Responsive Management™

IOWA ANGLERS' PARTICIPATION IN AND ATTITUDES TOWARD FISHING AND THE IOWA DNR

Conducted for the Iowa Department of Natural Resources

by Responsive Management

2019

IOWA ANGLERS' PARTICIPATION IN AND ATTITUDES TOWARD FISHING AND THE IOWA DNR

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Acknowledgments

Responsive Management would like to thank Jeff Kopaska, George D. Scholten, and David Arentson of the Iowa Department of Natural Resources for their input, support, and guidance on this project.

EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Iowa Department of Natural Resources (the Department) to assess anglers' fishing preferences and behaviors, as well as their attitudes toward the Department's management of fishing and fisheries in the state. The study entailed a scientific multi-modal survey of anglers who had fished in Iowa within the 3 years previous to the survey.

The database of licensed Iowa anglers from which the survey sample was pulled was provided by the Department. In instances where a telephone number was not available, a postcard was sent inviting the angler to participate in the survey by telephone or online. The telephone survey was conducted in December 2018, and the online survey was conducted in December 2018 through January 2019. In the telephone and online surveys, Responsive Management obtained 1,628 completed questionnaires.

The software used for telephone data collection was Questionnaire Programming Language. Data from the telephone survey and online survey were merged prior to final weighting and analysis. The analysis of data was performed using IMB SPPS Statistics as well as proprietary software developed by Responsive Management. Results were weighted among four state regions so that the proportions of the regions matched the distribution of the angler population statewide.

FISHING PARTICIPATION AND AVIDITY

- The overwhelming majority of anglers in the sample (83%) had fished within the previous 12 months.

- The mean number of years that anglers had fished out of the past 3 years is 2.61 years (the median is 3 years); 71% of anglers had fished all 3 years.
  - This reflects a slight increase in avidity since 2007, in which the mean was 2.42 years.

- Of those who had fished in the past year, the mean number of days they fished was 24.9, and the median was 14. Additionally, 45% had fished no more than 10 days, and a third (33%) had fished for more than 20 days.
  - The results of this question and the fishing participation question indicate that Iowa anglers fished for 10.50 million days in Iowa in the past year.
  - Those who had not fished in the past year were asked about their number of days fishing *in the last year that they fished*, with lower numbers than those who fished in the previous year: 70% fished no more than 10 days, and only 12% fished for more than 20 days, in the last year they fished. Their median number of days fishing was 5 days in the last year they fished.

- The survey asked Iowa anglers how many years they had fished in Iowa. The mean is 30.6 years, and the median is 30 years (this suggests a generally normal distribution with few survey extremes).

- Those anglers who had fished for at least 10 years were asked about their amount of fishing now compared to 10 years ago. The results are split between those who fish more (37%) and those who fish less (also 37%), while 26% fish the same amount.

SPECIES FISHED AND PREFERRED

- The most-fished species of fish are panfish in general (72% of anglers fished for these in the previous 12 months or the last year they fished), bass in general (58%), bluegill (58%), crappie (56%), and catfish/bullhead in general (49%). The next tier of commonly fished species includes walleye (43%), largemouth bass (38%), and channel catfish (24%). In these questions, anglers could select all that they had fished for.
  - Nearly every top species was fished by a higher percentage of anglers in this survey compared to 2007.

- The survey then asked anglers to name the single species that they most often fished for. Walleye (14%) and bass (unspecified) (14%) are the types of fish that anglers most commonly say they fish for most often in Iowa, closely followed by catfish (unspecified) (12%), largemouth bass (12%), crappie (11%), and bluegill (11%).
  - When anglers were asked which single species of fish they would *prefer* to fish for, their responses closely mirror the fish that they most commonly fish for. This suggests that anglers are able to fish for the species that they prefer in Iowa, with the exception of walleye. Preference for walleye (24% prefer walleye) exceeds actual fishing for it (14% say that walleye is the species they most often fish for).
  - Walleye is much more commonly fished and preferred in the northern regions than the southern regions.

FISHING LOCATIONS AND TYPE OF FISHING

Fishing Locations

- The most commonly fished body of water was the Mississippi River (11.0% of anglers fished this water body the most often), followed by unnamed private ponds (10.5%). These were distantly followed by the Cedar River (4.7%), Clear Lake (4.2%), and the Des Moines River (4.0%).
  - A follow-up question asked anglers in which county their most frequently fished water body is located. The top counties are Polk (7.3%), Cerro Gordo (4.7%), Johnson (4.7%), Scott (4.6%), and Dickinson (4.2%).

- As with the species section, the survey next asked Iowa anglers to name their *preferred* body of water and county in which to fish. Again, the preferred water bodies and counties largely mirror those in which the anglers actually fished. The top responses are the Mississippi River (11.6%), unnamed private ponds (6.6%), Clear Lake (3.5%), the Des Moines River (3.4%), Okoboji Lake (East and West) (3.2%), and the Cedar River (3.0%).
  - The counties associated with the preferred water bodies are Dickinson (6.6%), Polk (6.4%), Johnson (4.8%), Cerro Gordo (4.2%), and Scott (3.8%).

- While the majority of Iowa anglers (56%) typically travel no more than 20 miles to fish in Iowa, 17% typically travel more than 50 miles.

- The large majority of Iowa anglers (78%) fished from the shore at least some of the time, while 67% fished from a boat, 65% did catch-and-release fishing, and 49% fished from a pier or dock. Much less common were ice fishing (27%), fishing while wading (17%), fly fishing (7%), and fishing in a tournament (6%).

- The most commonly fished type of water body was lakes (64% stated this), closely followed by rivers or streams (59%). These were distantly followed by ponds or pits (43%) and reservoirs (22%).

Catch-and-Release Fishing

- It was previously indicated that a majority of Iowa anglers (65%) had done catch-and-release fishing at least once in the last year they fished. For each of the following species that they had fished, catch-and-release anglers were asked about the portion of fish they typically release. As the table below shows, bass is released the most, while trout and panfish are the most-kept types of fish.

Species	Releases all	Releases most	Releases about half	Releases a few	Release almost none	Releases none	Don't know
Bass	66	25	5	1	1	1	1
	96			3			
Trout	20	30	22	9	9	10	1
	71			28			
Catfish or bullhead	31	28	22	9	7	3	0
	81			19			
Walleye	21	30	26	10	8	4	1
	77			22			
Sauger	29	28	26	5	6	3	2
	83			15			
Northern pike	50	20	15	8	5	1	1
	86			14			
Musky	79	2	3	0	2	2	12
	84			4			
Panfish	25	21	26	14	9	5	1
	72			27			

Fishing from a Boat

- It was previously indicated that 67% of Iowa anglers had fished from a boat at least once in the last year they fished.
  - Anglers who had fished from a boat were asked about the amount of their fishing that is typically done from a boat: 14% say that all their fishing is from a boat, another 33% say that most of their fishing is from a boat, and 25% say at least half is done that way, for a total of 72% of "boater-anglers" doing at least half of their fishing from a boat.

Tournament Fishing

- It was previously indicated that 6% of Iowa anglers had fished in a tournament at least once in the last year they fished.
  - Those who fished in a tournament did so a mean of 2.3 times and a median of 1 time in the last year they fished; 55% fished in a tournament 1 time.
  - Tournament anglers most commonly fished in the tournament for bass (unspecified) (33% stated this), walleye (30%), largemouth bass (24%), catfish (unspecified) (21%), and crappie (12%).

ATTITUDES TOWARD FISHING AND FISHING MANAGEMENT IN IOWA

- The majority of Iowa anglers (68%) rate fishing in Iowa as *excellent* or *good* (with 56% saying *good*), while 31% rate it as *fair* or *poor* (with 27% saying *fair*).
  - These results are nearly identical to those from 2007.

- The survey asked those anglers who have fished in Iowa for at least 10 years to rate whether Iowa's fishing is better or worse now compared to 10 years ago. A slightly greater percentage think that fishing is better (26%) than think it is worse (20%). The most common answer is that fishing is the same now as compared to 10 years ago (44%).

- The majority of Iowa anglers (76%) rate the Department as *excellent* or *good* in managing fishing and fisheries in Iowa (with 50% saying *good*), while 17% rate the Department as *fair* or *poor* (with 14% saying *fair*).
  - Since 2007 there has been a shift of anglers moving from *good* to *excellent* in their ratings of the Department. Although a slight improvement in the ratings of the Department is observed, results of the more general question of rating fishing in Iowa have remained largely unchanged.
  - Anglers who rated management of fishing and fisheries in the higher end of the scale (*excellent* or *good*) most commonly gave as their reasoning a general positive statement, stated that their experience with agency personnel or agency efforts was positive, gave a stocking-related reason, or stated that fishing is good and that fisheries are managed well.
  - Those anglers who rated management of fishing and fisheries in the lower end of the scale (*fair* or *poor*) most commonly gave as their reasoning that they disagree with some aspect of fish stocking, that water quality is bad, or that they have a specific problem with fishing regulations or management.

- The majority of Iowa anglers describe fishing management in Iowa as regulated the right amount (78%). Otherwise, more of them say that fishing is under-regulated (10%) than over-regulated (4%).

- Iowa anglers were asked to rate public access to various water body types in the state.
  - The majority of Iowa anglers (66%) rate public access to Iowa's inland rivers and streams for fishing as *excellent* or *good* (52% *good*), while 26% rate such access as *fair* or *poor* (21% *fair*).
  - Similarly, 64% of anglers rate public access to Iowa's reservoirs for fishing as *excellent* or *good* (50% *good*), while 16% rate the access as *fair* or *poor* (15% *fair*). A sizable percentage (19%) do not know.
  - Most anglers (80%) rate public access to Iowa's lakes for fishing as *excellent* or *good* (60% *good*), while 14% rate access as *fair* or *poor* (13% *fair*).

- Just under half of anglers (48%) rate public access to Iowa's ponds and pits for fishing as *excellent* or *good* (40% *good*), compared to 37% who rate the access as *fair* or *poor* (27% *fair*). A large percentage (15%) do not know.
- There are more who rate public access for fishing in the Mississippi River as *excellent* or *good* (40%; 28% *good*) than who rate it as *fair* or *poor* (11%; 9% *poor*). However, the top response is "don't know" (48%).
    - Among those who live in counties bordering the Mississippi River, 78% rate access *excellent* or *good* (48% *good*), while 20% rate it *fair* or *poor* (10% *fair*).
- Finally, a majority of anglers (72%) don't know how to rate public access for fishing in the Missouri River. Otherwise, 19% rate access as *excellent* or *good* (13% *good*), while 9% rate it as *fair* or *poor* (7% *fair*).
    - Among those who live in counties bordering the Missouri River, there is a three-way split between those who rate access *excellent* or *good* (32%; 17% *good*), those who rate it *fair* or *poor* (34%; 18% *fair*), and those who do not know (34%).

➢ A strong majority of Iowa anglers (78%) agree, after being informed that one of the uses of funds from license fees is to improve Iowa's fishing, that anglers are currently getting their money's worth for those fees; only 10% disagree.

POND FISHING OPPORTUNITIES

➢ Among those who fished ponds in Iowa, the most common types of ponds fished are a pond on a farm (60% fished this type) and a pond on private property (58%). Those pond types are distantly followed by a city, town, or local park pond (36%); a pond on state or federal land (28%); and a pond in a neighborhood or residential community (21%).

- The last three pond types (the public ponds) are much more frequently fished by those who live in an Urban/Community Fishing Program area compared to those who do not.

- A majority of anglers who fished ponds (54%) stated that they have mostly fished private ponds. Meanwhile, 20% fished private and public ponds about equally and 25% fished mostly public ponds.
  - Southeast pond anglers are more likely to fish private ponds compared to pond anglers from other regions.
  - As noted earlier, those who live in Urban/Community Fishing Program areas are much more likely to fish public ponds than those who do not live in such areas.
  - A third of pond anglers (34%) fish only private ponds in Iowa (this corresponds to 15% of all anglers).
  - The groups most associated with fishing only private ponds are those who do not live in Urban/Community Fishing Program areas, residents of the Southwest and Southeast Regions, and those who fished all 3 of the past 3 years.

- A strong majority of anglers who fished ponds (77%) say the ponds they have fished are mostly located in a rural or country area. Otherwise, 10% fished ponds mostly in a city or town and 12% fished both about equally.
  - Unsurprisingly, those who live in Urban/Community Fishing Program areas fish ponds in a city or town more often than those who do not.

- Those who fished a pond typically travel a mean of 20.8 miles, one-way, to fish ponds in Iowa. The median is 10 miles; in other words, 50% of pond anglers travel 10 miles or less to fish ponds.
  - Of pond anglers who live in Urban/Community Fishing Program areas, 43% travel 10 miles or less and 66% travel 20 miles or less to fish ponds.

- A majority of anglers (58%) rate the fishing opportunities within a few miles of their home as *excellent* or *good* (39% *good*). However, a notable percentage (41%) rate the opportunities as *fair* or *poor* (28% *fair*). (Note that this question was asked of all anglers, not just those who fished ponds.)

- Anglers are *willing* to travel a mean of 96.6 miles (median of 60 miles), one-way, to fish in Iowa.

- Finally in this section, anglers were presented with the following statement and question: *Currently, Iowa has many local fishing opportunities across the state in both urban and rural areas. Assuming there is a fishing pond within a few miles of your home, regardless of where you live, is there anything that would make it easier for you to [fish / fish more often] at local or nearby ponds?*
  - Two thirds of anglers (68%) said there is nothing that would make it easier. Meanwhile, 12% said better access in general, including shore access, would make fishing at nearby ponds easier.

WATER QUALITY IN IOWA

- Anglers were asked about water quality now compared to 10 years ago, and they are about evenly divided: 28% think it is better now than it was 10 years ago, while 31% think it is worse now. Meanwhile, 26% think it is the same and 15% do not know.

- When asked to rate the current quality of Iowa's waters, anglers are evenly divided between those who think it is *excellent* or *good* (47%; 42% *good*) and those who think it is *fair* or *poor* (also 47%; 32% *fair*).

- When asked to name the most important water quality issue where they fish most often in Iowa, anglers most commonly say agricultural runoff (29% state this), followed by litter or trash (12%); 14% say that there is no important issue.

RATINGS OF DEPARTMENT PRIORITIES

- Anglers were asked to rate the importance of 13 efforts related to fishing by the Department, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important. The Department efforts are listed on the following page, in descending order of their mean ratings. In general, the ecological efforts, such as protecting water quality or improving

habitat, are given higher ratings than the recreation-related efforts, such as stocking fish or improving access.

- Protecting water quality in Iowa's waters (mean rating of 9.2)
- Conservation of streams and rivers (8.7)
- Improving fish habitat (8.5)
- Monitoring fisheries populations (8.3)
- Stocking fish (8.2)
- Enforcing fishing regulations (8.1)
- Planning for and implementing lake and pond restoration projects (8.1)
- Improving angler access points at lakes, ponds, and streams (7.6)
- Installing fishing structures (7.5)
- Improving shore fishing opportunities at lakes, ponds, and streams (7.5)
- Conducting angler and creel surveys (6.5)
- Preparing weekly fishing reports (6.3)
- Preparing weekly social media materials (5.3)

FISH CONSUMPTION

- The large majority of Iowa anglers (80%) eat (or their family members eat) the fish they catch at least some of the time.
  - Those who live in an Urban/Community Fishing Program area are less likely to eat the fish they catch than those who do not live in a program area.

- Those who eat the fish they catch do so a mean of 13.6 times a year; the median is 6 meals a year.
  - The results of these questions indicate that Iowa anglers consumed approximately 4.59 million meals of Iowa-caught fish in the past year.

- Most of those who consume fish that they have caught (78%) do *not* limit their consumption based on safety concerns about eating the fish caught in Iowa. Nonetheless, 6% of such anglers limit their consumption very much, and 15% limit it a little.

- Among those who limit their consumption very much or a little, 29% are concerned about heavy metals or mercury, 23% are concerned about agricultural runoff in general, and 15% are concerned about nutrients in the water from runoff.

- The overwhelming majority of those who consume fish that they have caught (84%) consider Iowa's fish to be safe for eating; however, a small percentage (5%) consider Iowa's fish to be unsafe for eating.
  - In a related question, 52% of anglers who do not eat the fish they catch would be likely to eat the fish if they felt it was safer. A third of this group (33%), however, would still be unlikely to eat the fish.

- Over a third of anglers (37%) have been aware of at least one fish advisory about eating fish from Iowa waters.
  - This percentage has decreased since 2007 (49%).
  - Mercury is the most common contaminant for which these anglers have seen or heard advisories.

LAW ENFORCEMENT AND FISHING REGULATIONS

- Most anglers (86%) think Iowa's fishing regulations are clear, compared to only 5% who think they are confusing.

- A solid majority of anglers (73%) rate Iowa's enforcement of fishing regulations and laws as *excellent* or *good* (with 50% saying *good*). Nonetheless, 21% rate it as *fair* or *poor* (16% *fair*).

ATTITUDES TOWARD PANFISH REGULATIONS

- A majority of those who fished for bluegill (62%) say they have been harvesting about the same number of bluegill since the bag limit began in 2009. Nonetheless, it appears that the bag limit had some impact, as 24% of bluegill anglers say they have been harvesting fewer bluegill compared to 5% who say they have been harvesting more.

- Likewise, a majority of those who fished for crappie (56%) say they have been harvesting about the same number of crappie since the bag limit began in 2009; 28% have been harvesting fewer compared to 8% who have been harvesting more.

- A majority of those who fished for bluegill (78%) are satisfied with the daily bag limit of 25 (57% are *very* satisfied), compared to just 8% who are dissatisfied.
  - Results are very similar among bluegill anglers who live in counties bordering the Mississippi River: 75% are satisfied with the bag limit (53% are *very* satisfied) and 11% are dissatisfied.
  - Among bluegill anglers who are dissatisfied with the bag limit, 60% want the limit to be more than 25 bluegill per day, as opposed to 36% who want a lower limit.
    - Southeast anglers in this group are markedly more likely than those in other regions to want a higher bag limit.
    - Likewise, anglers in this group who live in the Mississippi River corridor more commonly want a higher bag limit (75% do) compared to anglers statewide. (Note that only 9 anglers meet these conditions.)

- The same questions were asked of those who fished for crappie: 78% are satisfied with the daily bag limit of 25 (57% are *very* satisfied), compared to just 9% who are dissatisfied.
  - Among crappie anglers who live in the Mississippi River corridor, 72% are satisfied with the bag limit (51% are *very* satisfied) and 10% are dissatisfied.
  - Among crappie anglers who are dissatisfied with the bag limit, 44% want the limit to be more than 25 crappie per day, while 53% want the limit to be fewer than 25 per day.
    - Again, Southeast anglers in this group are more likely than others to want a higher bag limit.
    - Among crappie anglers who are dissatisfied with the bag limit and who live in the Mississippi River corridor, 56% want a higher bag limit and 44% want a lower one (only 9 anglers meet these conditions).

SOURCES OF INFORMATION ABOUT FISHING IN IOWA

- Anglers were asked, in an open-ended question, what sources they use or have used to get information about fishing. By far the top responses are the Iowa Department of Natural Resource's website (42% stated this) and word-of-mouth (32%). Other information sources cited by at least 10% of anglers include the Department's weekly fishing report email, social media in general, *Iowa Outdoors* magazine, and other websites.
  - In follow-up, those who did not mention the Department's website in the open-ended question were directly asked if they ever visited the website. Combining the results of the two questions, most Iowa anglers (79%) have visited the website.
  - Those who visited the Department's website were most commonly seeking information on regulations, fishing locations, fishing reports, and license information.

- Overall, 38% of anglers have seen or heard information about fishing on social media (such as Facebook, Twitter, or Instagram). (As with the questions about the Department's website, results of the open-ended question were combined with a direct question to those who did not mention social media initially.)
  - Most anglers who saw or heard fishing information on social media (90%) got it from Facebook.

- A majority of anglers (74%) do not follow the Department on social media, whereas 20% follow the Department on Facebook.

- Nearly a quarter of anglers (23%) subscribe to the Department's weekly fishing report email.
  - Those who subscribe to the weekly email were asked how often they use it to plan their fishing trips, on a spectrum from *always* to *never*. The results resemble a bell curve, with *frequently* and *sometimes* being the most common responses.

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INTRODUCTION AND METHODOLOGY

This study was conducted for the Iowa Department of Natural Resources (the Department) to assess anglers' fishing preferences and behaviors, as well as their attitudes toward the Department's management of fishing and fisheries in the state. The study entailed a scientific multi-modal survey of Iowa anglers who had fished in Iowa within the 3 years previous to the survey. This report also presents trends of results compared to a 2007 survey. Specific aspects of the research methodology are discussed below.

MULTI-MODAL SURVEYING METHODOLOGY

Telephone Survey

A multi-modal approach was taken for this survey to ensure that all anglers had a chance of participating, including those who did not provide telephone contact information. From the sample of Iowa anglers (discussed further below), attempts were first made to contact those who provided telephone numbers, by telephone, to take the survey.

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

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted a project briefing with the interviewers prior to the administration of 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.

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 five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The telephone survey was conducted in December 2018.

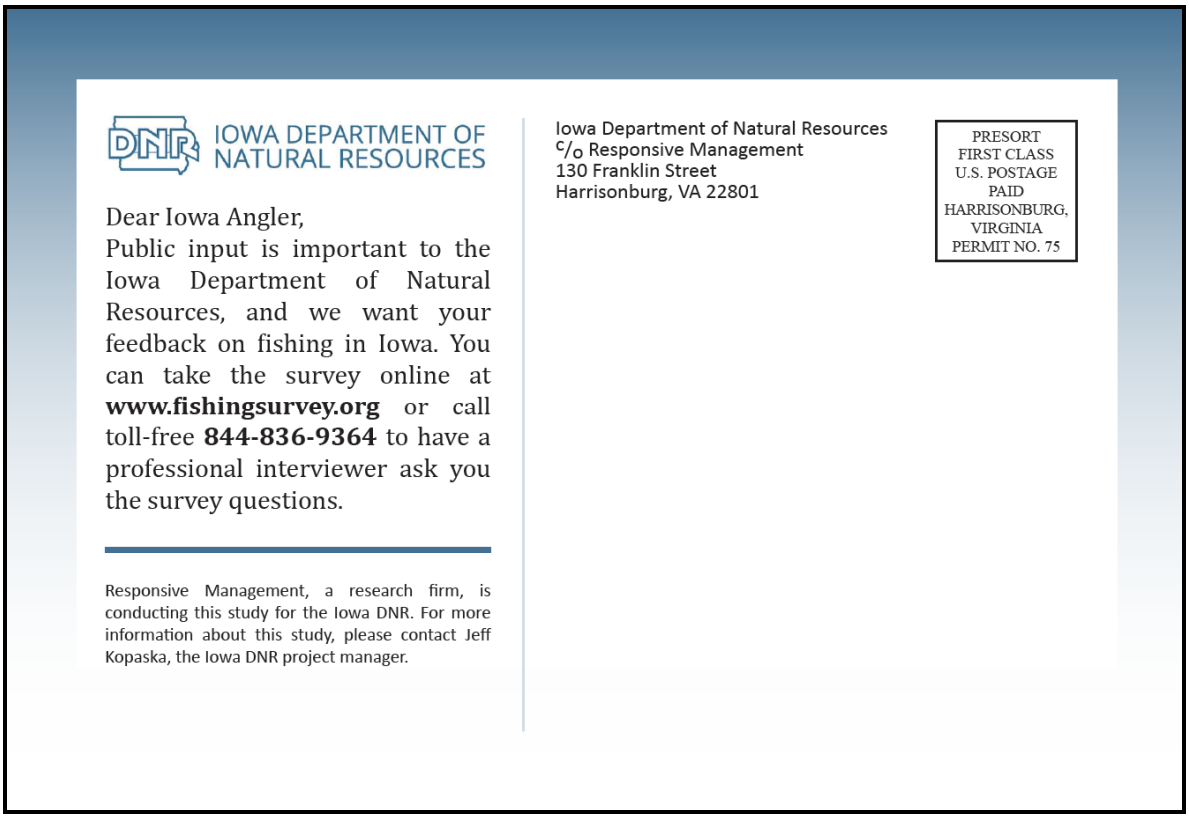
The software used for telephone data collection was Questionnaire Programming Language (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with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

Online Survey

Based on the primary telephone survey, an online questionnaire that mirrored the telephone survey was developed by Responsive Management to account for anglers who did not provide telephone contact information. In those instances when randomly selected anglers did not have telephone information in the license database, a postcard was sent to their mailing address. The postcard provided both a telephone number and a website address, inviting the angler to take the survey either by telephone interview or online. The online survey was conducted in December 2018 through January 2019.

The outgoing postcard is shown on the following page.

IOWA DEPARTMENT OF NATURAL RESOURCES
www.iowadnr.gov
Tell us about your Iowa fishing experiences and your opinions on fishing in Iowa.
The easiest way to enter is to take the survey online now at:
www.fishingsurvey.org
Please complete your survey as soon as possible.


IOWA DEPARTMENT OF NATURAL RESOURCES
Dear Iowa Angler,
Public input is important to the Iowa Department of Natural Resources, and we want your feedback on fishing in Iowa. You can take the survey online at www.fishingsurvey.org or call toll-free 844-836-9364 to have a professional interviewer ask you the survey questions.
Responsive Management, a research firm, is conducting this study for the Iowa DNR. For more information about this study, please contact Jeff Kopaska, the Iowa DNR project manager.
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QUESTIONNAIRE DESIGN

The telephone and online survey questionnaires were developed cooperatively by Responsive Management and the Department, based on the research team's familiarity with fishing, outdoor recreation, and wildlife conservation. In addition, the questionnaires in part include questions from a 2007 angler survey, with the results presented for a trend comparison. For portions of the questionnaire, respondents were randomly split and sent to different sections in order to reduce the overall survey length for each respondent. Responsive Management conducted pre-tests of the questionnaires to ensure proper wording, flow, and logic in the survey.

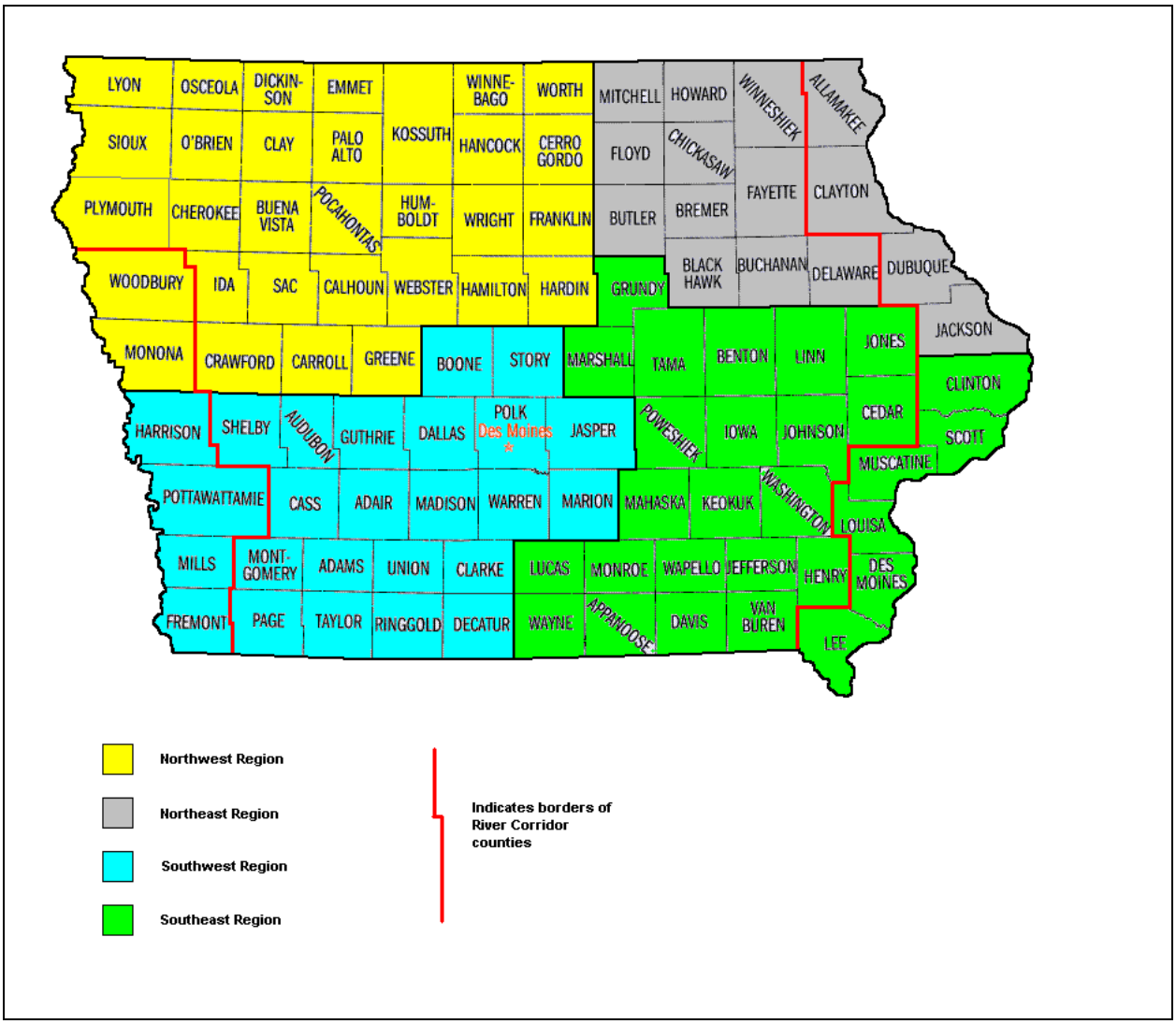
SURVEY SAMPLE

The database of licensed Iowa anglers from which the sample was pulled was provided by the Department. For the survey, the sample used a probability-based selection process that ensured that each eligible Iowa angler had an approximately equal chance of being selected for the survey. Selected anglers were contacted by telephone and interviewed, if possible. For anglers who did not have a telephone contact, postcards were sent inviting them to take the survey online or by calling in to Responsive Management. In the telephone and online surveys, Responsive Management obtained 1,628 completed questionnaires.

DATA ANALYSIS

Data from the telephone survey and online survey were merged prior to final weighting and analysis. The analysis of data was performed using IMB SPPS Statistics as well as proprietary software developed by Responsive Management. The results were weighted among four state regions (roughly divided into geographic quarters) so that the proportions of the regions (by respondents' counties of residence, not by the respondents' fishing locations) matched the distribution of the angler population statewide.

A map of the four geographic regions is shown on the following page.



The red lines denote counties that border the Missouri River to the west and the Mississippi River to the east. On select questions, results from anglers in those areas are shown separately.

Also, it was of interest to compare and contrast the results of urban and rural anglers. Within Iowa, 27 of the top 30 urban areas participate in an Urban/Community Fishing Program. To observe the similarities and differences between urban and rural anglers, survey results for each question are presented side-by-side for comparison.

A table of Urban/Community Fishing Program areas is shown on the following page.

Urban/Community Program Fishing Areas.

Rank	Urban Area	Population	County	Rank	Urban Area	Population	County
1	Des Moines	210,330	Polk	16	Marshalltown	27,620	Marshall
2	Cedar Rapids	130,405	Linn	17	Mason City	27,366	Cerro Gordo
3	Davenport	102,582	Scott	18*	Clinton	26,064	Clinton
4	Sioux City	82,821	Woodbury	19	Burlington	25,410	Des Moines
5	Iowa City	74,220	Johnson	20	Fort Dodge	24,649	Webster
6	Waterloo	68,460	Black Hawk	21	Ottumwa	24,624	Wapello
7	Ames	65,060	Story	22	Muscatine	23,968	Muscatine
8	West Des Moines	64,113	Polk	23	Johnston	20,871	Polk
9	Council Bluffs	62,597	Pottawattamee	24	Coralville	20,608	Johnson
10	Dubuque	58,799	Dubuque	25	Waukee	18,990	Dallas
11	Ankeny	56,764	Polk	26	Clive	17,419	Polk
12	Urbandale	44,062	Polk	27	Altoona	16,984	Polk
13	Cedar Falls	41,255	Black Hawk	28	North Liberty	15,931	Johnson
14	Marion	37,330	Linn	29*	Indianola	15,467	Warren
15	Bettendorf	35,505	Scott	30*	Newton	15,125	Jasper

*Does not participate in an urban/community fishing program.

Although Clinton, Indianola, and Newton do not participate in a Community Fishing Program, the Department directed Responsive Management to include anglers from those communities in the urban classification. In addition, anglers from Sergeant Bluff, Ottumwa, Robins, Cumming, Hills, and Hudson were included in the urban group. (The Department provided a list that included several other communities, but those anglers were either already classified in the urban group or there were no anglers from those locations.)

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

SAMPLING ERROR

Throughout this report, findings of the multi-modal survey are reported at a 95% confidence interval. For the entire sample of Iowa anglers, the sampling error is at most plus or minus 2.4 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 2.4 percentage points of each other. Sampling error was calculated using the formula described below, with a sample size of 1,628 and a population size of 507,927 licensed anglers in the database provided.

Sampling Error Equation

$$B = \left(\sqrt{\frac{\frac{N_p(.25)}{N_s} - .25}{N_p - 1}} \right) (1.96)$$

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

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

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

ADDITIONAL INFORMATION ABOUT THE PRESENTATION OF RESULTS IN THE REPORT

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

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

- Series questions: Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

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 results of each question are presented as follows:

- Statewide (overall)
- Regional (4-bar graphs)
- Urban/Rural (2-bar graphs)
- Trend (for identical questions; landscape format)

Several crosstabulations requested by the Department have been included in addition to the presentations listed above.

FISHING PARTICIPATION AND AVIDITY

- The overwhelming majority of anglers in the sample (83%) had fished within the previous 12 months.

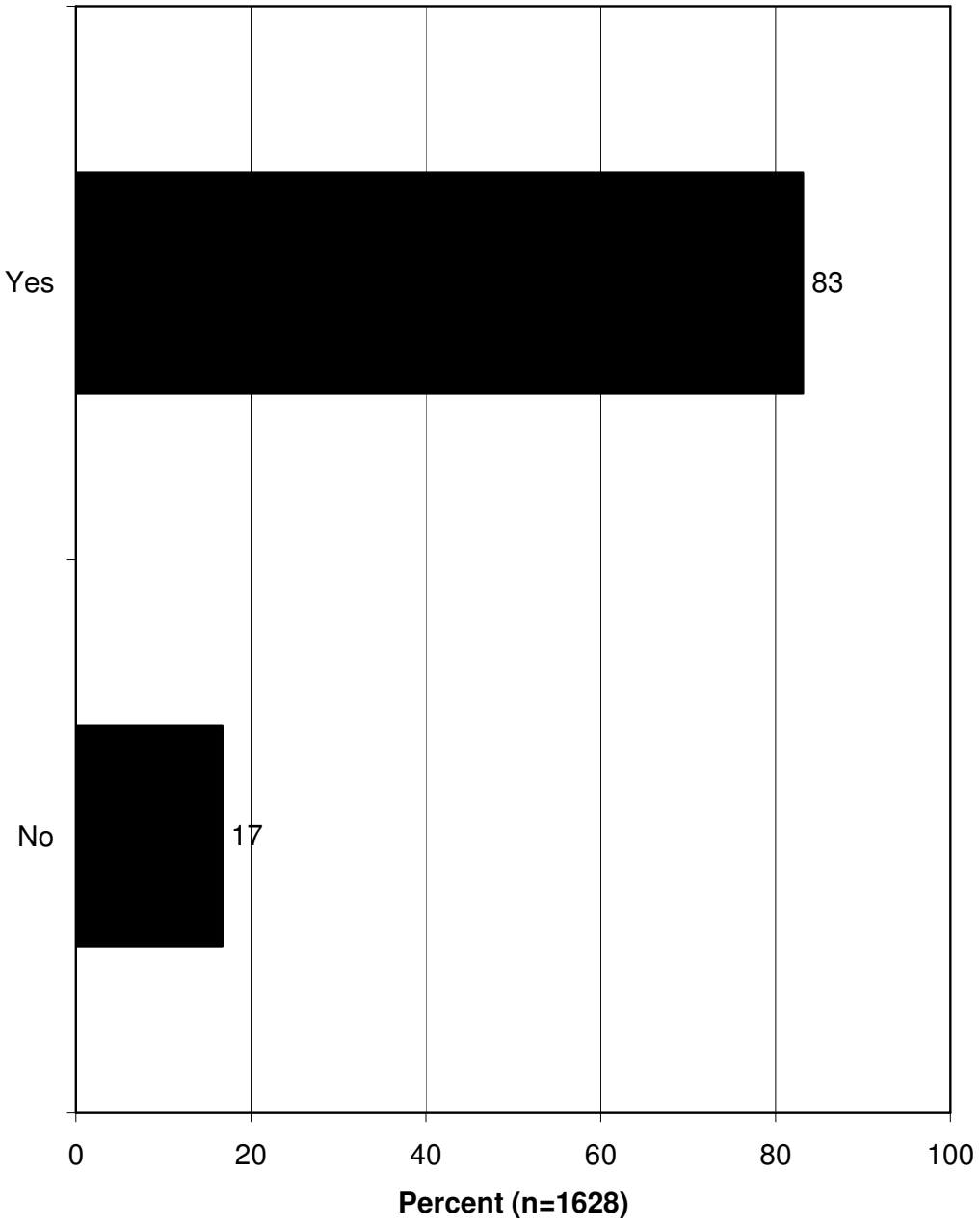
- The mean number of years that anglers had fished out of the past 3 years is 2.61 years (the median is 3 years); 71% of anglers had fished all 3 years.
  - This reflects a slight increase in avidity since 2007, in which the mean was 2.42 years (trend graph not shown).

- Of those who had fished in the past year, the mean number of days they fished was 24.9, and the median was 14. Additionally, 45% had fished no more than 10 days, and a third (33%) had fished for more than 20 days.
  - The results of this question and the fishing participation question indicate that Iowa anglers fished for 10.50 million days in Iowa in the past year.
  - Those who had not fished in the past year were asked about their number of days fishing *in the last year that they fished*, with lower numbers than those who fished in the previous year: 70% fished no more than 10 days, and only 12% fished for more than 20 days, in the last year they fished. Their median number of days fishing was 5 days in the last year they fished.

- The survey asked Iowa anglers how many years they had fished in Iowa. The mean is 30.6 years, and the median is 30 years (this suggests a generally normal distribution with few survey extremes).

- Those anglers who had fished for at least 10 years were asked about their amount of fishing now compared to 10 years ago. The results are split between those who fish more (37%) and those who fish less (also 37%), while 26% fish the same amount.

Q7. Did you go fishing in Iowa in the past 12 months?



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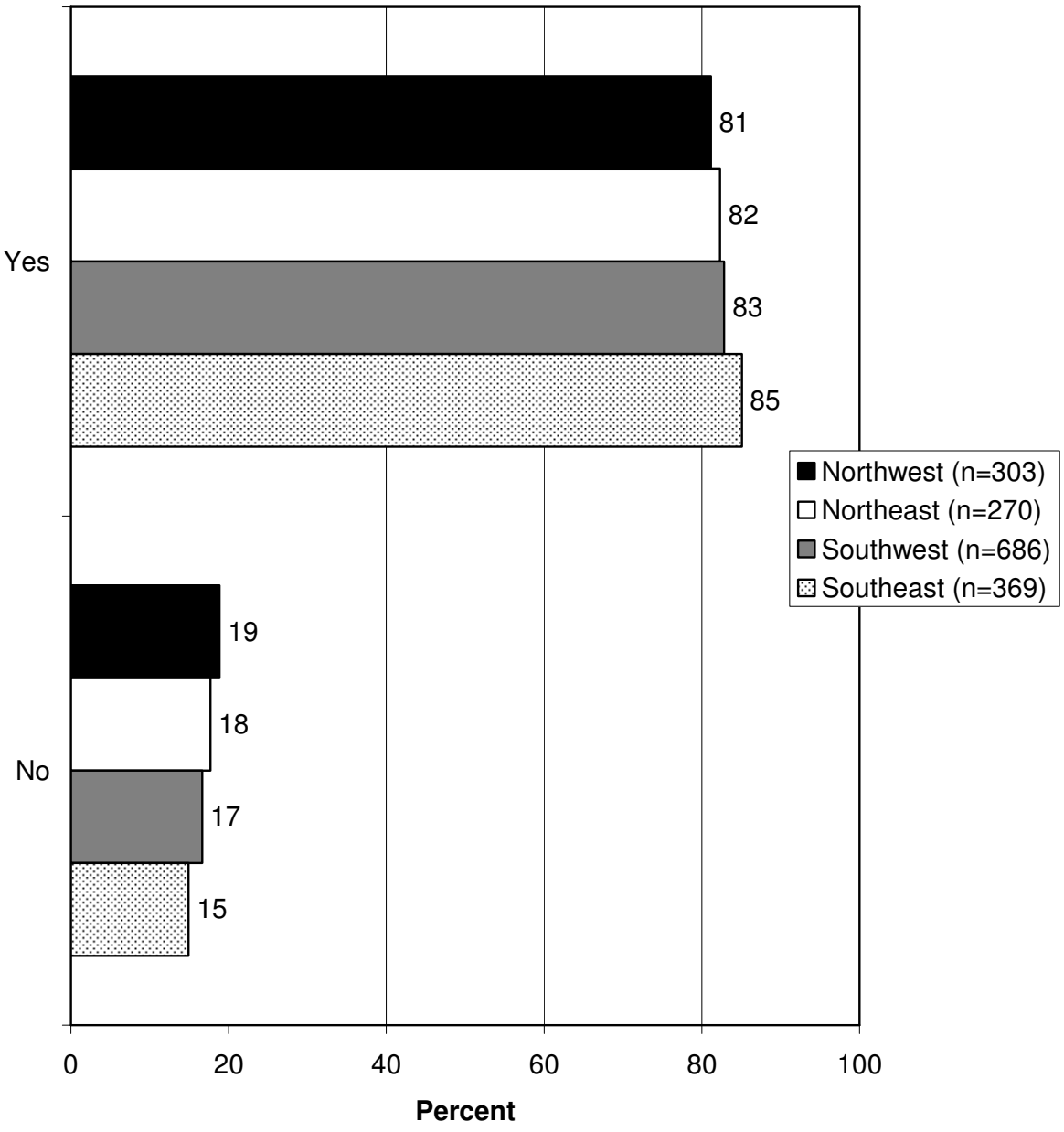

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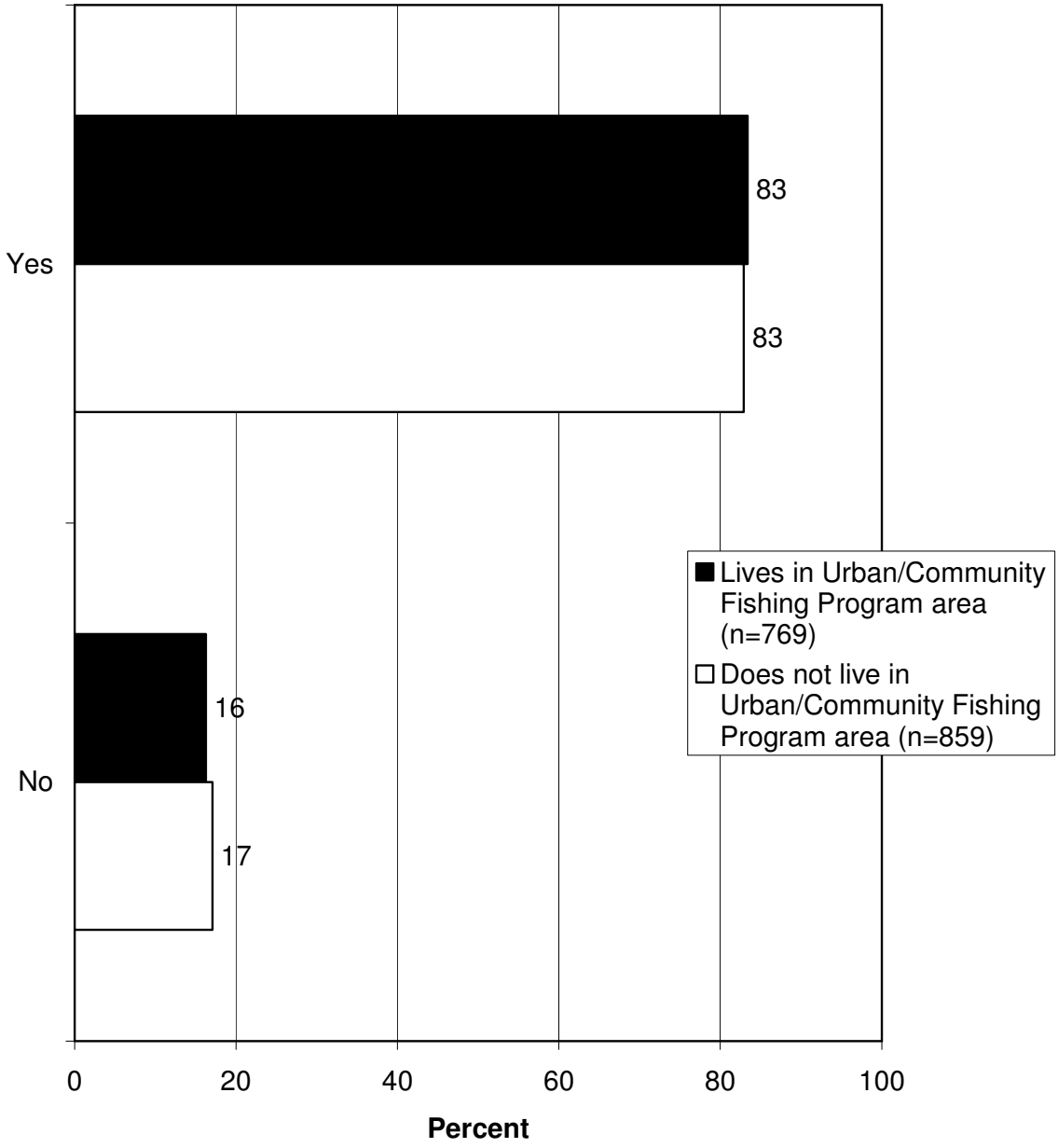

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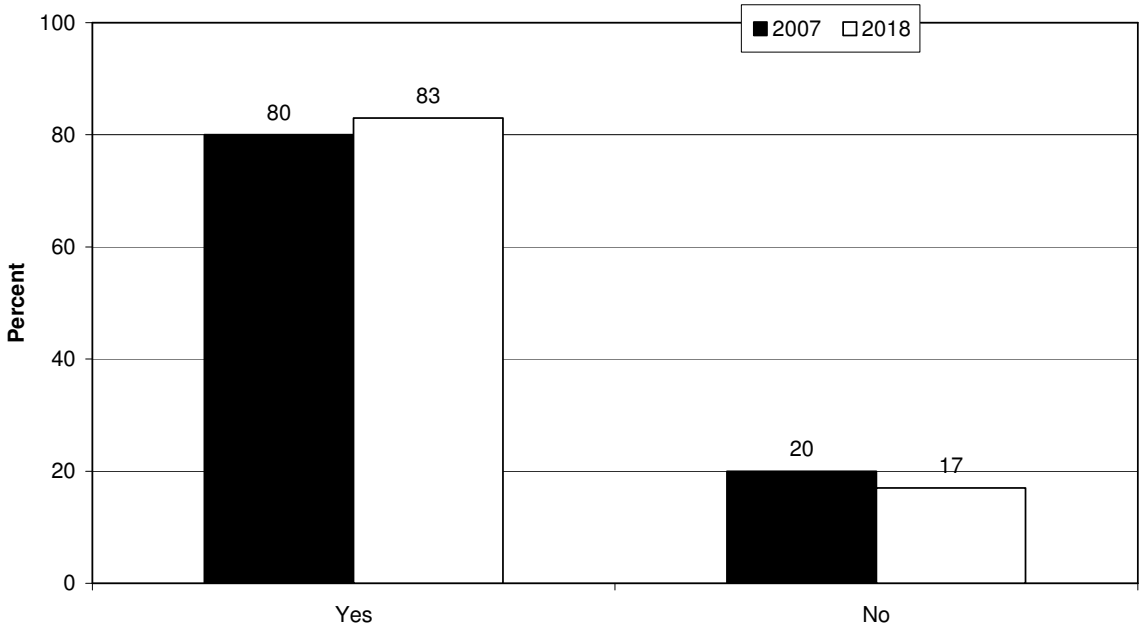
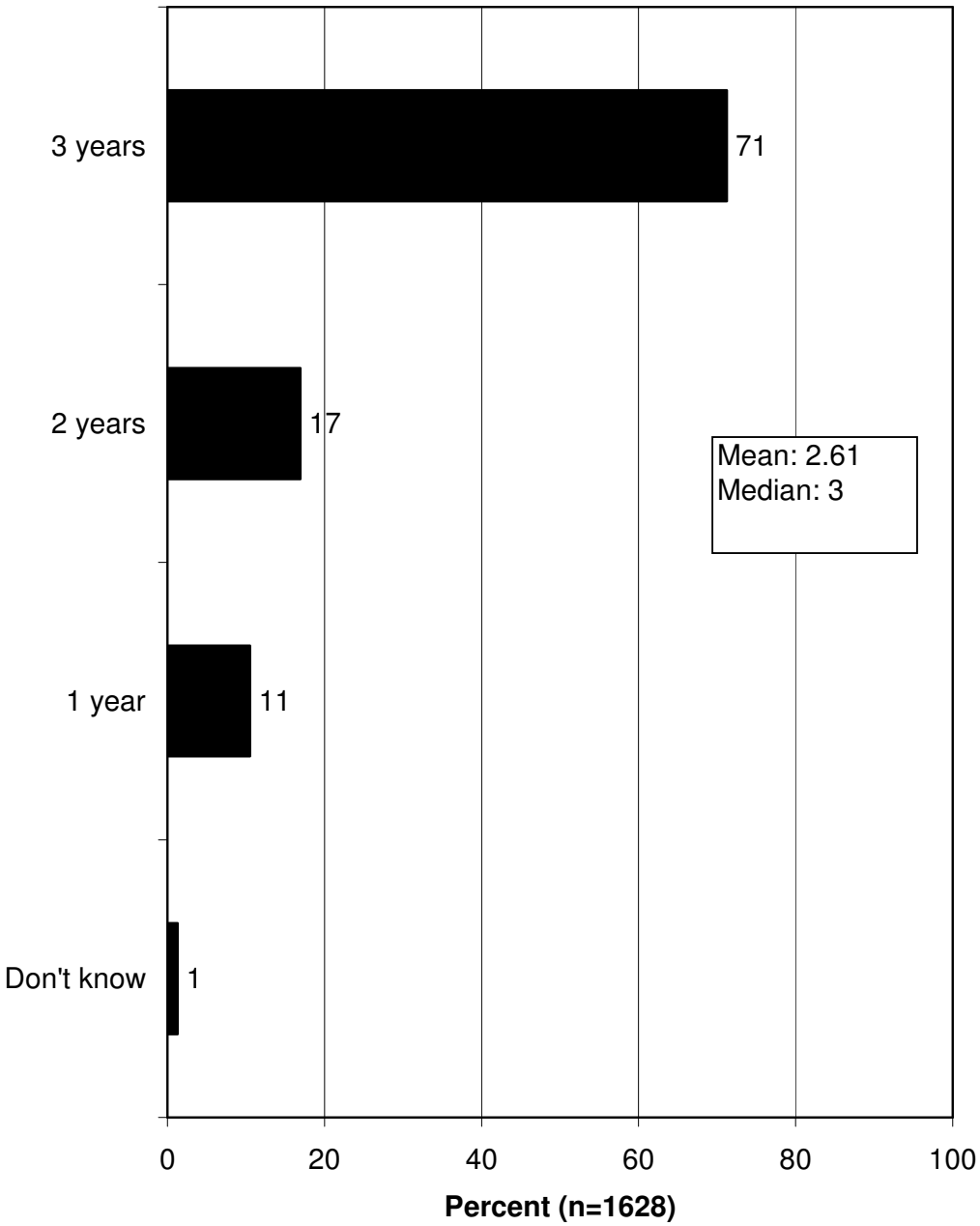


Q11. How many of the past 3 years have you fished?



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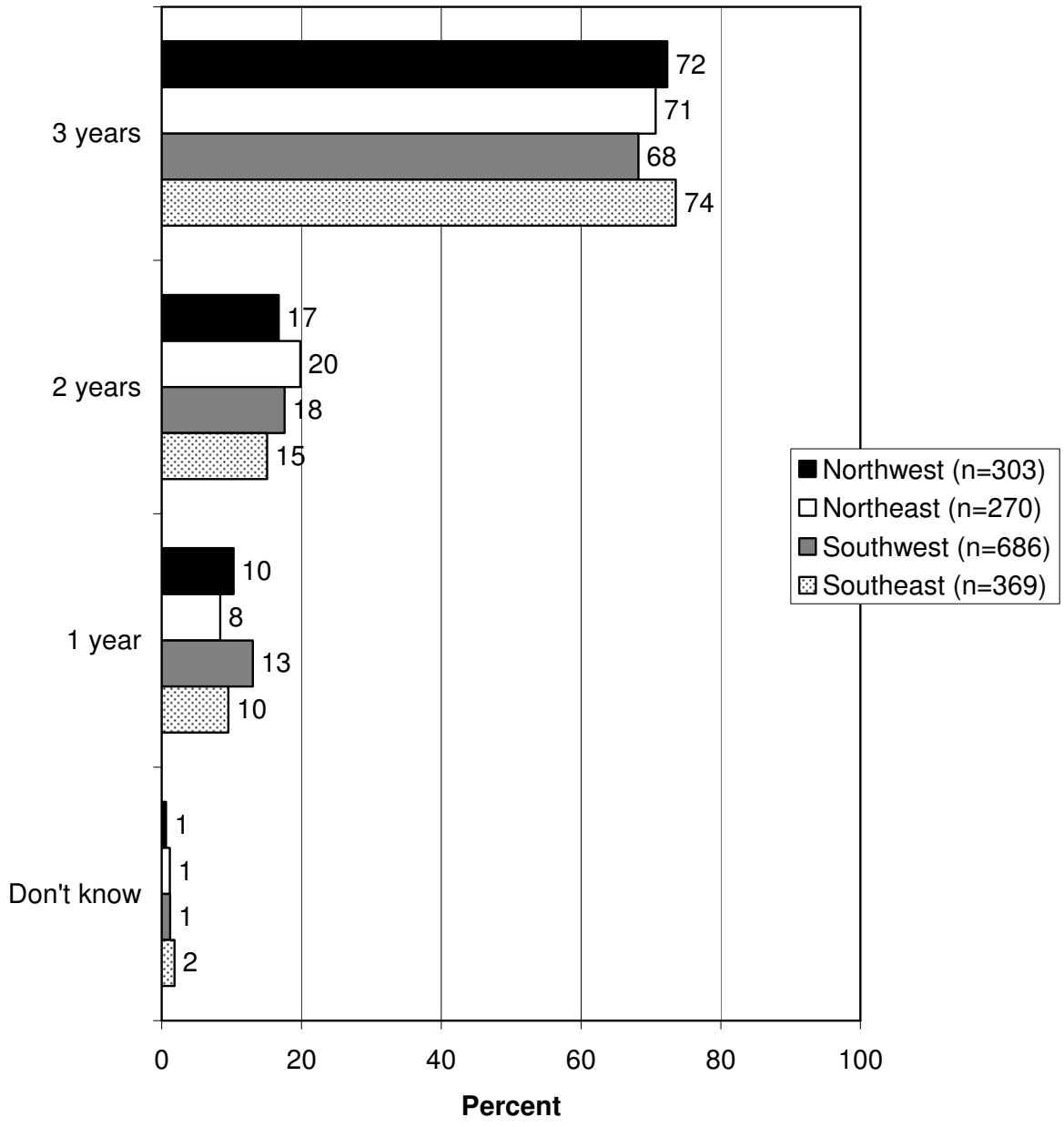

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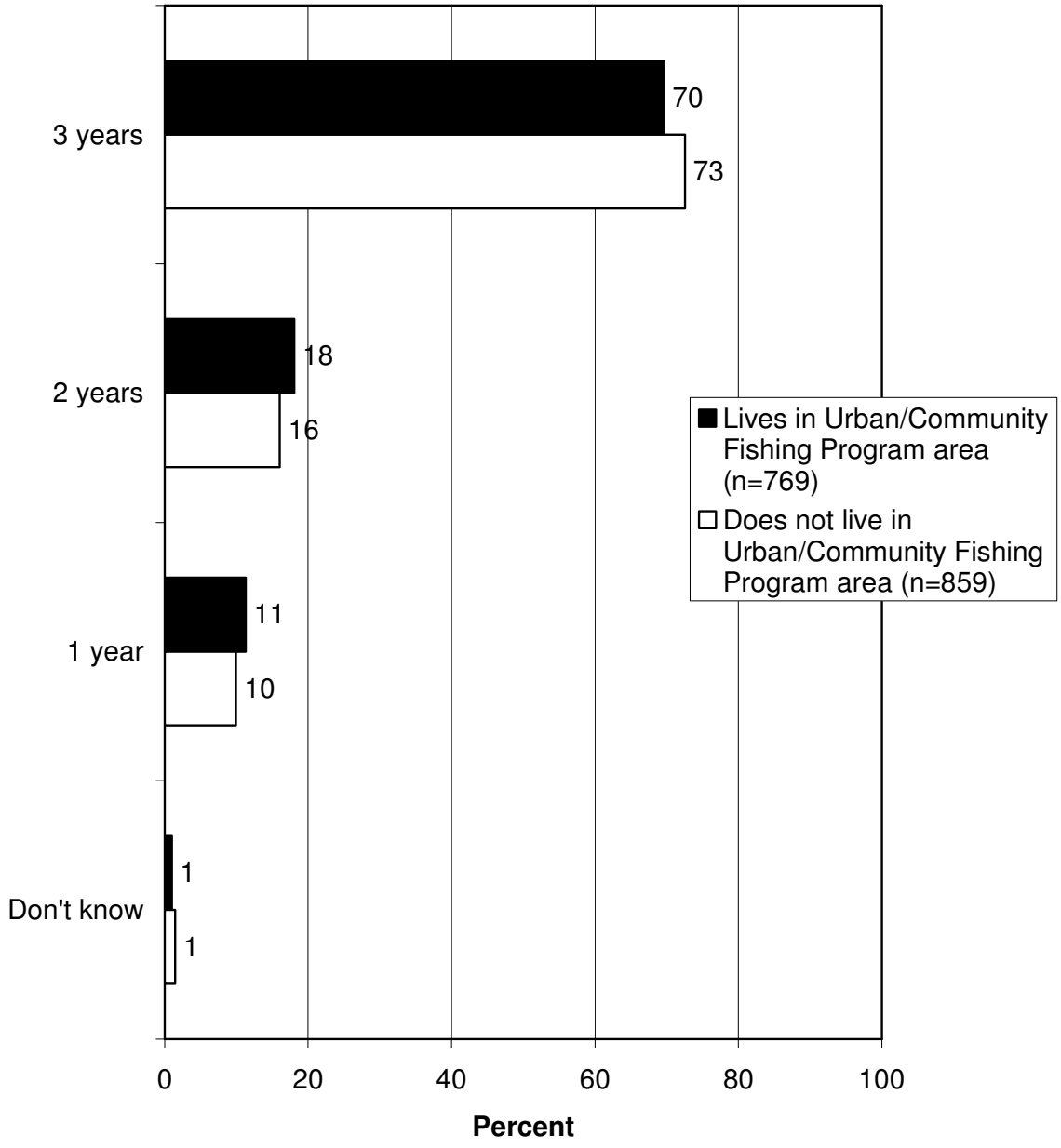
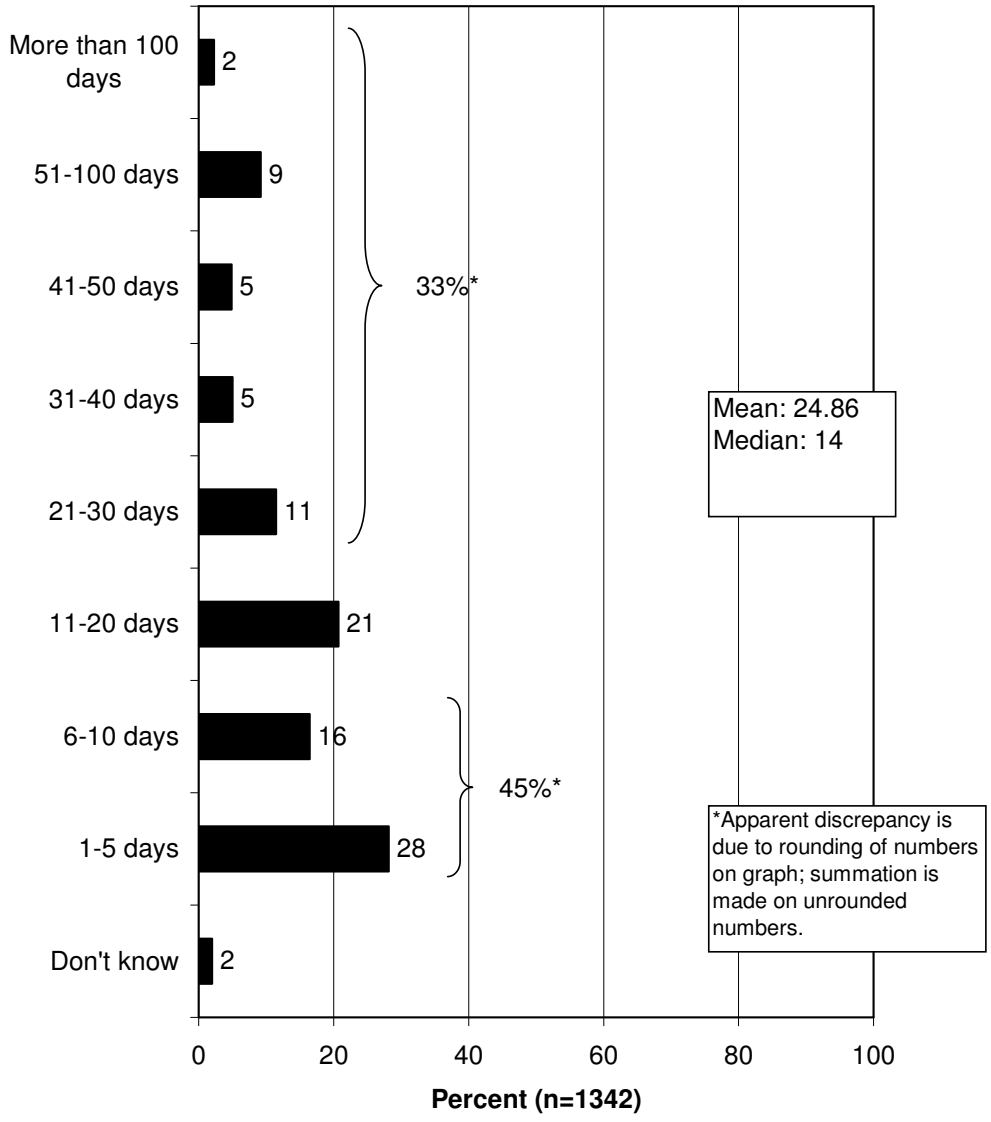


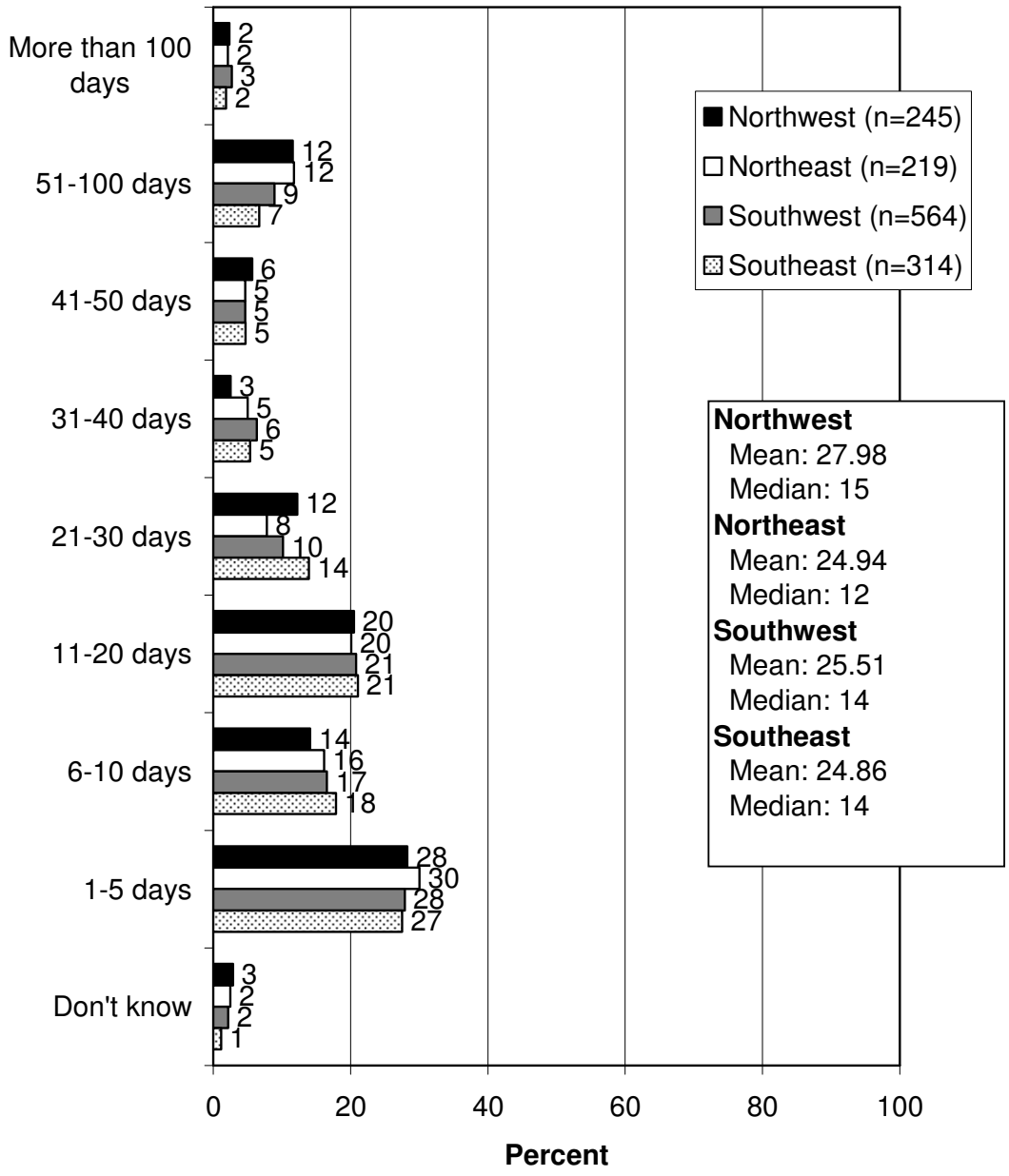
Q14. How many days do you estimate you fished in Iowa in the past 12 months? (Asked of those who fished in Iowa in the past 12 months.)



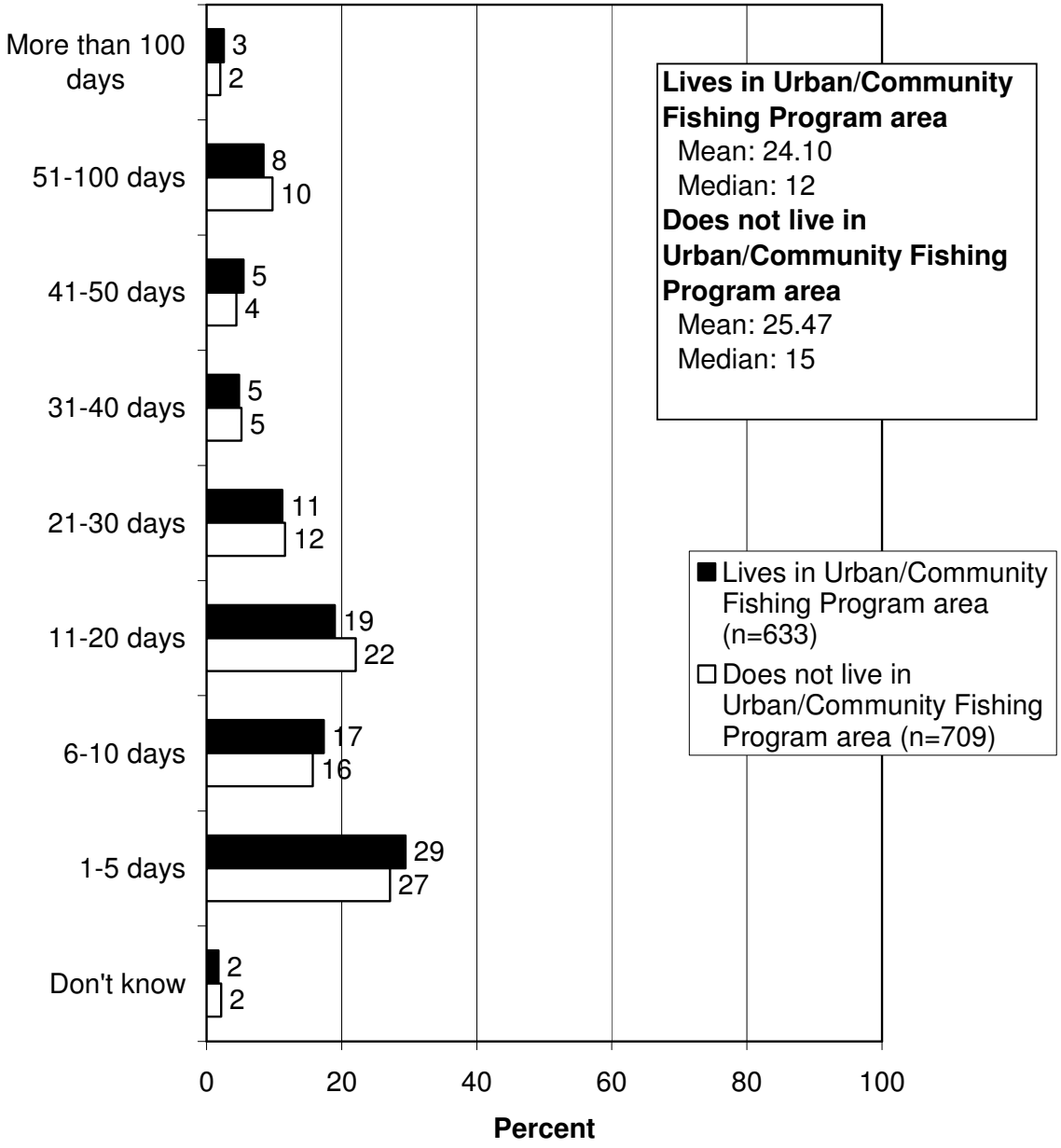
Calculation of Estimated Total Number of Days Iowa Anglers Fished in Iowa in 2018

Total number in sample: 507,927
Percent fished in past 12 months (approximates those who fished in 2018): 83.135%
Total number who fished in past 12 months: 422,265
Mean number of days fishing in past 12 months (of those who fished): 24.86
Total number of angler days in 2018: 10,497,500

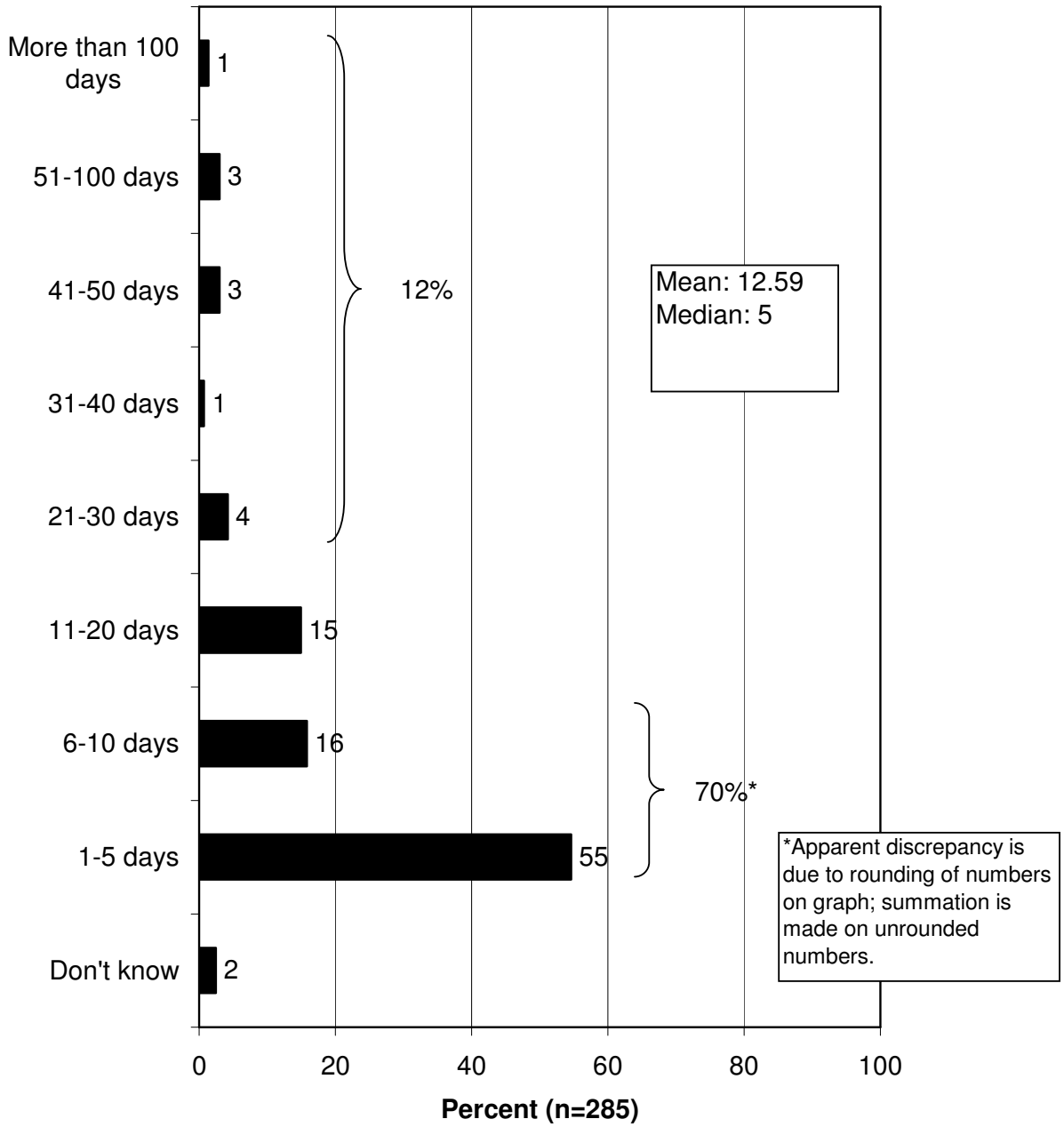
Q14. How many days do you estimate you fished in Iowa in the past 12 months? (Asked of those who fished in Iowa in the past 12 months.)



Q14. How many days do you estimate you fished in Iowa in the past 12 months? (Asked of those who fished in Iowa in the past 12 months.)



Q17. How many days did you fish in Iowa the last year you fished? (Asked of those who did not fish in Iowa in the past 12 months.)



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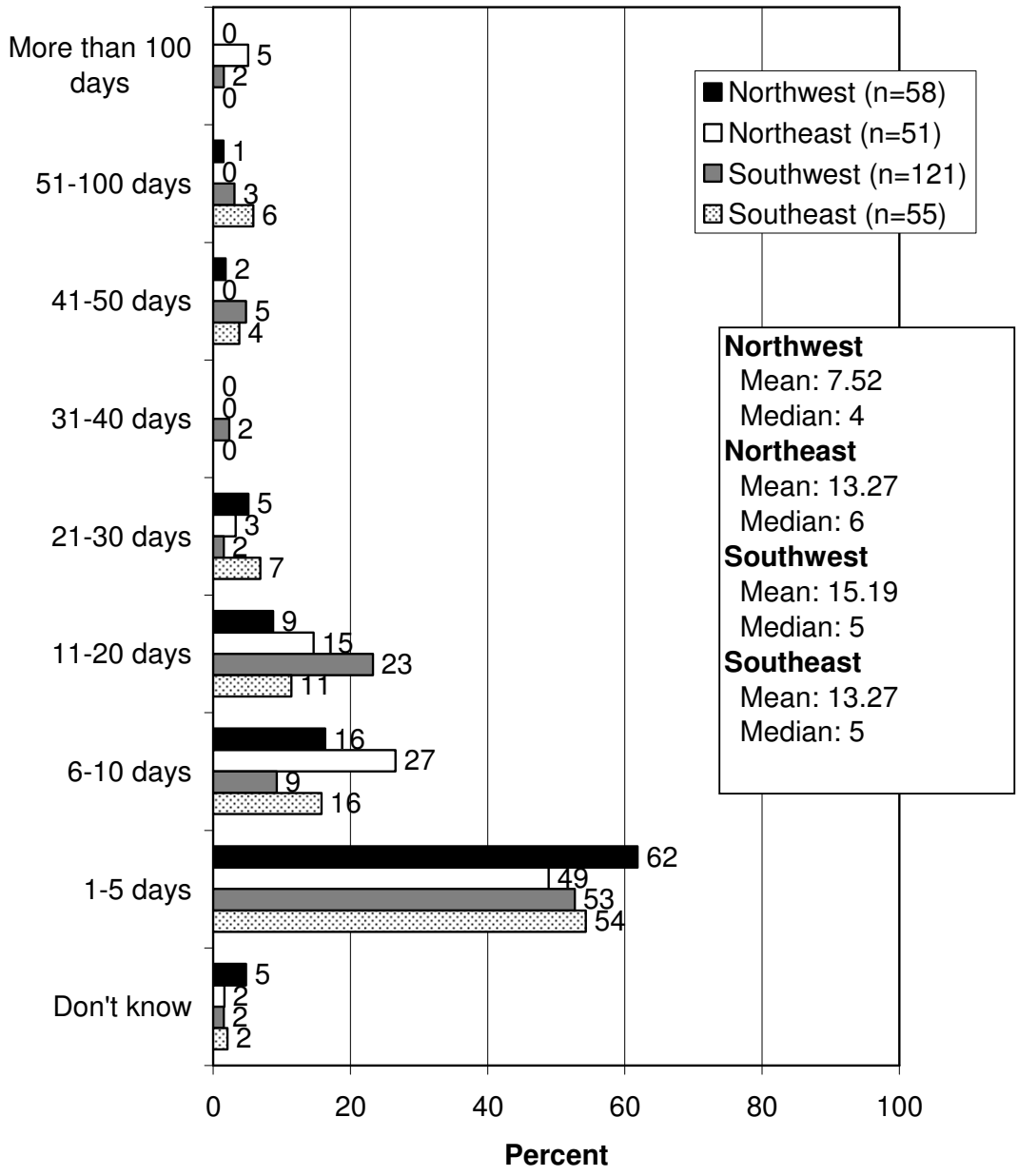

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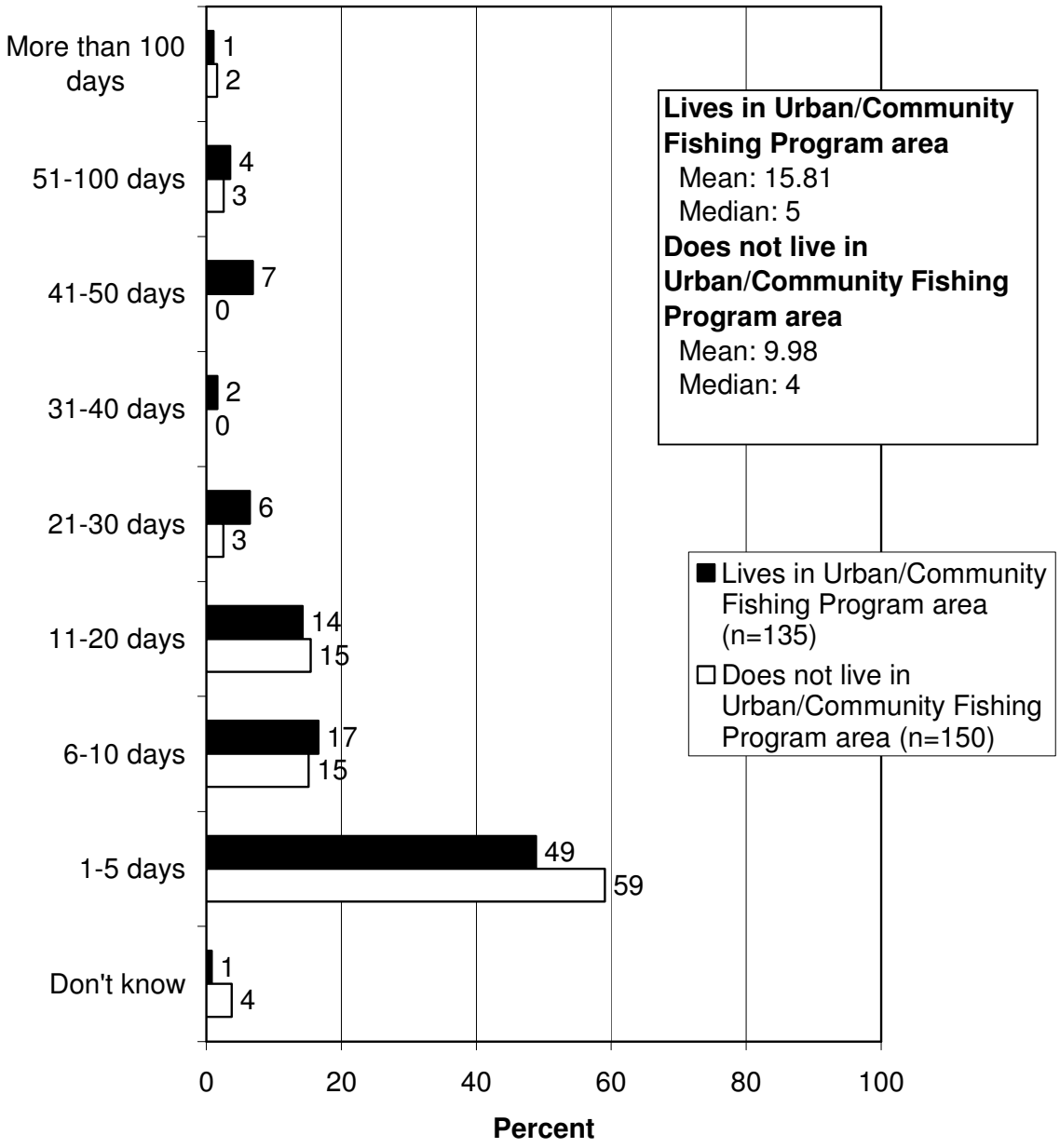
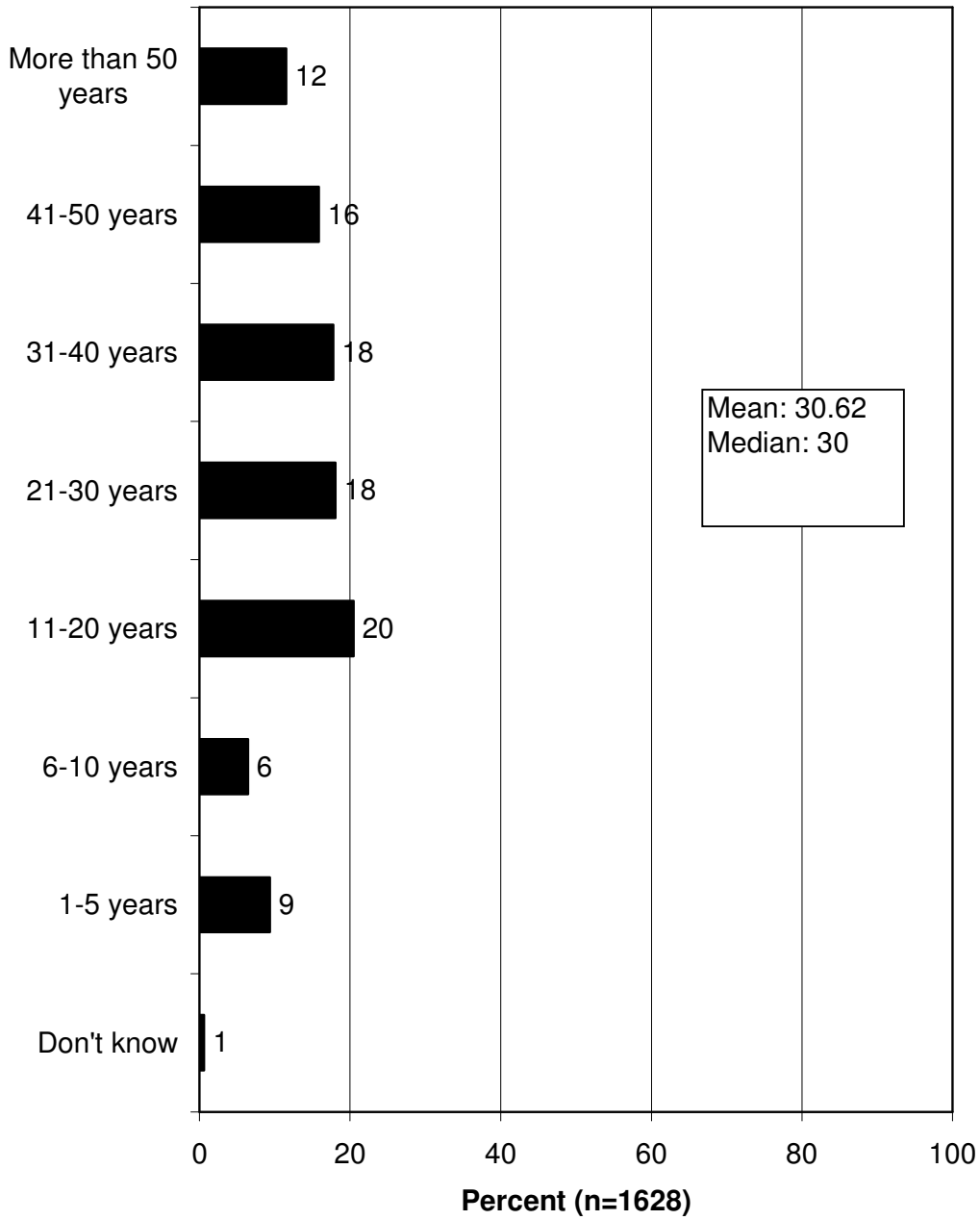


Q95. How many years do you estimate you've been fishing in Iowa?



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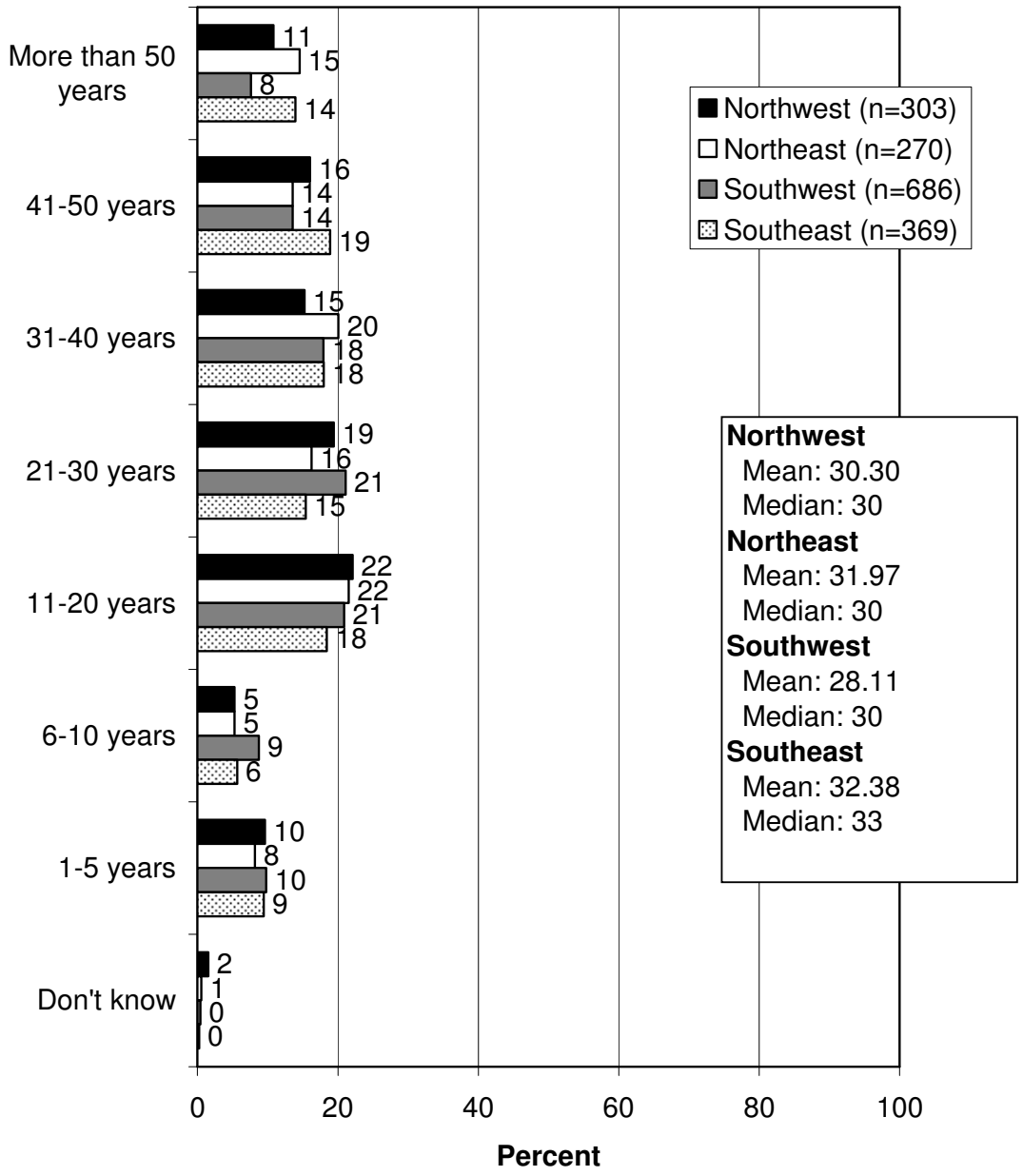

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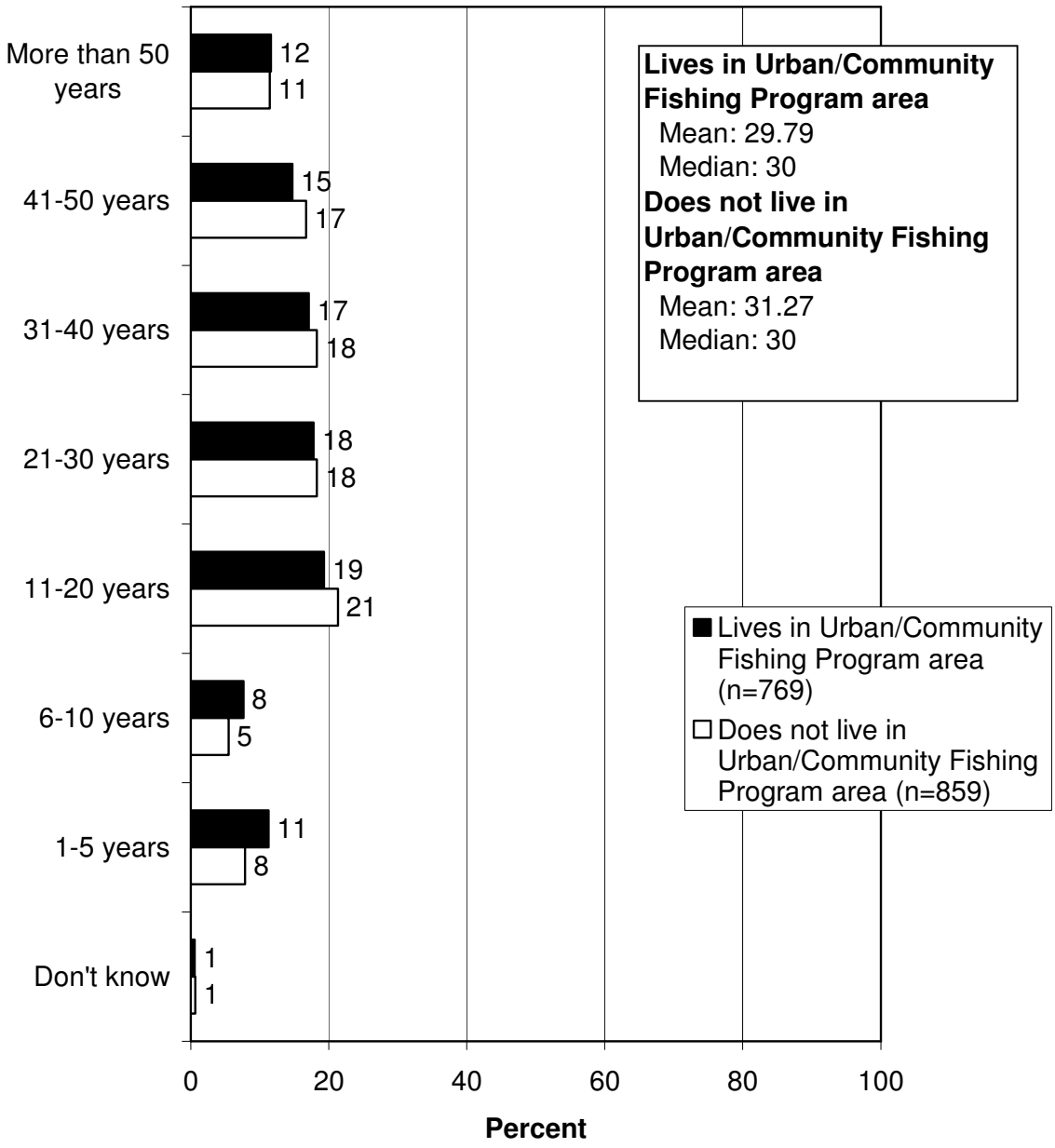
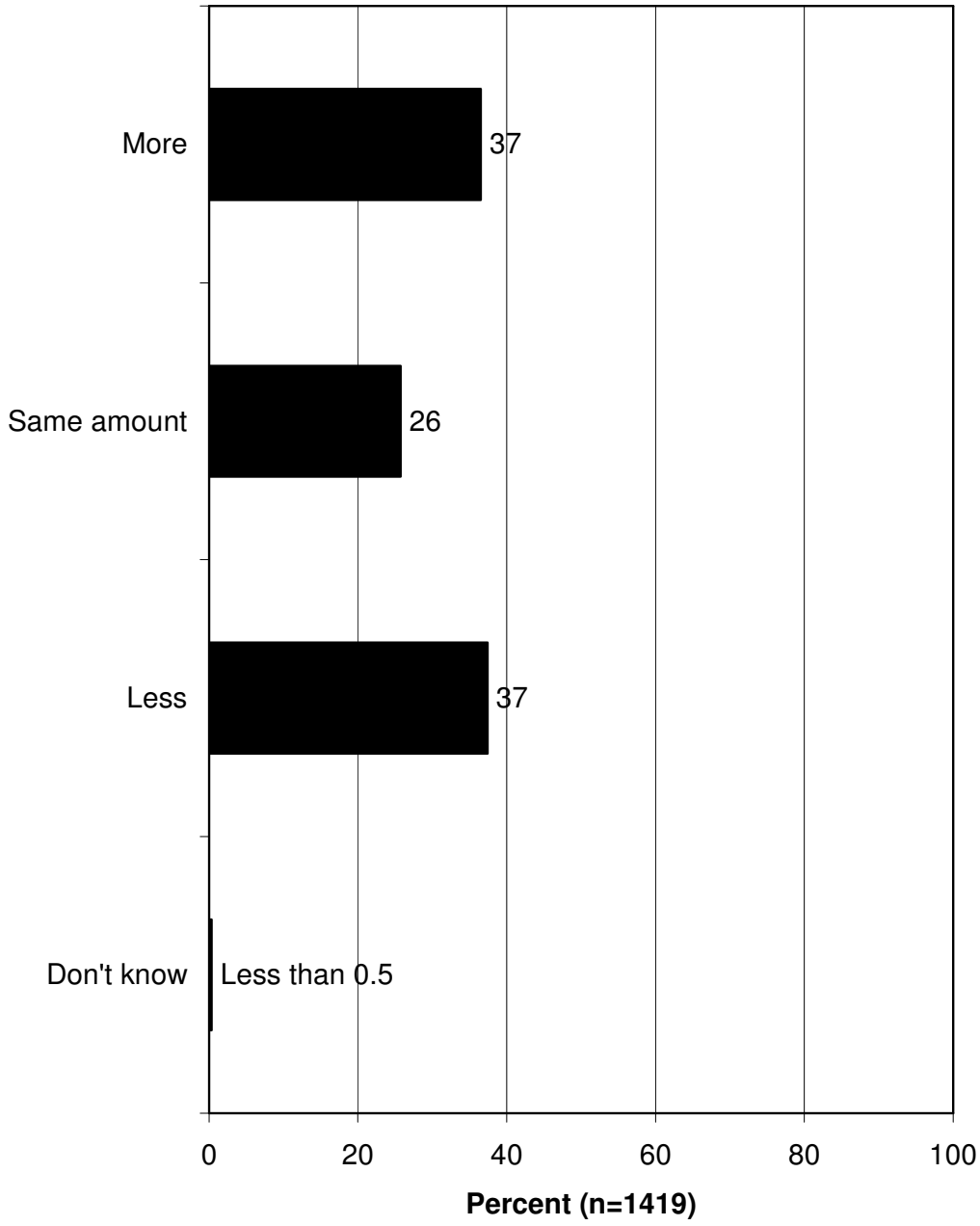


Q98. Do you fish more or less in Iowa now than you did 10 years ago? (Asked of those who have been fishing 10 or more years in Iowa.)



