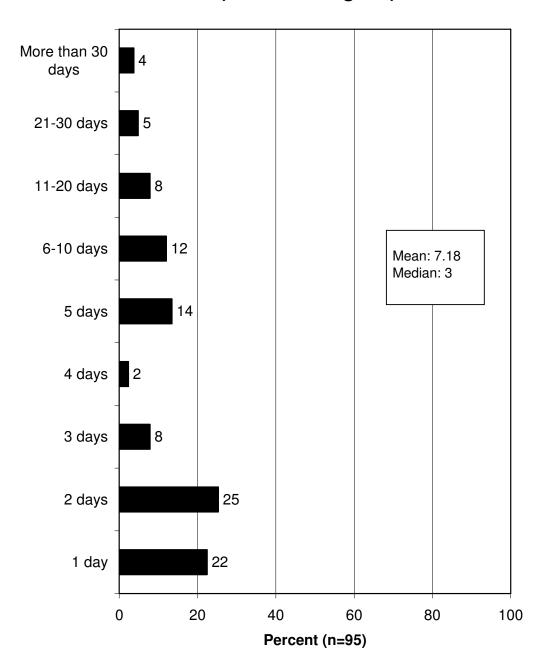


Q60. How many days did you go cast netting for shrimp in Georgia inshore or nearshore waters in the past 12 months? (Asked of those who fished with cast netting in inshore or nearshore waters.) (Saltwater anglers)



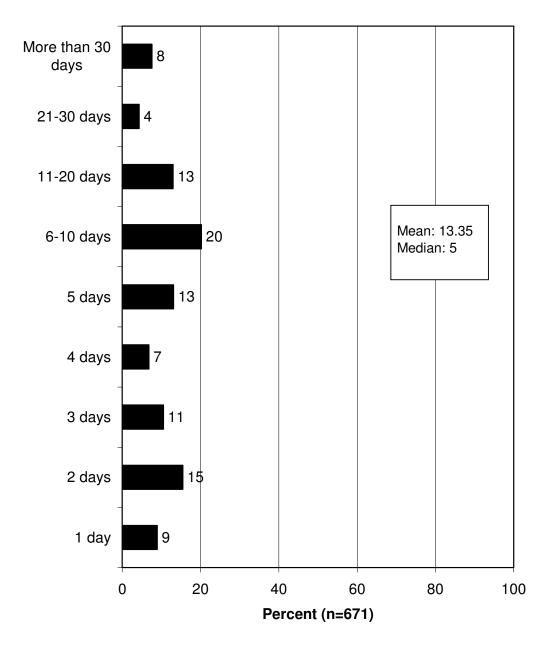
Q61. How many days did you go seining for shrimp in Georgia inshore or nearshore waters in the past 12 months? (Asked of those who seined for shrimp in inshore or nearshore waters.)

(Saltwater anglers)



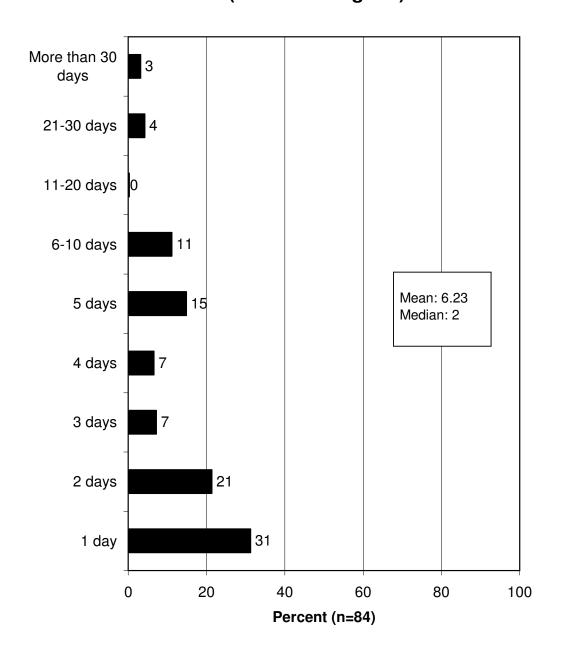
Q62. How many days did you go crabbing with a trap or hand line in Georgia inshore or nearshore waters in the past 12 months? (Asked of those who crabbed with a trap or hand line in inshore or nearshore waters.)

(Saltwater anglers)



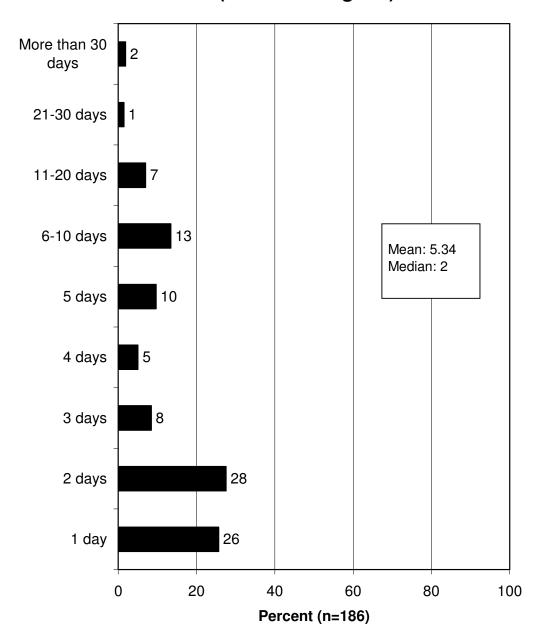
Q63. How many days did you harvest oysters or clams in Georgia inshore or nearshore waters in the past 12 months? (Asked of those who harvested oysters or clams in inshore or nearshore waters.)

(Saltwater anglers)



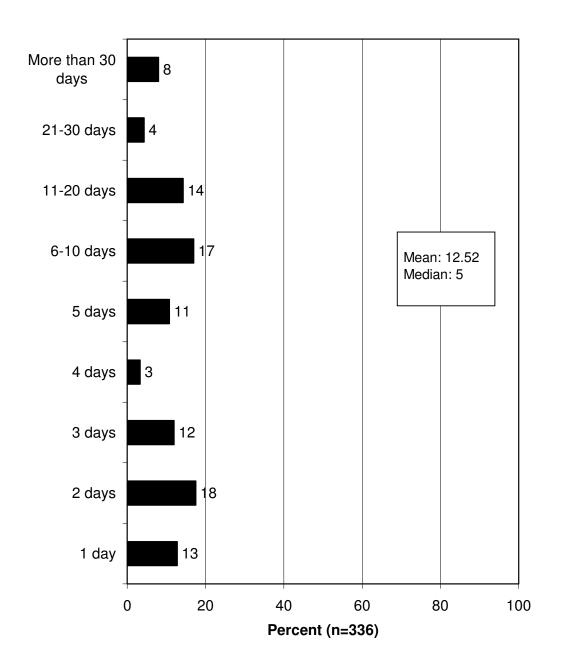
Q64. How many days did you go gigging for flounder in Georgia inshore or nearshore waters in the past 12 months? (Asked of those who went gigging for flounder in inshore or nearshore waters.)

(Saltwater anglers)



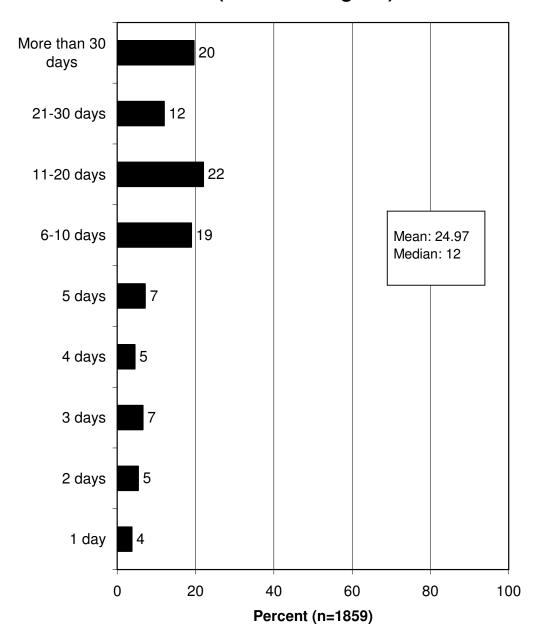
Q65. How many days did you fish an artificial reef in Georgia inshore or nearshore waters in the past 12 months? (Asked of those who fished an inshore or nearshore artificial reef.)

(Saltwater anglers)



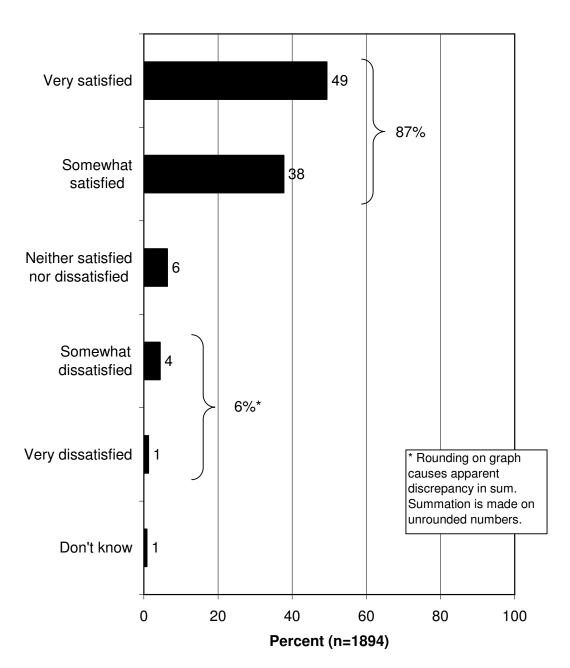
Q66. During the past 12 months, how many days total did you do any saltwater fishing activities inshore or nearshore in Georgia? (Asked about those who saltwater fished in inshore or nearshore waters.)

(Saltwater anglers)



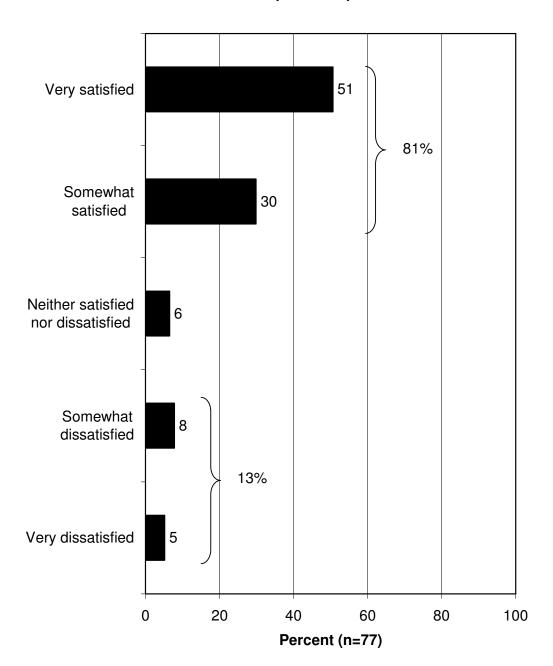
Q54. Overall, are you satisfied or dissatisfied with saltwater fishing in Georgia inshore and nearshore waters? (Asked of those who fished in inshore or nearshore waters.)

(Saltwater anglers)



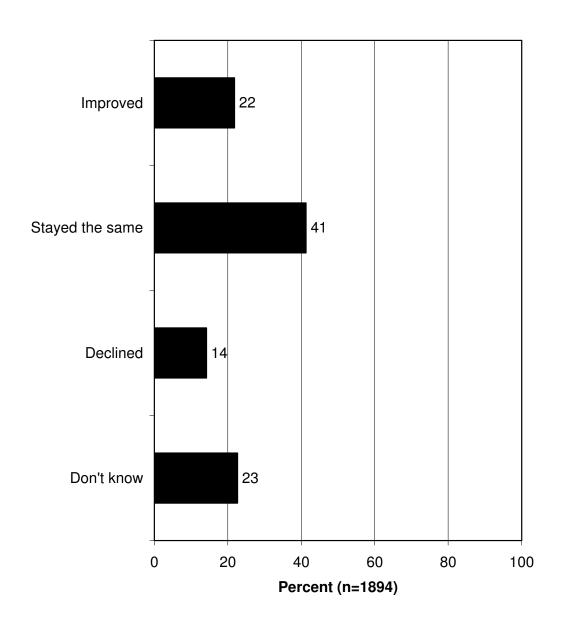
Q45. Overall, are you satisfied or dissatisfied with your guiding experiences in Georgia inshore and nearshore waters? (Asked about those who guided in inshore or nearshore waters.)

(Guides)



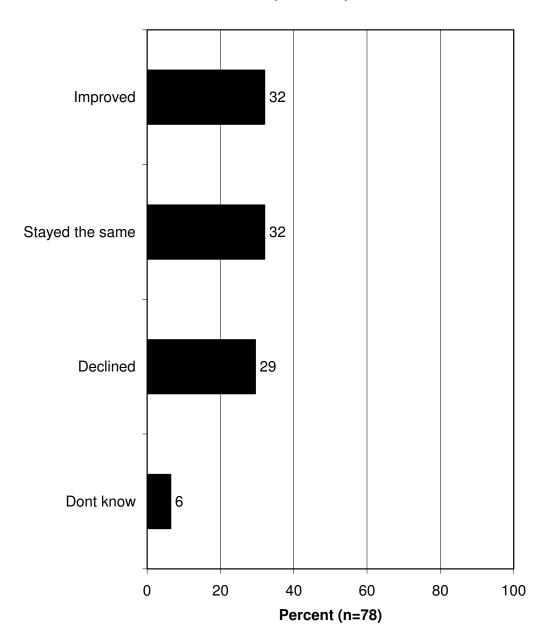
Q55. In the past 5 years, do you think the quality of saltwater fishing in Georgia inshore and nearshore waters has improved, stayed the same, declined, or do you not know? (Asked of those who fished in inshore or nearshore waters.)

(Saltwater anglers)



Q46. In the past 5 years, do you think the quality of saltwater fishing in Georgia inshore and nearshore waters has improved, stayed the same, declined, or do you not know? (Asked about those who guided in inshore or nearshore waters.)

(Guides)

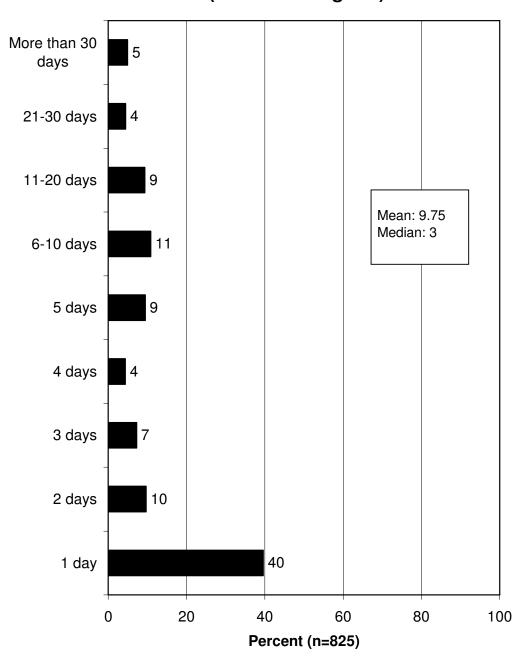


OFFSHORE FISHING

- ➤ The median number of days of fishing offshore is 3 days (representing the "typical" offshore angler). The mean is higher, at 9.75 days per year; it is brought up higher than the median because of a few marine anglers who are quite avid (5% fished offshore for more than 30 days).
- A majority of saltwater anglers (58%) are satisfied with fishing offshore in Georgia, compared to only 9% who are dissatisfied; 10% are neutral and a rather large percentage do not know (23%).
 - Again guides are more divided than anglers, as 48% of guides are satisfied and 32% are dissatisfied.
- Regarding the quality of offshore fishing over the past 5 years, about a third of anglers (32%) think it has stayed the same, while slightly more think it has improved (16%) than declined (11%). However, 41% said they do not know.
 - Among offshore guides, 42% think the quality of offshore fishing has stayed the same, 30% think it declined, and 22% think it improved.

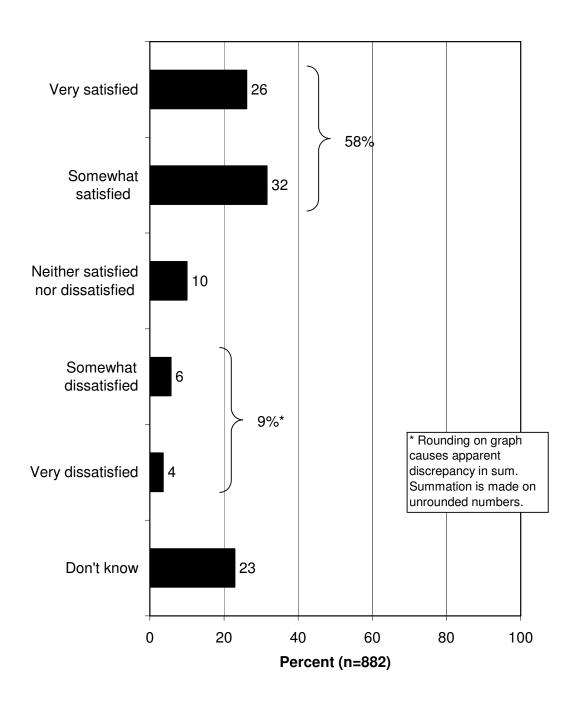
Q131. During the past 12 months how many days total did you go saltwater fishing offshore of Georgia? (Asked of those who fished offshore waters in Georgia.)

(Saltwater anglers)



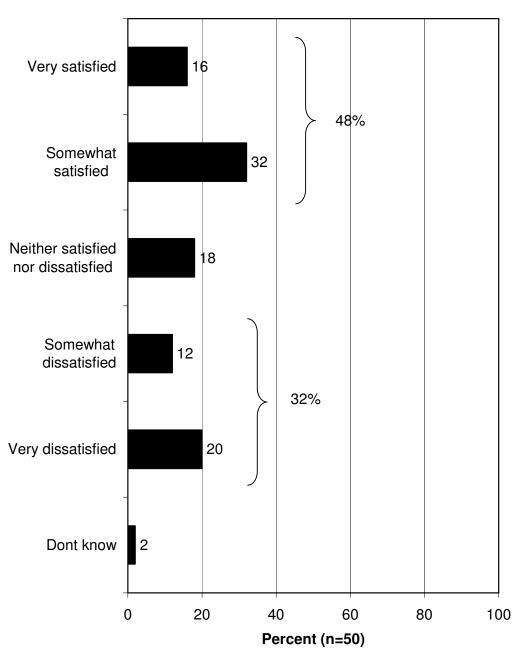
Q129. Overall, are you satisfied or dissatisfied with saltwater fishing offshore of Georgia? (Asked of those who fished offshore waters in Georgia.)