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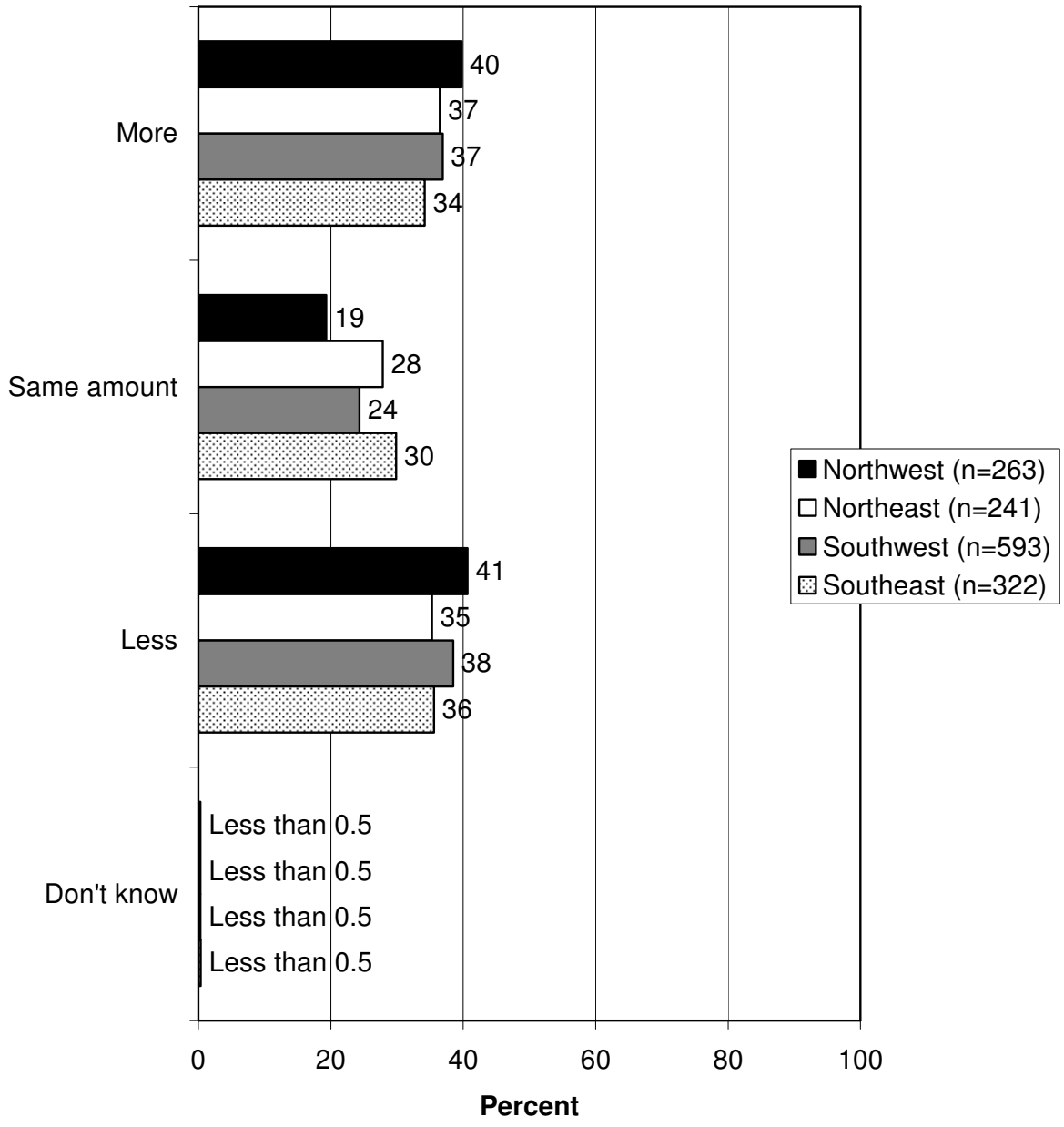

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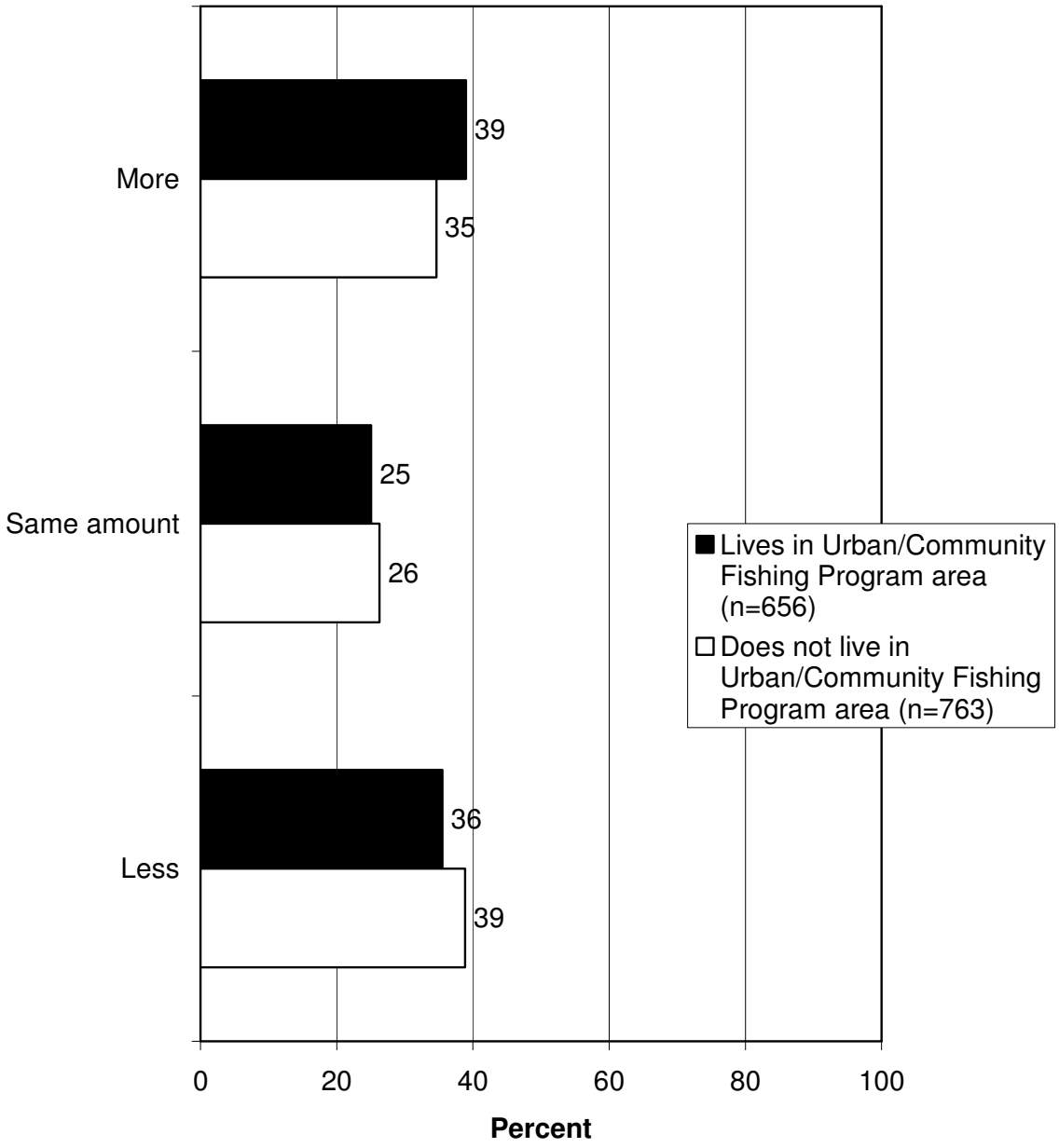
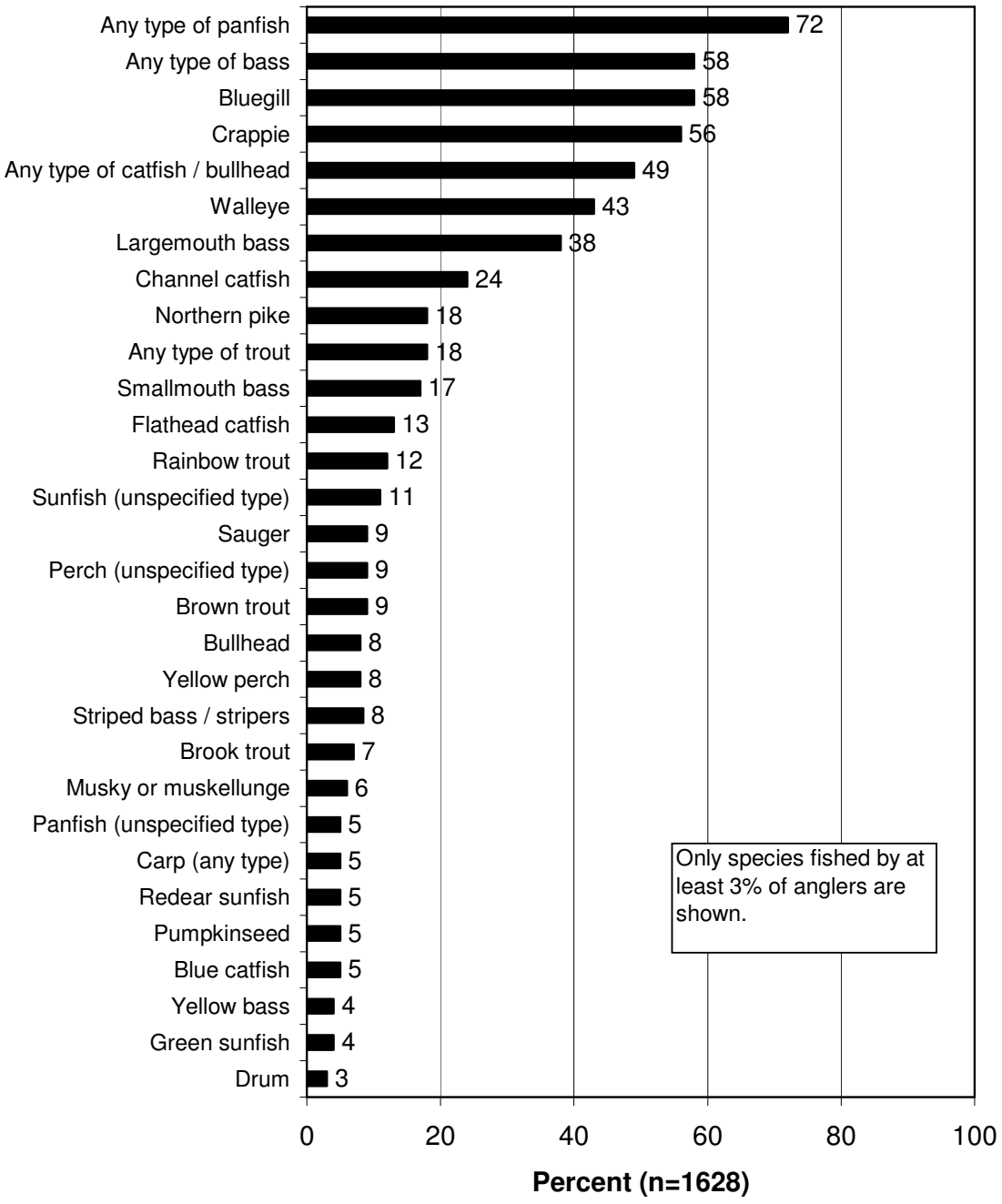


SPECIES FISHED AND PREFERRED

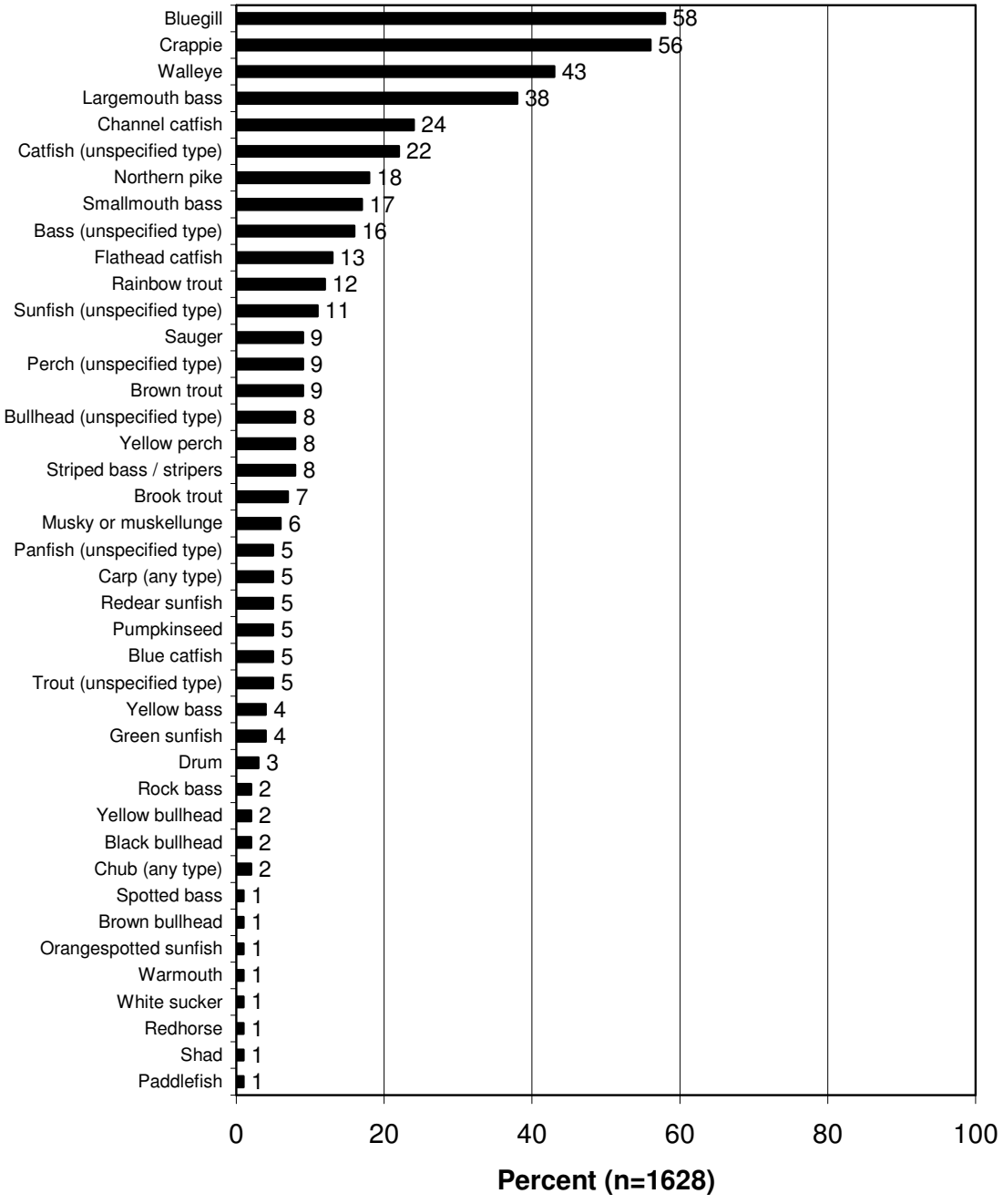
- The most-fished species of fish are panfish in general (72% of anglers fished for these in the previous 12 months or the last year they fished), bass in general (58%), bluegill (58%), crappie (56%), and catfish/bullhead in general (49%). The next tier of commonly fished species includes walleye (43%), largemouth bass (38%), and channel catfish (24%). In these questions, anglers could select all that they had fished for.
  - The trend graph shows that nearly every top species was fished by a higher percentage of anglers in this survey compared to 2007.
  - Graphs are shown for the individual categories of species fished.

- The survey then asked anglers to name the single species that they most often fished for. Walleye (14%) and bass (unspecified) (14%) are the types of fish that anglers most commonly say they fish for most often in Iowa, closely followed by catfish (unspecified) (12%), largemouth bass (12%), crappie (11%), and bluegill (11%).
  - When anglers were asked which single species of fish they would *prefer* to fish for, their responses closely mirror the fish that they most commonly fish for. This suggests that anglers are able to fish for the species that they prefer in Iowa, with the exception of walleye. Preference for walleye (24% prefer walleye) exceeds actual fishing for it (14% say that walleye is the species they most often fish for).
  - Walleye is much more commonly fished and preferred in the northern regions than the southern regions.
    - Species preferences are shown several ways: overall results, by region overall (combined; 4-bar graph), by each region individually, by urban/rural overall (combined; 2-bar graph), by the urban/rural split individually, by regions crosstabulated by urban/rural split (combined; two 4-bar graphs), and by each region individually crosstabulated by urban/rural split (2-bar graphs for each).
    - Also, for the species most often fished and the species most preferred to fish questions, results have been isolated and shown for the bass, trout, catfish/bullhead, and panfish categories.

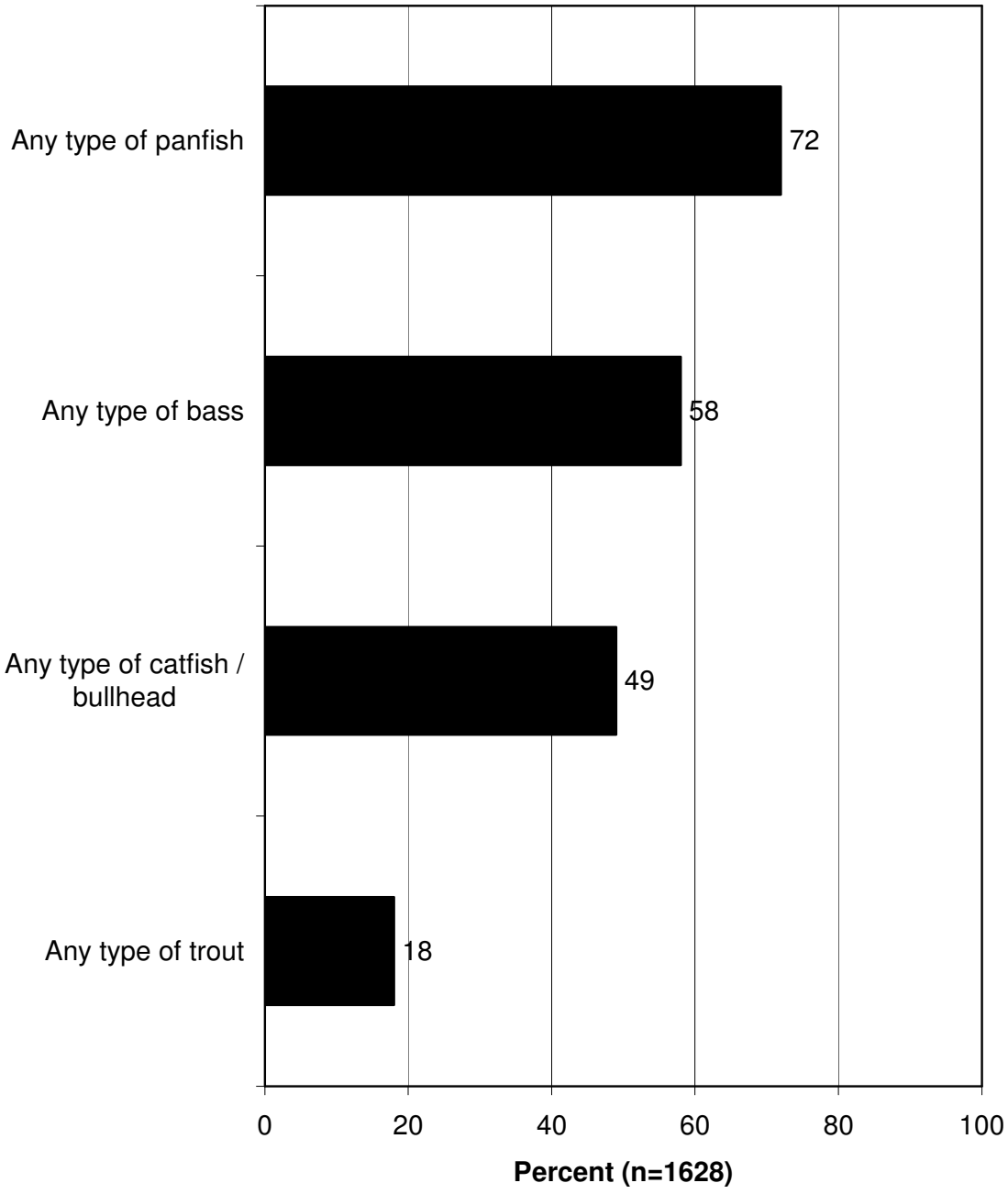
Q22-37. Species fished for in Iowa in the [past 12 months / last year fished]. (Top responses)



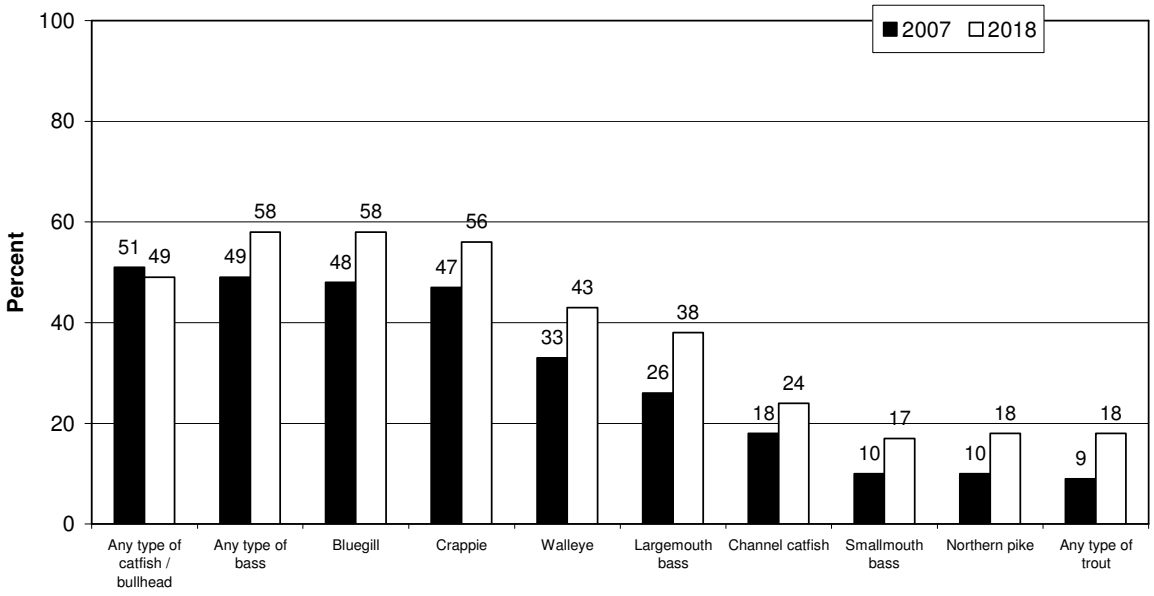
Q22-37. Species fished for in Iowa in the [past 12 months / last year fished]. (All named species)



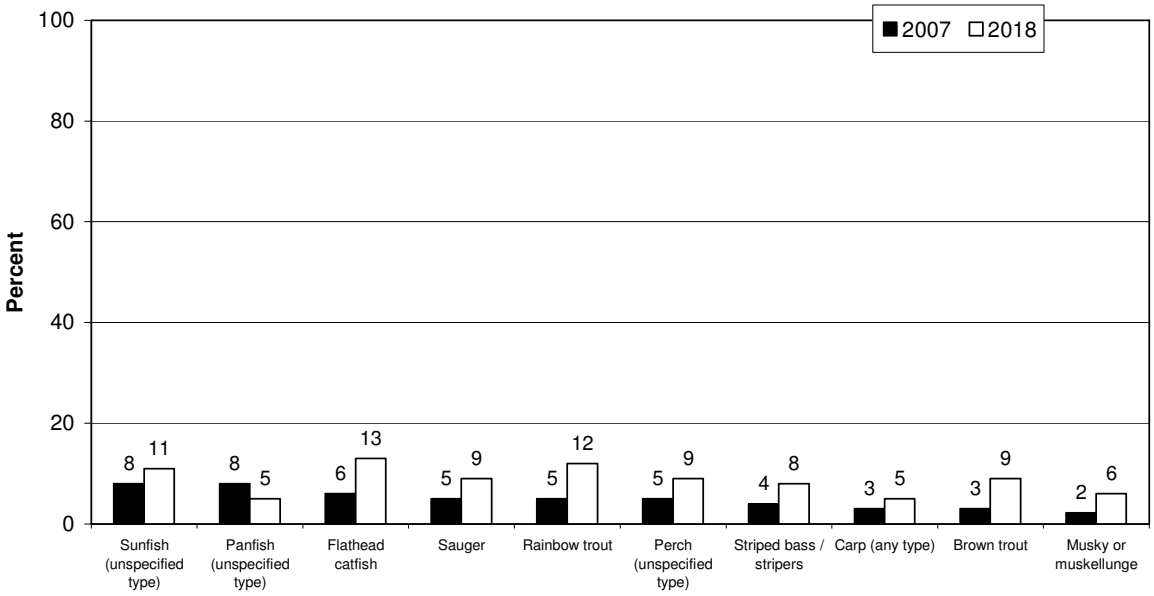
Q22-37. Species fished for in Iowa in the [past 12 months / last year fished]. (Species aggregations)



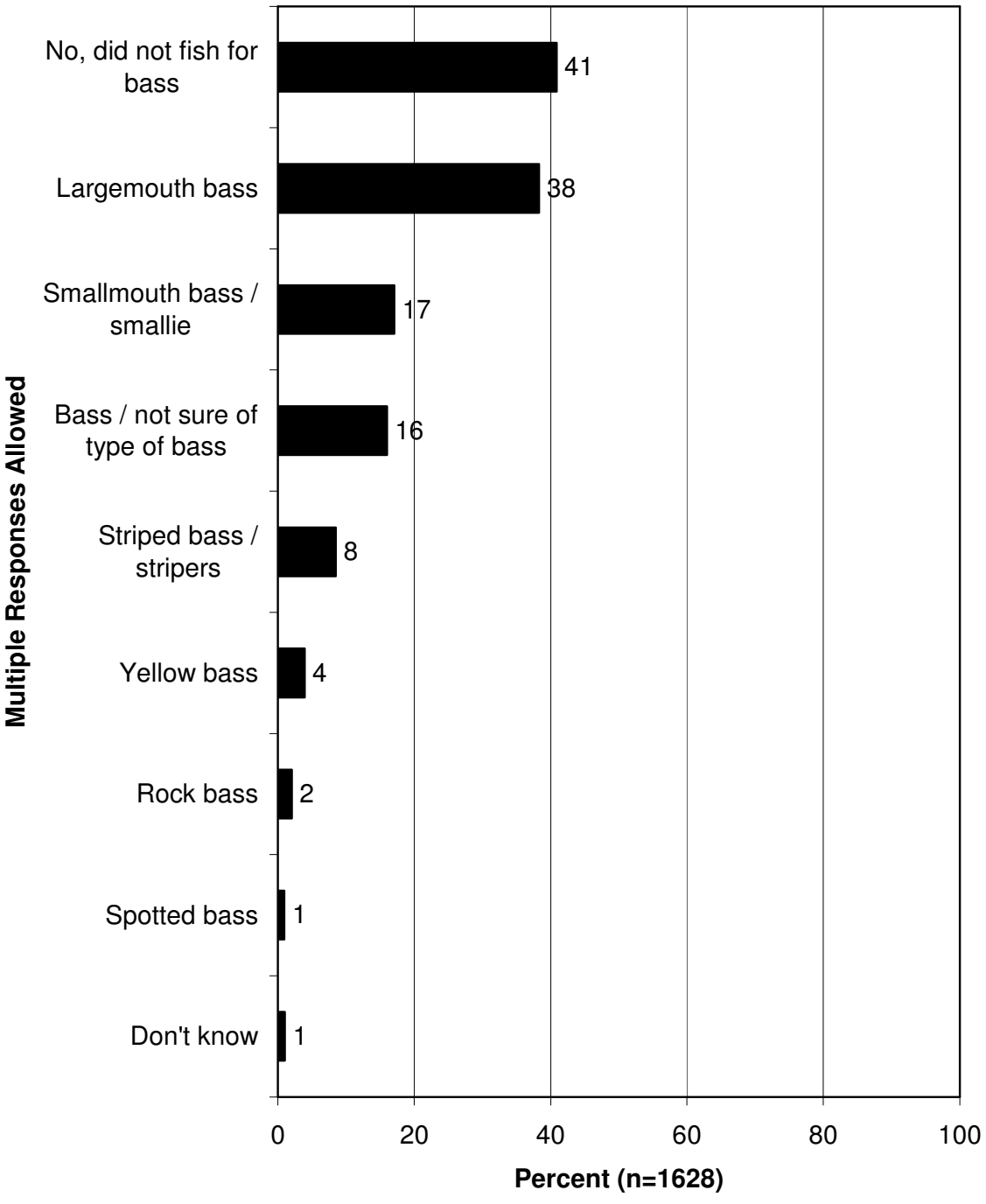
Q22-37. Species fished for in Iowa in the [past 12 months / last year fished]. (Limited to top species) (Part 1)



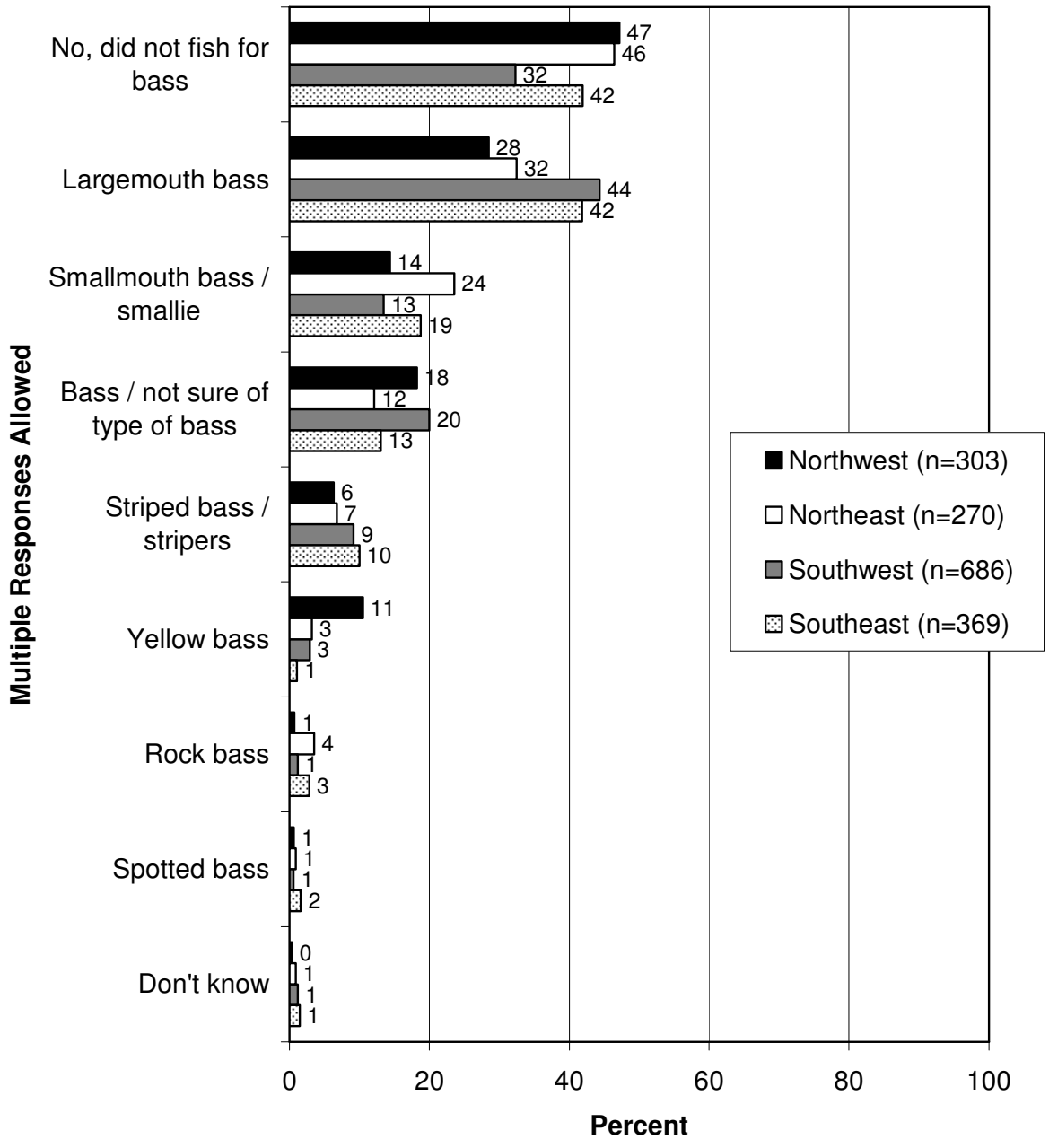
Q22-37. Species fished for in Iowa in the [past 12 months / last year fished]. (Limited to top species) (Part 2)



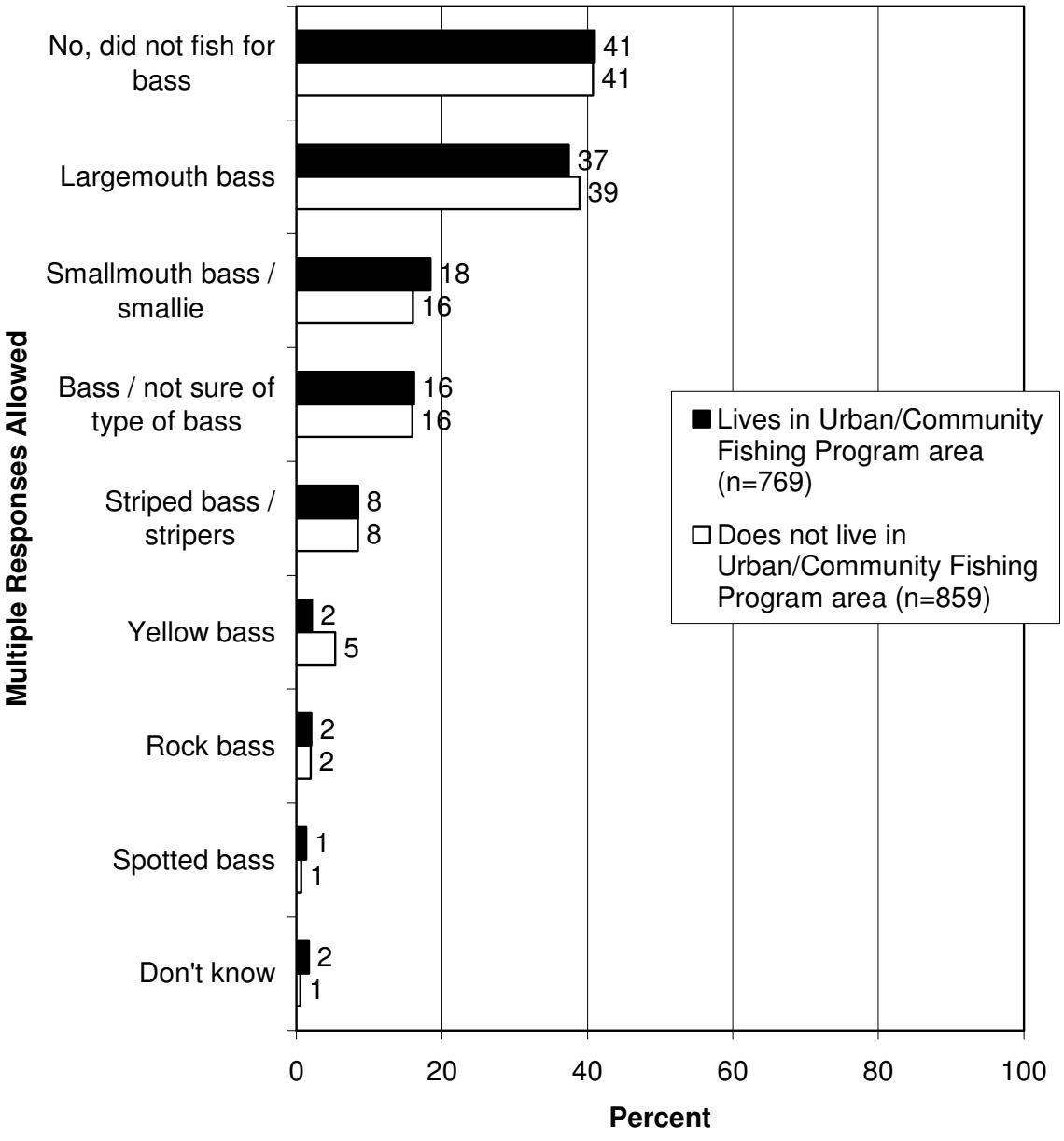
Q22. Did you fish for bass in Iowa in the [past 12 months / last year you fished]?



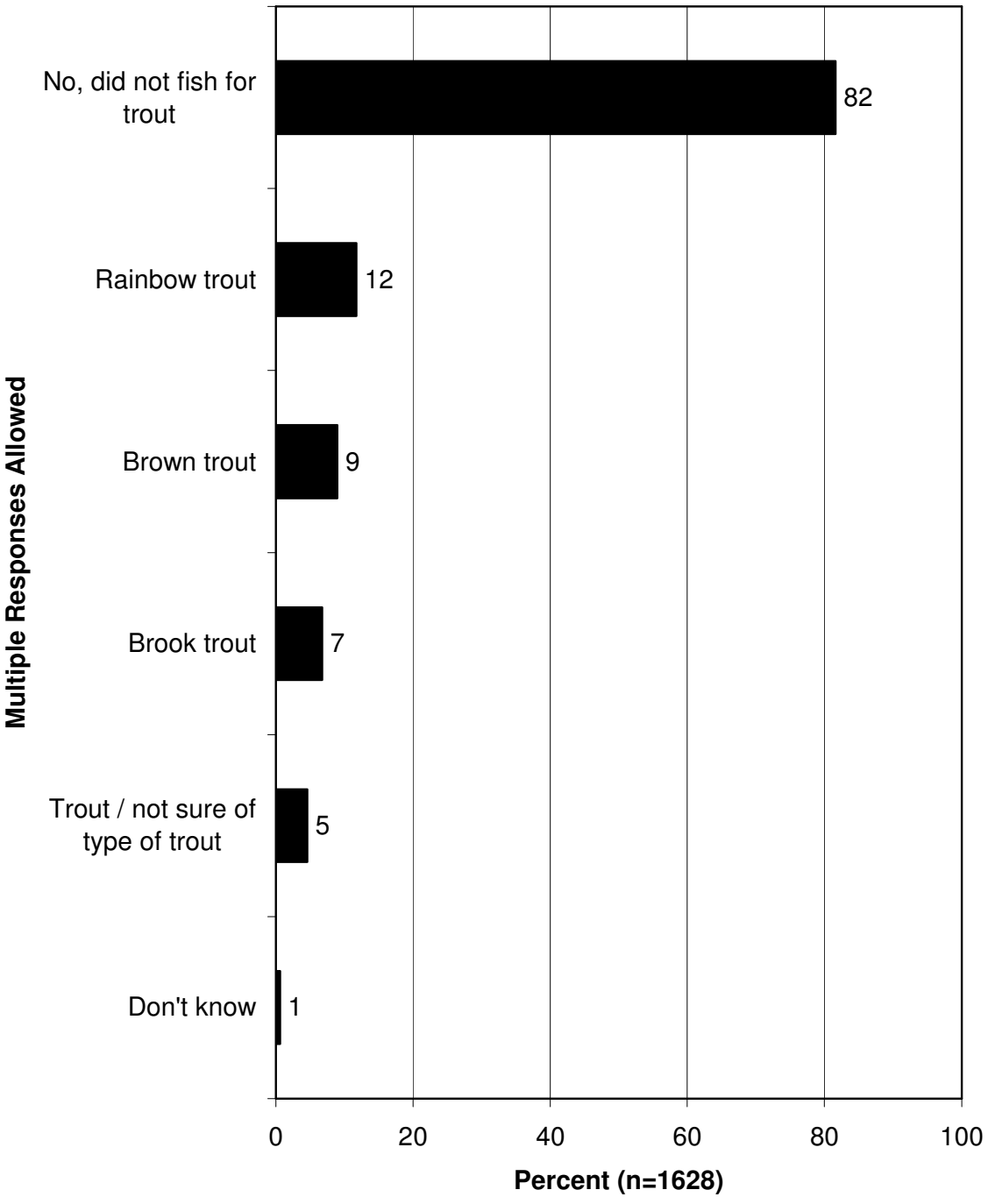
Q22. Did you fish for bass in Iowa in the [past 12 months / last year you fished]?



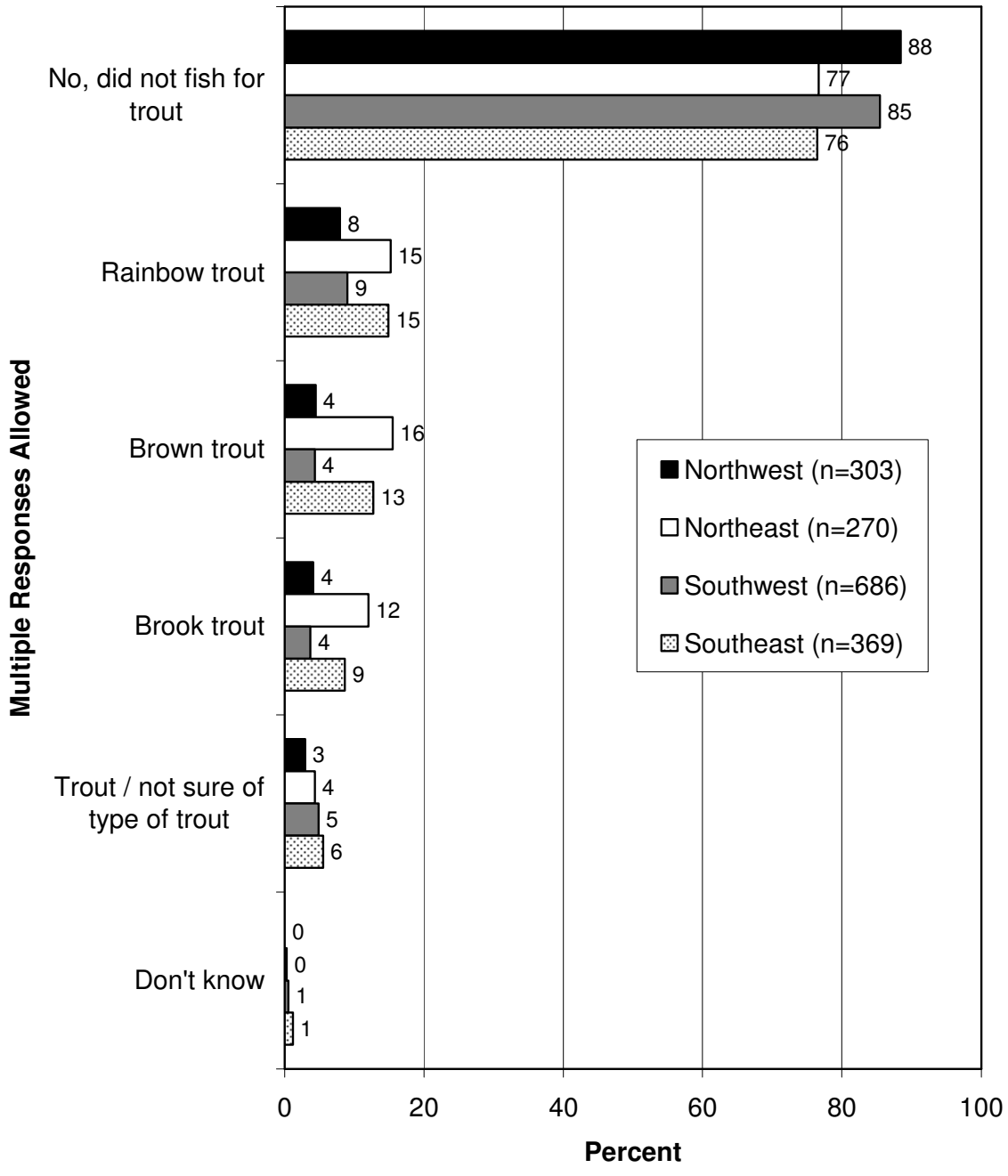
Q22. Did you fish for bass in Iowa in the [past 12 months / last year you fished]?



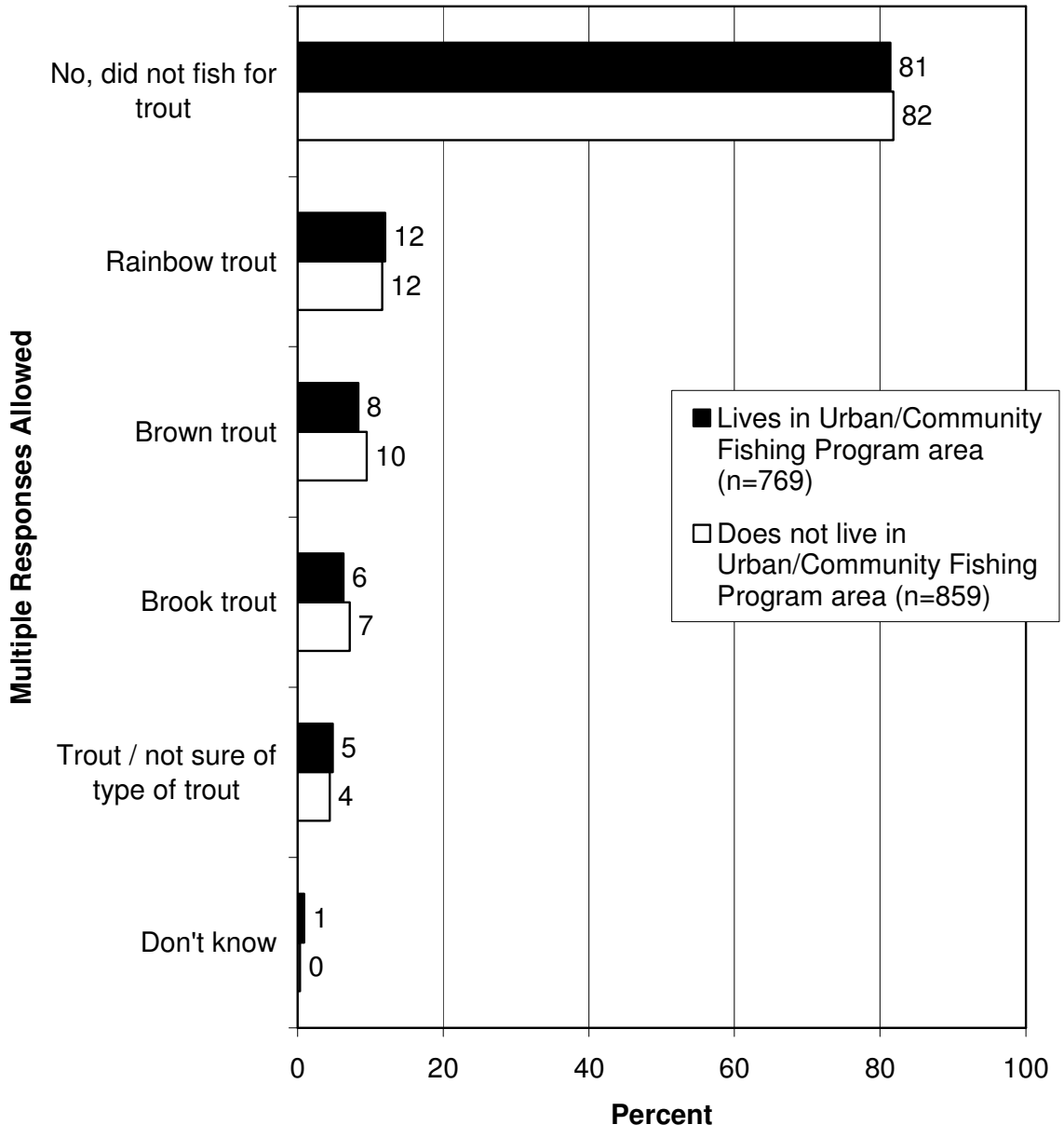
Q25. Did you fish for trout in Iowa in the [past 12 months / last year you fished]?



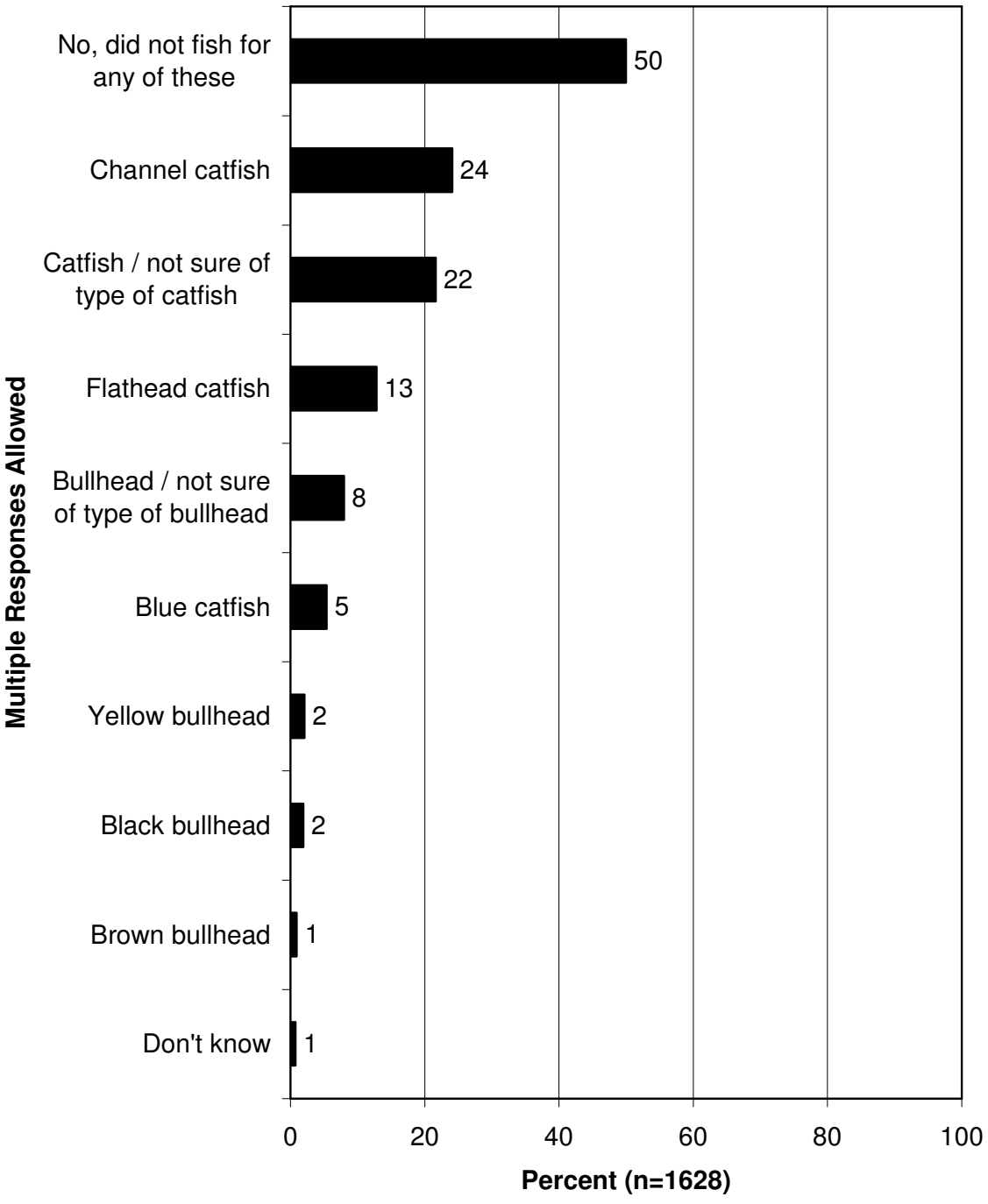
Q25. Did you fish for trout in Iowa in the [past 12 months / last year you fished]?



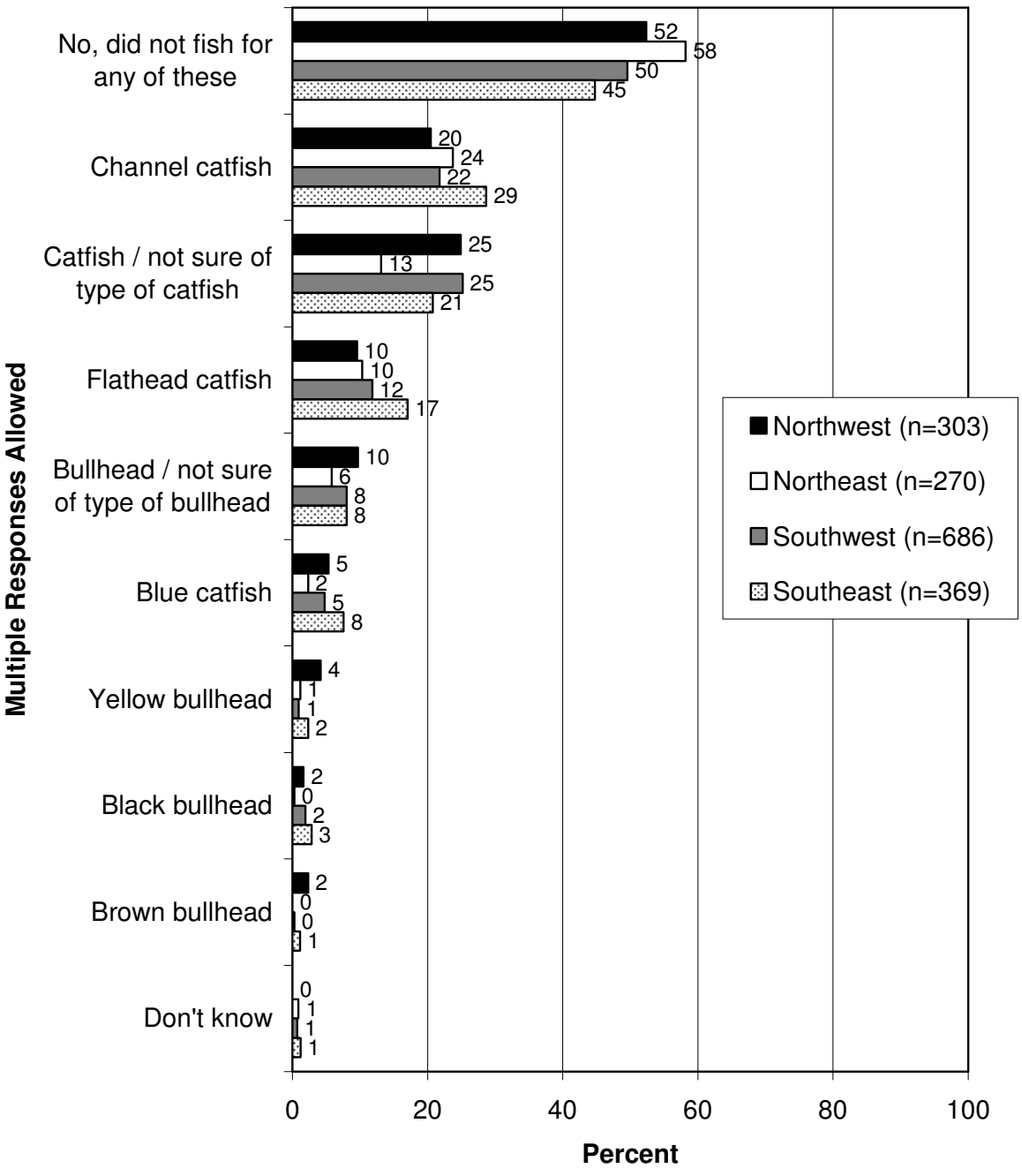
Q25. Did you fish for trout in Iowa in the [past 12 months / last year you fished]?



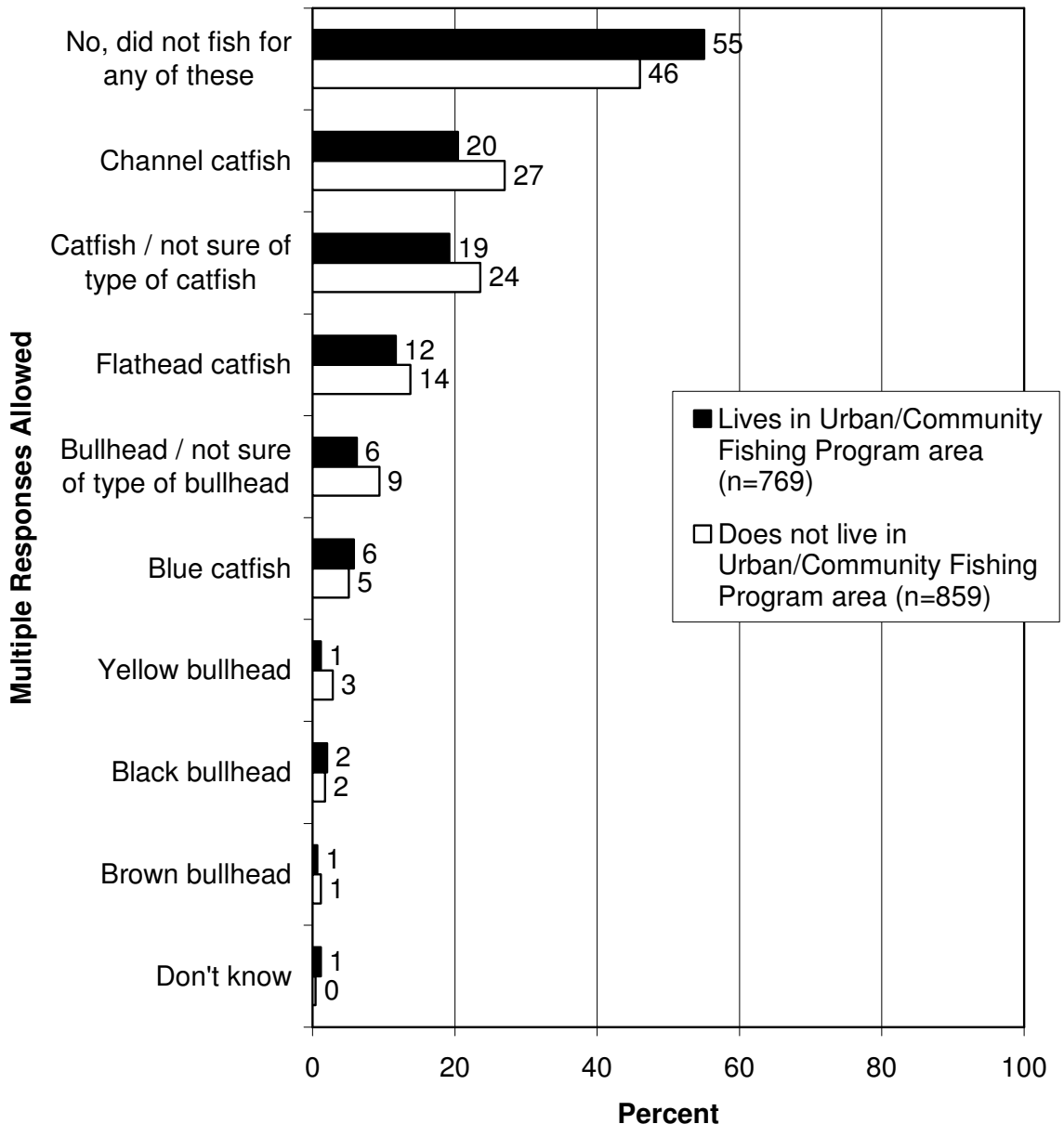
Q28. Did you fish for catfish or bullhead in Iowa in the [past 12 months / last year you fished]?



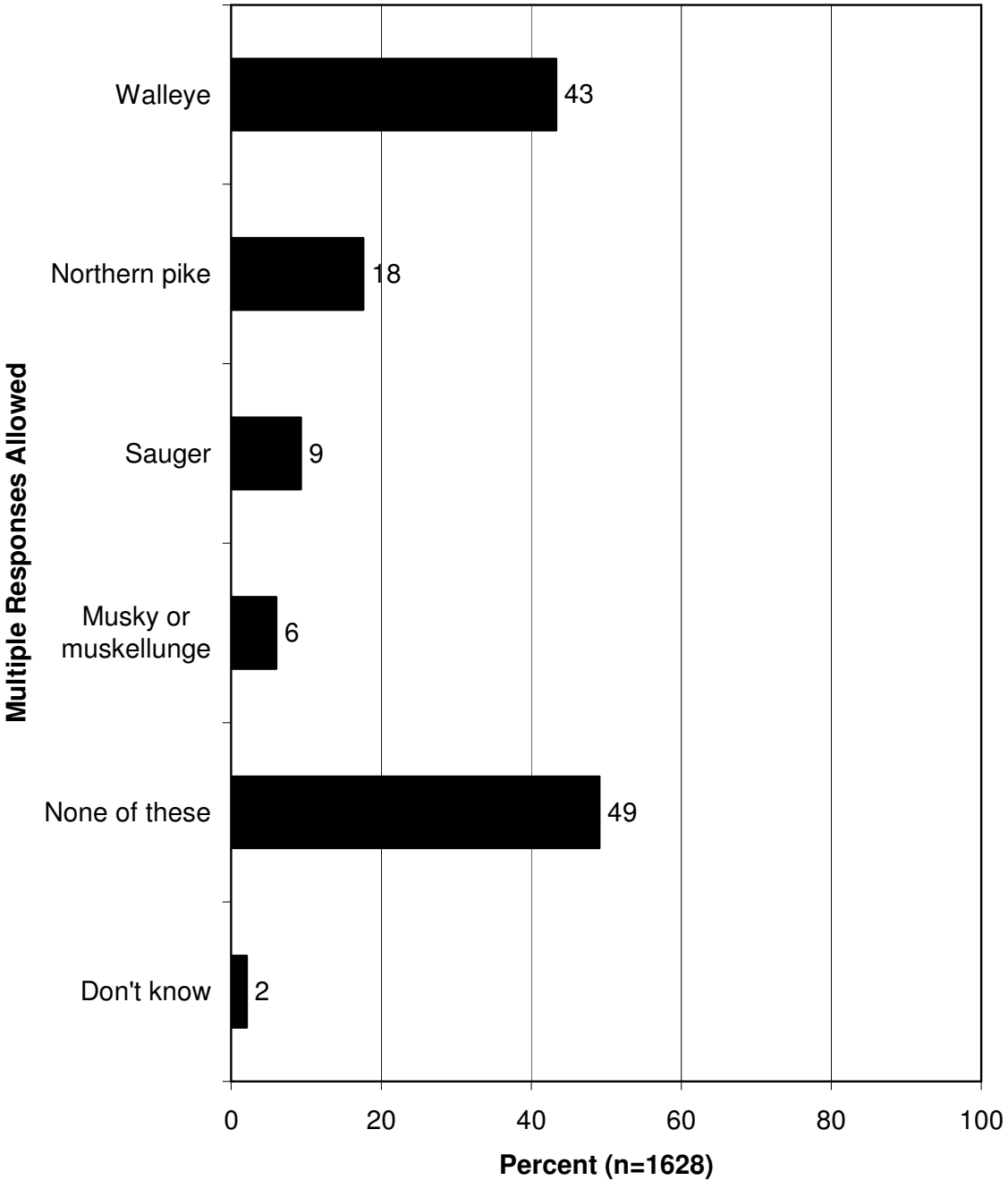
Q28. Did you fish for catfish or bullhead in Iowa in the [past 12 months / last year you fished]?



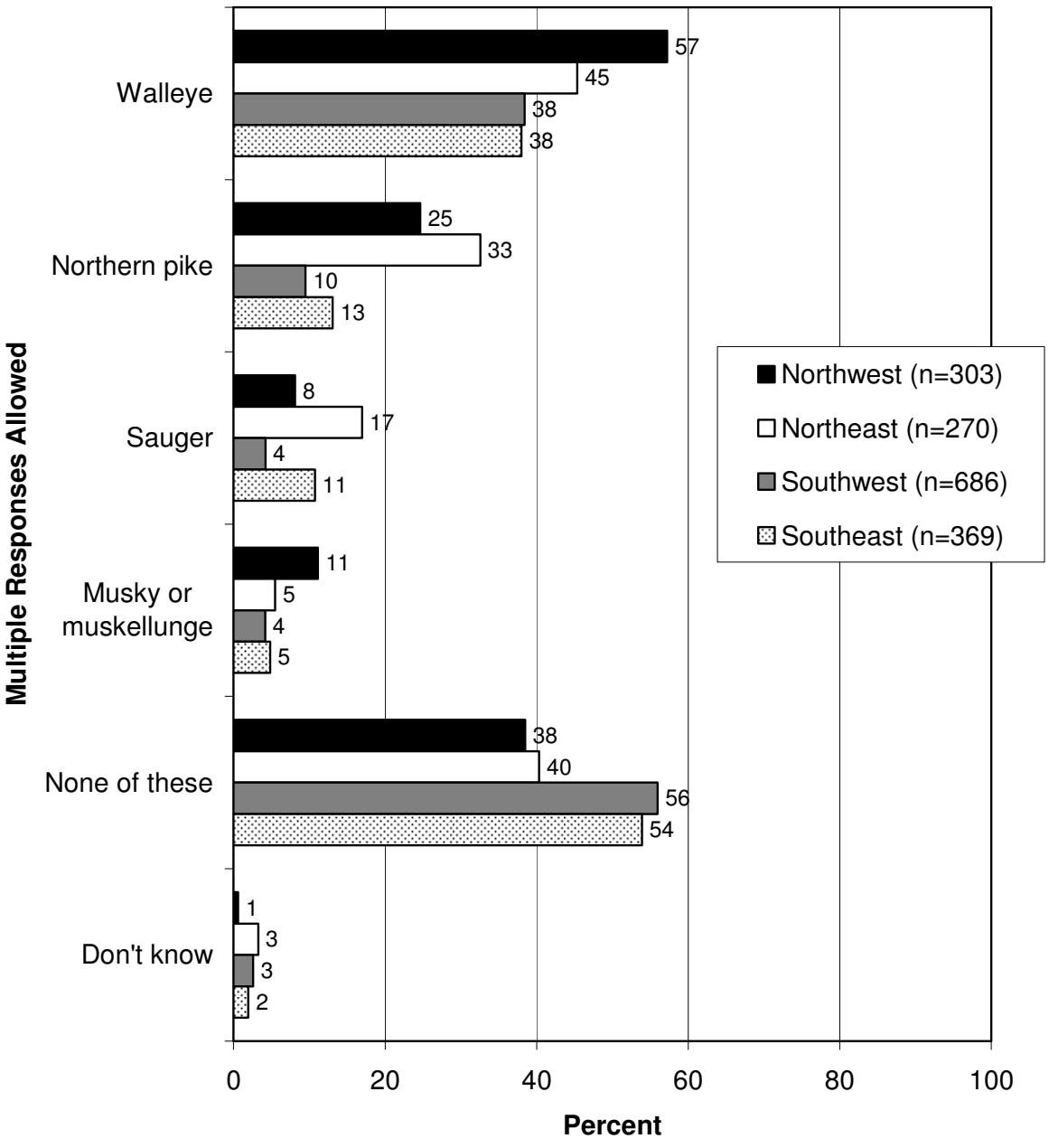
Q28. Did you fish for catfish or bullhead in Iowa in the [past 12 months / last year you fished]?



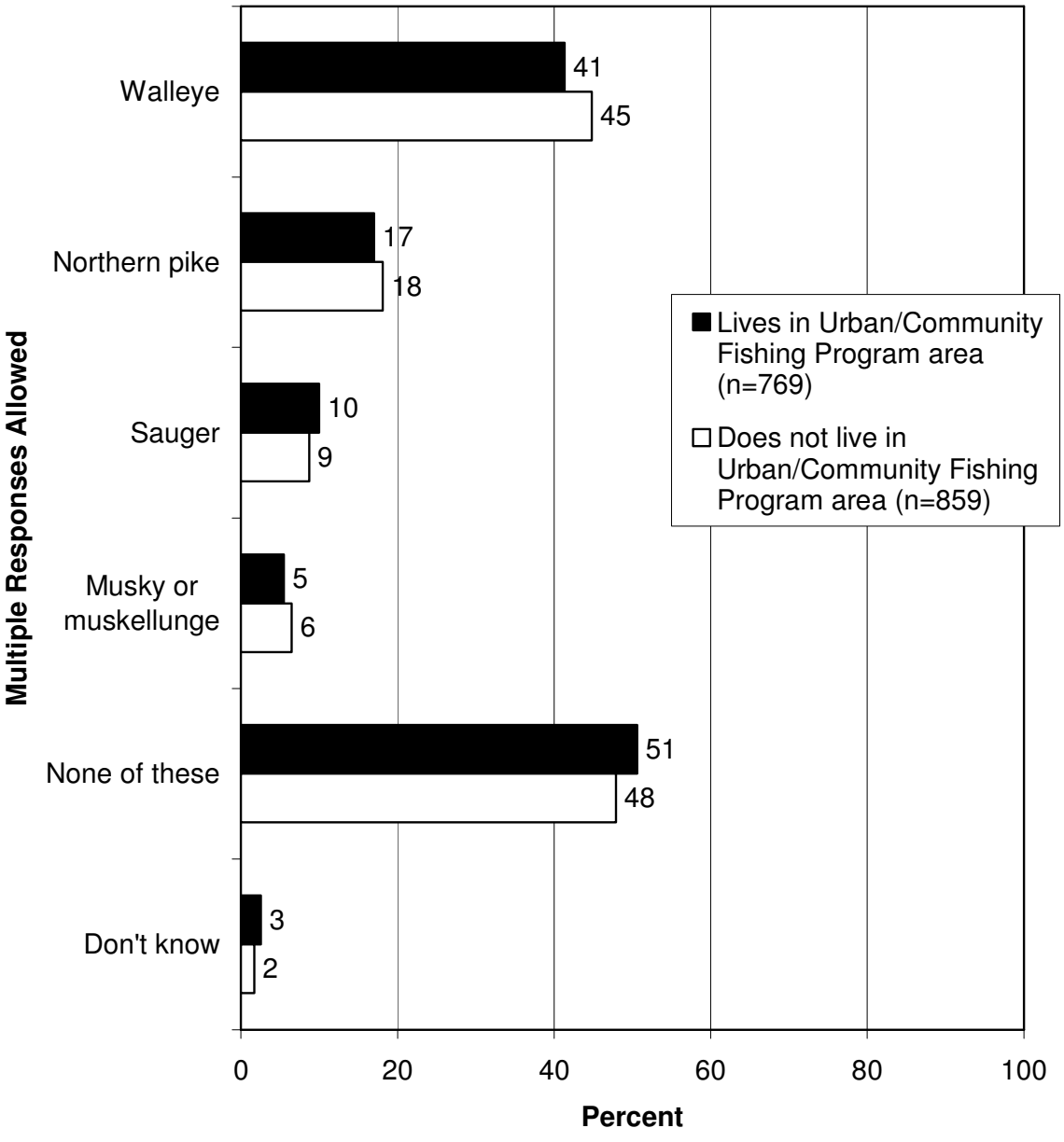
Q31. In Iowa in the [past 12 months / last year you fished], did you fish for…?



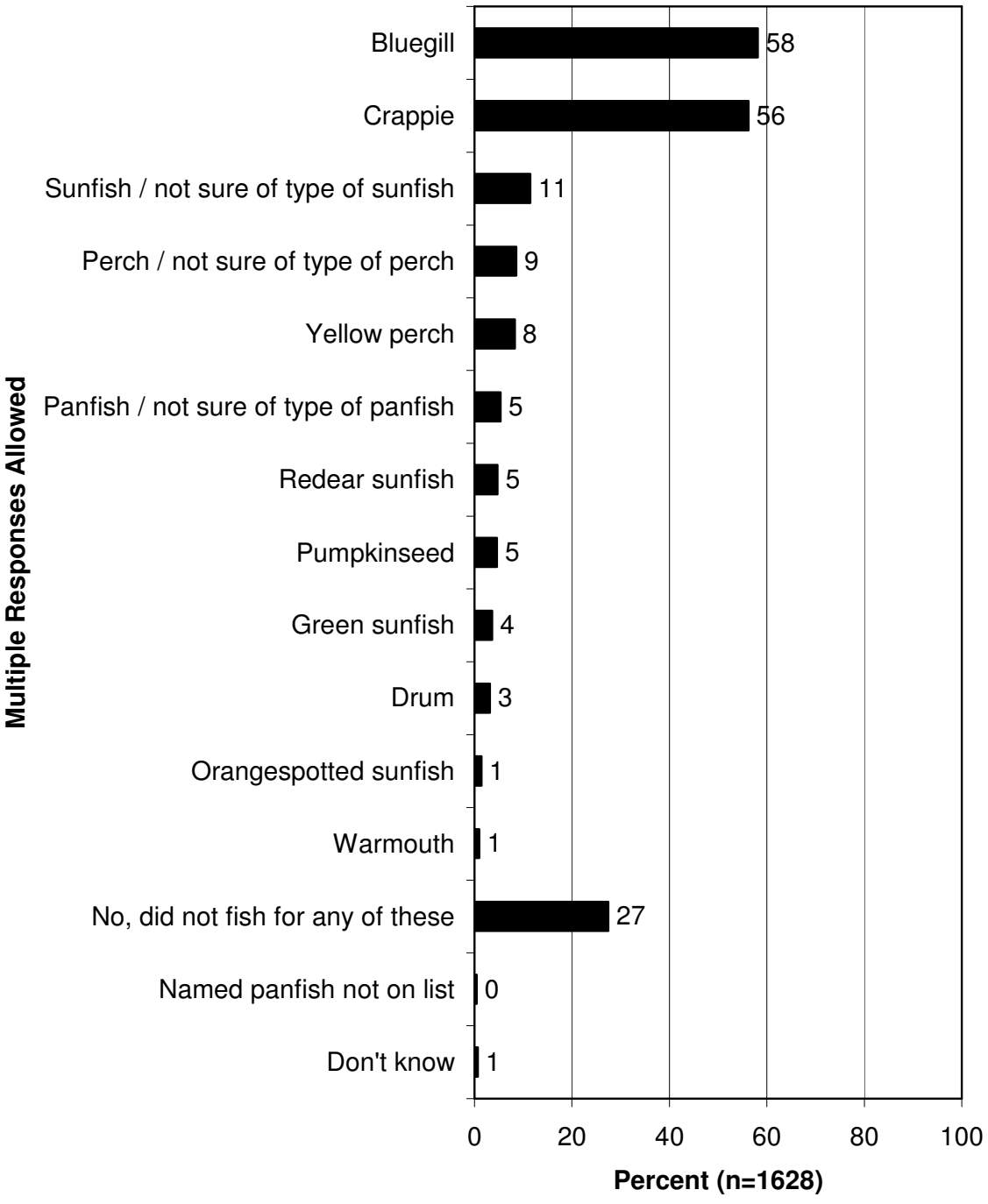
Q31. In Iowa in the [past 12 months / last year you fished], did you fish for…?



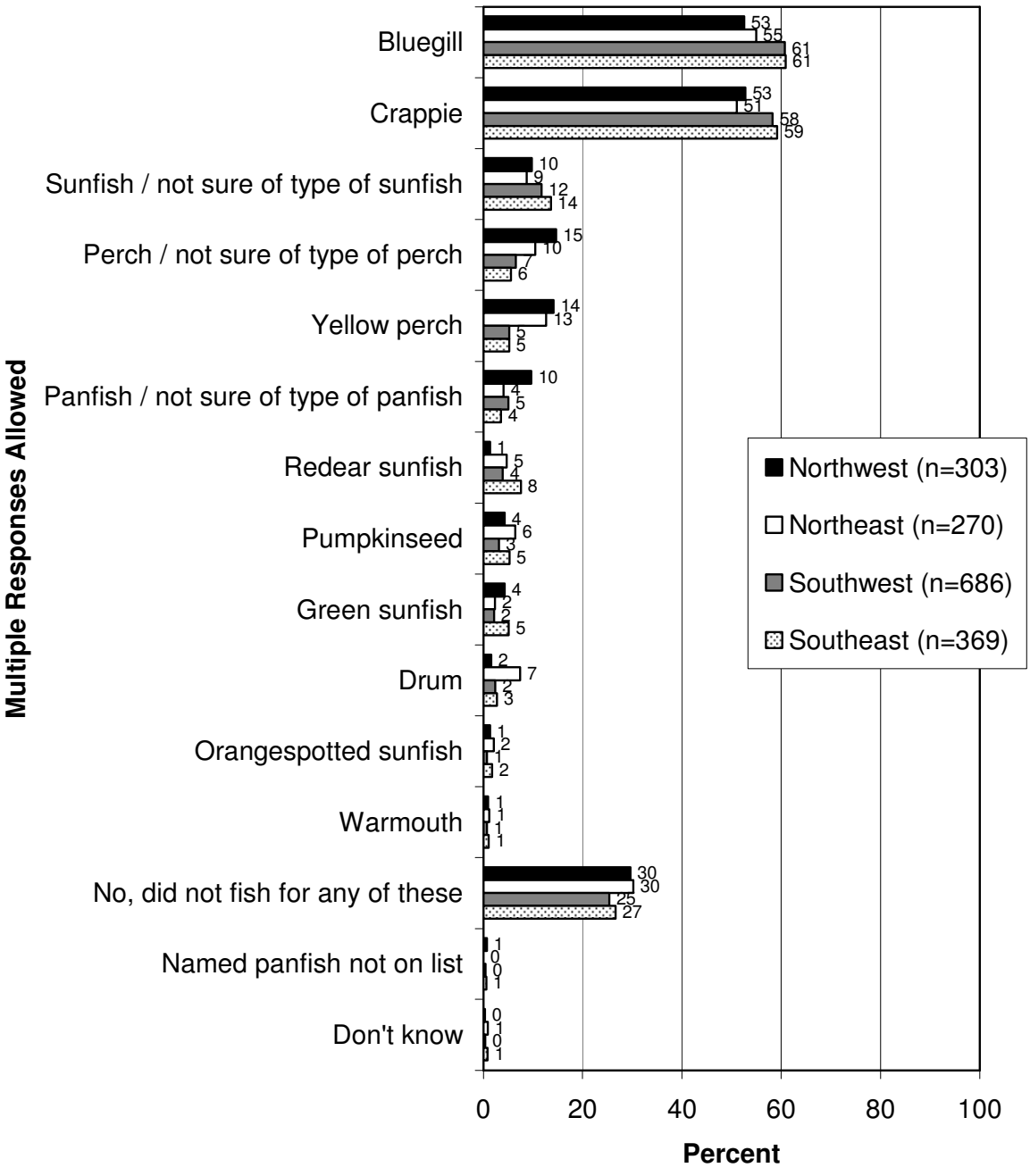
Q31. In Iowa in the [past 12 months / last year you fished], did you fish for...



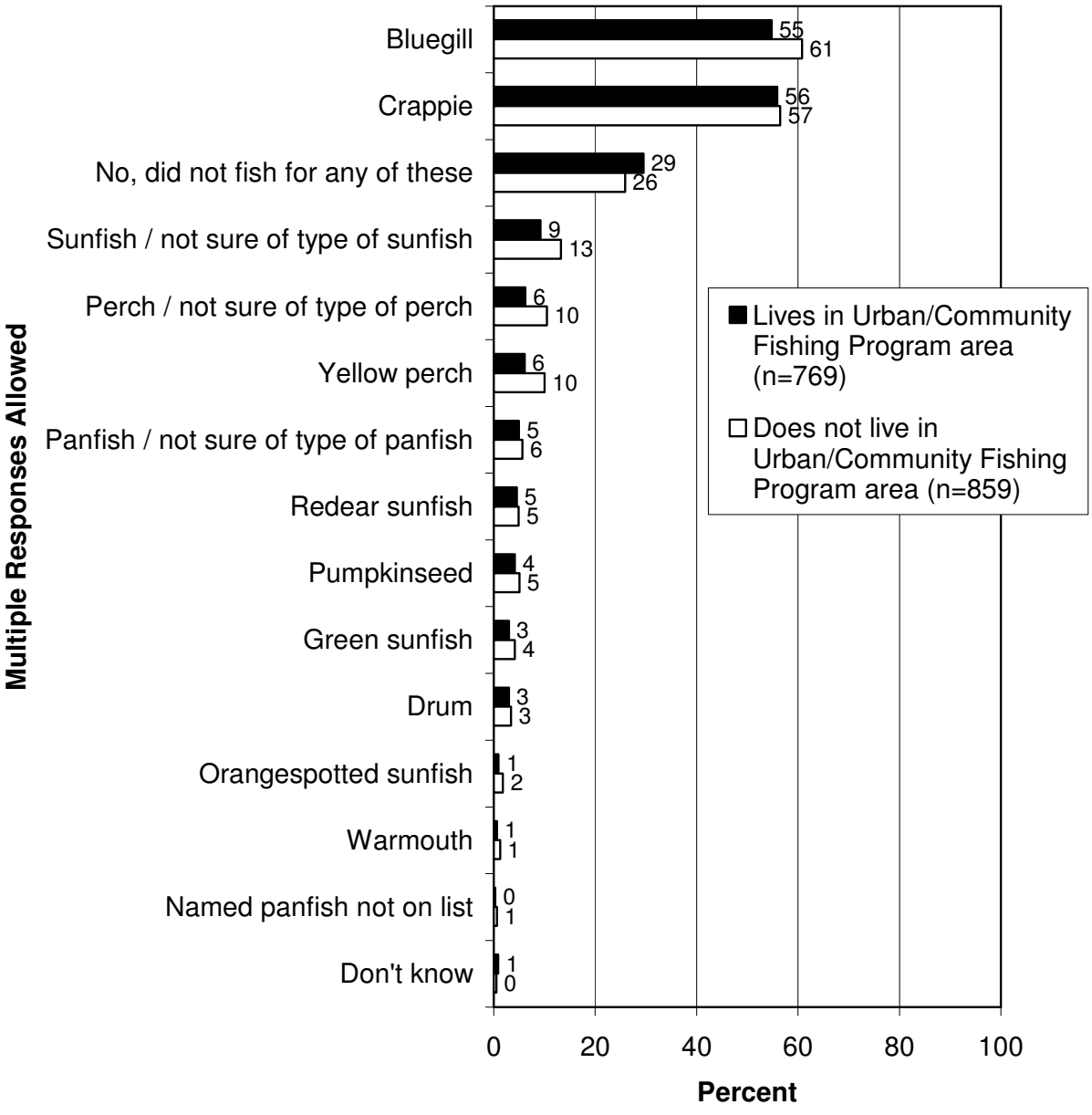
Q34. Did you fish for any panfish in Iowa in [past 12 months / last year you fished]?



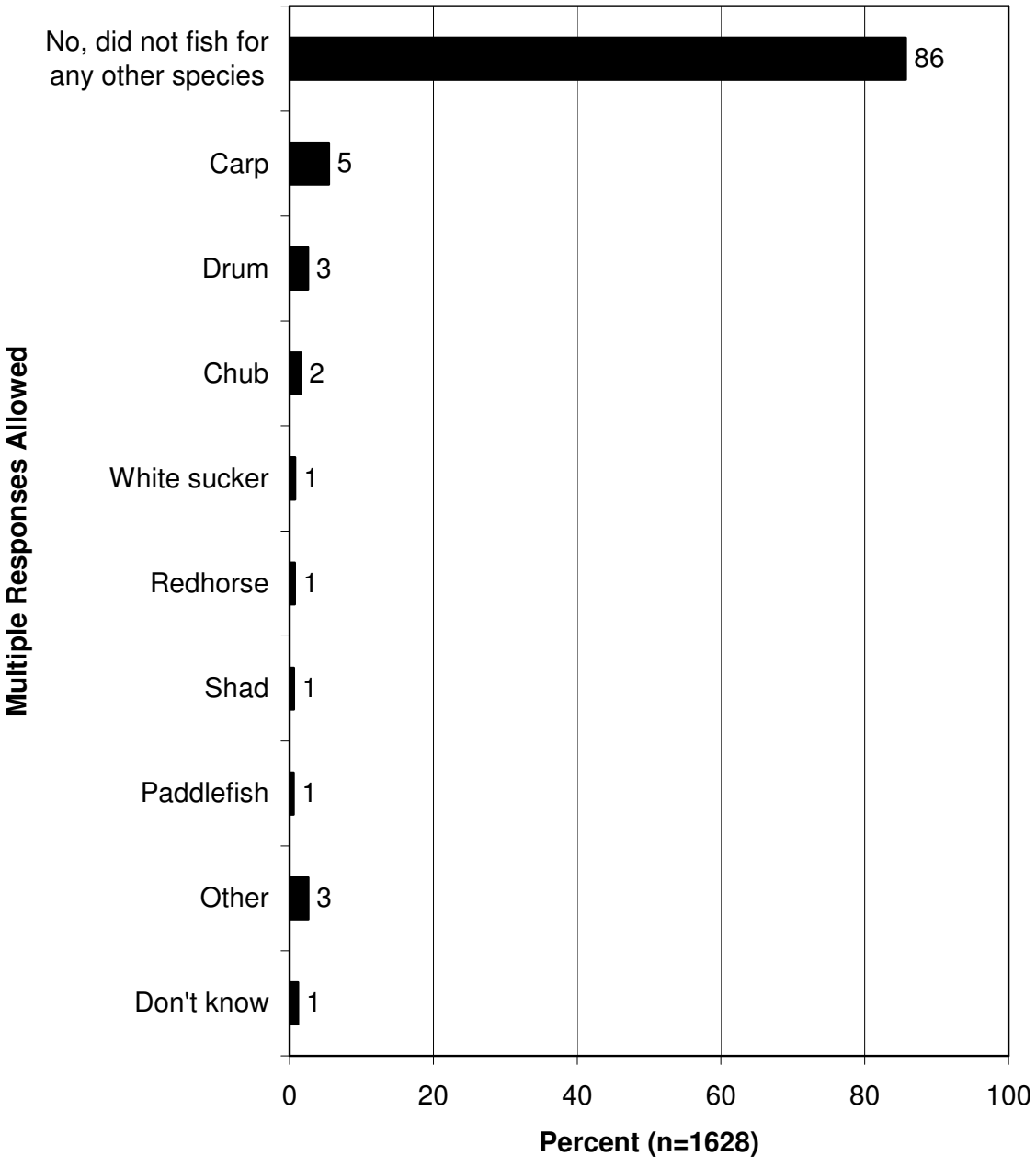
Q34. Did you fish for any panfish in Iowa in [past 12 months / last year you fished]?



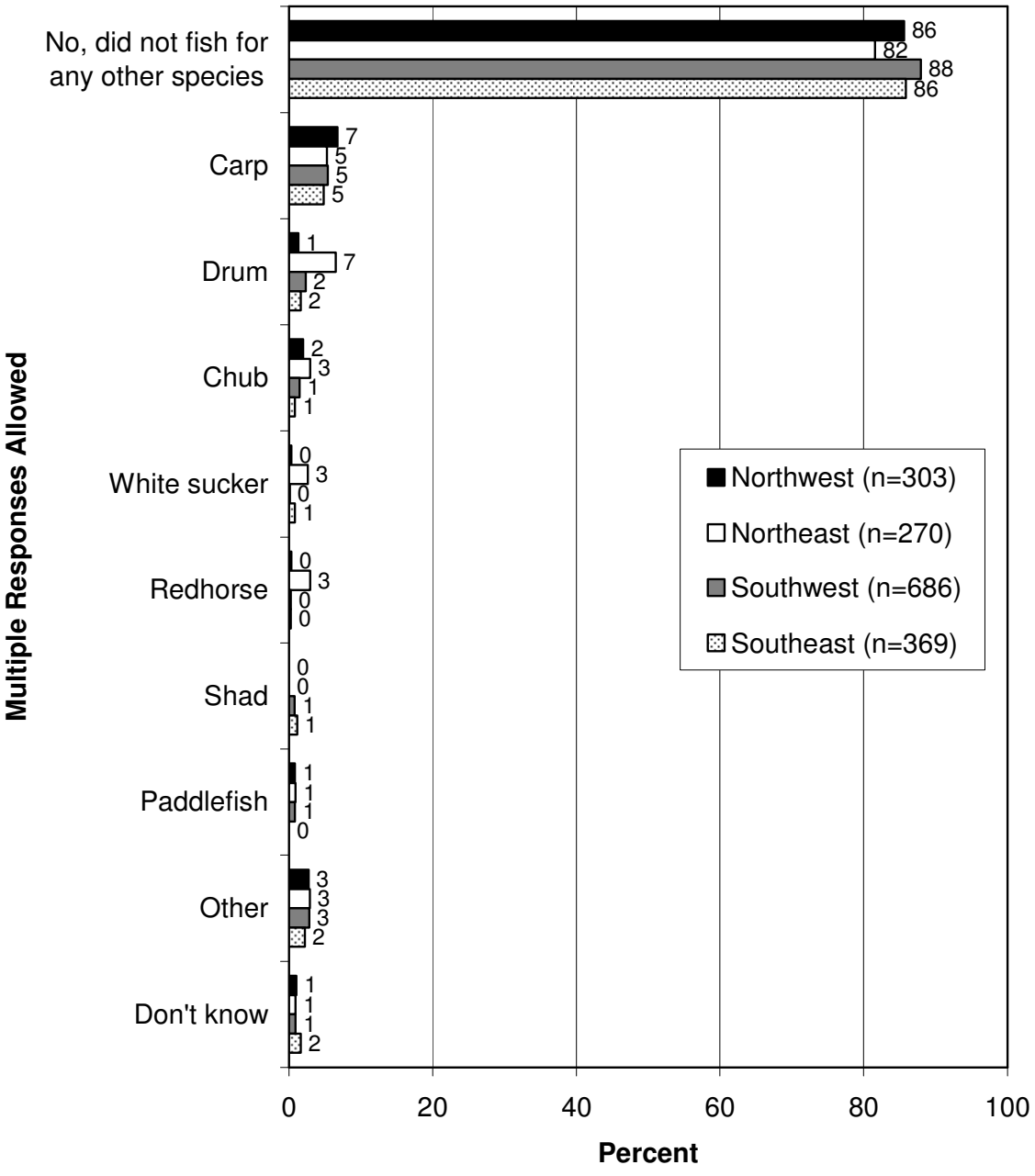
Q34. Did you fish for any panfish in Iowa in [past 12 months / last year you fished]?



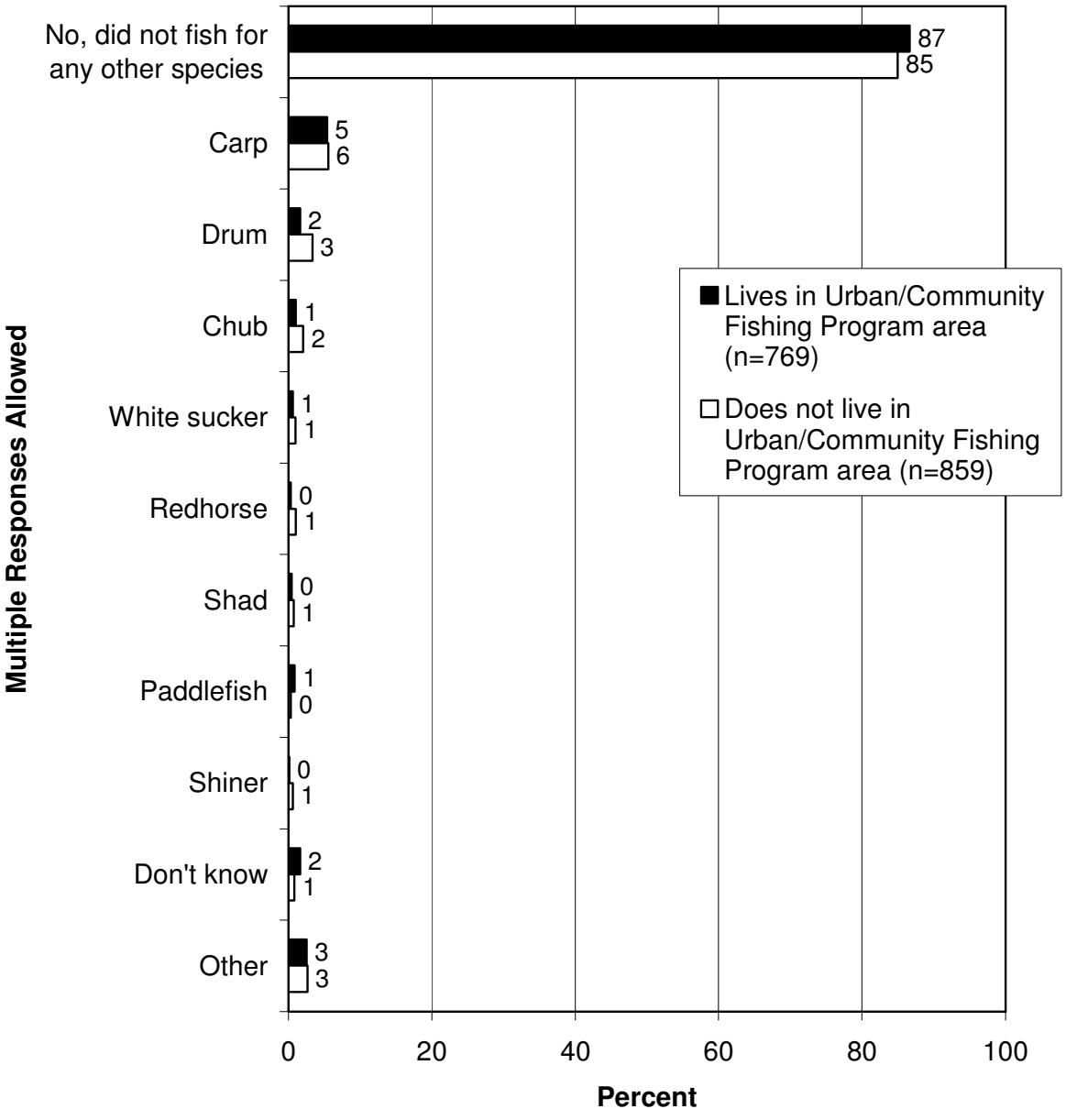
Q37. Did you fish for any other species in Iowa in the [past 12 months / last year you fished]?



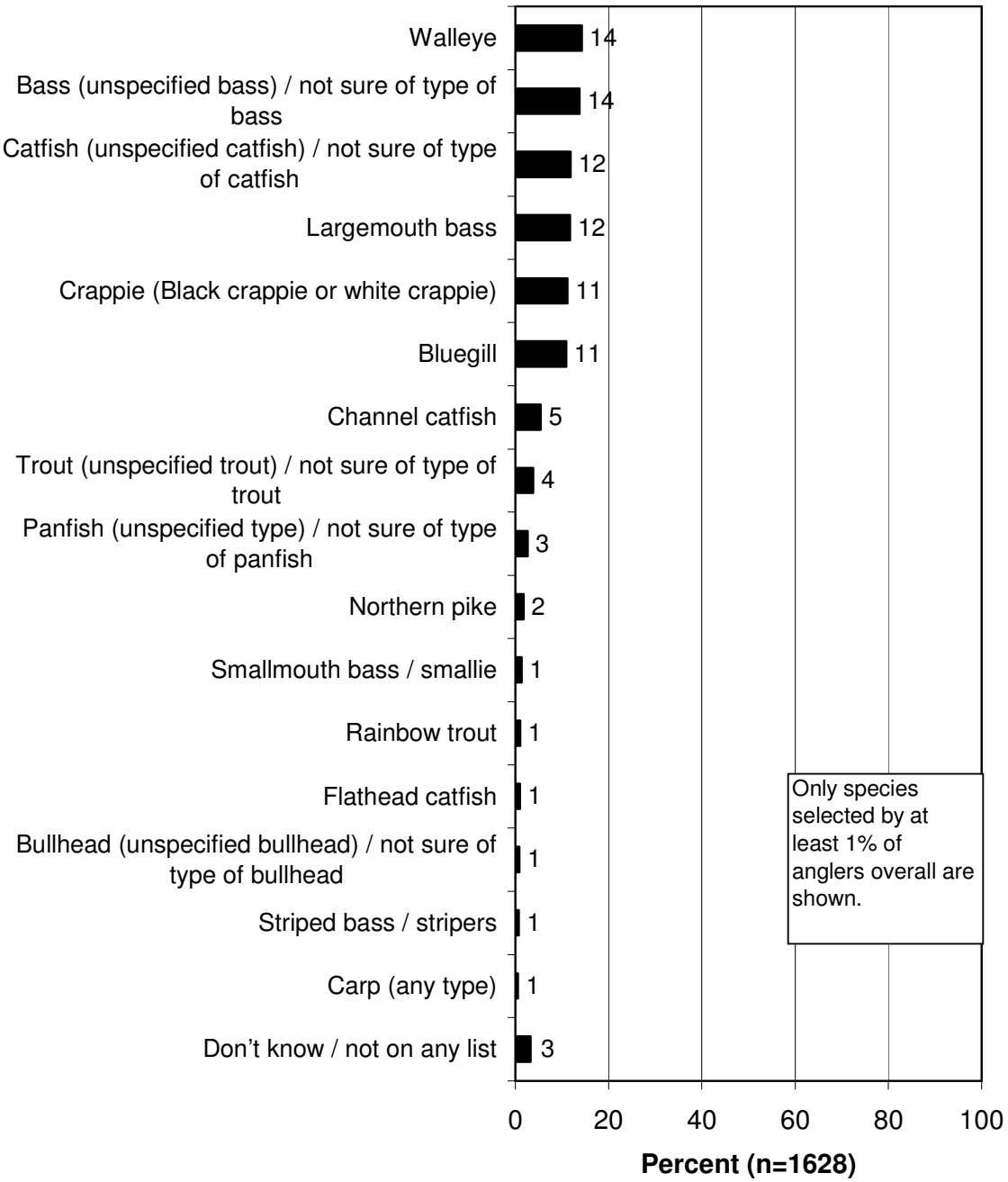
Q37. Did you fish for any other species in Iowa in the [past 12 months / last year you fished]?



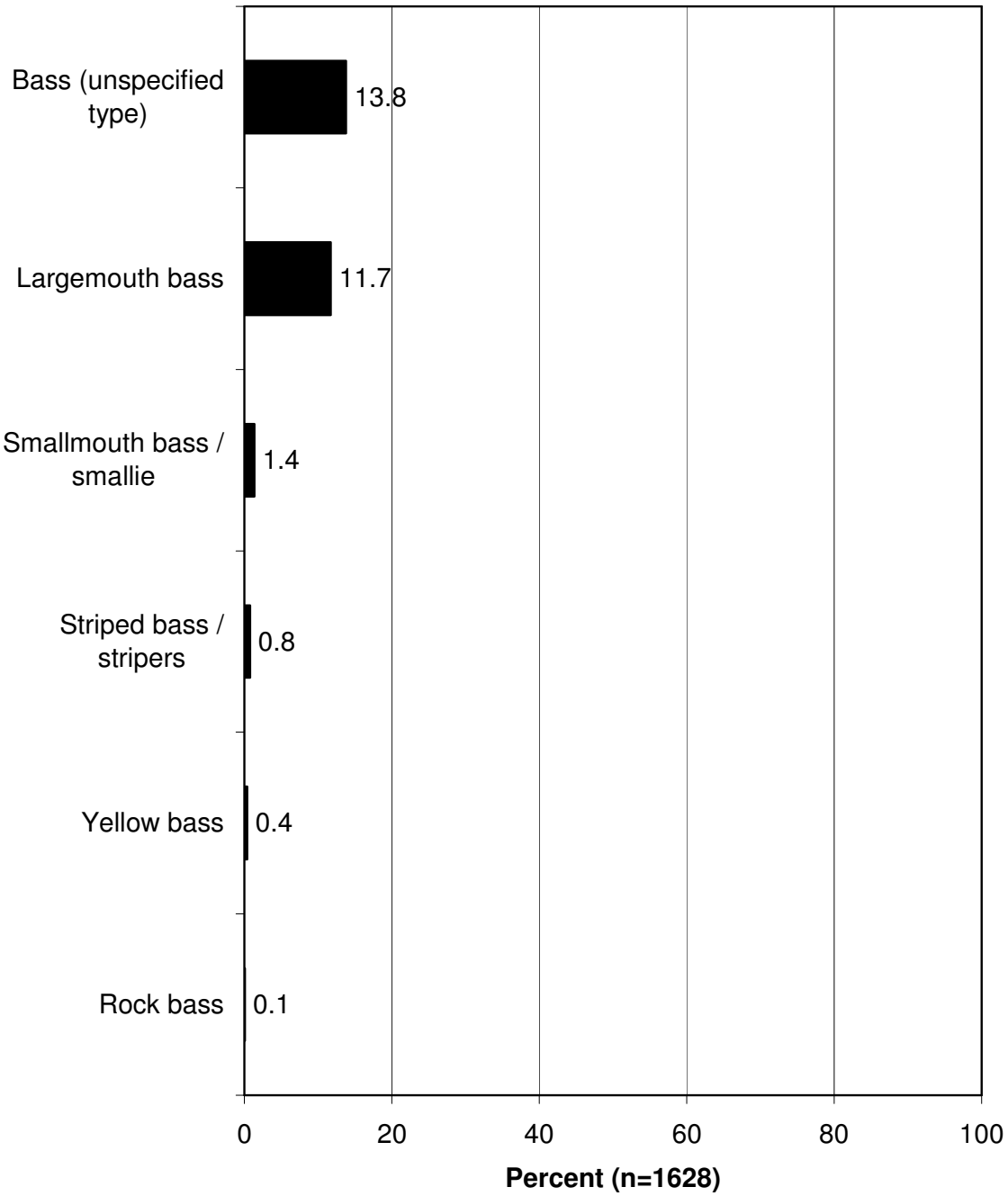
Q37. Did you fish for any other species in Iowa in the [past 12 months / last year you fished]?



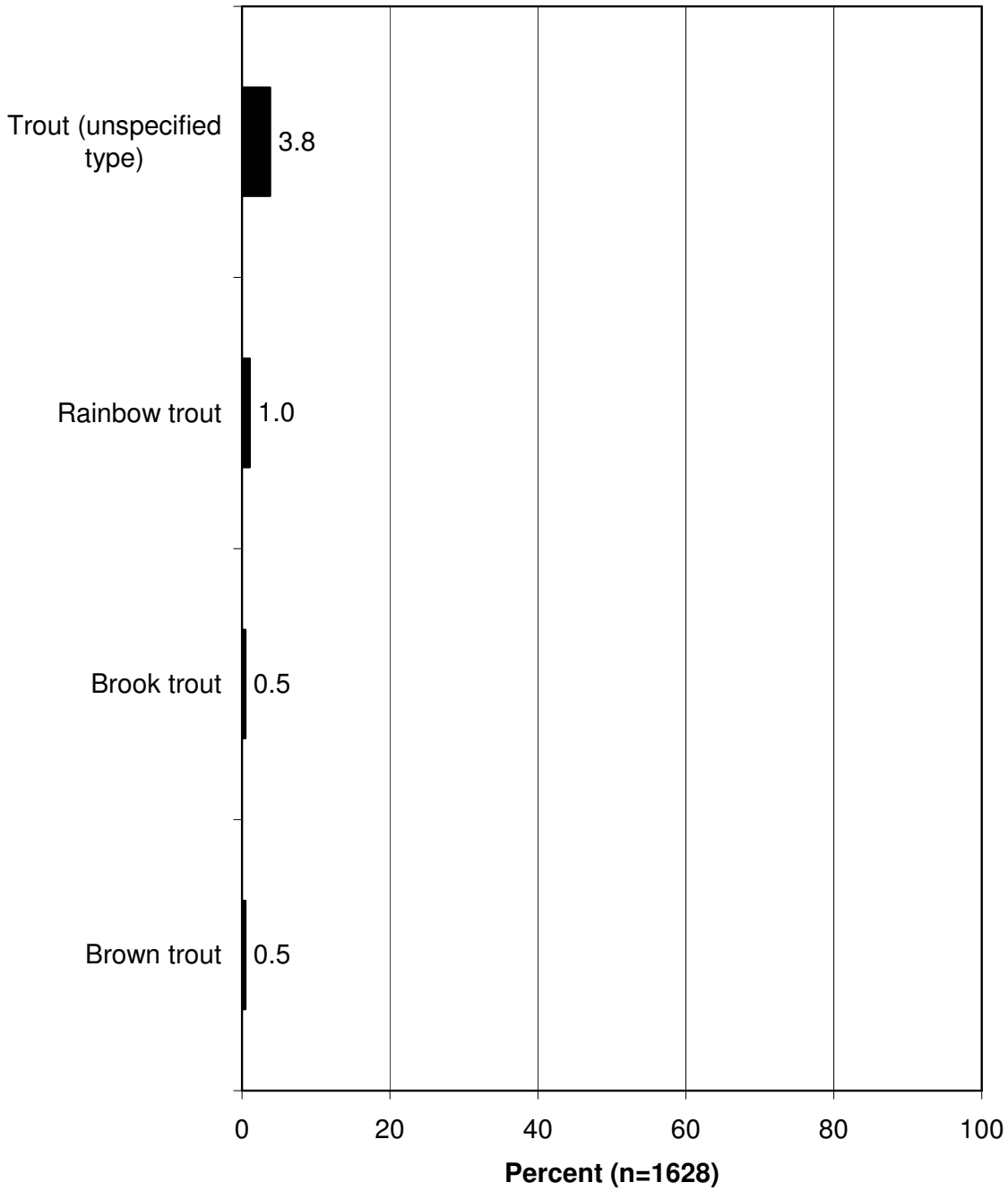
Q41. Which one species do you most often fish for in Iowa? (Top responses)



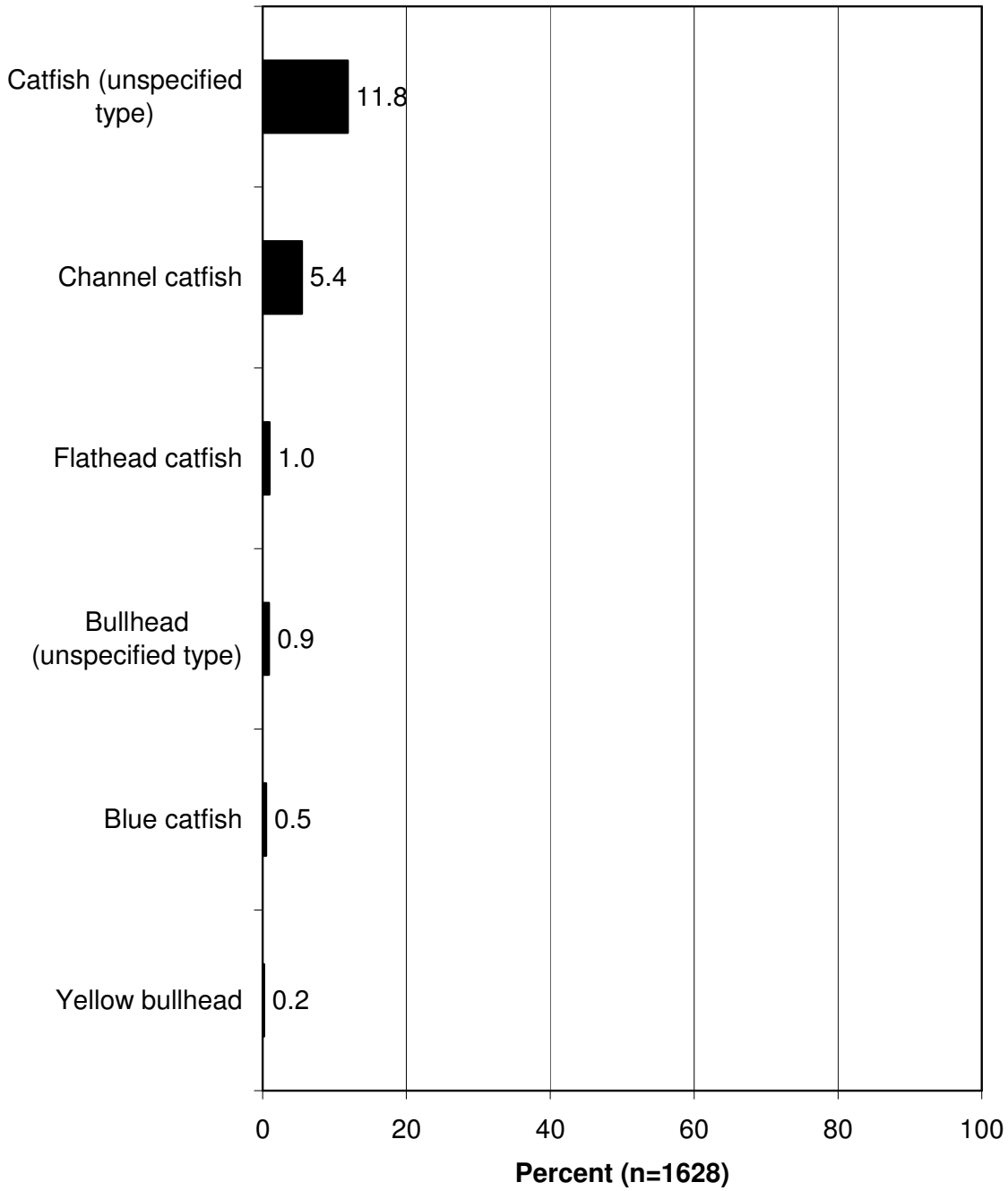
Q41. Which one species do you most often fish for in Iowa? (Bass category)



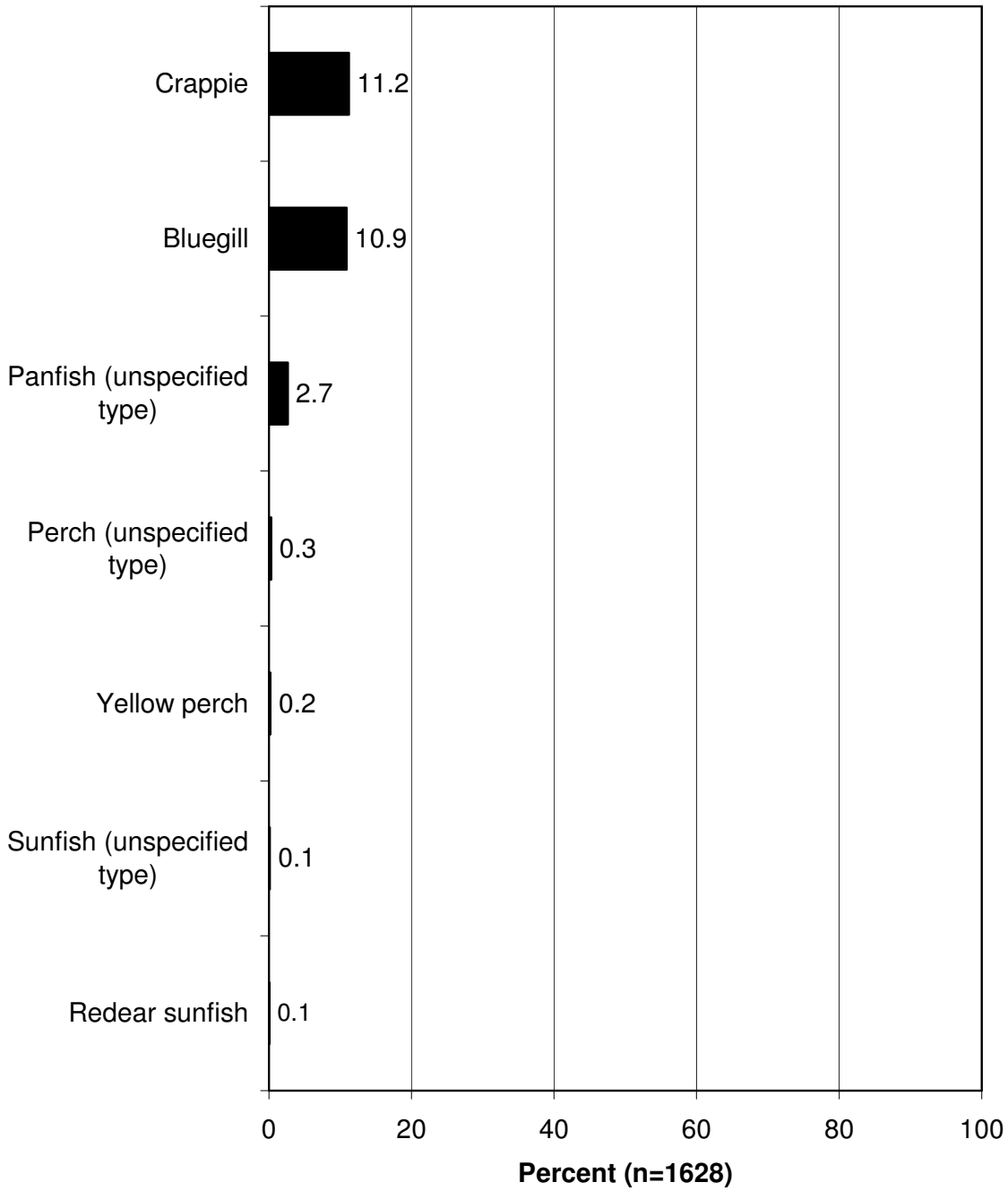
Q41. Which one species do you most often fish for in Iowa? (Trout category)



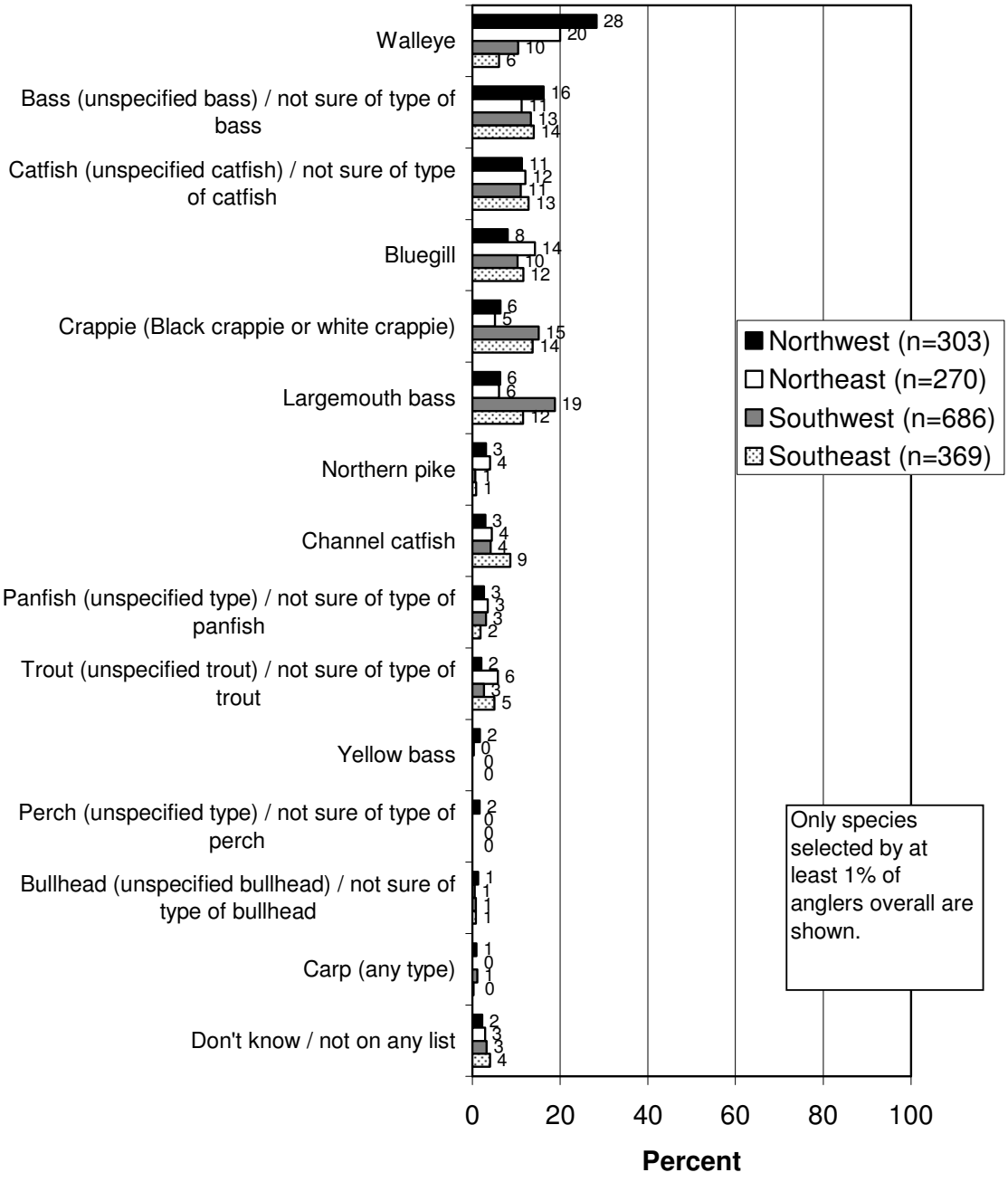
Q41. Which one species do you most often fish for in Iowa? (Catfish/bullhead category)



Q41. Which one species do you most often fish for in Iowa? (Panfish category)

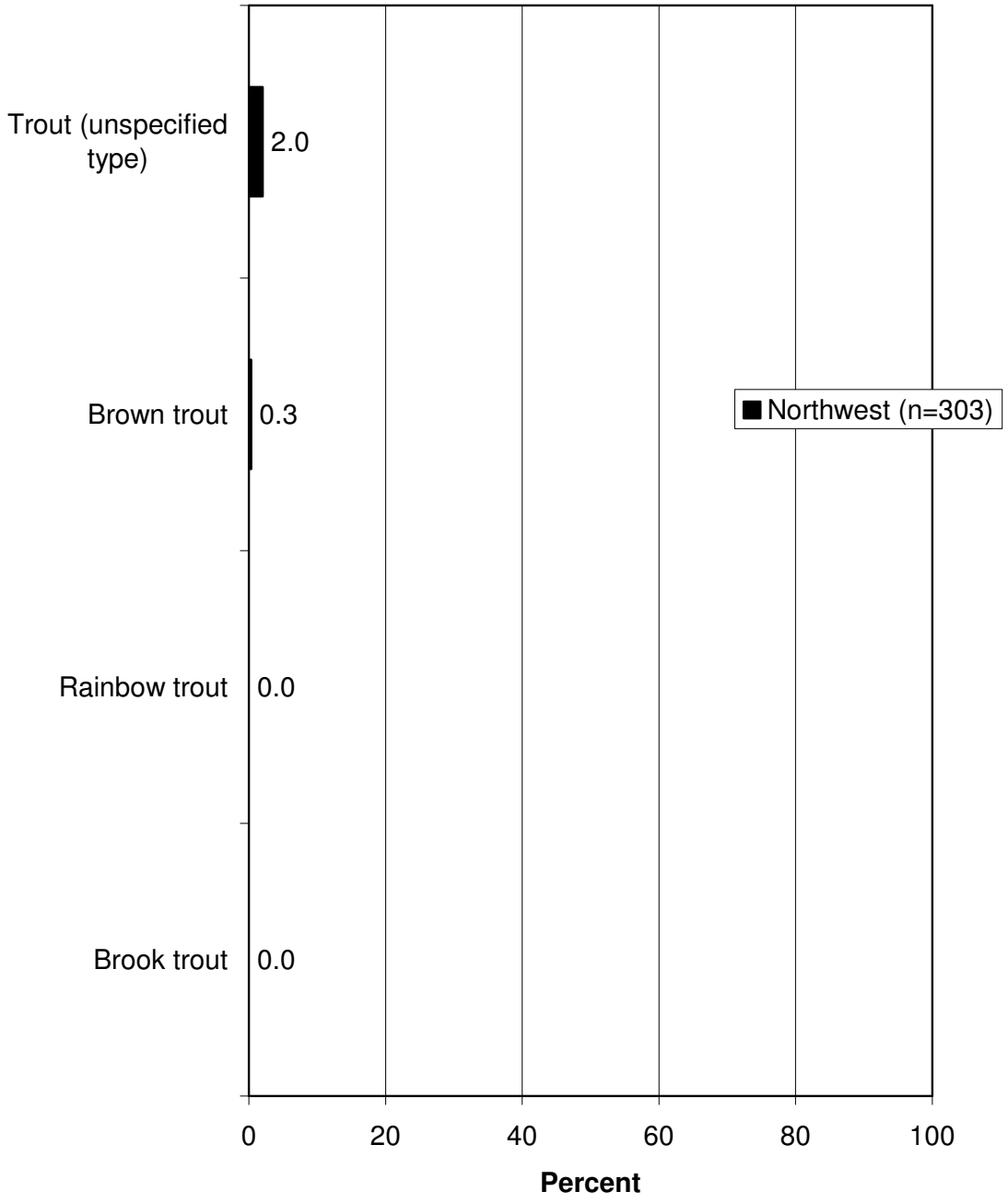


Q41. Which one species do you most often fish for in Iowa?

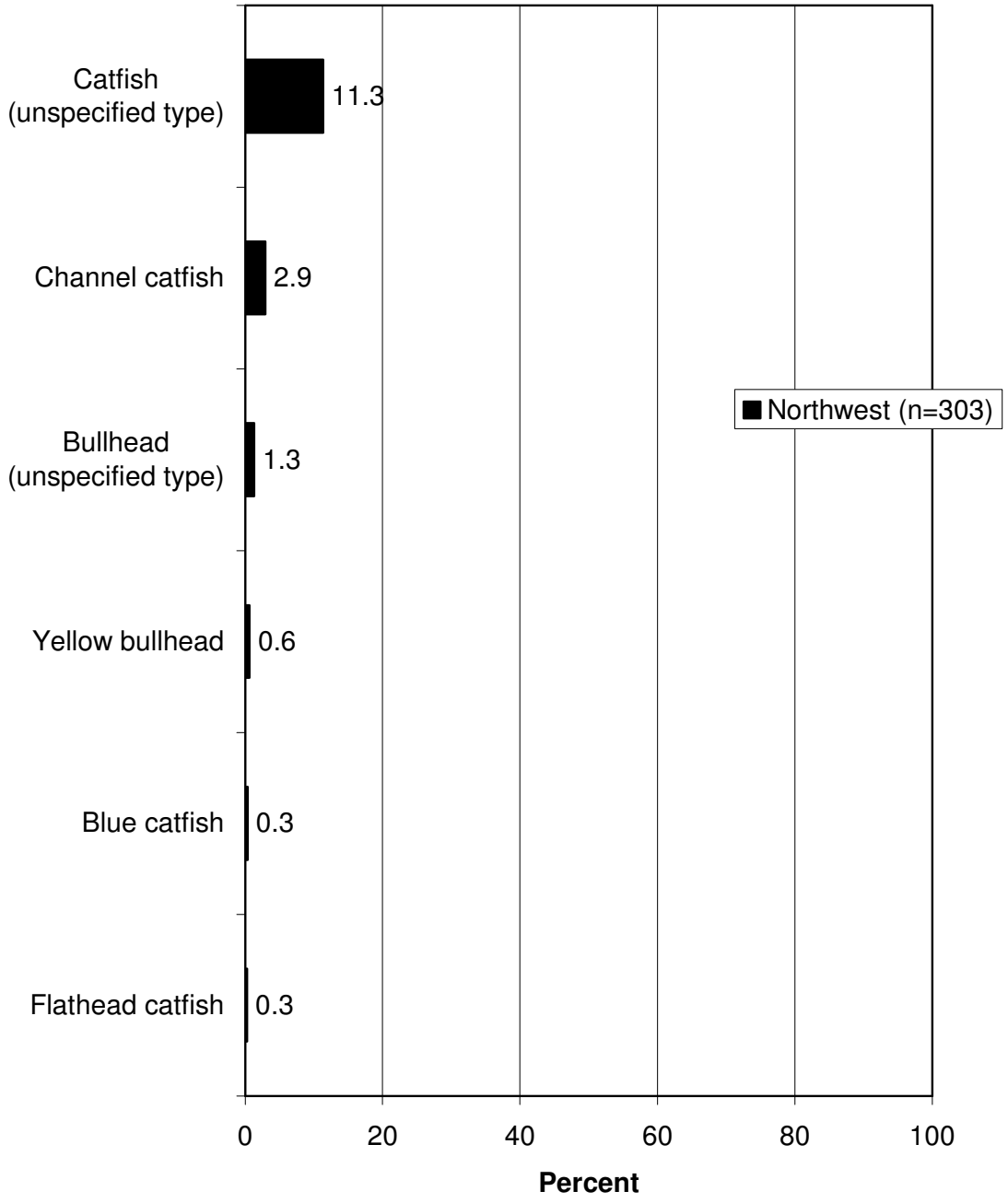


Q41. Which one species do you most often fish for in Iowa? (Bass category)

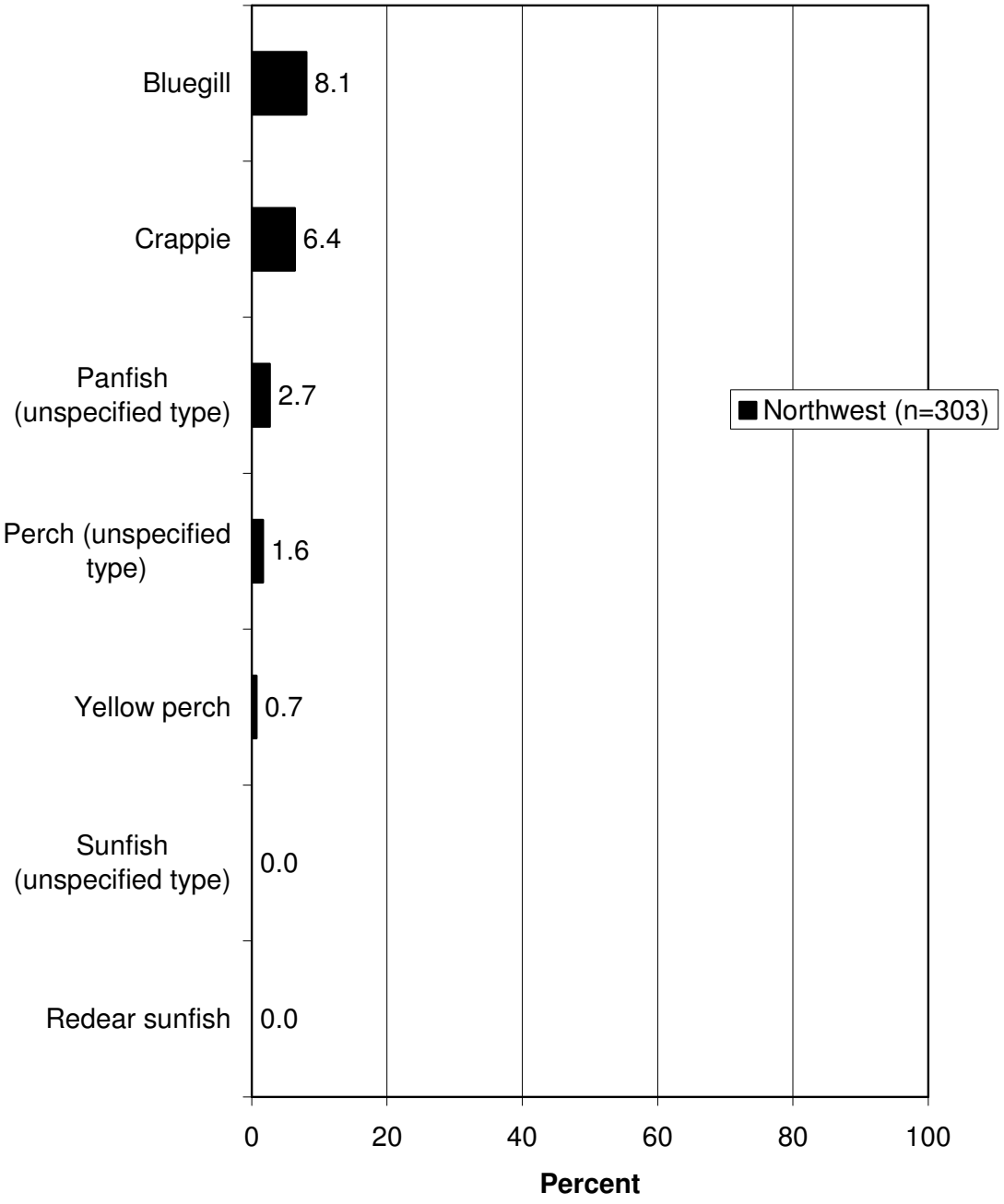
Q41. Which one species do you most often fish for in Iowa? (Trout category)



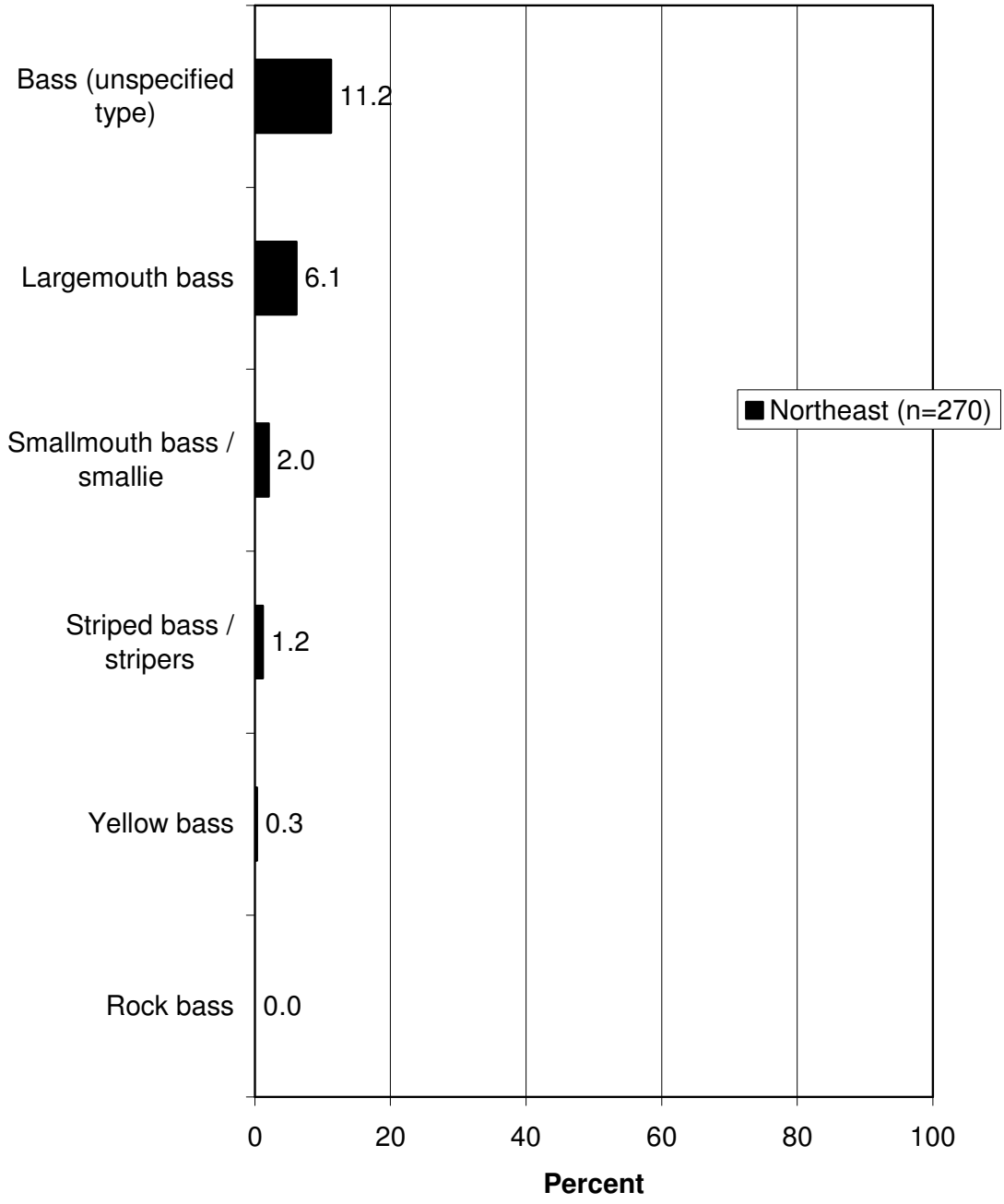
Q41. Which one species do you most often fish for in Iowa? (Catfish/bullhead category)



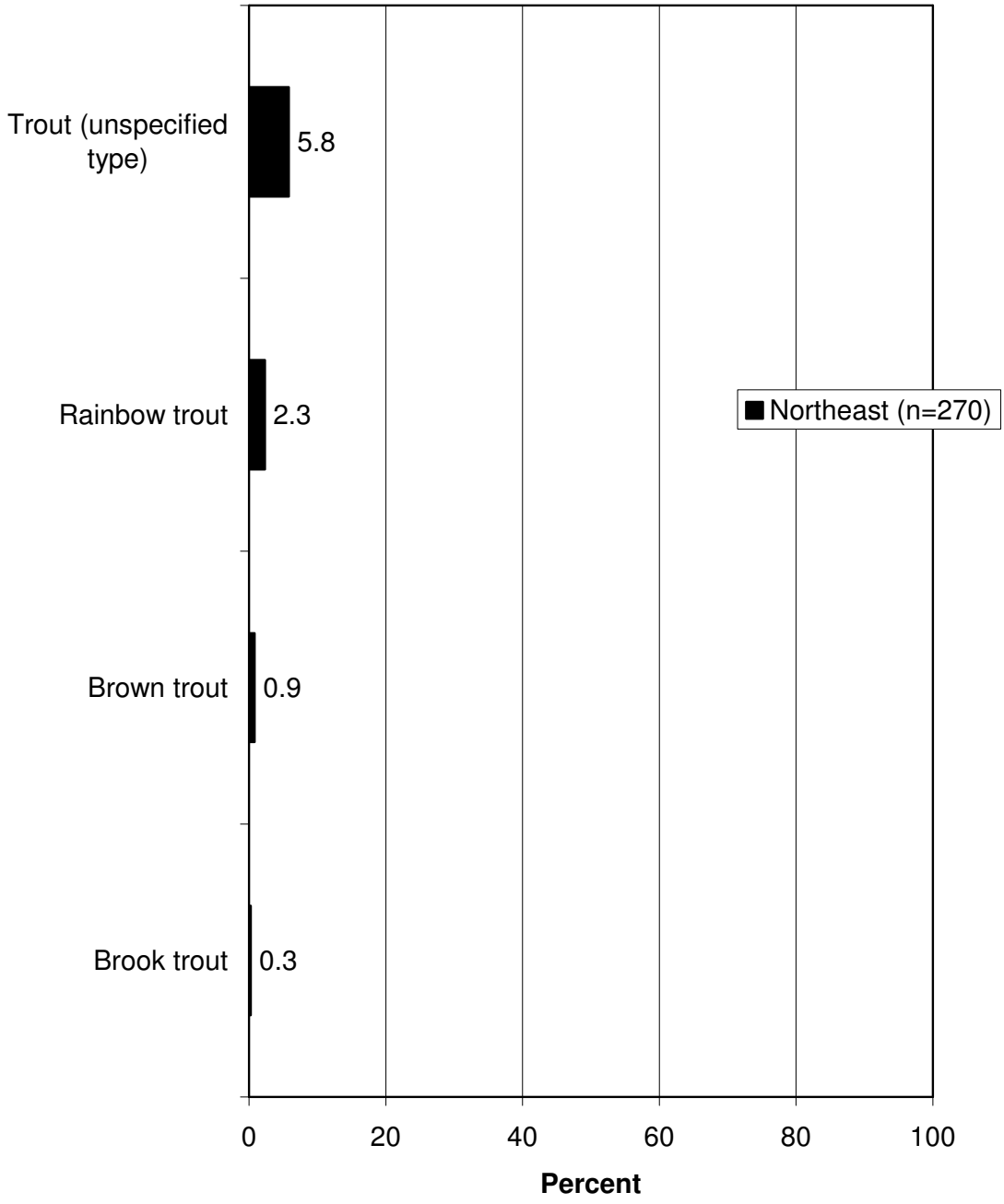
Q41. Which one species do you most often fish for in Iowa? (Panfish category)



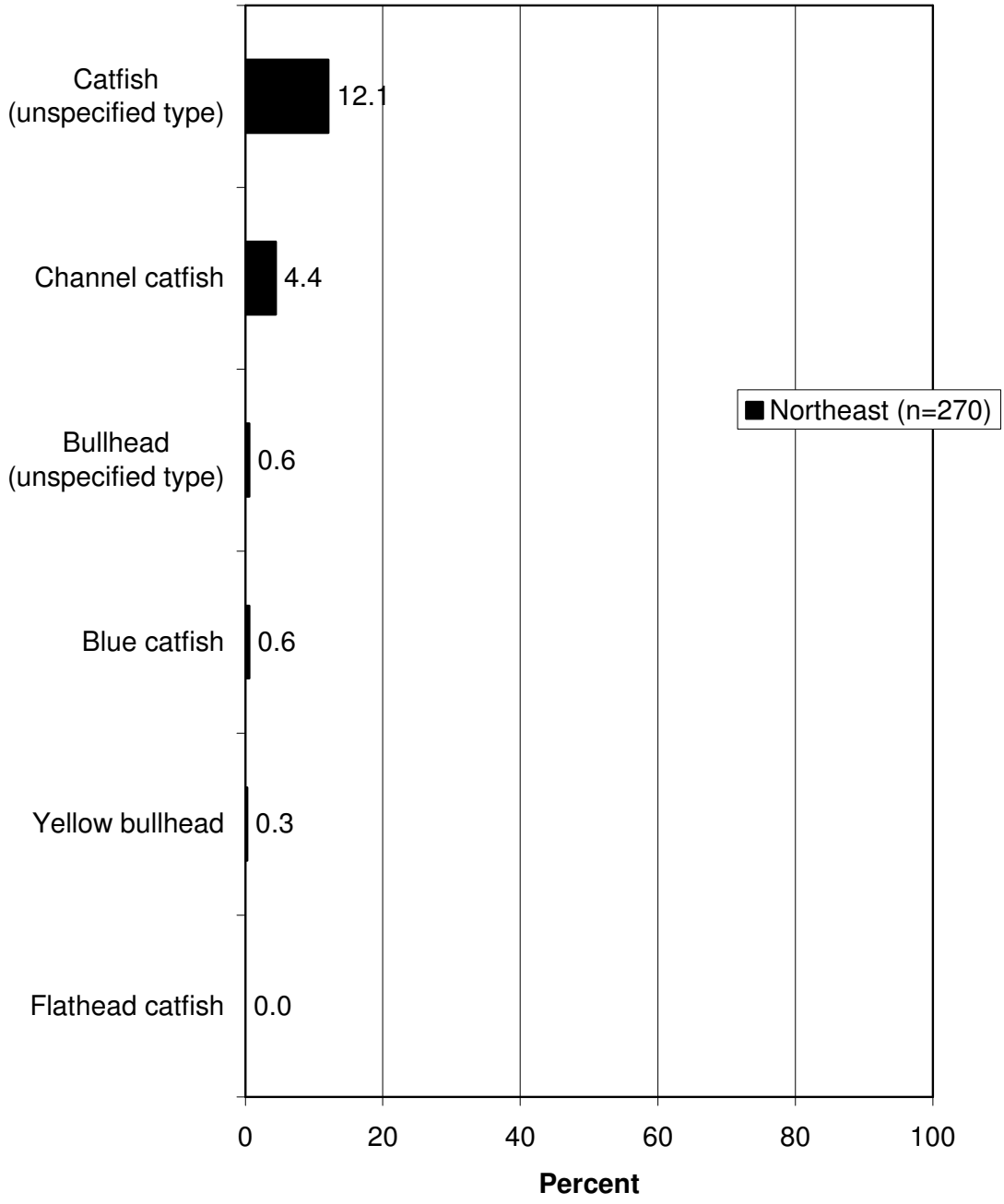
Q41. Which one species do you most often fish for in Iowa? (Bass category)



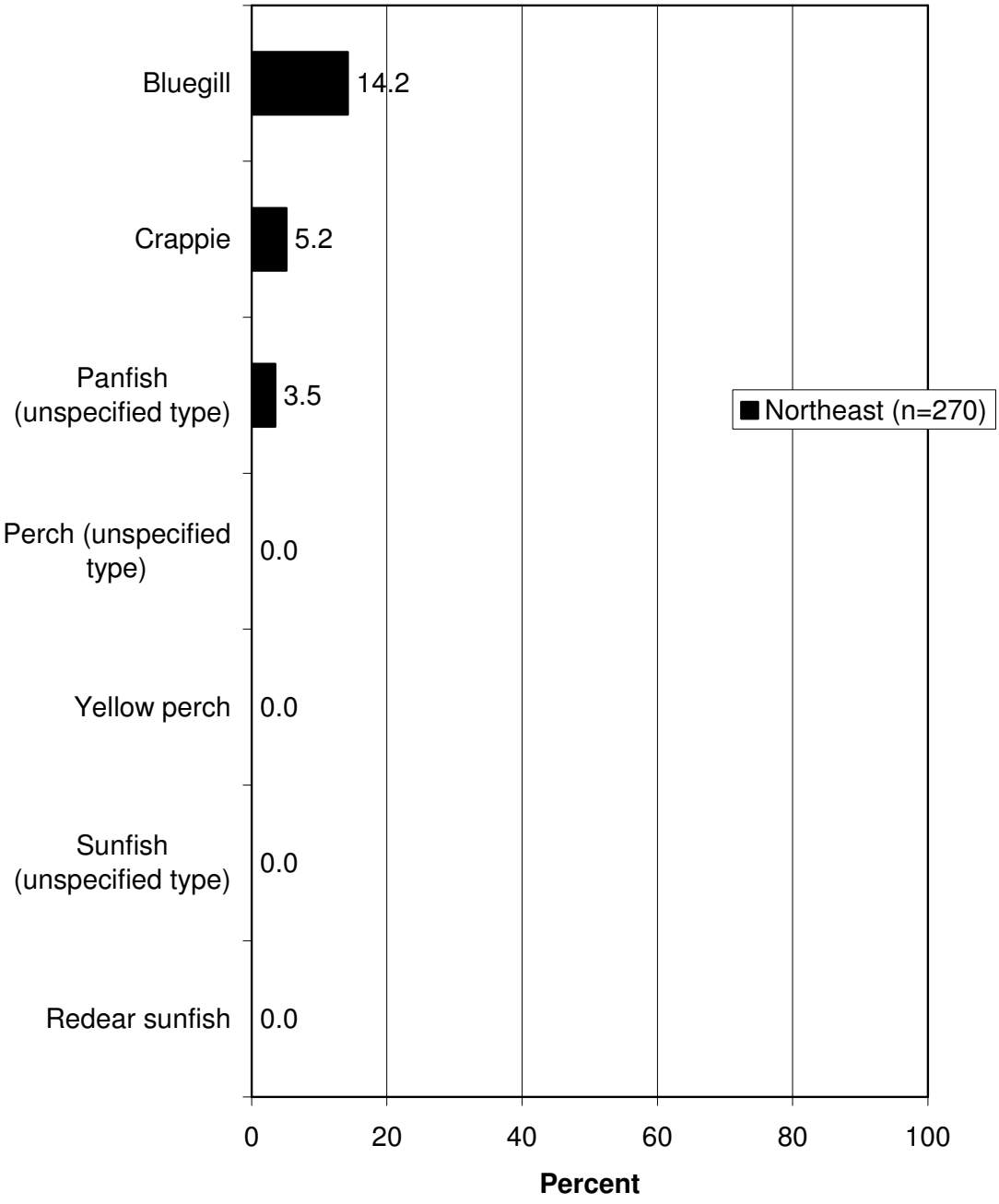
Q41. Which one species do you most often fish for in Iowa? (Trout category)



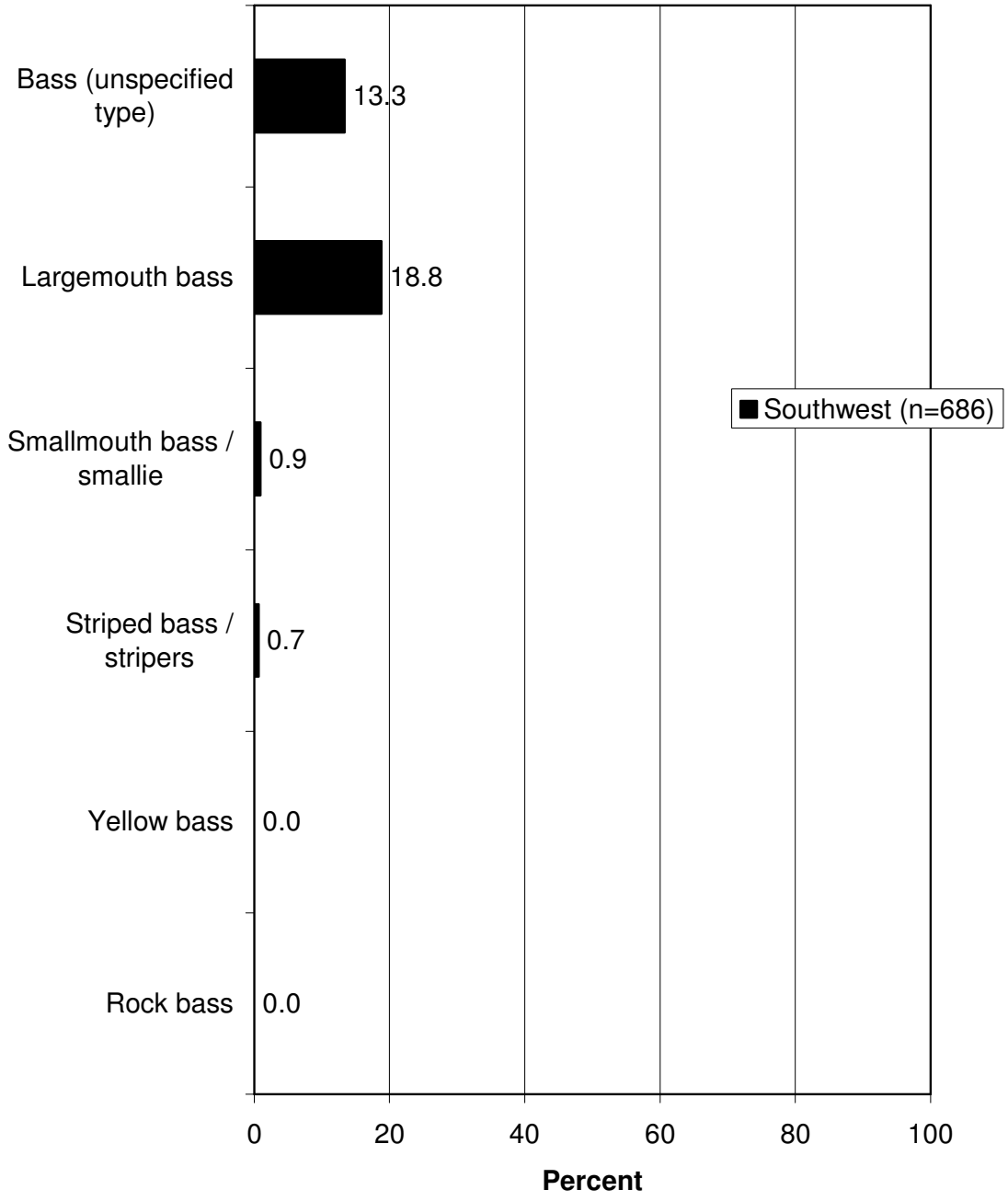
Q41. Which one species do you most often fish for in Iowa? (Catfish/bullhead category)



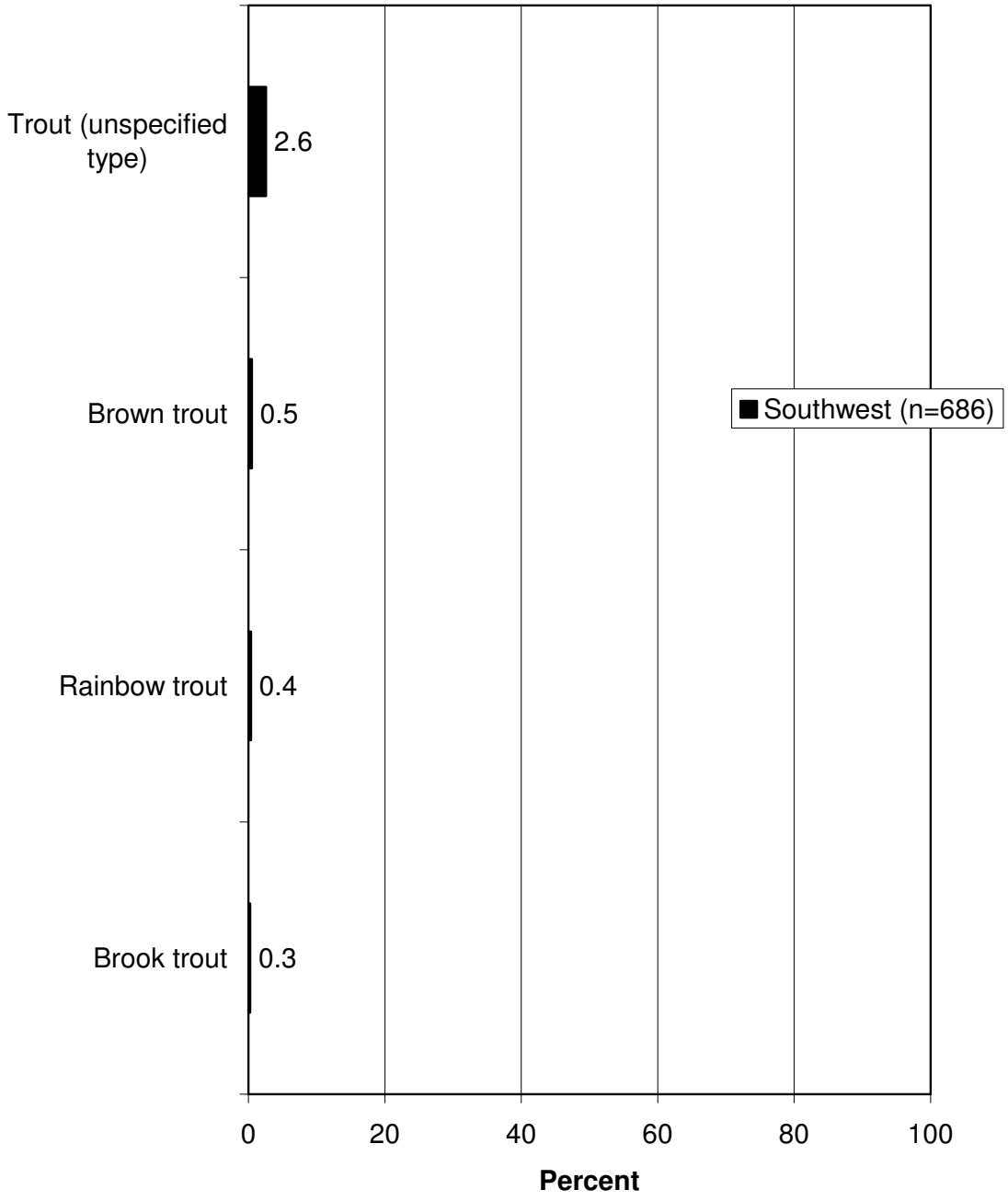
Q41. Which one species do you most often fish for in Iowa? (Panfish category)



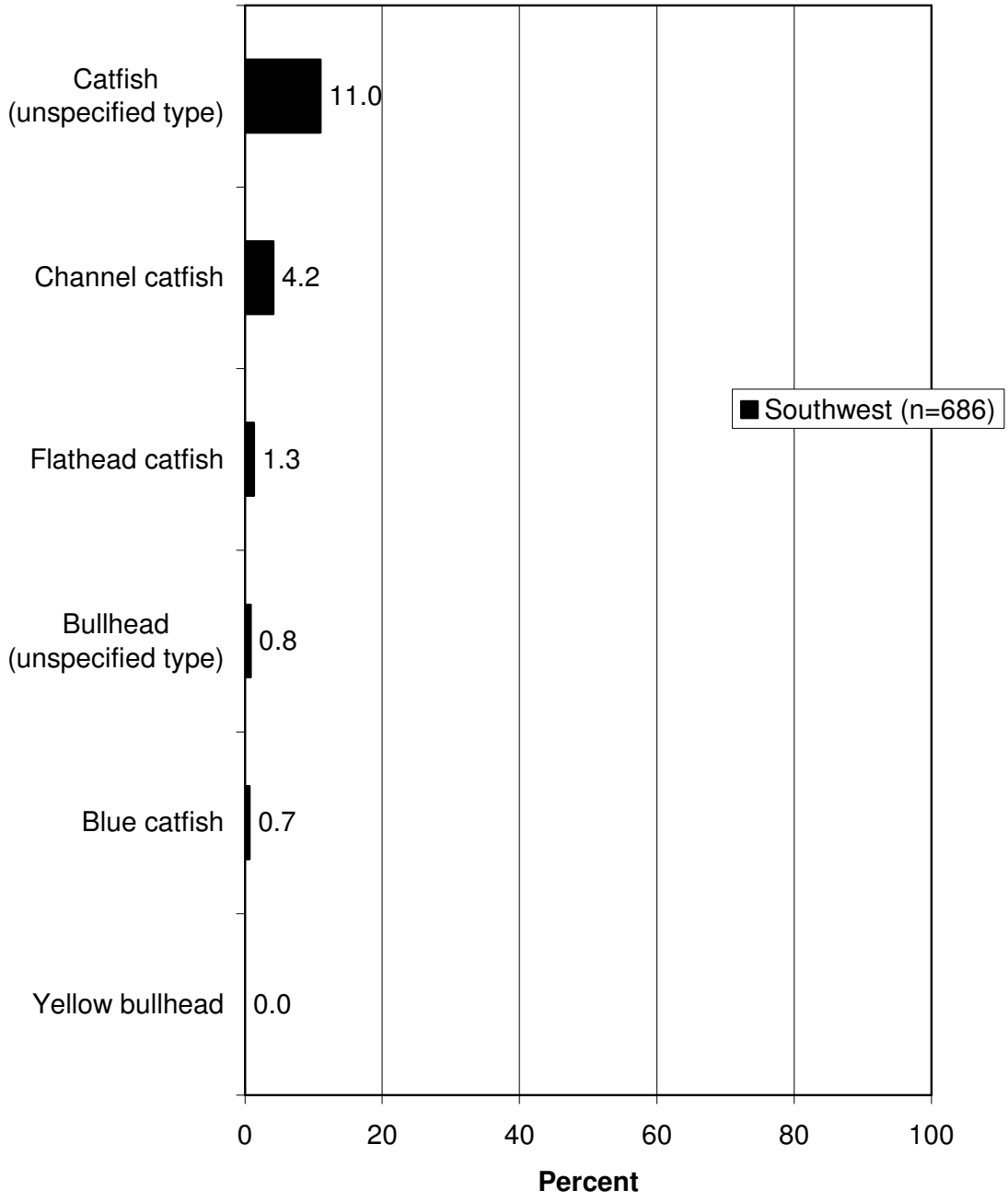
Q41. Which one species do you most often fish for in Iowa? (Bass category)



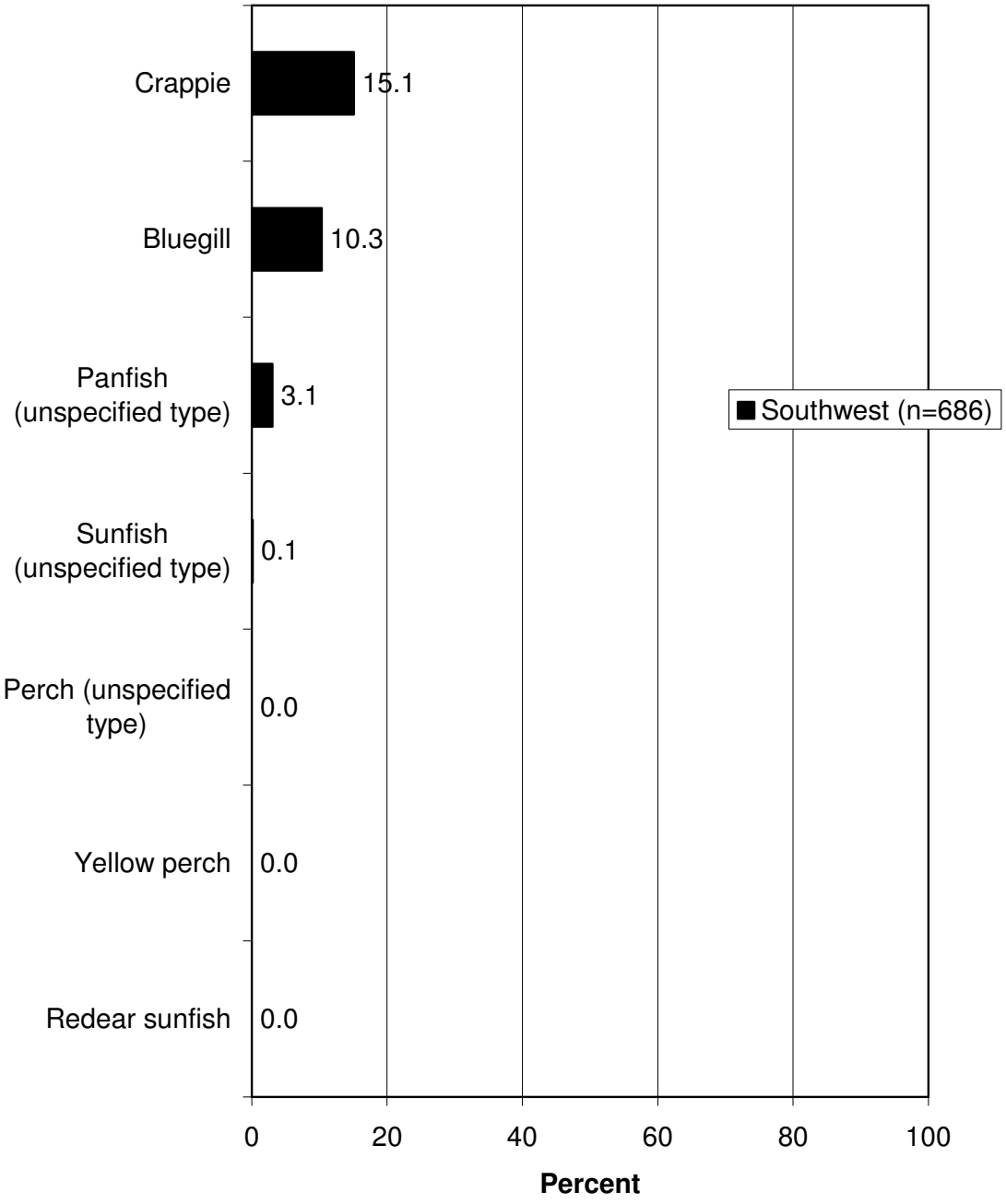
Q41. Which one species do you most often fish for in Iowa? (Trout category)



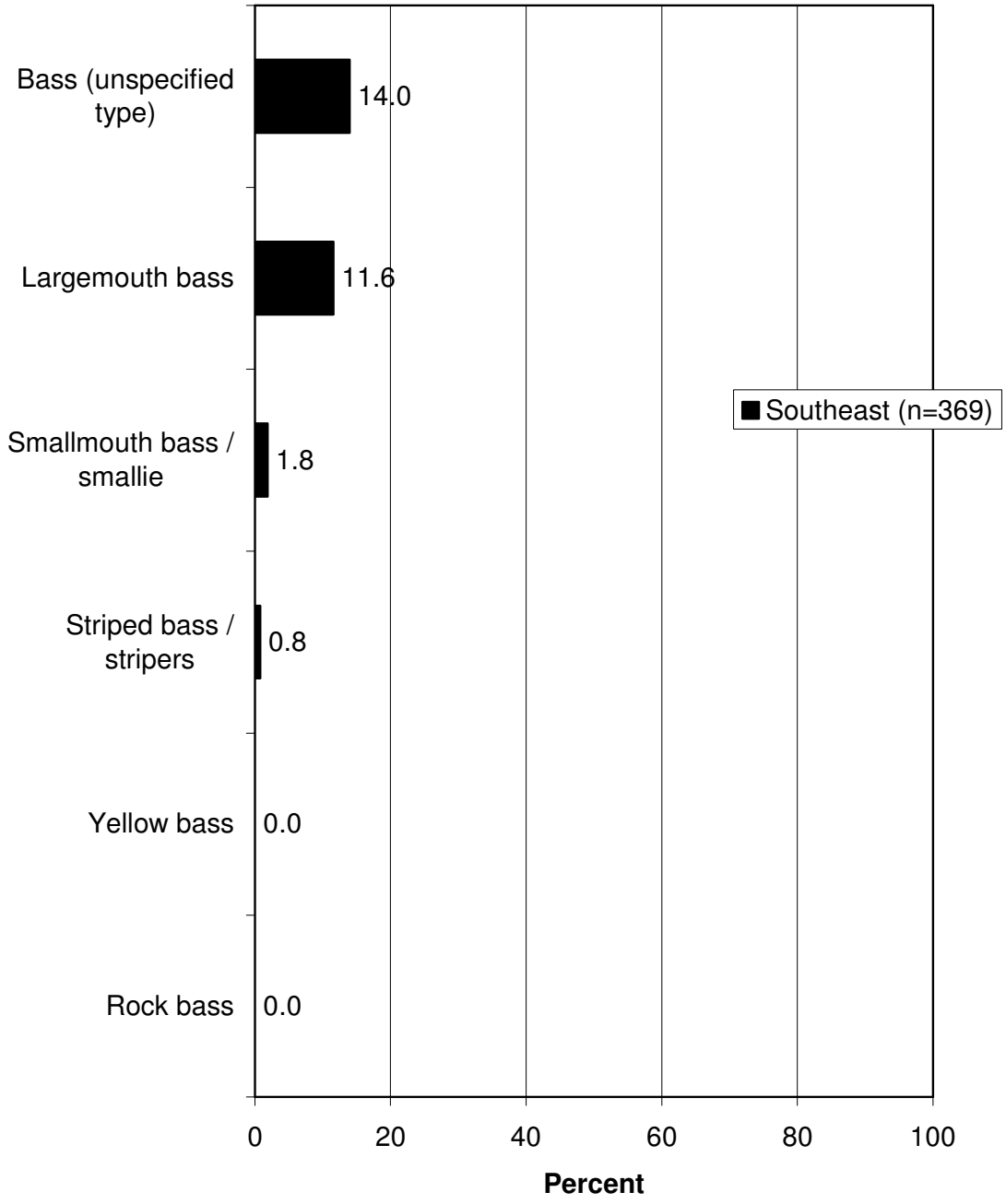
Q41. Which one species do you most often fish for in Iowa? (Catfish/bullhead category)



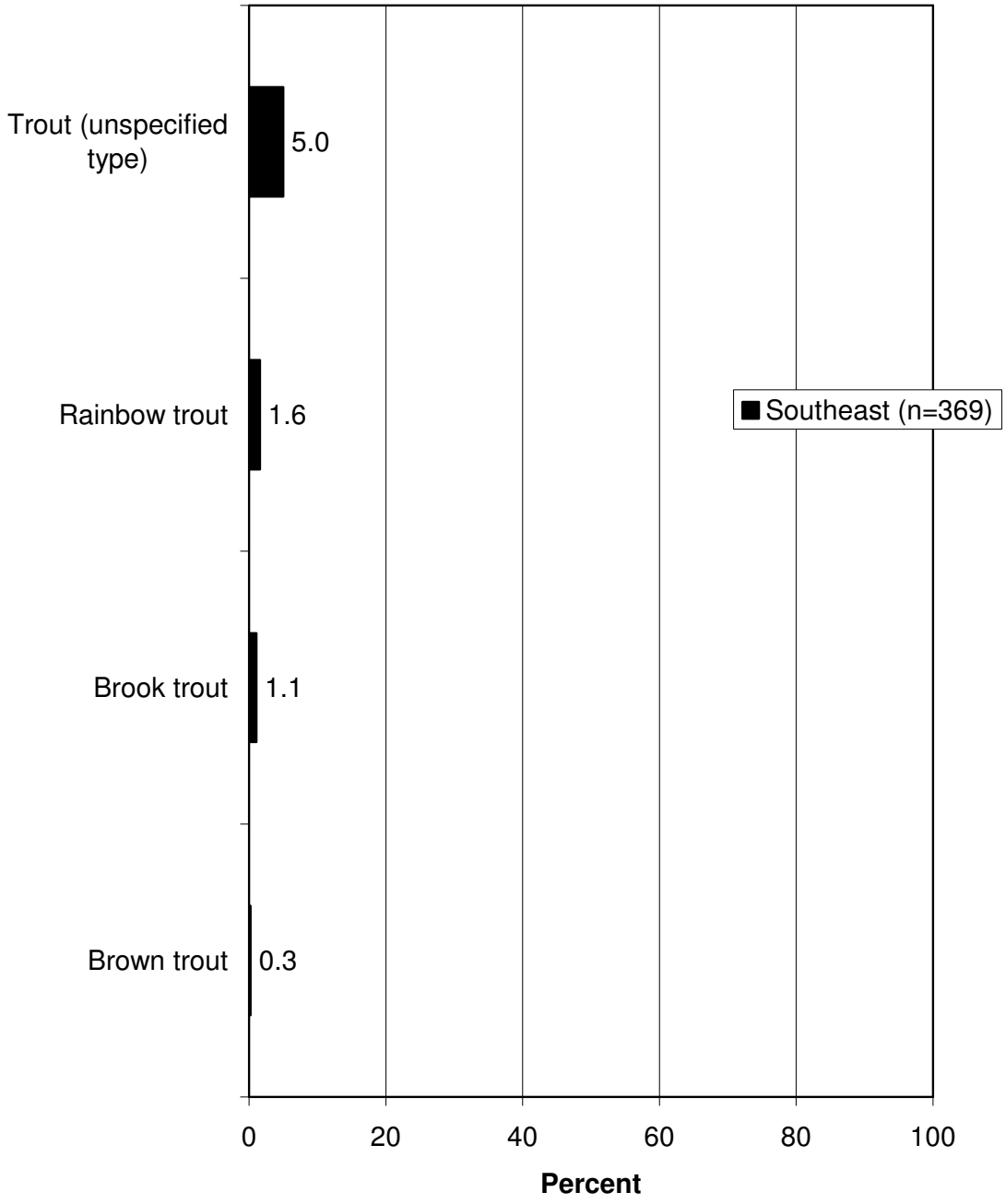
Q41. Which one species do you most often fish for in Iowa? (Panfish category)



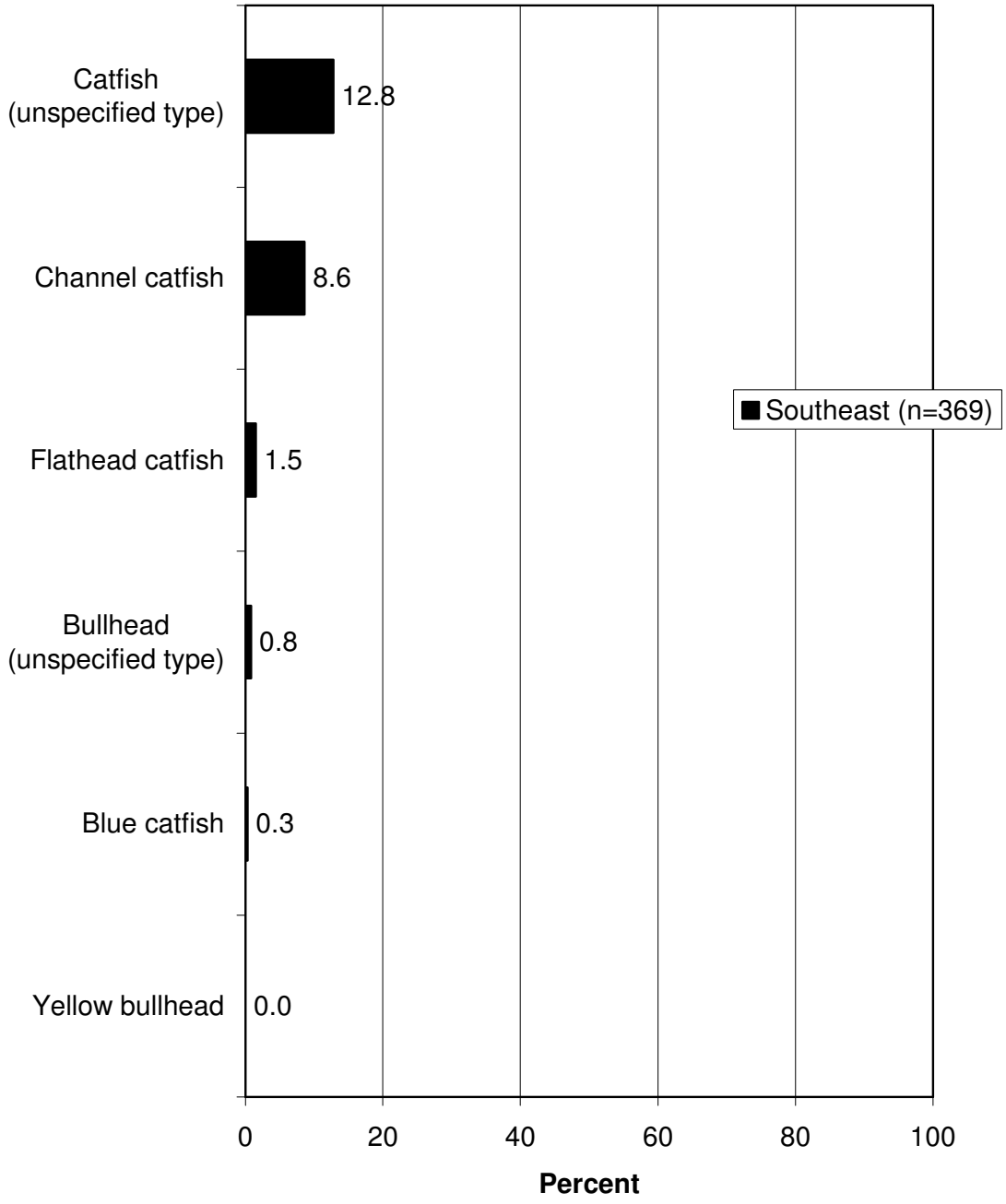
Q41. Which one species do you most often fish for in Iowa? (Bass category)



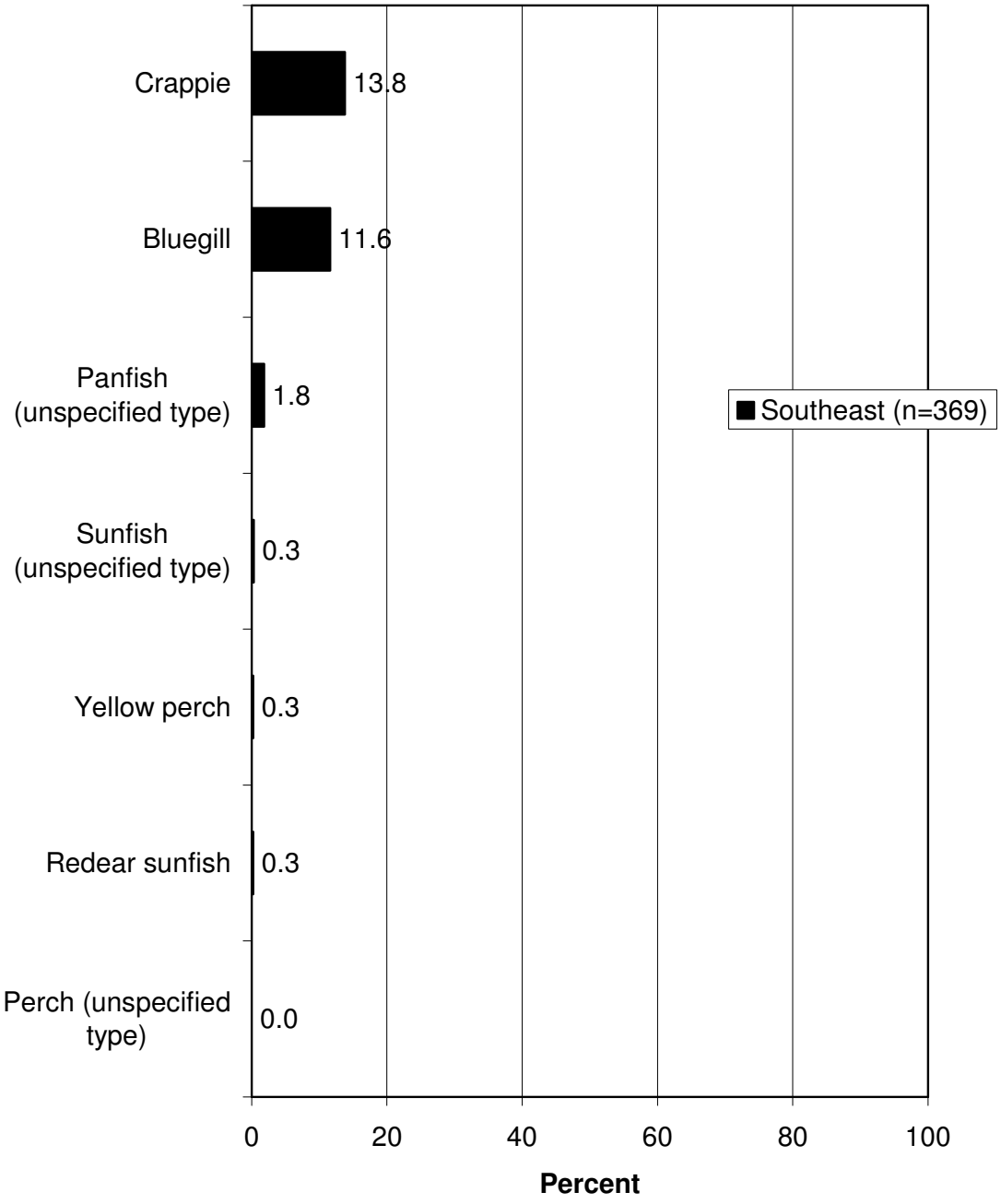
Q41. Which one species do you most often fish for in Iowa?
(Trout category)



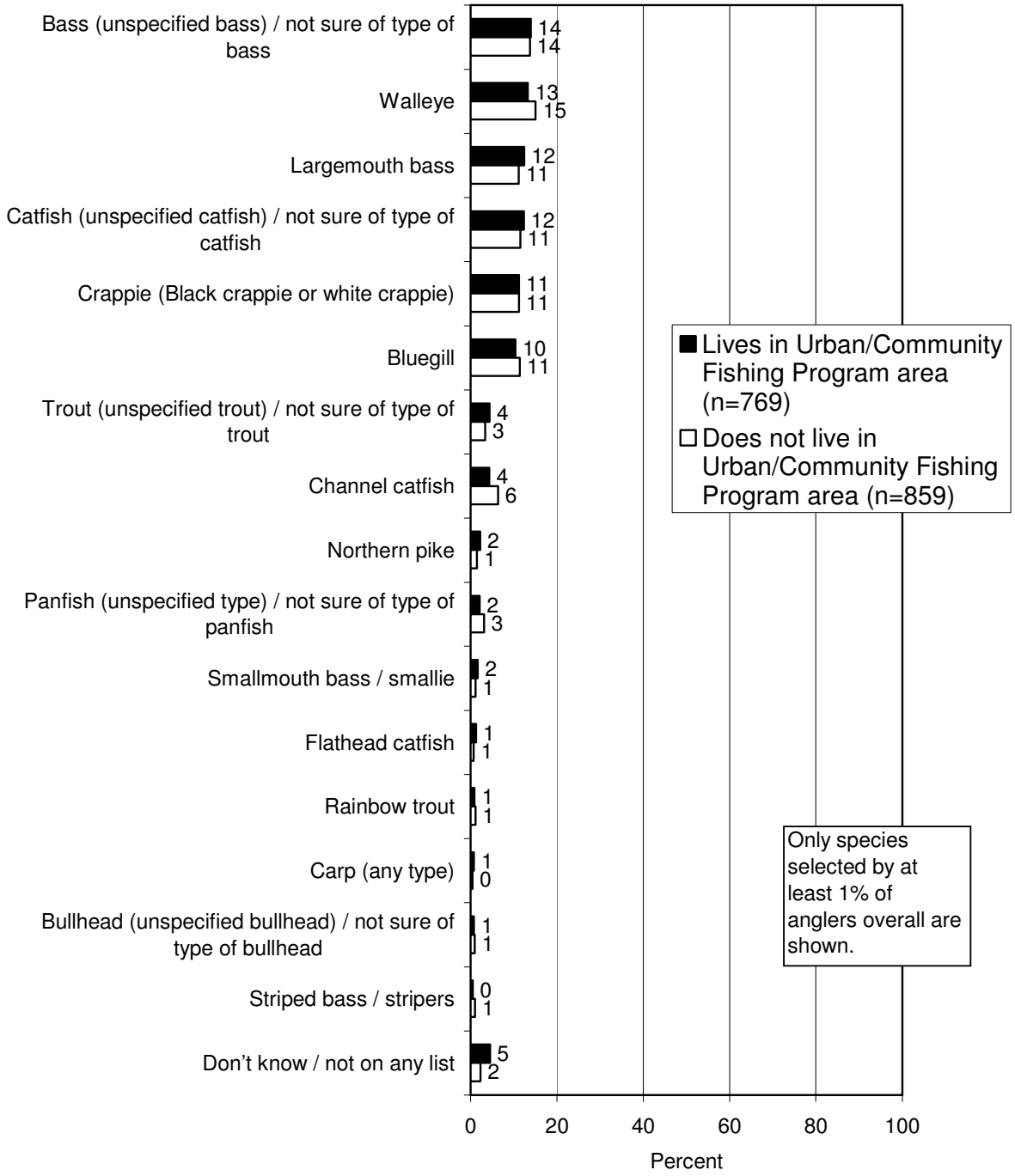
Q41. Which one species do you most often fish for in Iowa? (Catfish/bullhead category)



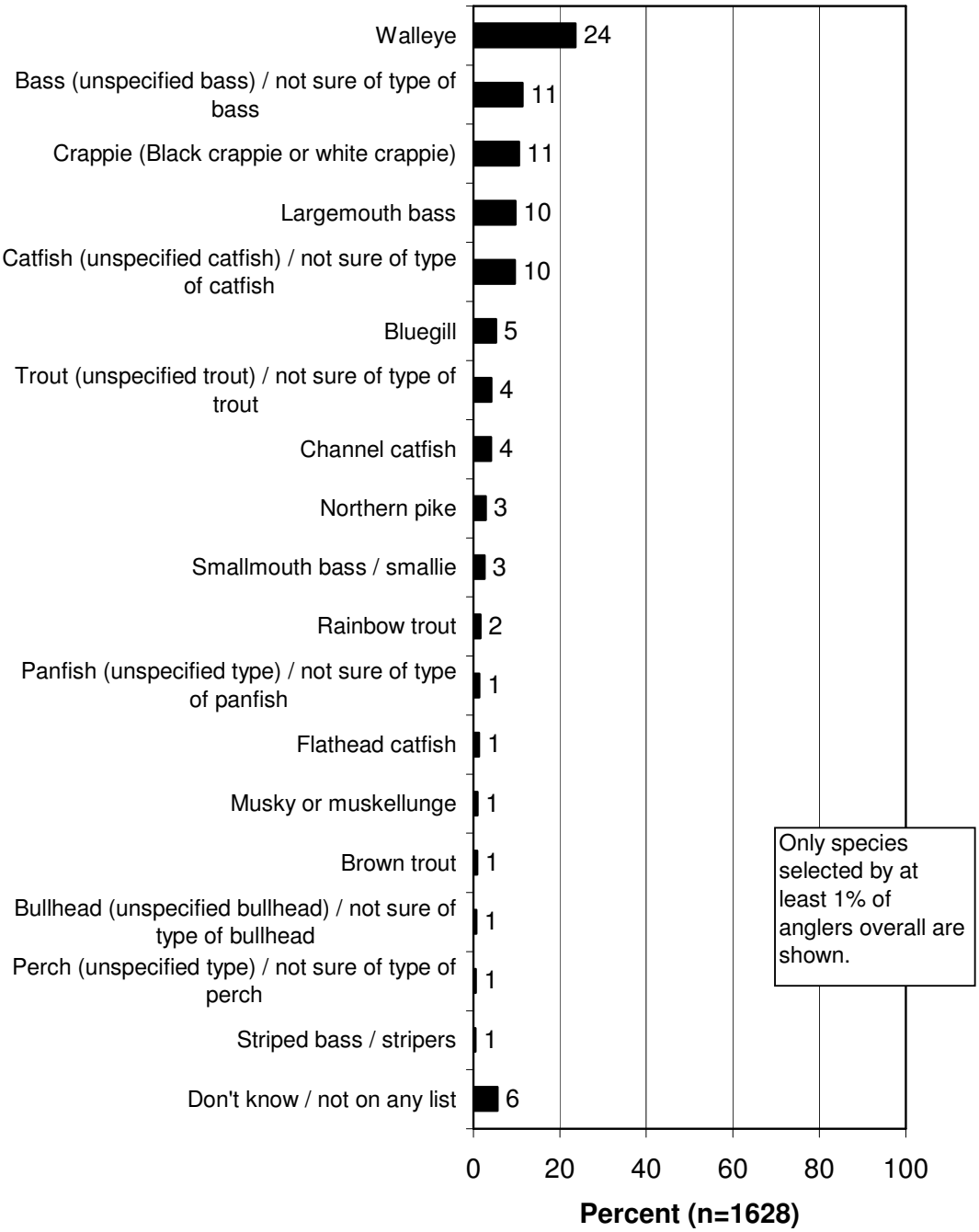
Q41. Which one species do you most often fish for in Iowa? (Panfish category)



Q41. Which one species do you most often fish for in Iowa?