(Saltwater anglers)



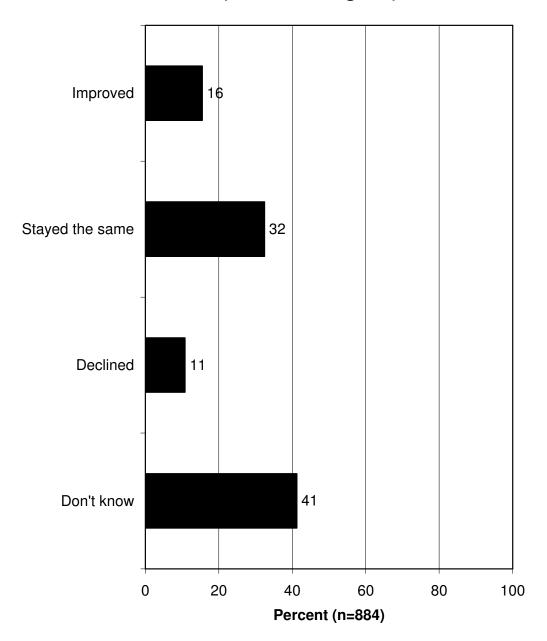
Q89. Overall, are you satisfied or dissatisfied with your guiding experiences in offshore waters off of Georgia's coast? (Asked of those who guided in offshore waters in Georgia.)

(Guides)



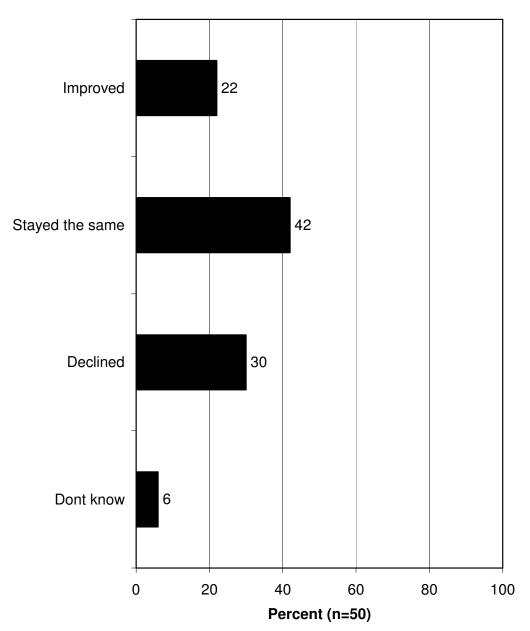
Q130. In the past 5 years, do you think the quality of saltwater fishing offshore of Georgia has improved, stayed the same, declined, or do you not know? (Asked of those who fished offshore waters in Georgia.)

(Saltwater anglers)



Q90. In the past 5 years, do you think the quality of saltwater fishing offshore of Georgia has improved, stayed the same, declined, or do you not know? (Asked of those who guided in offshore waters in Georgia.)

(Guides)

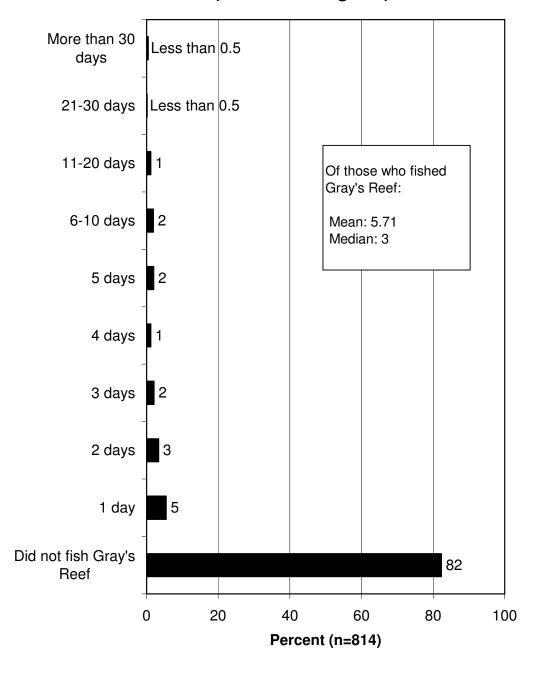


NATURAL AND ARTIFICIAL REEFS

- ➤ Of those who fished offshore waters in Georgia, 18% fished Gray's Reef (of that group, the mean days fished is 5.7 and the median is 3).
 - Among offshore guides, 19% guided anglers to this natural reef (mean 9.9; median 3).
- > Over a third of offshore anglers (35%) fished at a Georgia artificial reef in the past year.
 - Most offshore guides (90%) guided anglers to an artificial reef.
 - Graphs show the listing of offshore artificial reefs and the percentage of anglers and guides who visited each over the past 12 months (reefs not named by respondents are excluded).
- Among inshore anglers, 17% fished at an inshore artificial reef in the past 12 months.
 - Of inshore guides, 30% guided anglers to an inshore artificial reef.
 - Graphs of the inshore artificial reefs visited by anglers and guides are shown.

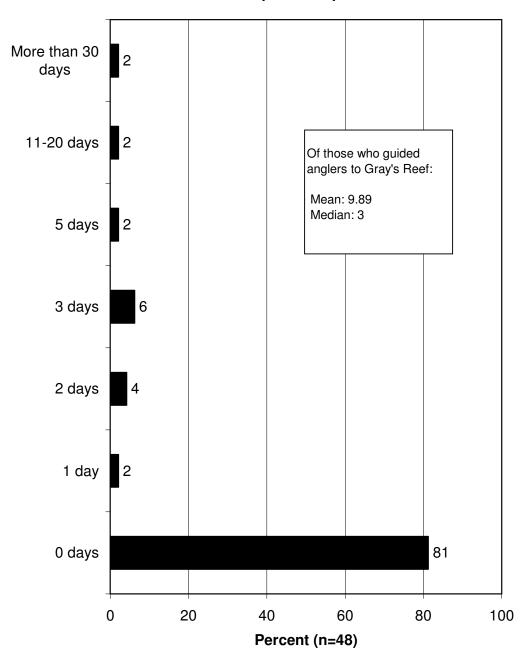
Q135. How many days did you fish Gray's Reef, which is a natural reef, in the past 12 months? (Asked of those who fished offshore waters in Georgia.)

(Saltwater anglers)

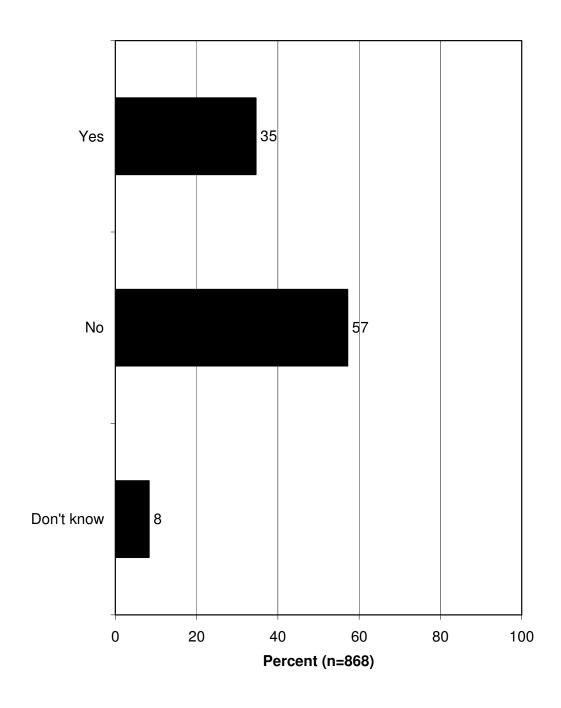


Q91. How many days did you guide anglers to Gray's Reef, which is a natural reef, in the past 12 months? (Asked of those who guided offshore waters in Georgia.)

(Guides)

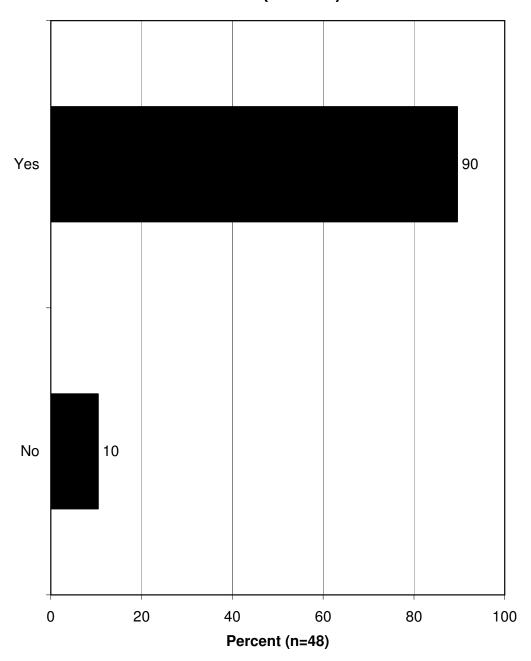


Q138. Did you fish at any of Georgia's offshore artificial reefs in the past 12 months? (Asked of those who fished offshore waters in Georgia.)
(Saltwater anglers)

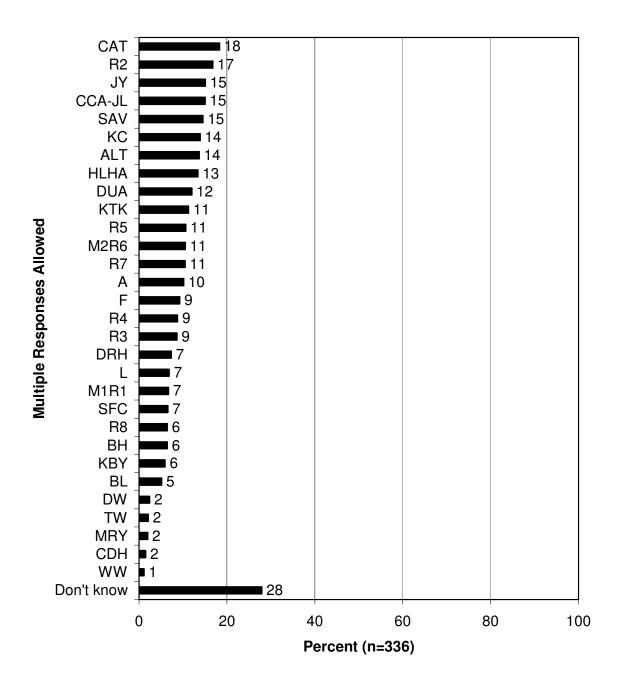


Q94. Did you guide anglers at any of Georgia's offshore artificial reefs in the past 12 months? (Asked of those who guided offshore waters in Georgia.)

(Guides)

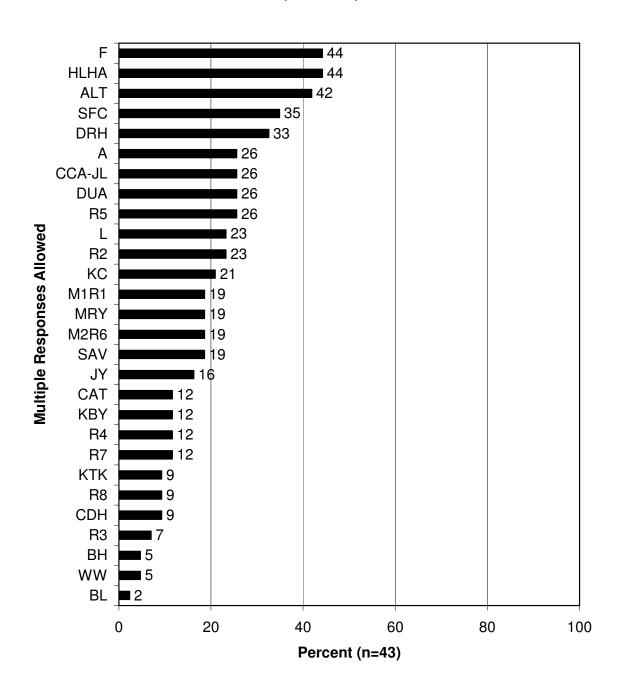


Q142. Which offshore artificial reefs did you fish at in the past 12 months? (Asked of those who fished offshore waters in Georgia.) (Saltwater anglers)

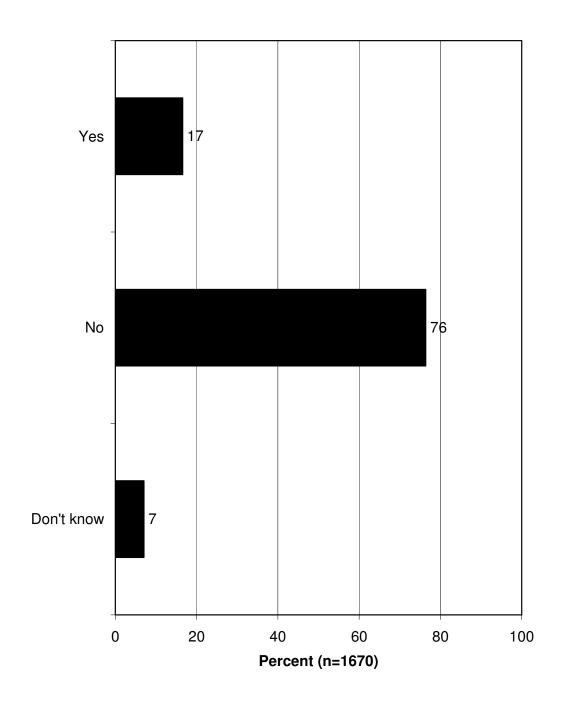


Q98. Which offshore artificial reefs did you guide anglers to in the past 12 months? (Asked of those who guided offshore artificial reefs in Georgia.)

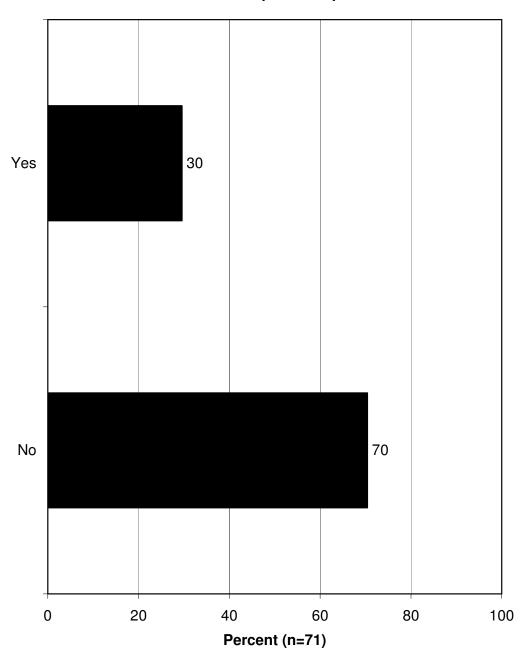
(Guides)



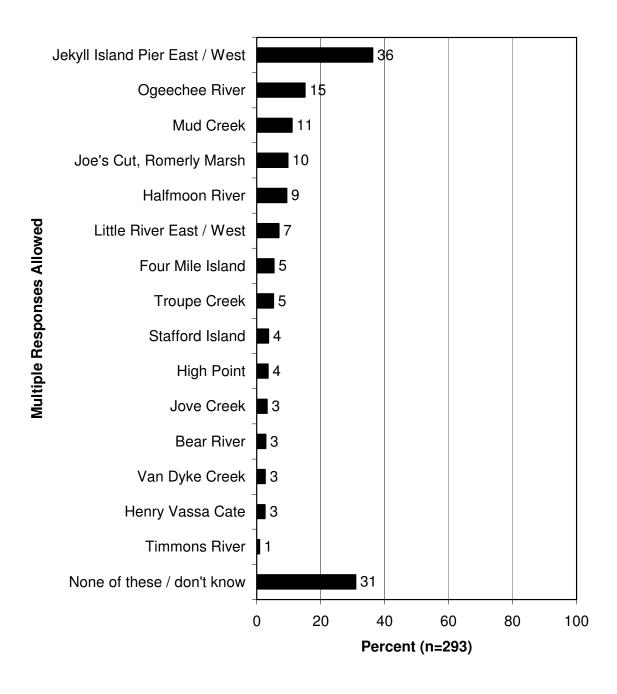
Q147. Did you fish at any of Georgia's inshore artificial reefs in the past 12 months? (Asked of those who fished inshore in Georgia.)
(Saltwater anglers)



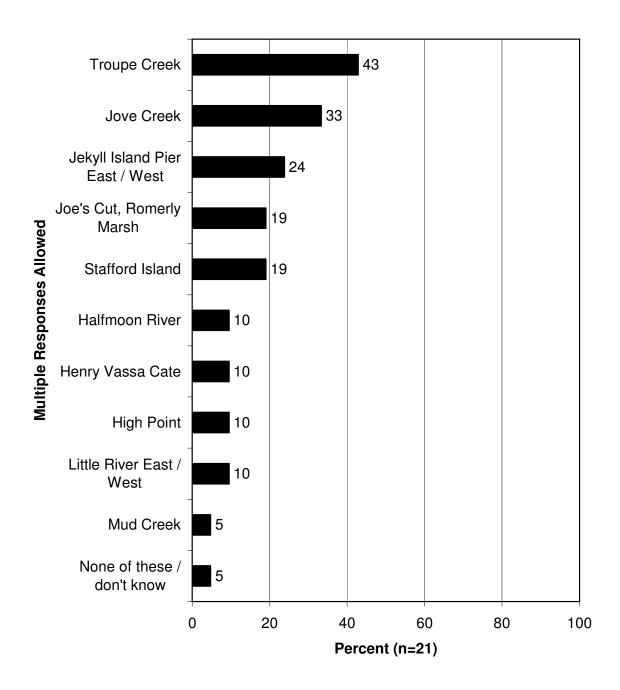
Q103. Did you guide anglers to any of Georgia's inshore artificial reefs in the past 12 months? (Asked of those who guided inshore waters in Georgia.) (Guides)



Q150. Which inshore artificial reefs did you fish at in the past 12 months? (Asked of those who fished inshore artificial reefs in Georgia.) (Saltwater anglers)



Q106. Which inshore artificial reefs did you guide anglers to in the past 12 months? (Asked of those who guided anglers to inshore artificial reefs in Georgia.) (Guides)



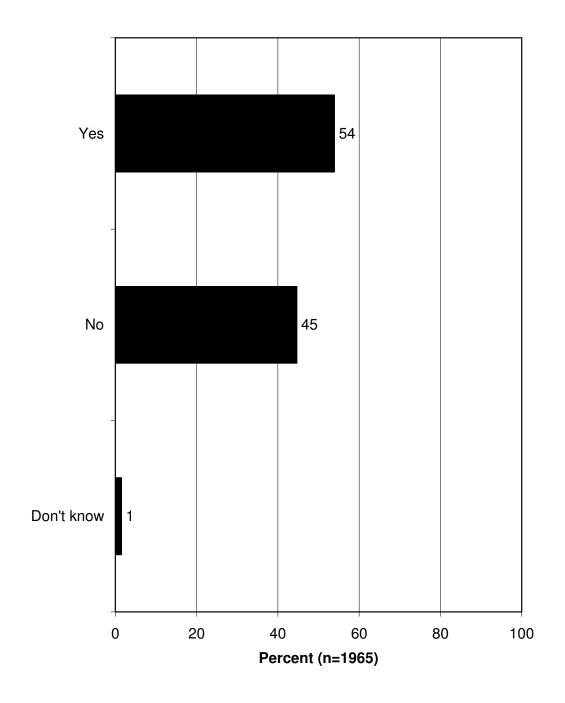
RED DRUM

- A majority of marine anglers (54%) say that they typically fish for red drum in Georgia.
 - Four-fifths of guides (80%) have guided anglers fishing for red drum.
- ➤ Days of fishing for red drum are presented; the mean for anglers is 17.9 days, while the median is 10 days.
 - Among guides who guided anglers seeking red drum, the mean is 64.4 days and the median is 50 days.
 - The coastal counties from which anglers depart to fish for red drum are shown.
- The survey asked about four motivations for fishing for red drum. Recreation was valued above harvest: red drum anglers rate the activity of releasing fish above the three options related to catching fish. Nonetheless, the majority rate each item as *very* or *somewhat* important, ranging from 91% for releasing fish, to 78% to 84% for the three options related to catching fish.
- A majority of red drum anglers were satisfied with their red drum fishing in the past 12 months in Georgia (among those who had fished for red drum in that time period): 75% were satisfied, while only 13% were dissatisfied.
 - Among guides, 73% were satisfied and 24% were dissatisfied.
- Satisfaction with the *number* of red drum the angler catches far exceeds dissatisfaction: 65% are satisfied, while 21% are dissatisfied.
 - Two-thirds of guides (67%) are satisfied with the number of red drum in Georgia, while 30% are dissatisfied. (Note that guides were asked about the number of red drum, not the number caught.)

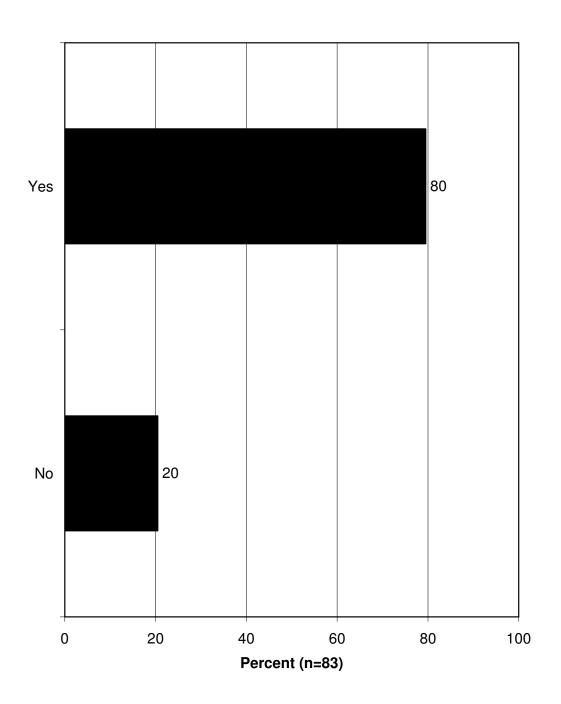
- Satisfaction with the *average size* of red drum the angler catches far exceeds dissatisfaction: 71% are satisfied, while 12% are dissatisfied.
 - A majority of guides (71%) are satisfied with the average size of red drum in Georgia, while 23% are dissatisfied. (Guides were asked about the average size, not the average size caught.)
- Nearly a quarter of red drum anglers (23%) release all or nearly all of the red drum (of legal size to keep) that they catch. On the other hand, 14% say that they keep all the red drum that they catch. Overall, when asked about the portion of their red drum catch that they release, anglers release half of their catch: the mean percentage released is 56.9%; the median percentage released is 50%.
 - Guides indicated that their clients release legal red drum much more often than not: the mean percentage released is 67.5% and the median is 75%.
- The survey asked red drum anglers if they think the number of red drum in three size categories are increasing, staying the same, or decreasing.
 - Most commonly, red drum anglers think that smaller red drum (less than 23 inches) are increasing (31% say this), compared to the medium size category of red drum (between 23 and 36 inches; 21% of red drum anglers say they are increasing) and large red drum (more than 36 inches; 16% say they are increasing).
 - In contrast, 38% of red drum guides think that red drum within the middle size category are increasing, 34% think smaller red drum are increasing, and 28% think larger red drum are increasing.
- ➤ Currently, the creel limit for red drum in Georgia is 5 per day per person, with a 14- to 23-inch slot limit and year-round harvest. Red drum angler satisfaction with these regulations far exceeds dissatisfaction: 72% are satisfied, while 16% are dissatisfied.
 - On the other hand, red drum guides are more dissatisfied (53%) than satisfied (44%) with the regulations.

- ➤ The survey provided a choice of slot size ranges for red drum and asked respondents to select a preference.
 - Red drum anglers most frequently selected a slot size of 14 to 25 inches (27% chose this), while guides most frequently chose 15 to 23 inches (28%). Distributions of all responses are shown.
- ➤ Over half of red drum anglers (56%) would like the creel limit to be 5 fish; this is also the median selection. Otherwise, most commonly, anglers gave a response in the range of 6 to 10 fish (26% gave an answer in this range).
 - Red drum guides, compared to red drum anglers, prefer a lower creel limit: their median is 3 fish, and 51% of the guides preferred either 2 or 3 fish.
- First, those who want the creel limit to be above 5 fish were asked, if the creel limit had to be no more than 5 fish, what they would like the limit to be: 86% of anglers and all guides (100%) would want the limit to be 5 fish. Next, those who want a creel limit of 1 fish were asked, if the limit had to be more than 1 fish, what they would like the limit to be: 76% of anglers (with the remainder answering "don't know") and all guides (100%) would want the creel limit to be 2 fish in that scenario. (Graphs not shown.)
- Notably more red drum anglers (54%) would oppose a hypothetical red drum season than support it (31%); 37% would *strongly* oppose a season for red drum harvest.
 - A majority of red drum guides (62%) oppose a red drum season, compared to 32% in support; 45% *strongly* oppose a season.
- A final question about red drum regulations asked about support for or opposition to the mandatory use of circle hooks to target red drum above 36 inches, with support far exceeding opposition. Among red drum anglers, 67% support, while 15% oppose.
 - Support is even more pronounced among red drum guides: 88% support, while only 8% oppose.

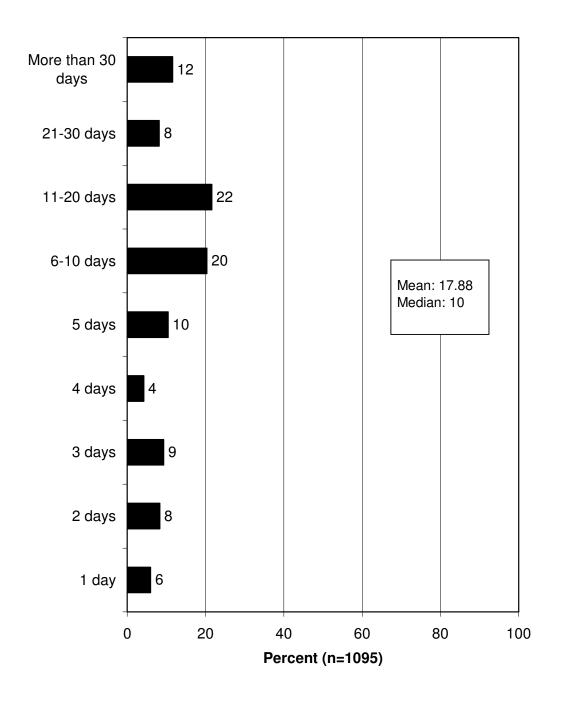
Q70. Do you typically fish for red drum in Georgia? (Saltwater anglers)



Q49. Have you guided anglers fishing for red drum in Georgia?
(Guides)

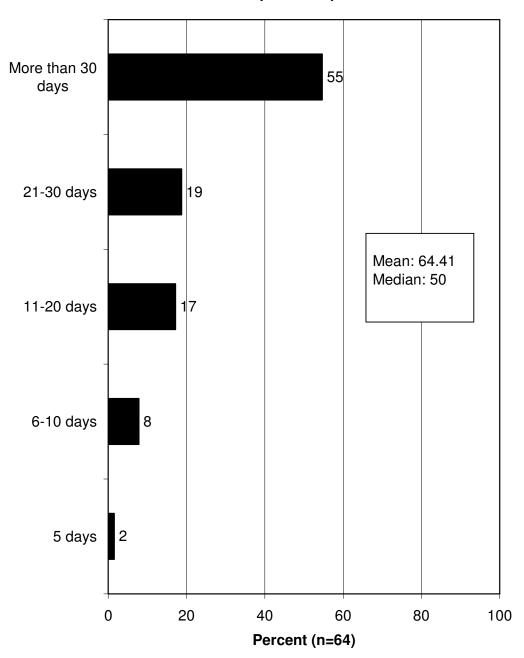


Q71. During the past 12 months, how many days did you fish for red drum in Georgia? (Asked of those who fished for red drum in Georgia.)
(Saltwater anglers)

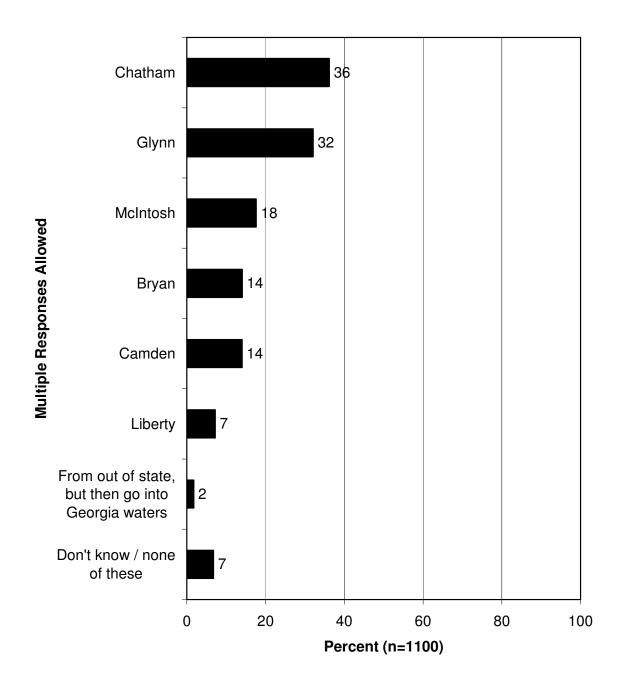


Q50. During the past 12 months, how many days did you guide anglers seeking red drum in Georgia? (Asked of those who guided anglers fishing for red drum in Georgia.)

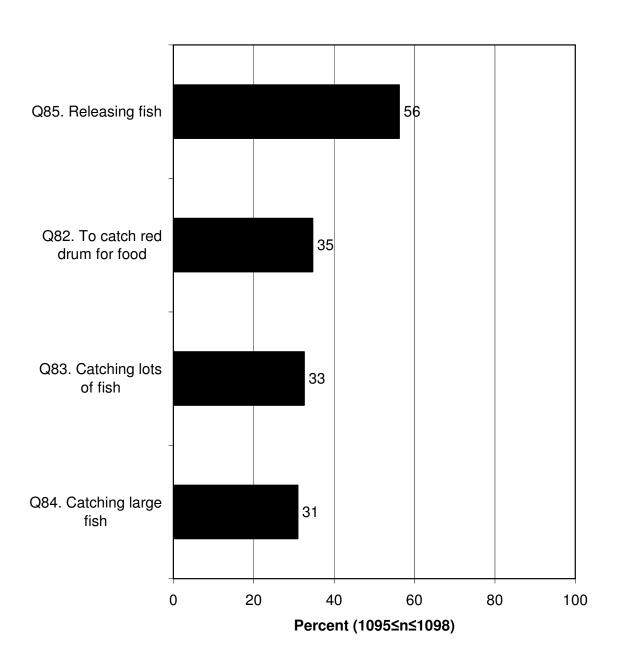
(Guides)



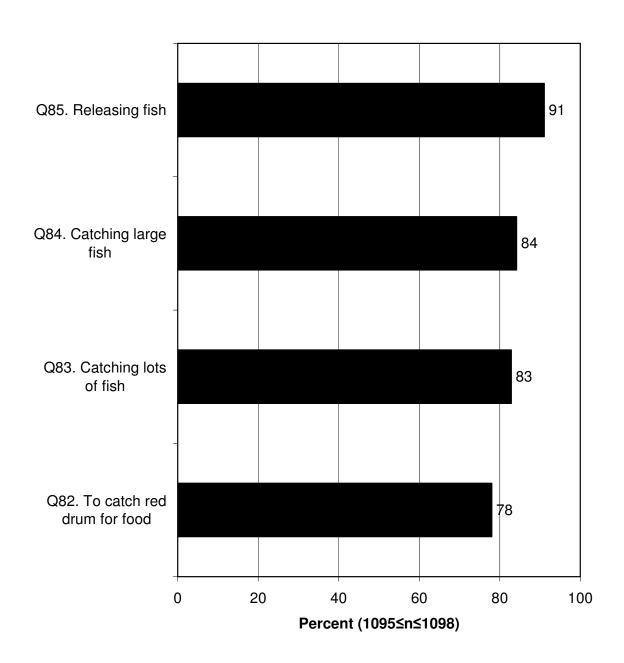
Q76. From which coastal counties do you usually depart to fish for red drum? (Asked of those who fished for red drum in Georgia.) (Saltwater anglers)



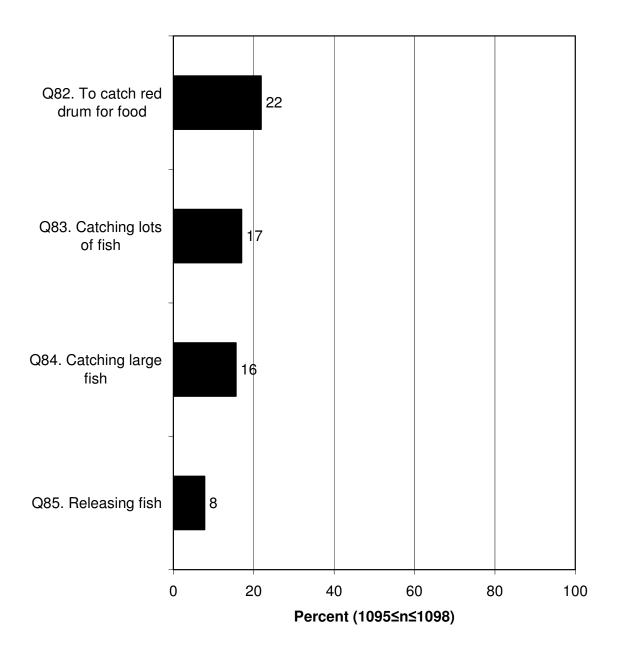
Q82-Q85. Percent of respondents who rated each of the following as very important to their red drum fishing in Georgia: (Saltwater anglers)



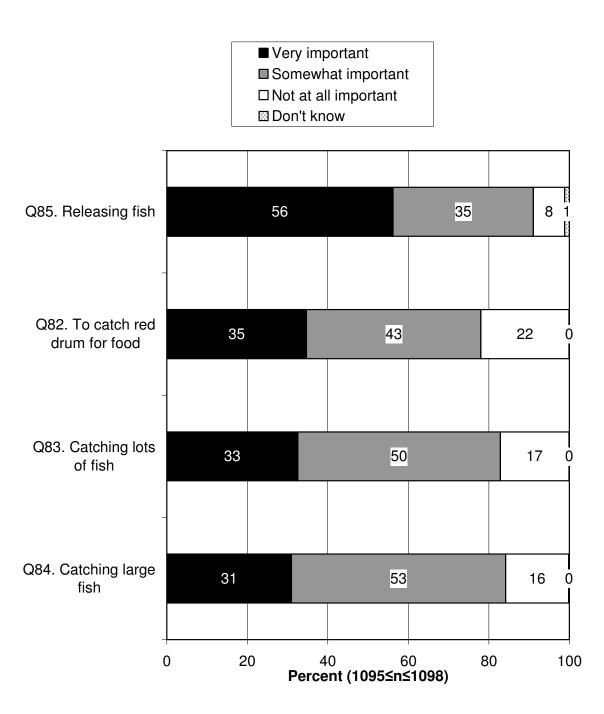
Q82-Q85. Percent of respondents who rated each of the following as very important or somewhat important to their red drum fishing in Georgia: (Saltwater anglers)



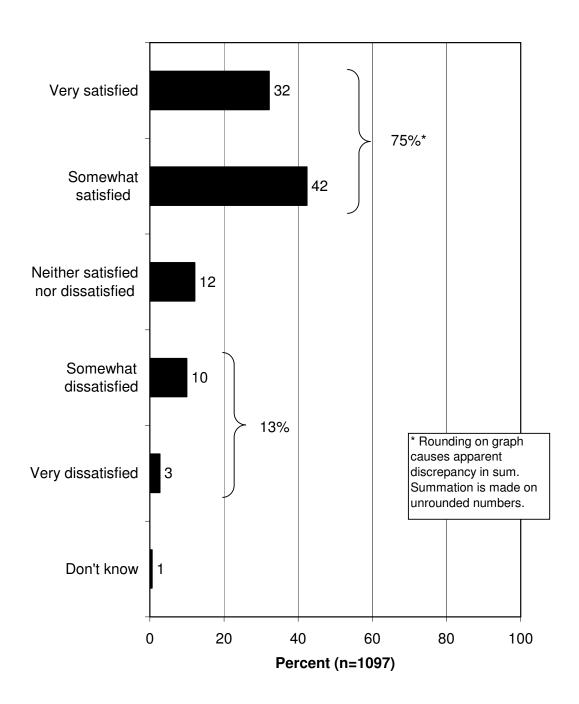
Q82-Q85. Percent of respondents who rated each of the following as not at all important to their red drum fishing in Georgia: (Saltwater anglers)



Q82-Q85. Percent of respondents who rated each of the following as [rating] to their red drum fishing in Georgia: (Saltwater anglers)

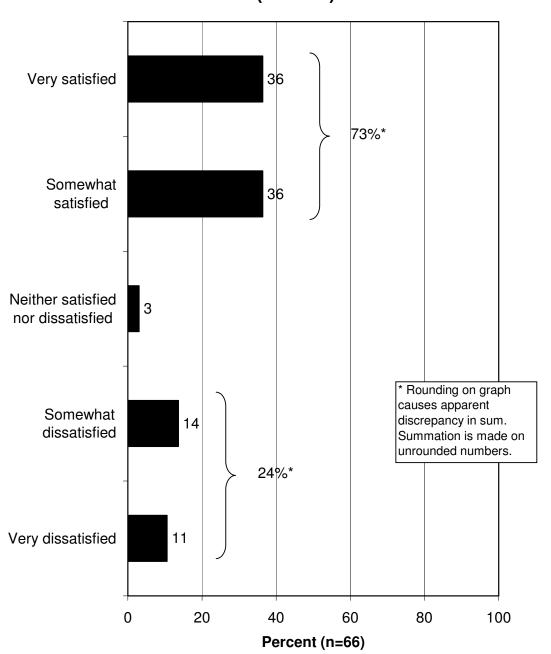


Q77. In general, are you satisfied or dissatisfied with your red drum fishing in Georgia? (Asked of those who fished for red drum in Georgia.)
(Saltwater anglers)

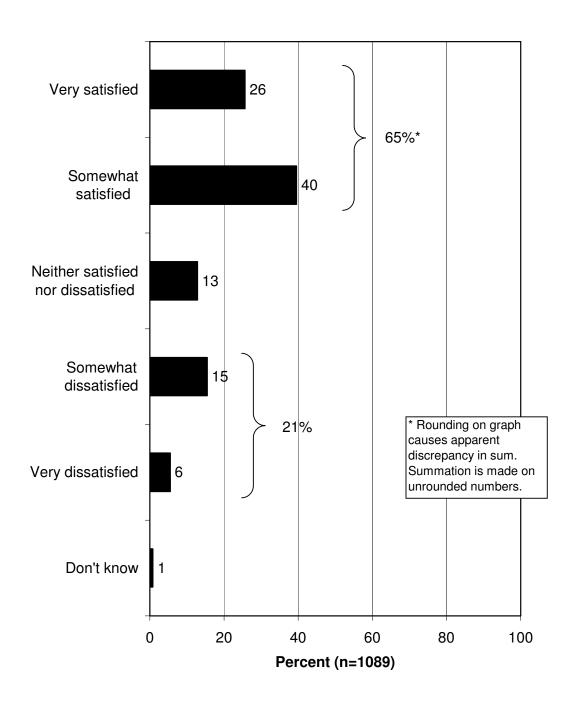


Q53. In general, are you satisfied or dissatisfied with red drum fishing in Georgia? (Asked of those who guided anglers fishing for red drum in Georgia.)