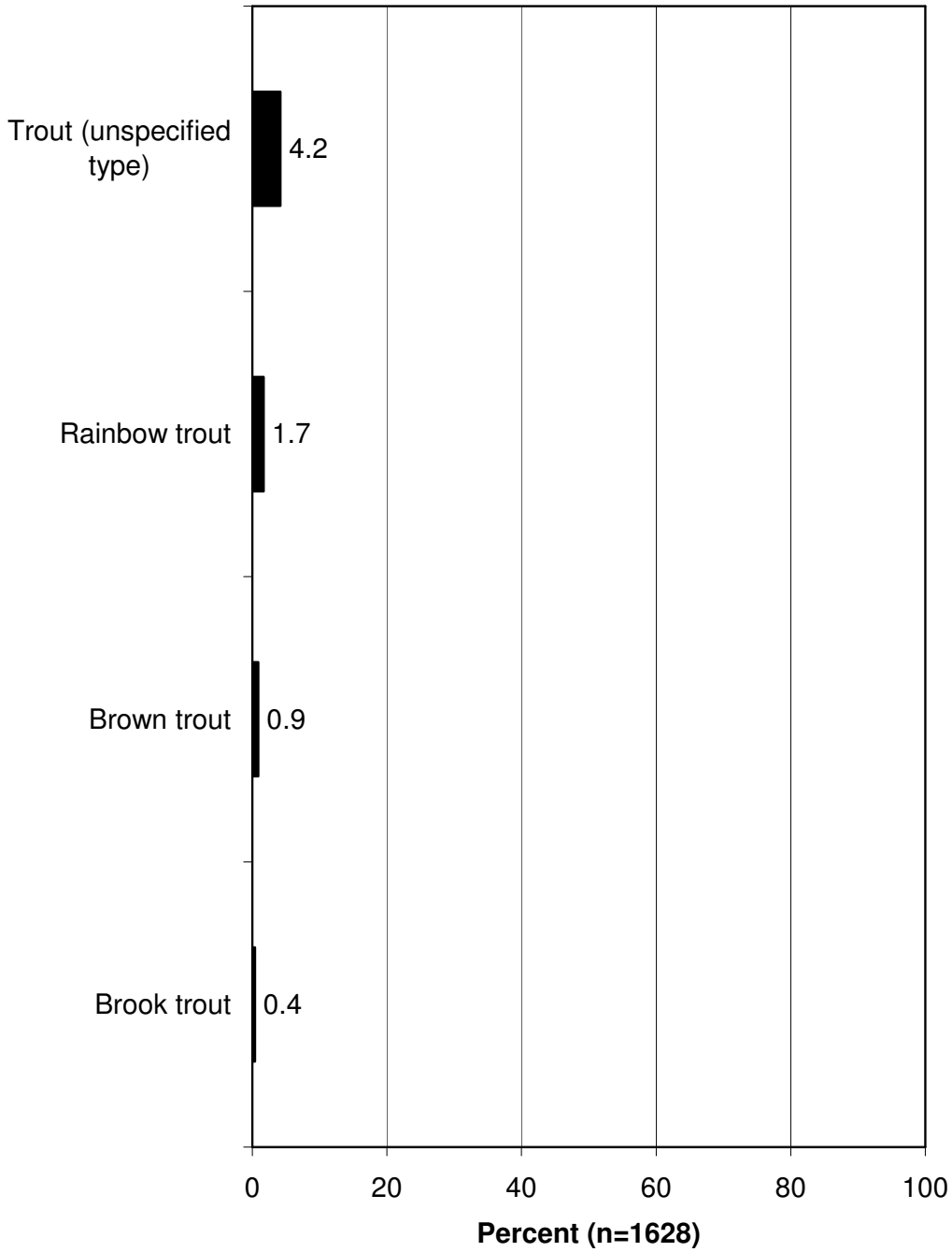


Q44. Which one species would you most prefer to fish for? (Top responses)

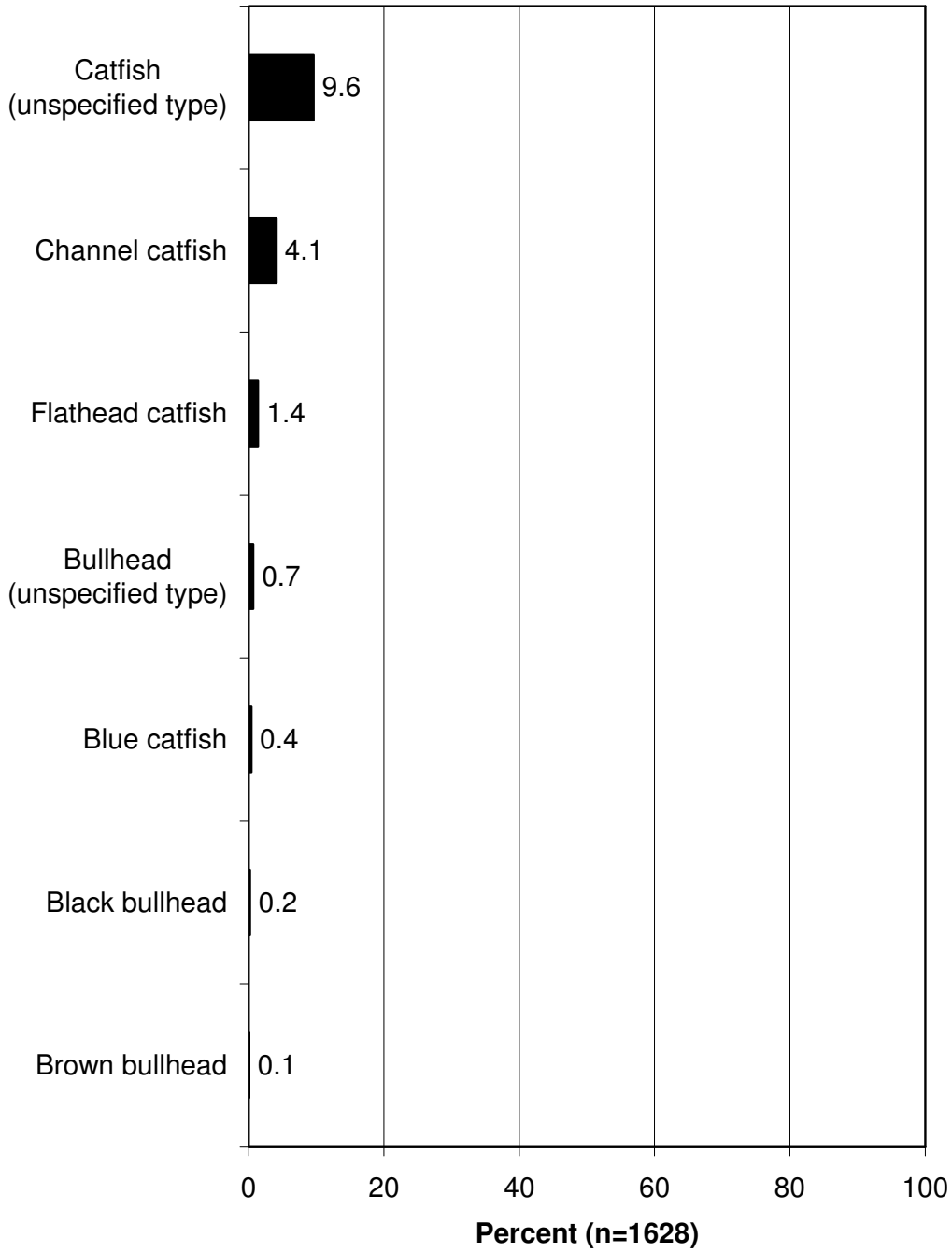


Q44. Which one species would you most prefer to fish for?
(Bass category)

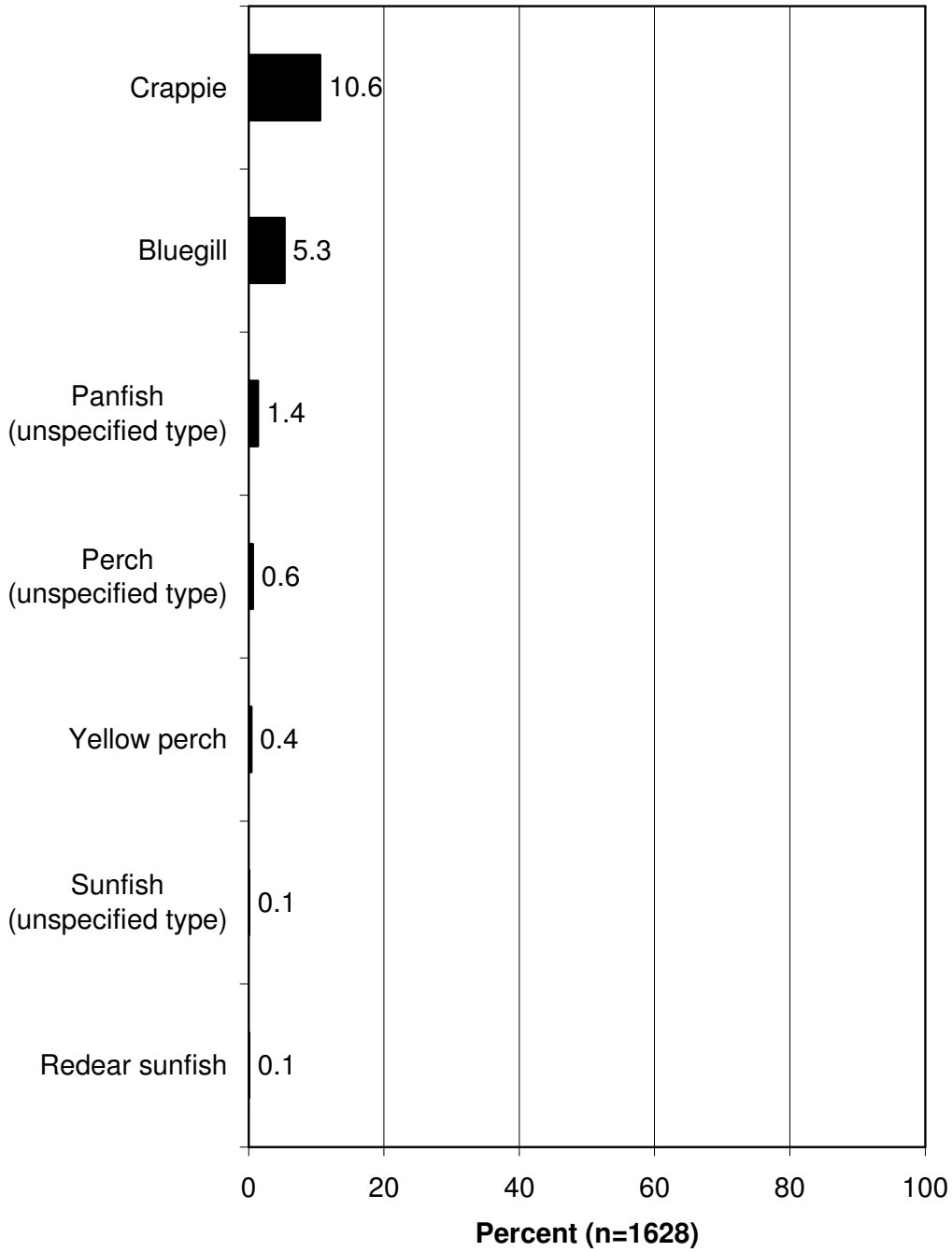
Q44. Which one species would you most prefer to fish for? (Trout category)



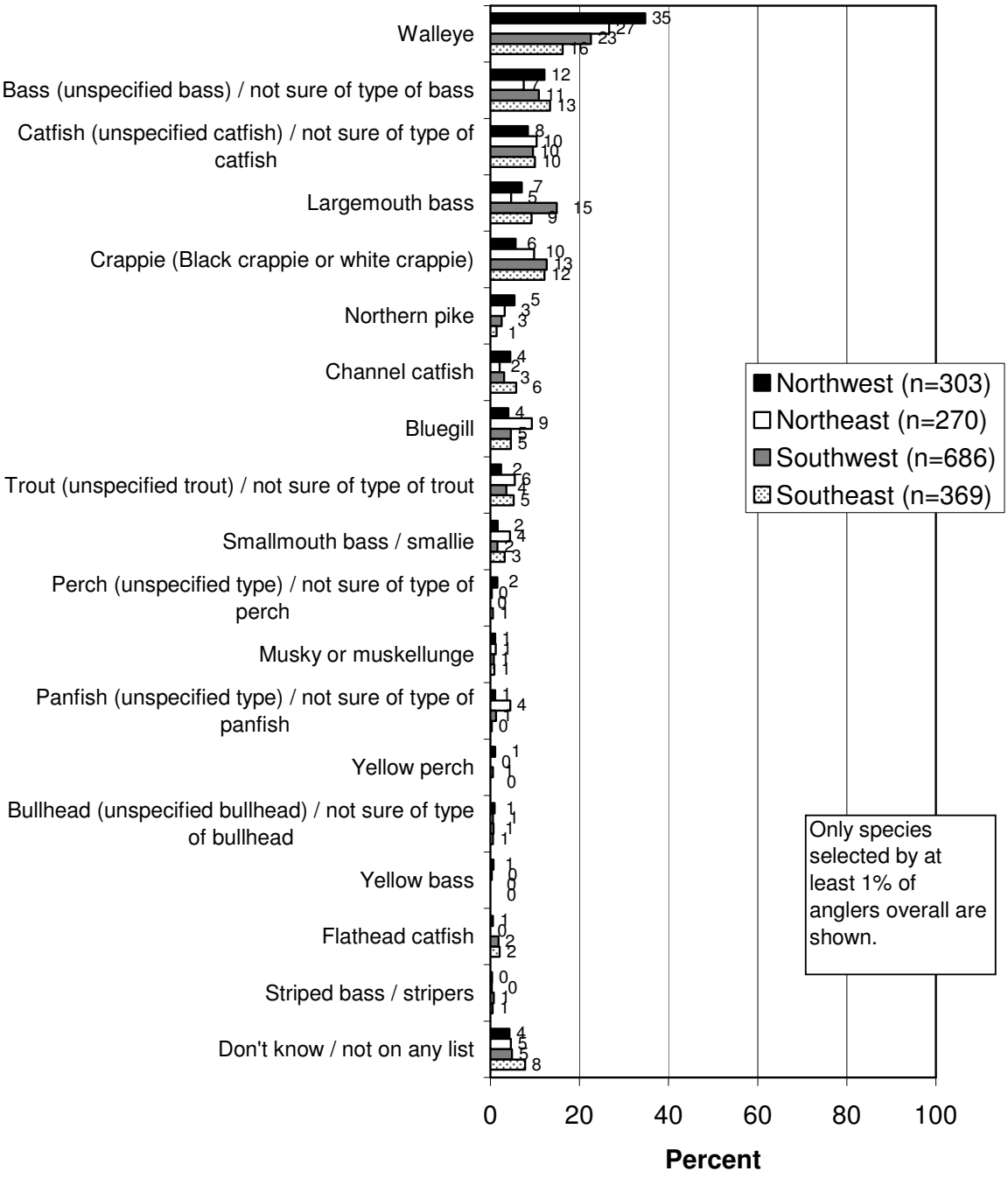
Q44. Which one species would you most prefer to fish for? (Catfish/bullhead category)



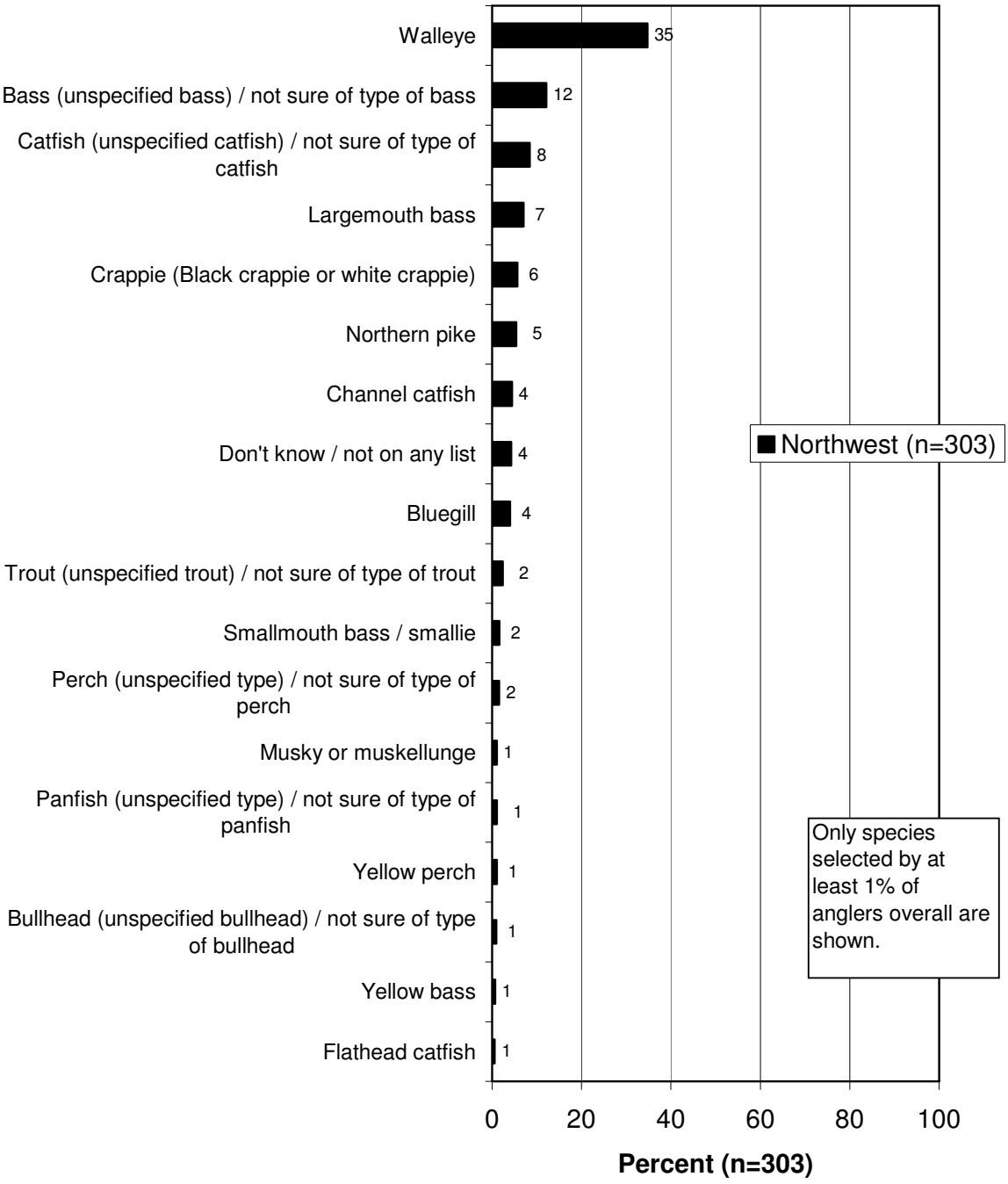
Q44. Which one species would you most prefer to fish for? (Panfish category)



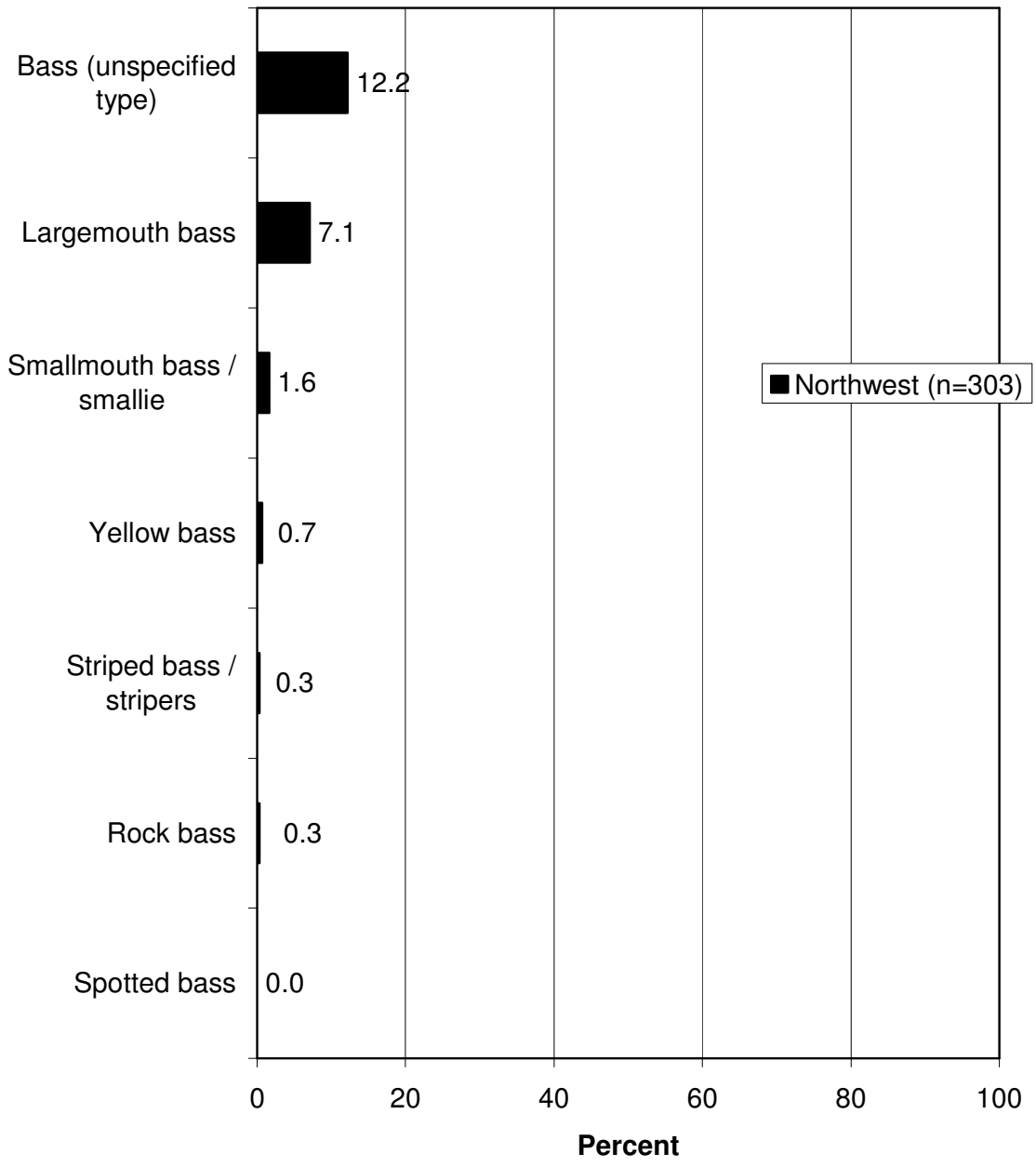
Q44. Which one species would you most prefer to fish for?



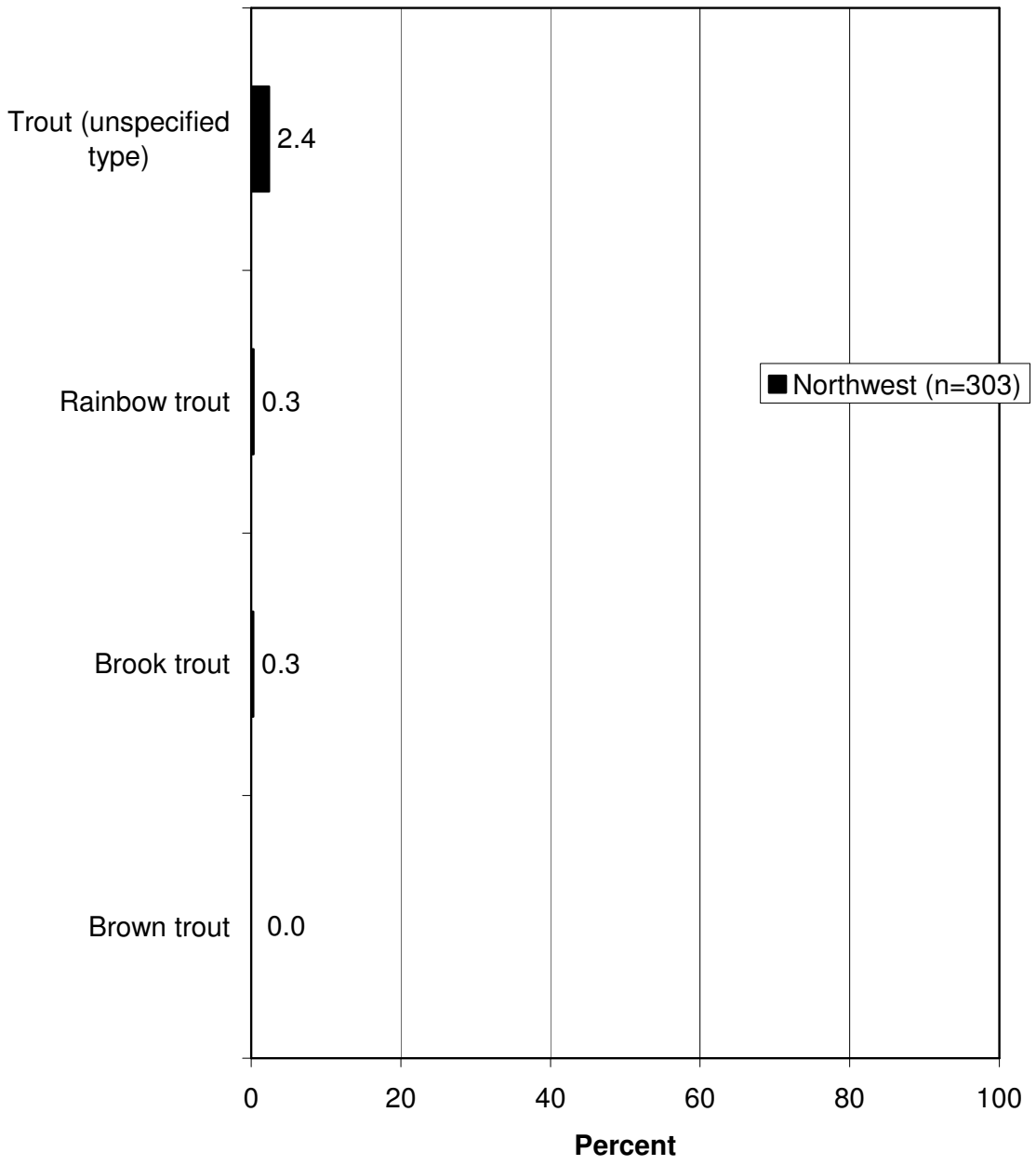
Q44. Which one species would you most prefer to fish for? (Among Northwest Region residents.)



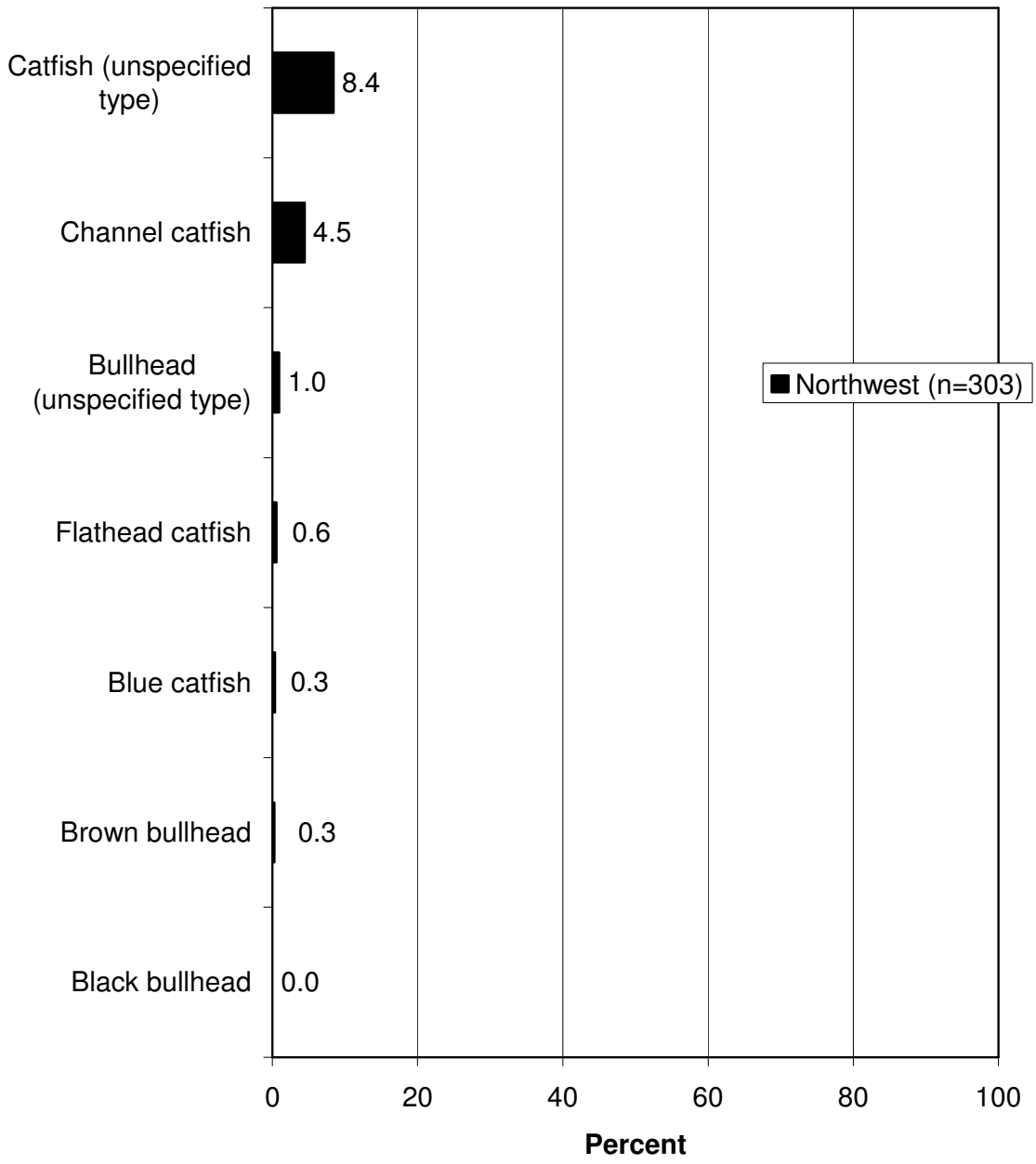
Q44. Which one species would you most prefer to fish for? (Among Northwest Region residents.) (Bass category)



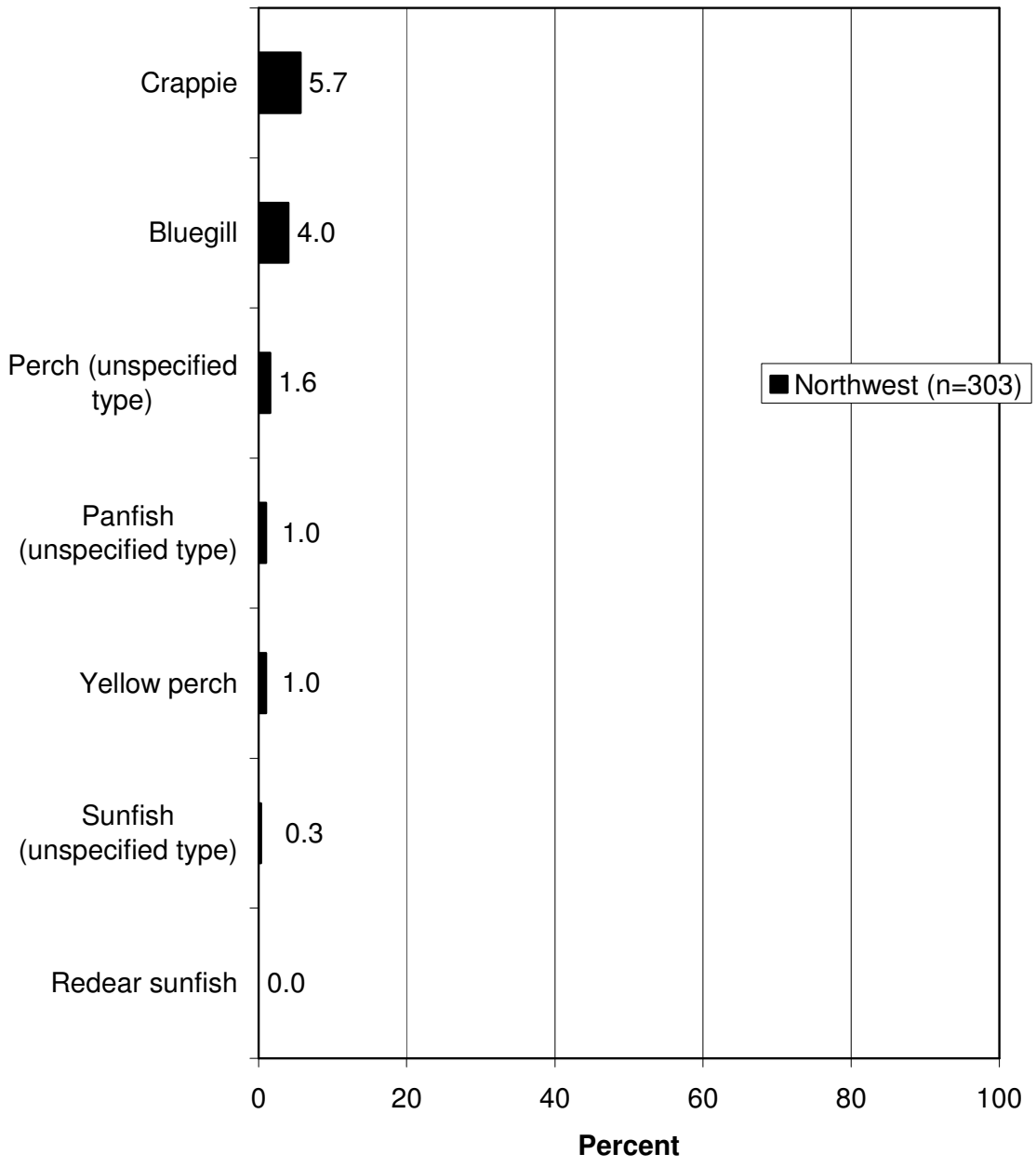
Q44. Which one species would you most prefer to fish for? (Among Northwest Region residents.) (Trout category)



Q44. Which one species would you most prefer to fish for? (Among Northwest Region residents.) (Catfish/bullhead category)

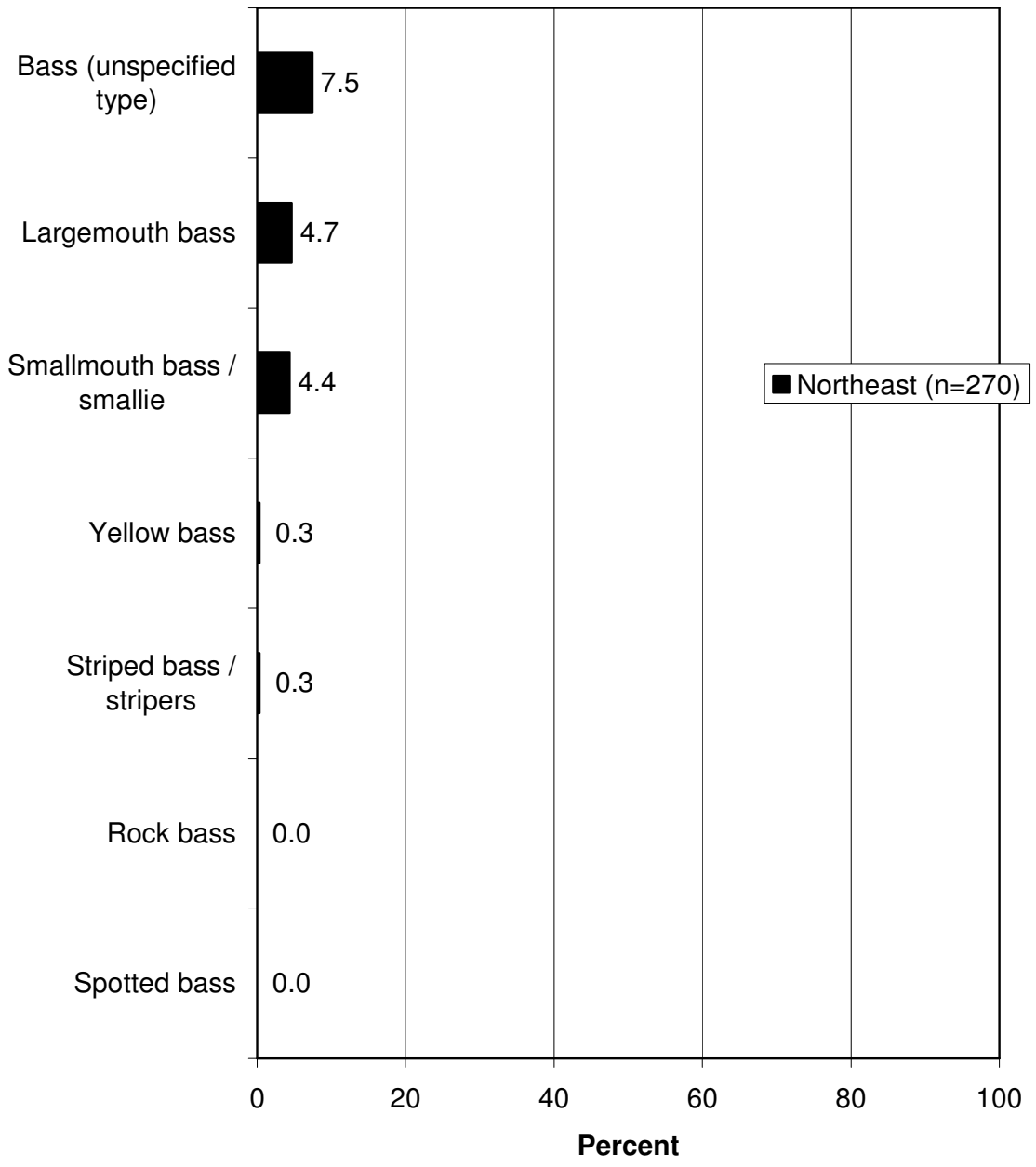


Q44. Which one species would you most prefer to fish for? (Among Northwest Region residents.) (Panfish category)

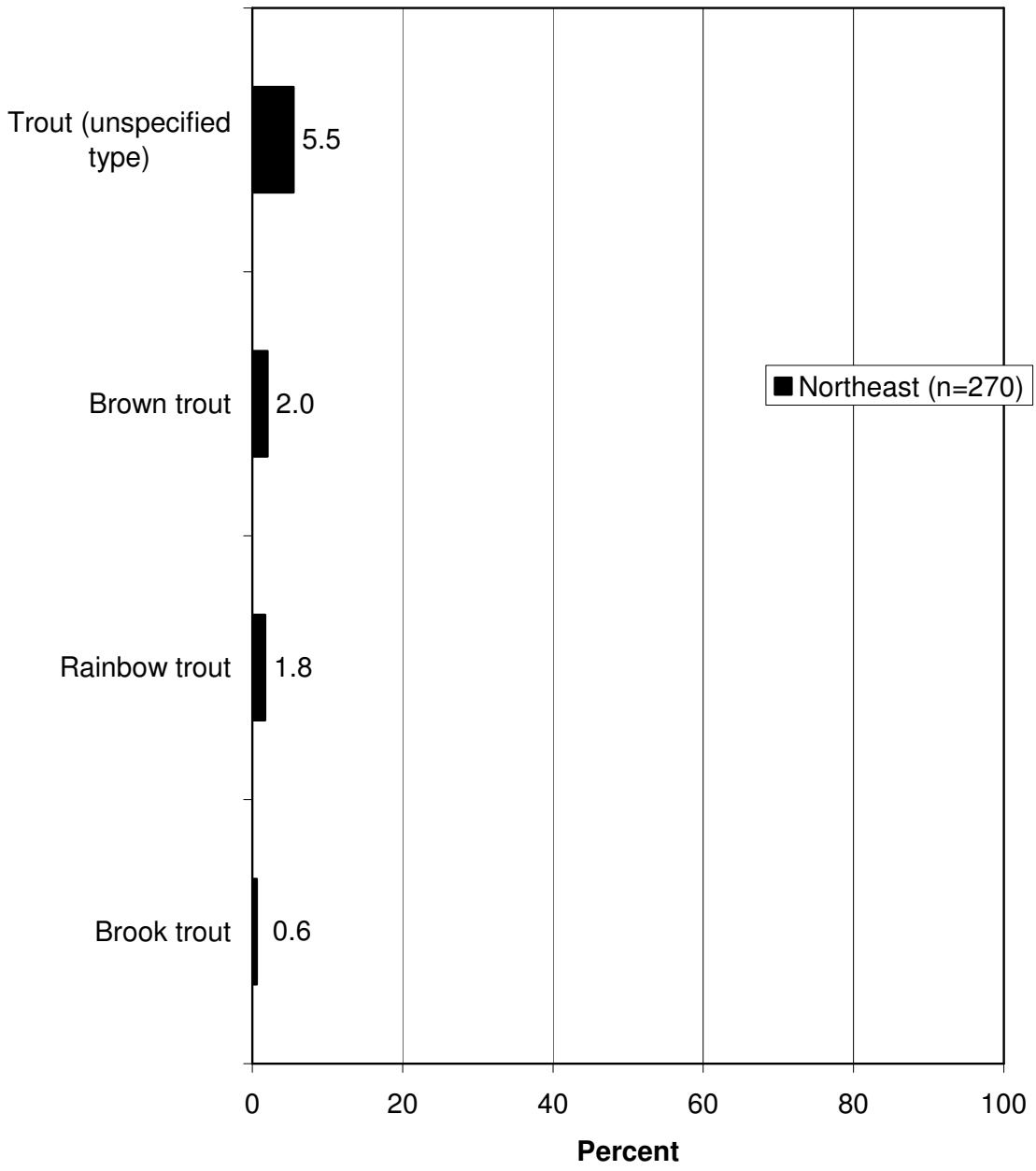


Q44. Which one species would you most prefer to fish for? (Among Northeast Region residents.)

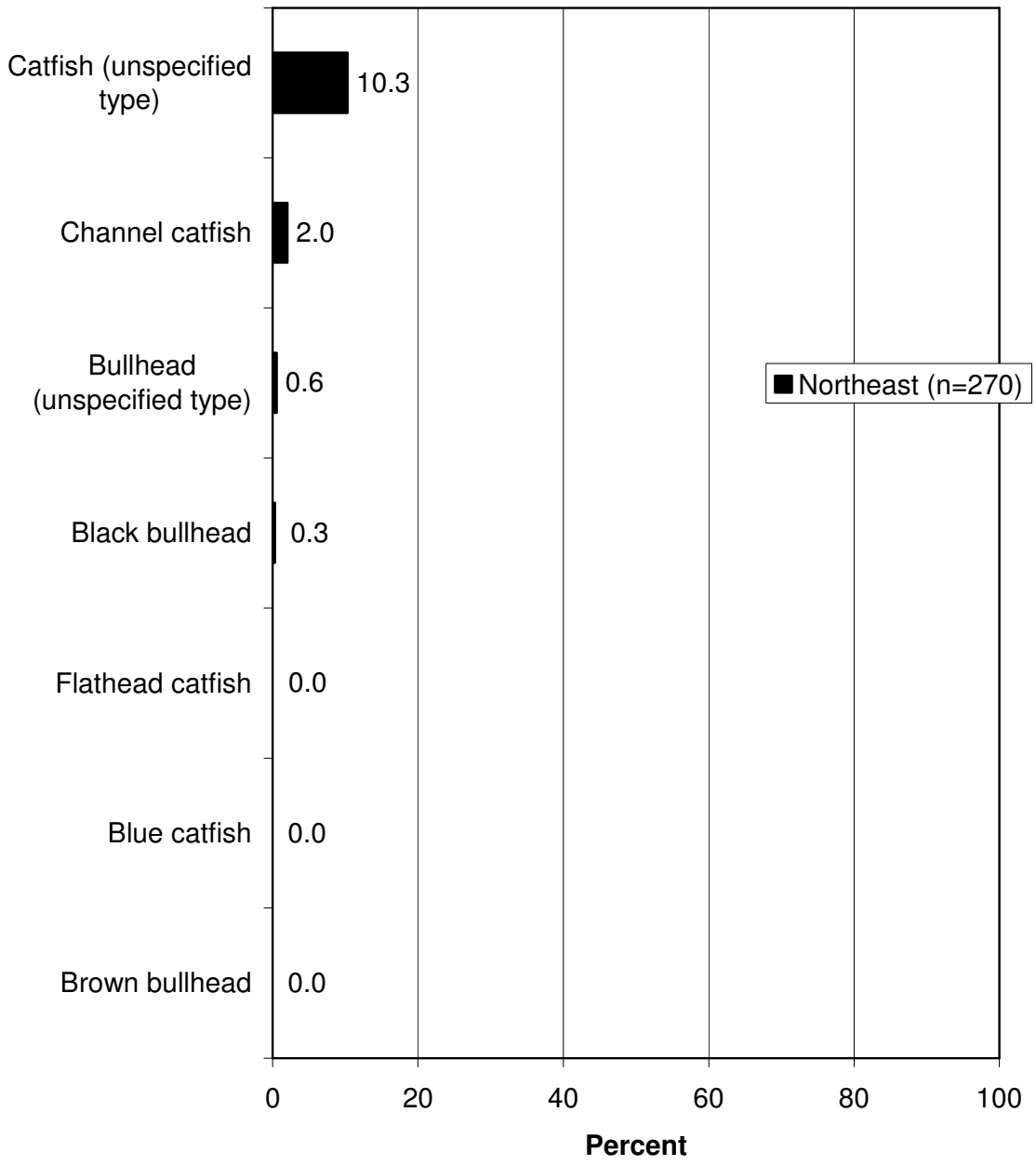
Q44. Which one species would you most prefer to fish for? (Among Northeast Region residents.) (Bass category)



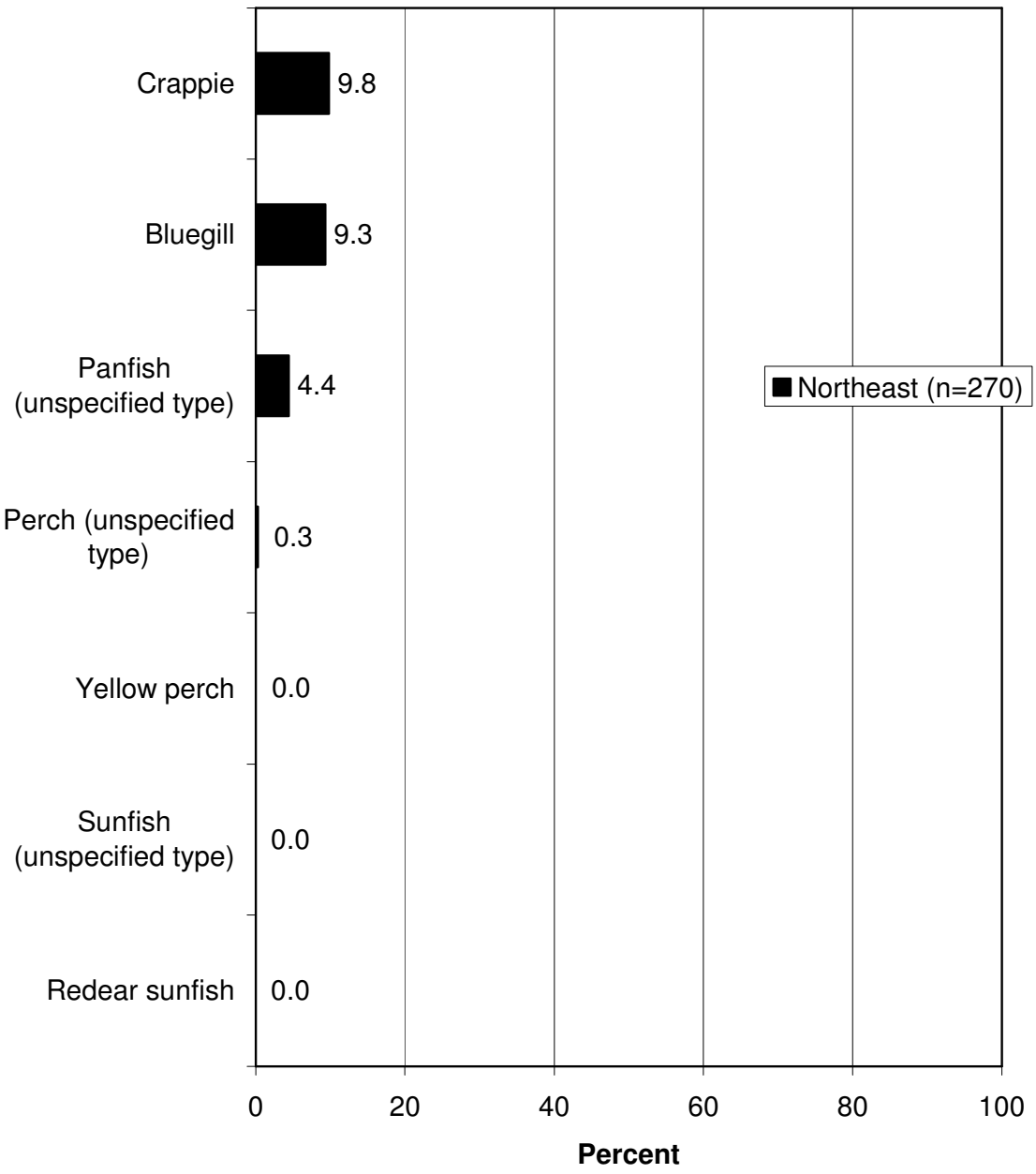
Q44. Which one species would you most prefer to fish for? (Among Northeast Region residents.) (Trout category)



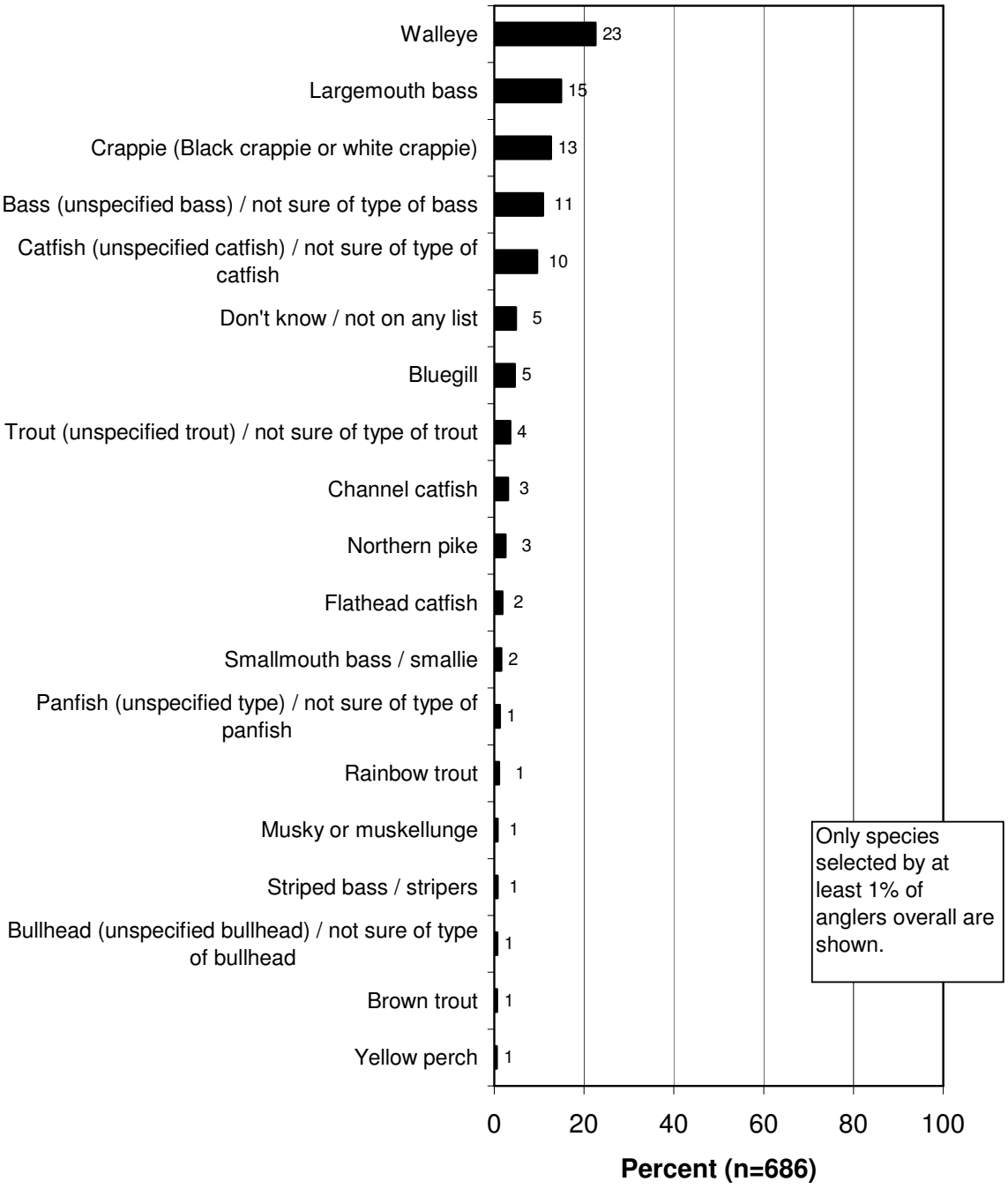
Q44. Which one species would you most prefer to fish for? (Among Northeast Region residents.) (Catfish/bullhead category)



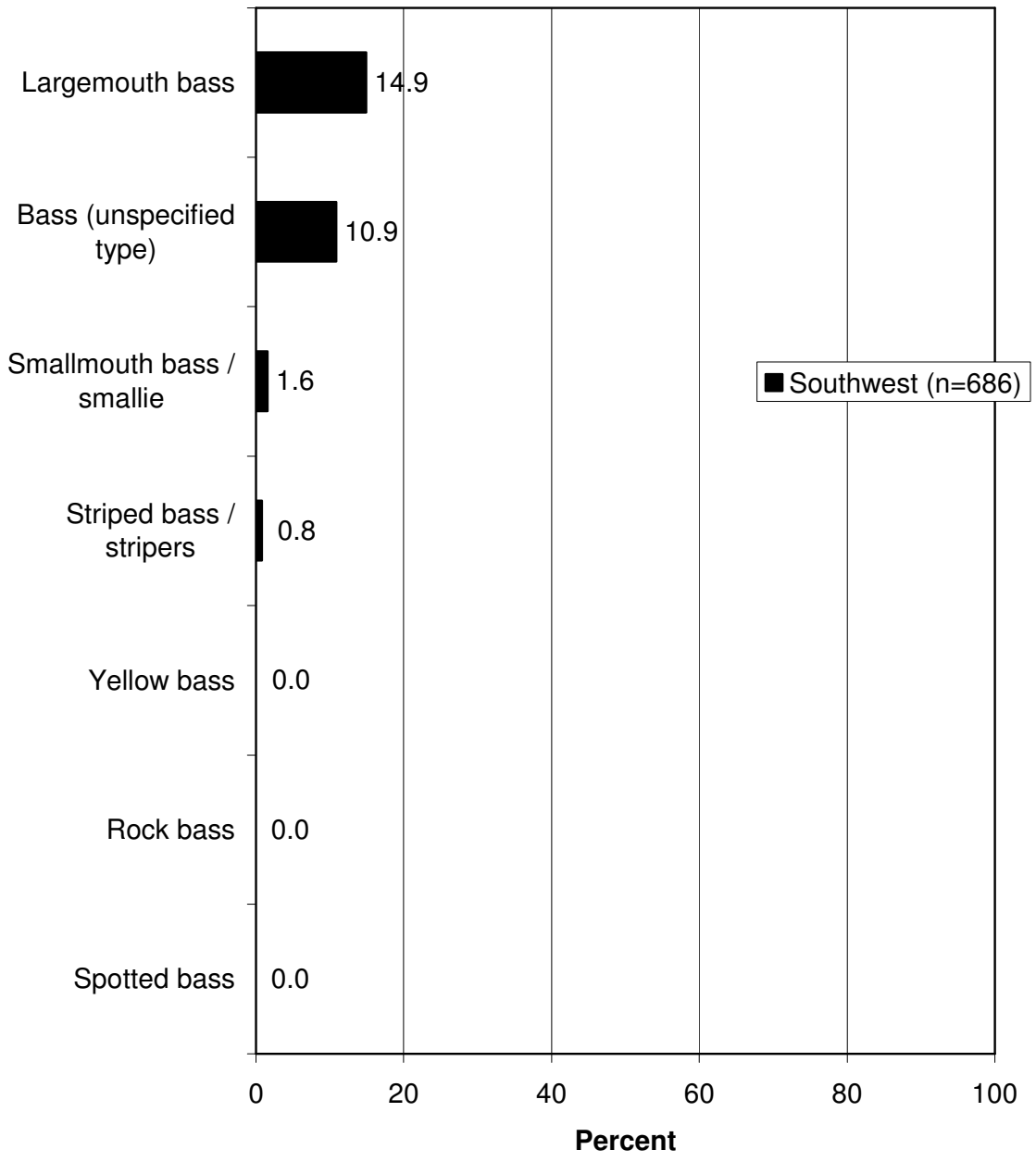
Q44. Which one species would you most prefer to fish for? (Among Northeast Region residents.) (Panfish category)



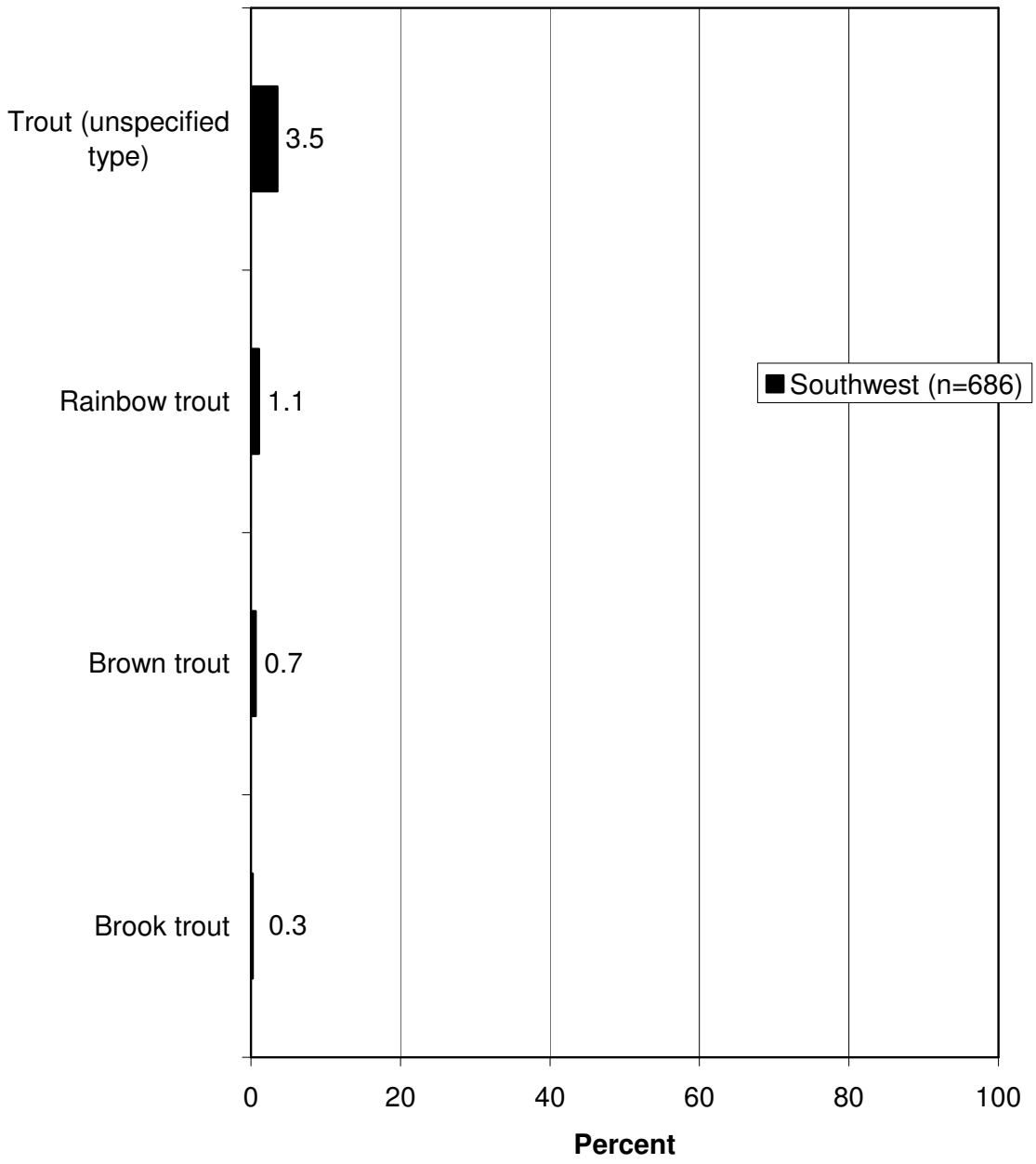
Q44. Which one species would you most prefer to fish for? (Among Southwest Region residents.)



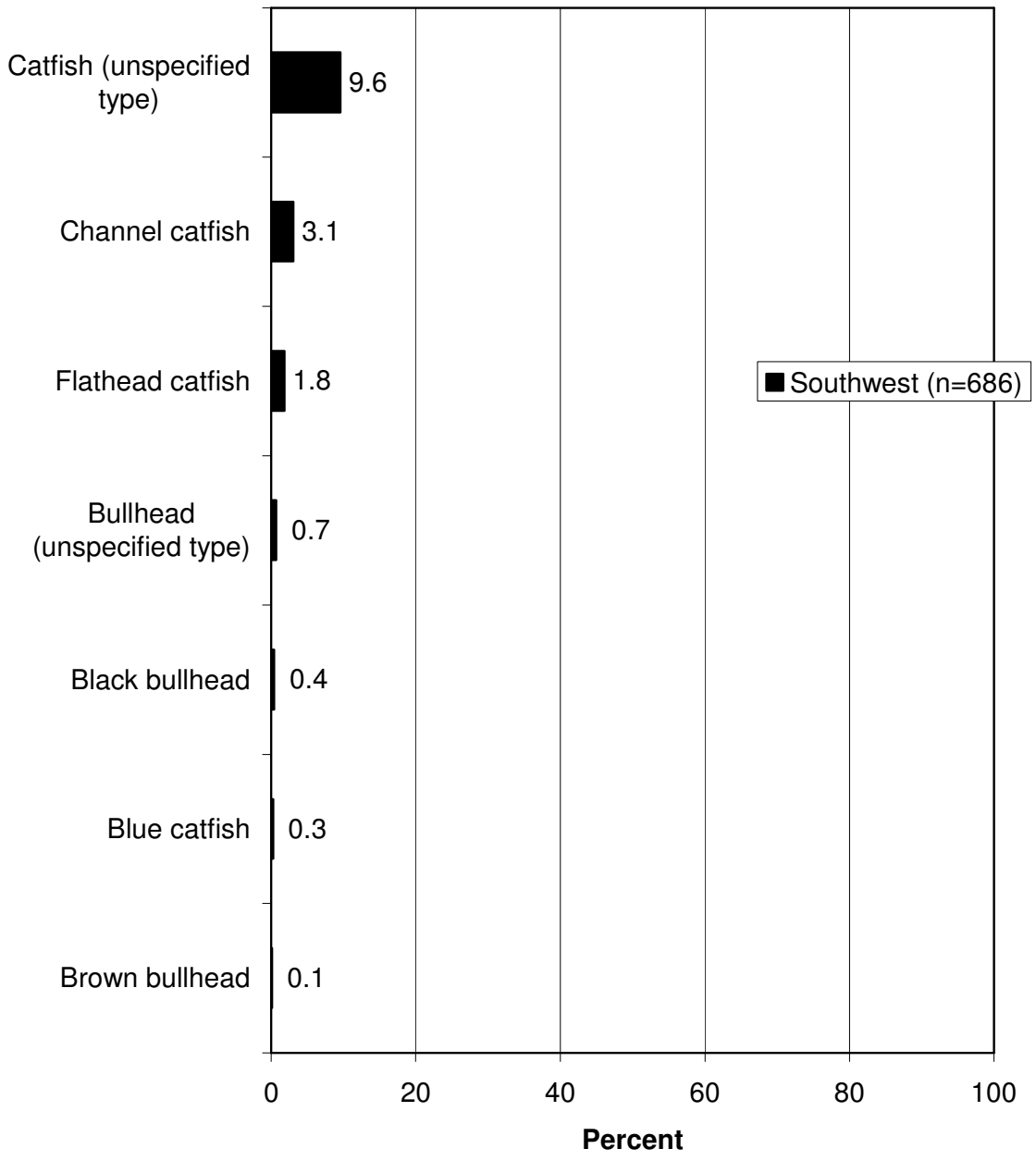
Q44. Which one species would you most prefer to fish for? (Among Southwest Region residents.) (Bass category)



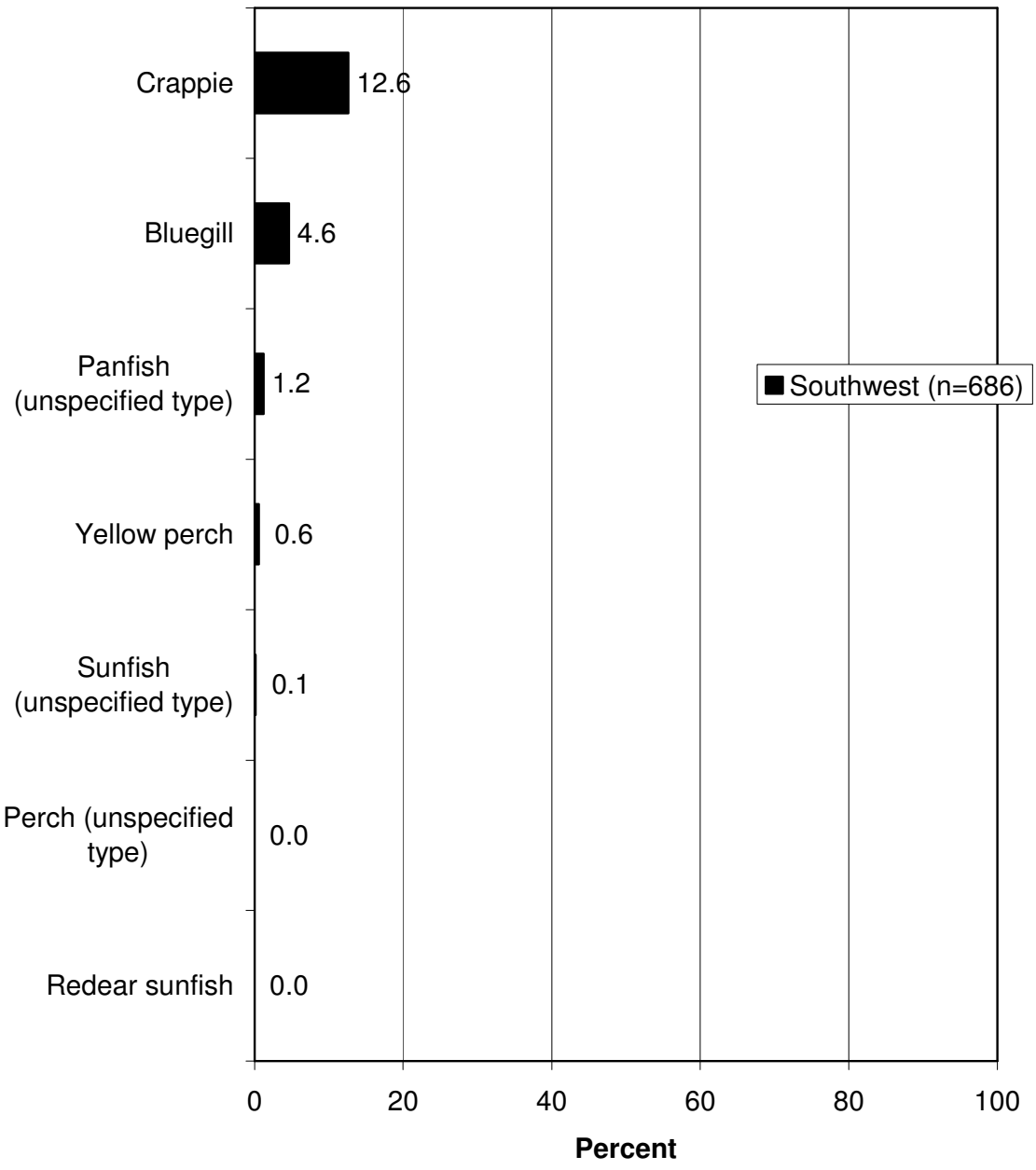
Q44. Which one species would you most prefer to fish for? (Among Southwest Region residents.) (Trout category)



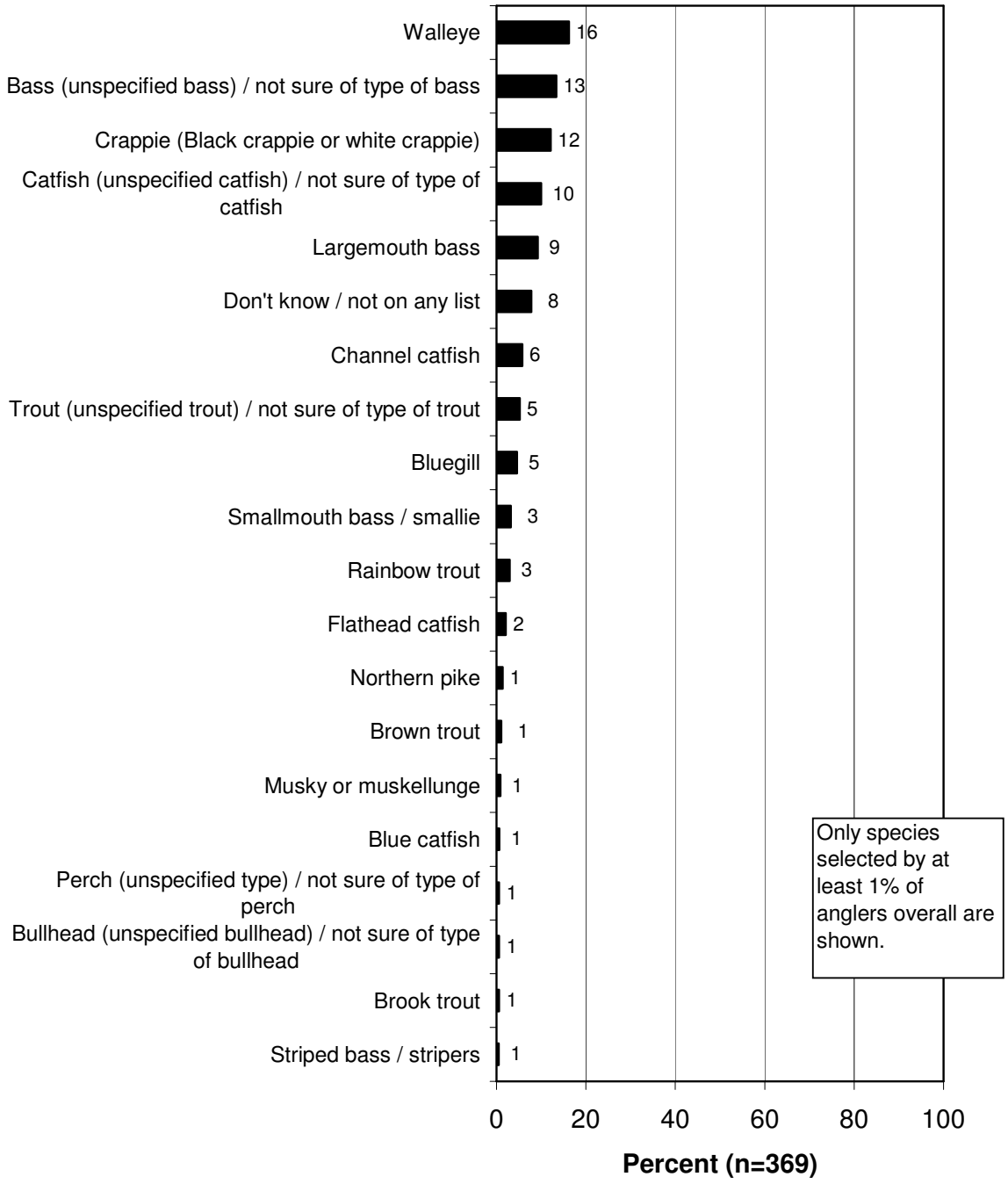
Q44. Which one species would you most prefer to fish for? (Among Southwest Region residents.) (Catfish/bullhead category)



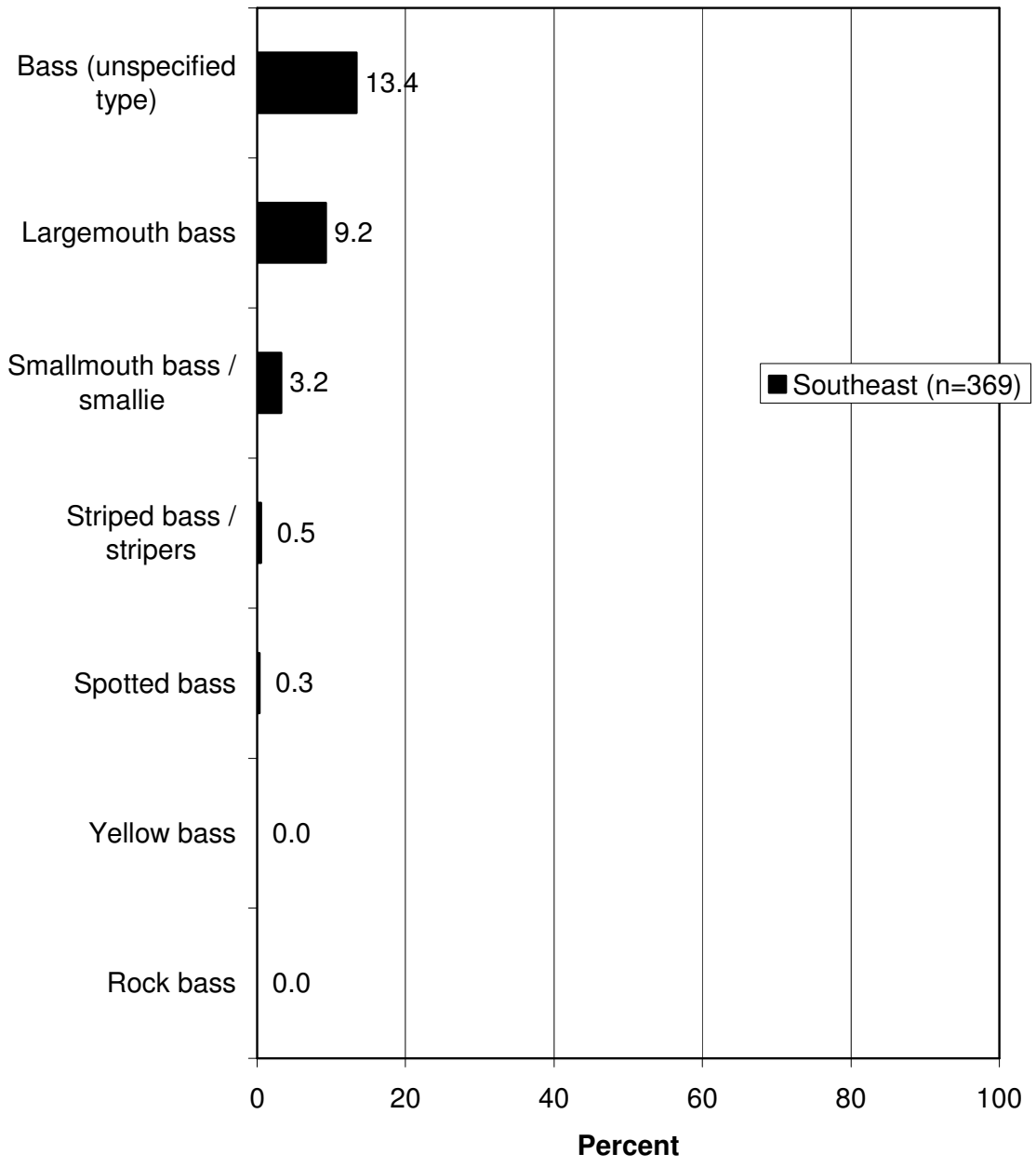
Q44. Which one species would you most prefer to fish for? (Among Southwest Region residents.) (Panfish category)



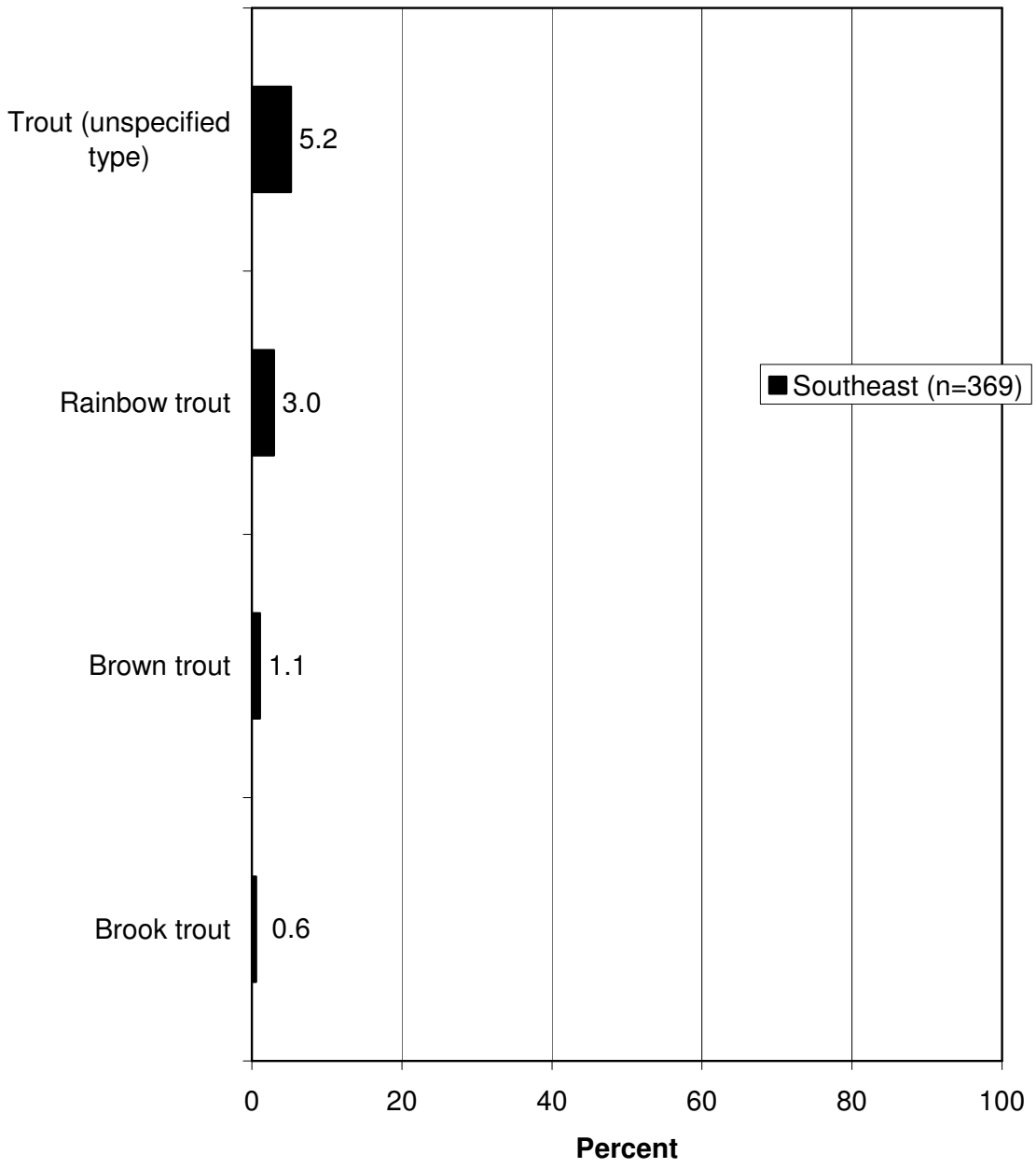
Q44. Which one species would you most prefer to fish for? (Among Southeast Region residents.)



Q44. Which one species would you most prefer to fish for? (Among Southeast Region residents.) (Bass category)



Q44. Which one species would you most prefer to fish for? (Among Southeast Region residents.) (Trout category)



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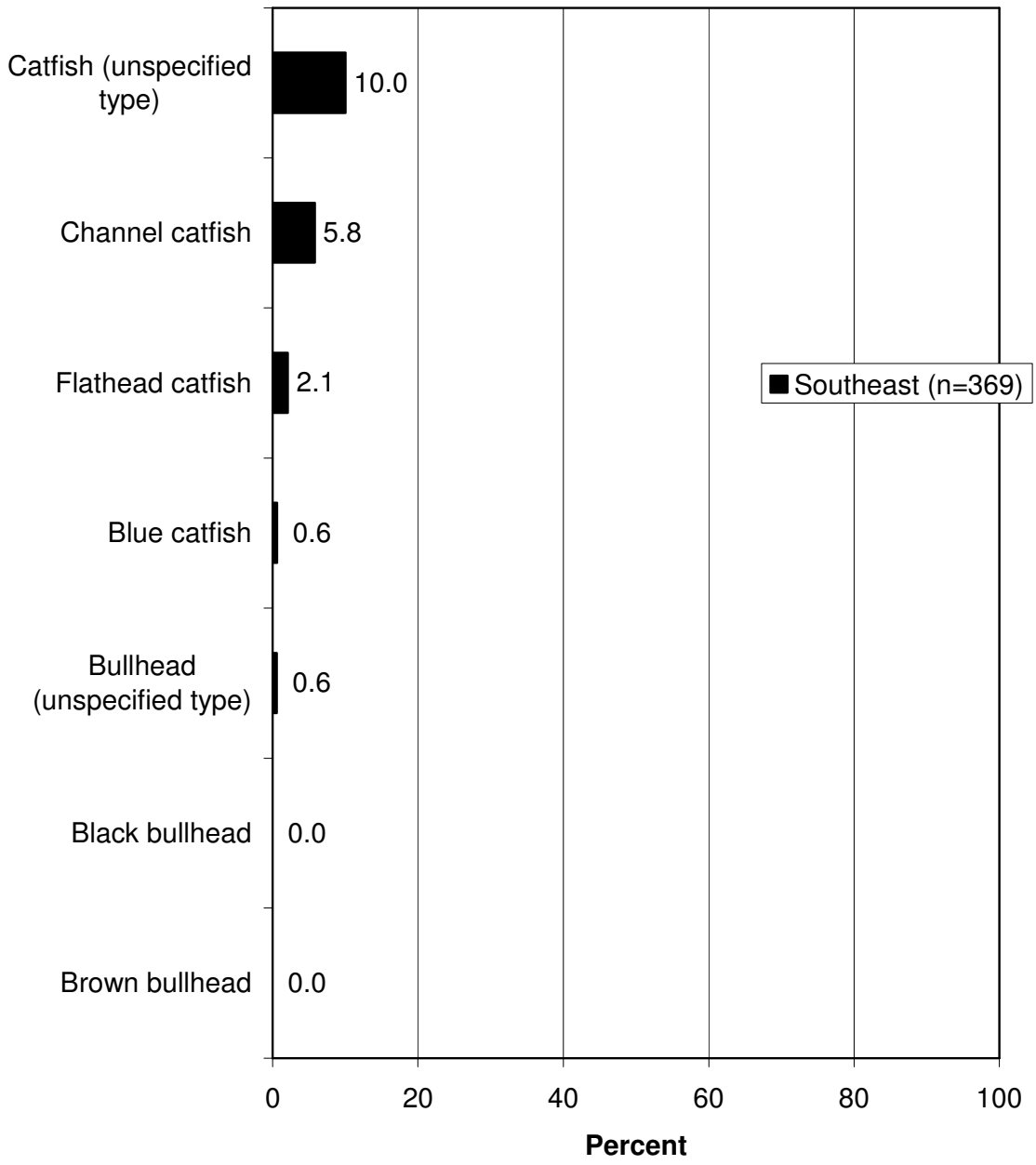
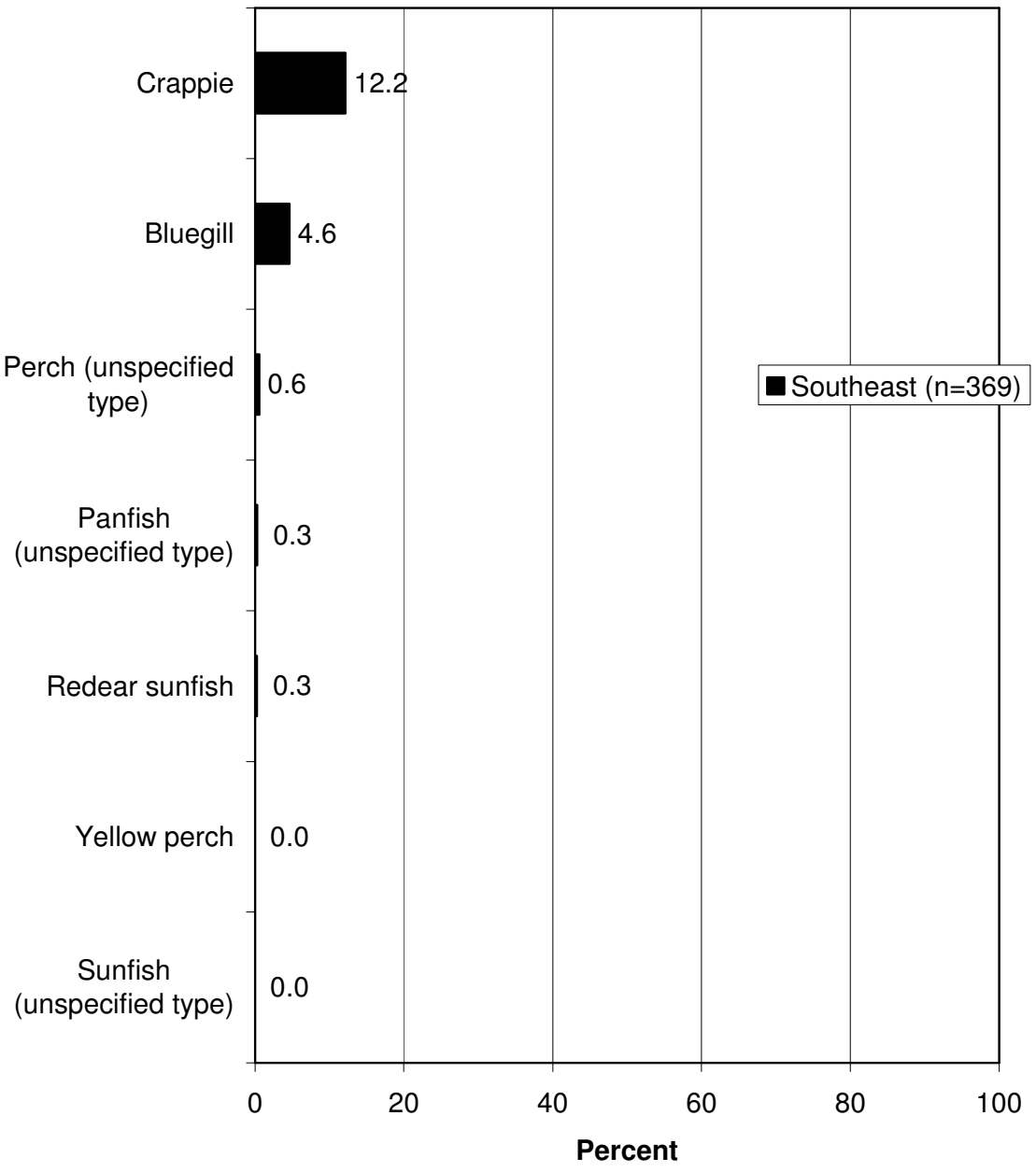
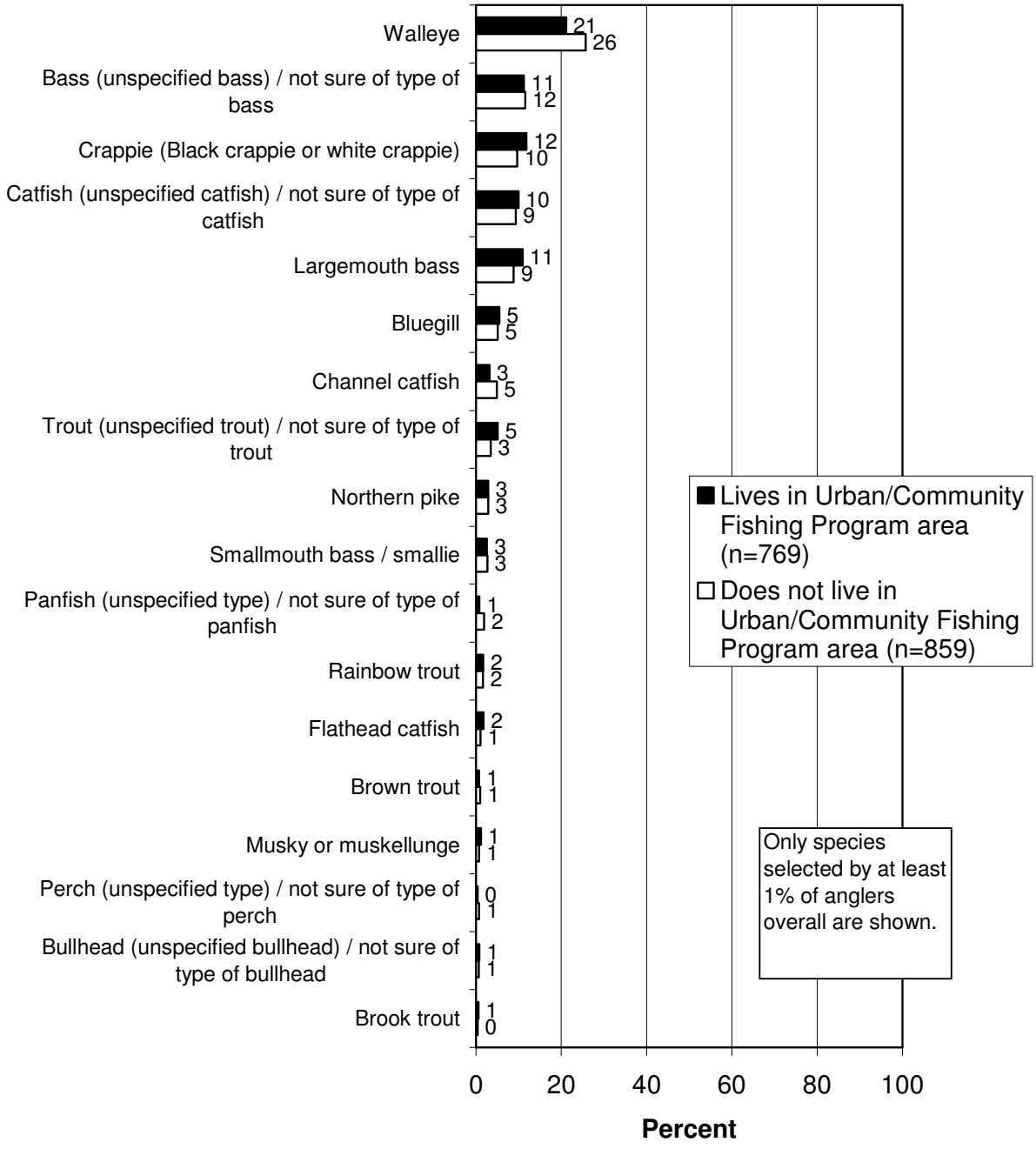


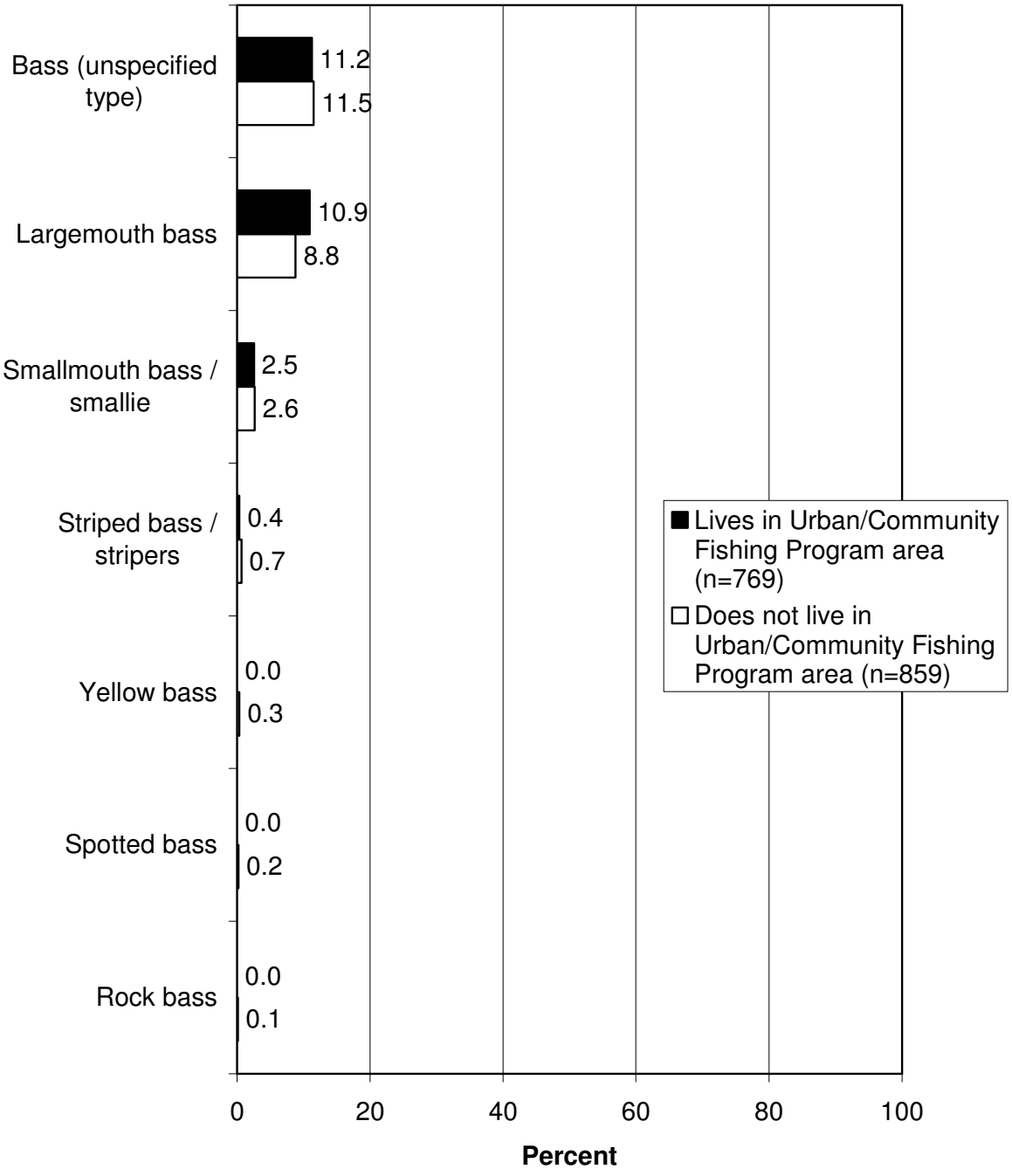
Q44. Which one species would you most prefer to fish for? (Among Southeast Region residents.) (Panfish category)



Q44. Which one species would you most prefer to fish for? (Top responses)



Q44. Which one species would you most prefer to fish for? (Bass category)



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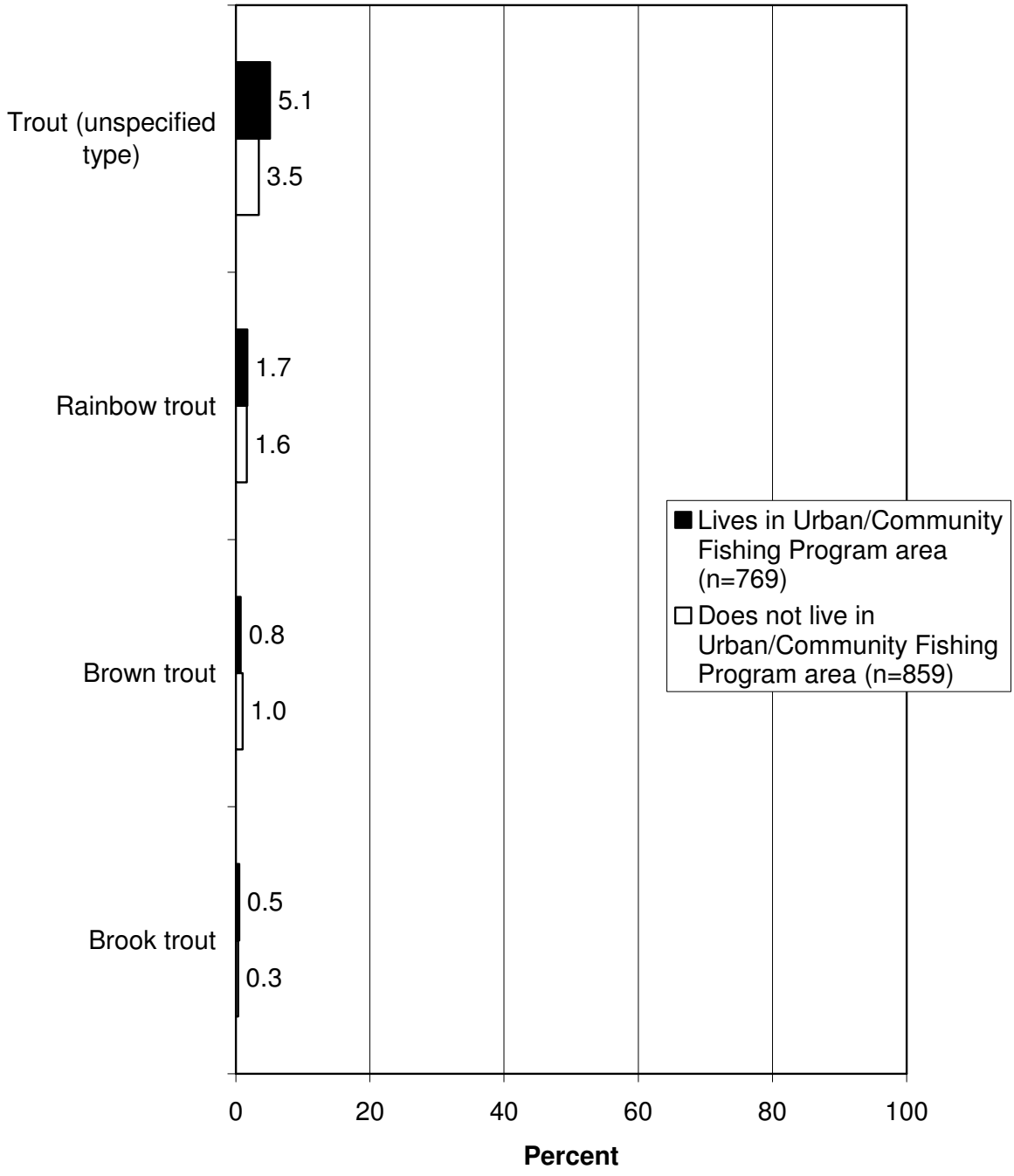
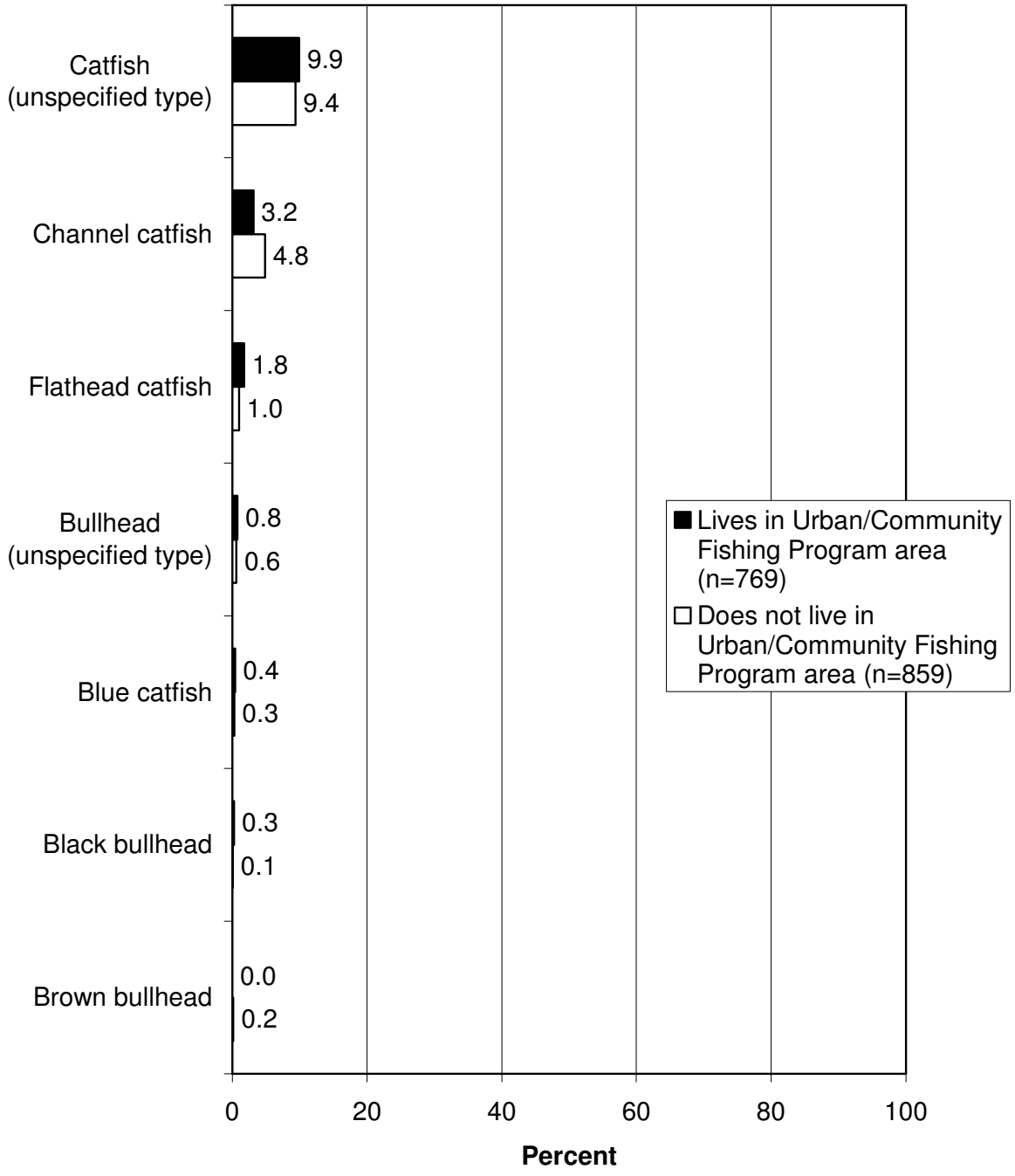
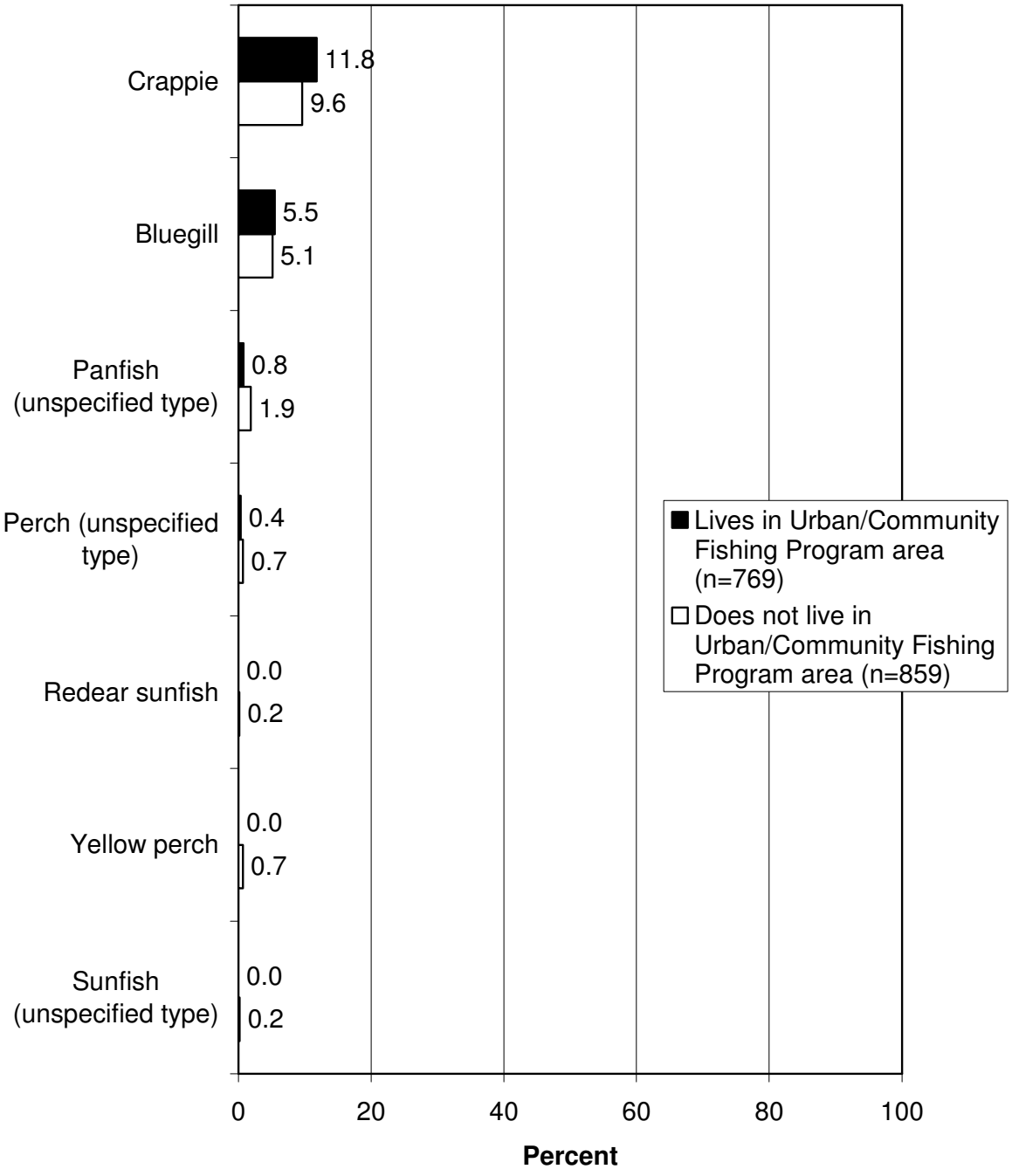


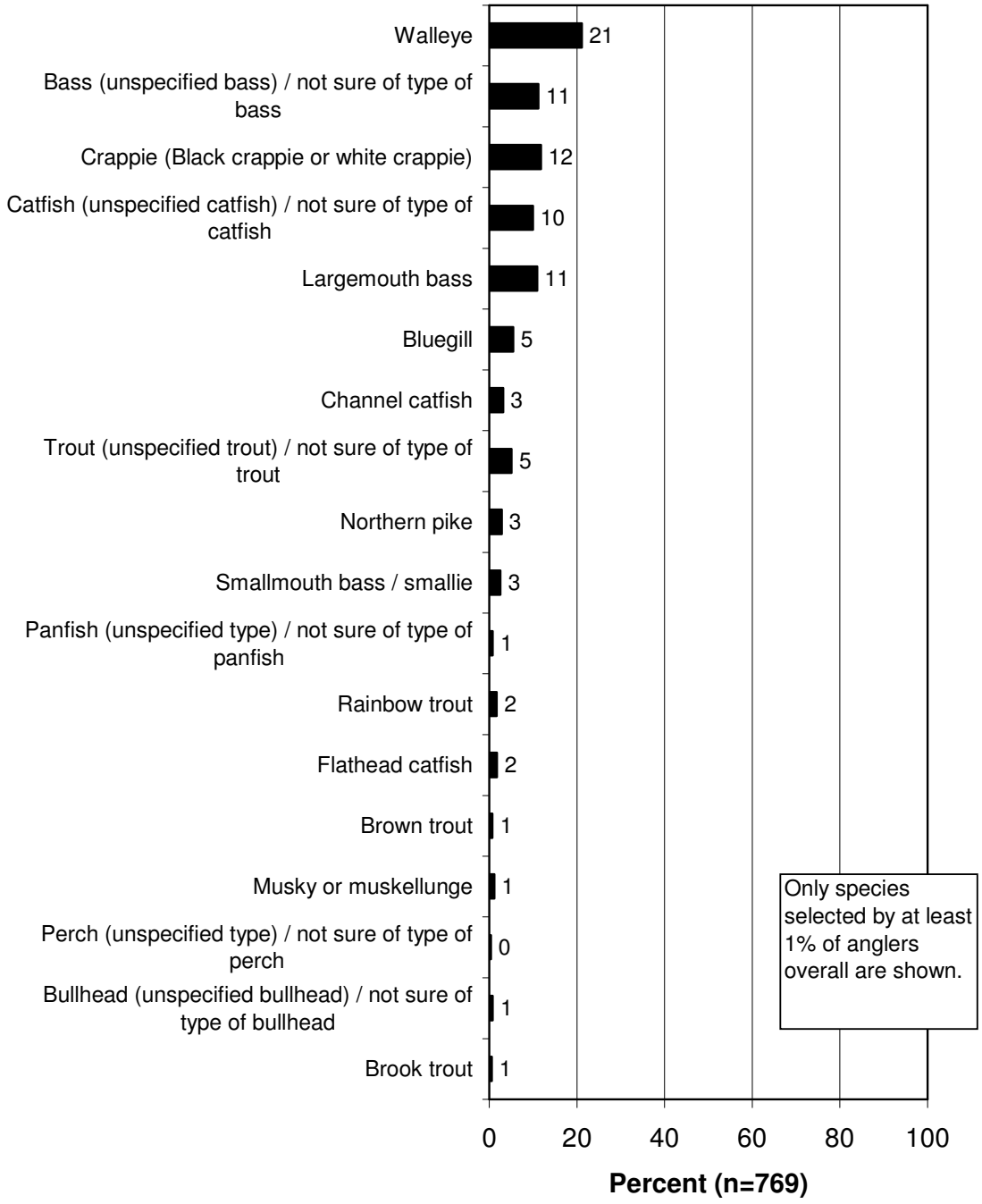
Q44. Which one species would you most prefer to fish for? (Catfish/bullhead category)



Q44. Which one species would you most prefer to fish for? (Panfish category)



Q44. Which one species would you most prefer to fish for? (Among those who live in an Urban/Community Fishing Program area.)