(Guides)

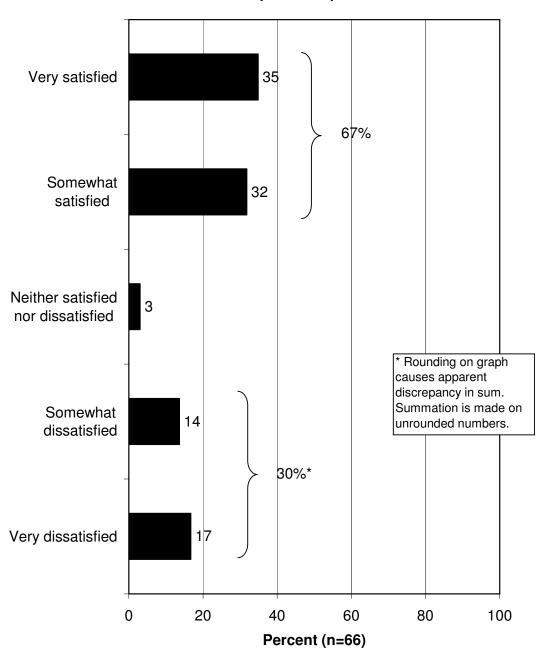


Q78. Are you satisfied or dissatisfied with the number of red drum you catch in Georgia? (Asked of those who fished for red drum in Georgia.)
(Saltwater anglers)



Q54. Are you satisfied or dissatisfied with the number of red drum in Georgia? (Asked of those who guided anglers fishing for red drum in Georgia.)

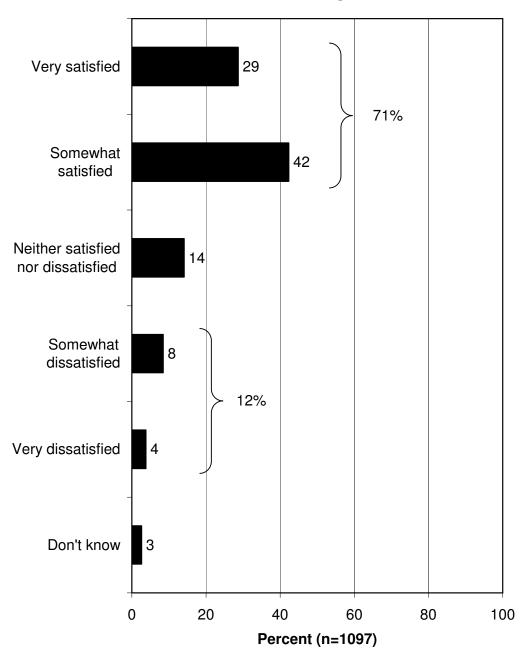
(Guides)



Q79. Are you satisfied or dissatisfied with the average size of the red drum you catch in Georgia?

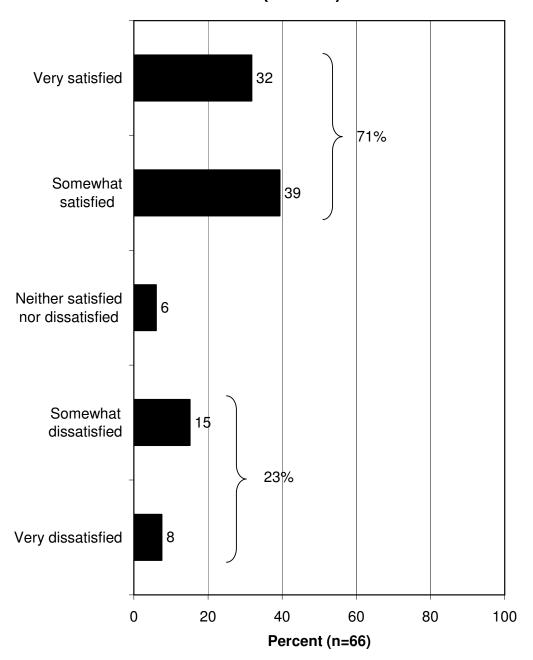
(Asked of those who fished for red drum in Georgia.)

(Saltwater anglers)



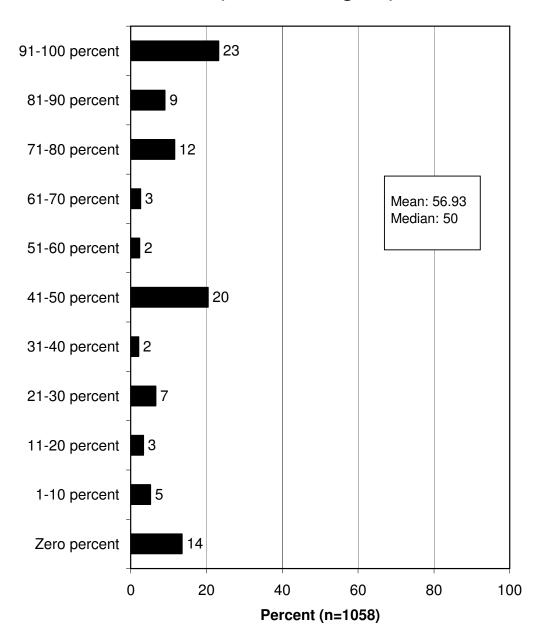
Q55. Are you satisfied or dissatisfied with the average size of the red drum in Georgia? (Asked of those who guided anglers fishing for red drum in Georgia.)

(Guides)



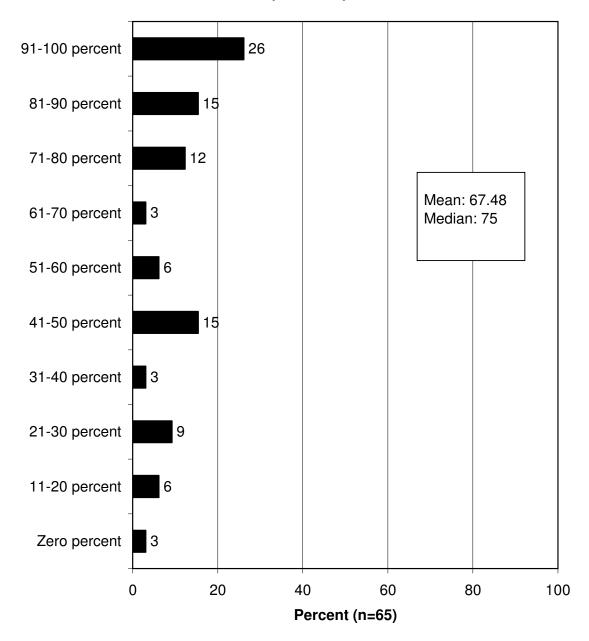
Q86. Of all the red drum you catch that are of legal size to keep, approximately what percentage do you release back into the water when fishing in Georgia? (Asked of those who fished for red drum in Georgia.)

(Saltwater anglers)

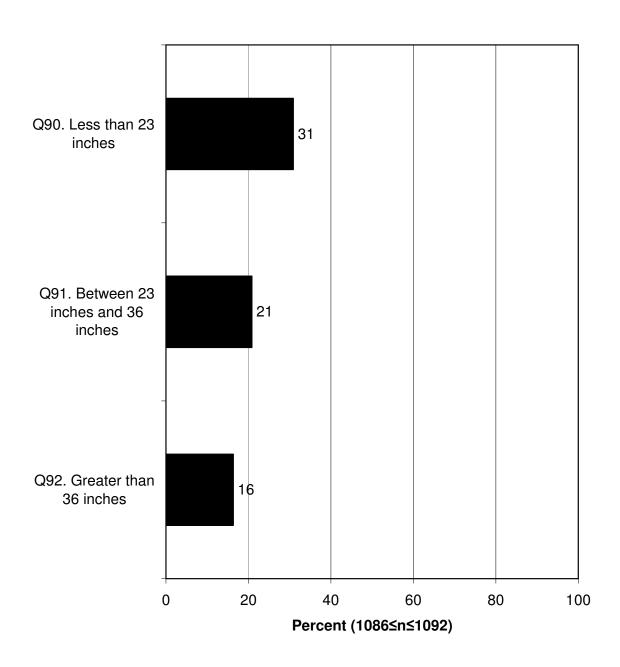


Q56. Of all the red drum your clients catch that are of legal size to keep, approximately what percentage do they release back into the water when fishing in Georgia? (Asked of those who guided anglers fishing for red drum in Georgia.)

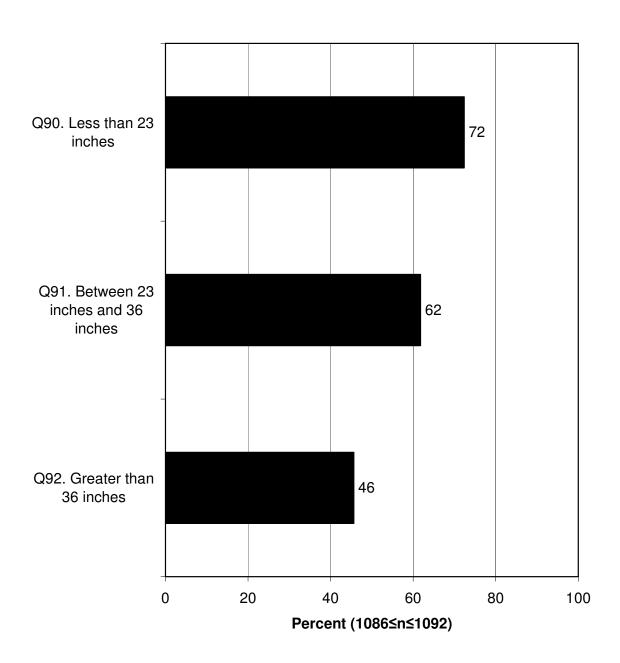
(Guides)



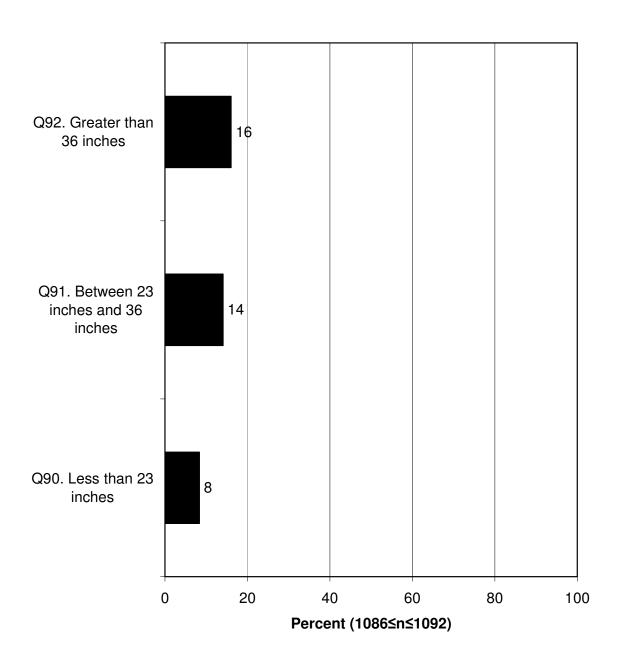
Q90-Q92. Percent of red drum anglers who think red drum of each of the following lengths are increasing: (Saltwater anglers)



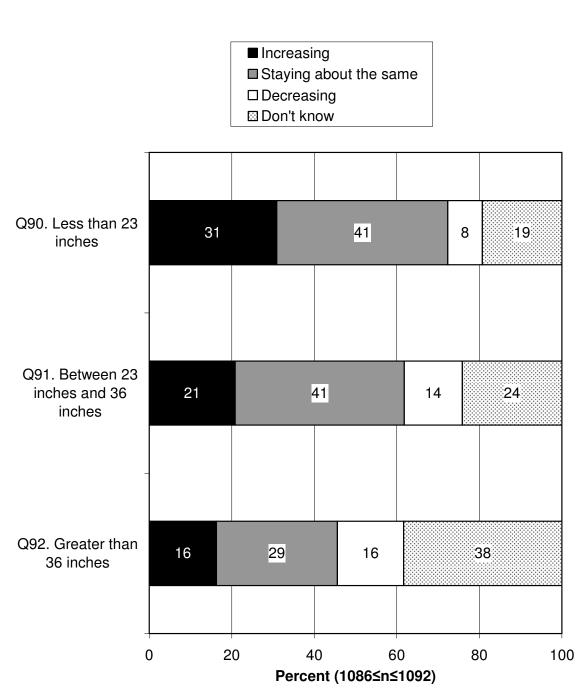
Q90-Q92. Percent of red drum anglers who think red drum of each of the following lengths are increasing or staying about the same: (Saltwater anglers)



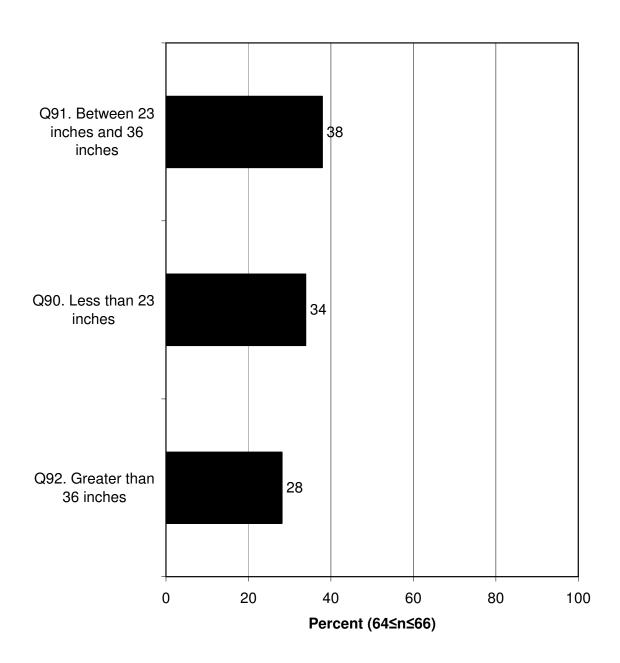
Q90-Q92. Percent of red drum anglers who think red drum of each of the following lengths are decreasing: (Saltwater anglers)



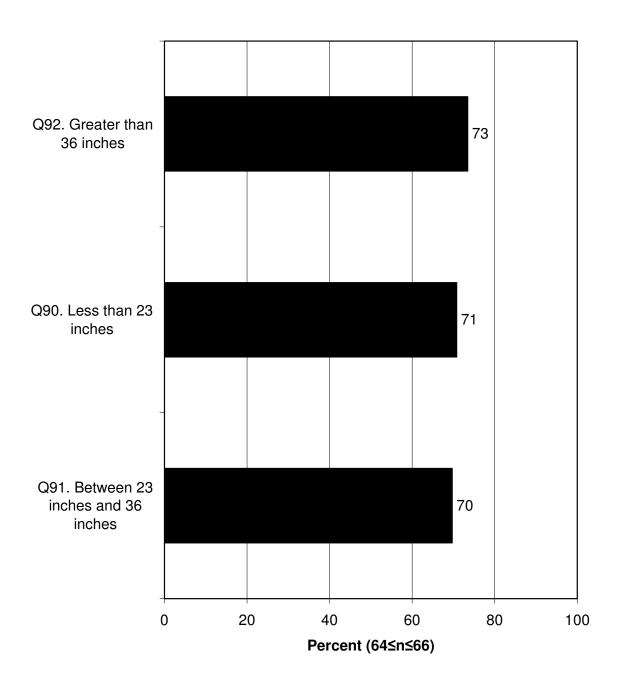
Q90-Q92. Percent of red drum anglers who think red drum of each of the following lengths are [option]: (Saltwater anglers)



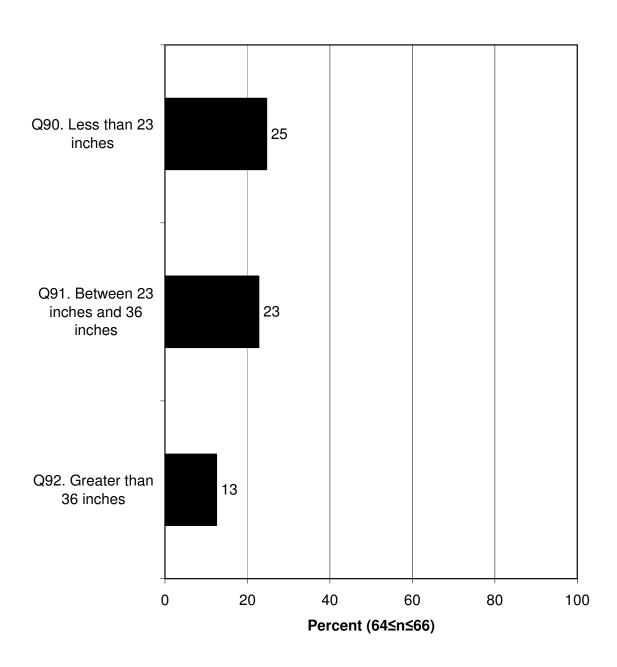
Q60-Q62. Percent of red drum guides who think red drum of each of the following lengths are increasing: (Guides)



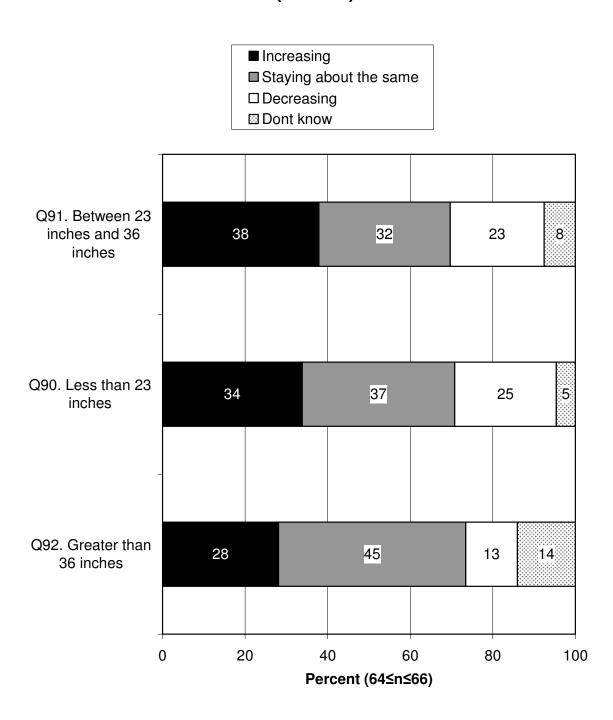
Q60-Q62. Percent of red drum guides who think red drum of each of the following lengths are increasing or staying about the same: (Guides)