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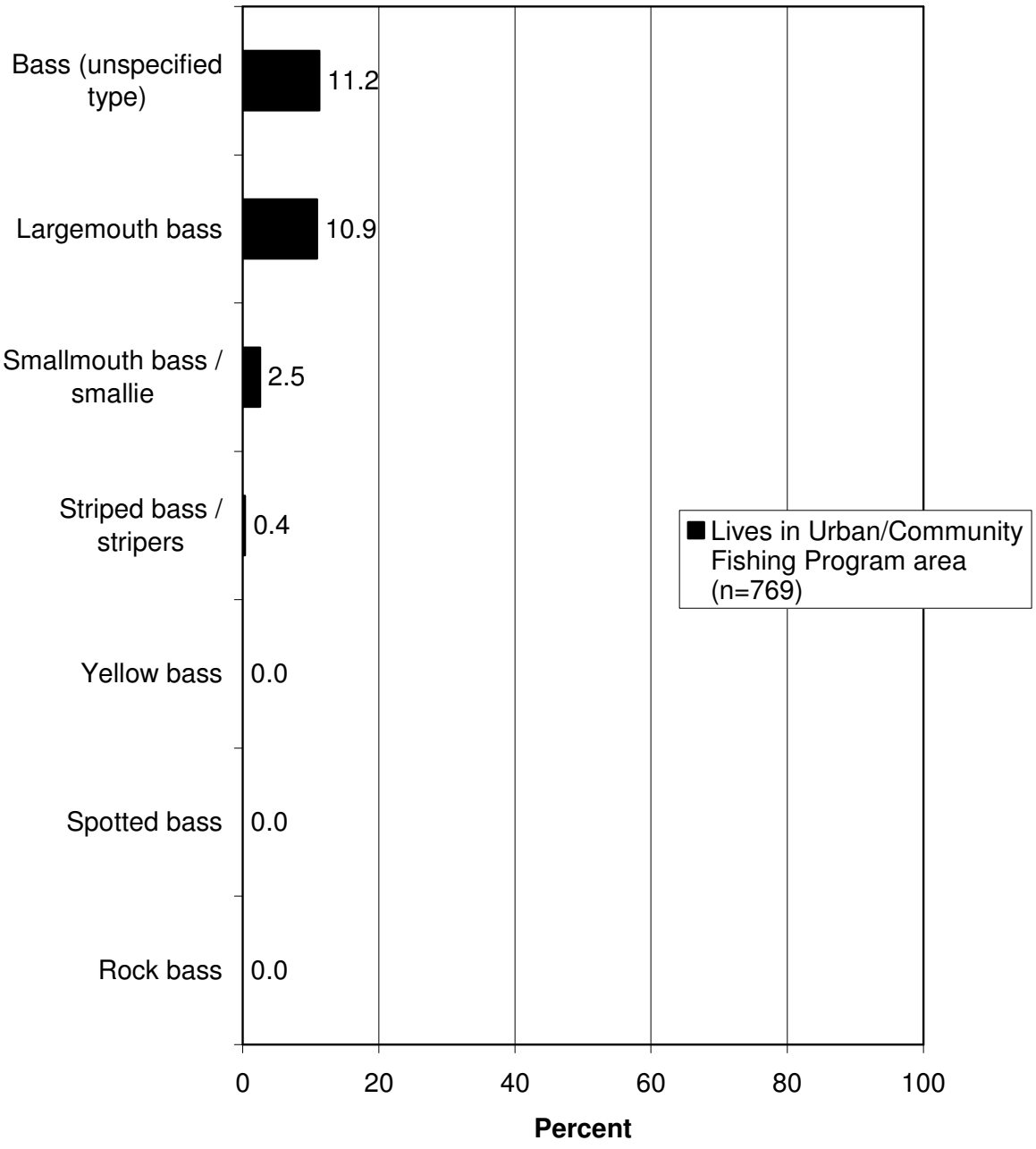

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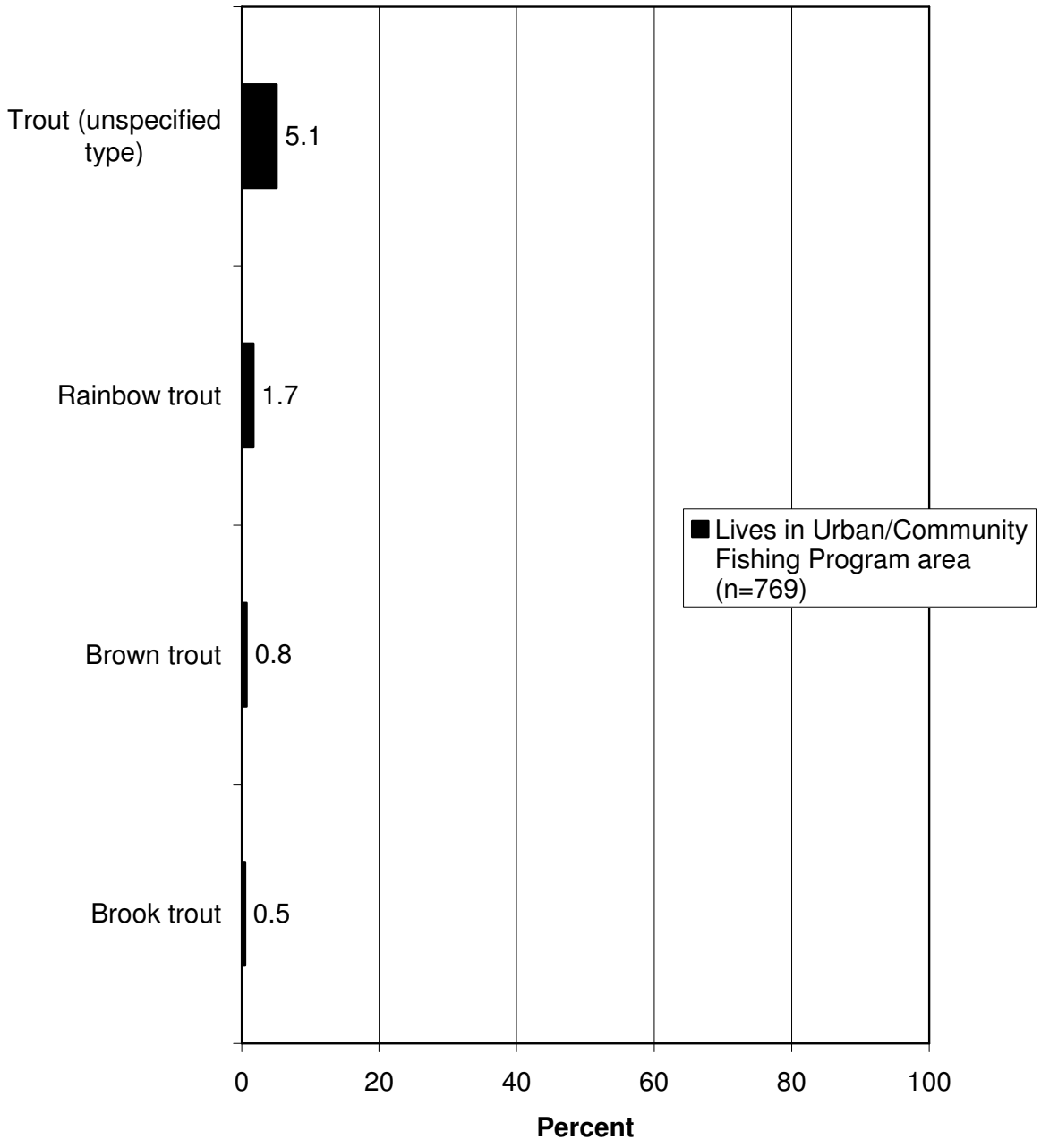

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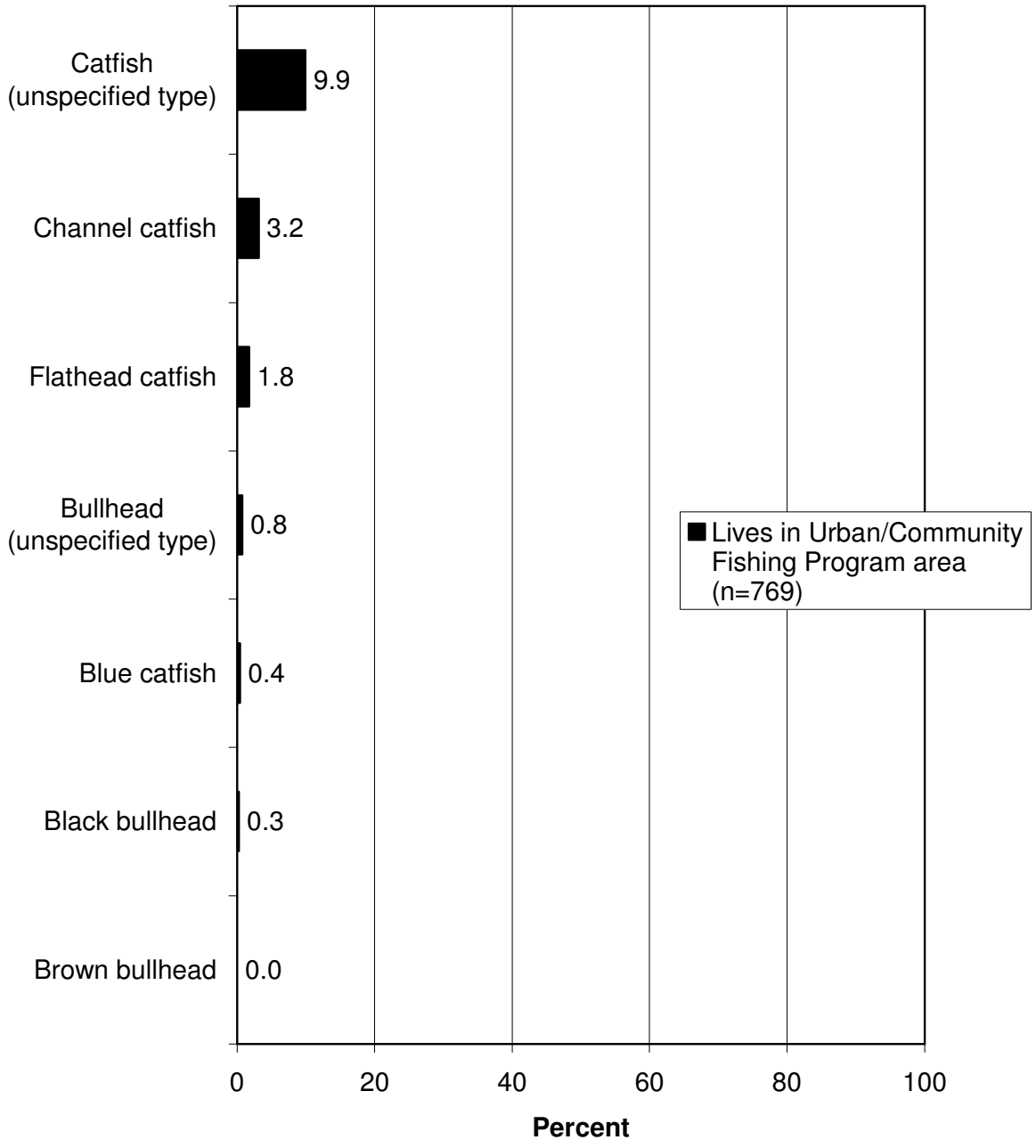
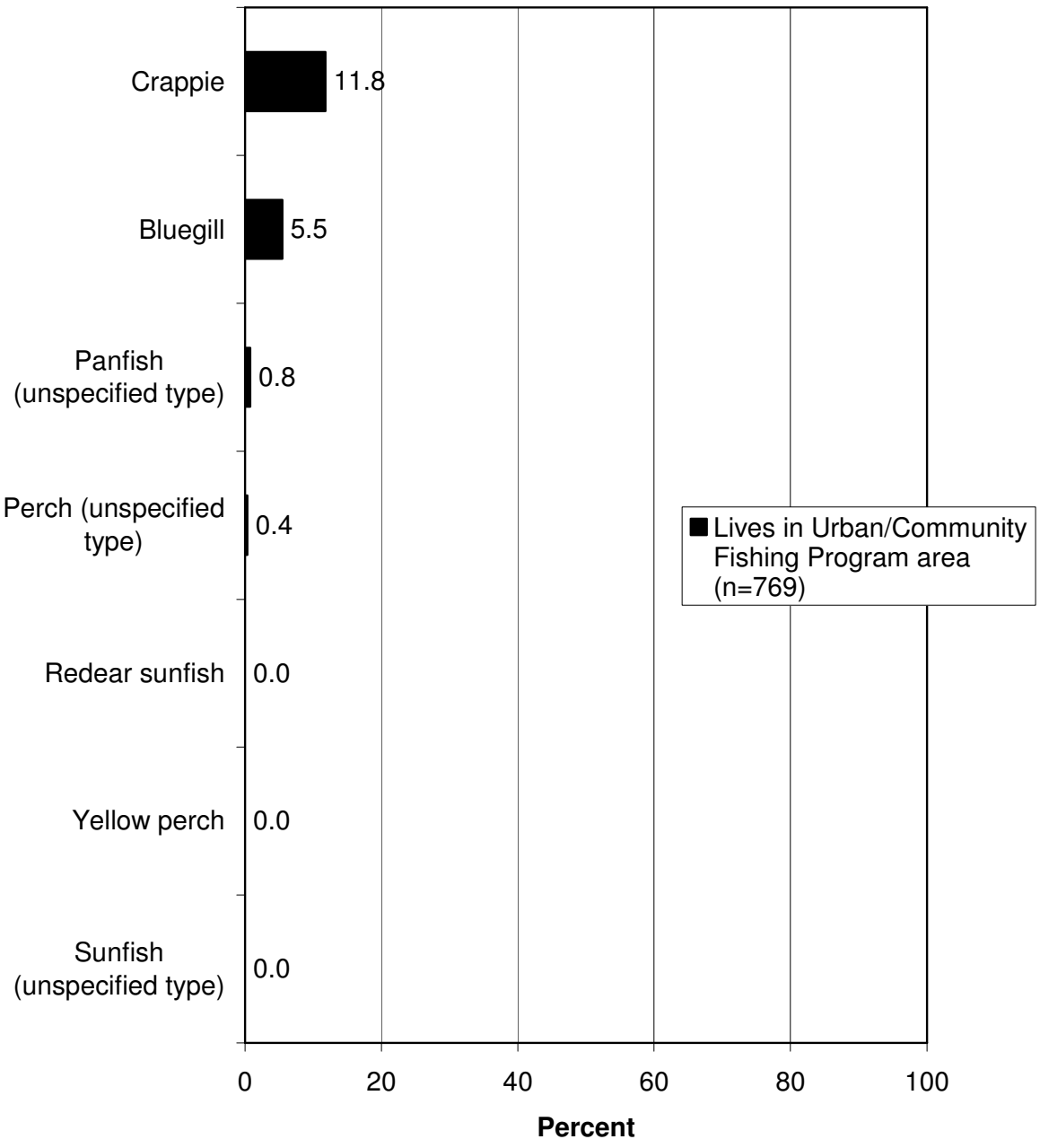
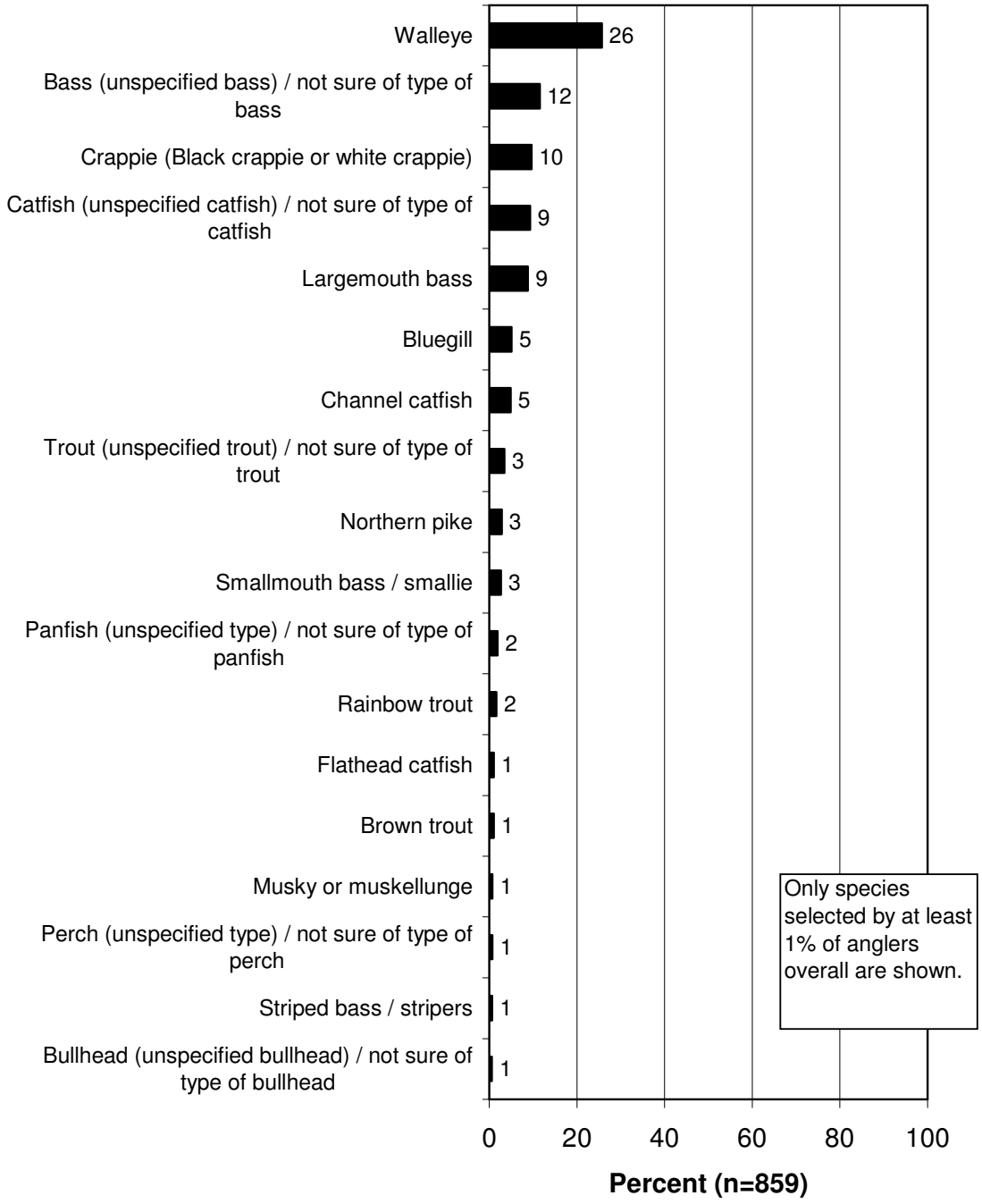


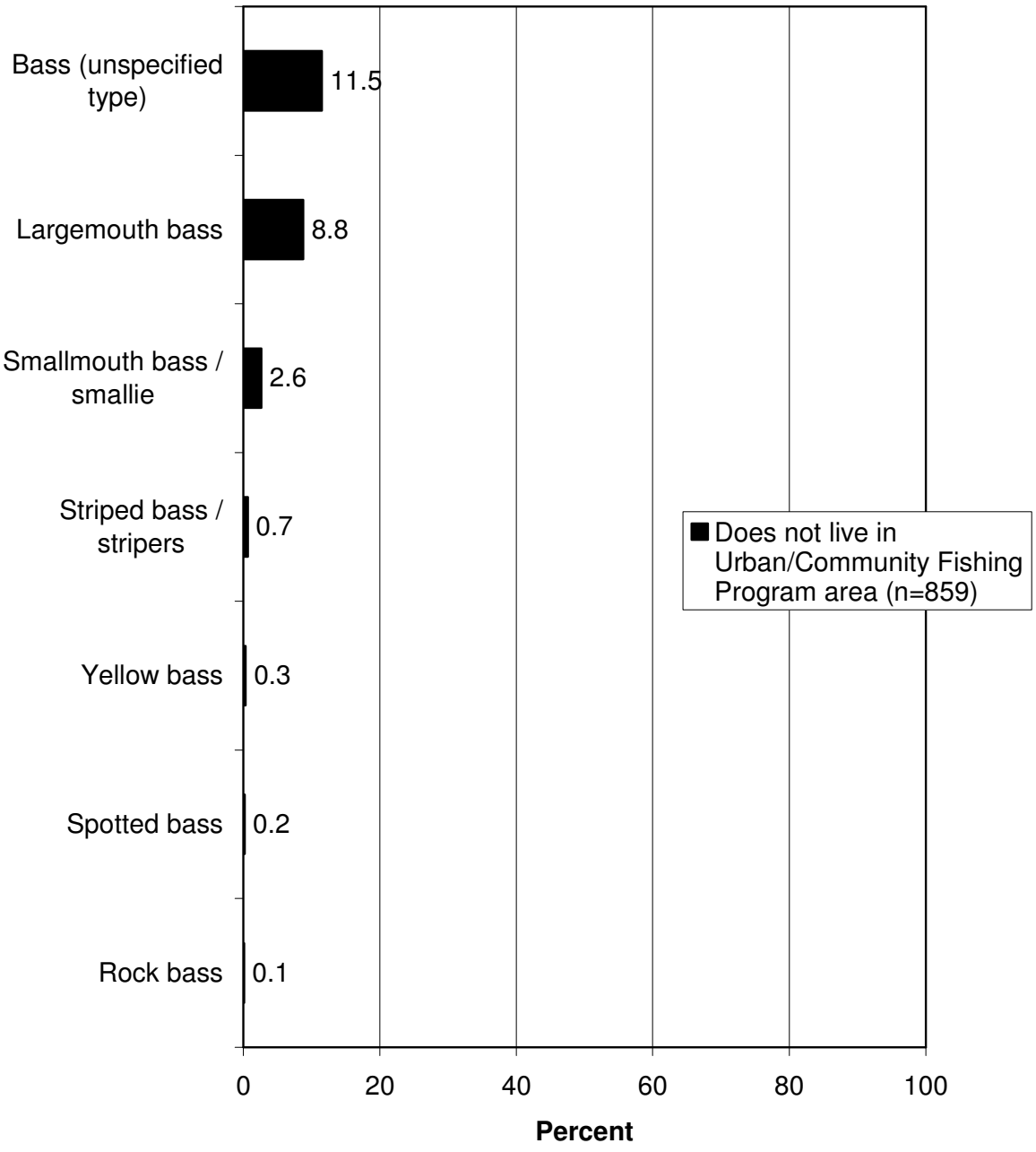
Q44. Which one species would you most prefer to fish for? (Among those who live in an Urban/Community Fishing Program area.) (Panfish category)



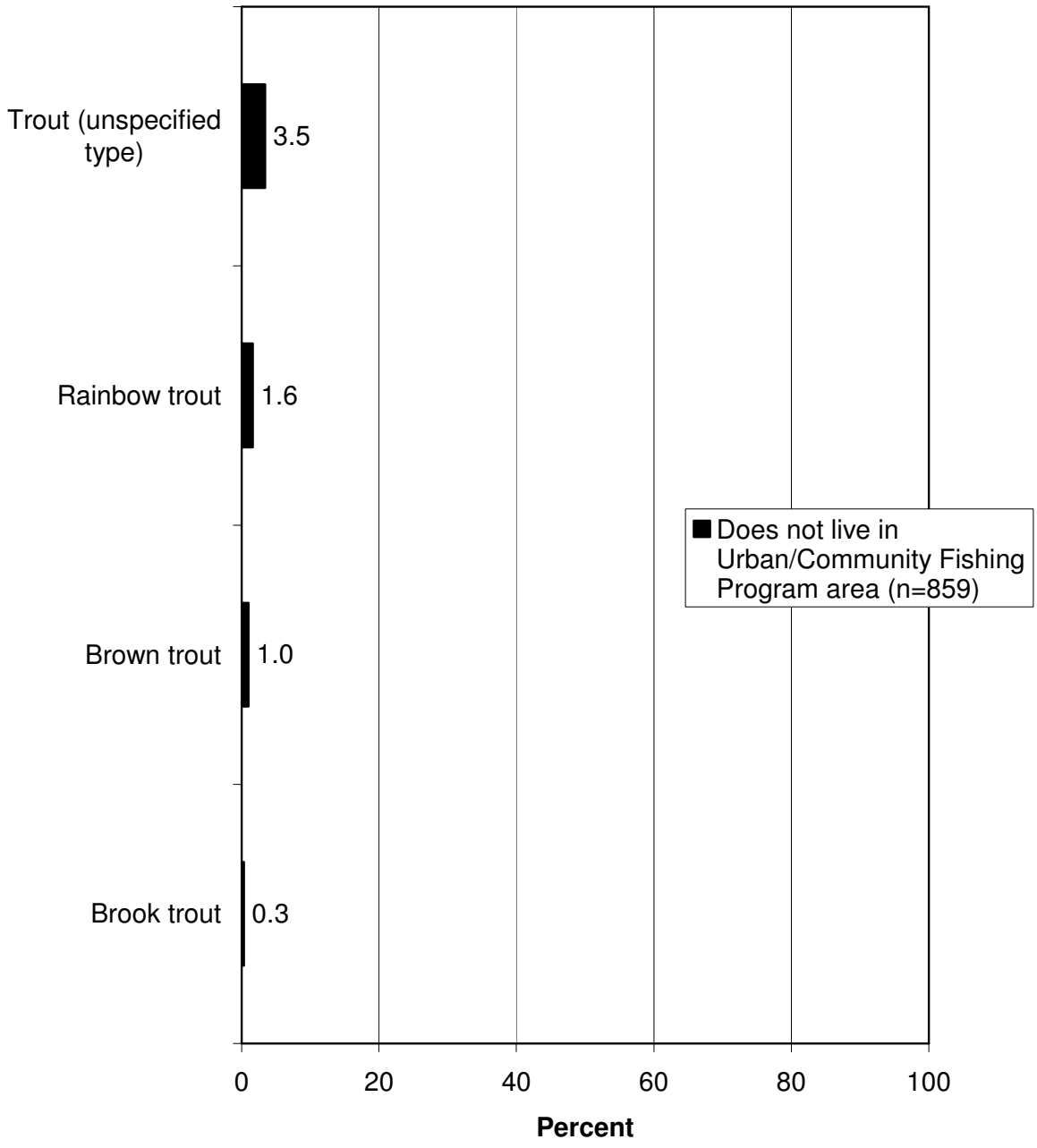
Q44. Which one species would you most prefer to fish for? (Among those who do not live in an Urban/Community Fishing Program area.)



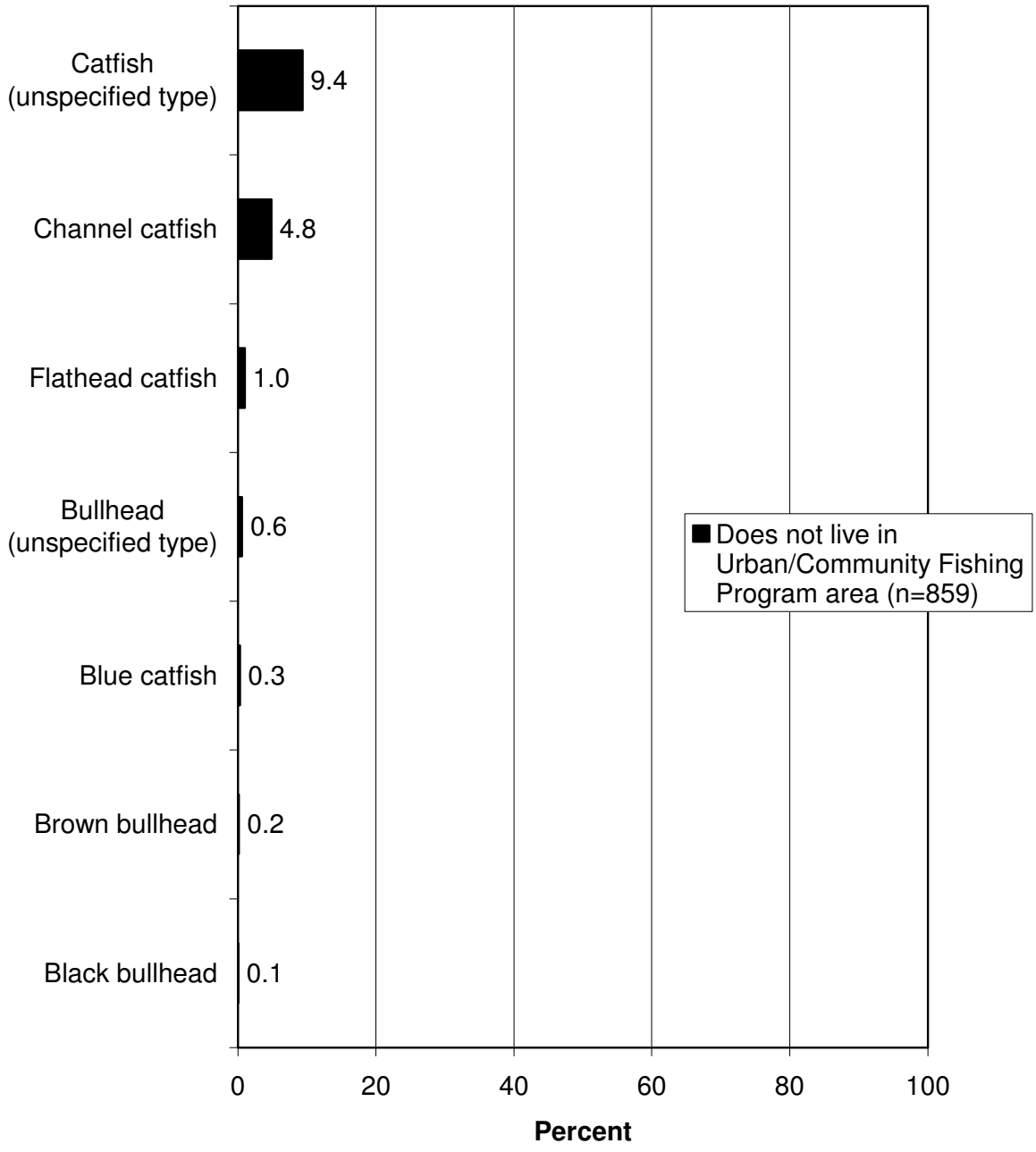
Q44. Which one species would you most prefer to fish for? (Among those who do not live in an Urban/Community Fishing Program area.) (Bass category)



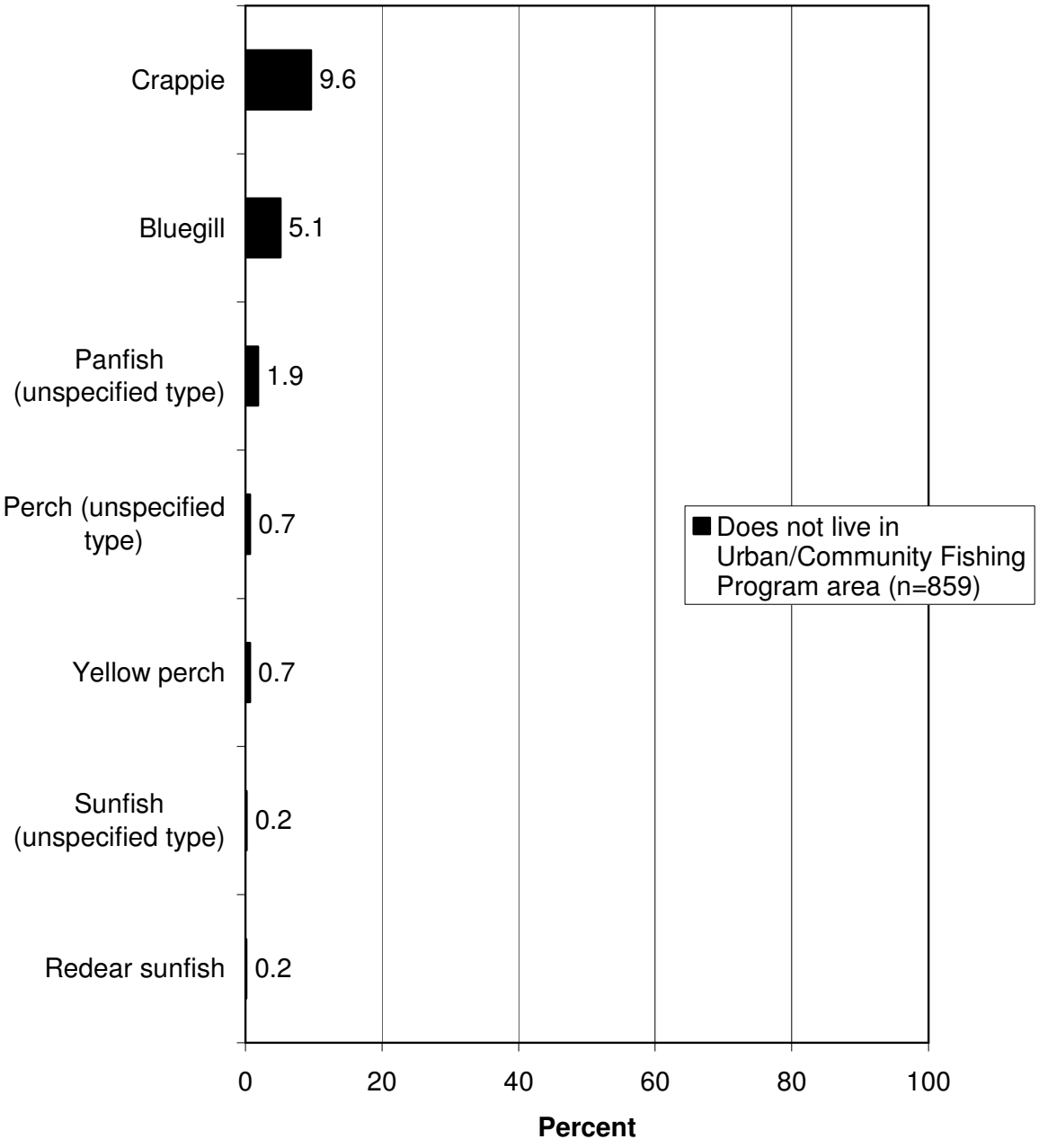
Q44. Which one species would you most prefer to fish for? (Among those who do not live in an Urban/Community Fishing Program area.) (Trout category)



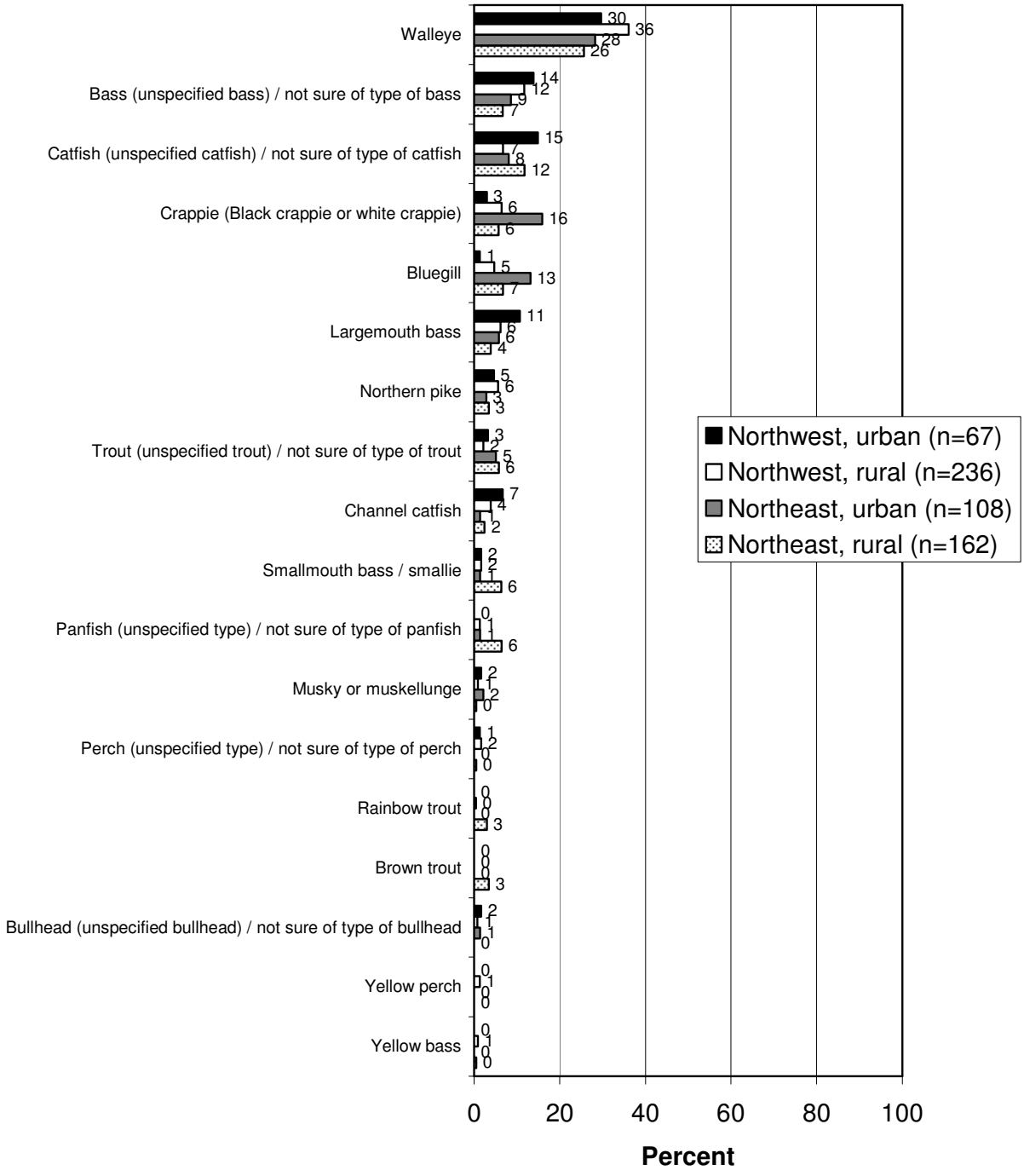
Q44. Which one species would you most prefer to fish for? (Among those who do not live in an Urban/Community Fishing Program area.) (Catfish/bullhead category)



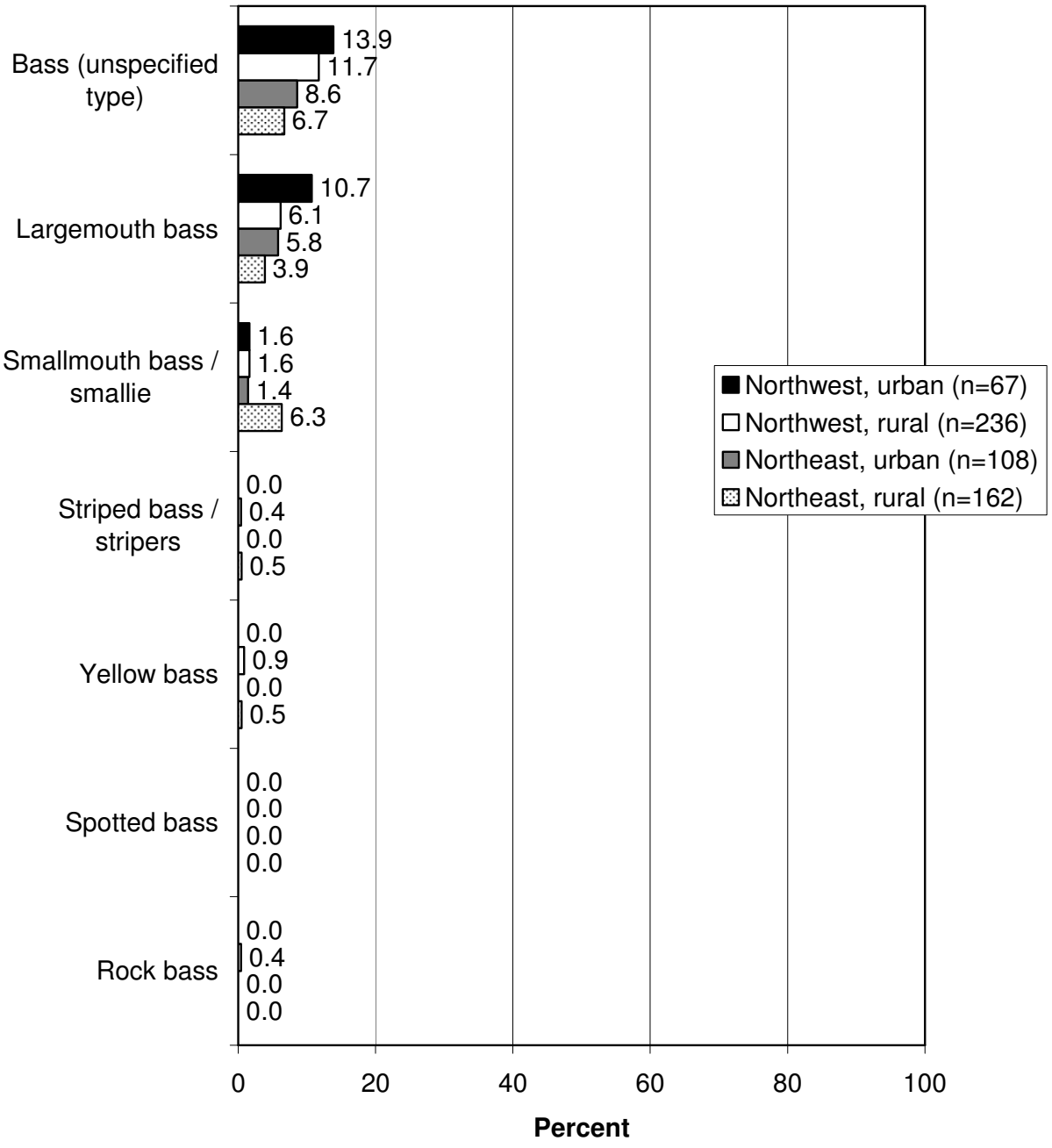
Q44. Which one species would you most prefer to fish for? (Among those who do not live in an Urban/Community Fishing Program area.) (Panfish category)



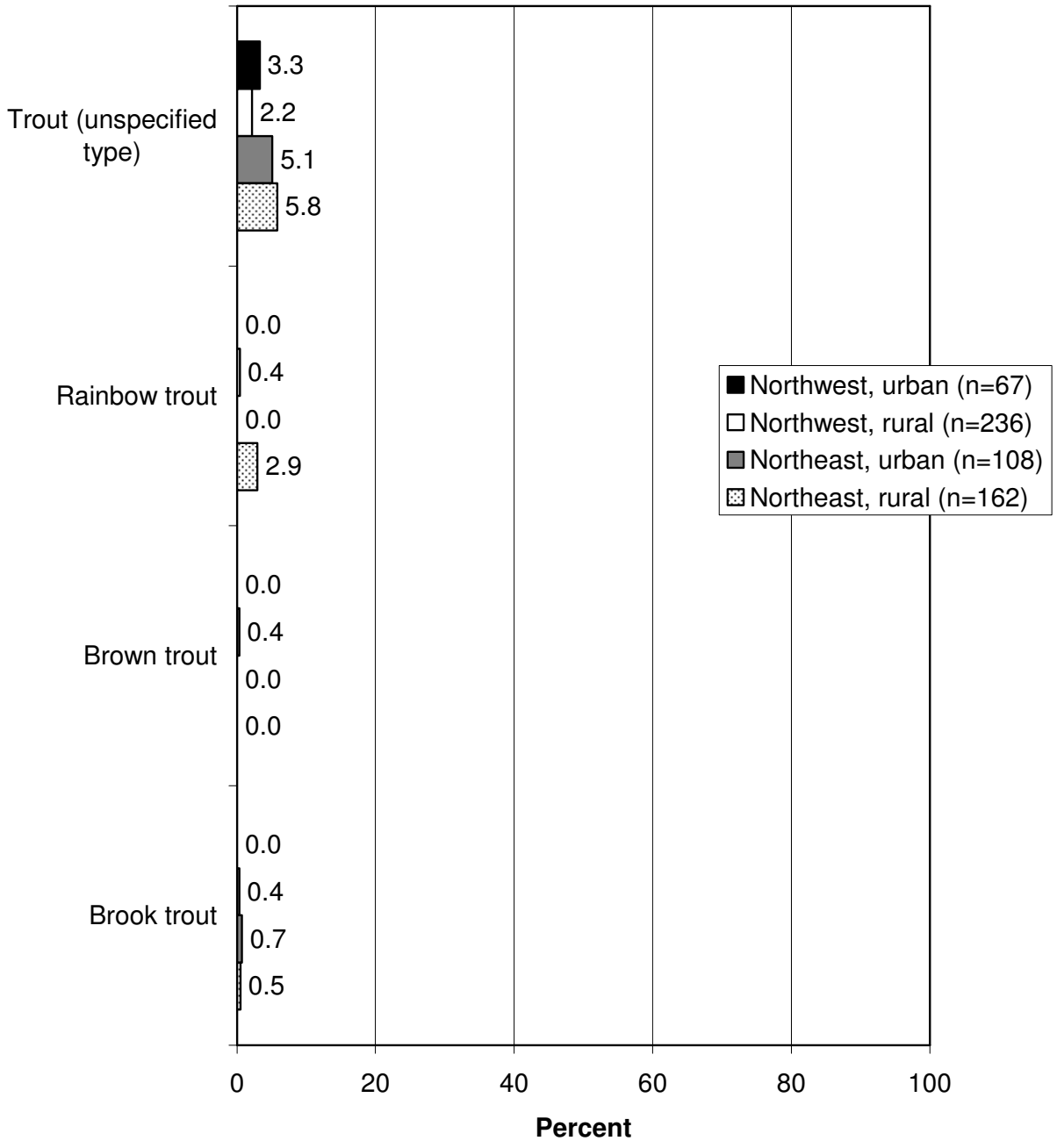
Q44. Which one species would you most prefer to fish for? (Top species only)



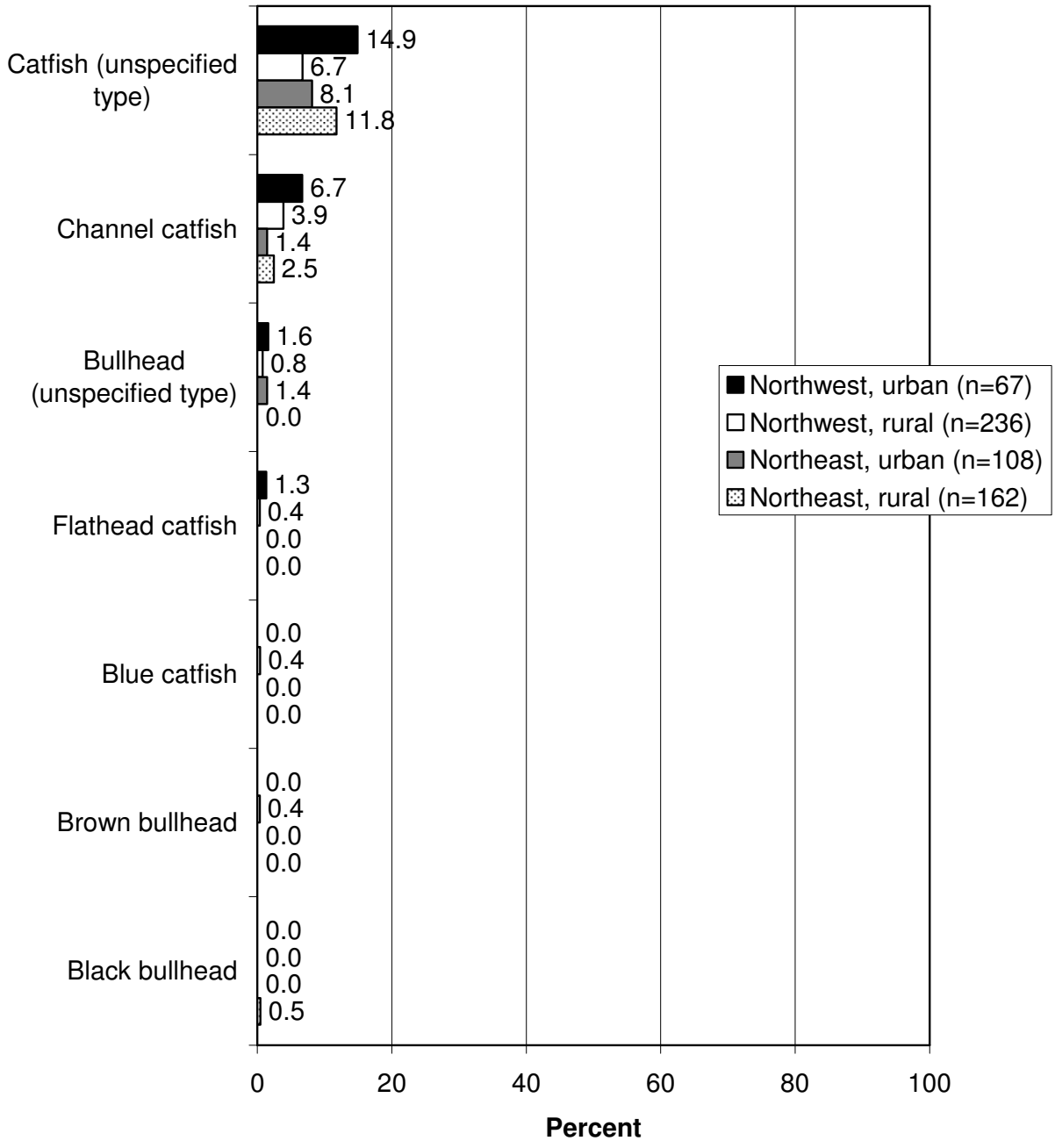
Q44. Which one species would you most prefer to fish for? (Bass category)



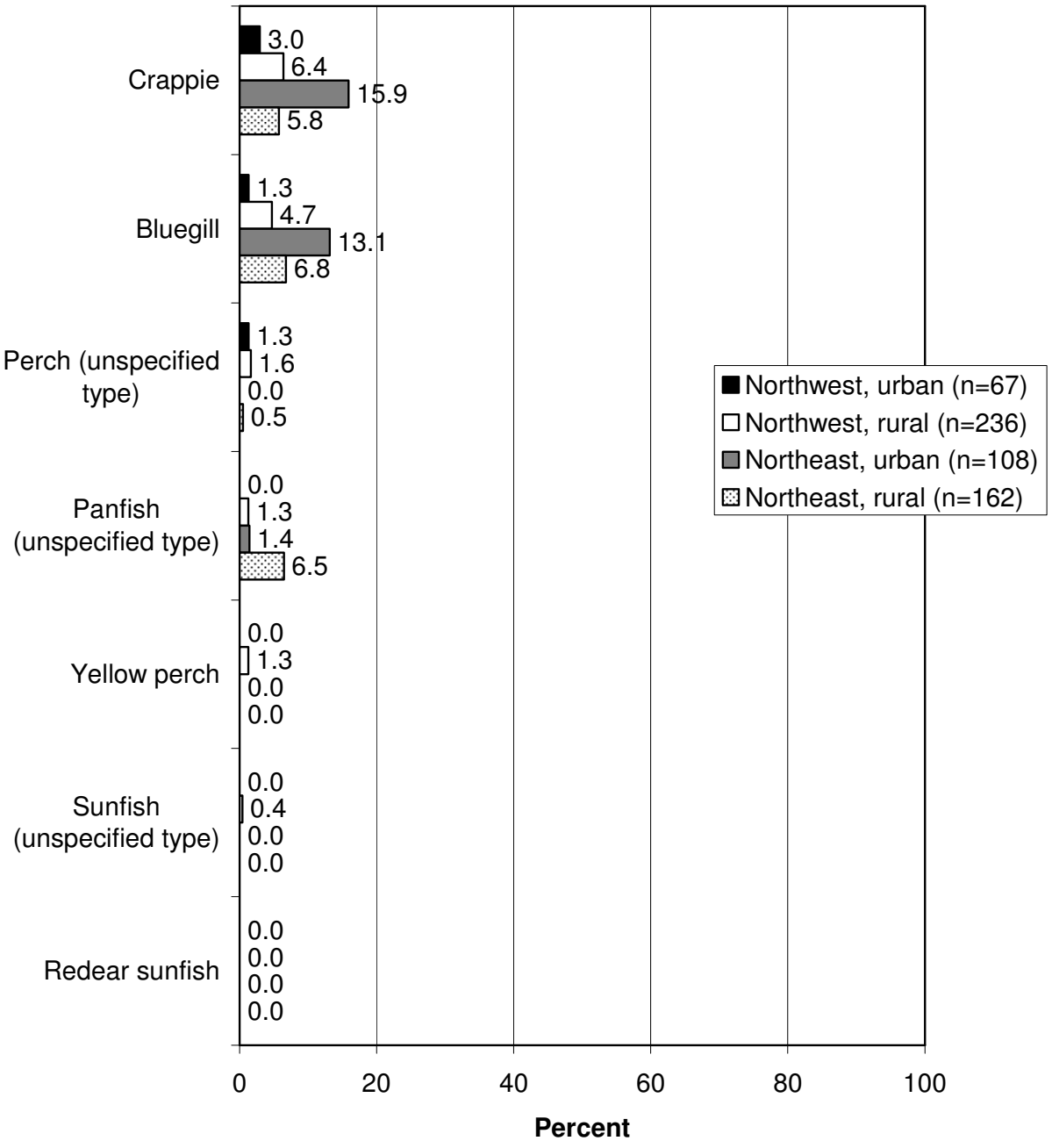
Q44. Which one species would you most prefer to fish for?
(Trout category)



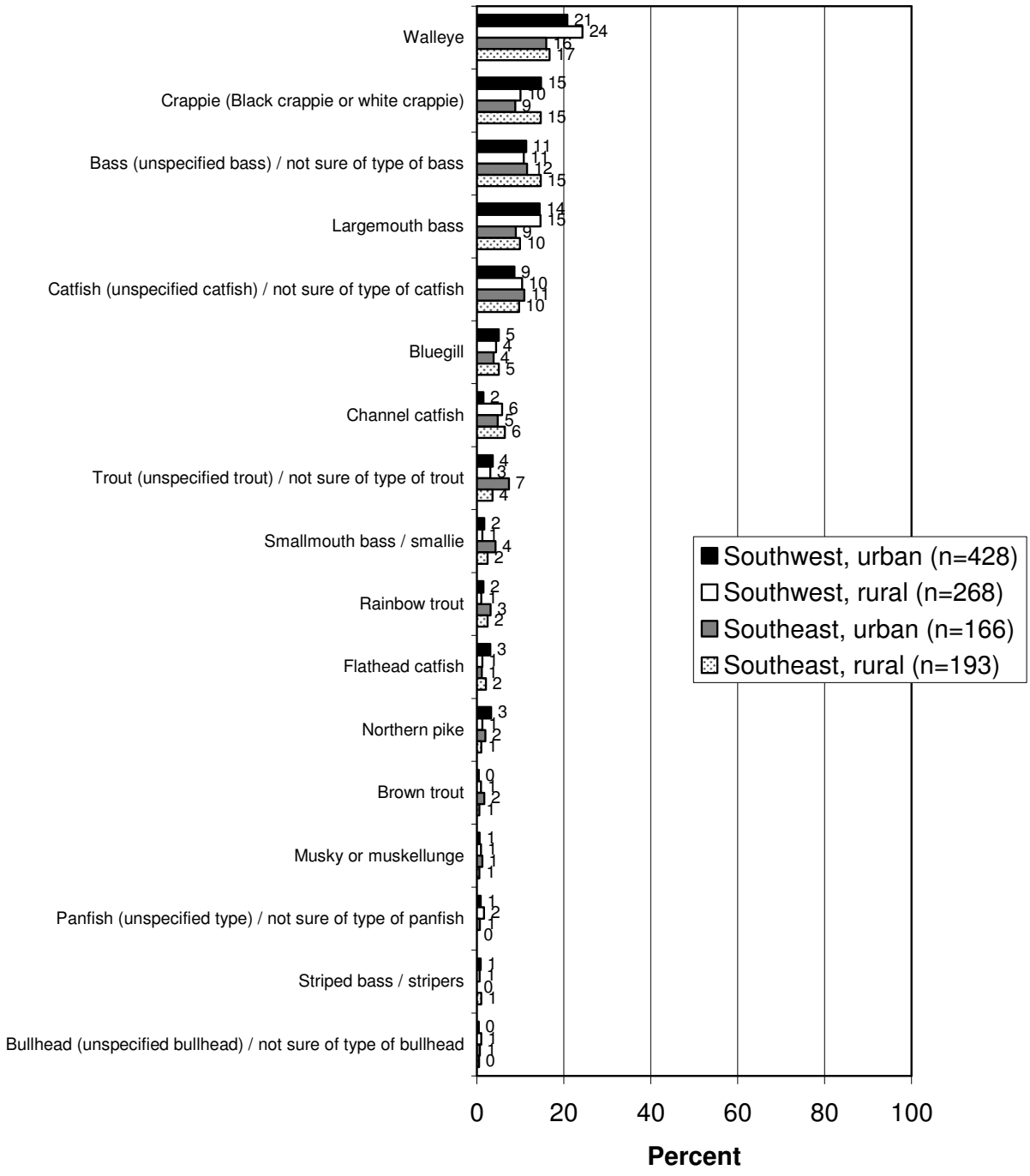
Q44. Which one species would you most prefer to fish for? (Catfish/bullhead category)



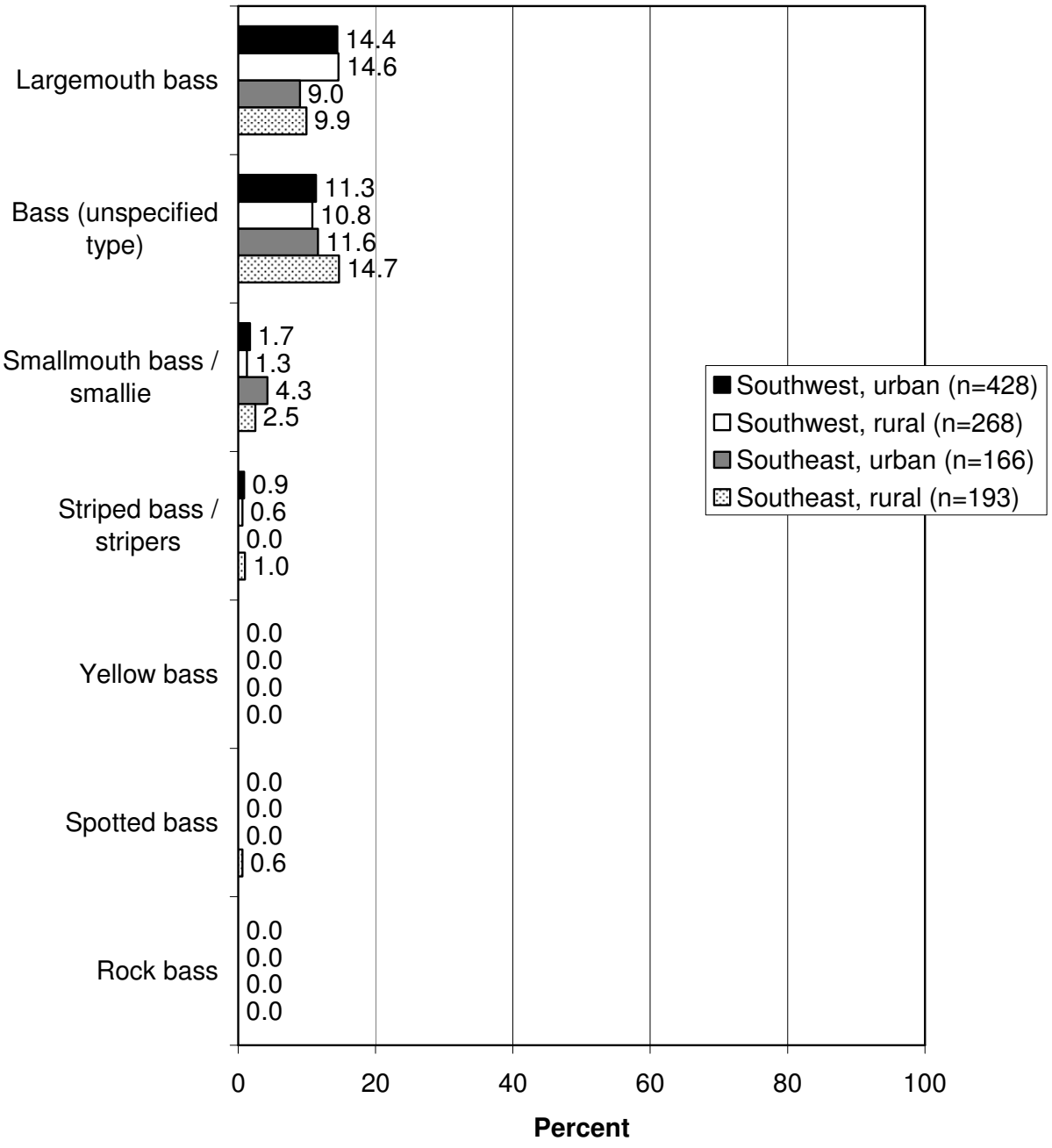
Q44. Which one species would you most prefer to fish for? (Panfish category)



Q44. Which one species would you most prefer to fish for? (Top responses only)



Q44. Which one species would you most prefer to fish for? (Bass category)



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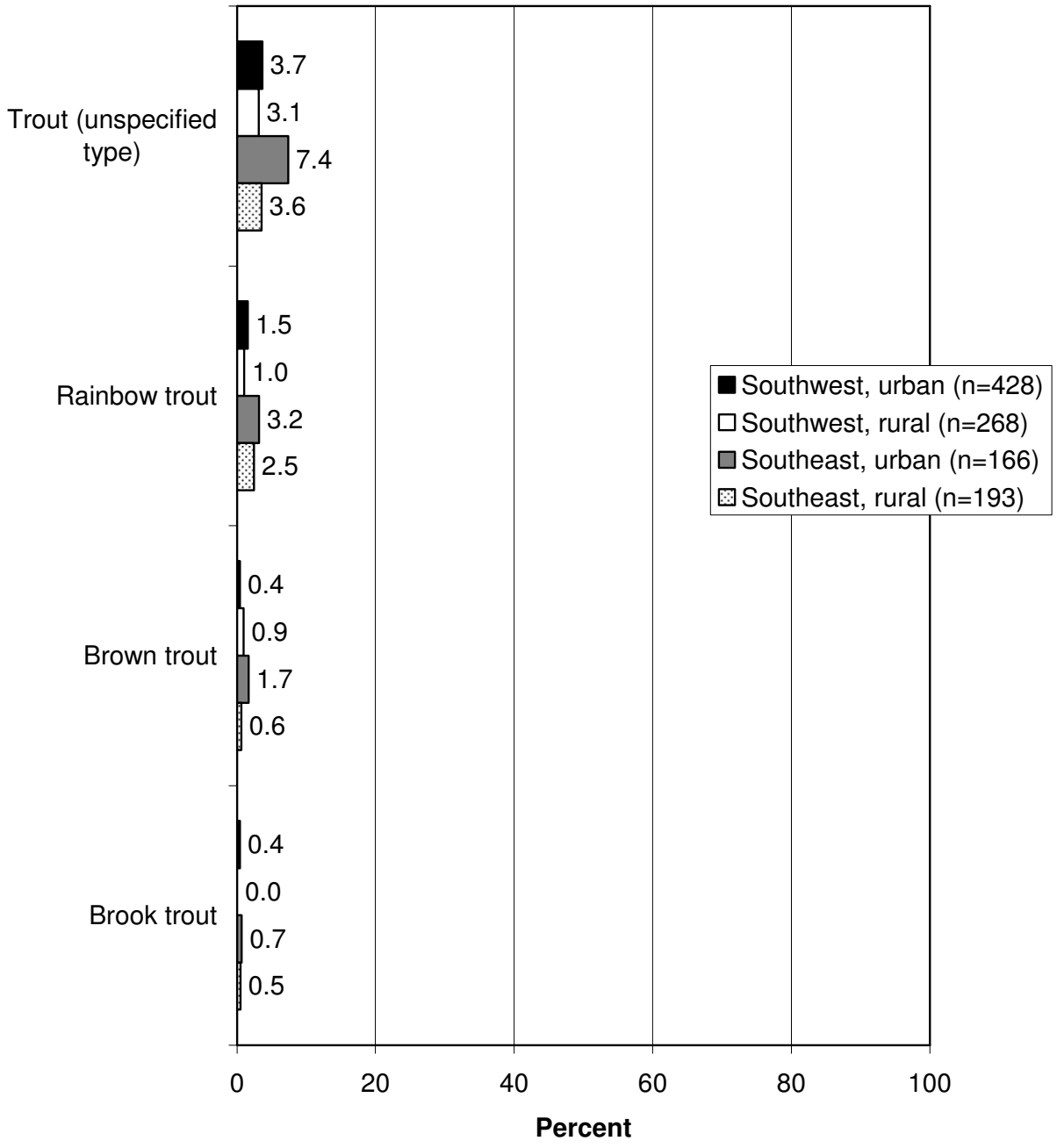

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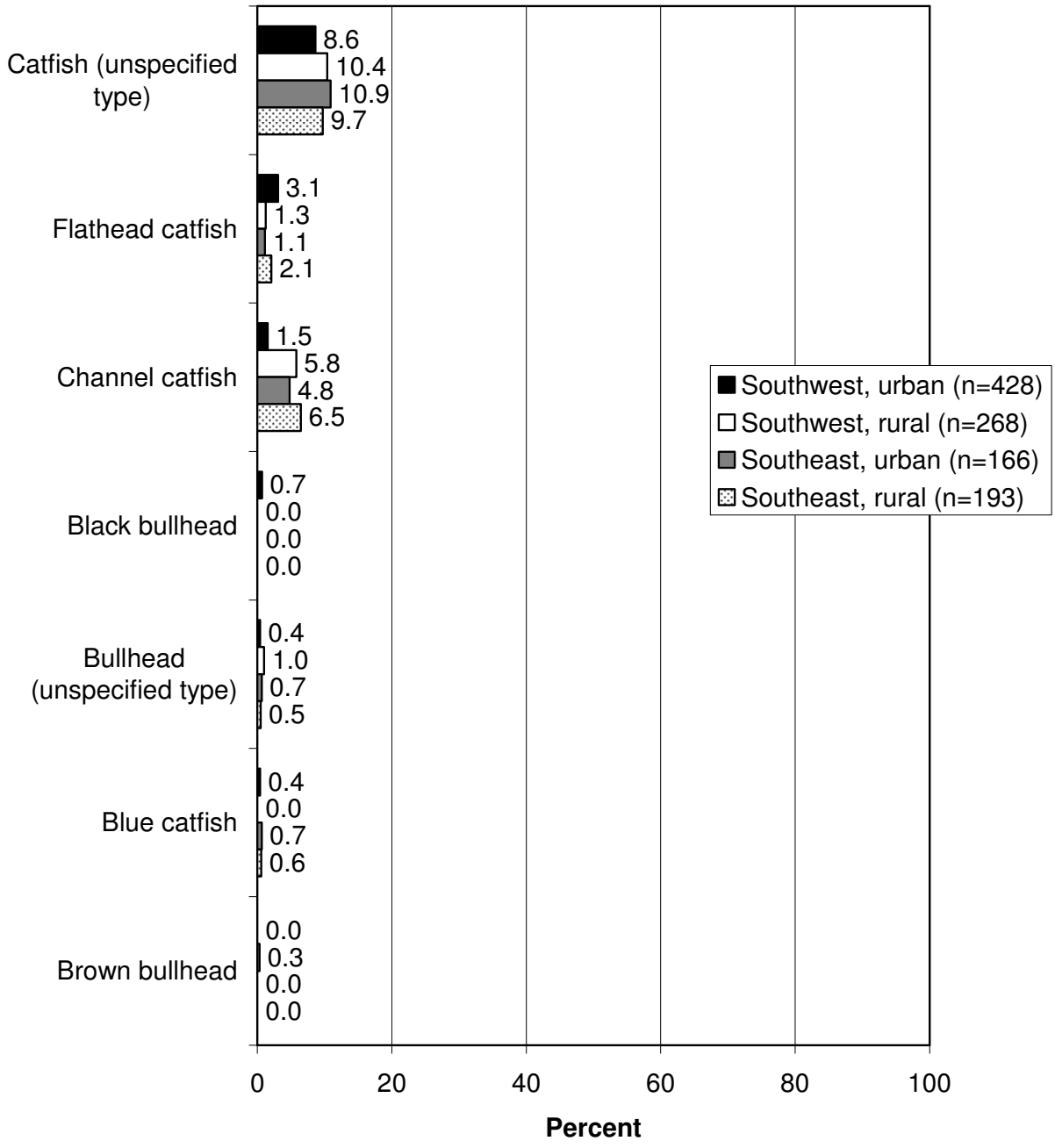
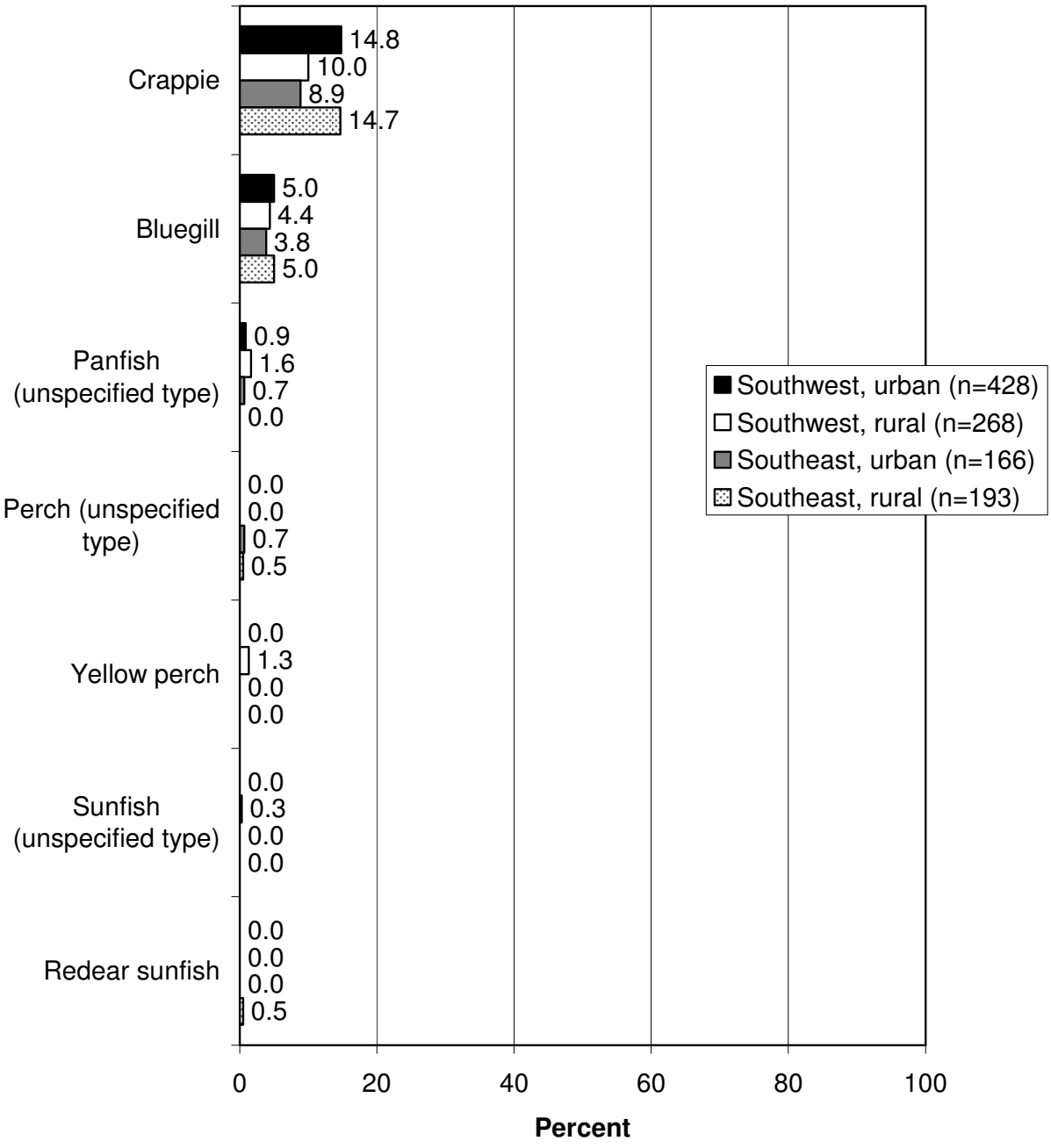


Q44. Which one species would you most prefer to fish for? (Panfish category)



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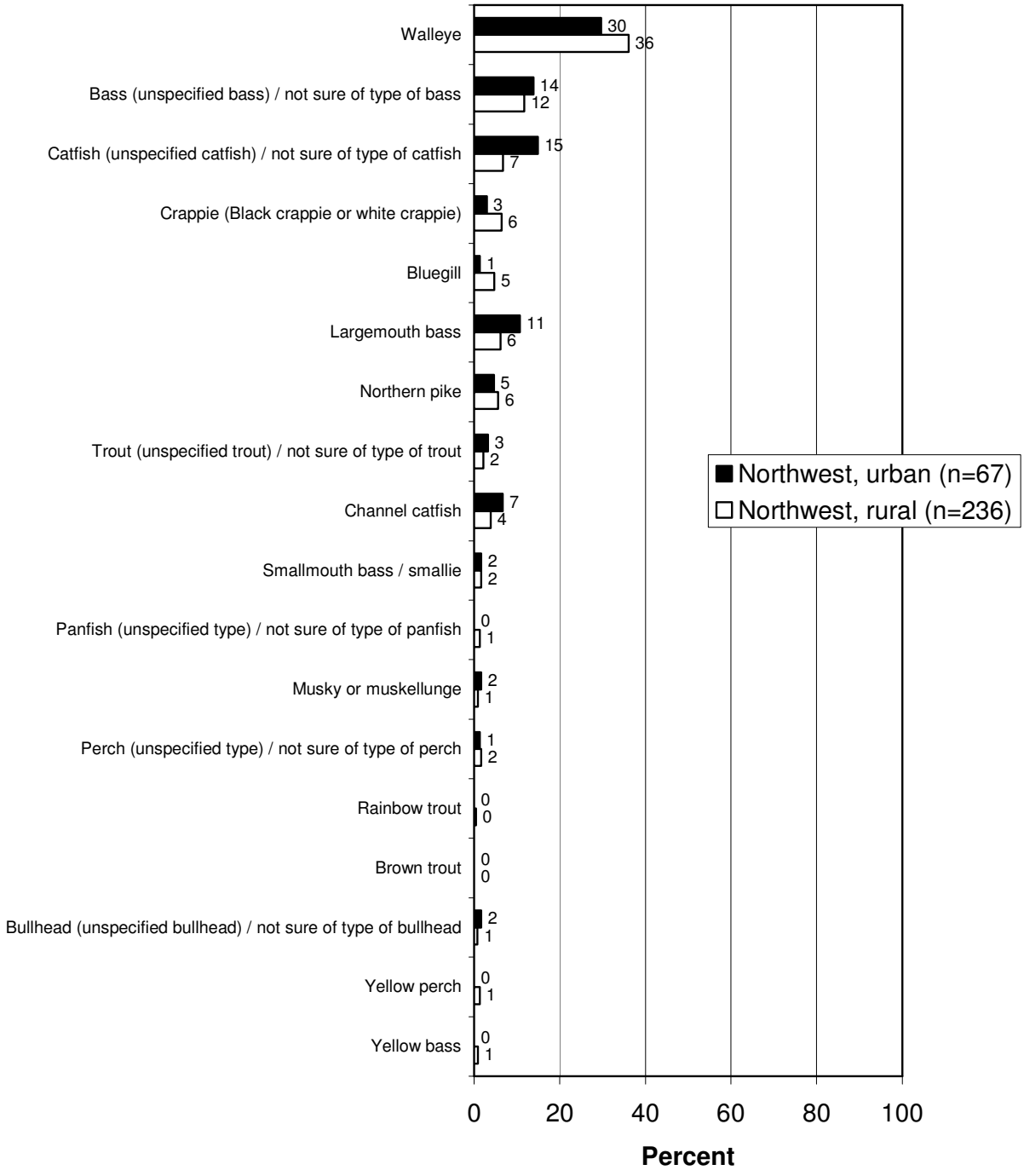

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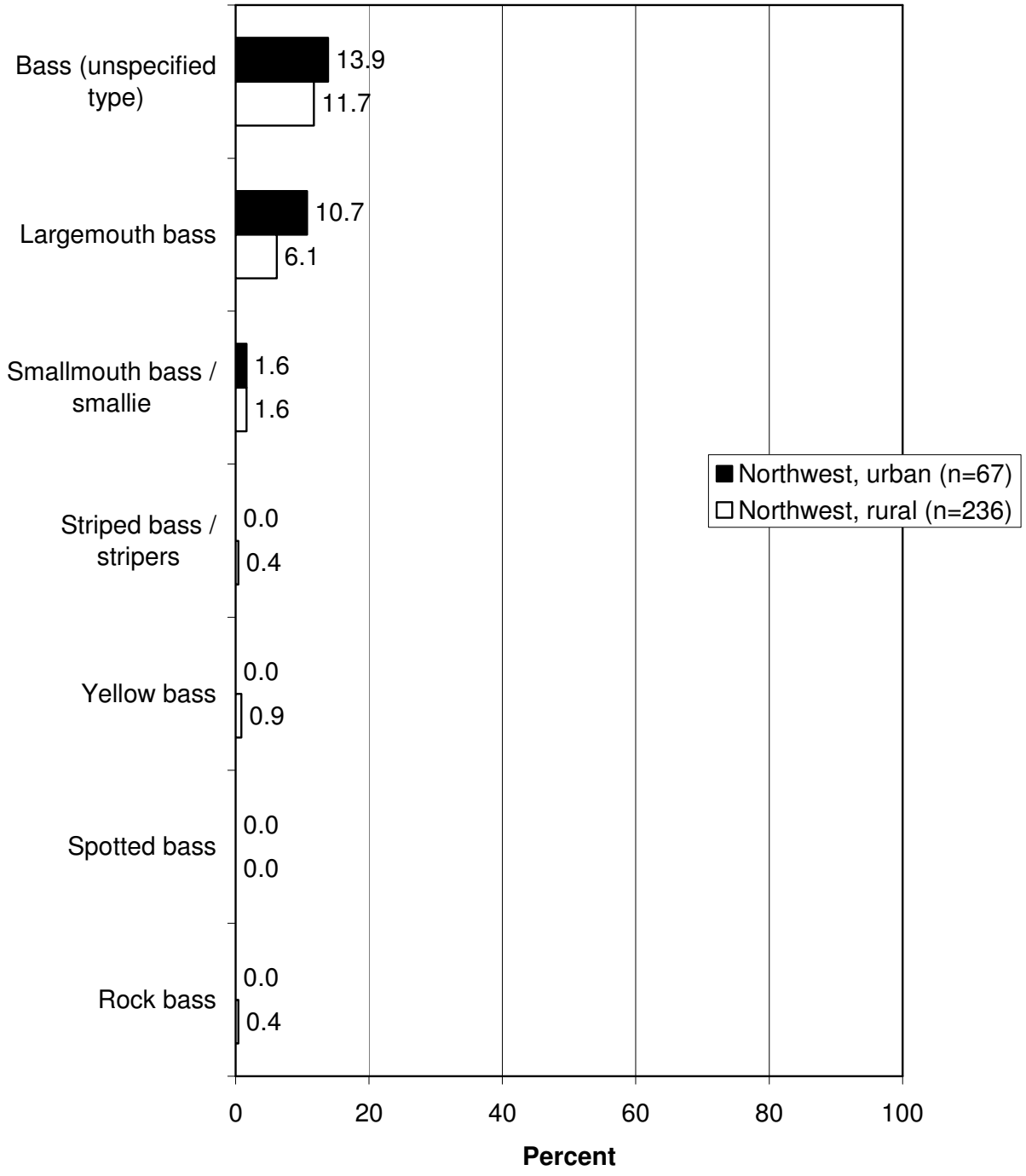

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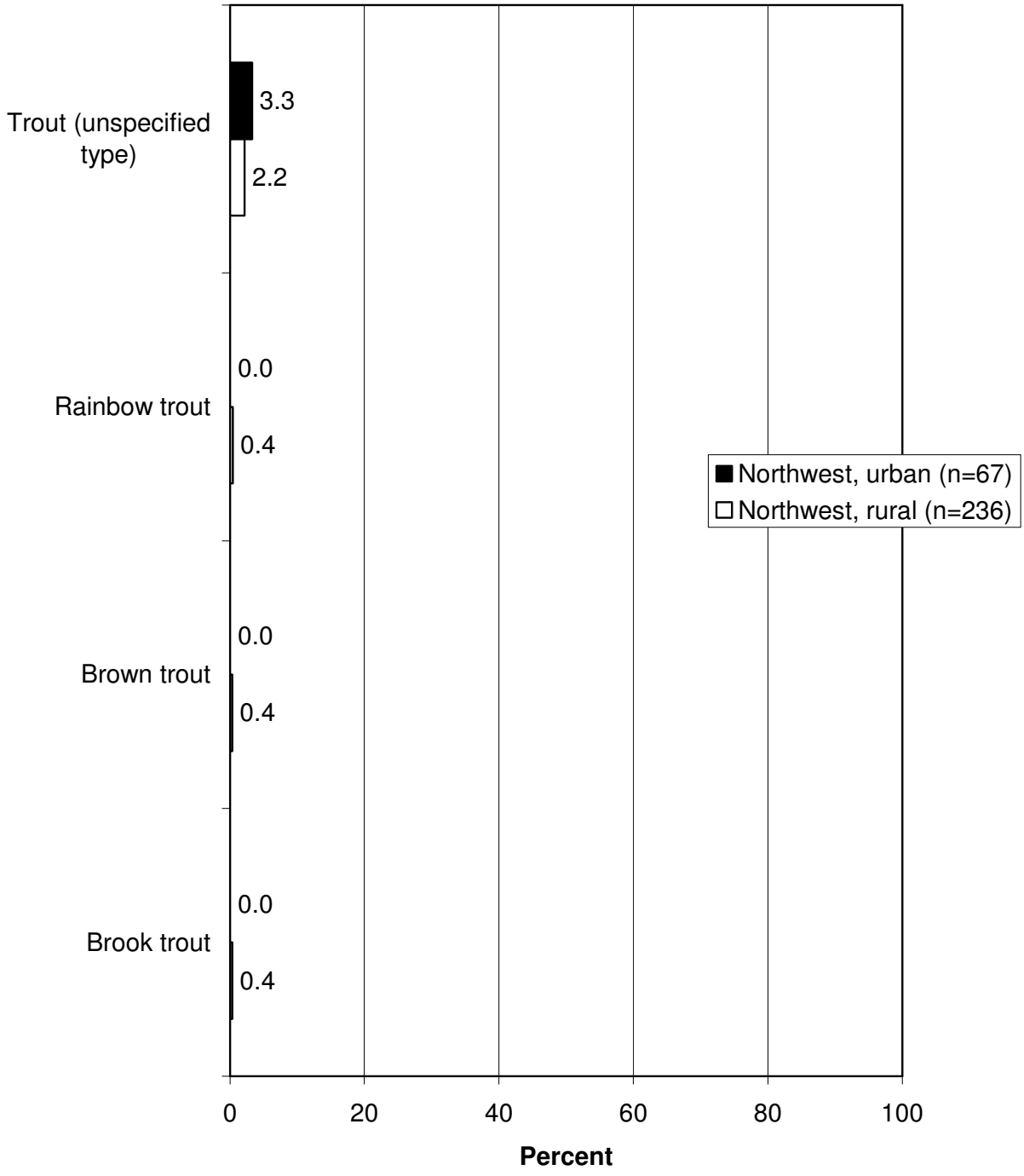

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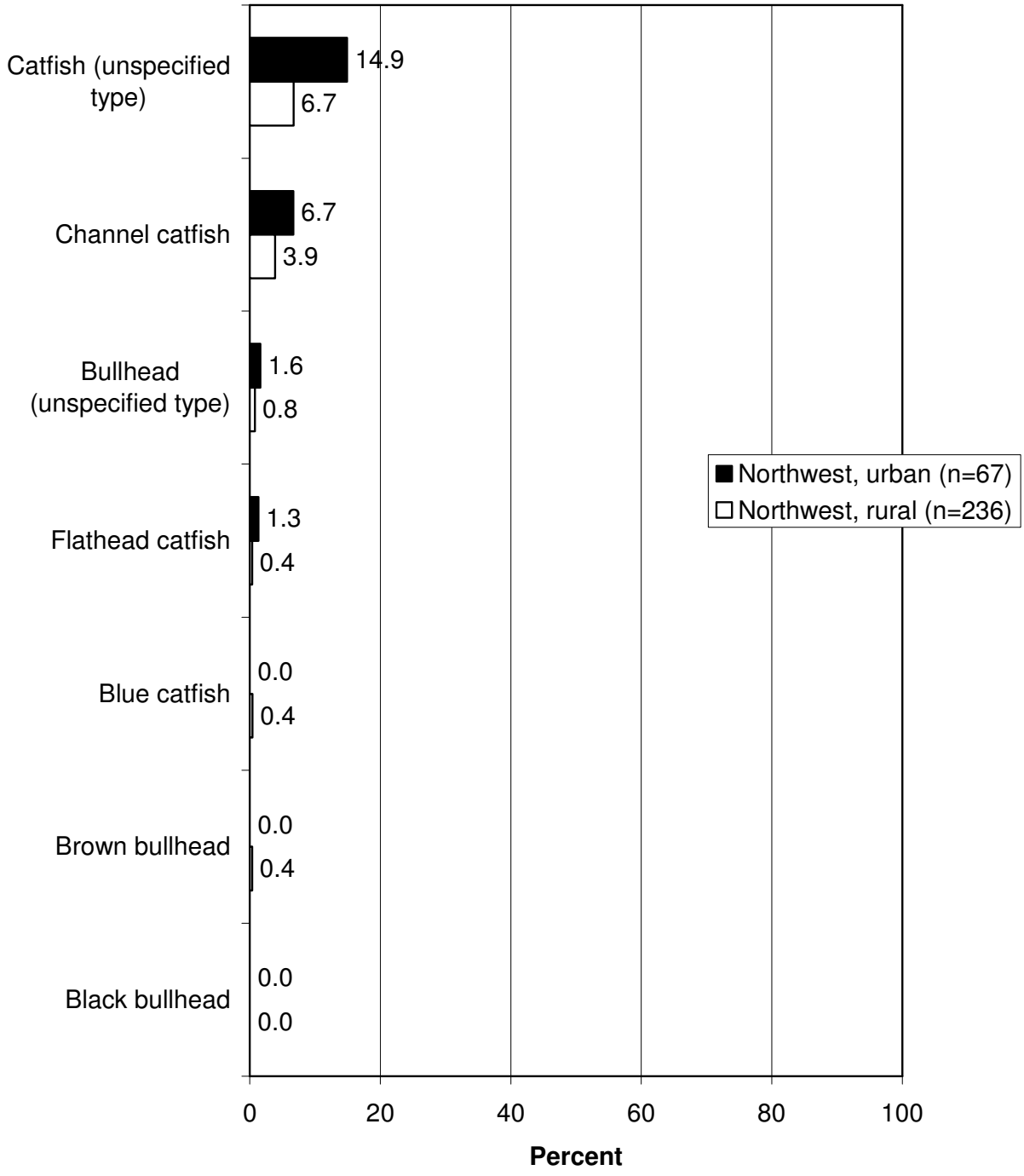
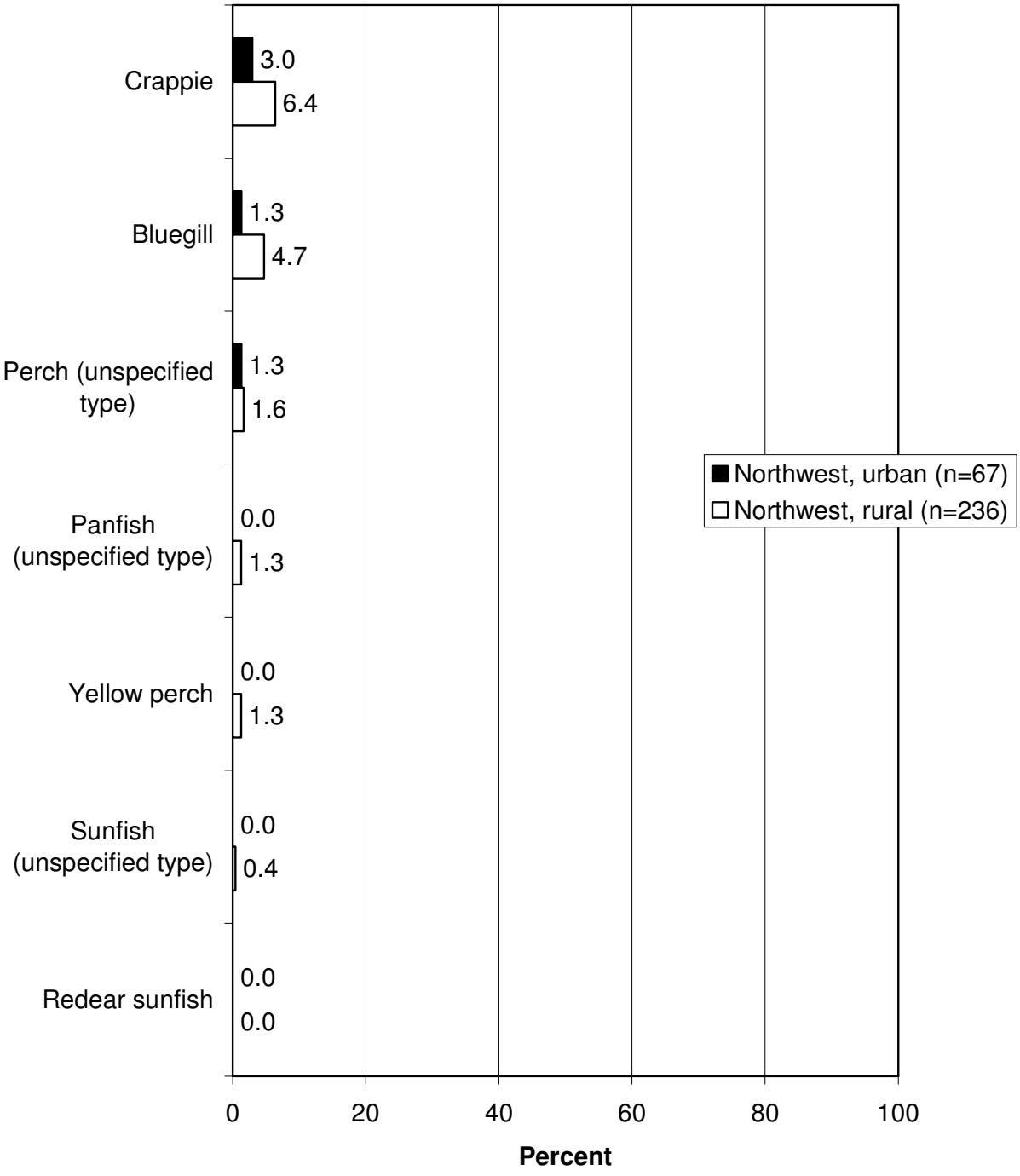


Q44. Which one species would you most prefer to fish for? (Panfish category)



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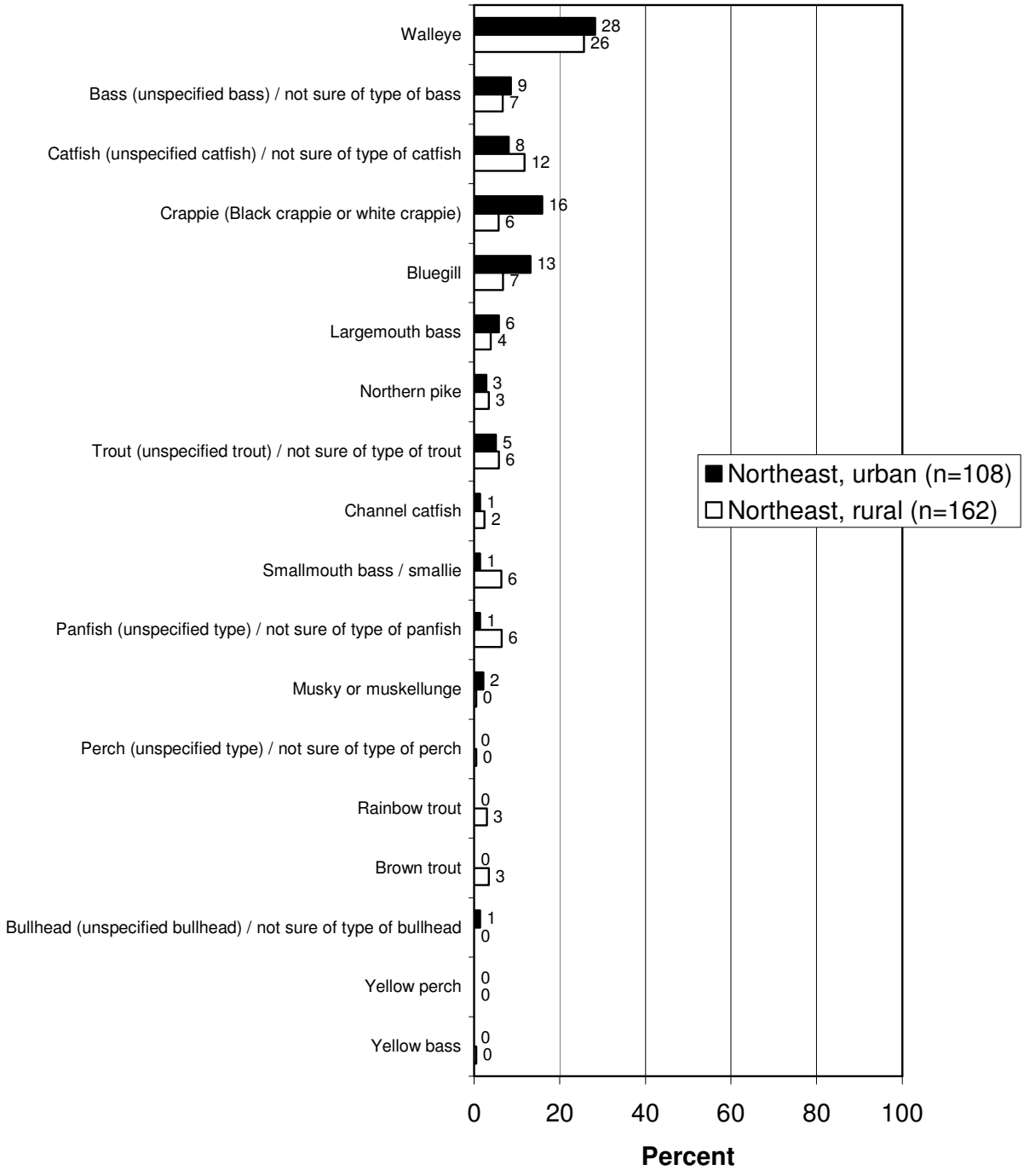

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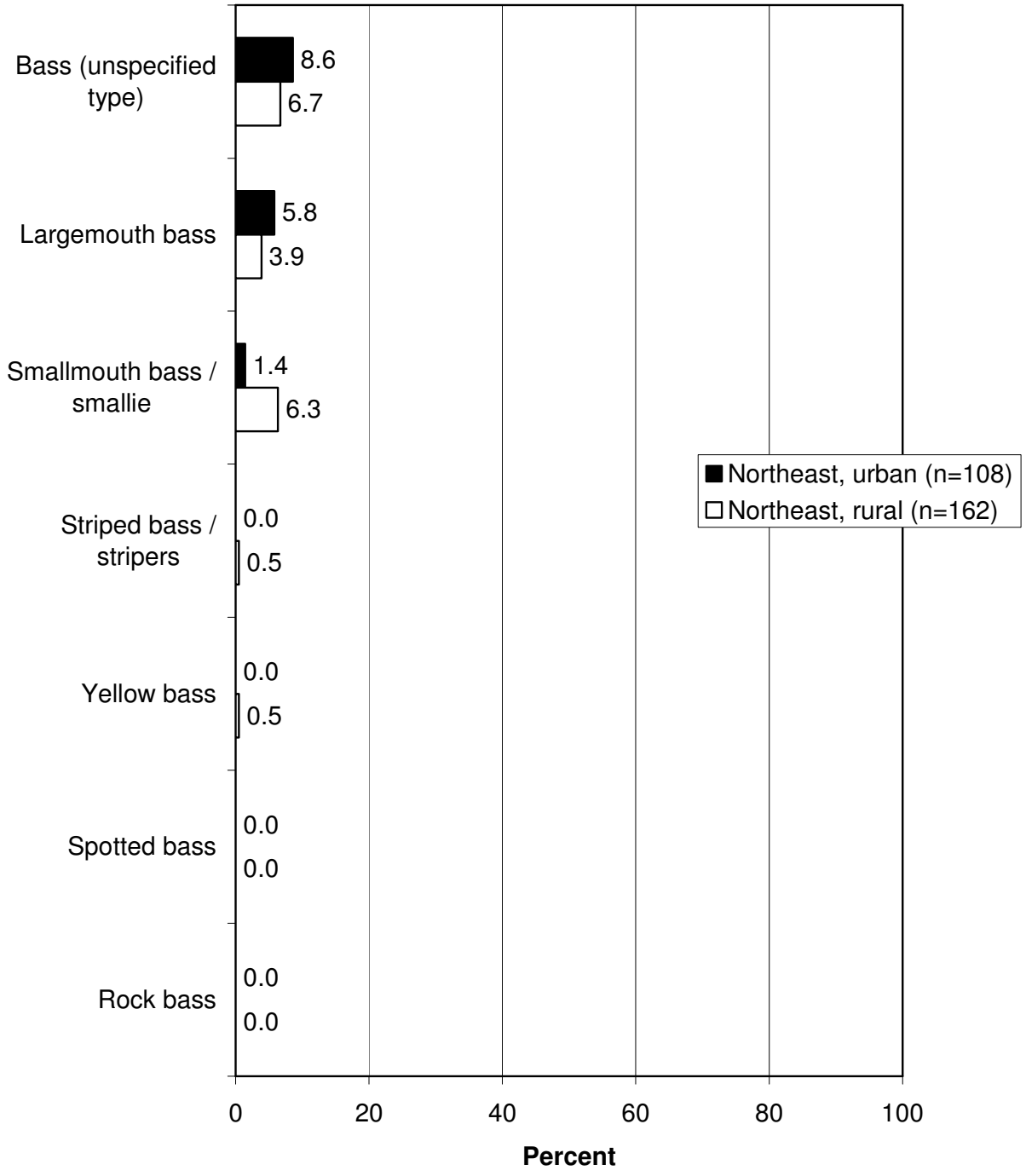

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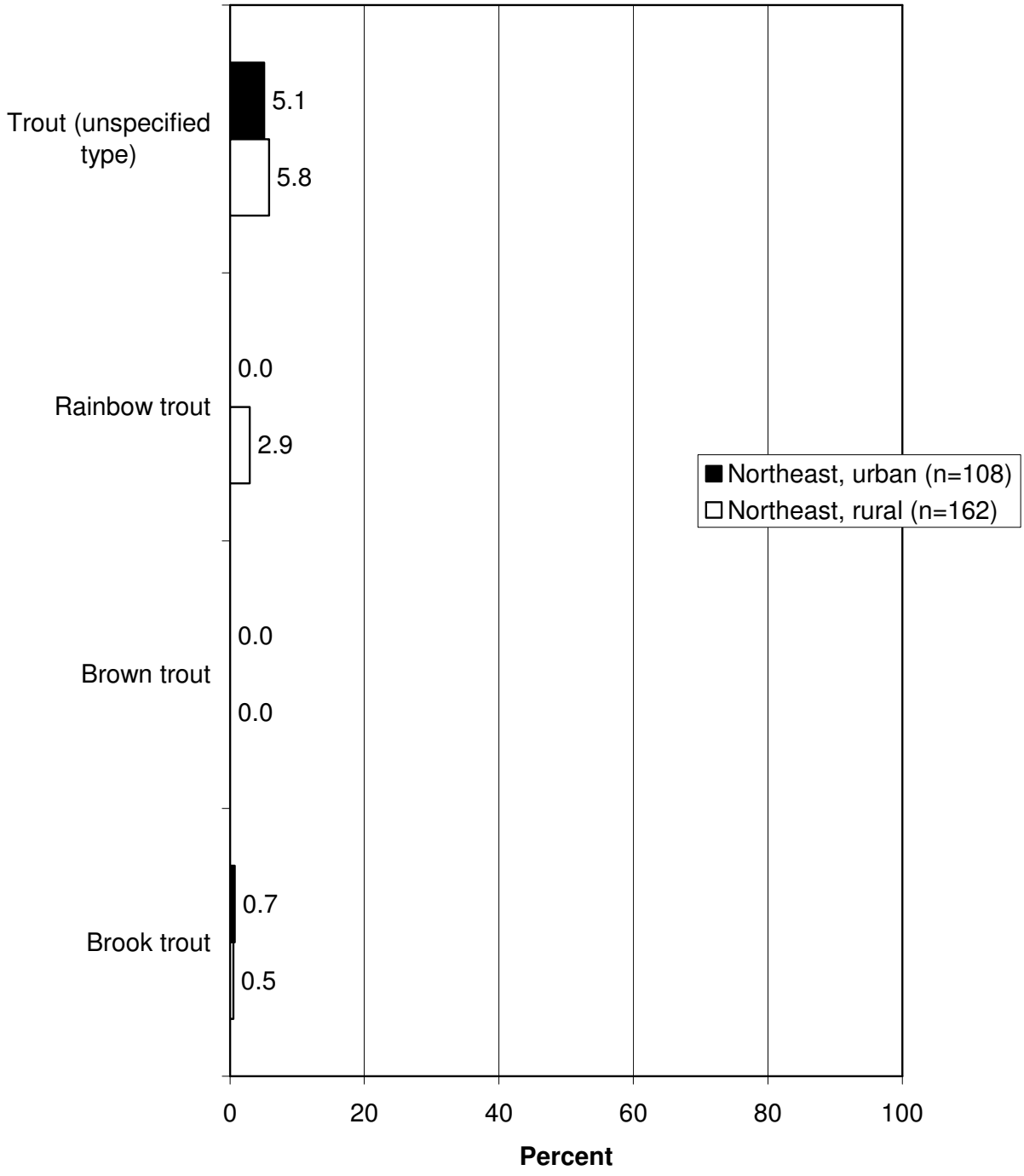

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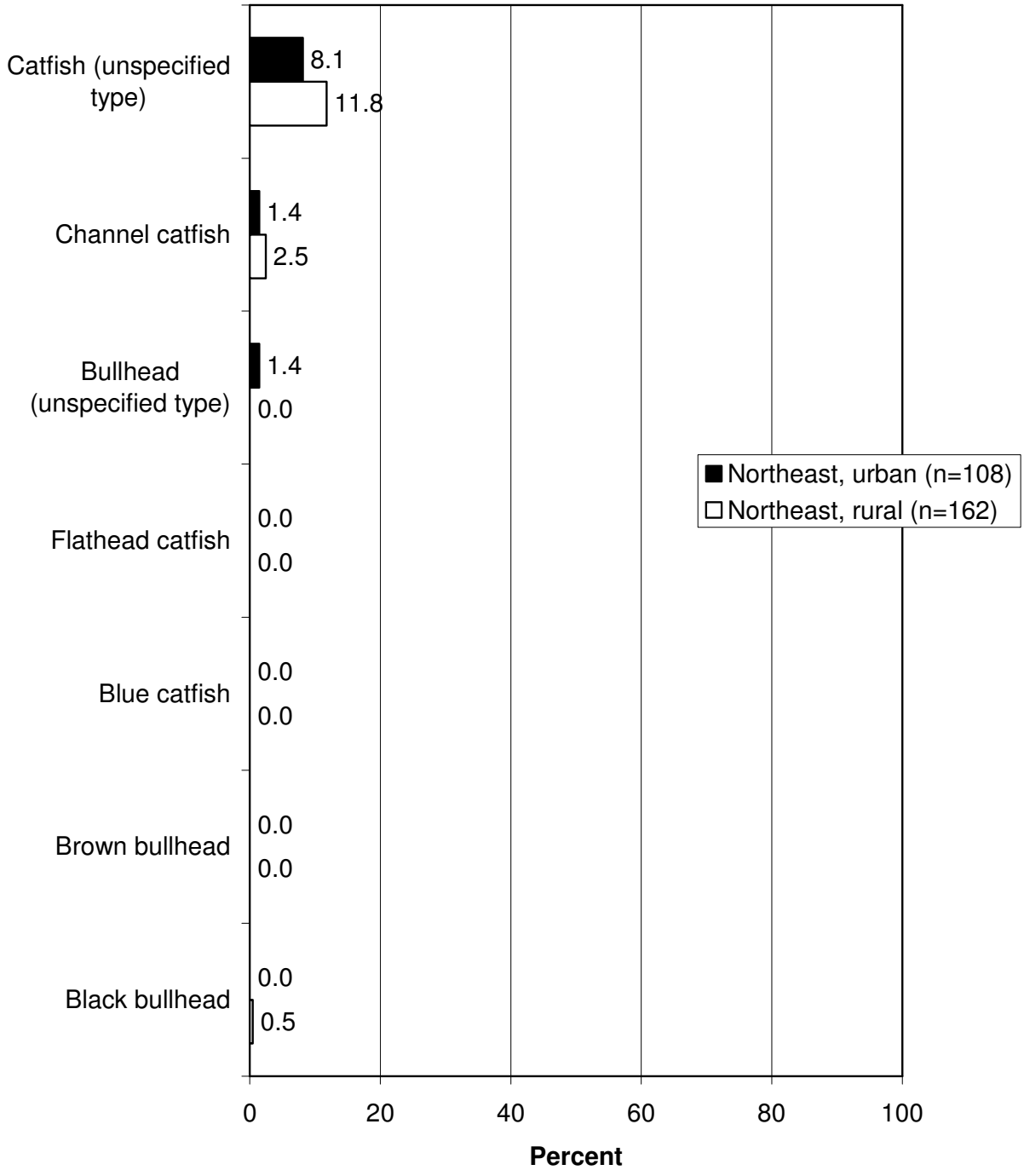

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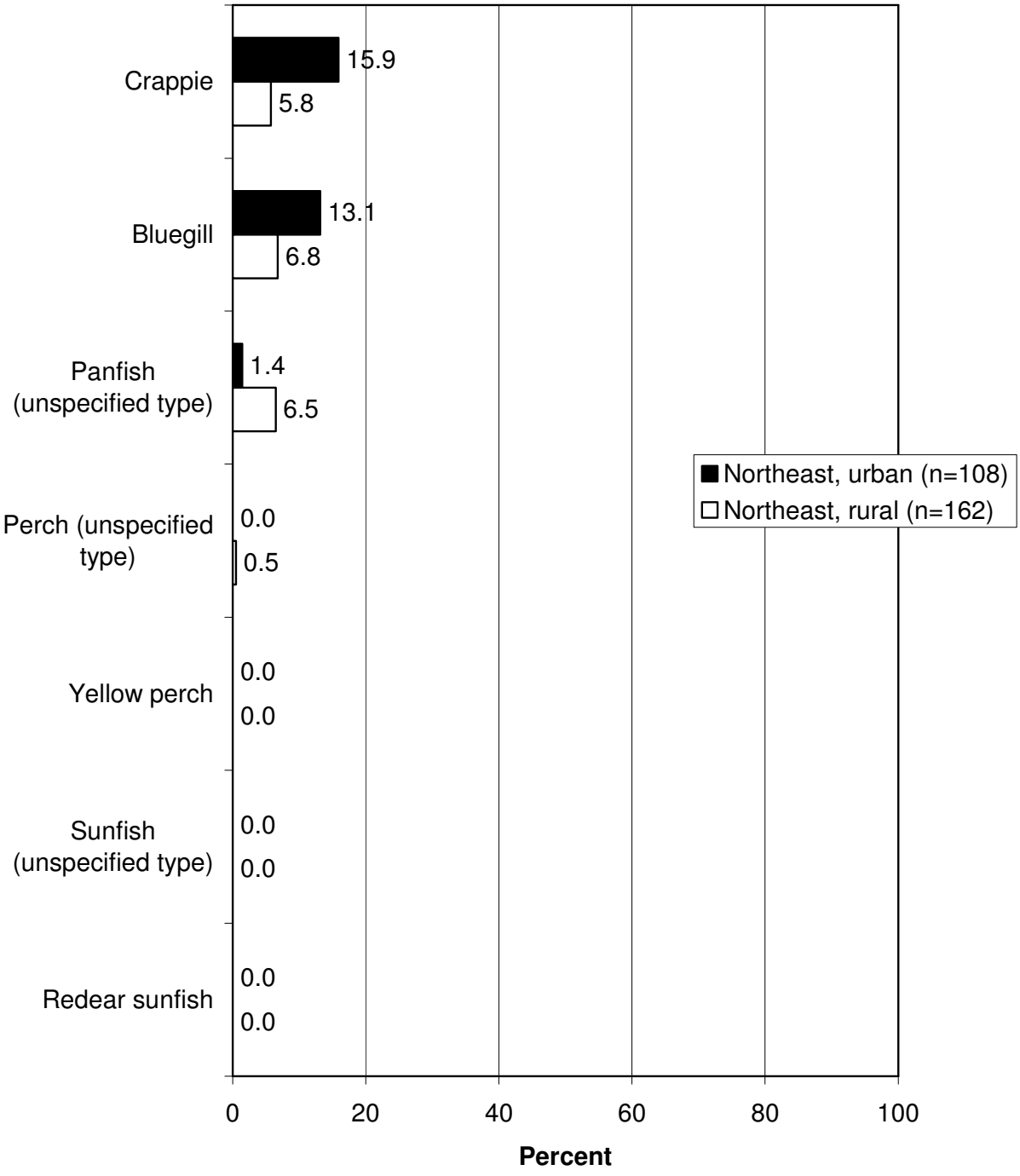

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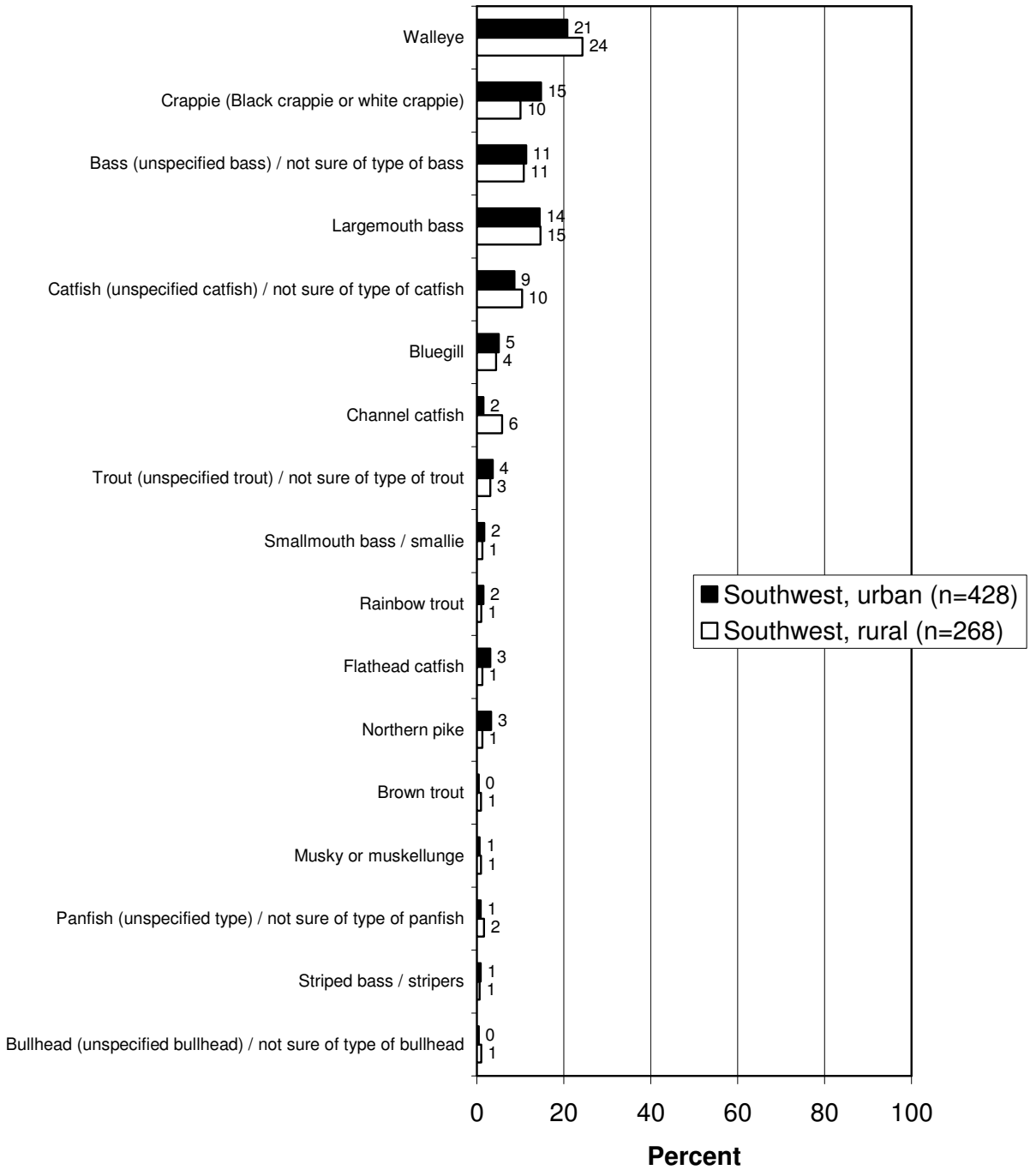

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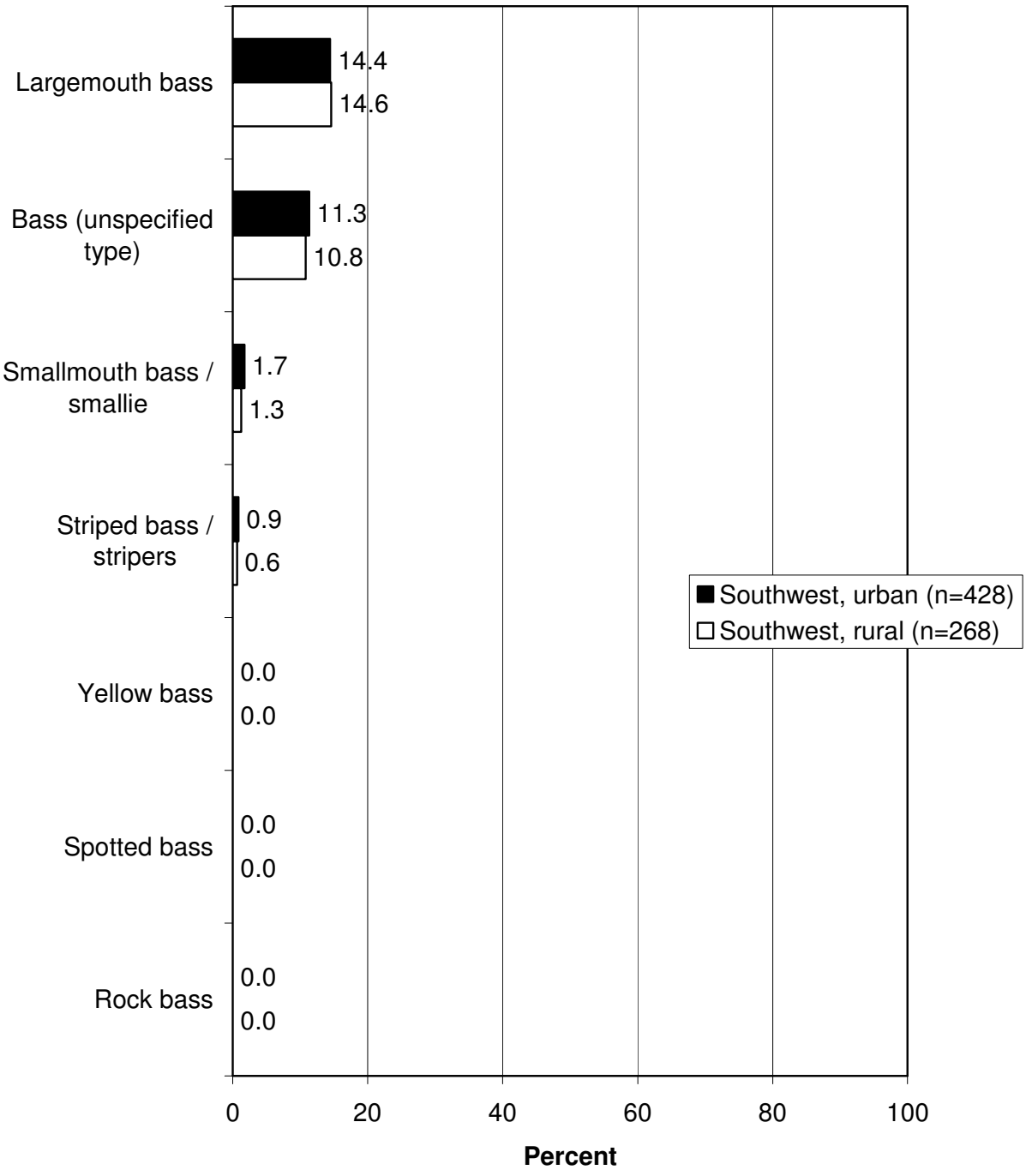

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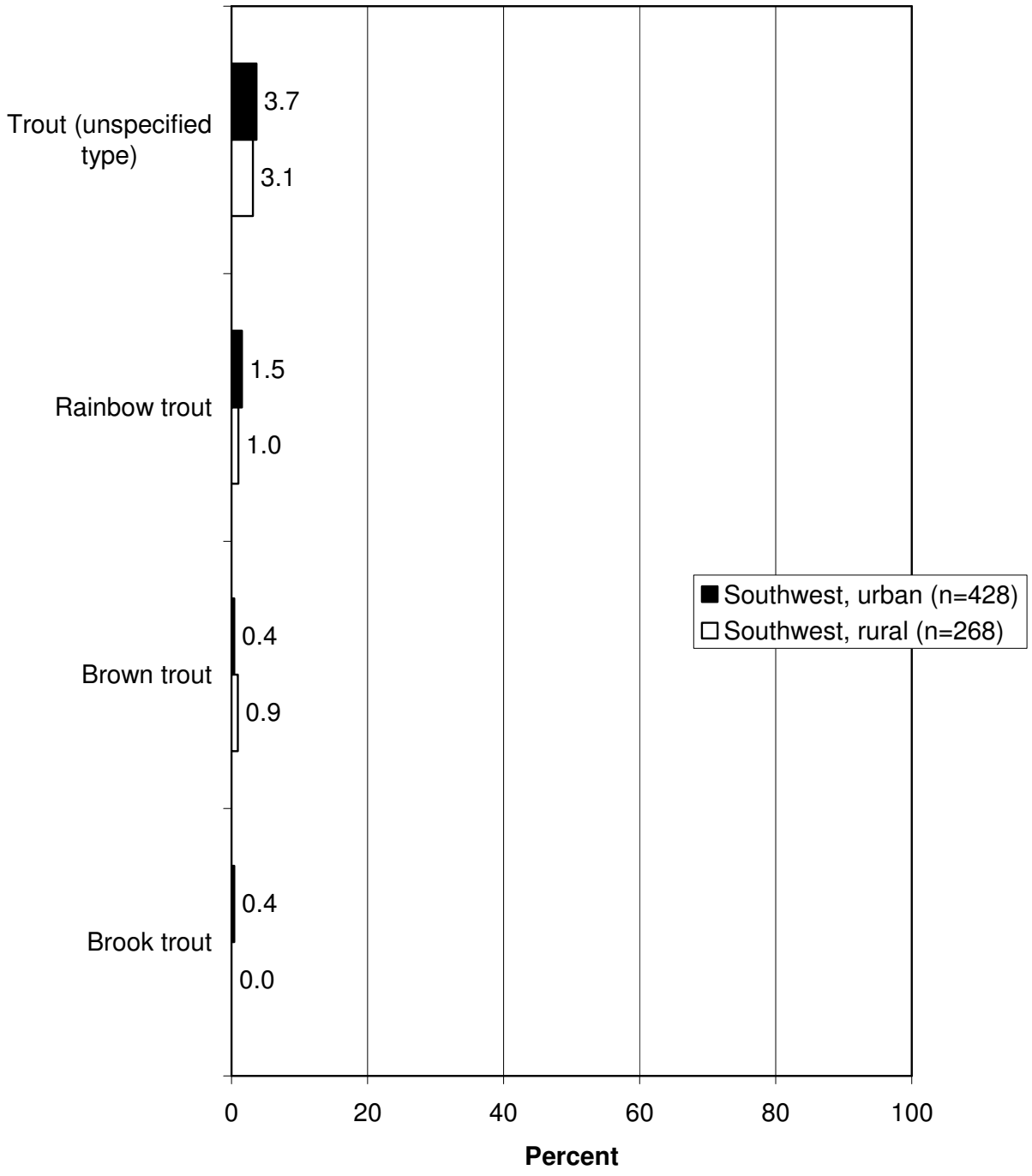

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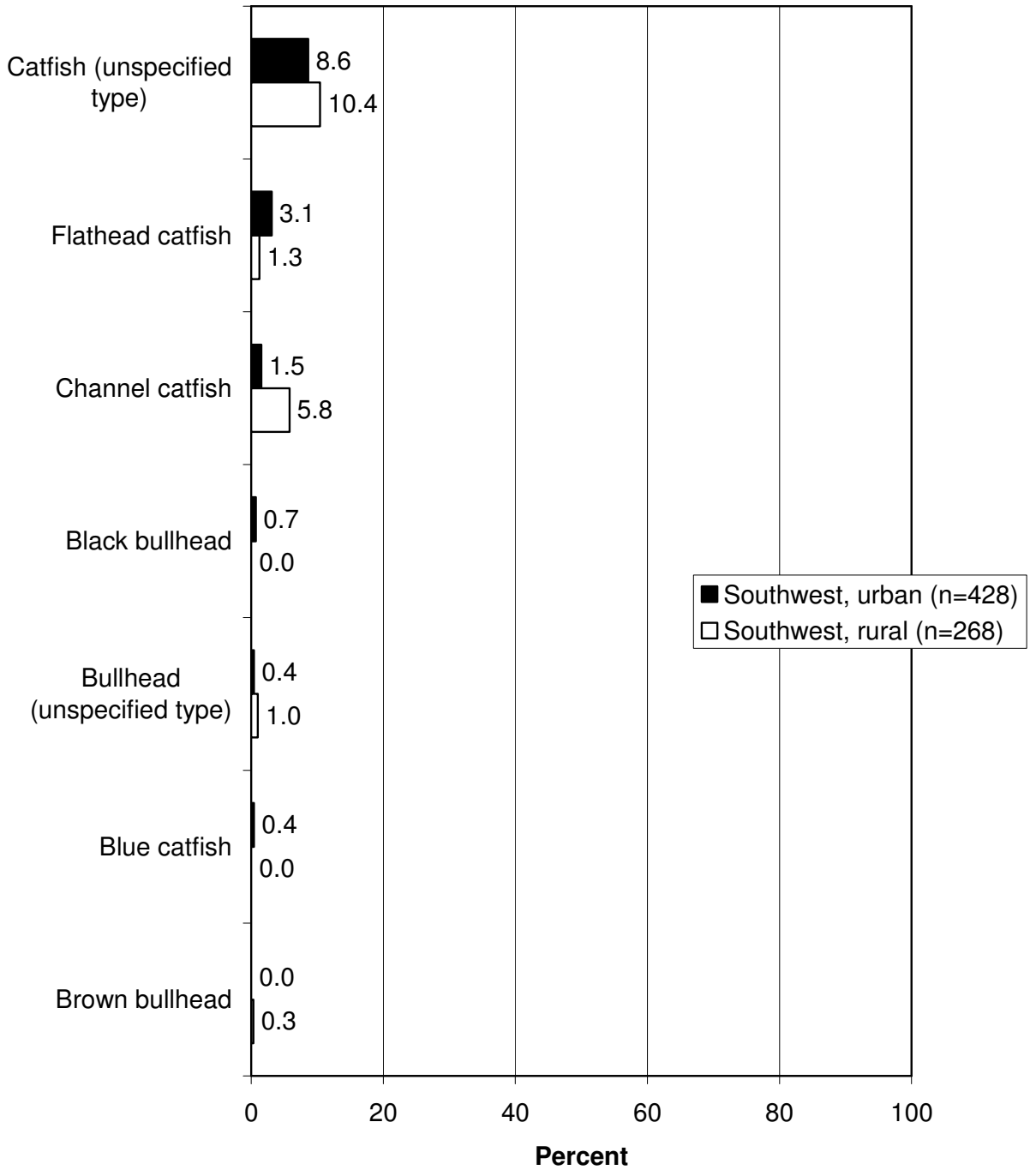

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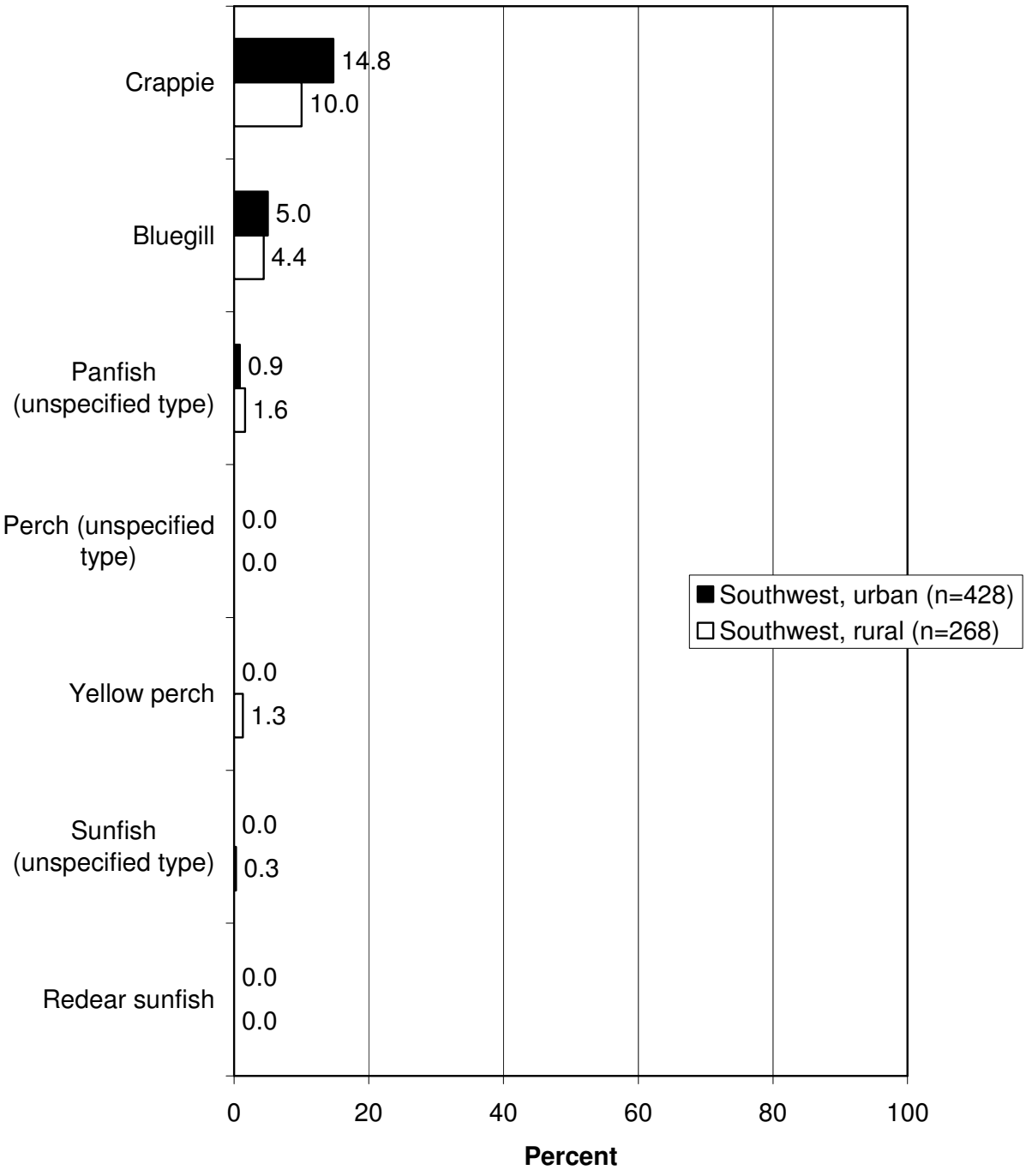
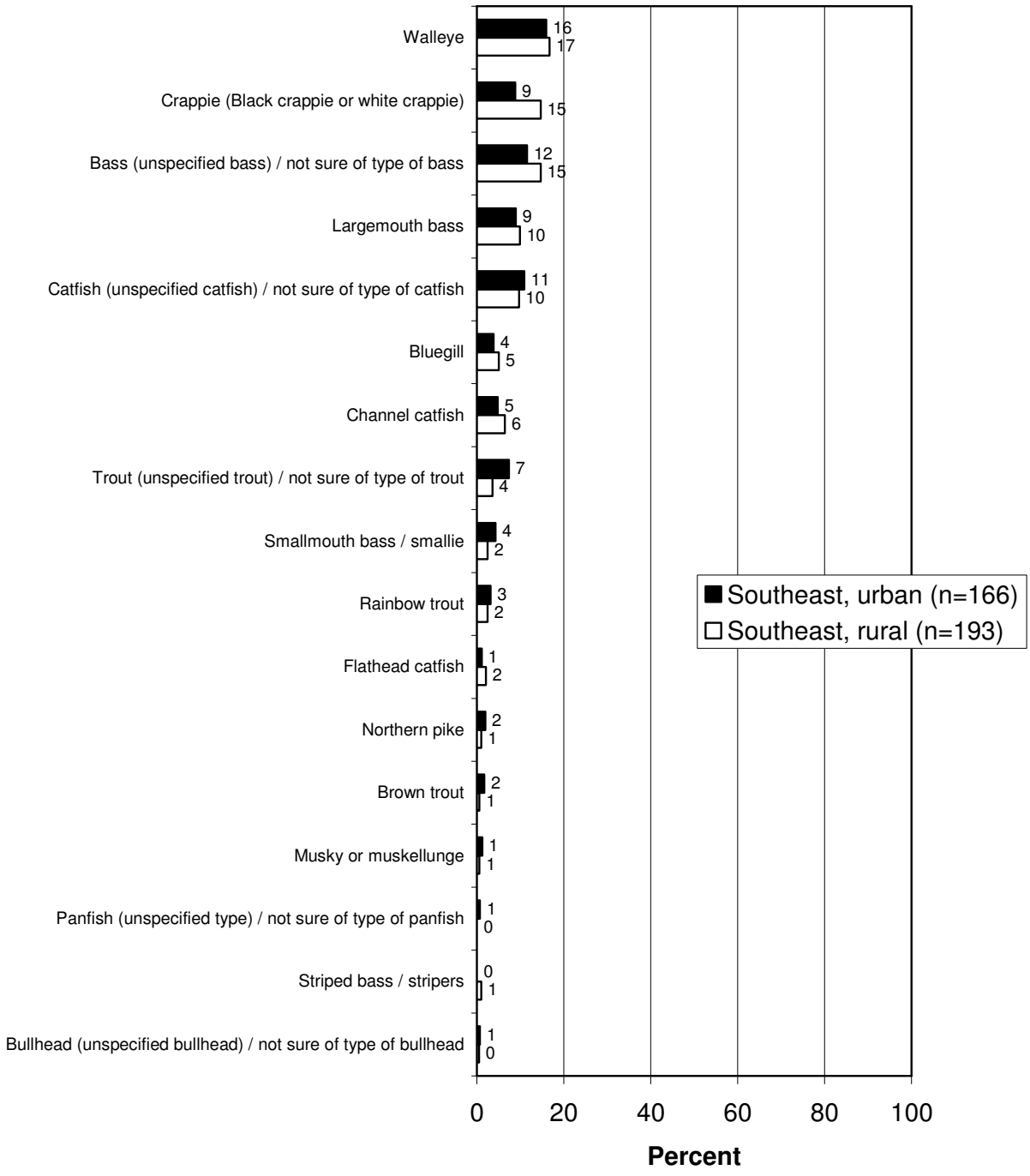
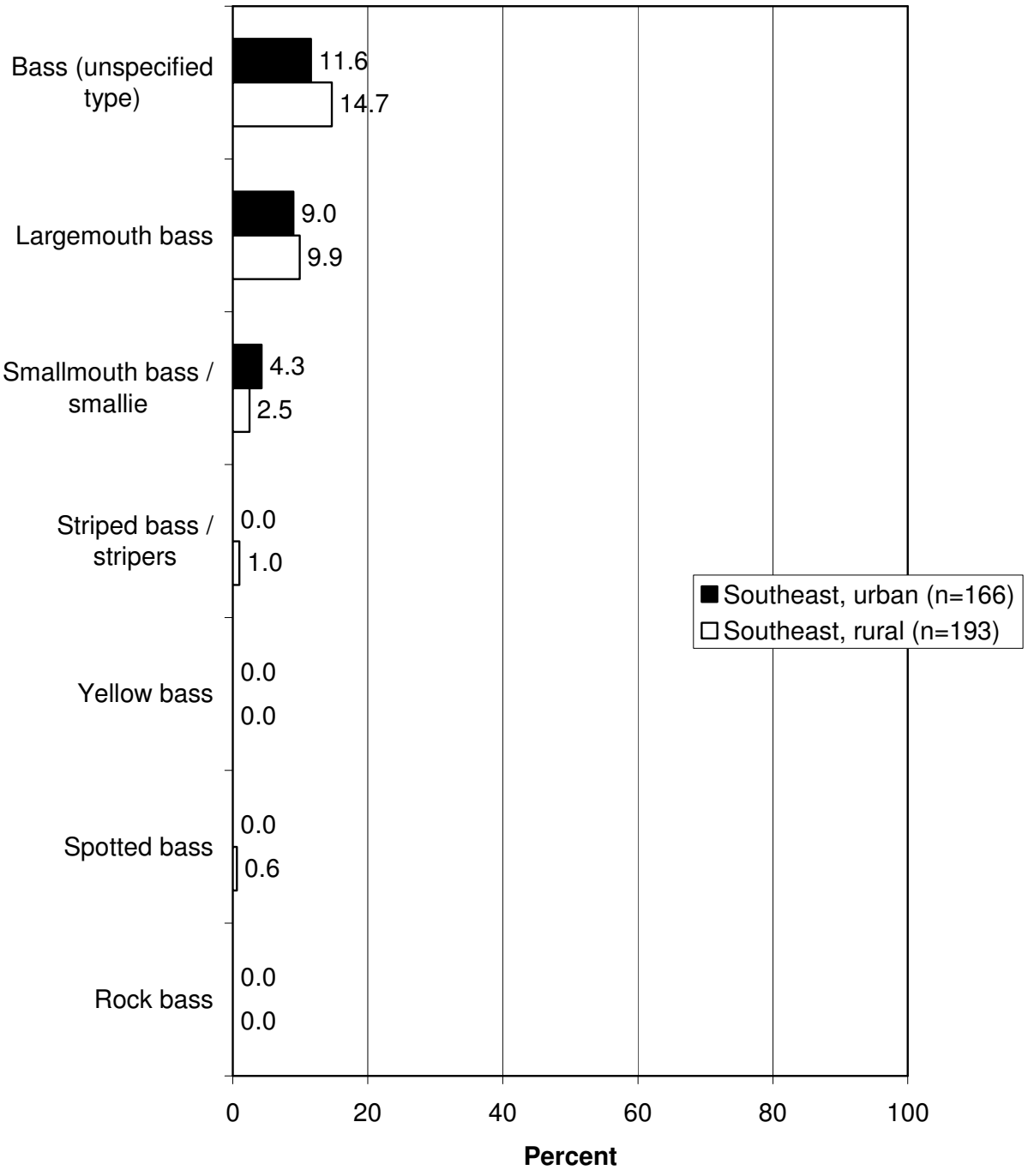


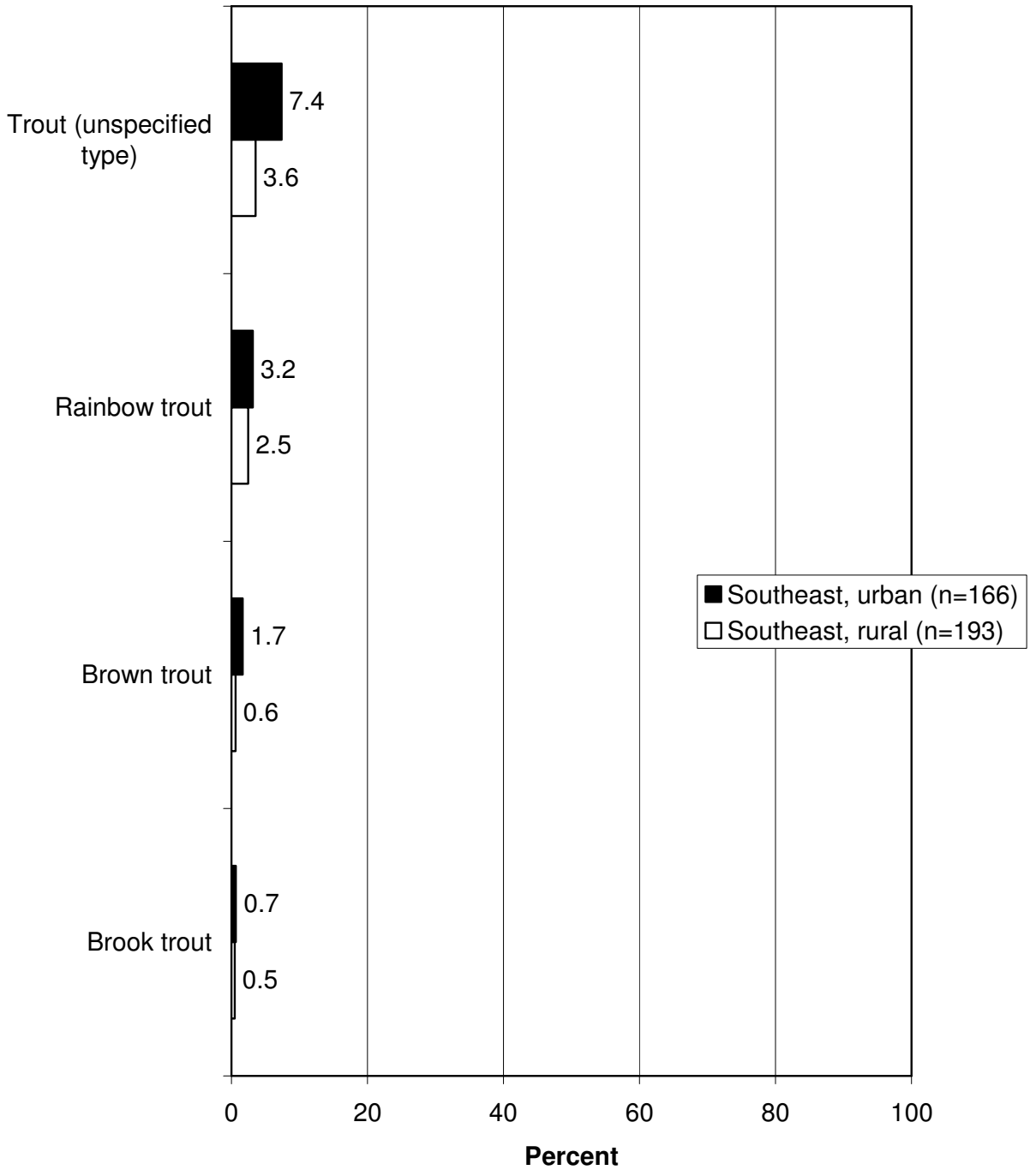
Q44. Which one species would you most prefer to fish for? (Top responses only)



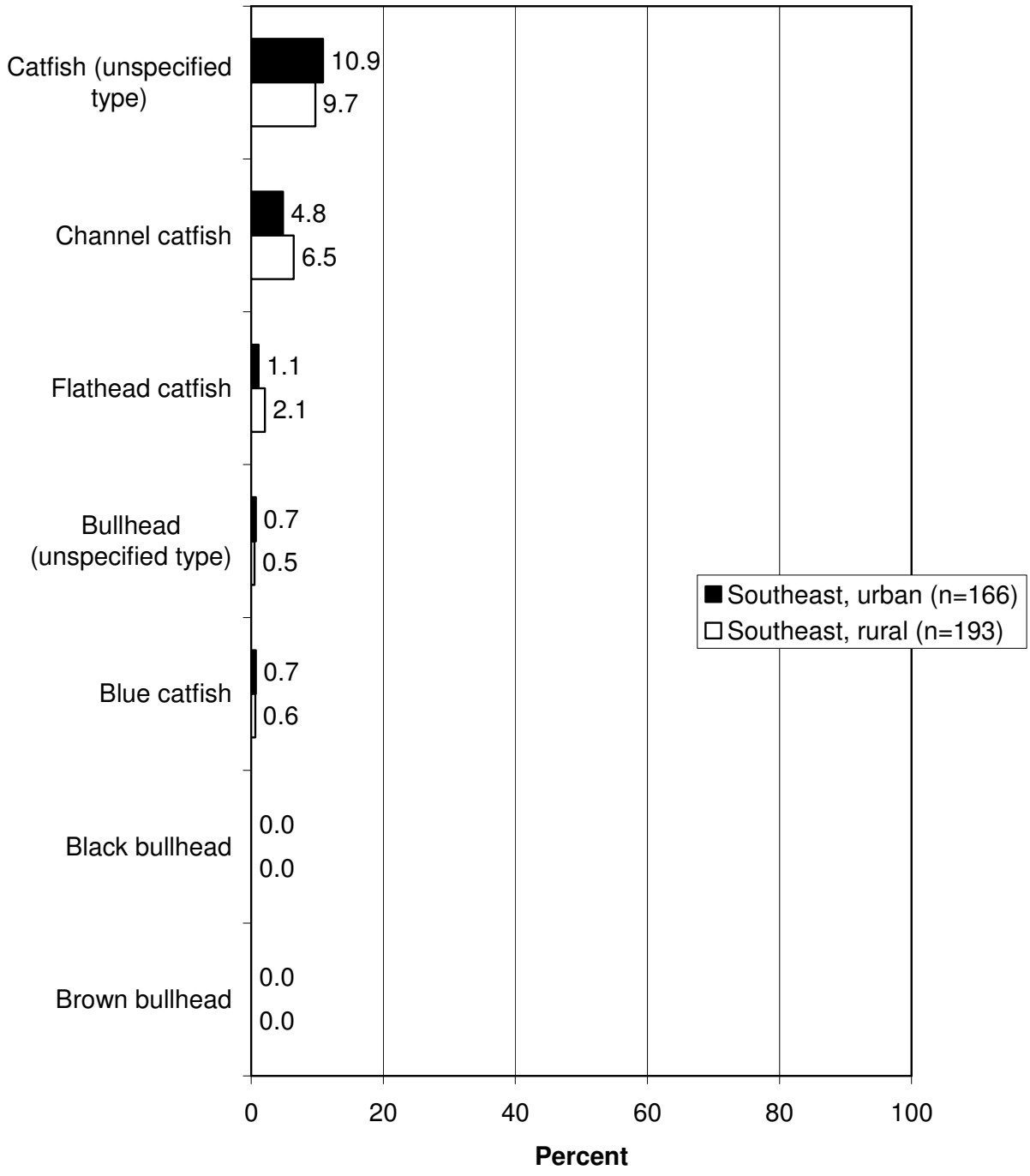
Q44. Which one species would you most prefer to fish for? (Bass category)



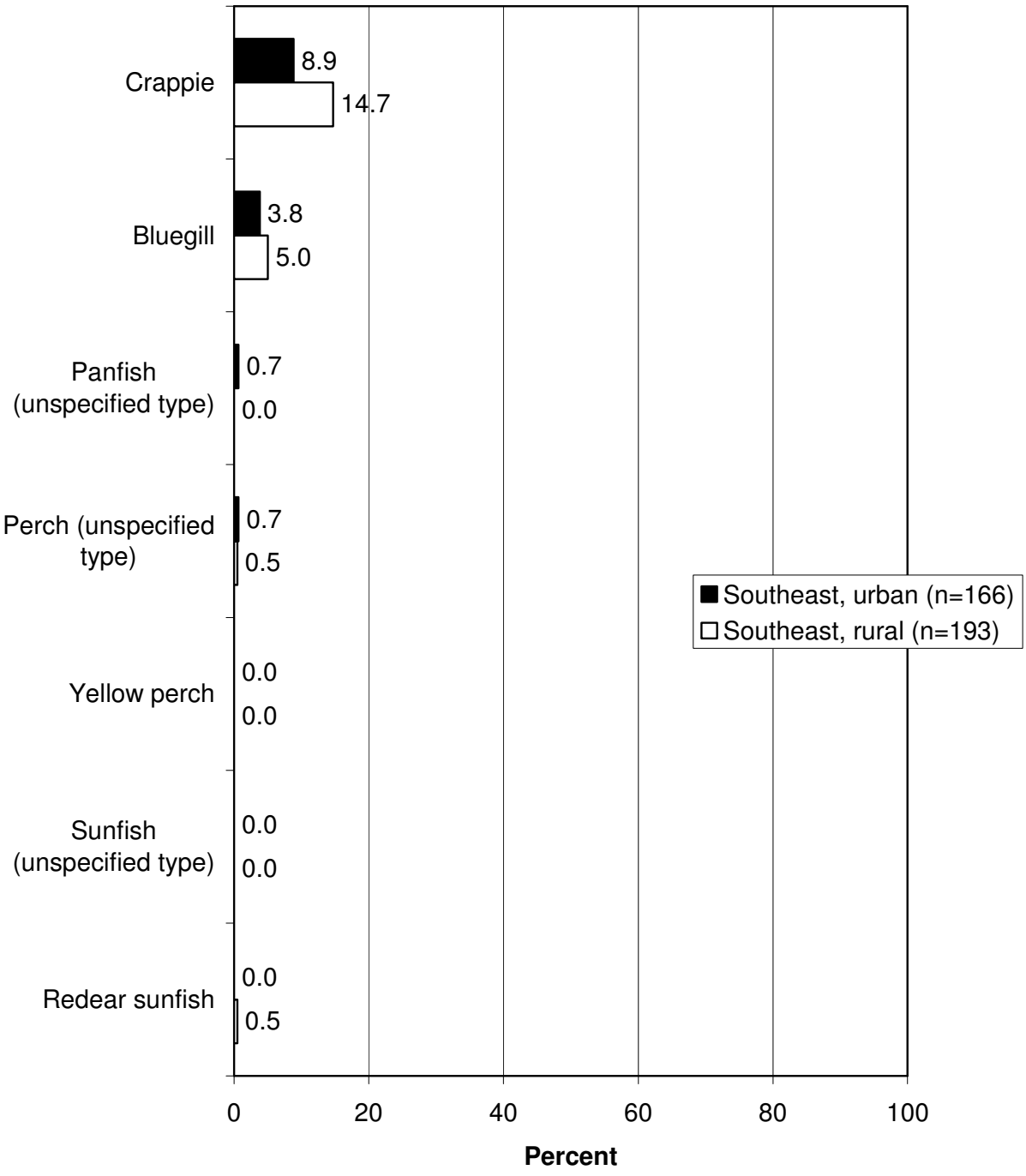
Q44. Which one species would you most prefer to fish for? (Trout category)



Q44. Which one species would you most prefer to fish for? (Catfish/bullhead category)



Q44. Which one species would you most prefer to fish for? (Panfish category)



FISHING LOCATIONS AND TYPE OF FISHING

FISHING LOCATIONS

- The most commonly fished body of water was the Mississippi River (11.0% of anglers fished this water body the most often), followed by unnamed private ponds (10.5%). These were distantly followed by the Cedar River (4.7%), Clear Lake (4.2%), and the Des Moines River (4.0%).
  - A follow-up question asked anglers in which county their most frequently fished water body is located. The top counties are Polk (7.3%), Cerro Gordo (4.7%), Johnson (4.7%), Scott (4.6%), and Dickinson (4.2%).
  - A map of the most commonly fished counties is shown.
  - Graphs also show the most fished water bodies broken out by water body type.

- As with the species section, the survey next asked Iowa anglers to name their *preferred* body of water and county in which to fish. Again, the preferred water bodies and counties largely mirror those in which the anglers actually fished. The top responses are the Mississippi River (11.6%), unnamed private ponds (6.6%), Clear Lake (3.5%), the Des Moines River (3.4%), Okoboji Lake (East and West) (3.2%), and the Cedar River (3.0%).
  - The counties associated with the preferred water bodies are Dickinson (6.6%), Polk (6.4%), Johnson (4.8%), Cerro Gordo (4.2%), and Scott (3.8%).
  - A map of the most commonly preferred counties is shown.

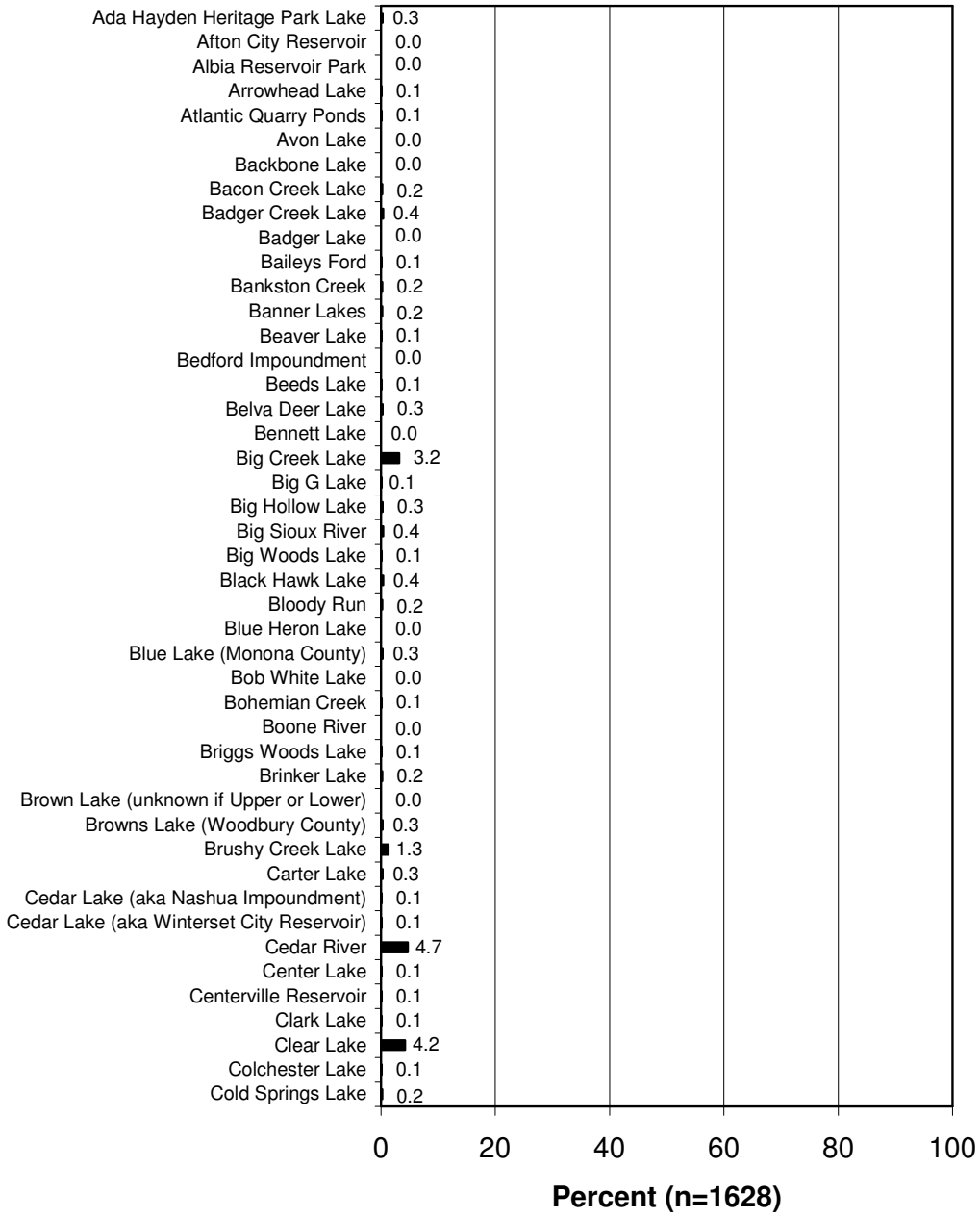
- While the majority of Iowa anglers (56%) typically travel no more than 20 miles to fish in Iowa, 17% typically travel more than 50 miles.

- The large majority of Iowa anglers (78%) fished from the shore at least some of the time, while 67% fished from a boat, 65% did catch-and-release fishing, and 49% fished from a pier or dock. Much less common were ice fishing (27%), fishing while wading (17%), fly fishing (7%), and fishing in a tournament (6%).

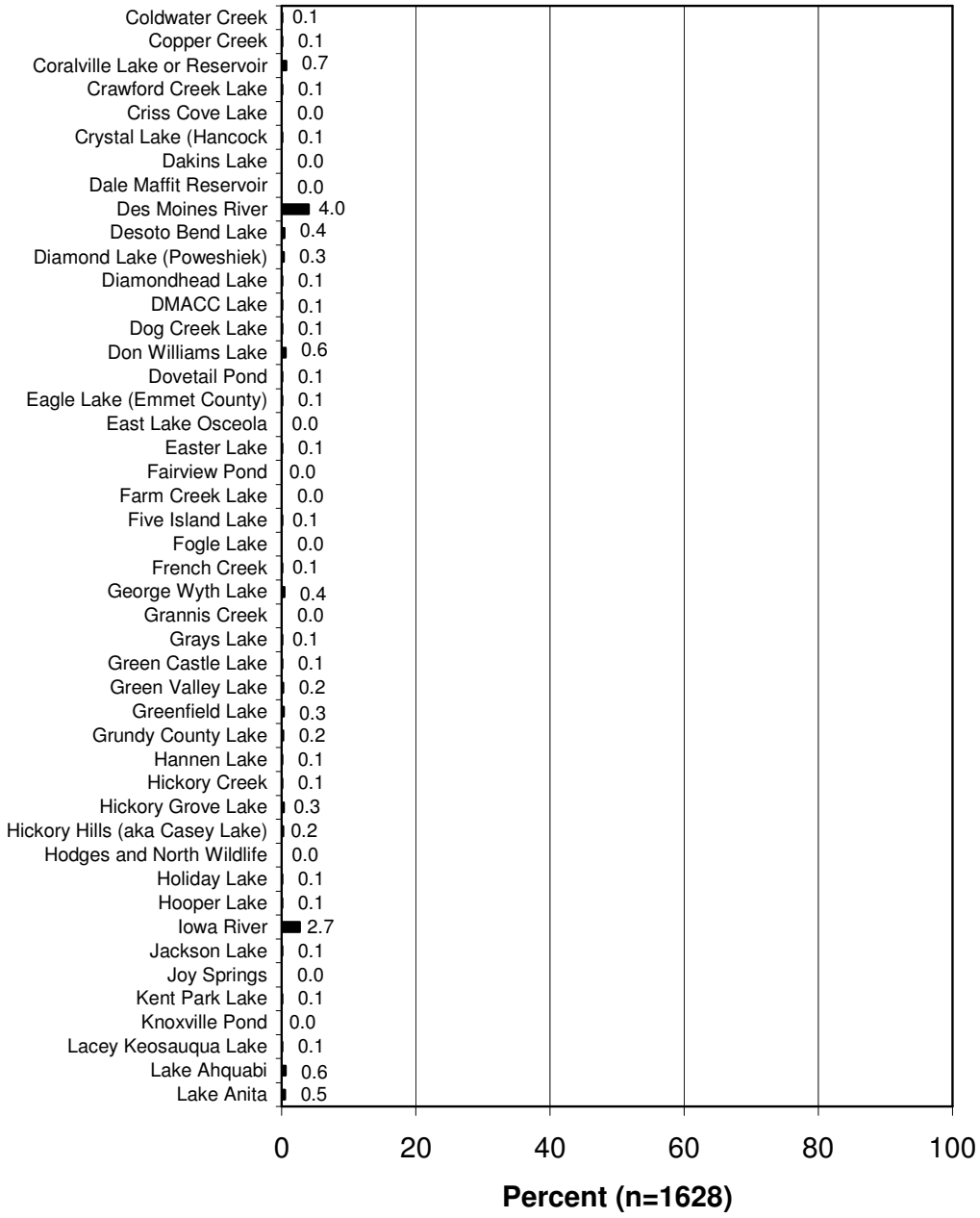
- The most commonly fished type of water body was lakes (64% stated this), closely followed by rivers or streams (59%). These were distantly followed by ponds or pits (43%) and reservoirs (22%).
  - Compared to the other regions, Northeast anglers are more likely to fish rivers or streams and less likely to fish the other water body types.
  - Those who do not live in Urban/Community Fishing Program areas are less likely to fish ponds than those who do.

- Crosstabulations of species fished and water body types fished are shown at the end of this subchapter.

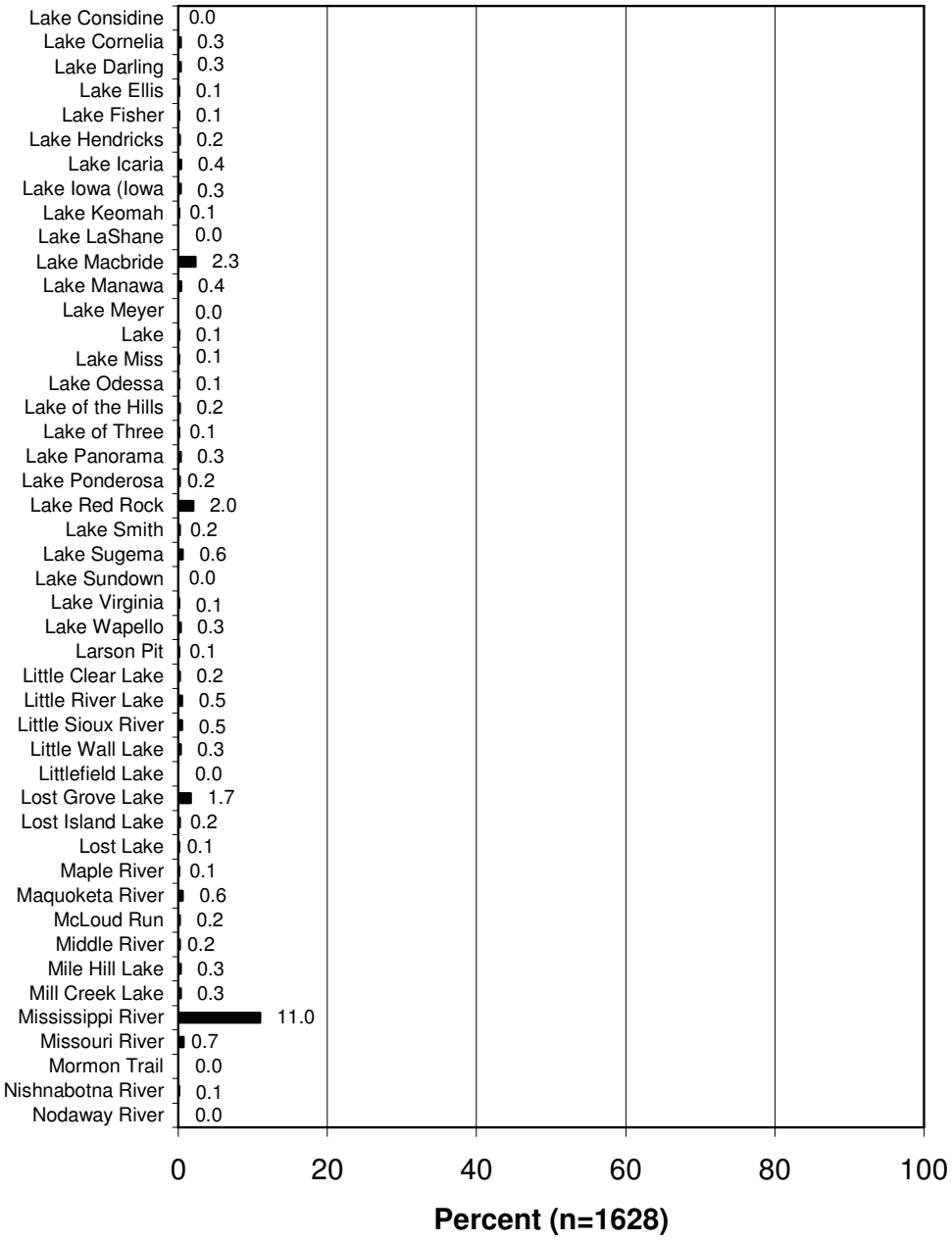
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Overall) (Alphabetical order, Part 1)



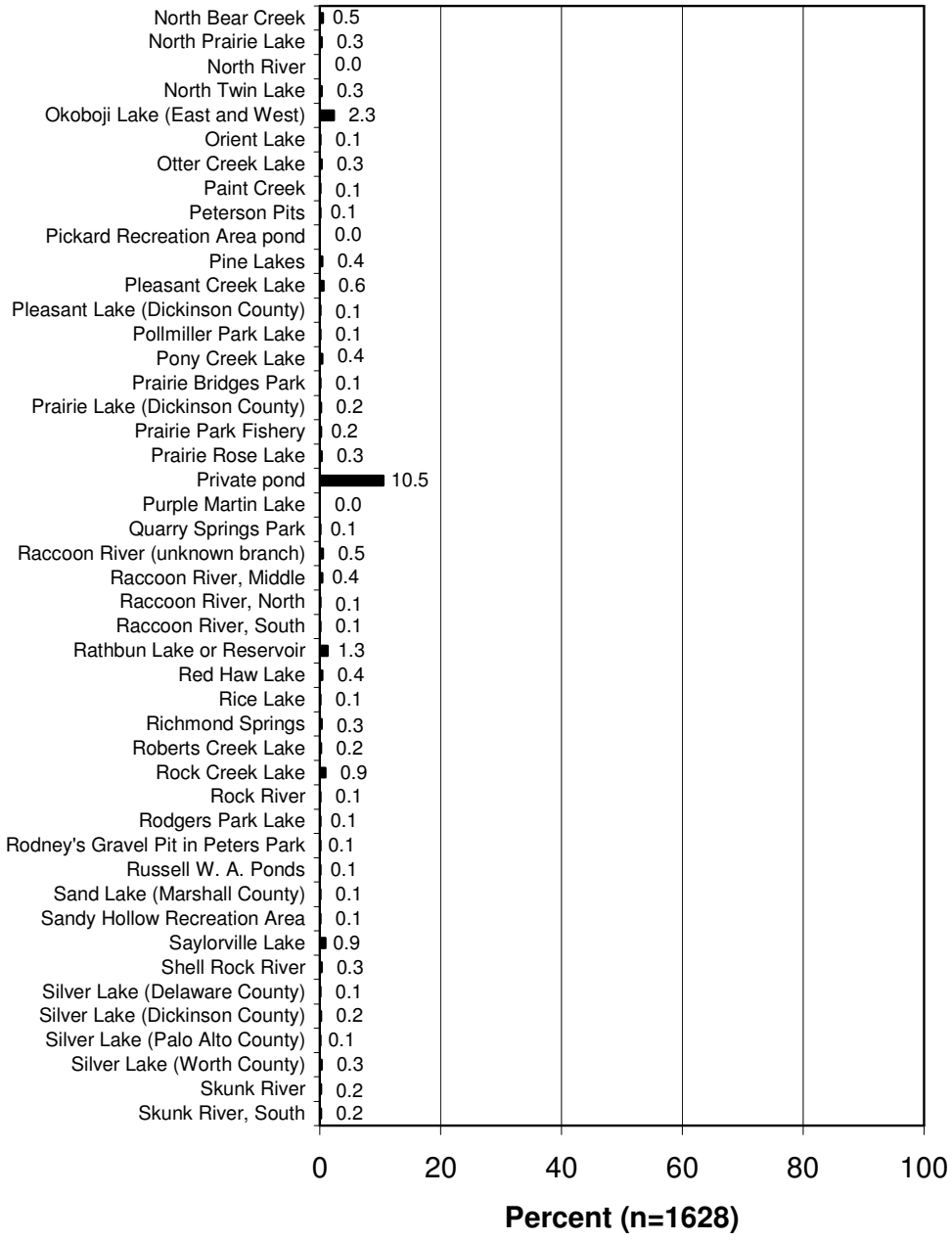
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Overall) (Alphabetical order, Part 2)



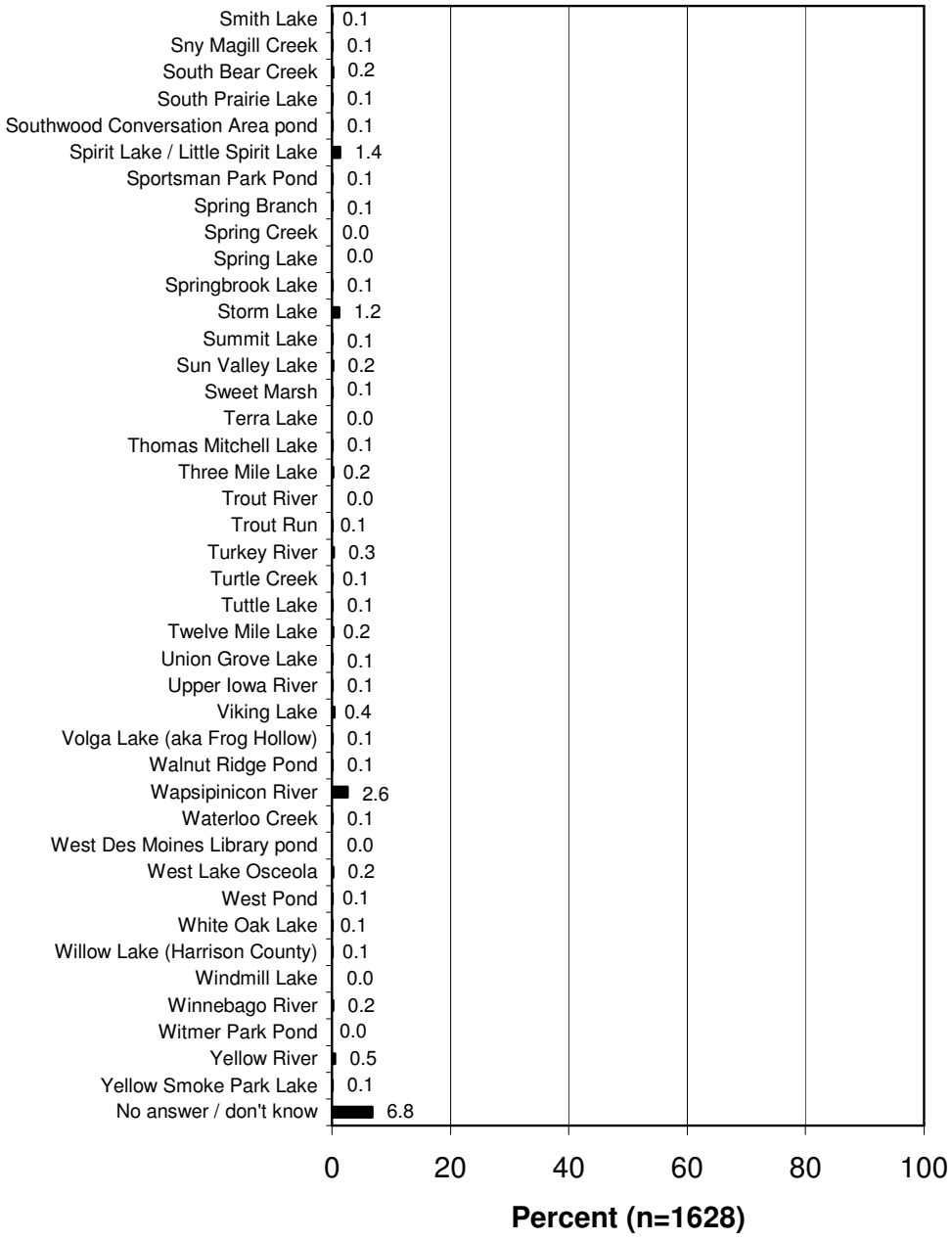
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Overall) (Alphabetical order, Part 3)



Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Overall) (Alphabetical order, Part 4)

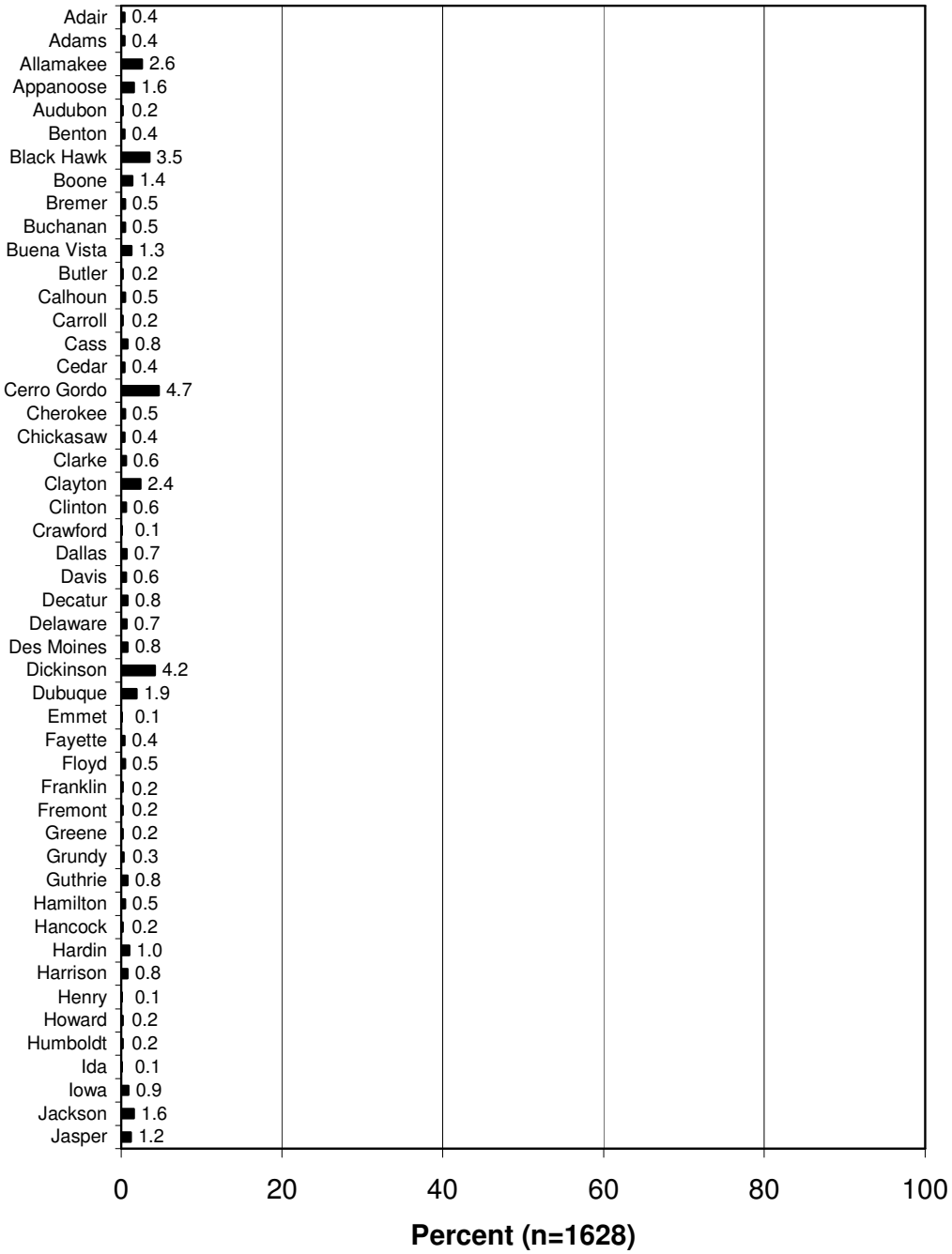


Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Overall) (Alphabetical order, Part 5)

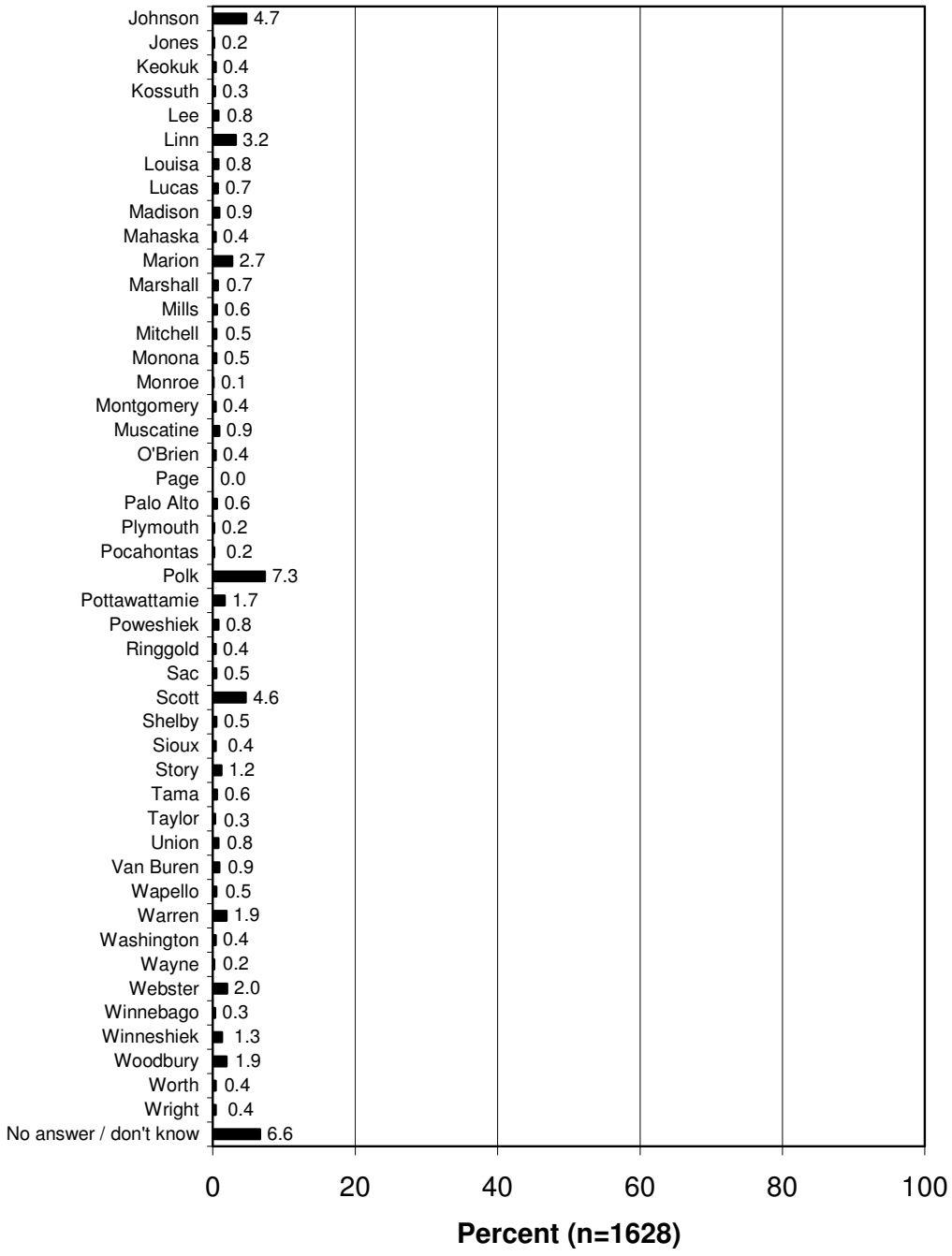


Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Overall) (Descending order, top responses only)

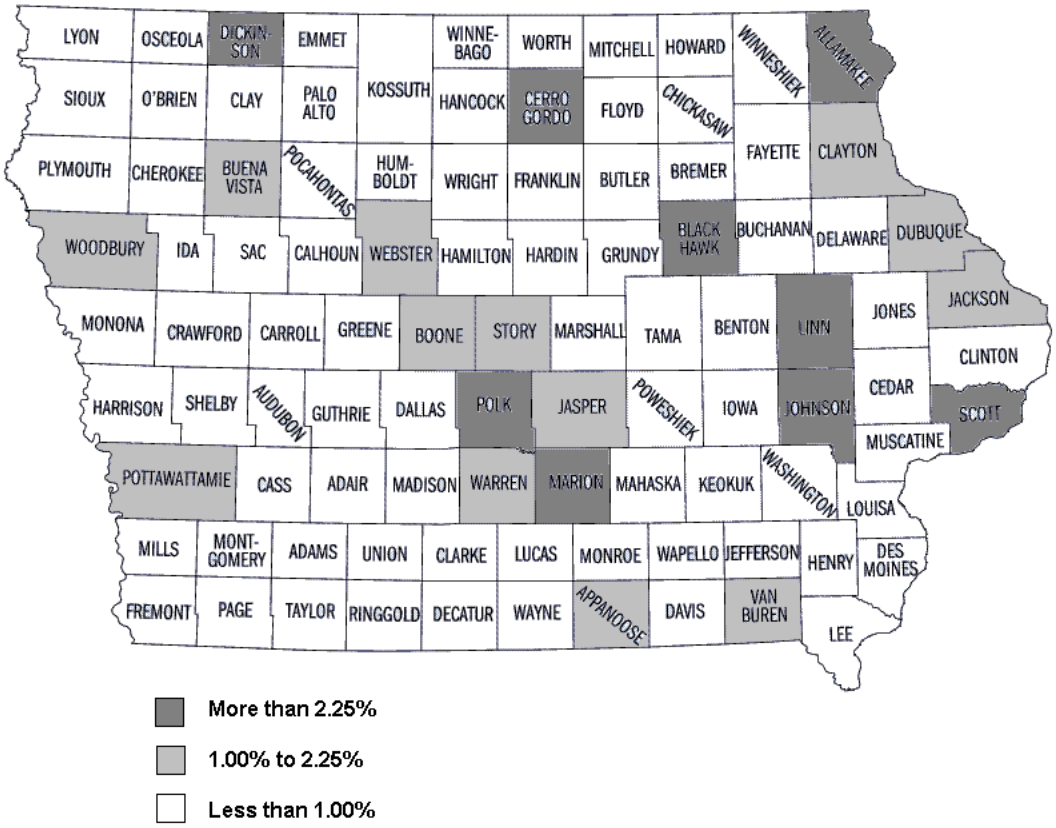
Q46. What county is that body of water in? (Overall) (Part 1)



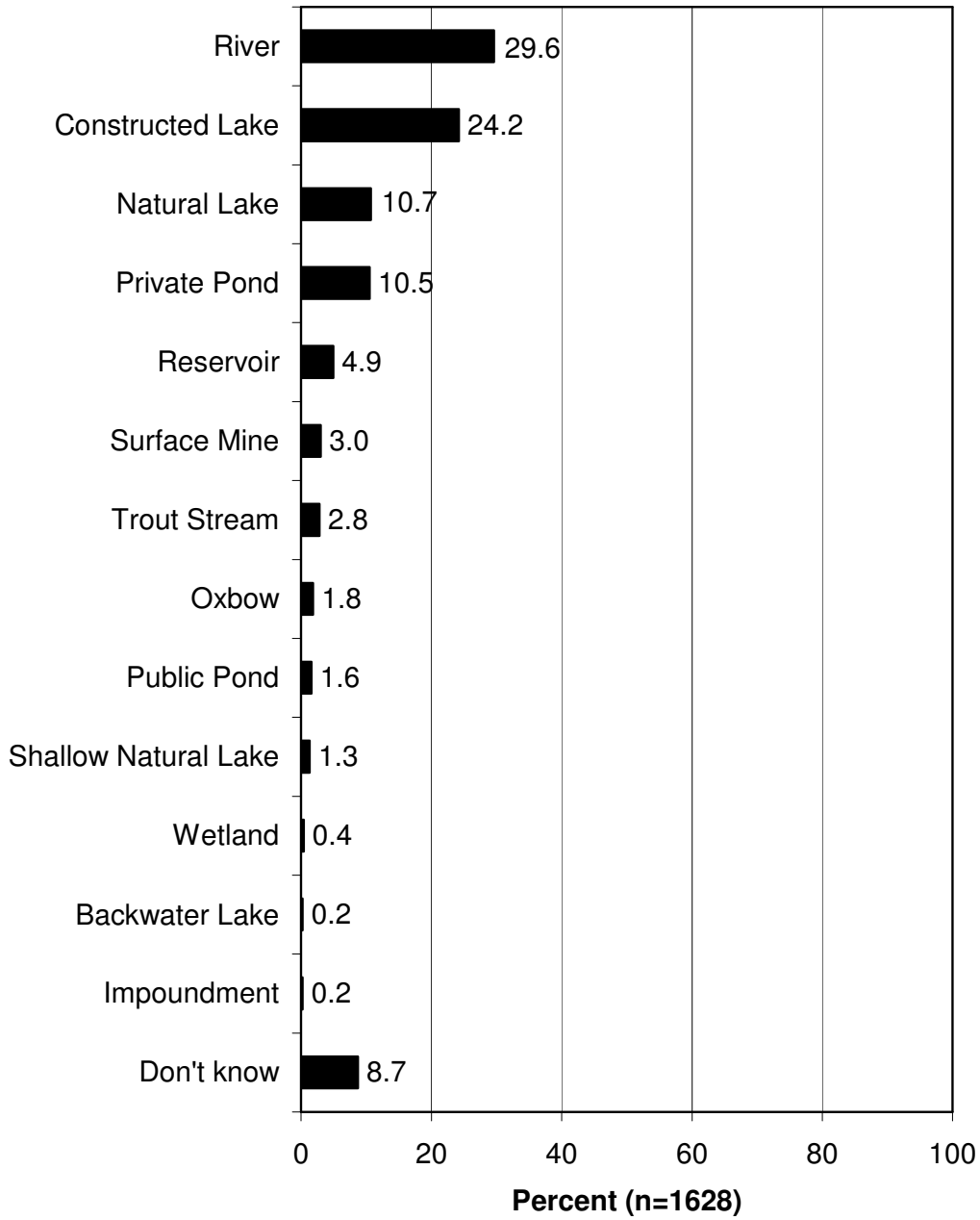
Q46. What county is that body of water in? (Overall) (Part 2)



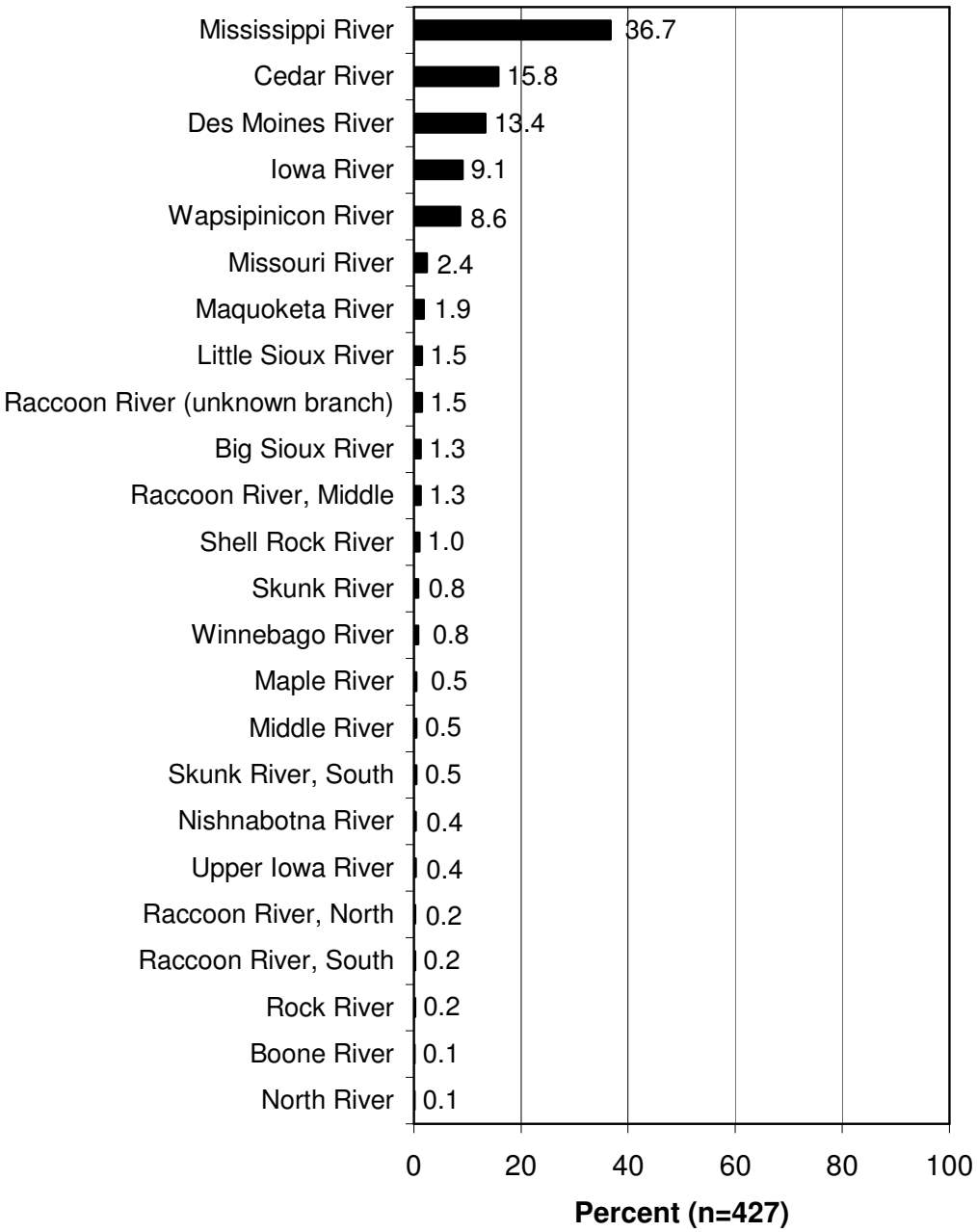
MOST COMMONLY FISHED COUNTIES



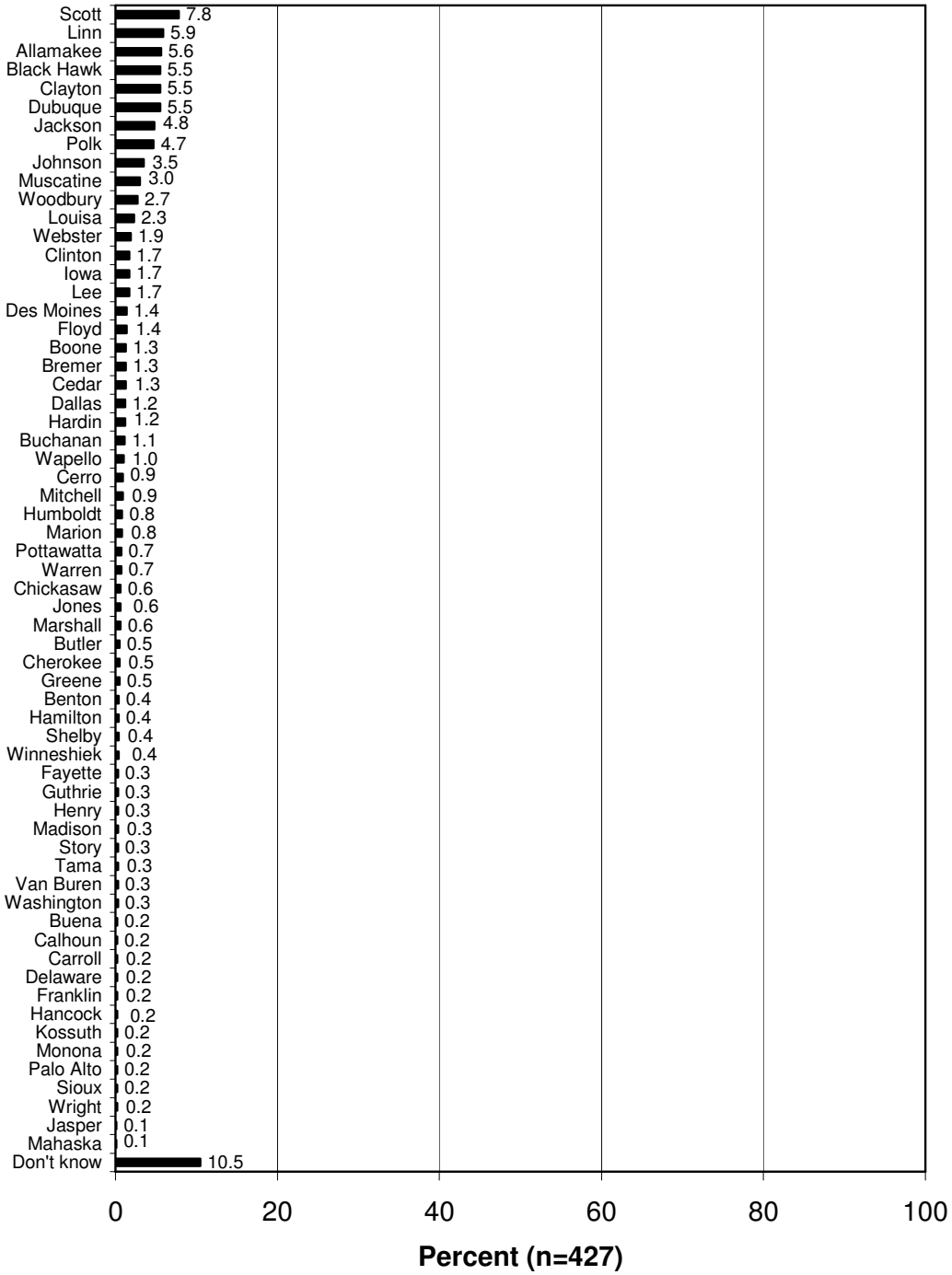
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Water body type)



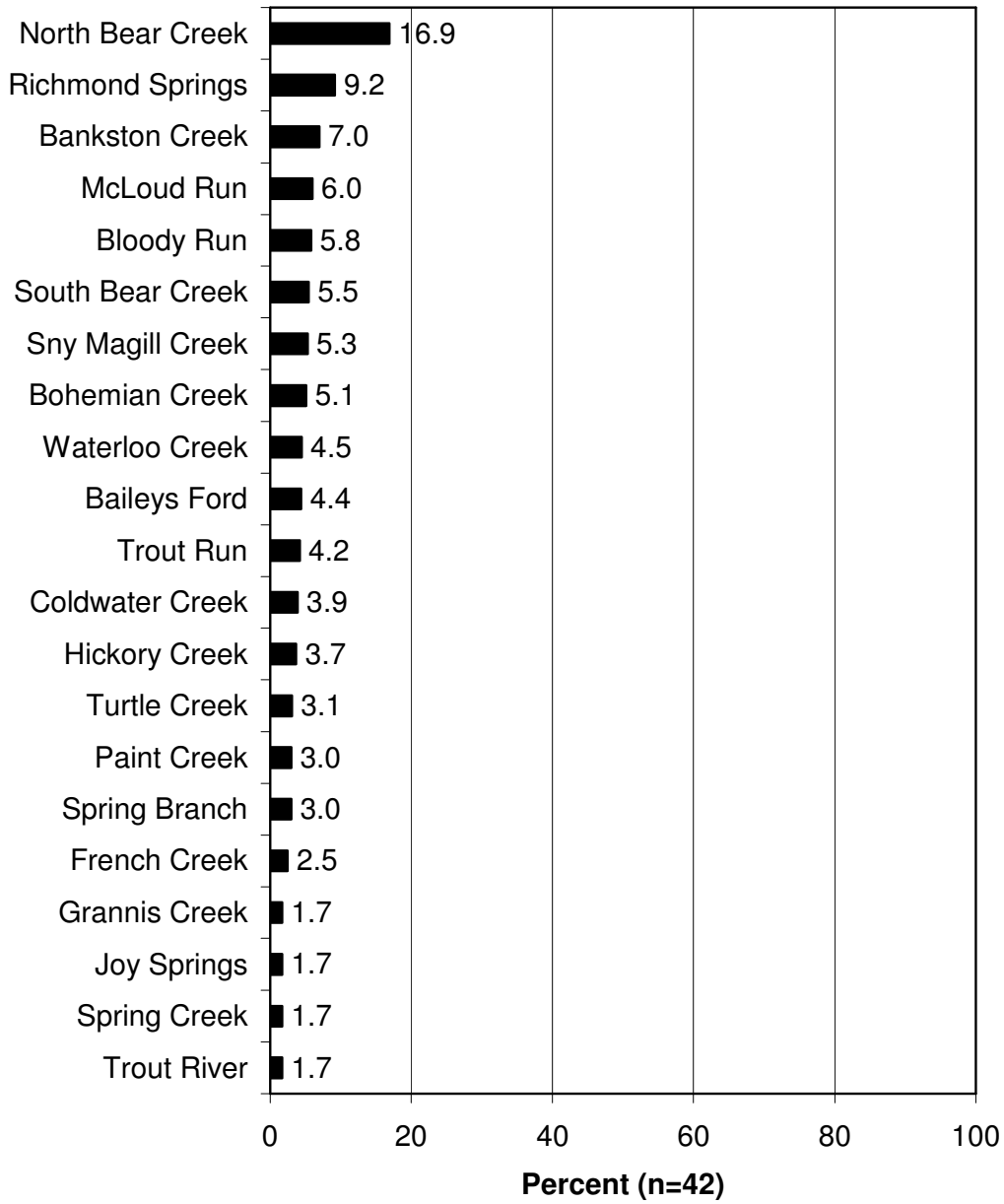
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Rivers) (Among those who fished in rivers.)