Q60-Q62. Percent of red drum guides who think red drum of each of the following lengths are decreasing: (Guides)

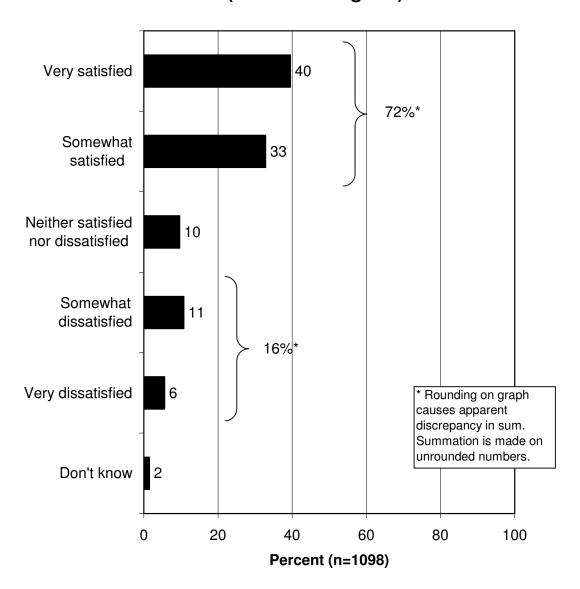


Q60-Q62. Percent of red drum guides who think red drum of each of the following lengths are [option]: (Guides)



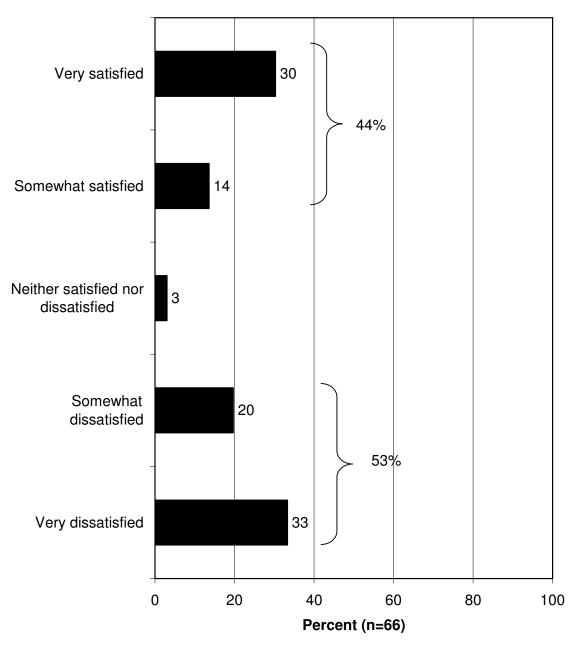
Q93. Currently, the statewide creel limit for red drum is 5 per day per person with a 14- to 23-inch slot limit with year-round harvest. Are you satisfied or dissatisfied with these fishing regulations for red drum?

(Asked of those who fished for red drum in Georgia.) (Saltwater anglers)

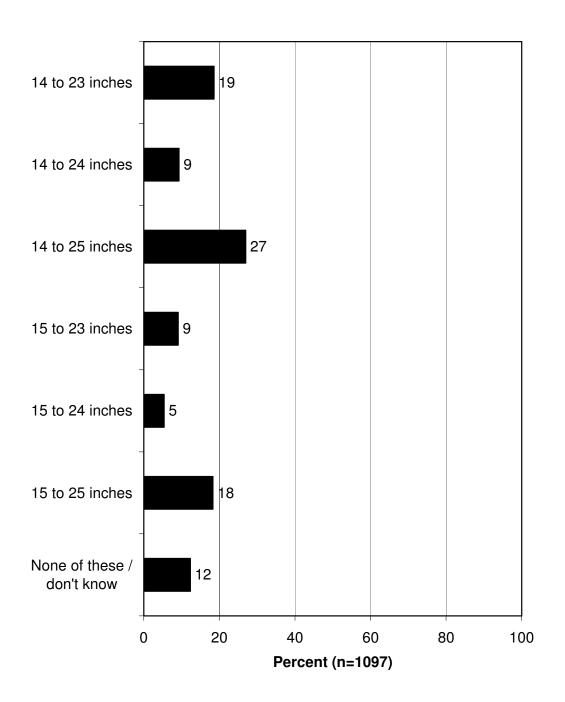


Q63. Currently, the statewide creel limit for red drum is 5 per day per person with a 14- to 23-inch slot limit with year-round harvest. Are you satisfied or dissatisfied with these fishing regulations for red drum? (Asked of those who guided anglers fishing for red drum in Georgia.)

(Guides)

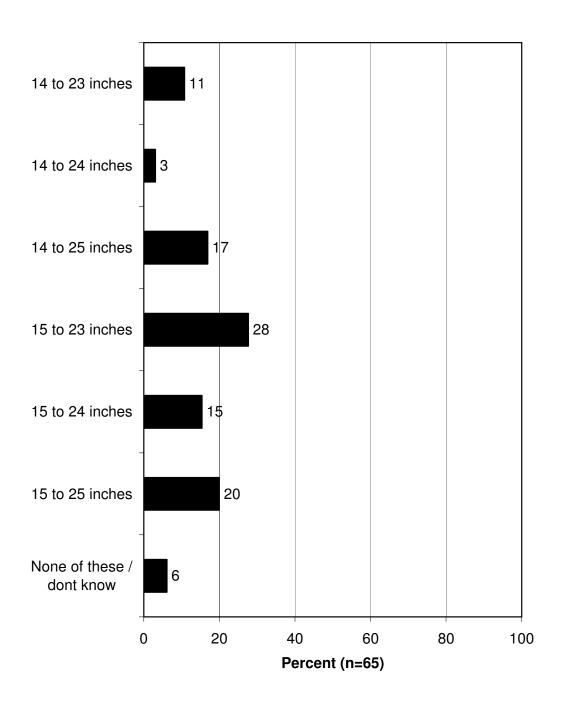


Q94. What would you like the slot size to be out of these choices? (Asked of those who fished for red drum in Georgia.)
(Saltwater anglers)

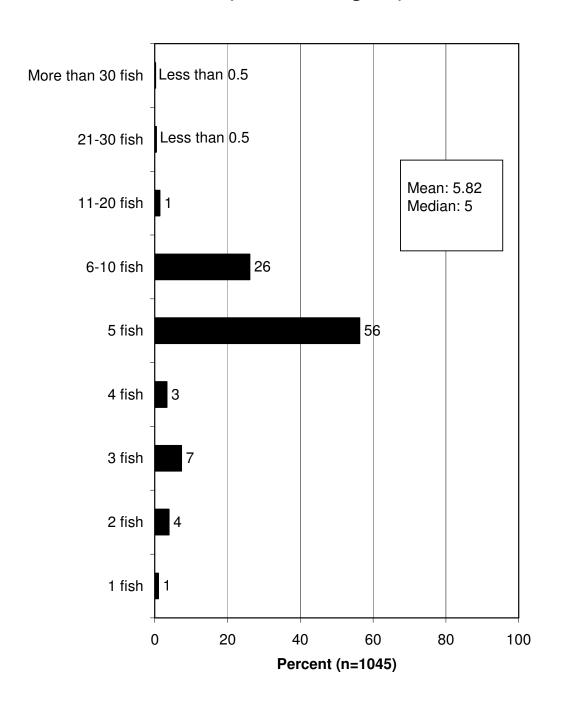


Q64. What would you like the slot size to be out of these choices? (Asked of those who guided anglers fishing for red drum in Georgia.)

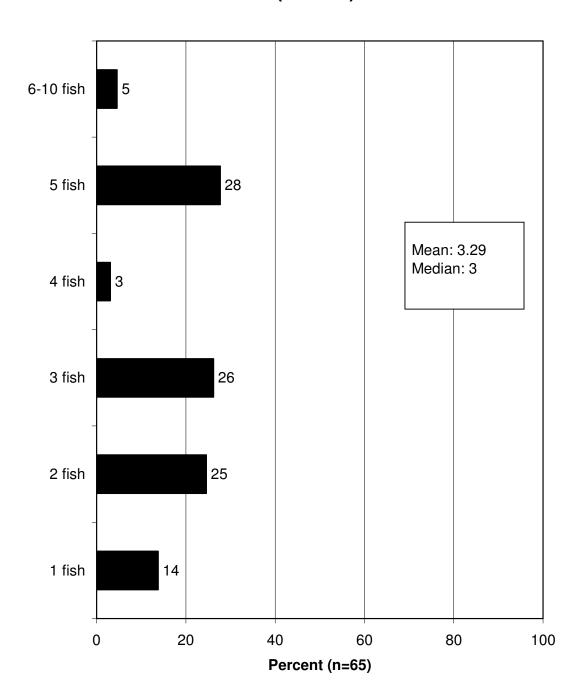
(Guides)



Q95. What would you like the creel limit to be?
(Asked of those who fished for red drum in
Georgia.)
(Saltwater anglers)

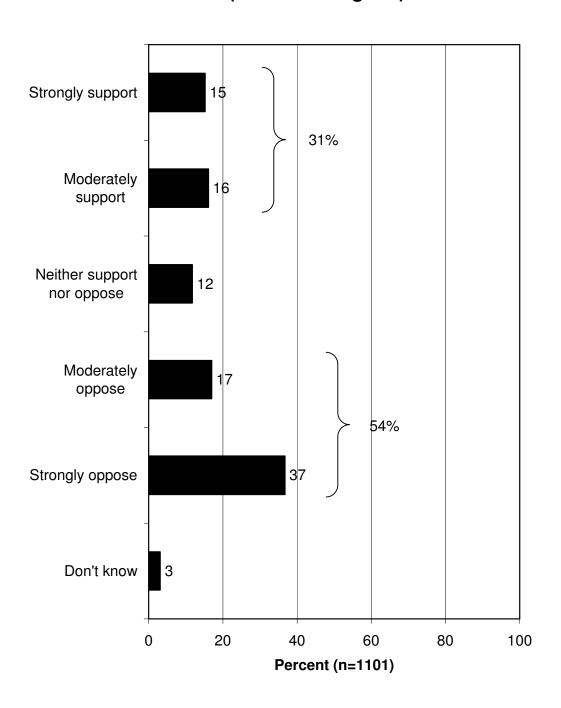


Q65. What would you like the creel limit to be?
(Asked of those who guided anglers fishing for red drum in Georgia.)
(Guides)

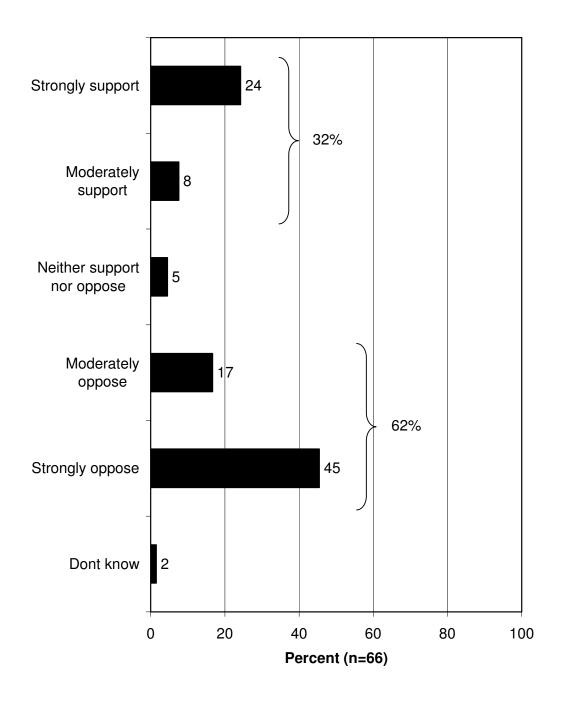


Q100. Would you support or oppose a season for red drum harvest? (Asked of those who fished for red drum in Georgia.)

(Saltwater anglers)



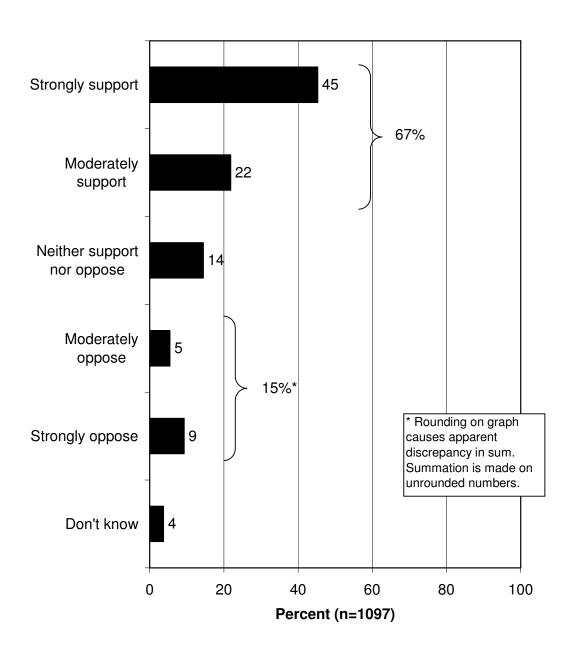
Q70. Would you support or oppose a season for red drum harvest? (Asked of those who guided anglers fishing for red drum in Georgia.)
(Guides)



Q101. For anglers fishing for large red drum, which are red drum 36 inches or more, would you support or oppose the mandatory use of circle hooks?

(Asked of those who fished for red drum in Georgia.)

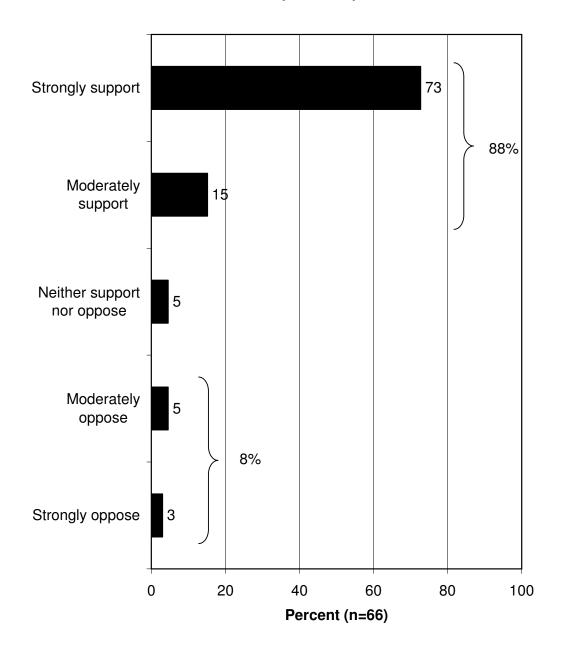
(Saltwater anglers)



Q71. For anglers fishing for large red drum, which are red drum 36 inches or more, would you support or oppose the mandatory use of circle hooks?

(Asked of those who guided anglers fishing for red drum in Georgia.)

(Guides)



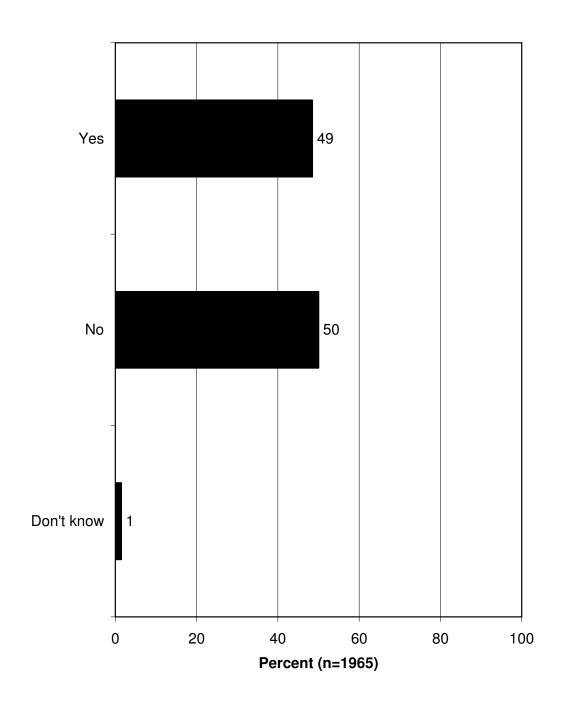
SPOTTED SEATROUT

- ➤ About half of marine anglers (49%) say that they typically fish for spotted seatrout in Georgia.
 - A majority of guides (78%) typically guide anglers fishing for spotted seatrout.
- ➤ Days of fishing for spotted seatrout are presented; the mean is 18.8 days, while the median is 10 days.
 - Guides frequently took anglers fishing for spotted seatrout over the past 12 months: the mean is 75.7 days and the median is 60 days.
- ➤ The counties of fishing for spotted seatrout are shown. The most popular counties from which to depart are Chatham County and Glynn County.
- As was done regarding red drum, the survey asked about four motivations for fishing for spotted seatrout. The majority of anglers rate each item about equally as *very* or *somewhat* important, ranging only from 85% to 87%. Looking at *very* important ratings, "to catch spotted seatrout for food" is at the top (46% rating it *very* important), and "releasing fish" is second (43% rating it *very* important), thus making these results different than those for red drum.
- A large majority of spotted seatrout anglers were satisfied with their spotted seatrout fishing in the past 12 months: 76% were satisfied, while only 11% were dissatisfied (in follow-up, dissatisfied anglers said catching more or larger fish and a lower size limit would increase satisfaction).
 - Among spotted seatrout guides, 83% were satisfied, while only 8% were dissatisfied.
- ➤ Satisfaction with the *number* of spotted seatrout the angler catches far exceeds dissatisfaction: 69% are satisfied, while 18% are dissatisfied.
 - Guides are more satisfied than anglers regarding the number: 84% are satisfied, while 10% are dissatisfied.