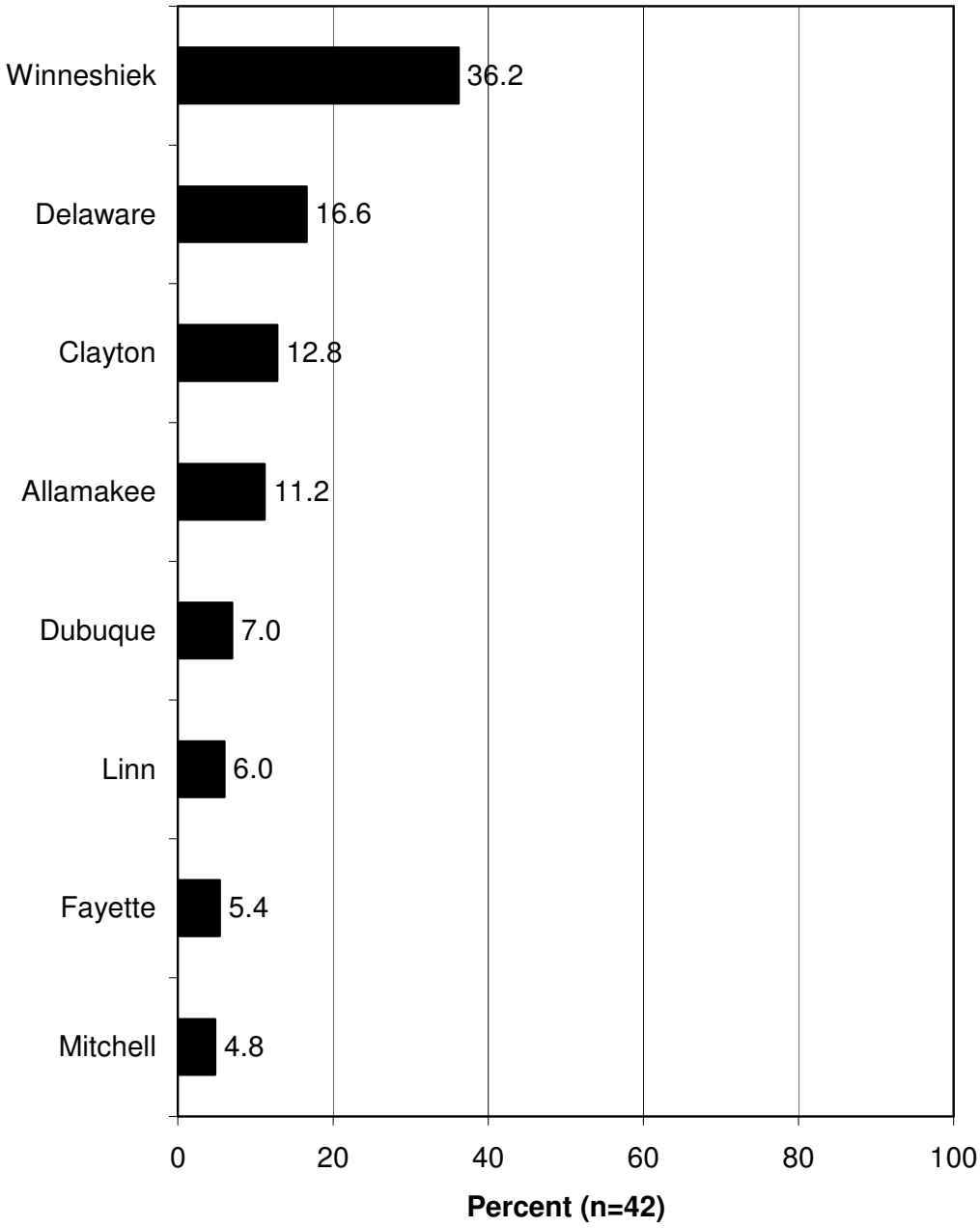
Q46. What county is that body of water in? (Rivers) (Among those who fished in rivers.)



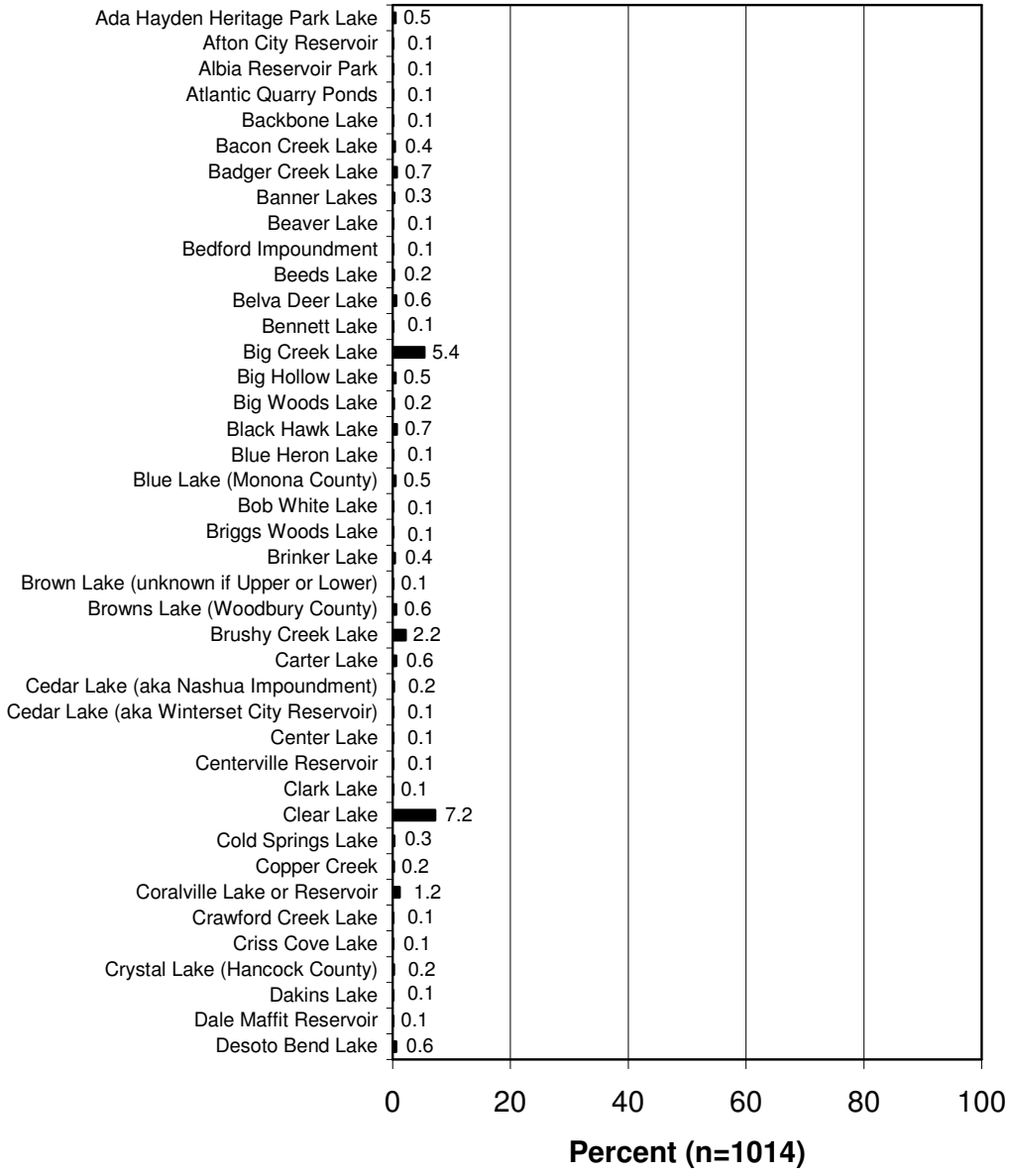
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished].
(Trout streams)
(Among those who fished in trout streams.)



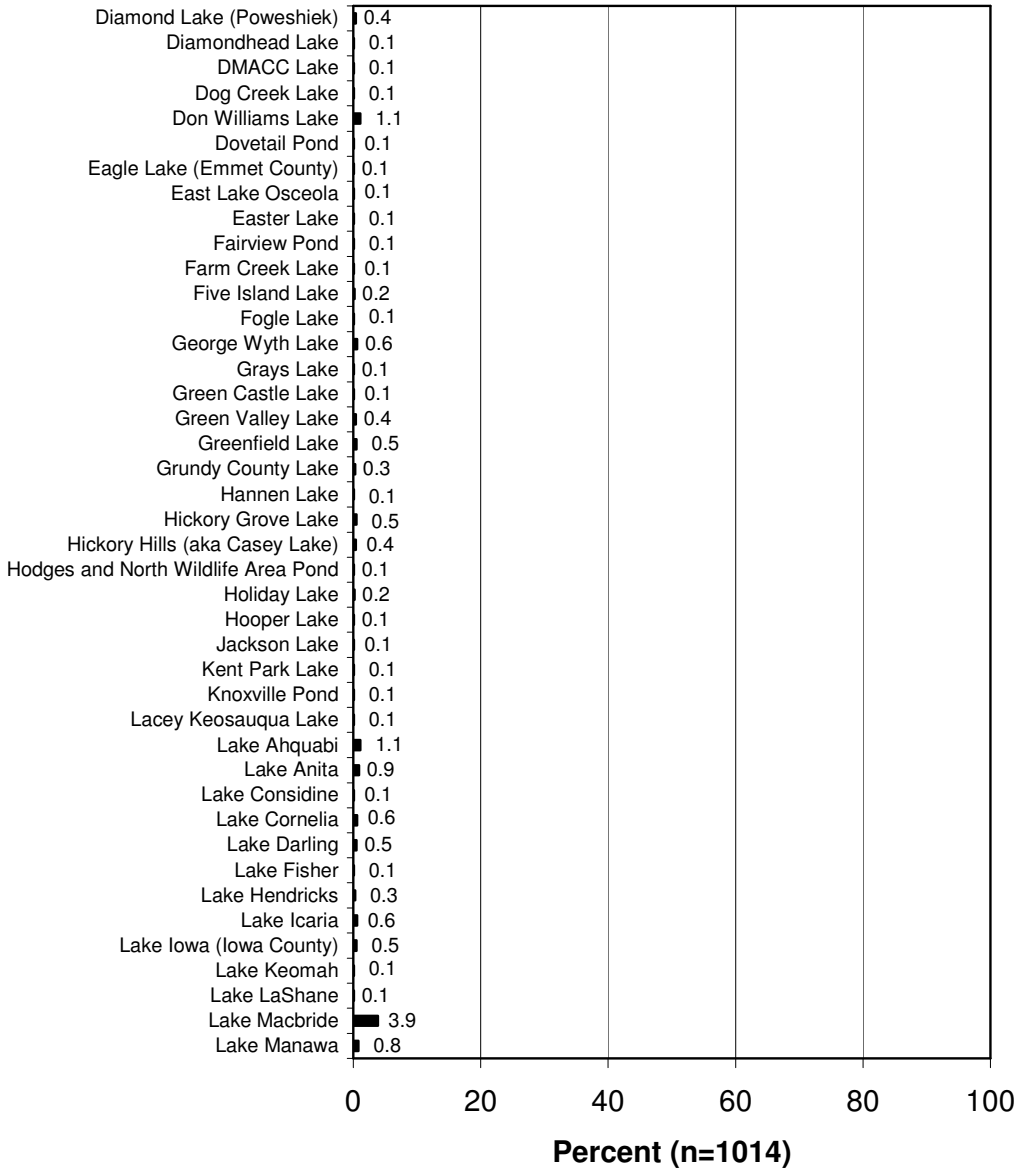
Q46. What county is that body of water in?
(Trout streams)
(Among those who fished in trout streams.)



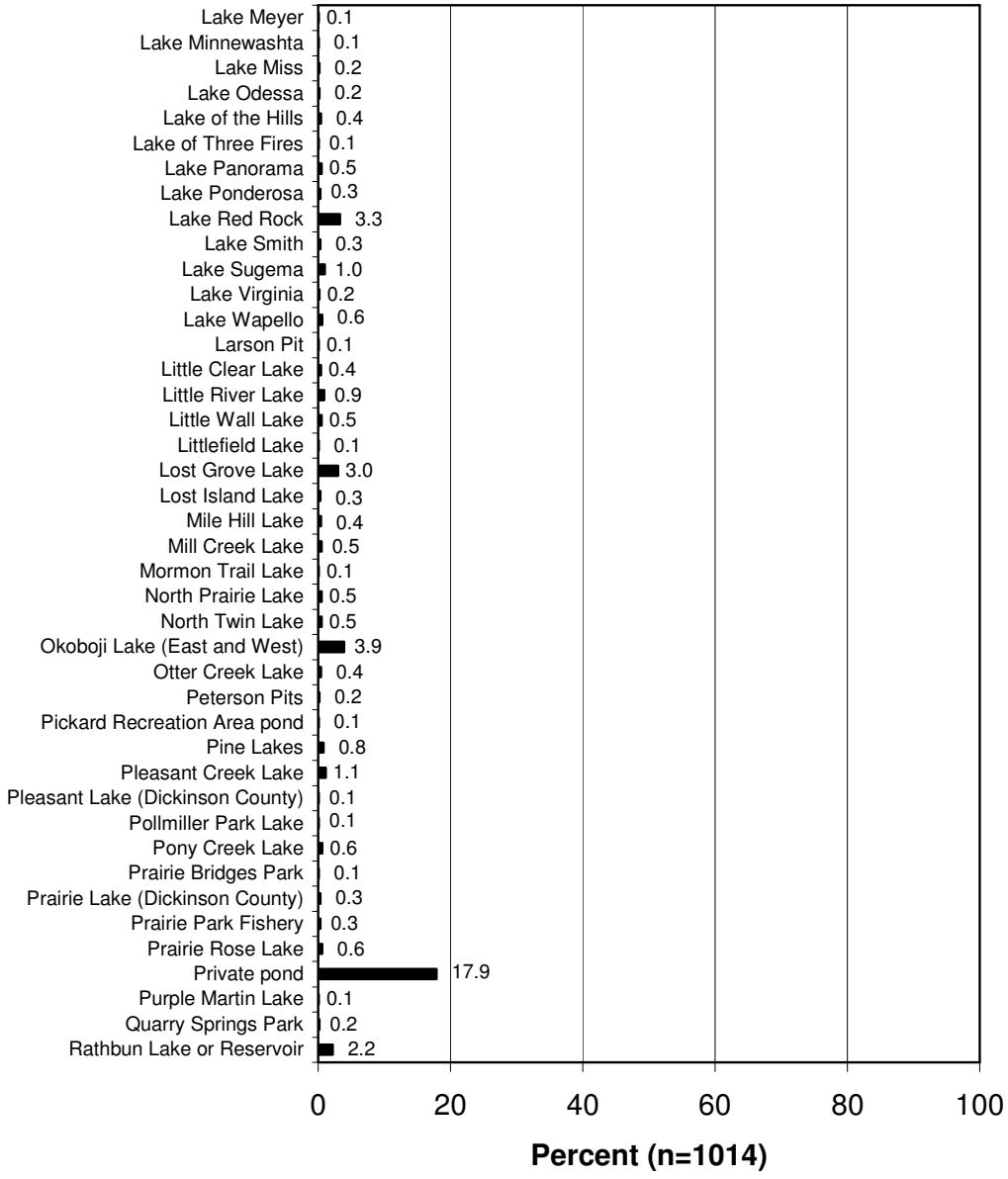
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Alphabetical order, Part 1)



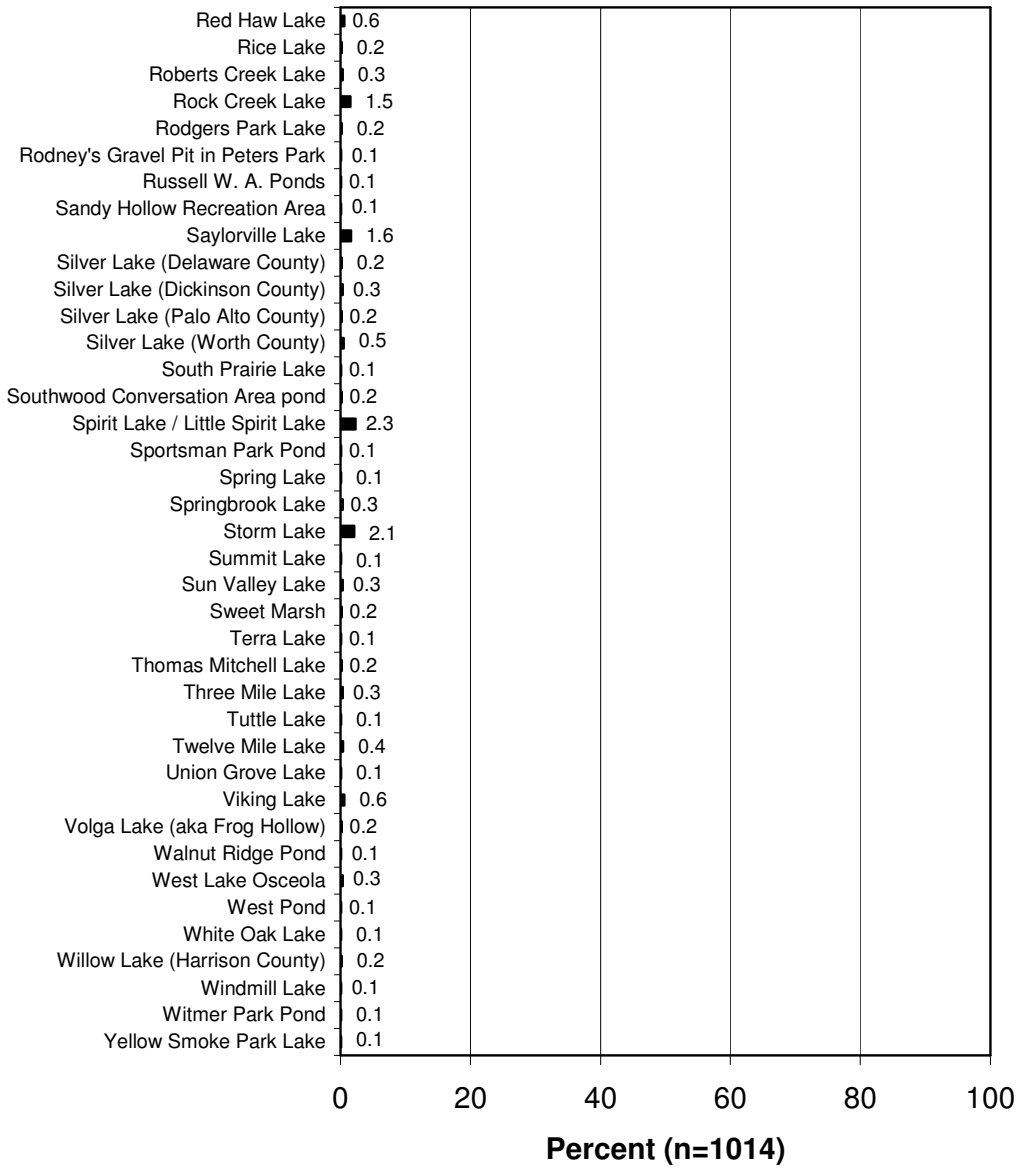
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Alphabetical order, Part 2)



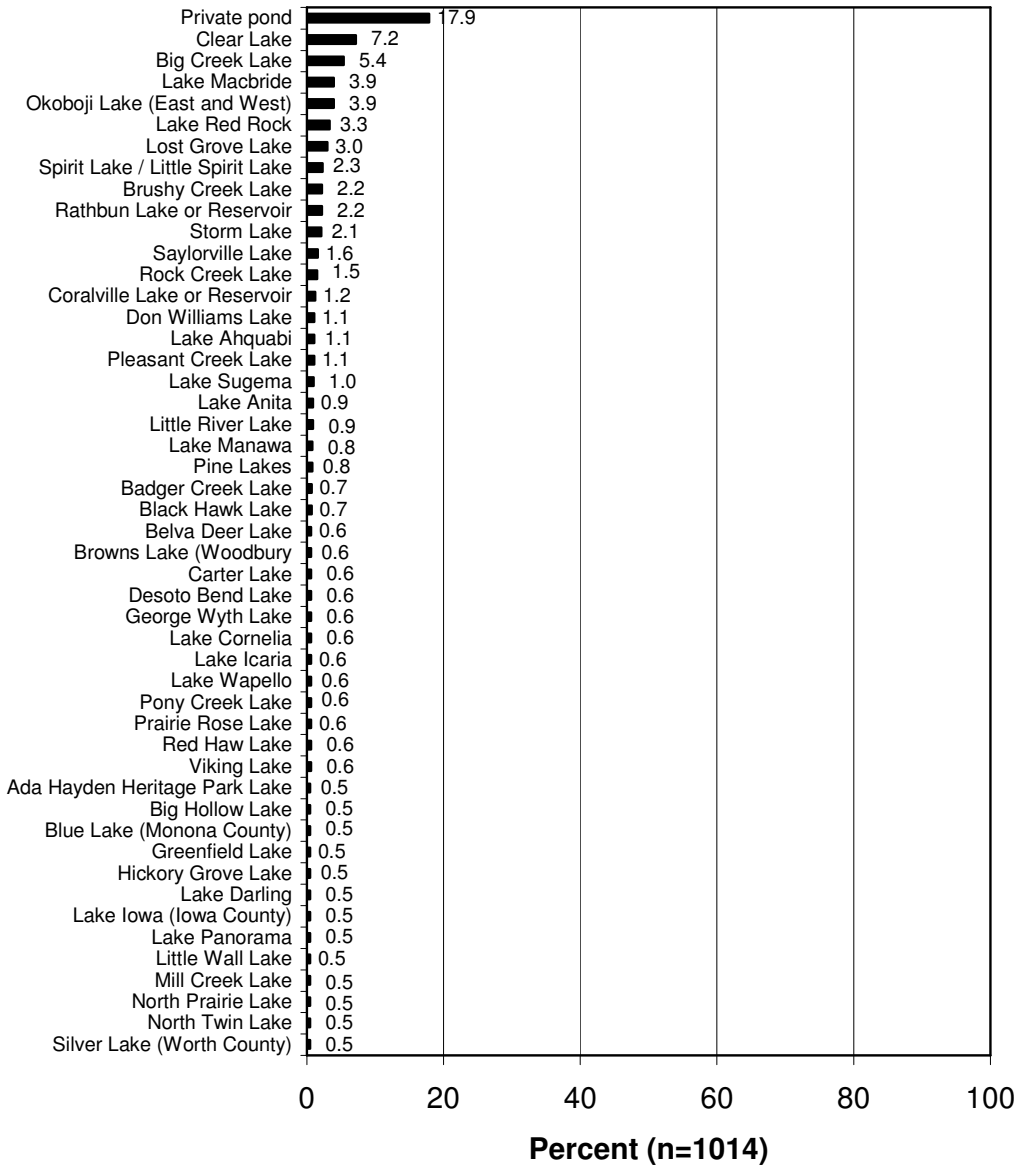
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Alphabetical order, Part 3)



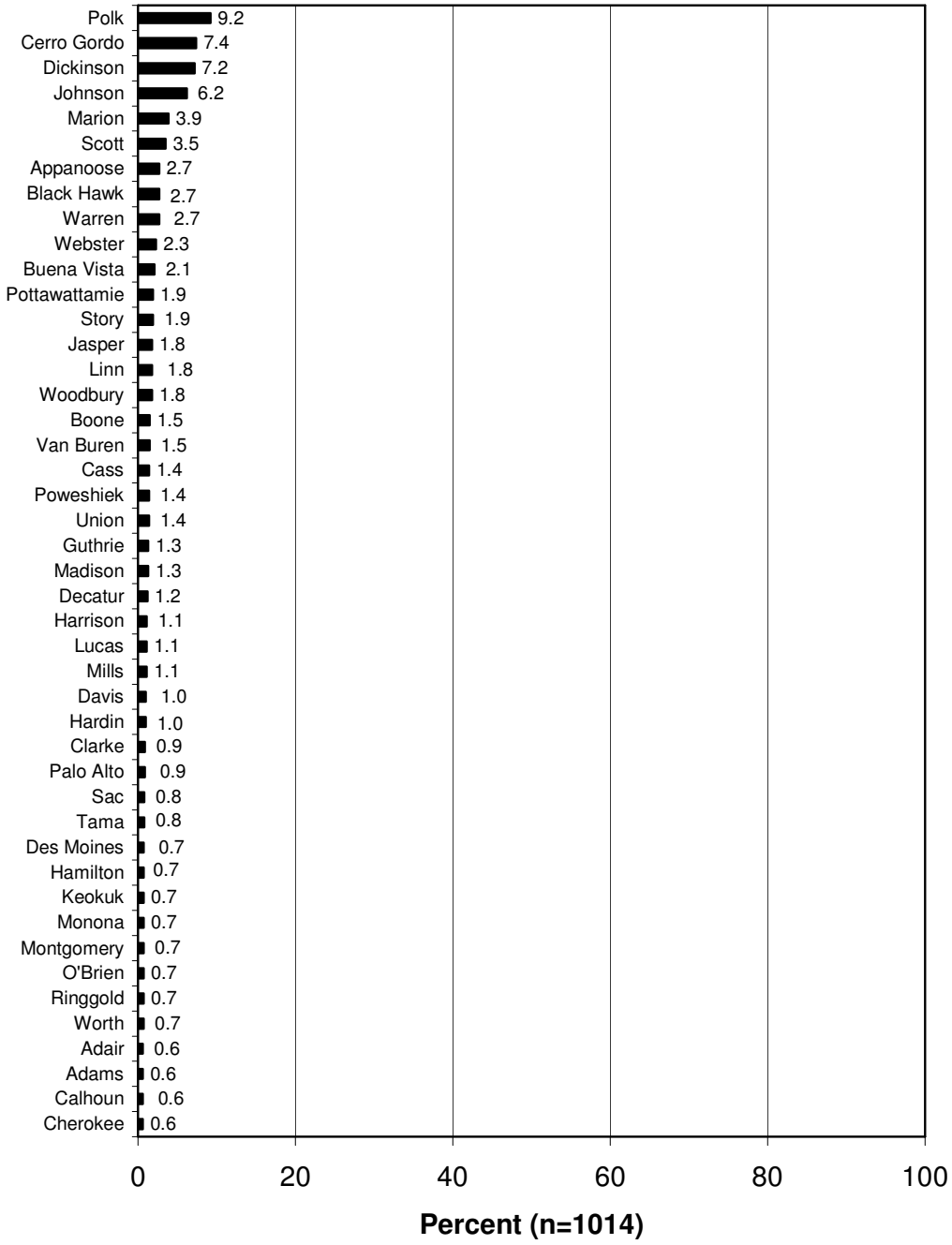
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Alphabetical order, Part 4)



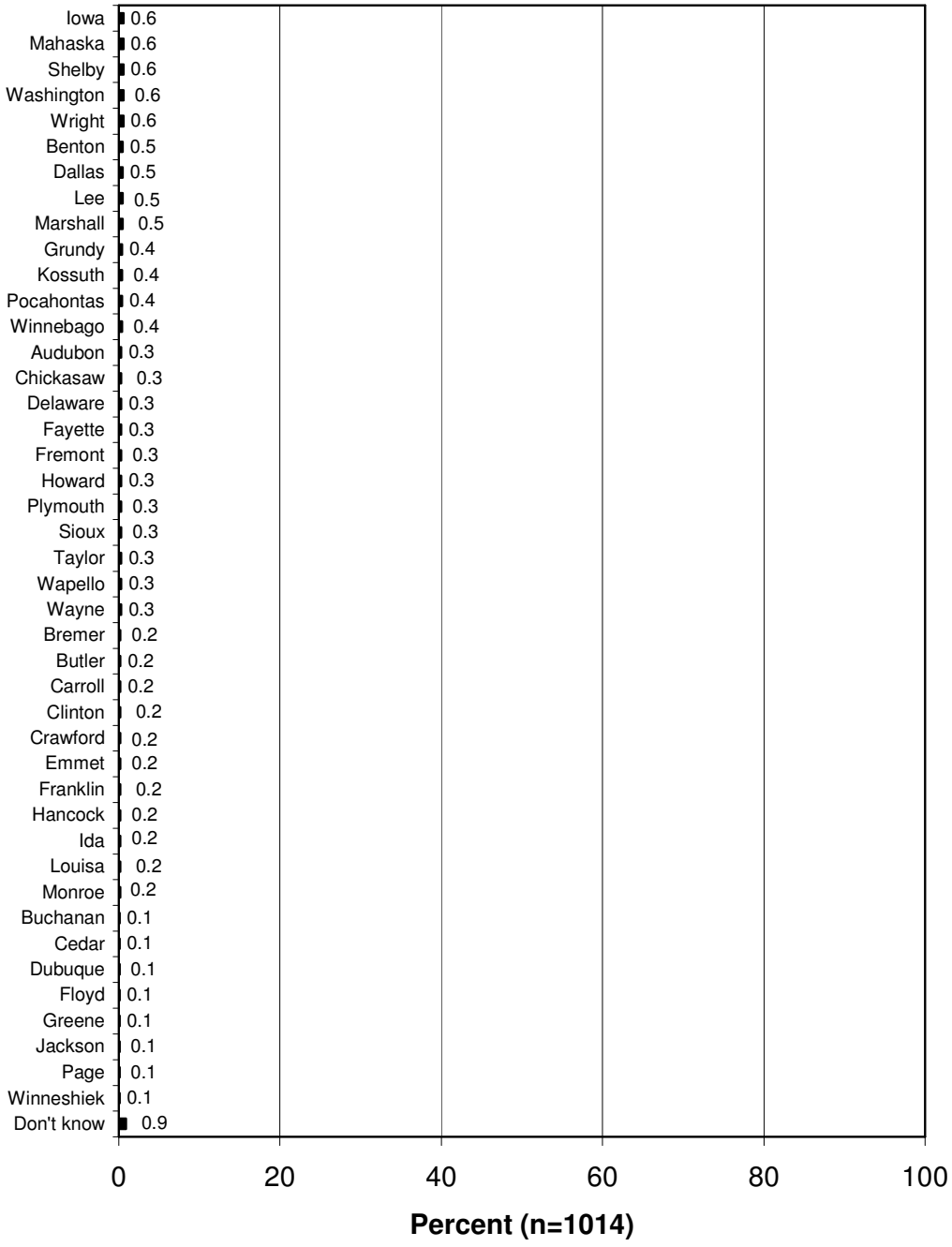
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Descending order, top responses only)



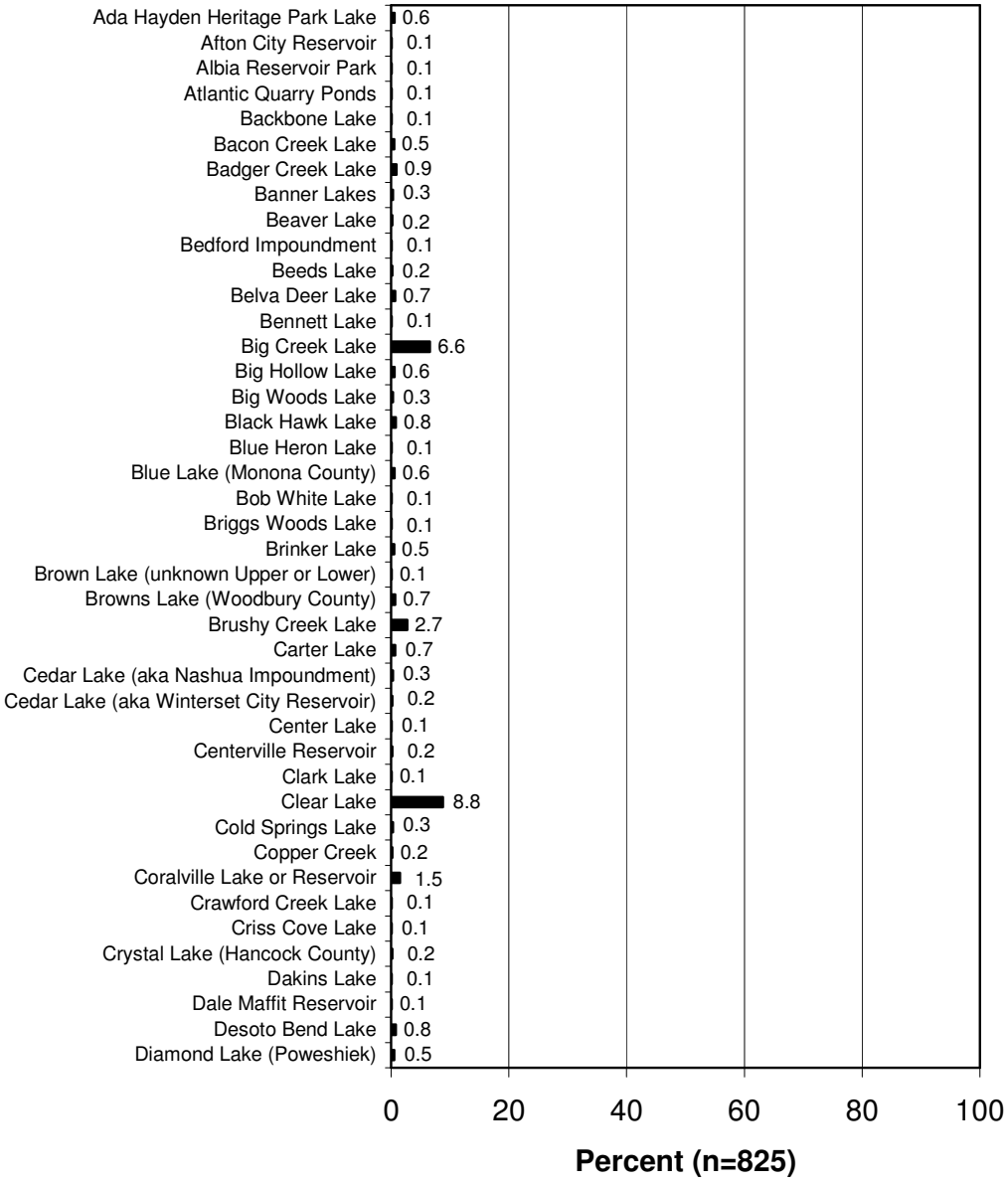
Q46. What county is that body of water in? (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Part 1)



Q46. What county is that body of water in? (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Part 2)



Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Private ponds not included) (Alphabetical order, Part 1)



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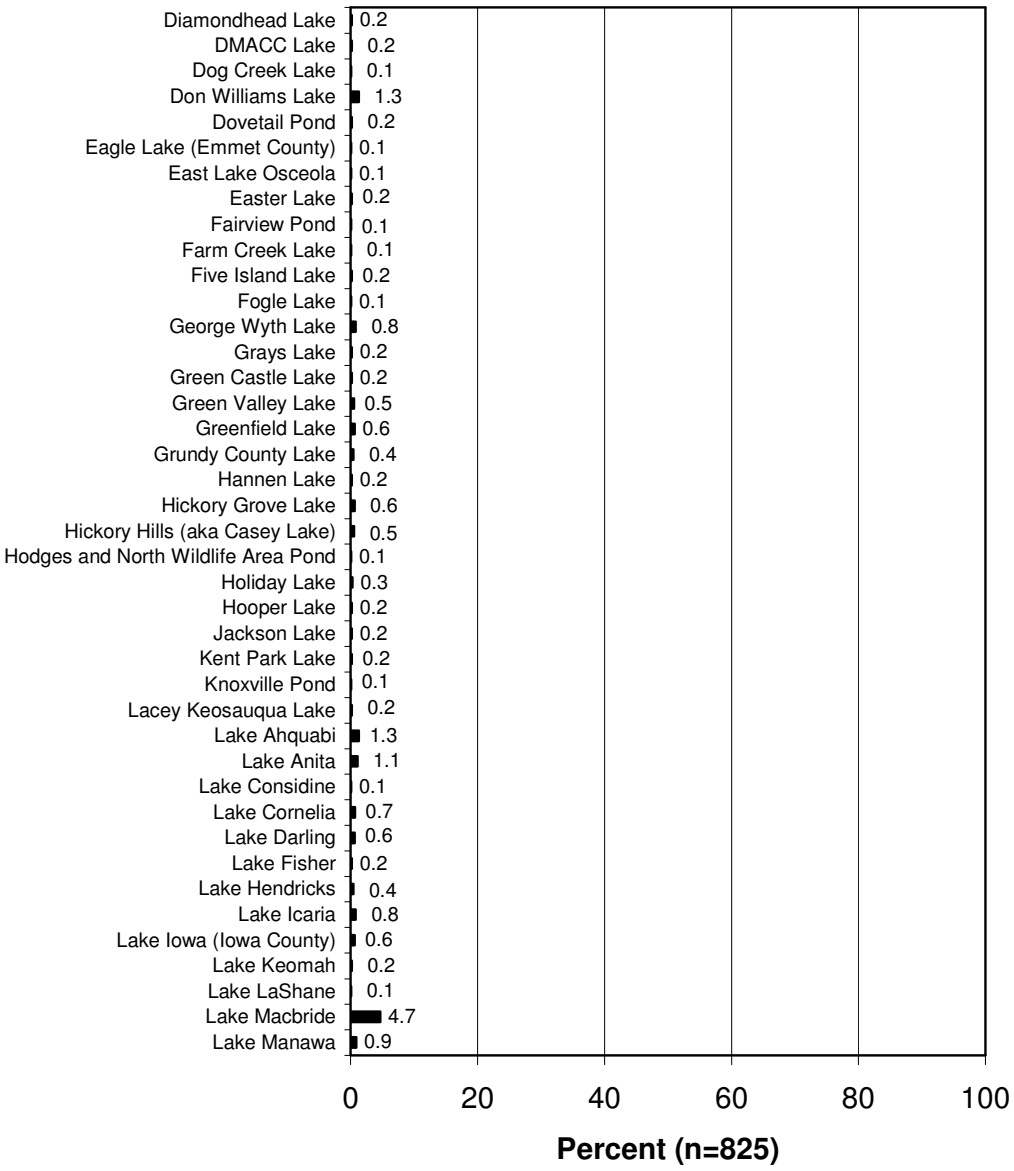
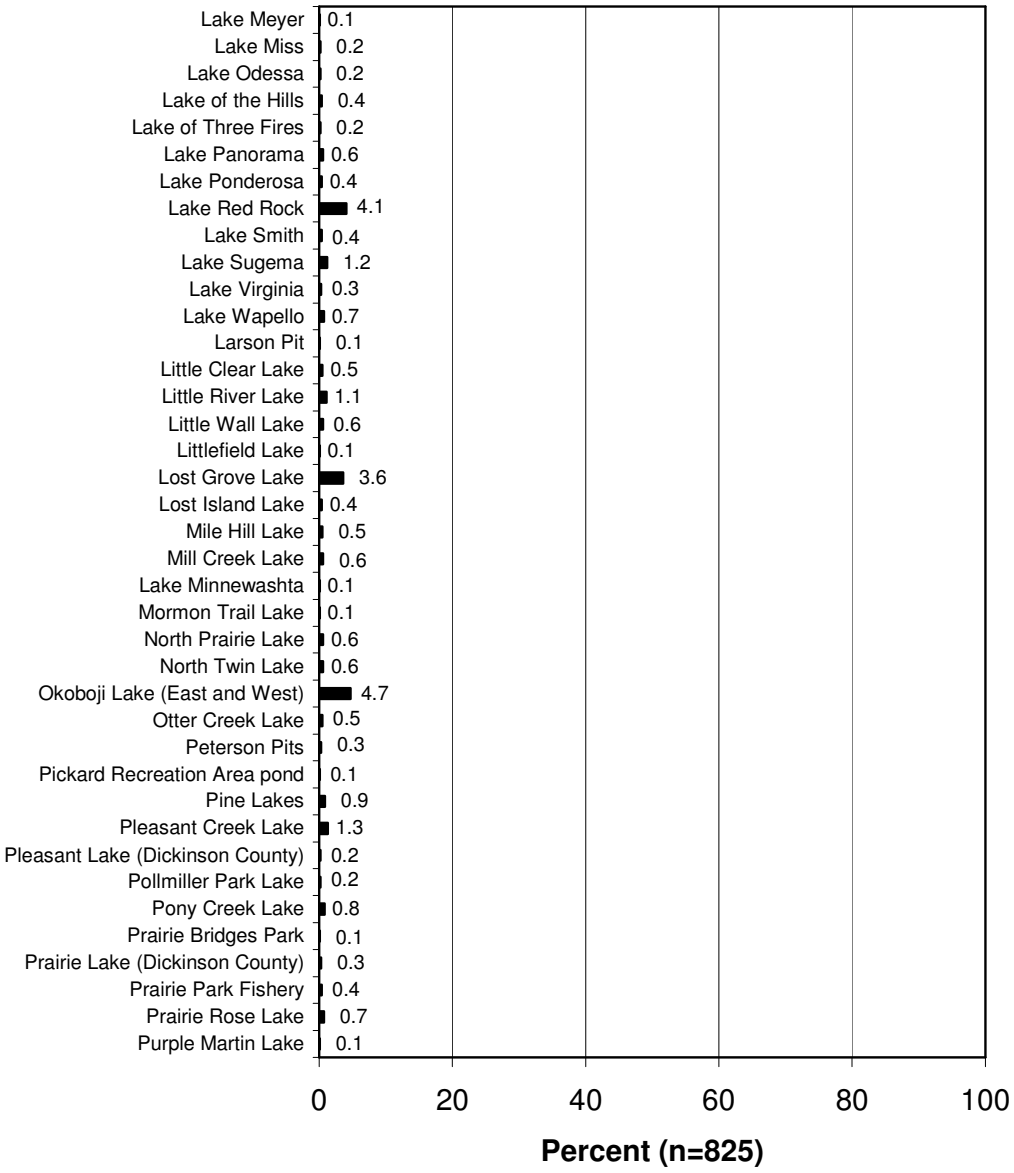
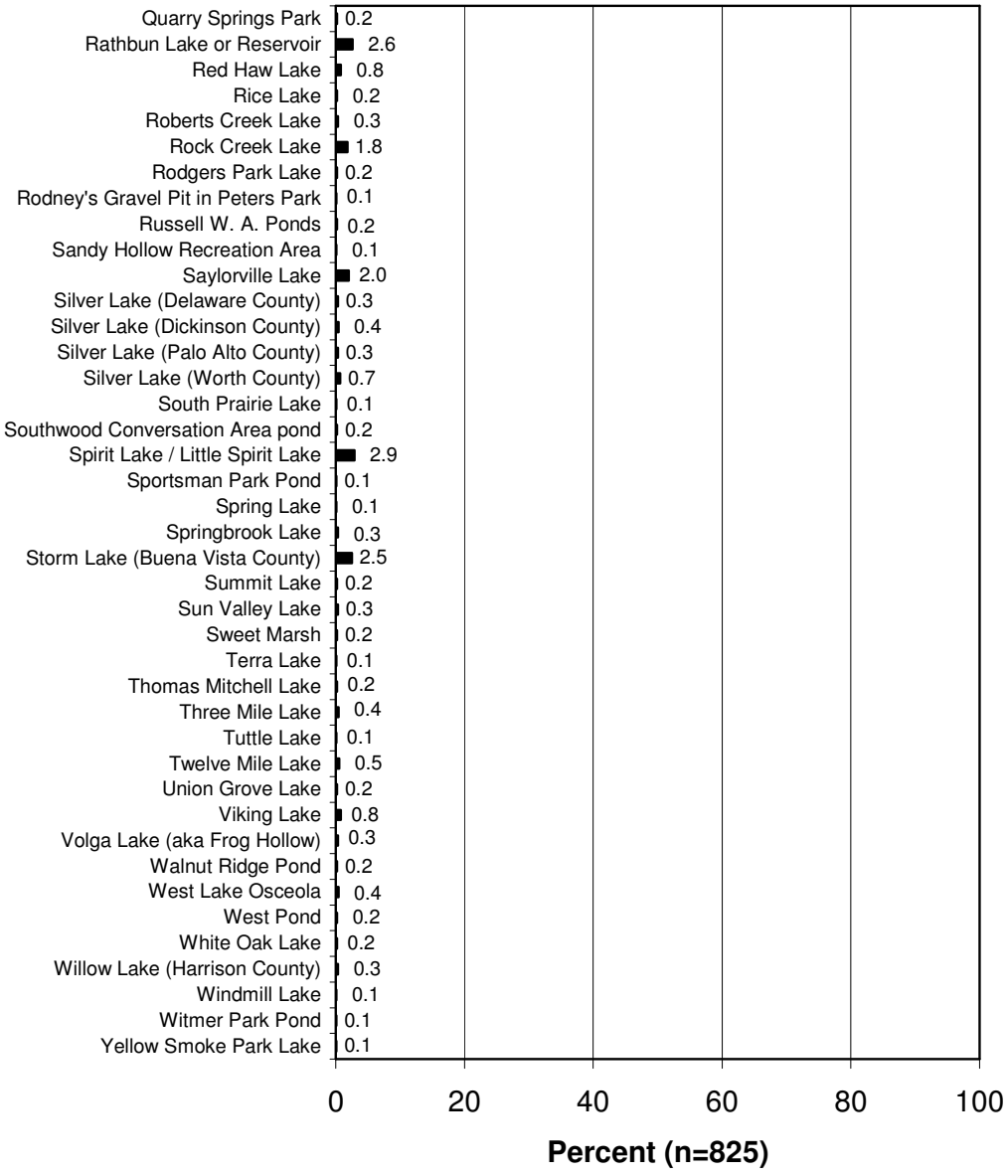


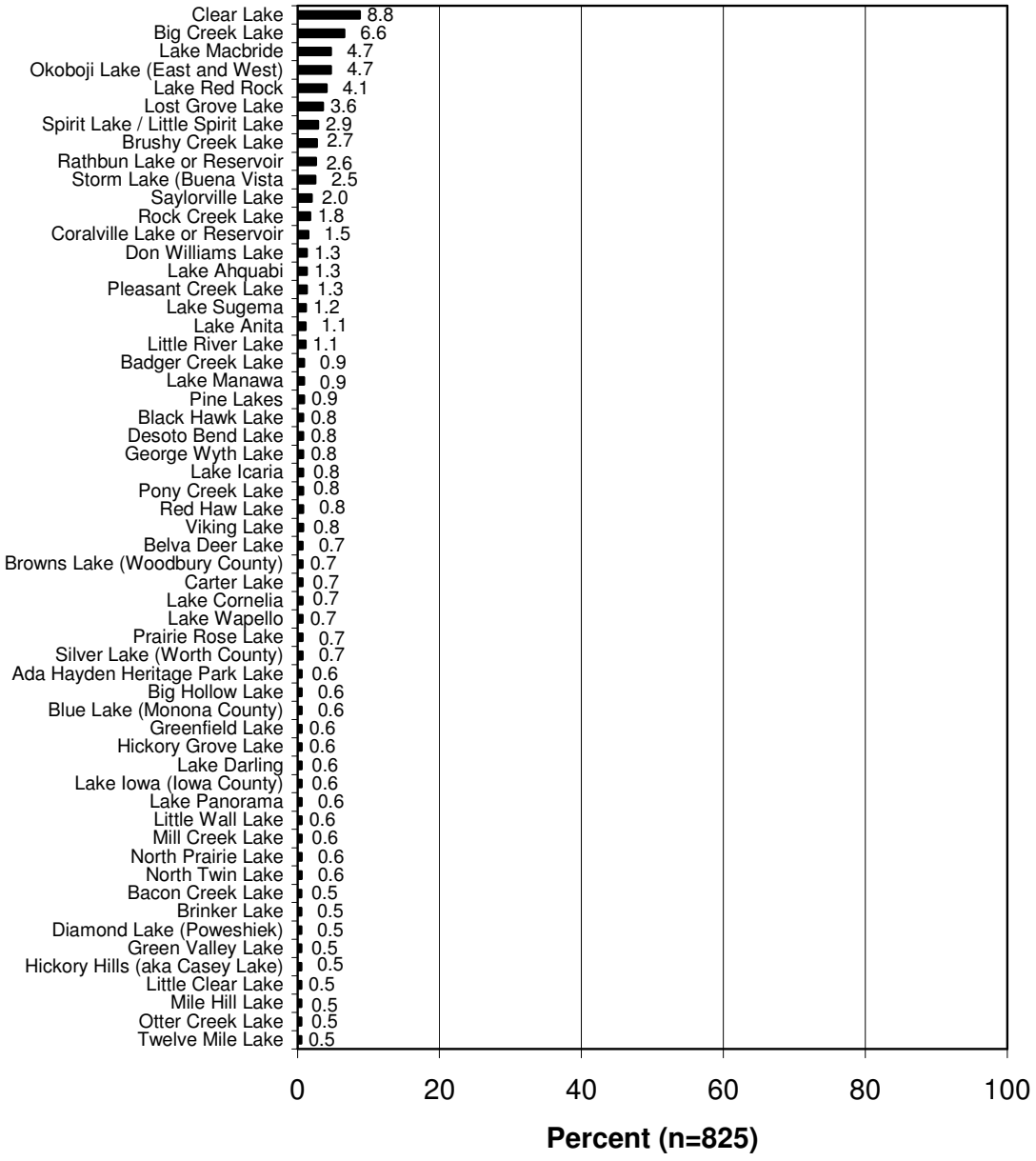
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Private ponds not included) (Alphabetical order, Part 3)



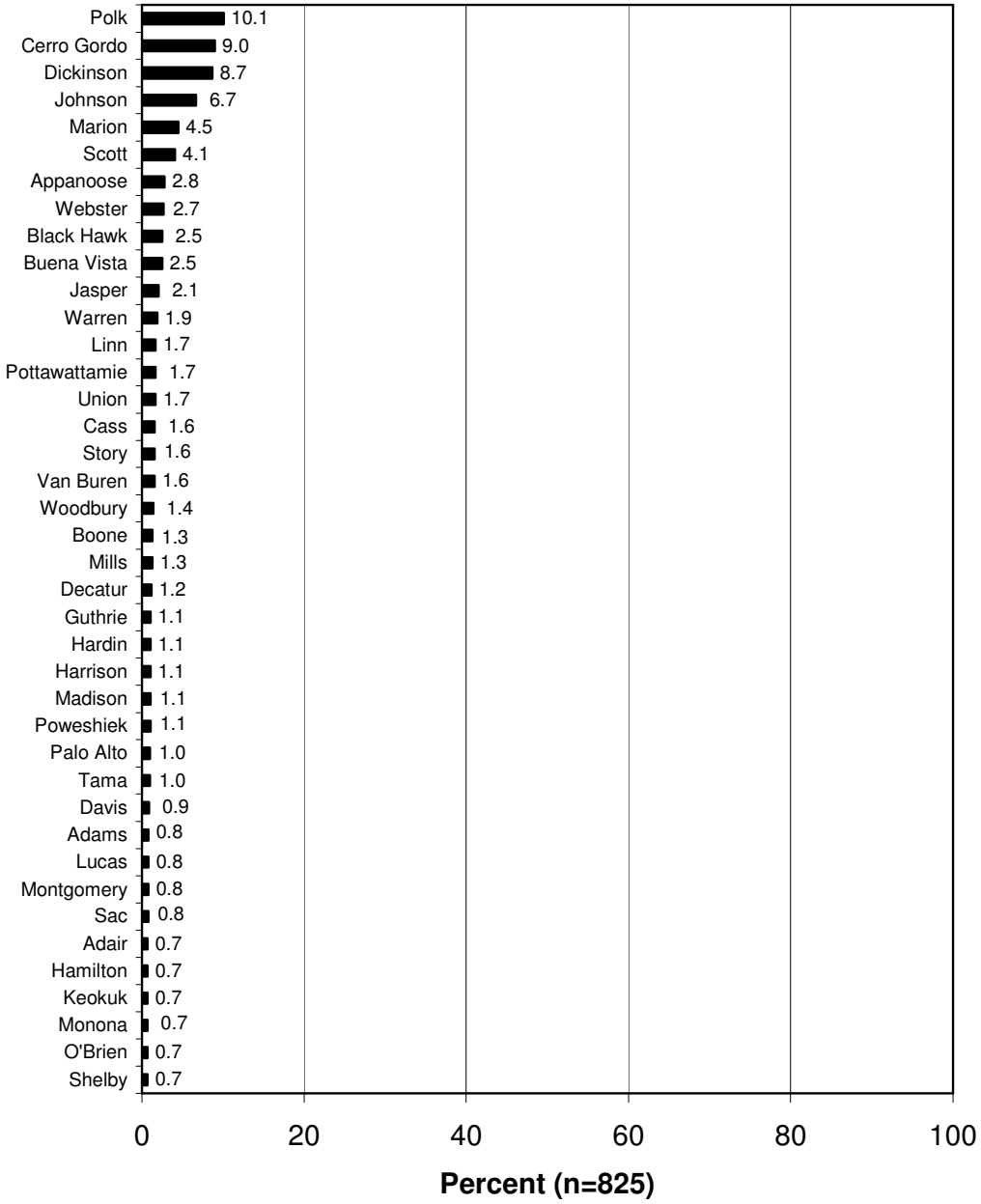
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Private ponds not included) (Alphabetical order, Part 4)



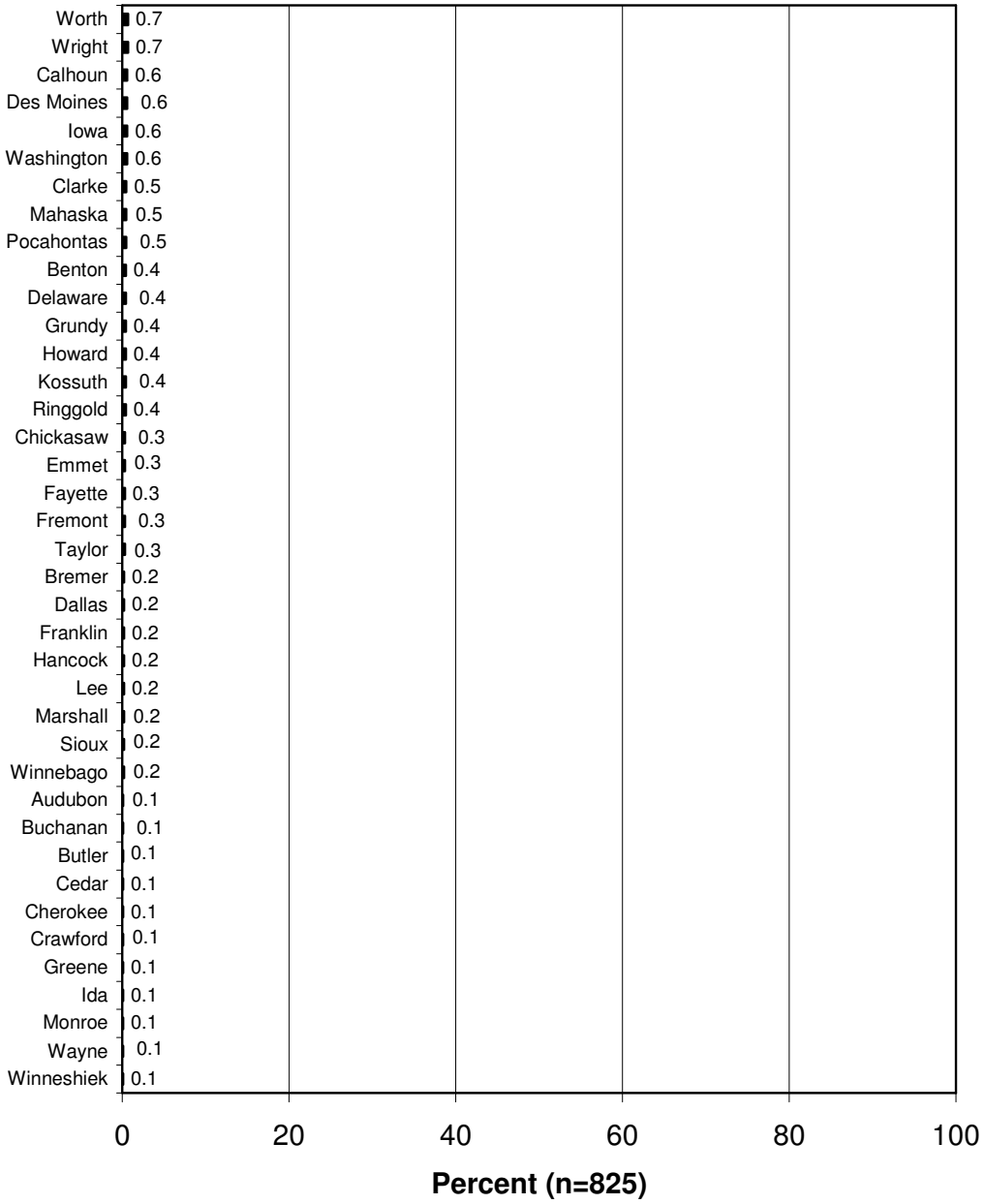
Q45. Please name the body of water in Iowa which you most often fished in the [past 12 months / last year you fished]. (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Private ponds not included) (Descending order, top responses only)



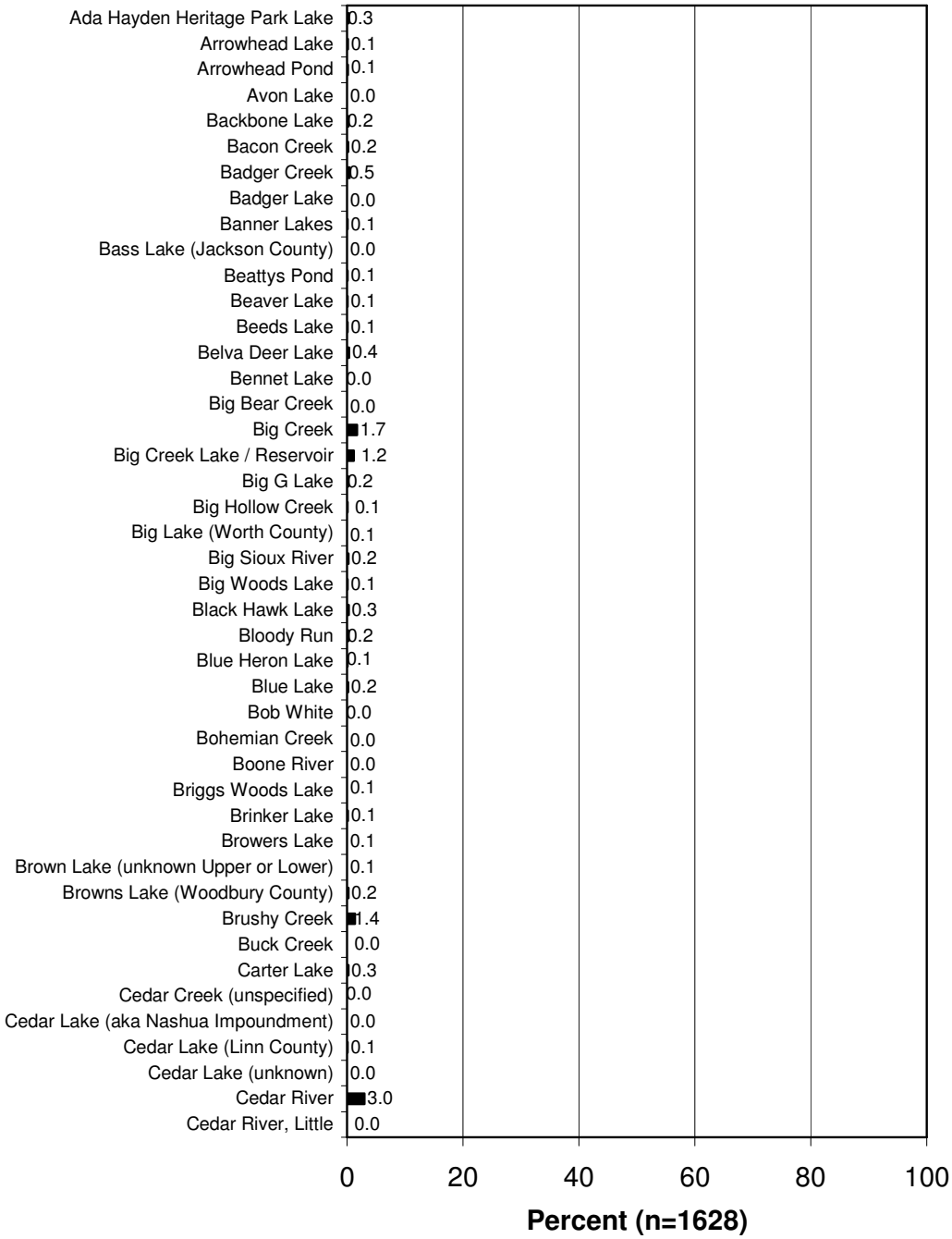
Q46. What county is that body of water in? (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Private ponds not included) (Part 1)



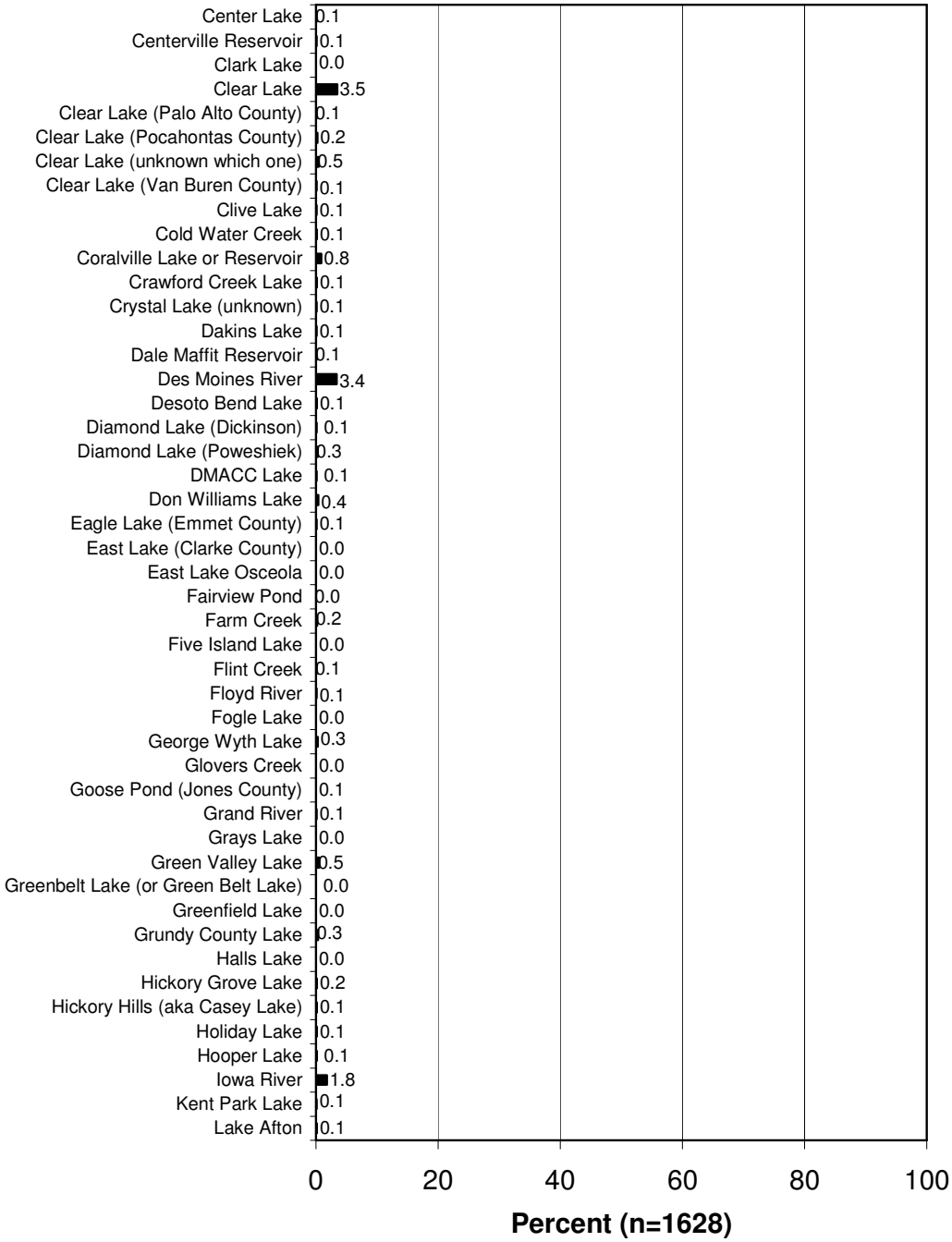
Q46. What county is that body of water in? (Lakes / ponds / reservoirs) (Among those who fished in lakes, ponds, or reservoirs.) (Private ponds not included) (Part 2)



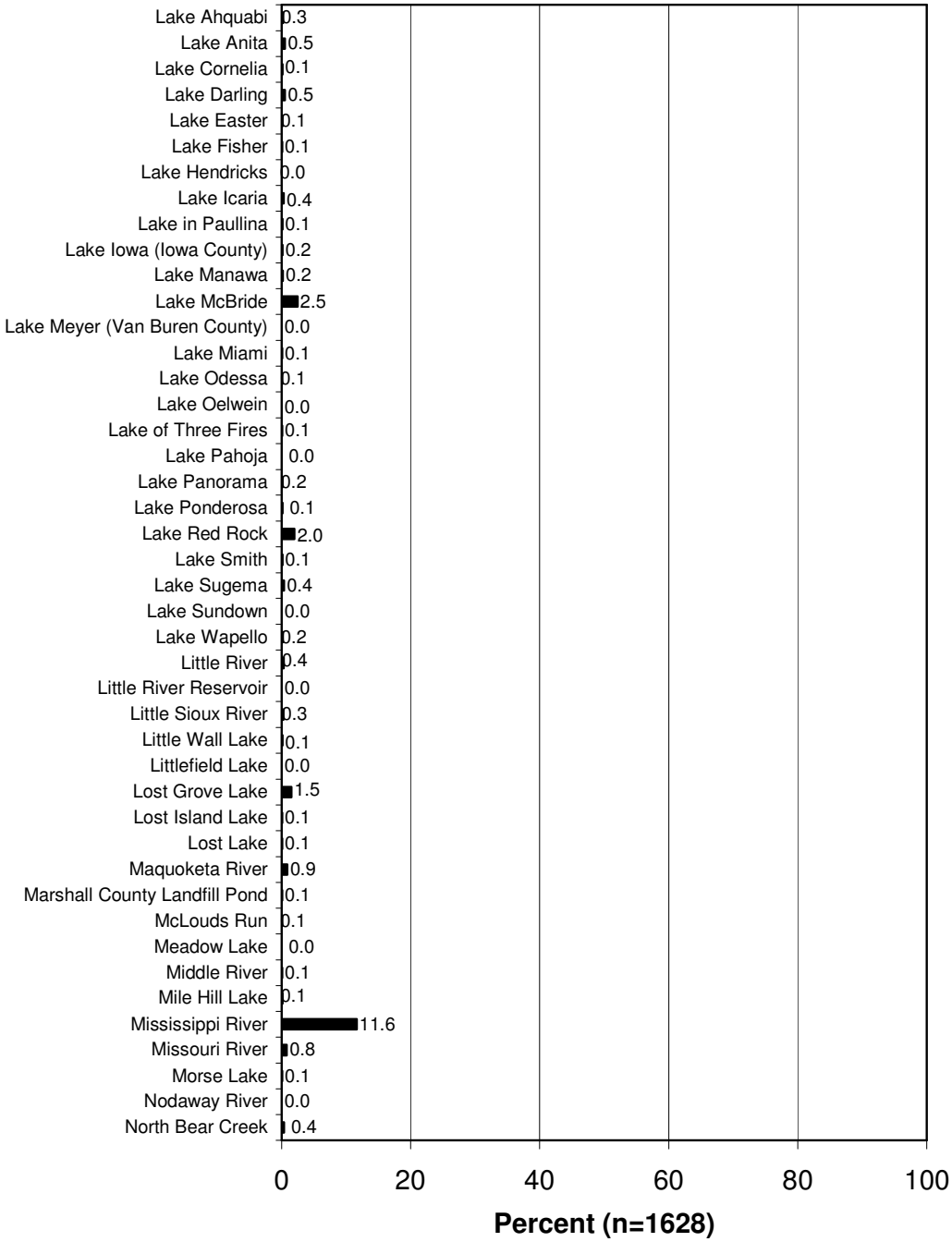
Q47. Which one body of water would you most prefer to fish? (Alphabetical order, Part 1)



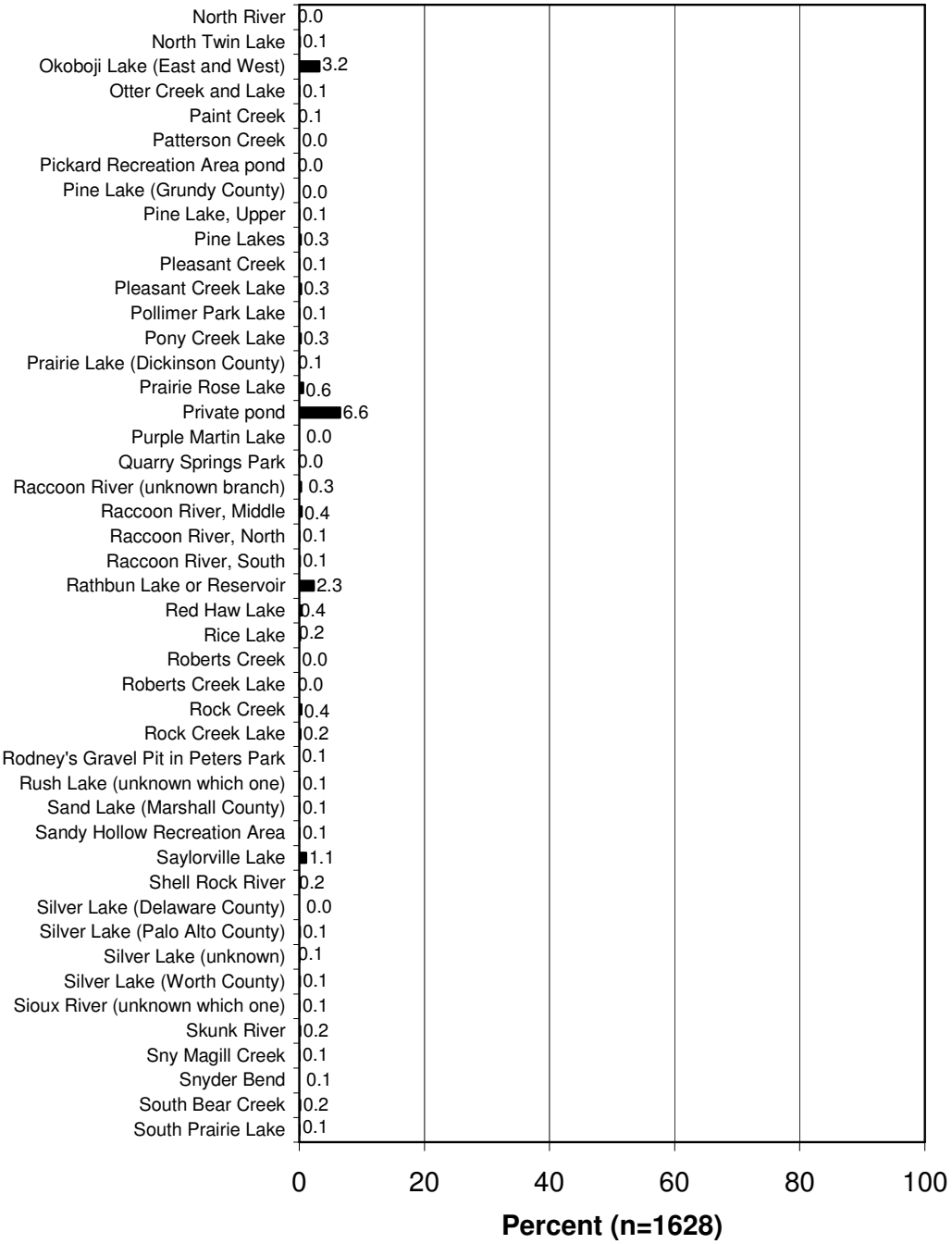
Q47. Which one body of water would you most prefer to fish? (Alphabetical order, Part 2)



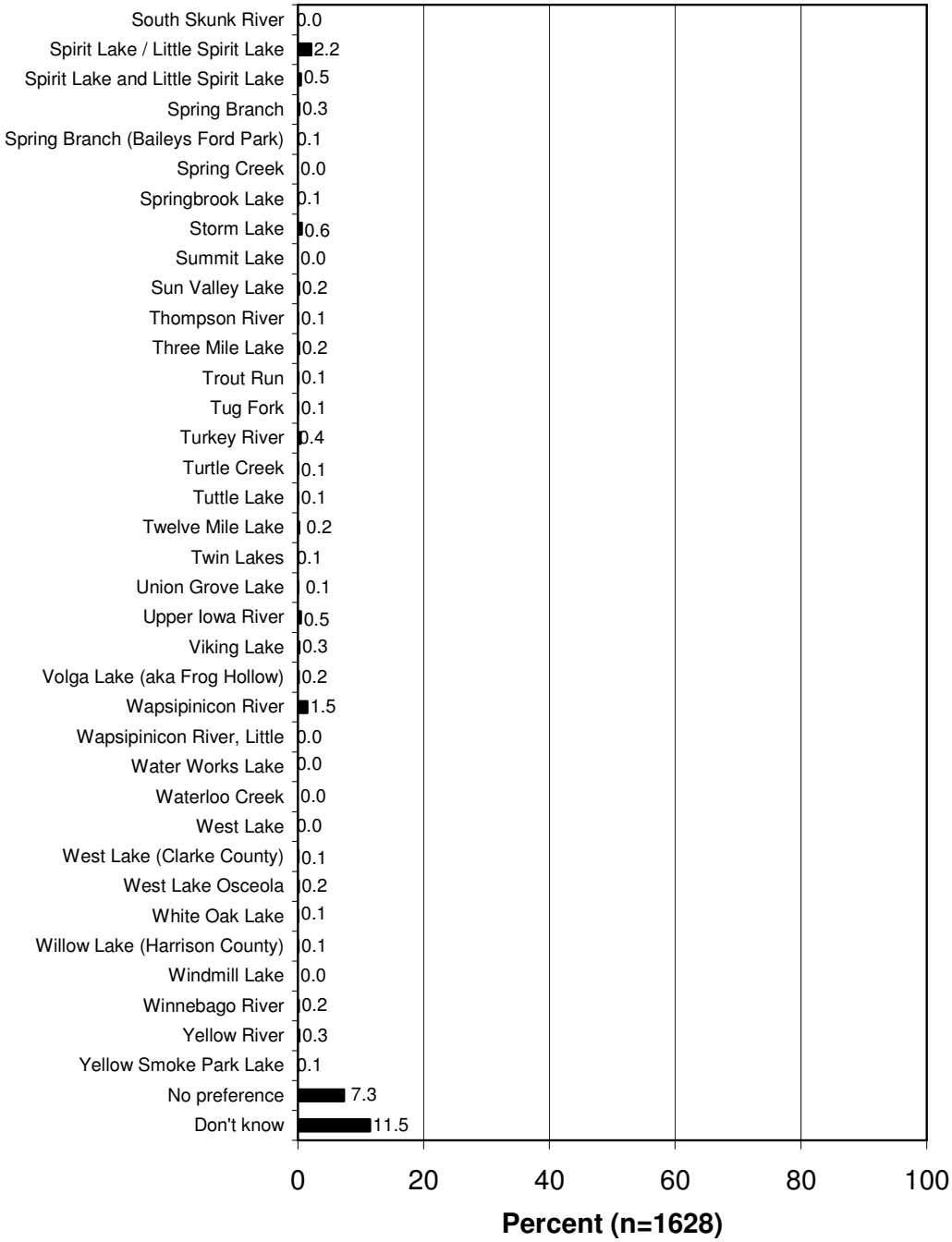
Q47. Which one body of water would you most prefer to fish? (Alphabetical order, Part 3)



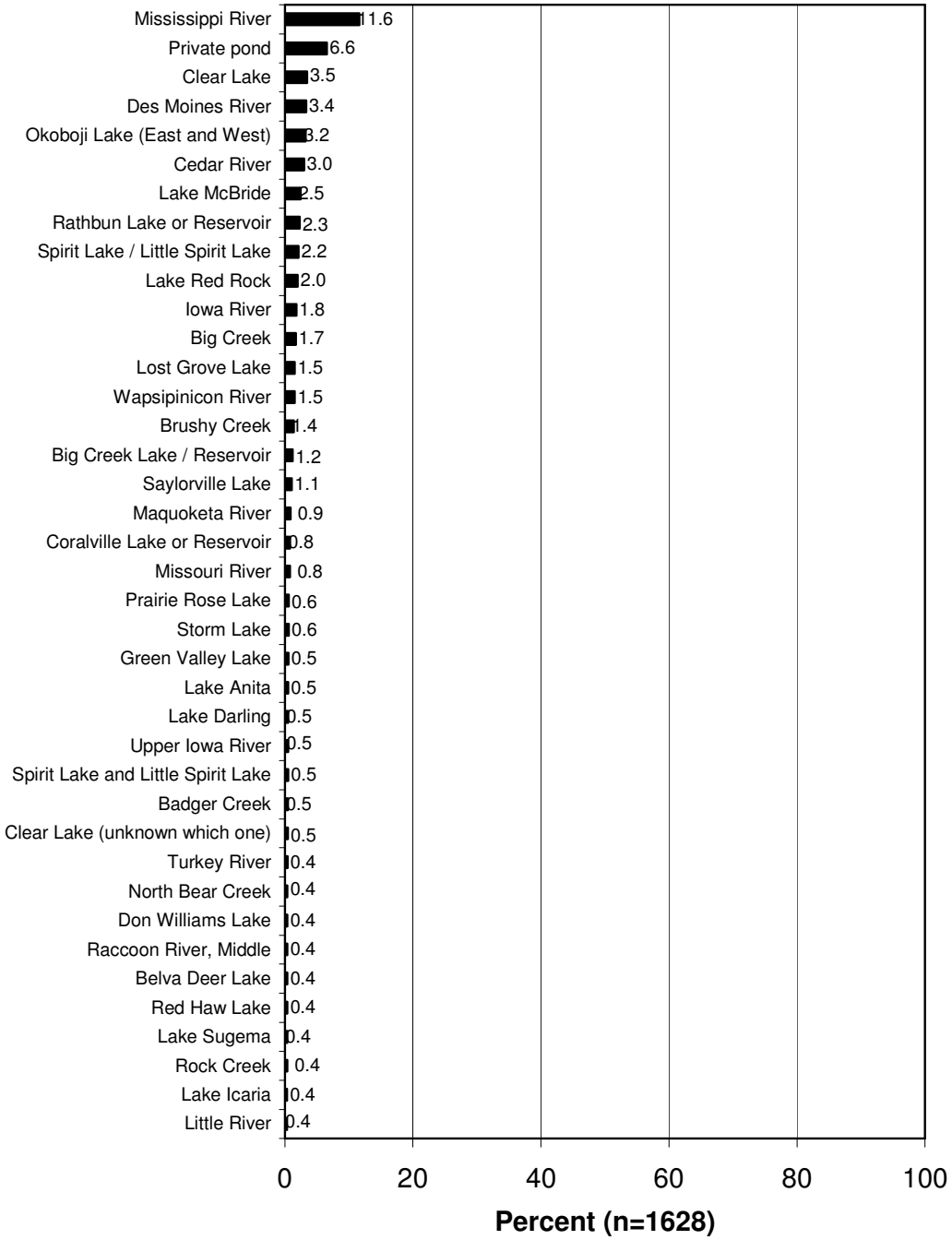
Q47. Which one body of water would you most prefer to fish? (Alphabetical order, Part 4)



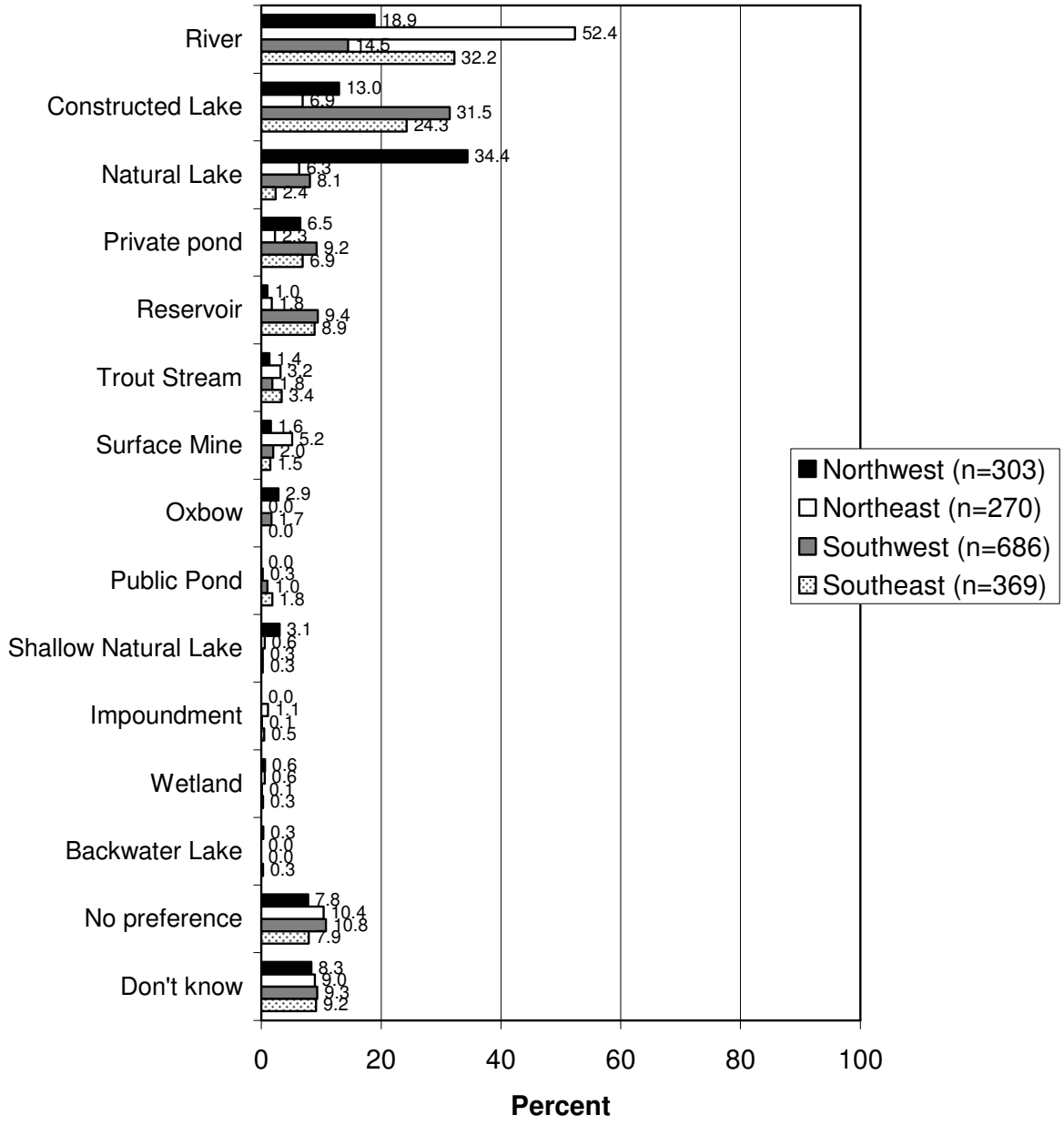
Q47. Which one body of water would you most prefer to fish? (Alphabetical order, Part 5)



Q47. Which one body of water would you most prefer to fish? (Descending order, top responses only)



Q47. Which one body of water would you most prefer to fish? (Water body type)