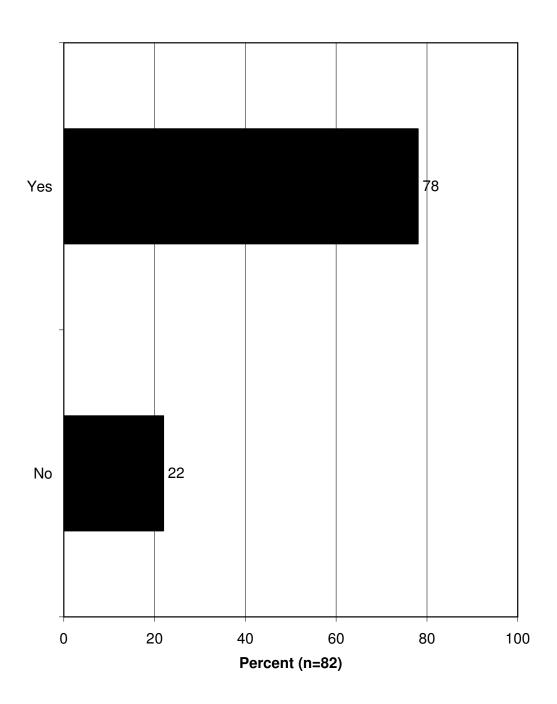
- Satisfaction with the *average size* of spotted seatrout the angler catches far exceeds dissatisfaction: 65% are satisfied, while 20% are dissatisfied.
 - Guides are very close to anglers on this question: 63% are satisfied and 22% are dissatisfied.
- Regarding spotted seatrout of legal size, 11% of spotted seatrout anglers release all or nearly all that they catch, whereas 19% keep all that they catch. The median percentage released is 50%.
 - Guides indicated that their clients release a median of 40% of legal spotted seatrout, and no guides indicated that their clients released all or nearly all that they caught.
- ➤ The survey informed respondents that, in January 2016, the minimum size for keeping spotted seatrout in Georgia increased to 14 inches.
 - By a 2-to-1 margin (42% positive to 20% negative), more anglers believe this rule change is a positive rather than a negative.
 - Nearly two-thirds of guides (63%) believe the change is positive, compared to 14% who believe it is negative.
- > Spotted seatrout anglers are divided on whether they support or oppose a hypothetical slot limit for the species, similar to the slot limit for red drum (i.e., there would be both a minimum and maximum length limit): 43% support and 39% oppose.
 - Guides are more supportive than anglers for a slot limit: 61% of guides support this, while 31% oppose.
- Respondents were asked, if a slot limit were created for spotted seatrout, if they would support an upper limit of 18 inches.
 - A majority of anglers (53%) oppose this, while 30% support it.
 - Guides are divided between support (49%) and opposition (46%).
- Respondents were next asked if they would support a maximum limit of 20 inches.
 - Anglers are divided between support (41%) and opposition (43%).
 - There are notably more guides in support (57%) than opposition (37%).

- > The survey asked respondents, if a slot limit were created for spotted seatrout, if they would support or oppose allowing the harvest of one fish above the maximum length limit.
 - About two-thirds of seatrout anglers (68%) support this, while 17% oppose.
 - Compared to anglers, guides expressed a similar amount of support (66%) but more opposition (30%).

Q102. Do you typically fish for spotted seatrout in Georgia?
(Saltwater anglers)

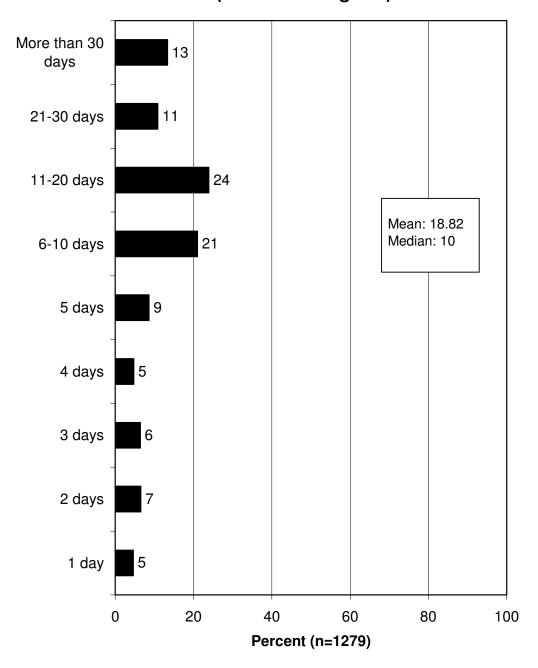


Q72. Do you typically guide anglers fishing for spotted seatrout in Georgia? (Guides)



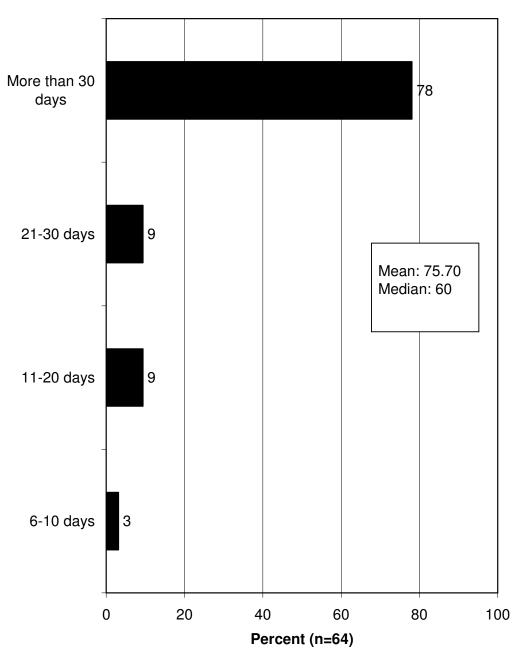
Q103. During the past 12 months, how many days did you fish for spotted seatrout in Georgia? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



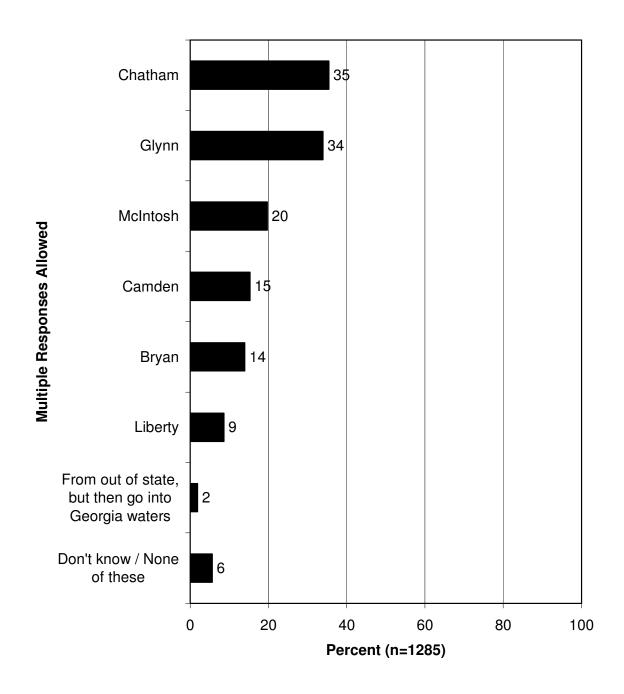
Q73. During the past 12 months, how many days did you guide anglers seeking spotted seatrout in Georgia? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)

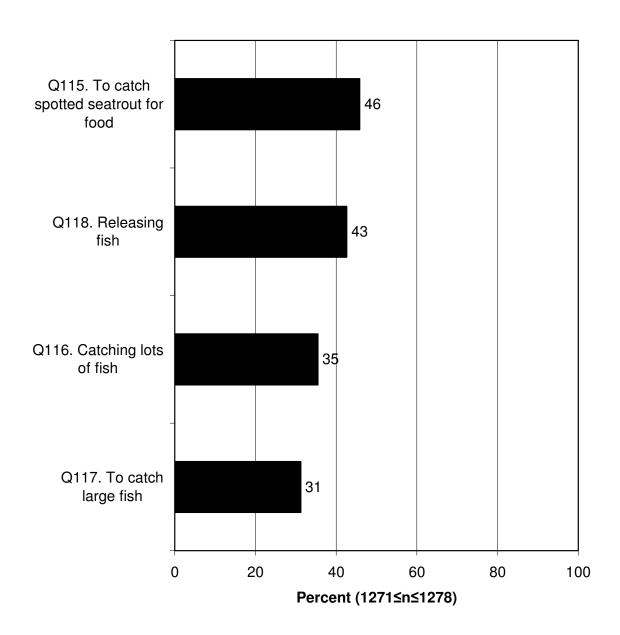


Q108. From which coastal counties do you usually depart to fish for spotted seatrout? (Asked of those who fished for spotted seatrout in Georgia.)

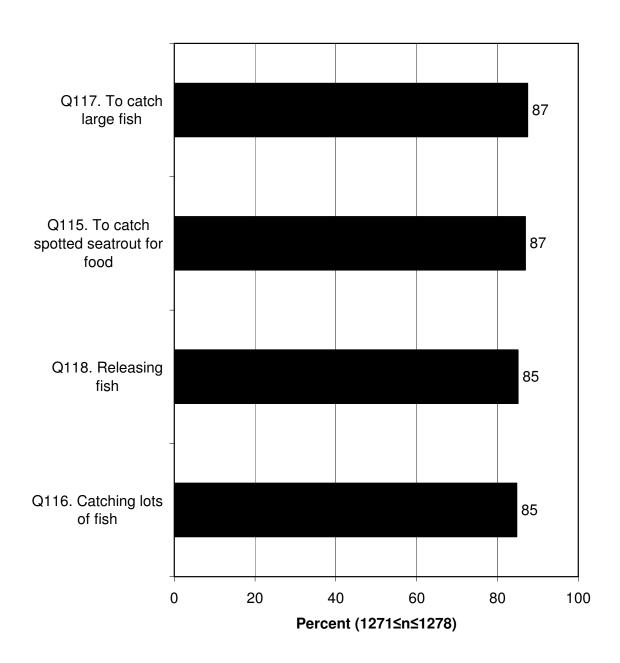
(Saltwater anglers)



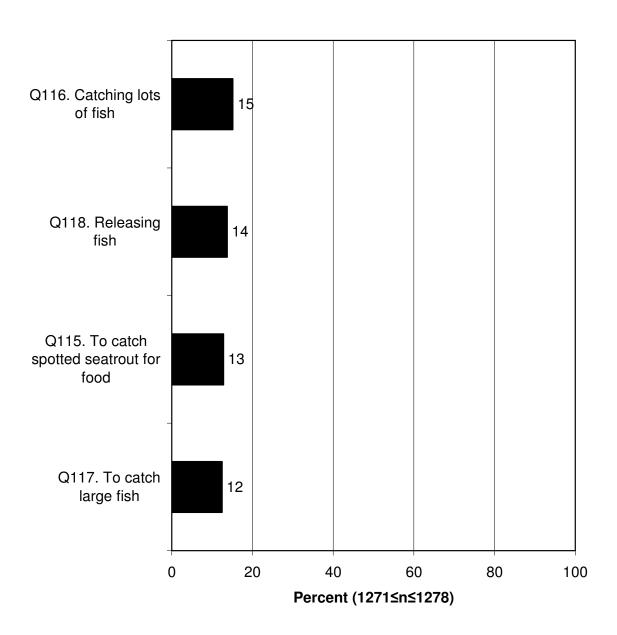
Q115-Q118. Percent of respondents who rated each of the following as very important to their spotted seatrout fishing in Georgia: (Saltwater anglers)



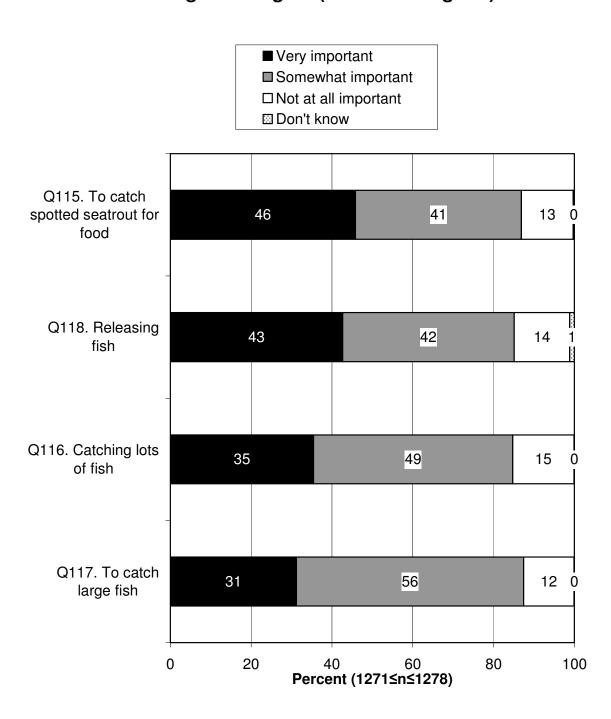
Q115-Q118. Percent of respondents who rated each of the following as very important or somewhat important to their spotted seatrout fishing in Georgia: (Saltwater anglers)



Q115-Q118. Percent of respondents who rated each of the following as not at all important to their spotted seatrout fishing in Georgia: (Saltwater anglers)

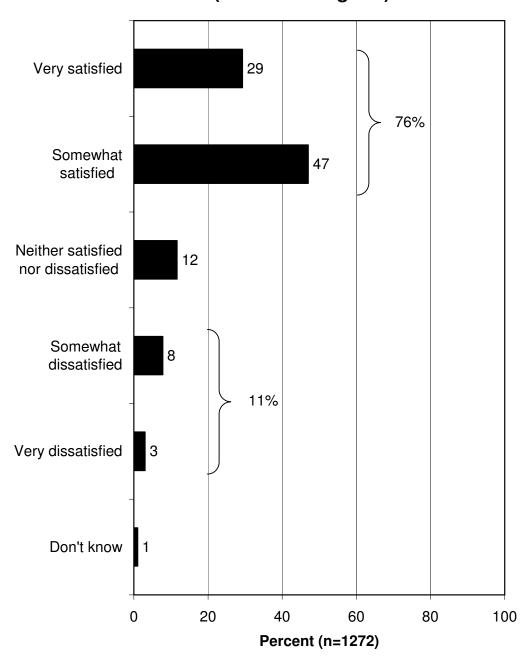


Q115-Q118. Percent of respondents who rated each of the following as [rating] to their spotted seatrout fishing in Georgia: (Saltwater anglers)



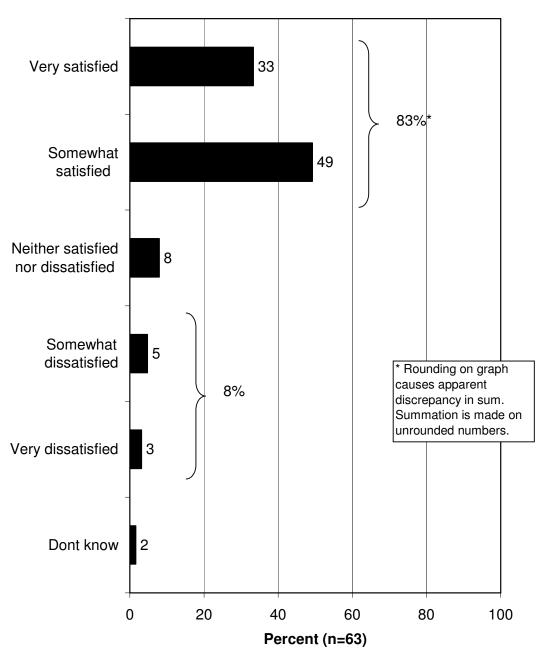
Q109. In general, are you satisfied or dissatisfied with your spotted seatrout fishing in Georgia (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)

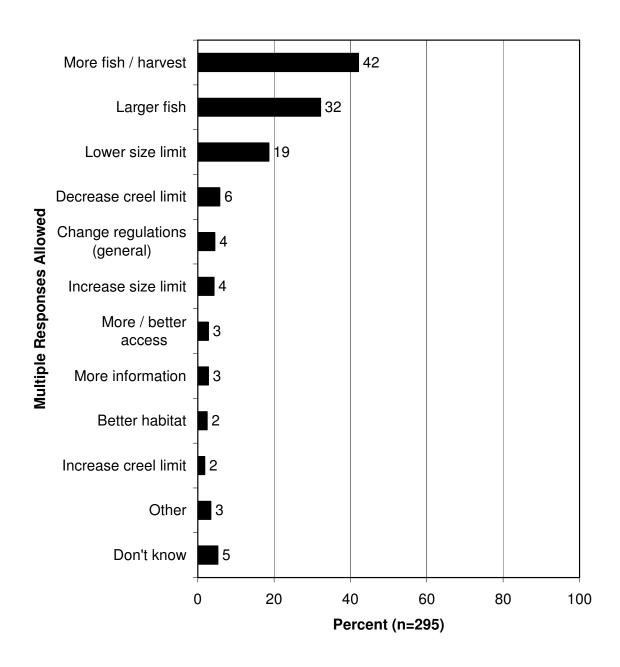


Q76. In general, are you satisfied or dissatisfied with spotted seatrout fishing in Georgia? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)

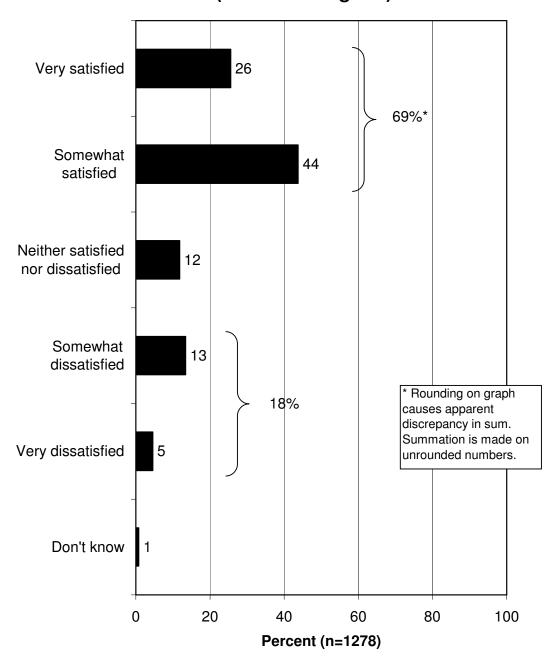


Q112. What would make you more satisfied with your spotted seatrout fishing in Georgia? (Asked of those who were not satisfied with fishing for spotted seatrout in Georgia.) (Saltwater anglers)



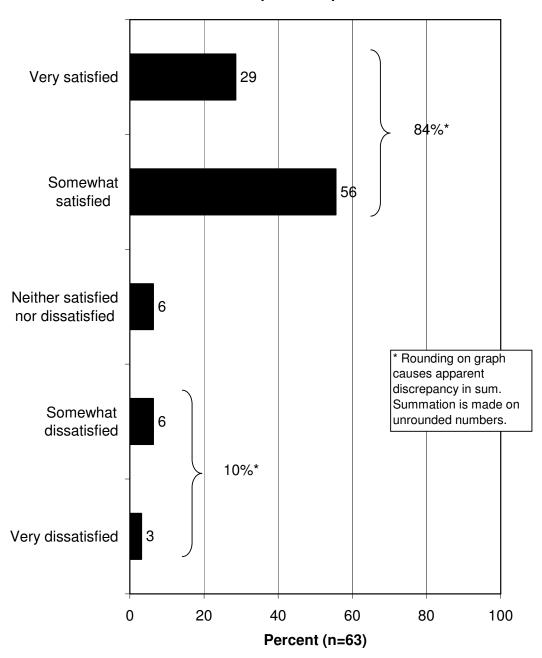
Q110. Are you satisfied or dissatisfied with the number of spotted seatrout you catch in Georgia? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



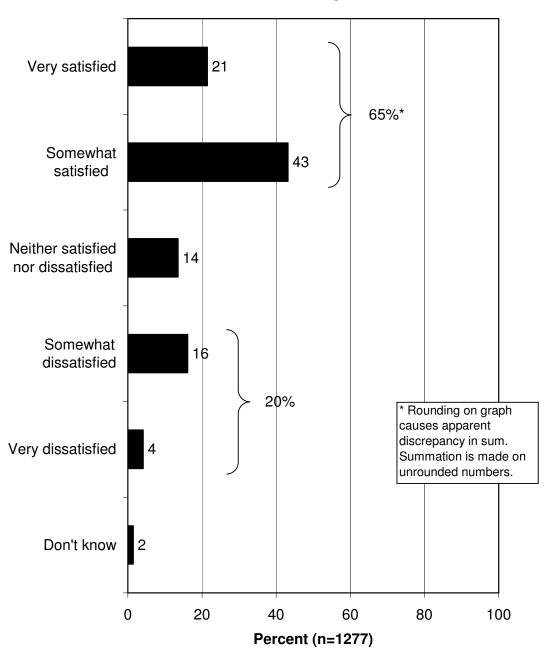
Q77. Are you satisfied or dissatisfied with the number of spotted seatrout you catch in Georgia? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)



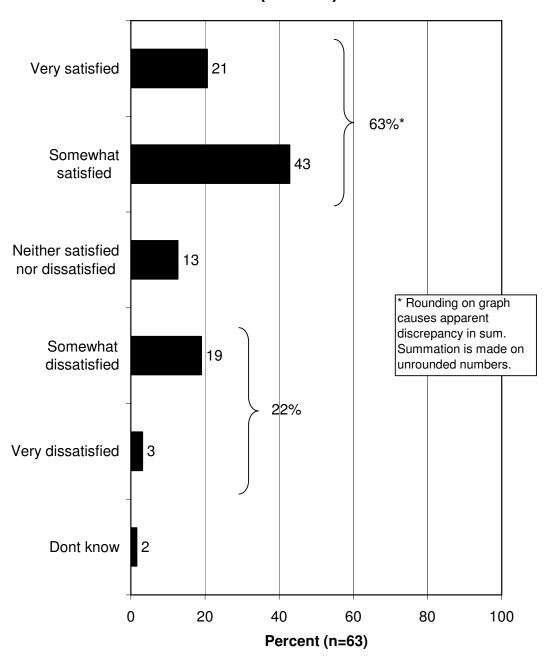
Q111. Are you satisfied or dissatisfied with the average size of the spotted seatrout you catch in Georgia? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



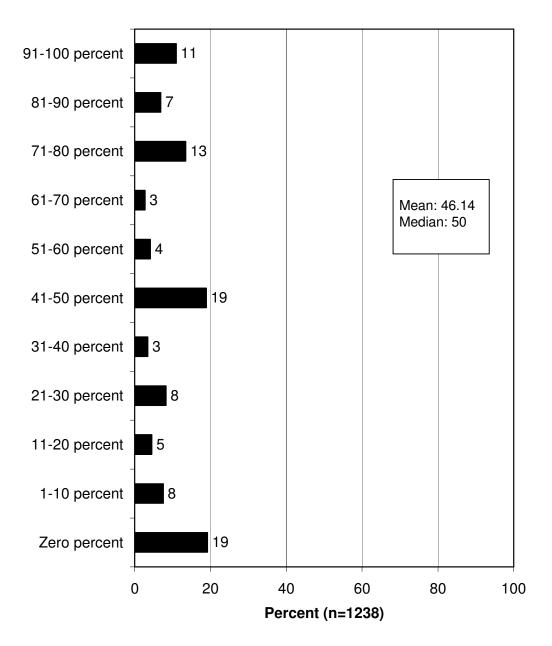
Q78. Are you satisfied or dissatisfied with the average size of spotted seatrout in Georgia? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)



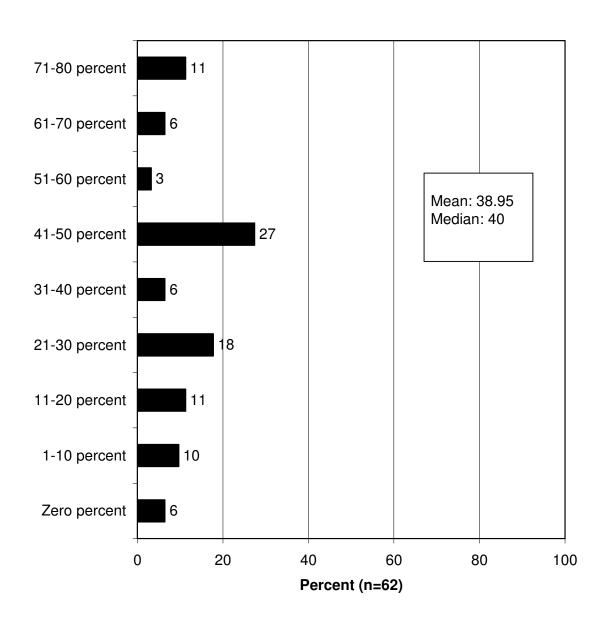
Q119. Of all the spotted seatrout you catch that are of legal size to keep, approximately what percentage do you release back into the water when fishing in Georgia? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



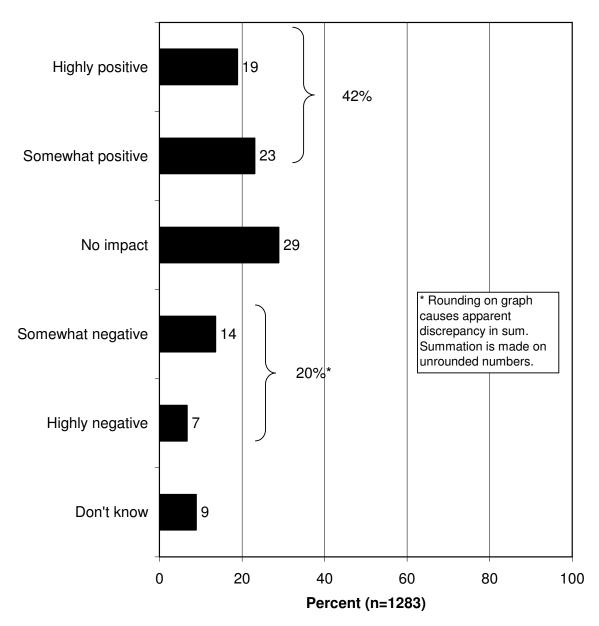
Q79. Of all the spotted seatrout your clients catch that are of legal size to keep, approximately what percentage do they release back into the water when fishing in Georgia? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)



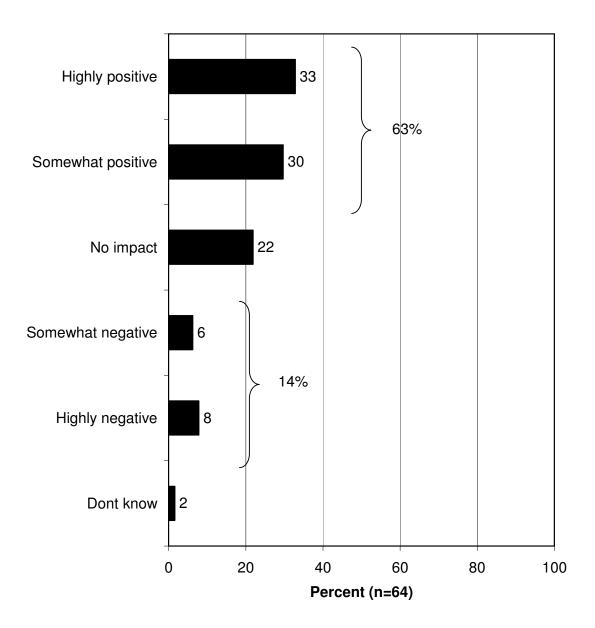
Q122. On January 1, 2016, the minimum size for keeping spotted seatrout in Georgia increased to 14 inches. Do you believe this change in size limit resulted in a positive or negative impact on your fishing, or did it have no impact? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



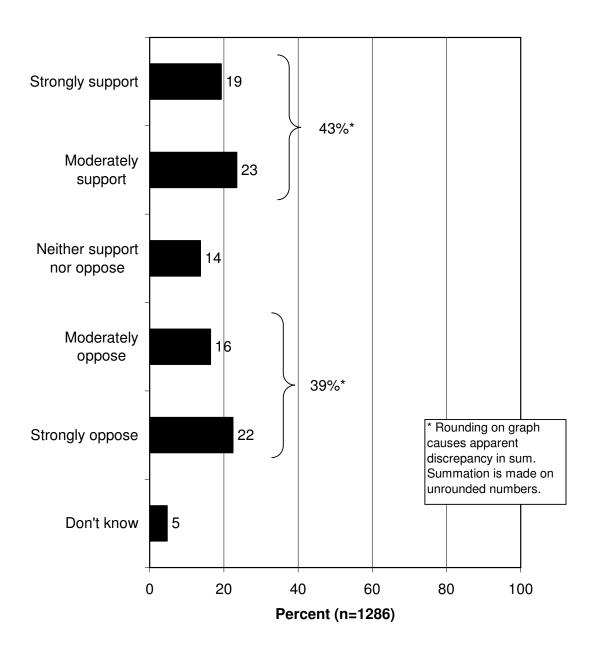
Q82. On January 1, 2016, the minimum size for keeping spotted seatrout in Georgia increased to 14 inches. Do you believe this change in size limit resulted in a positive or negative impact on your guiding, or did it have no impact? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)



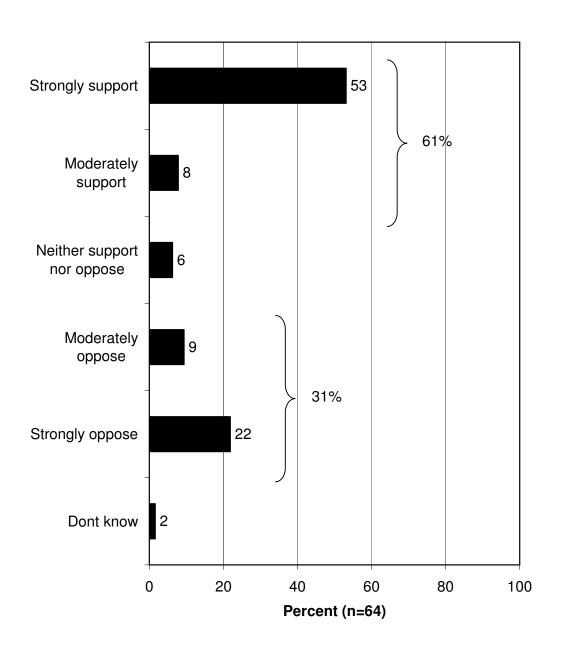
Q123. Would you support or oppose creating a slot limit for spotted seatrout where there would be both a minimum and maximum length limit, similar to red drum? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



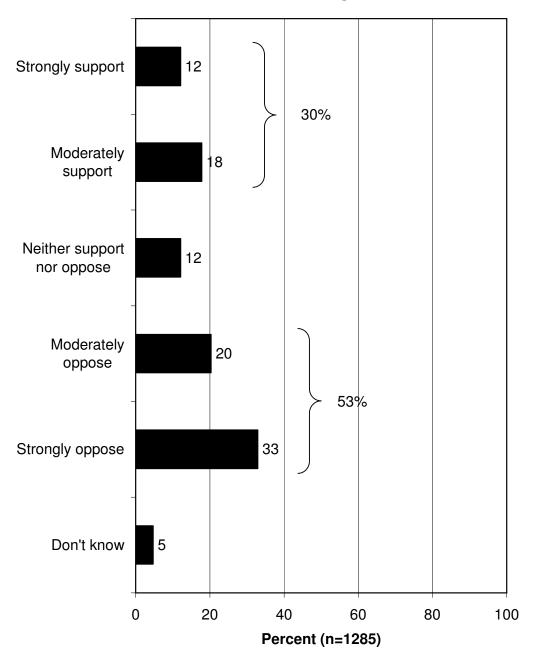
Q83. Would you support or oppose creating a slot limit for spotted seatrout where there would be both a minimum and maximum length limit, similar to red drum? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)

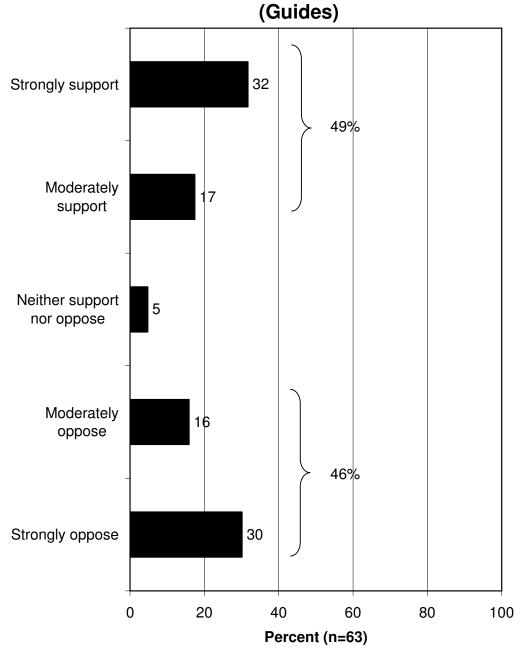


Q124. If a slot limit were created for spotted seatrout, would you support or oppose having the maximum limit be 18 inches? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)

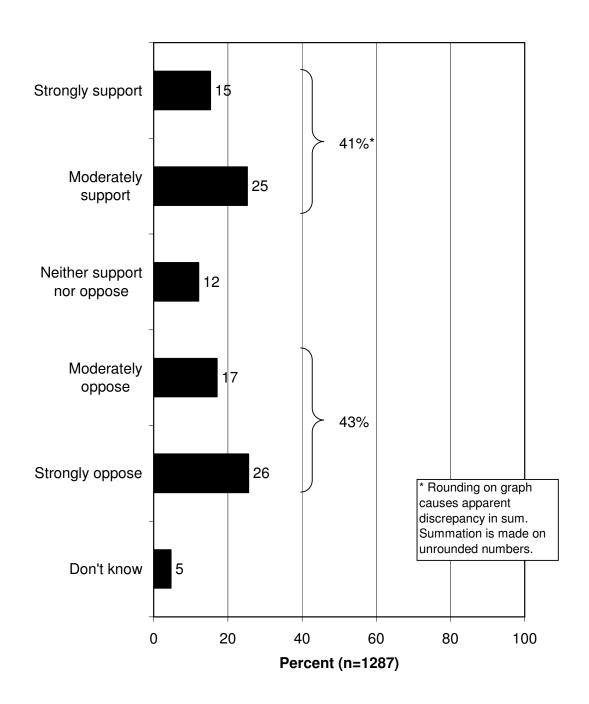


Q84. If a slot limit were created for spotted seatrout, would you support or oppose having the maximum limit be 18 inches? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)



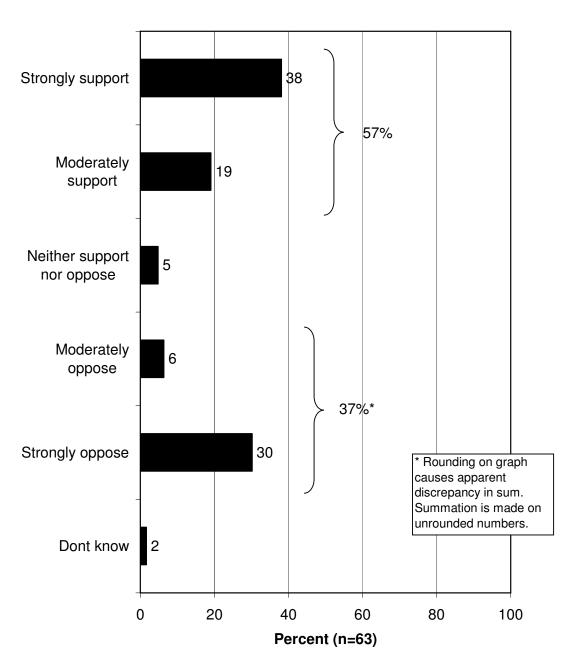
Q125. Would you support or oppose having the maximum limit be 20 inches? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



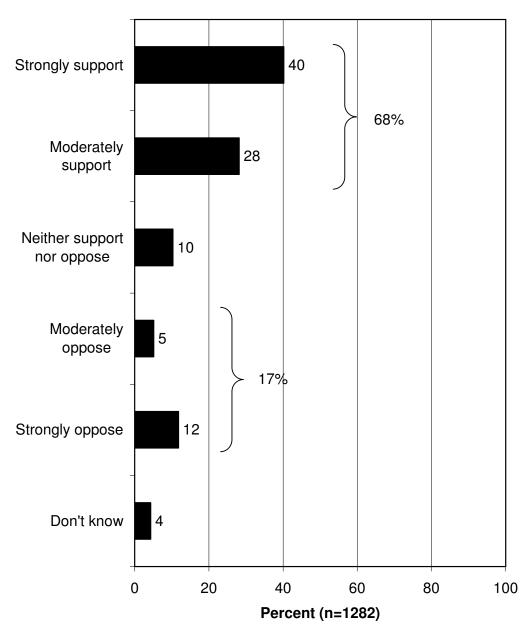
Q85. Would you support or oppose having the maximum limit be 20 inches? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

(Guides)



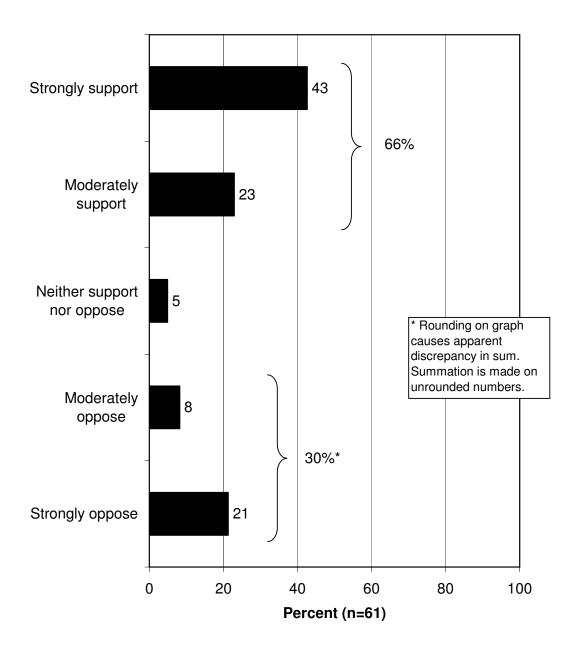
Q126. If a slot length limit were created for spotted seatrout, would you support or oppose allowing the harvest of one fish larger than the maximum length limit? (Asked of those who fished for spotted seatrout in Georgia.)

(Saltwater anglers)



Q86. If a slot length limit were created for spotted seatrout, would you support or oppose allowing the harvest of one fish larger than the maximum length limit? (Asked of those who guided anglers fishing for spotted seatrout in Georgia.)

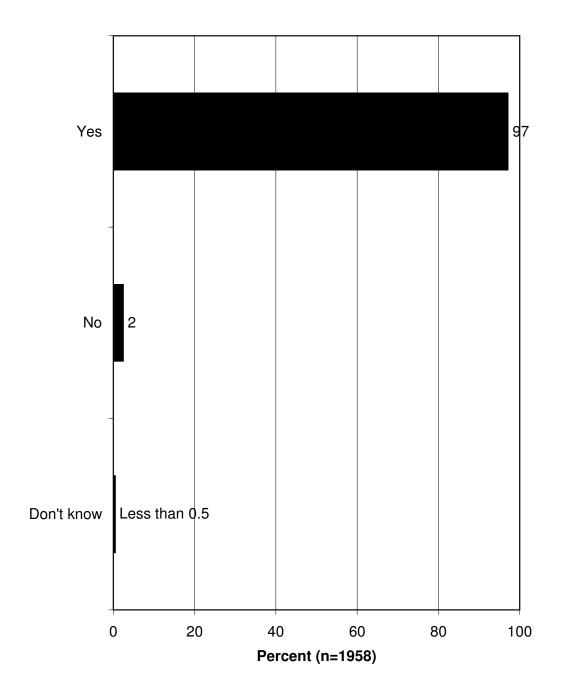
(Guides)



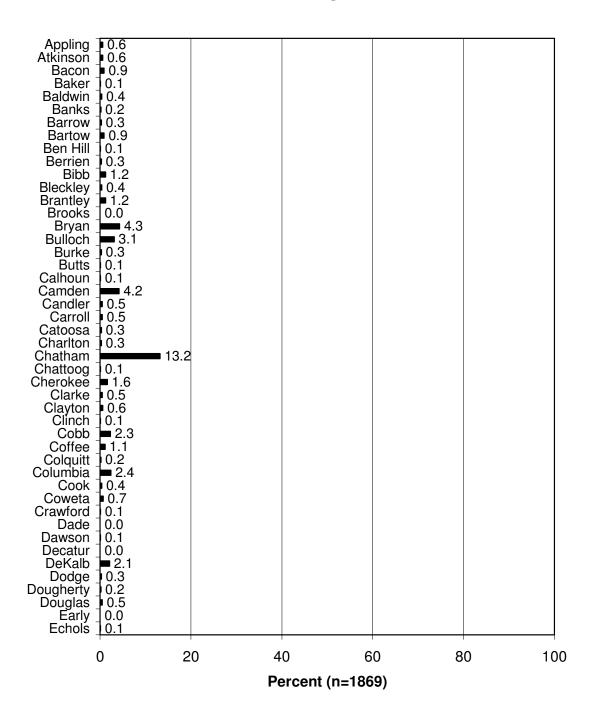
CHARACTERISTICS OF RECREATIONAL SALTWATER ANGLERS IN GEORGIA

- > The following data are shown for Georgia saltwater anglers:
 - Percent who are Georgia residents. (Note that the sample was of resident license holders, but a small percentage of anglers had moved since they bought the license that is in the database.)
 - County of residence of residents; county of the base of operations for guides.
 - Type of residential area.
 - Level of education.
 - Household income.
 - Race or ethnicity.
 - Age (also shown for guides).
 - Gender.

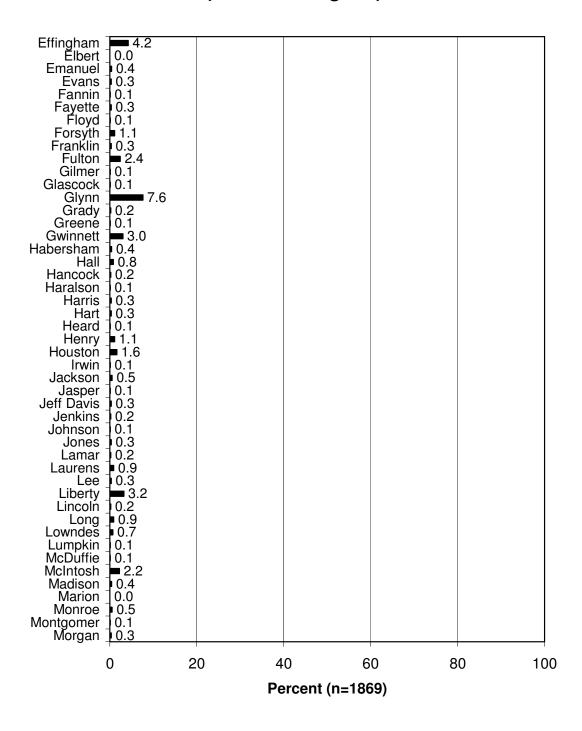
Q152. Are you a Georgia resident? (Saltwater anglers)



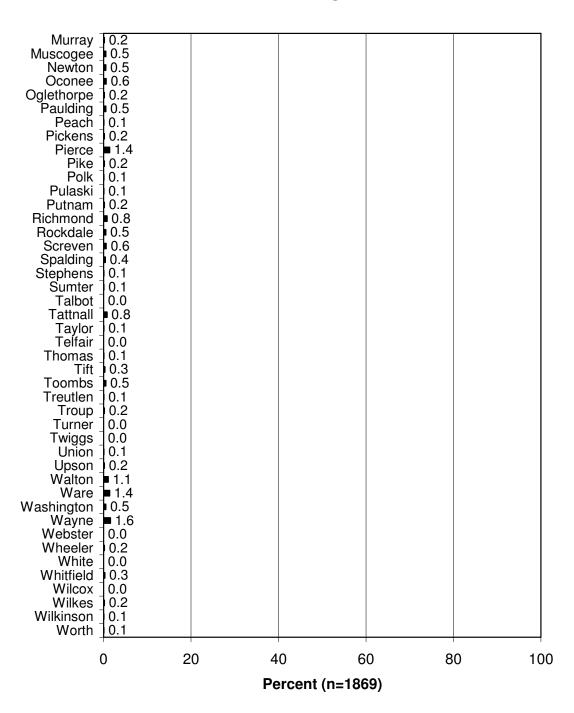
Q153. Which county do you live in? (Asked of Georgia residents.) (Part 1) (Saltwater anglers)



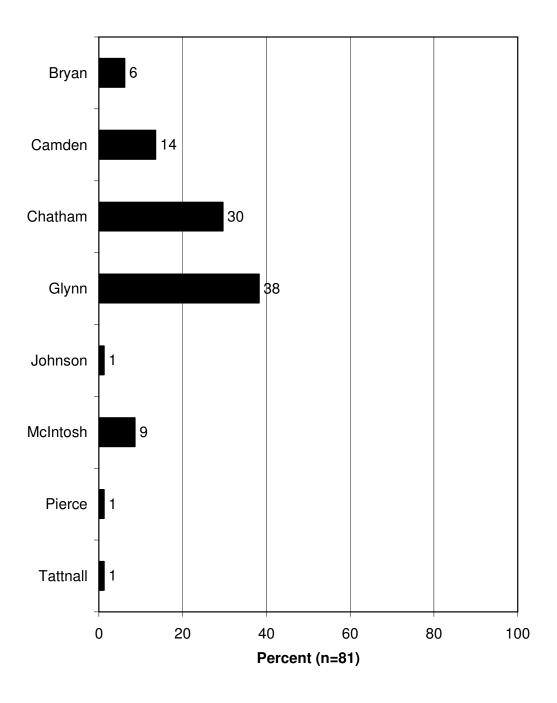
Q153. Which county do you live in? (Asked of Georgia residents.) (Part 2) (Saltwater anglers)



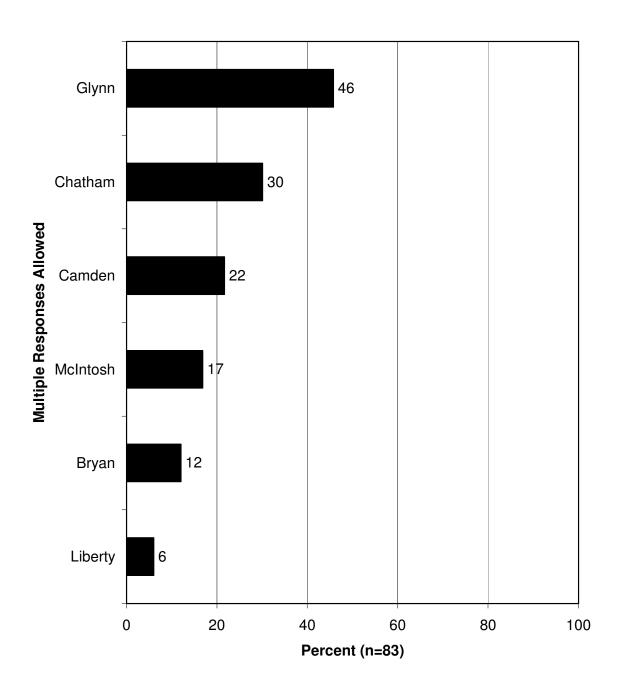
Q153. Which county do you live in? (Asked of Georgia residents.) (Part 3) (Saltwater anglers)



Q109. Which county do you live in? (Guides)

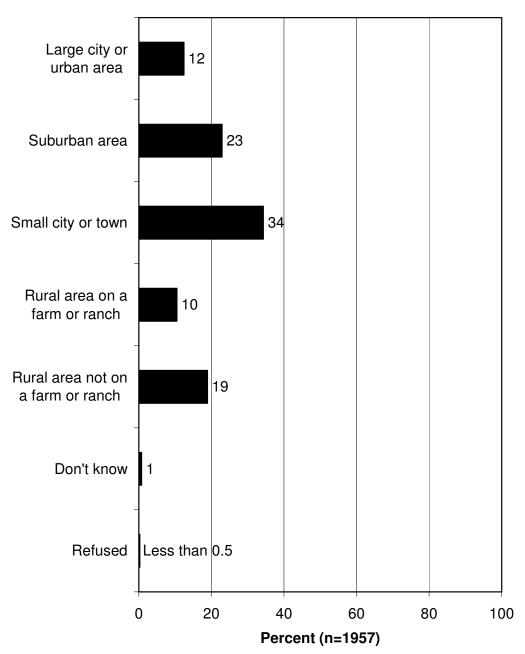


Q14. In which coastal counties of Georgia are you based? If you have more than one base of operations, please name all that apply. (Guides)

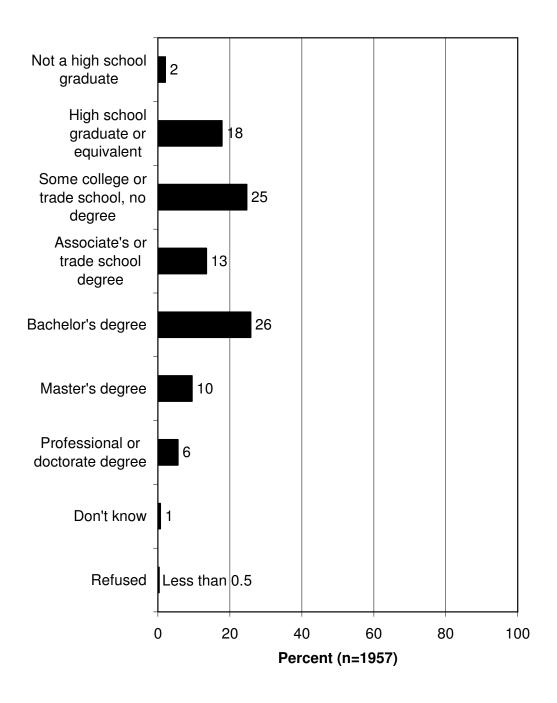


Q154. Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm or ranch, or a rural area not on a farm or ranch?

(Saltwater anglers)

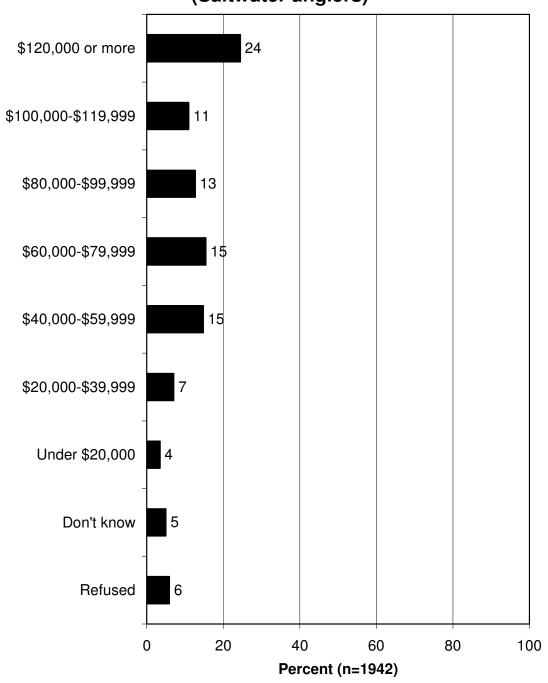


Q155. What is the highest level of education you have completed?
(Saltwater anglers)

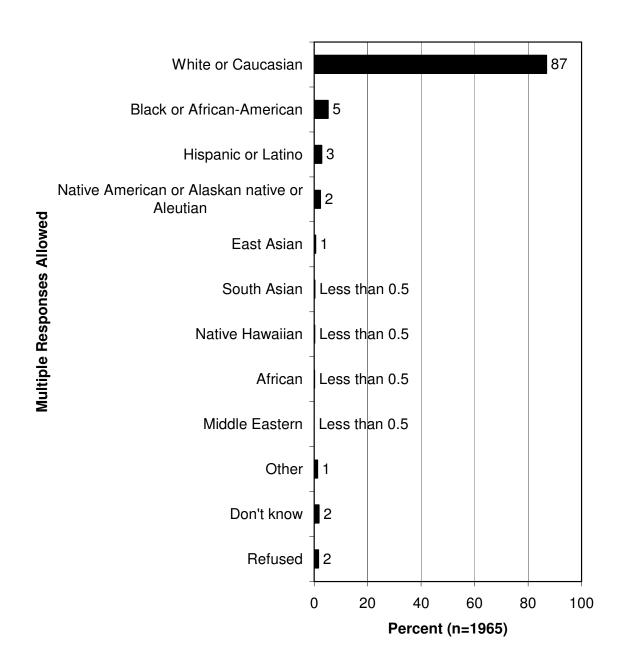


Q156. Which of these categories best describes your total household income before taxes last year?

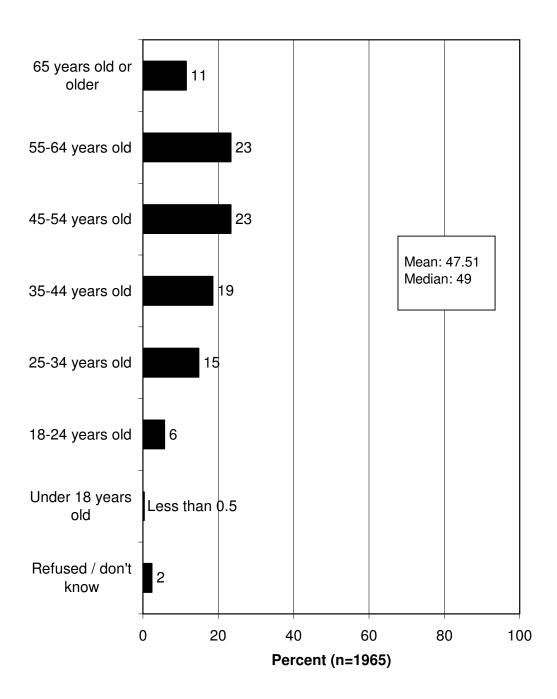
(Saltwater anglers)



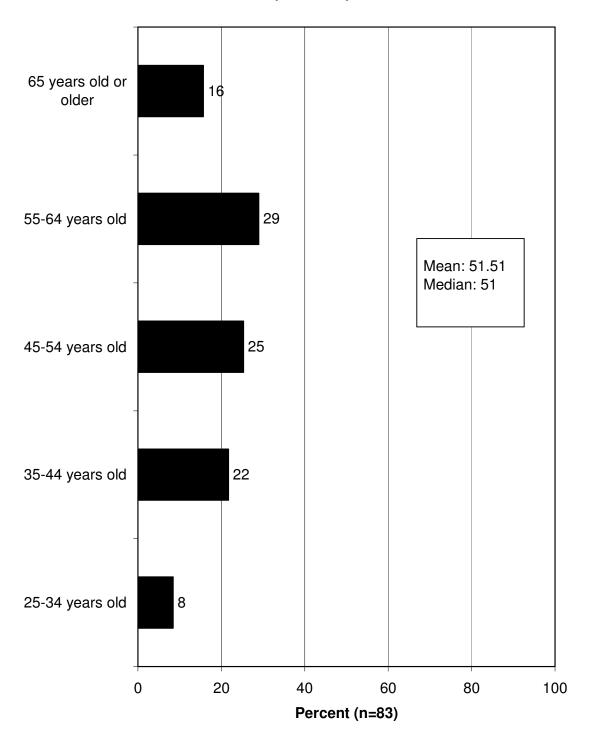
Q159. What races or ethnic backgrounds do you consider yourself? Please mention all that apply. (Saltwater anglers)



Q161. May I ask your age? (Saltwater anglers)

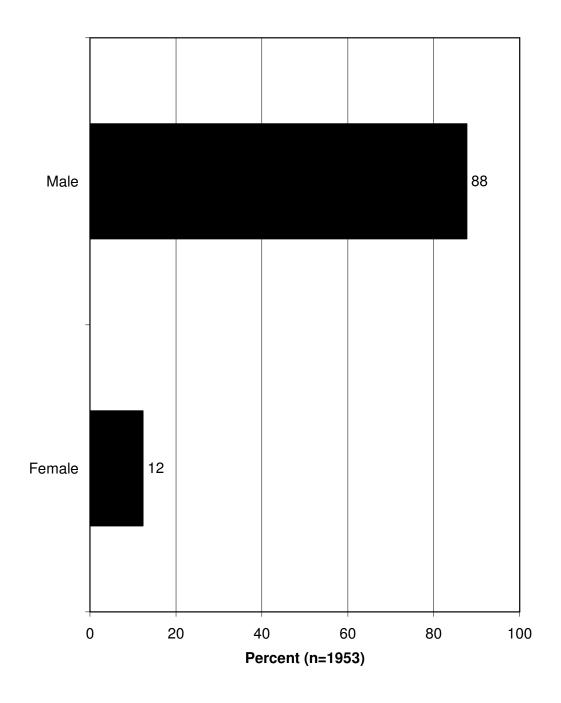


Q117. May I ask your age? (Guides)



Q167. Respondent's gender (not asked; observed by interviewer).

(Saltwater anglers)



ABOUT RESPONSIVE MANAGEMENT

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

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

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

Specializing in research on public attitudes toward natural resource and outdoor recreation issues, Responsive Management has completed a wide range of projects during the past 27 years, including dozens of studies of hunters, anglers, wildlife viewers, boaters, park visitors, historic site visitors, hikers, birdwatchers, campers, and rock climbers. Responsive Management has conducted studies on endangered species; waterfowl and wetlands; and the reintroduction of large predators such as wolves, grizzly bears, and the Florida panther.

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

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

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

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

Visit the Responsive Management website at:

www.responsivemanagement.com