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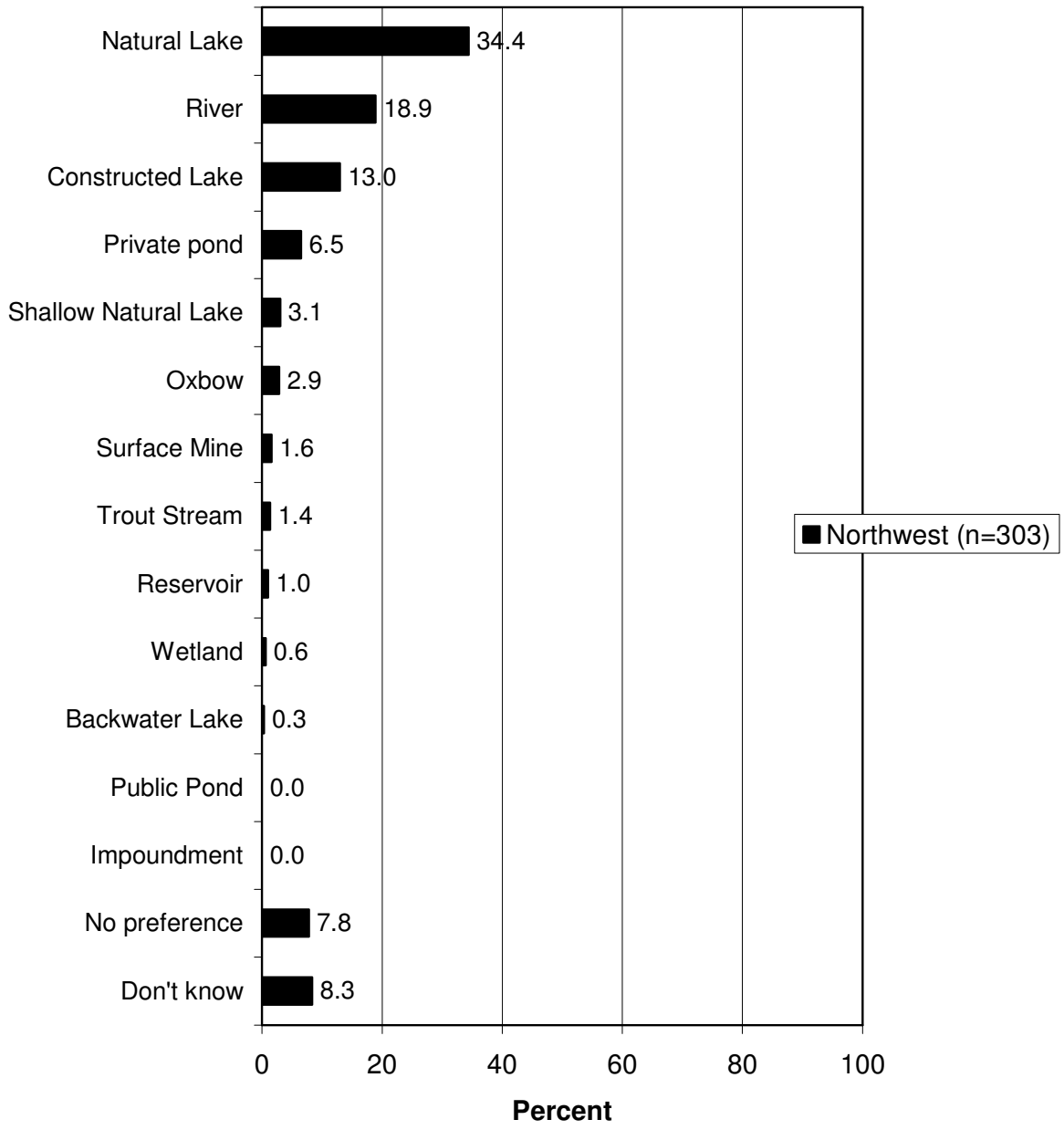
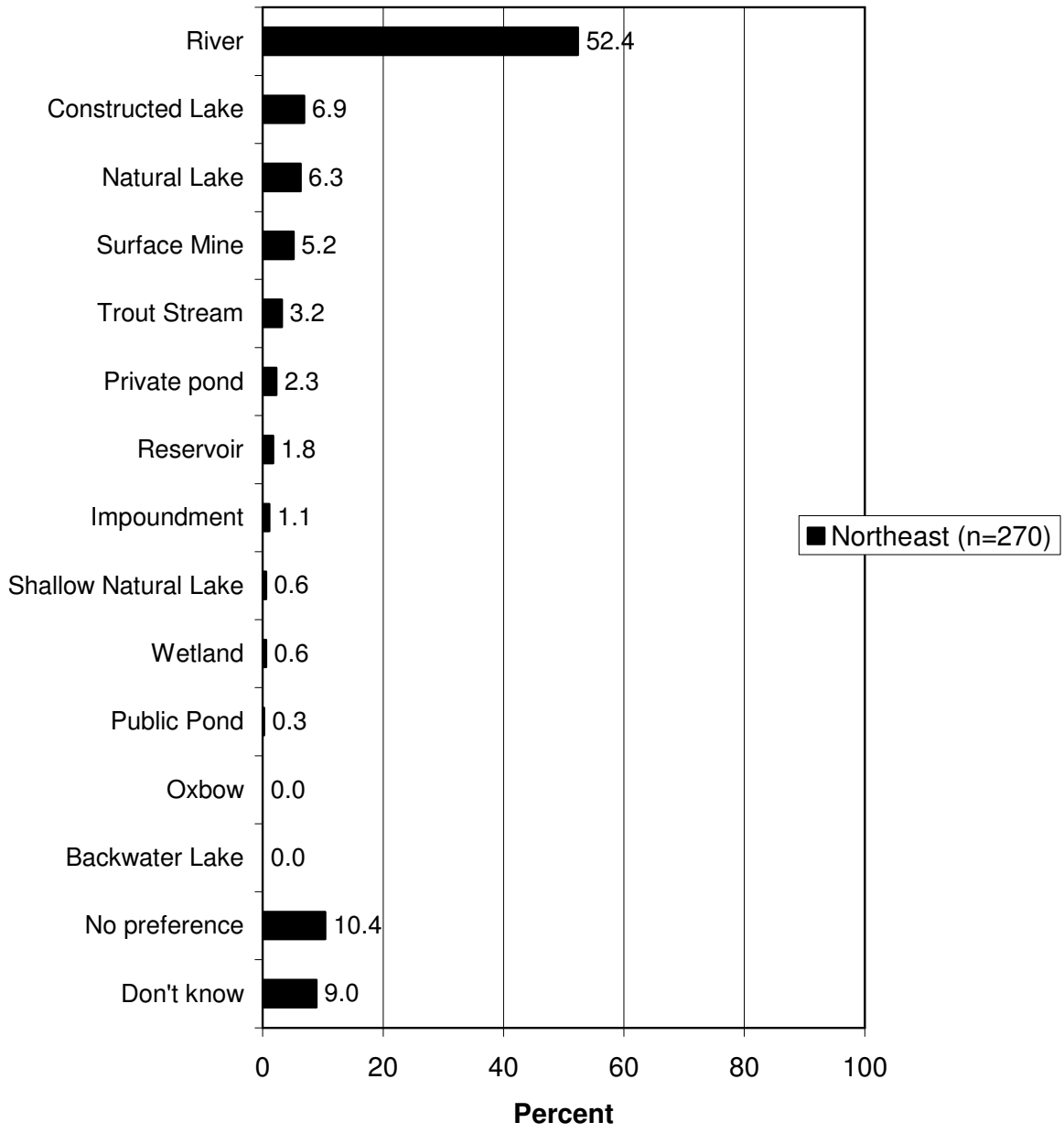
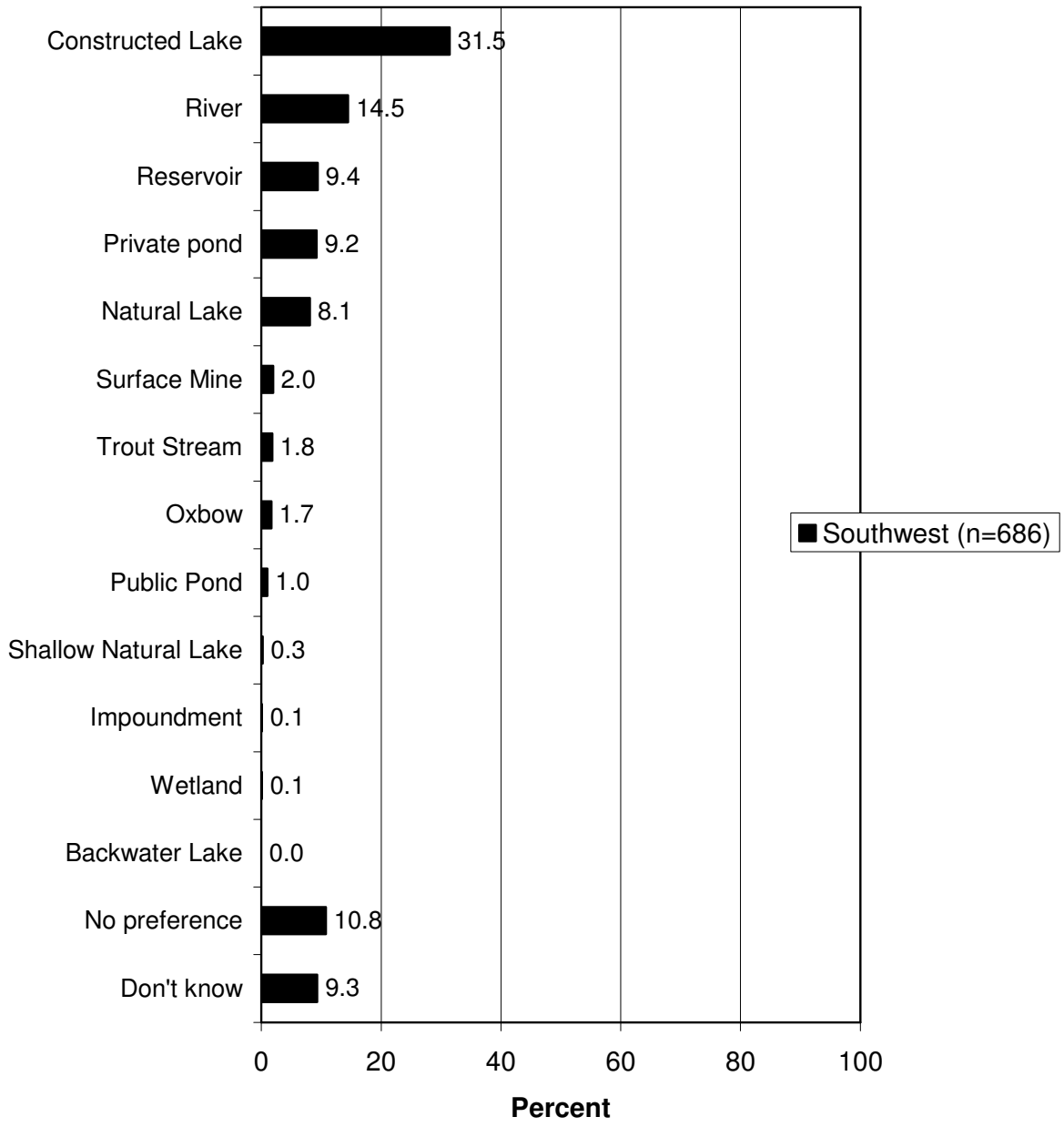


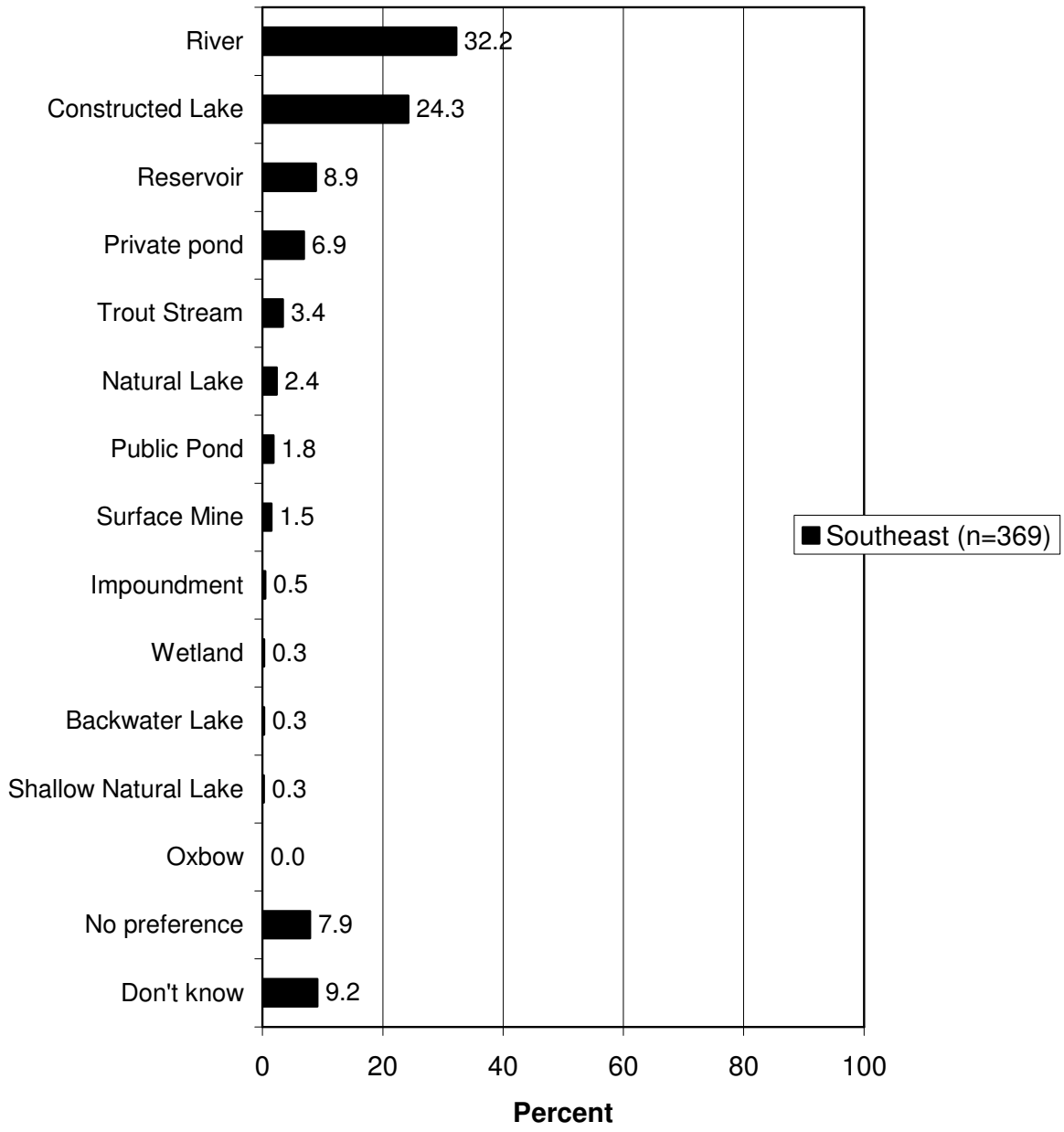
Q47. Which one body of water would you most prefer to fish? (Water body type)



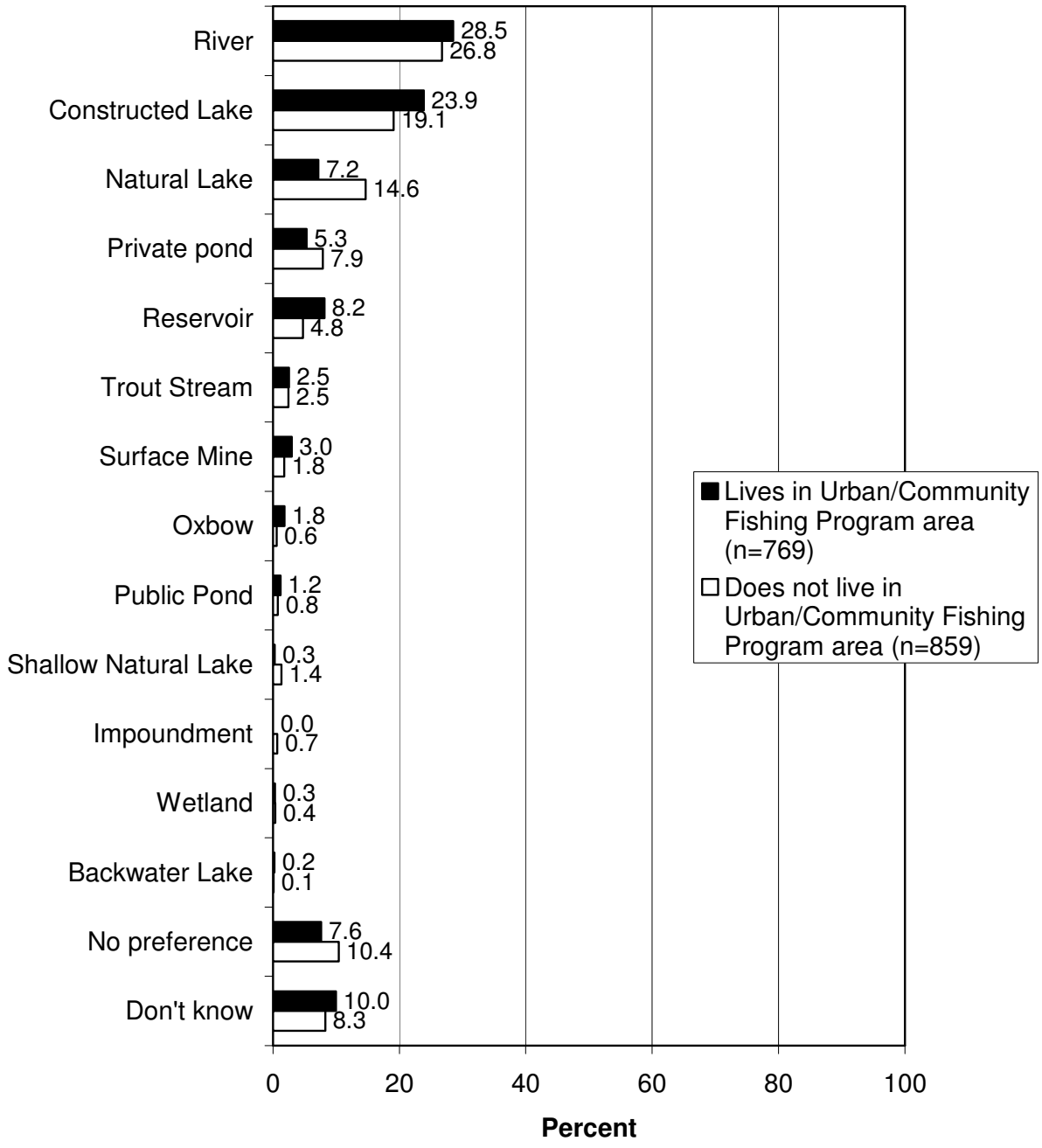
Q47. Which one body of water would you most prefer to fish? (Water body type)



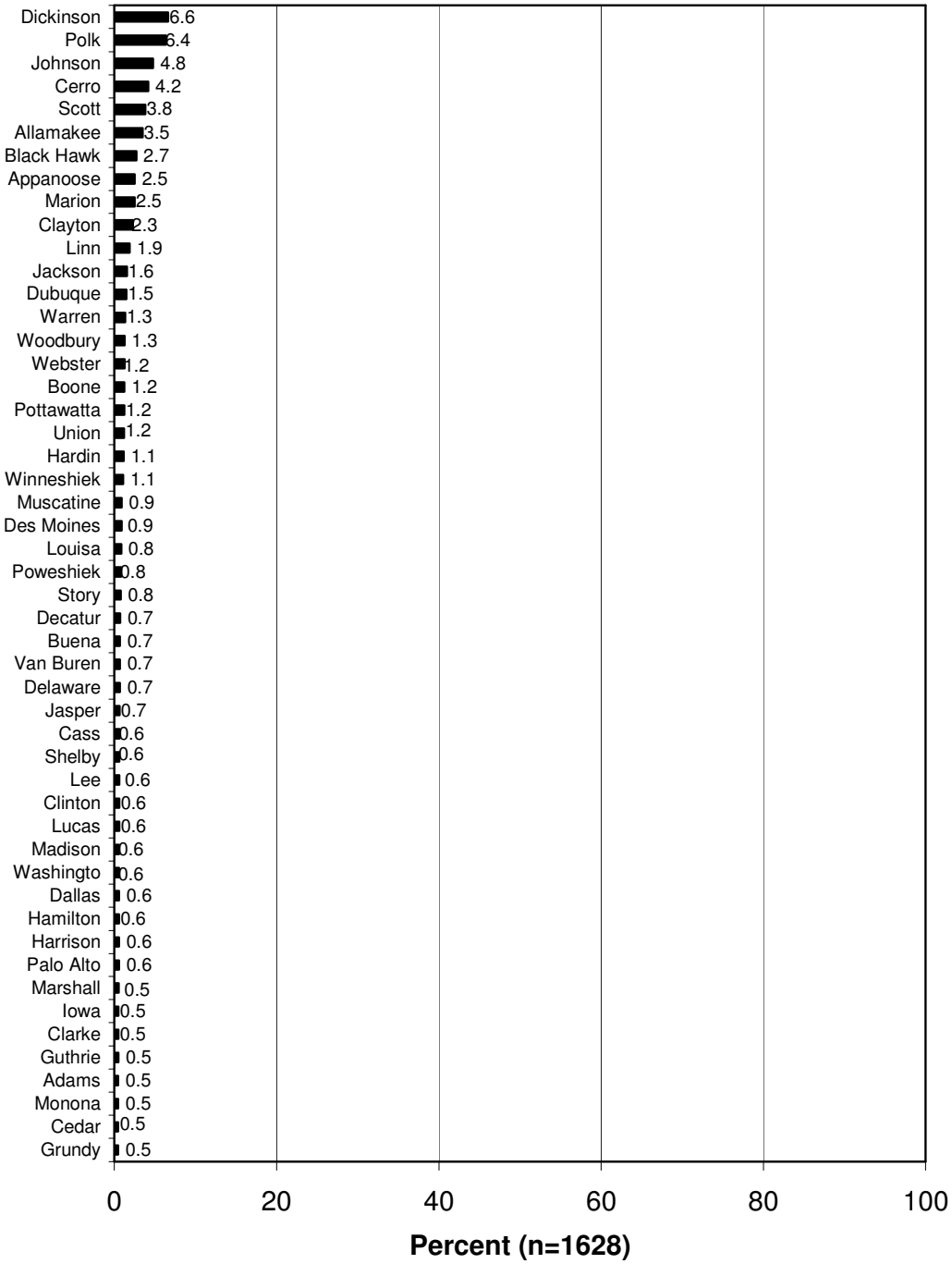
Q47. Which one body of water would you most prefer to fish? (Water body type)



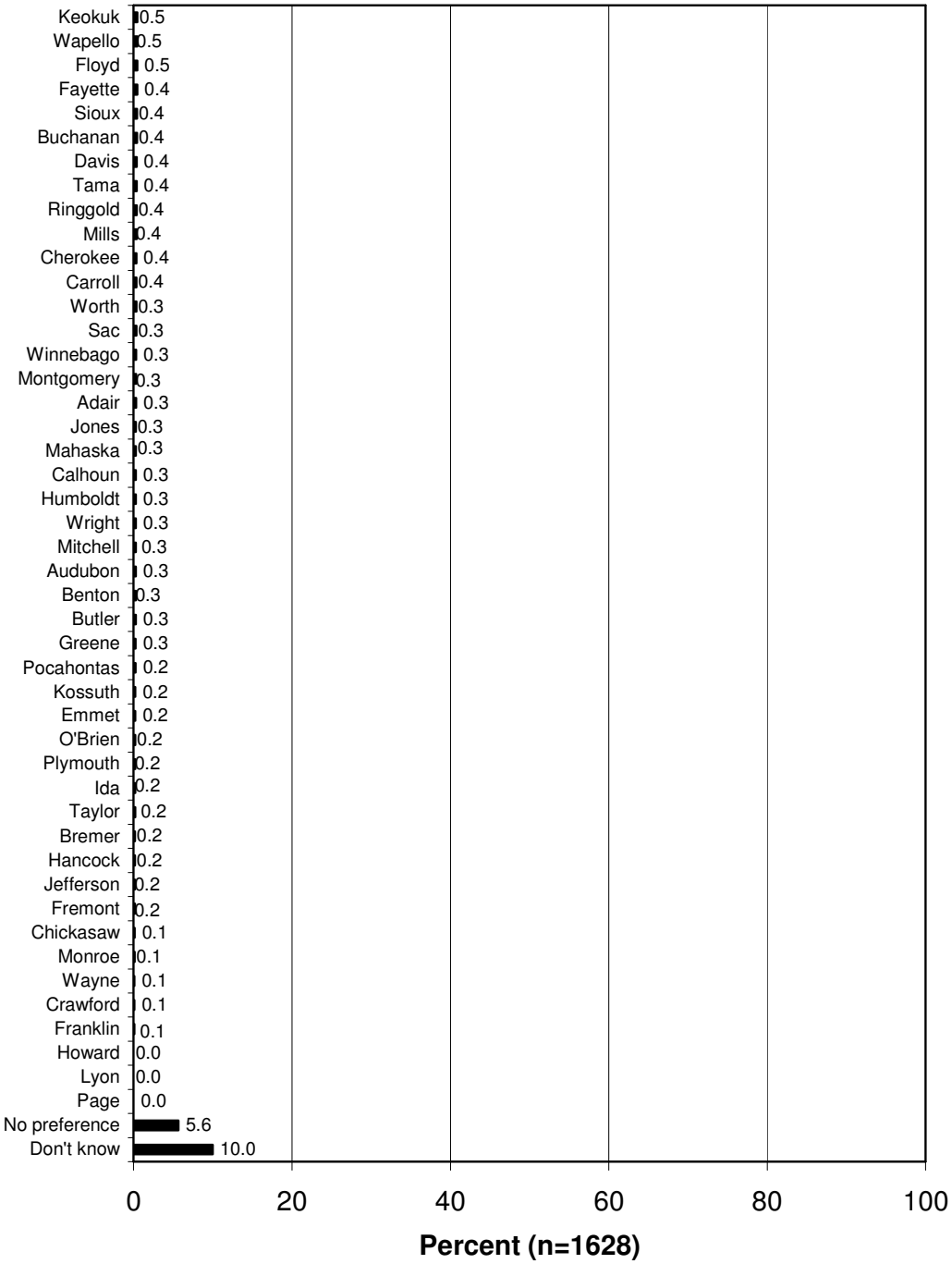
Q47. Which one body of water would you most prefer to fish? (Water body type)



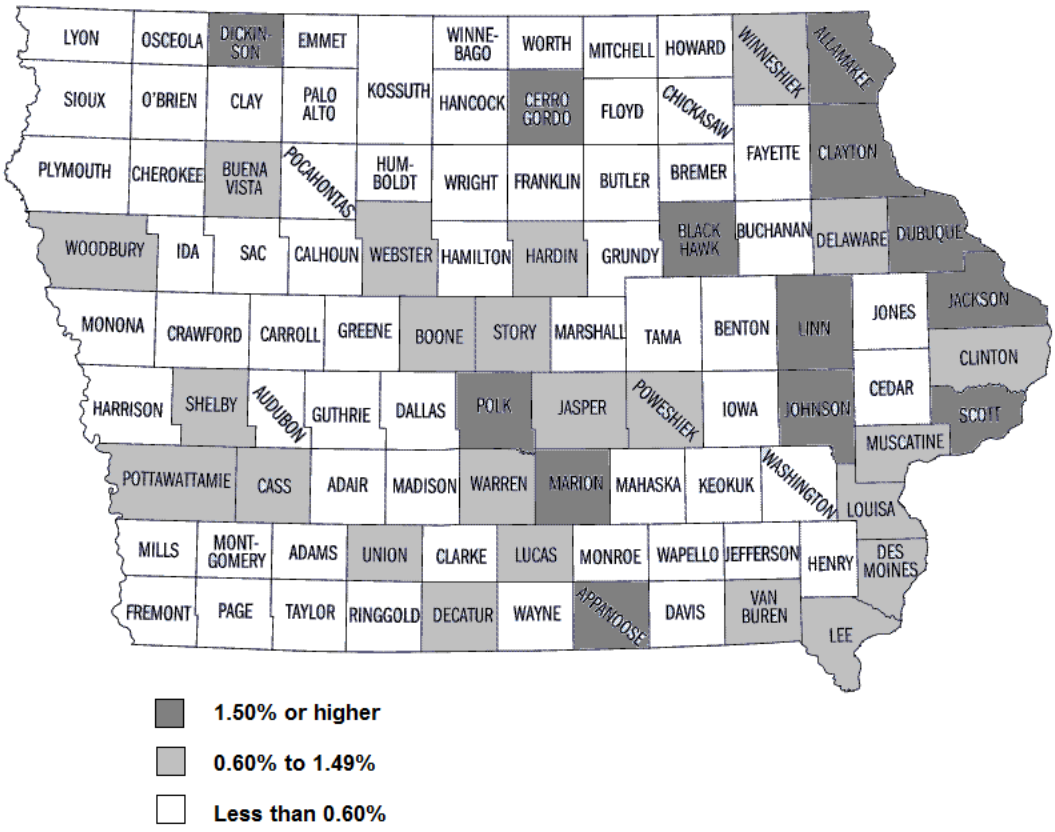
Q48. What county is that body of water in [that you most prefer to fish]? (Part 1)



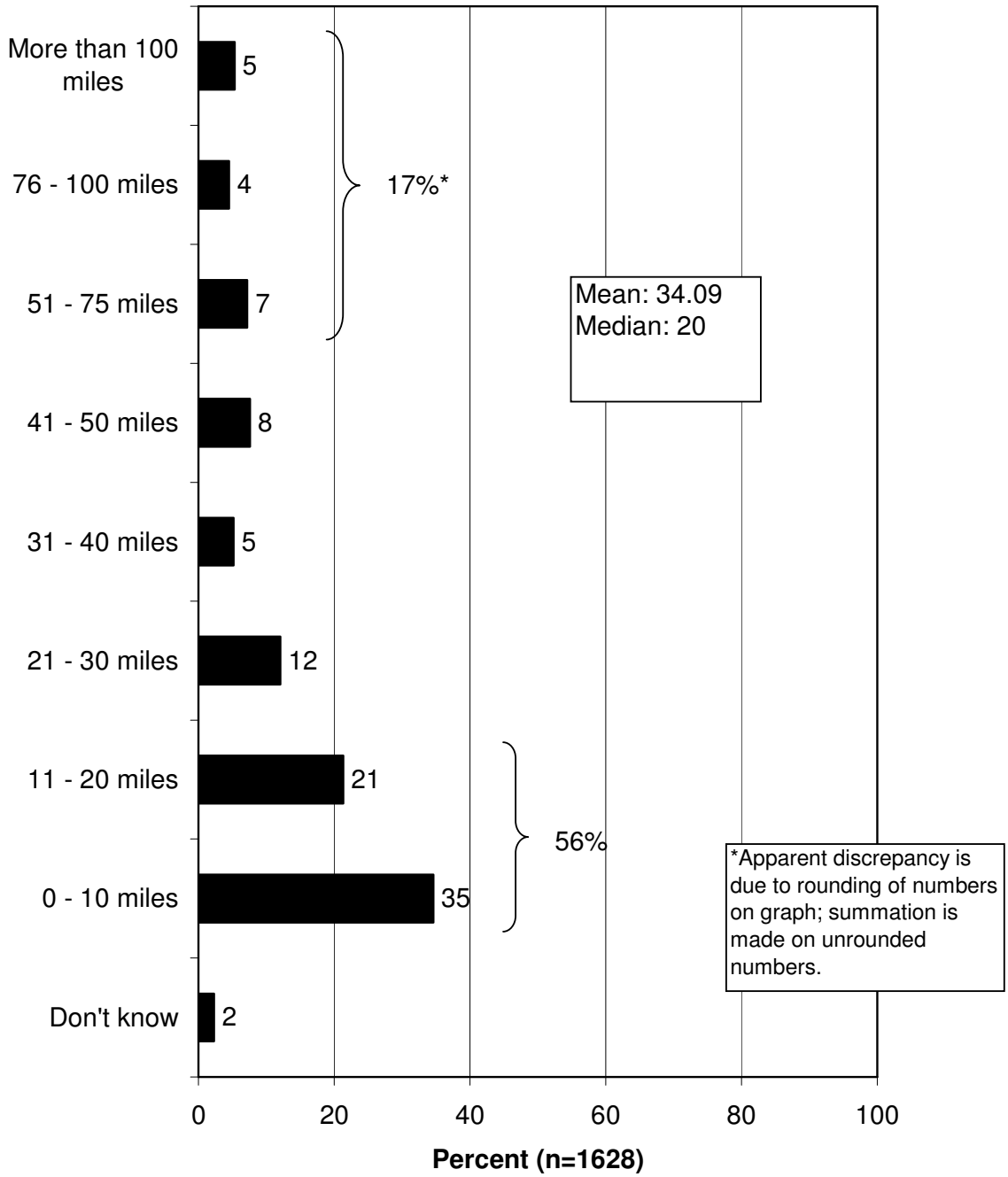
Q48. What county is that body of water in [that you most prefer to fish]? (Part 2)



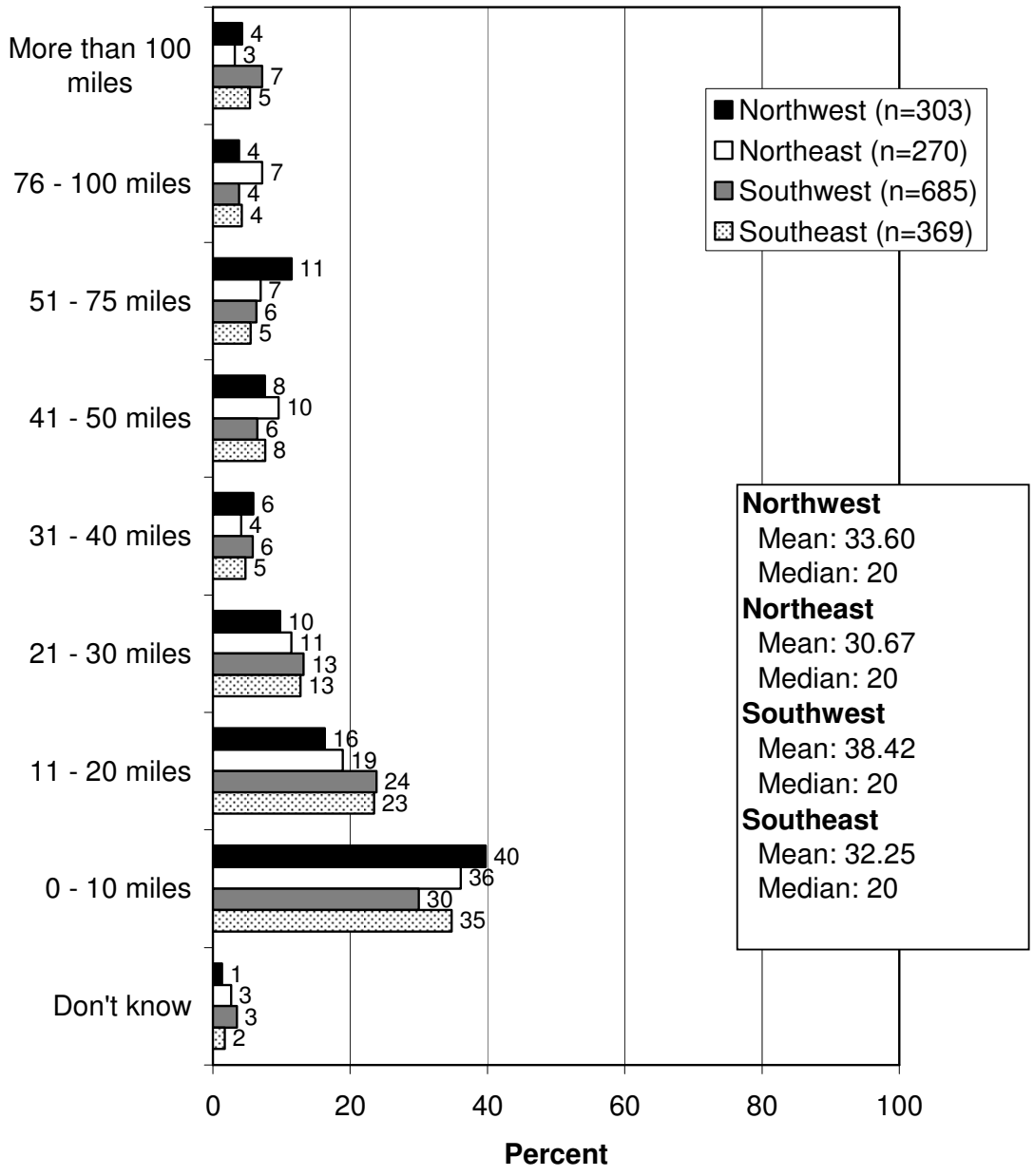
MOST PREFERRED COUNTIES



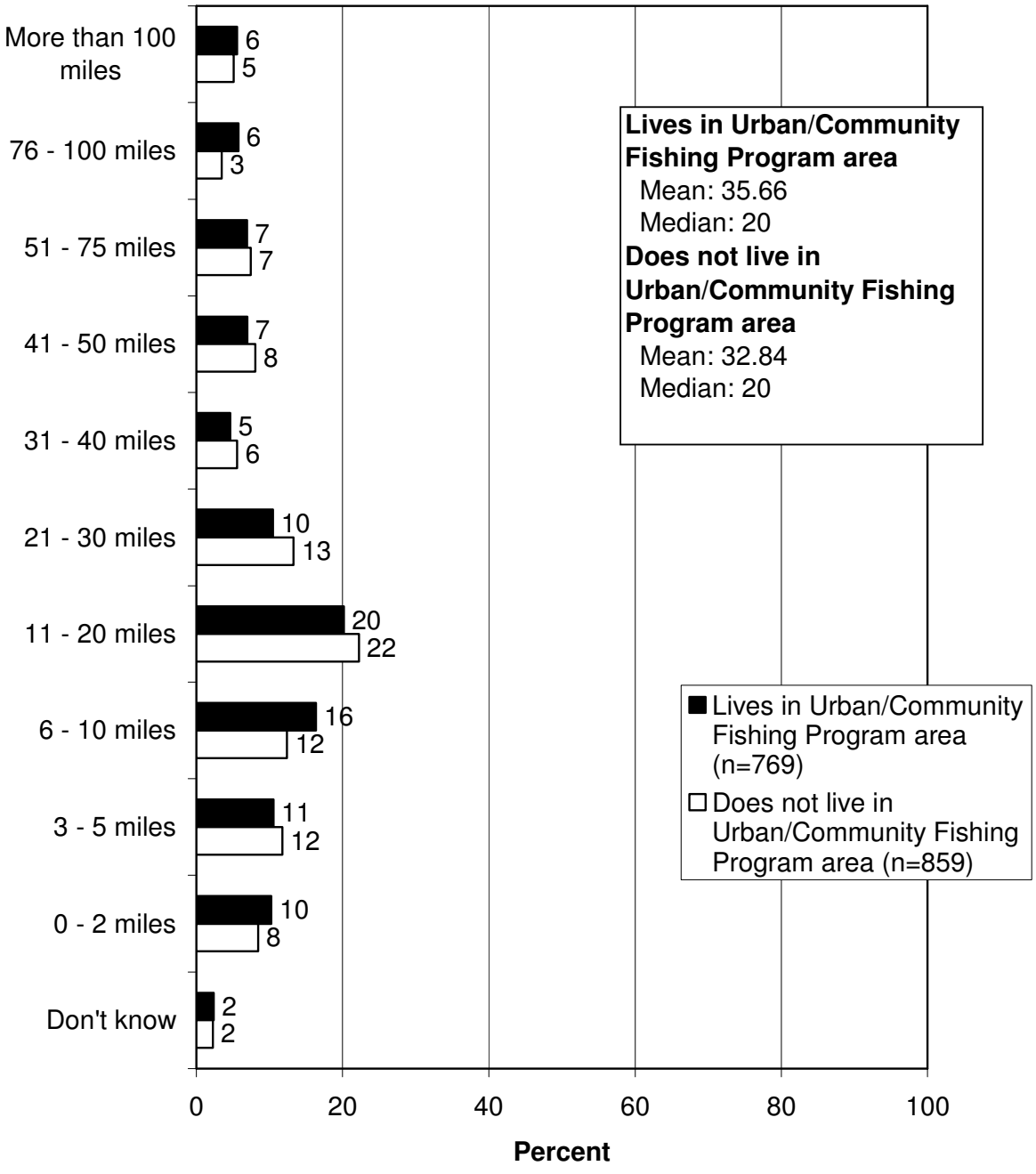
Q50. How many miles do you typically travel from your home, one-way, to fish in Iowa?



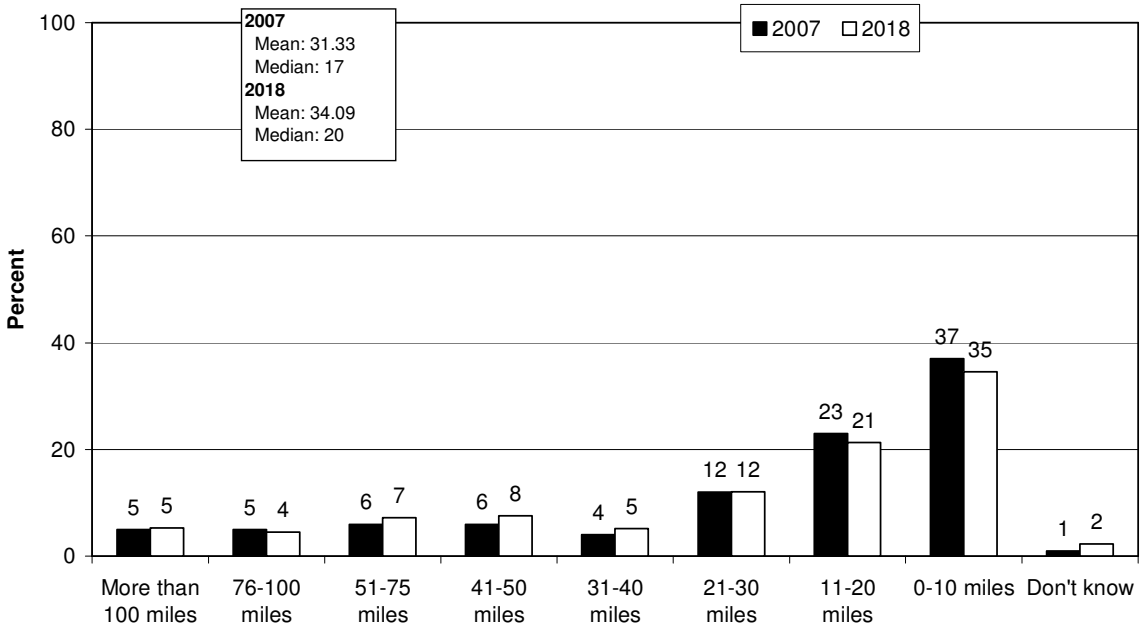
Q50. How many miles do you typically travel from your home, one-way, to fish in Iowa?



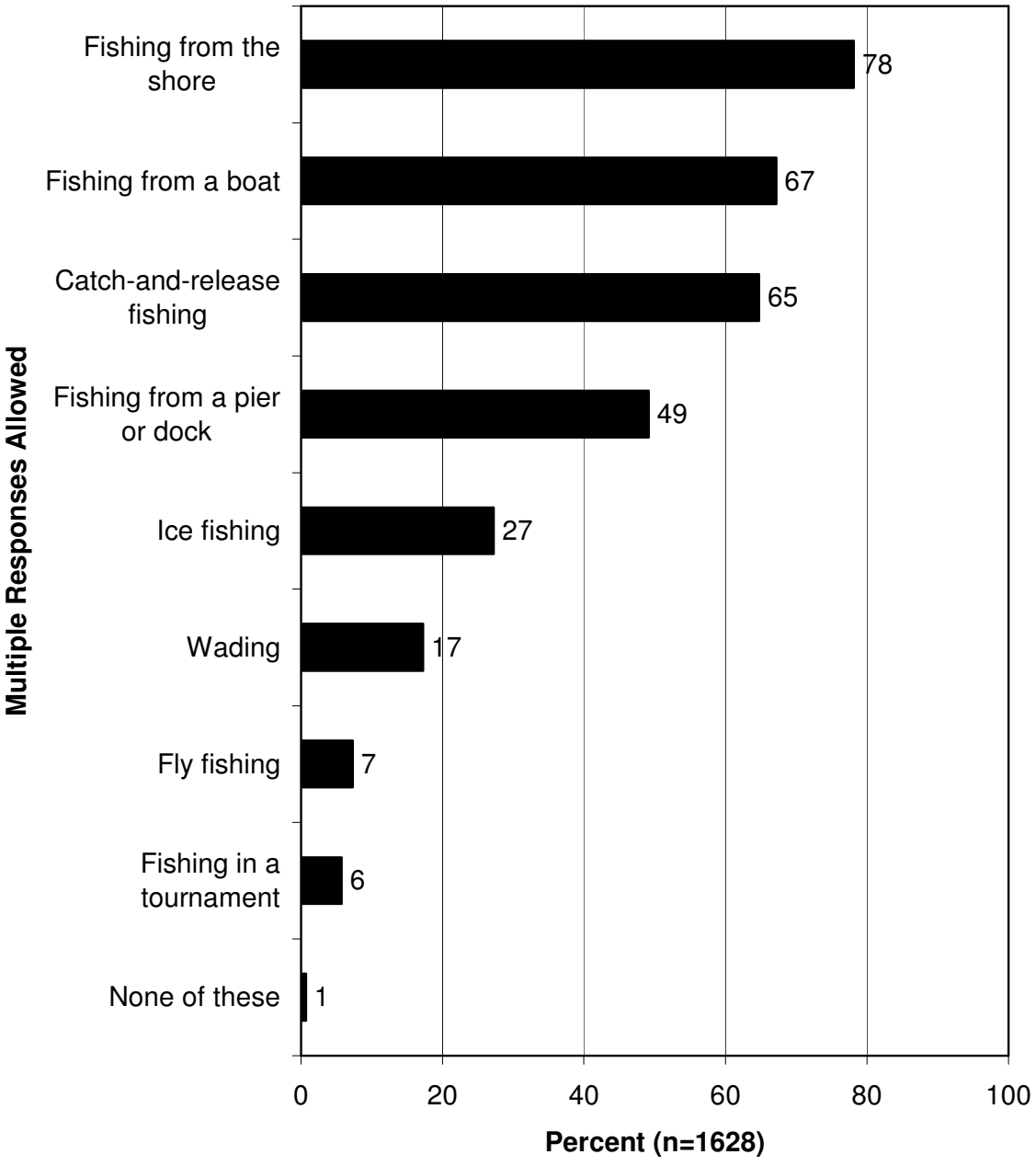
Q50. How many miles do you typically travel from your home, one-way, to fish in Iowa?



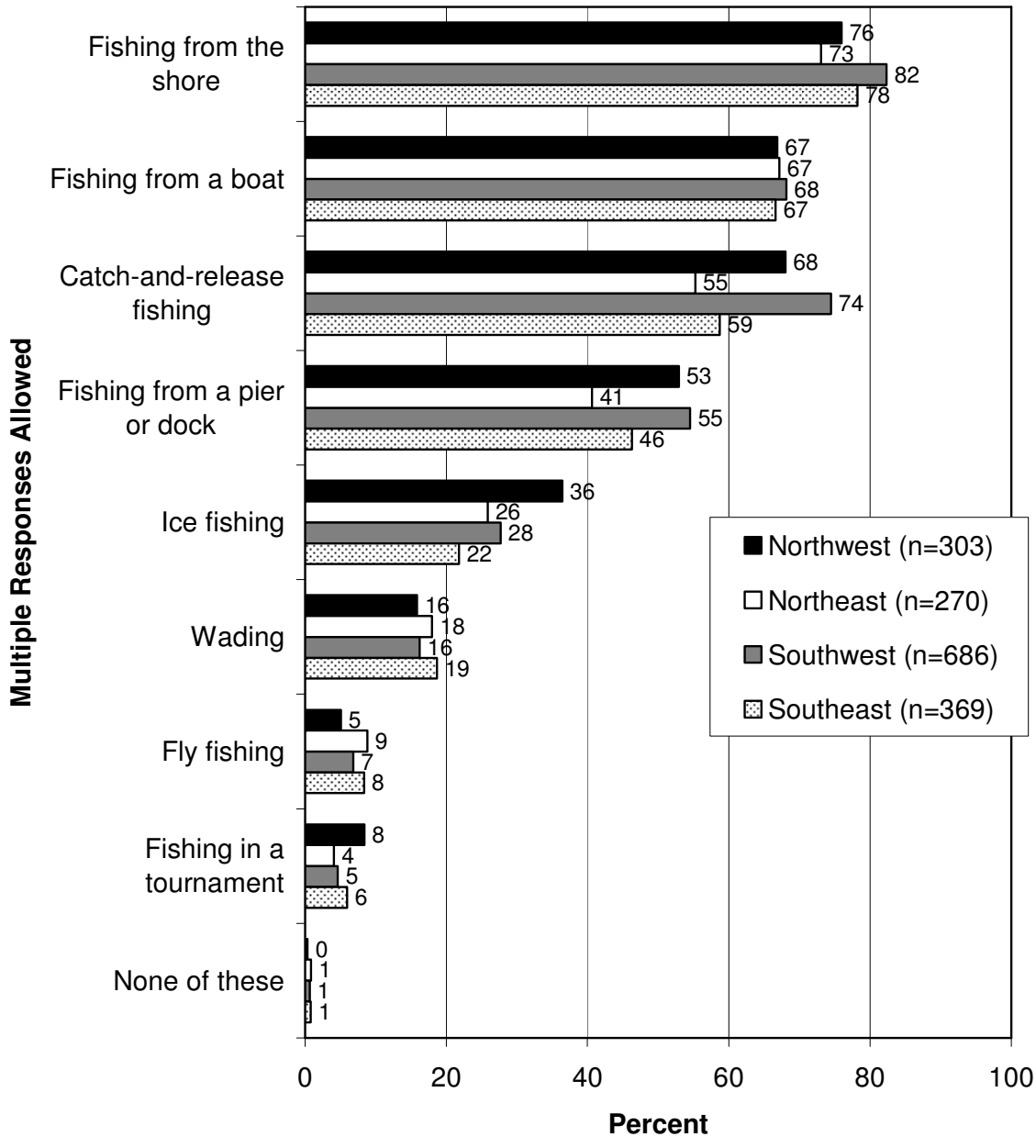
Q50. How many miles do you typically travel from your home, one-way, to fish in Iowa?



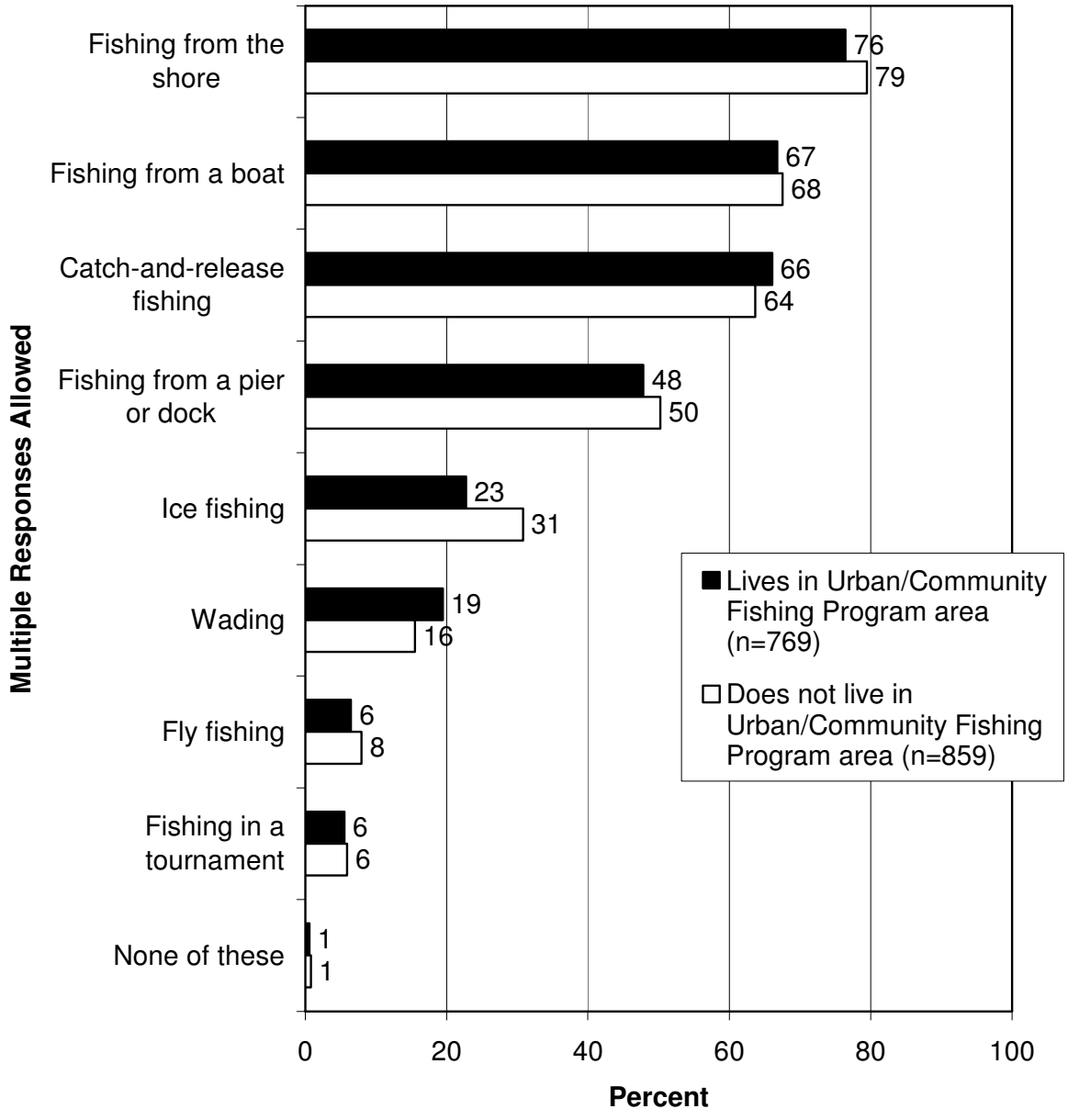
Q54. I'm going to name several types of fishing, and I'd like you to tell me if you did them in Iowa in the [past 12 months / last year you fished]. Did you go…?



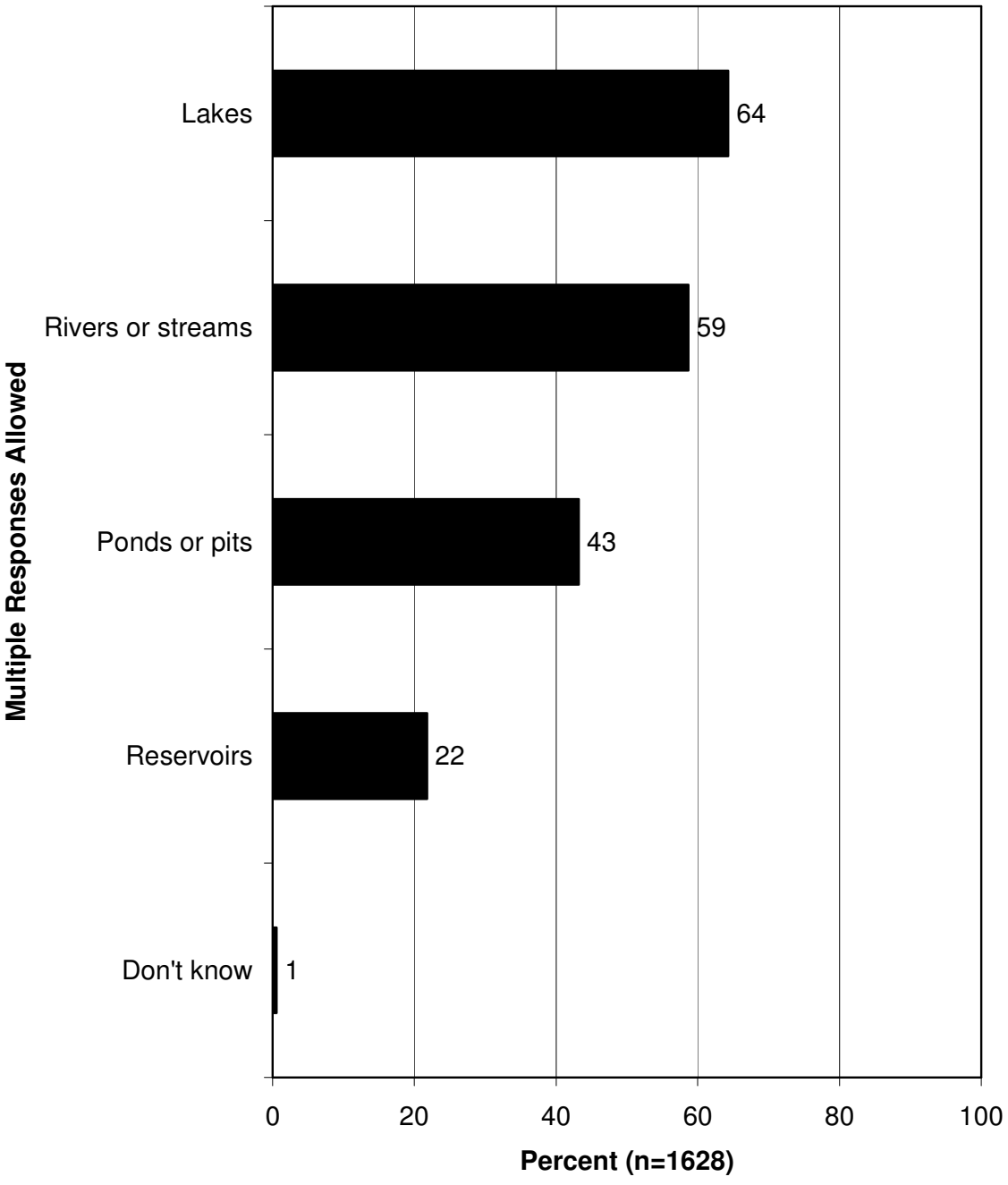
Q54. I'm going to name several types of fishing, and I'd like you to tell me if you did them in Iowa in the [past 12 months / last year you fished]. Did you go…?



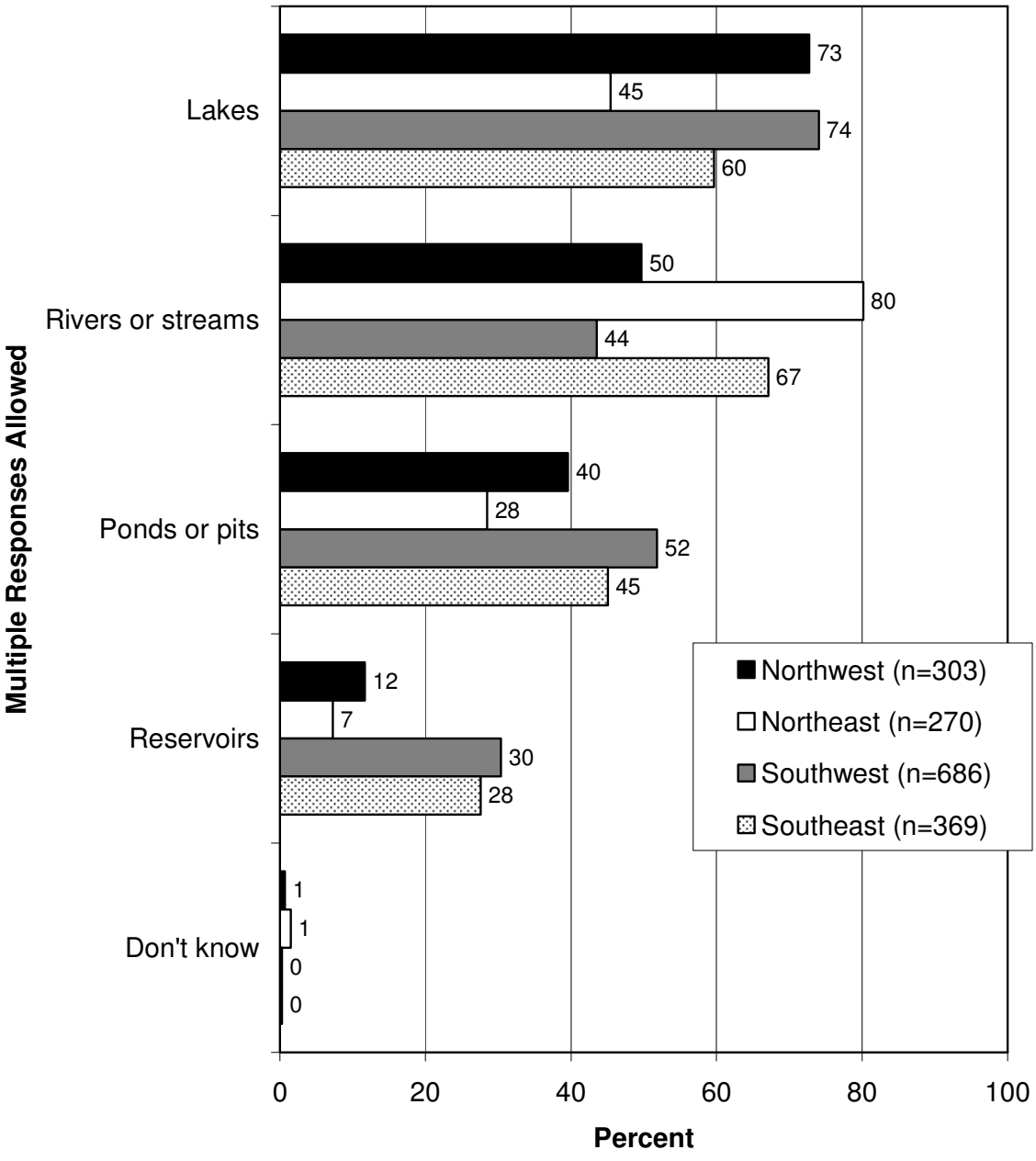
Q54. I'm going to name several types of fishing, and I'd like you to tell me if you did them in Iowa in the [past 12 months / last year you fished]. Did you go...



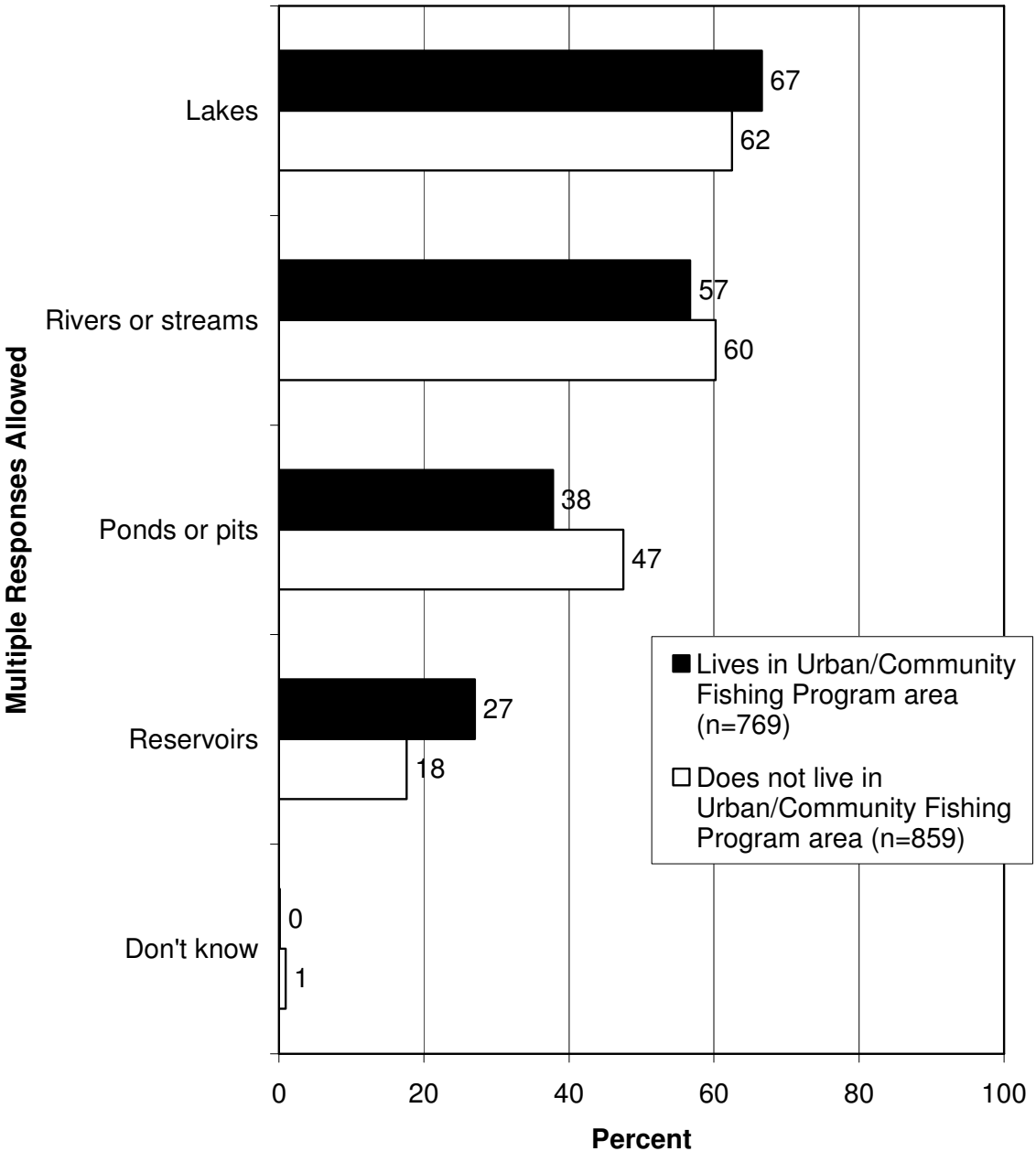
Q76. In which types of water did you fish in Iowa in the [past 12 months / last year you fished]? What about…?



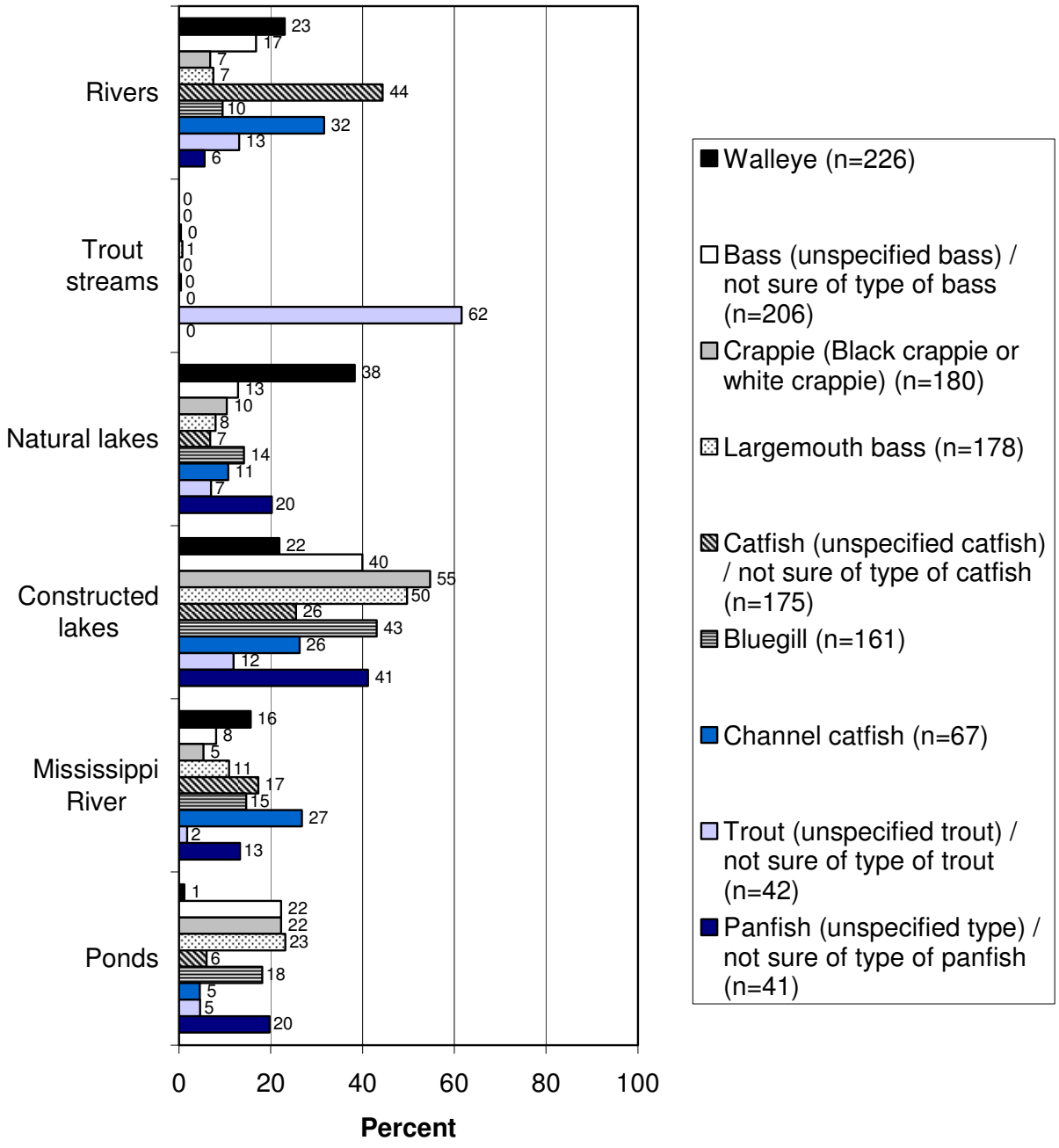
Q76. In which types of water did you fish in Iowa in the [past 12 months / last year you fished]? What about…?



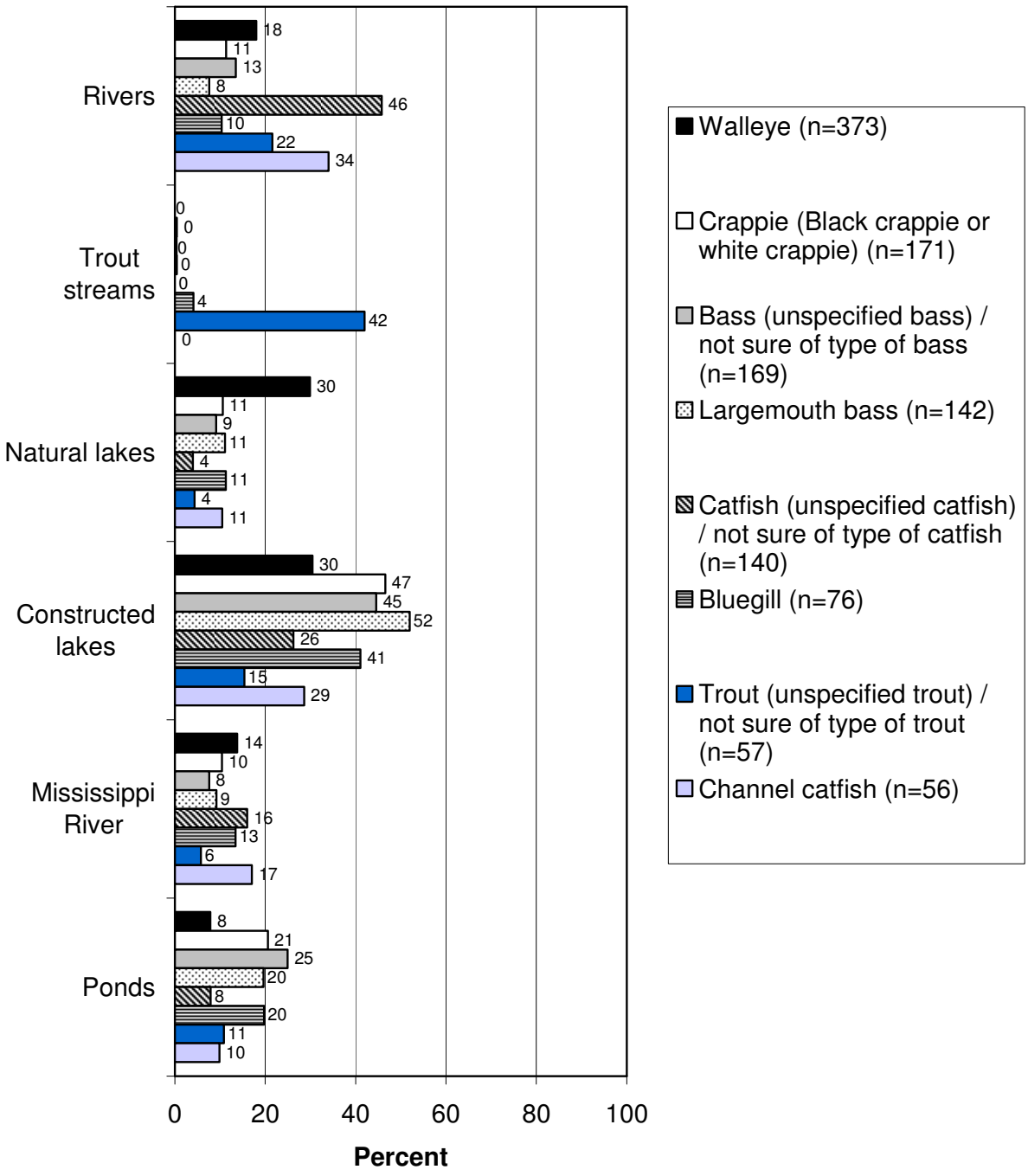
Q76. In which types of water did you fish in Iowa in the [past 12 months / last year you fished]? What about..



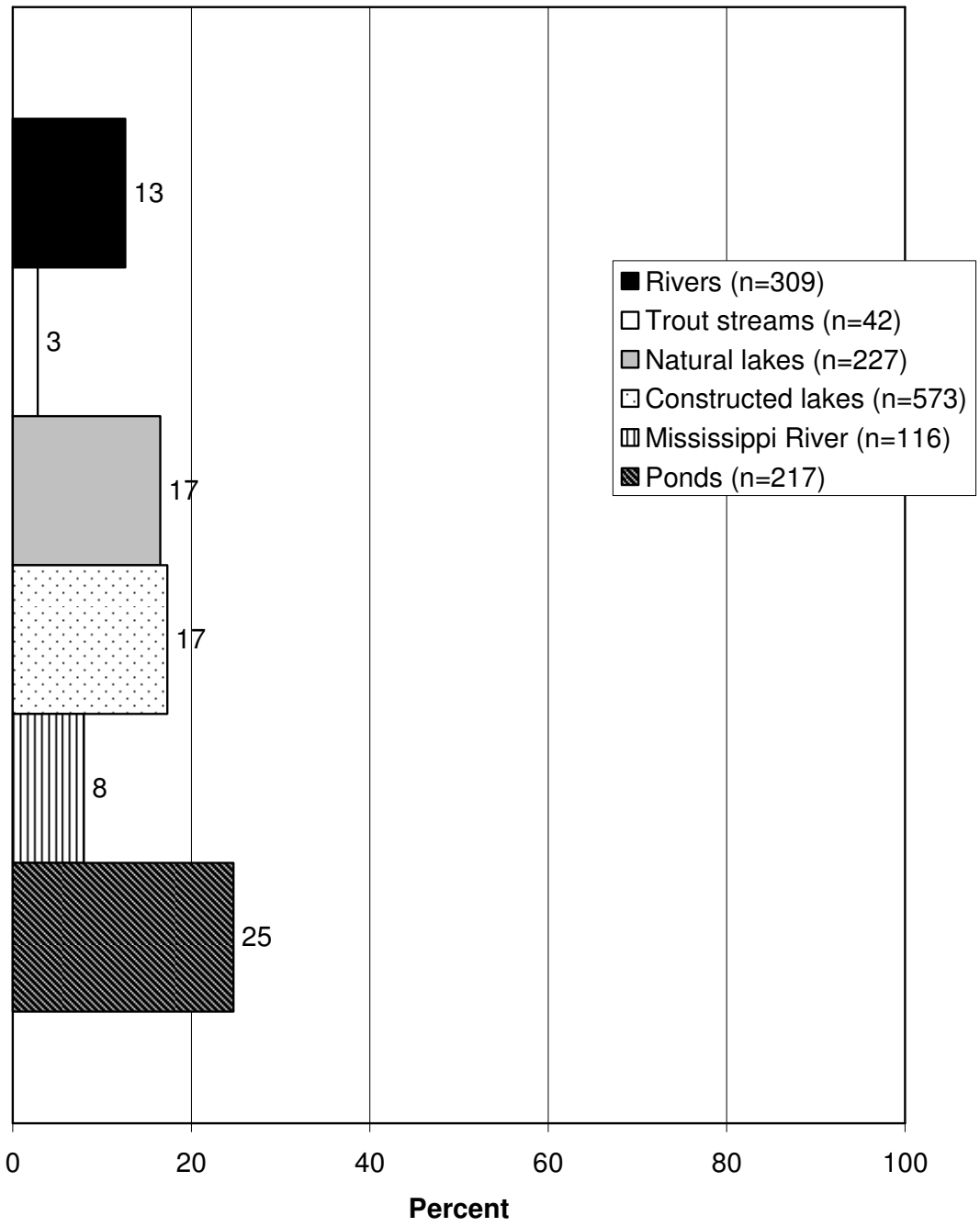
Water body types most often fished crosstabulated by species most often fished.



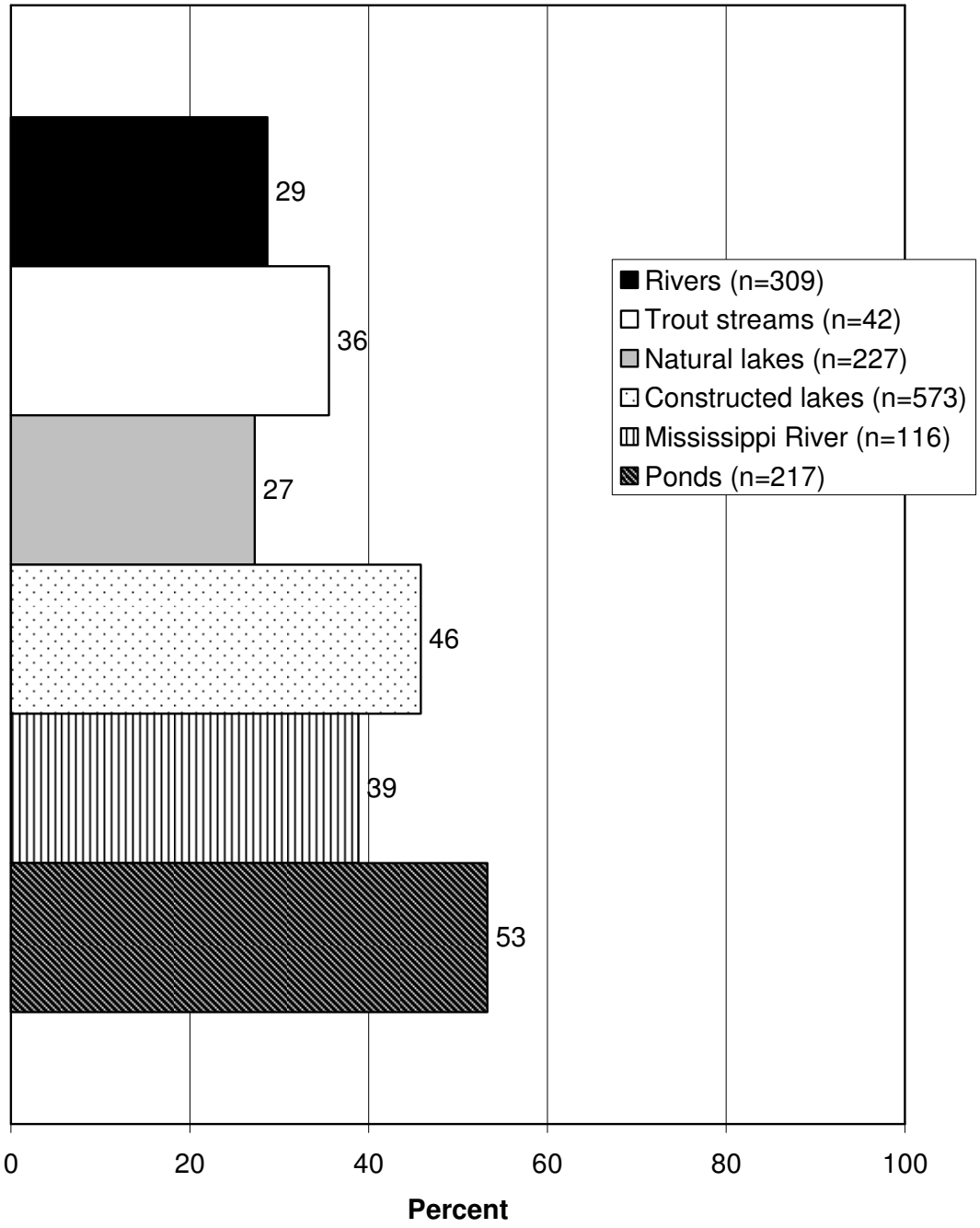
Water body types most often fished crosstabulated by species most preferred to fish.



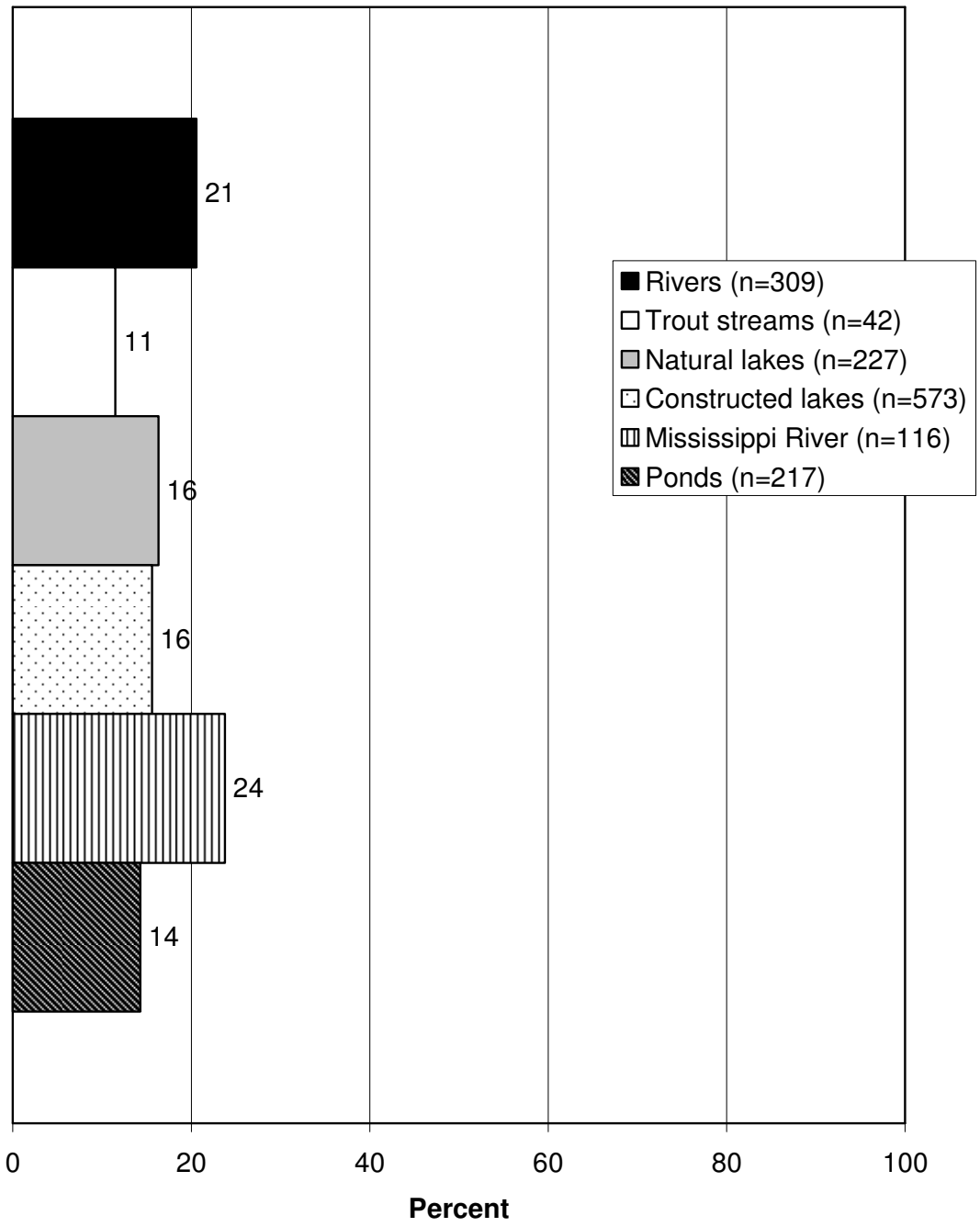
Bass / not sure of type of bass.
(Species fished crosstabulated by water body type most often fished.)



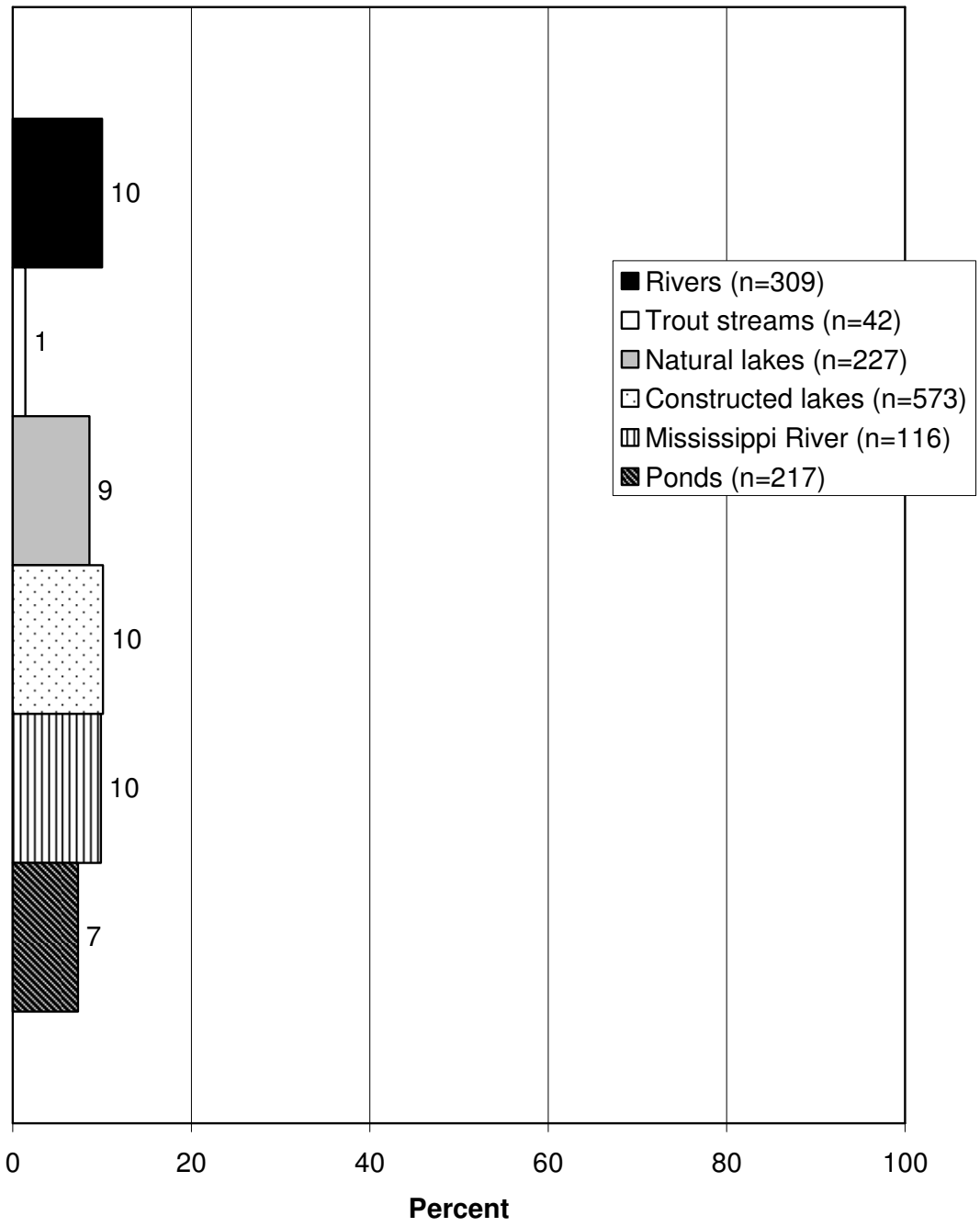
Largemouth bass.
(Species fished crosstabulated by water body type most often fished.)



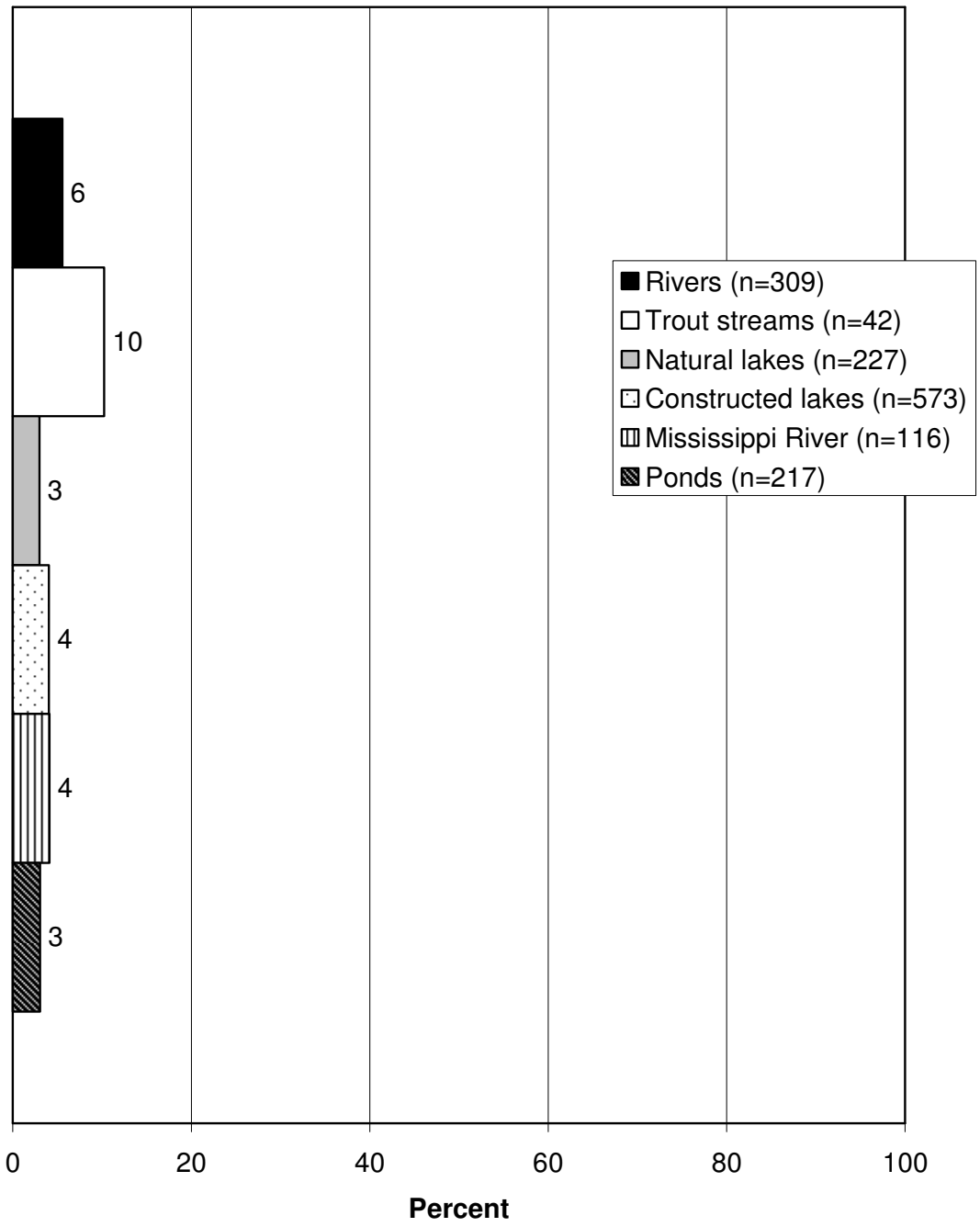
Smallmouth bass / smallie.
(Species fished crosstabulated by water body type most often fished.)



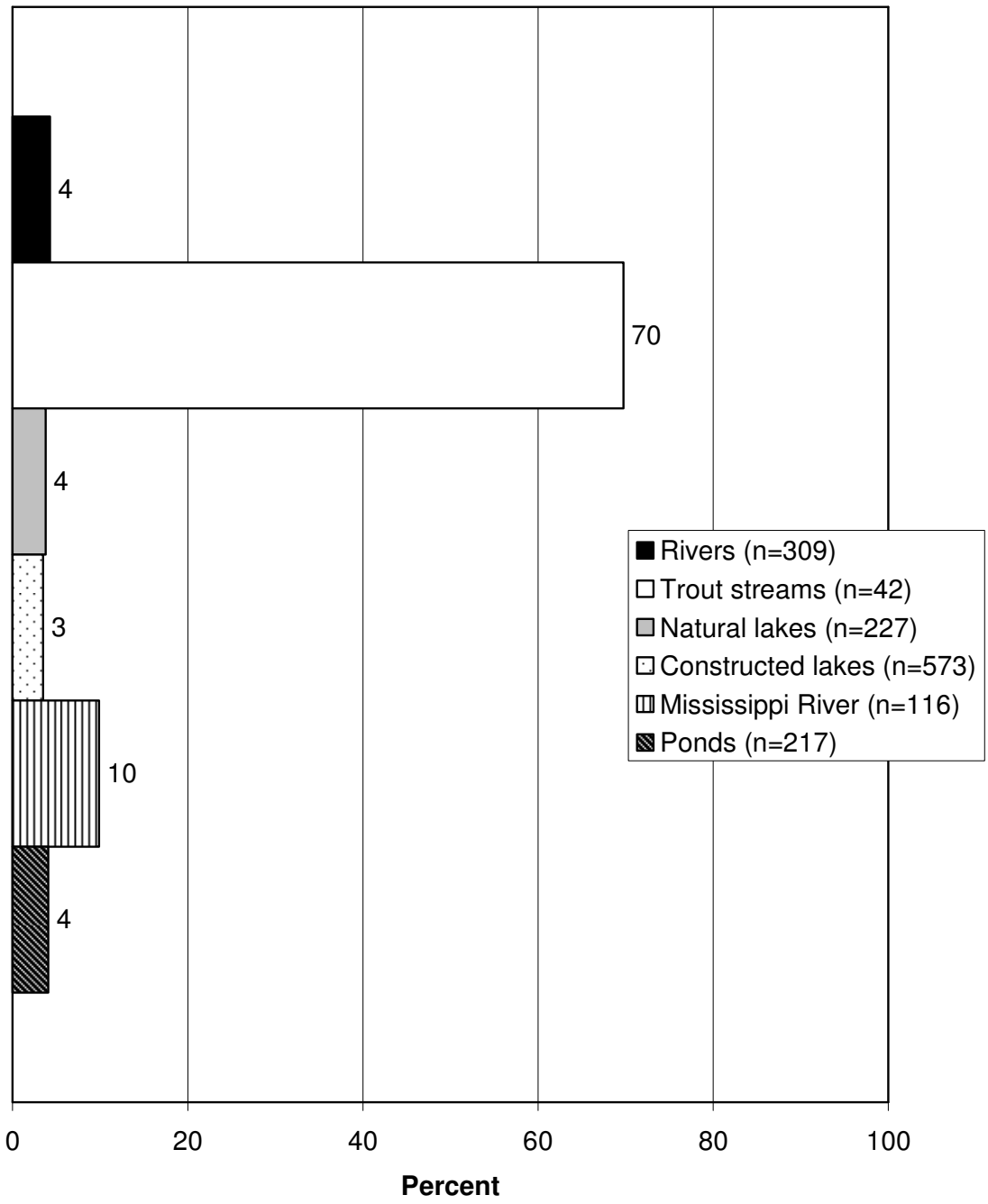
Striped bass / stripers.
(Species fished crosstabulated by water body type most often fished.)



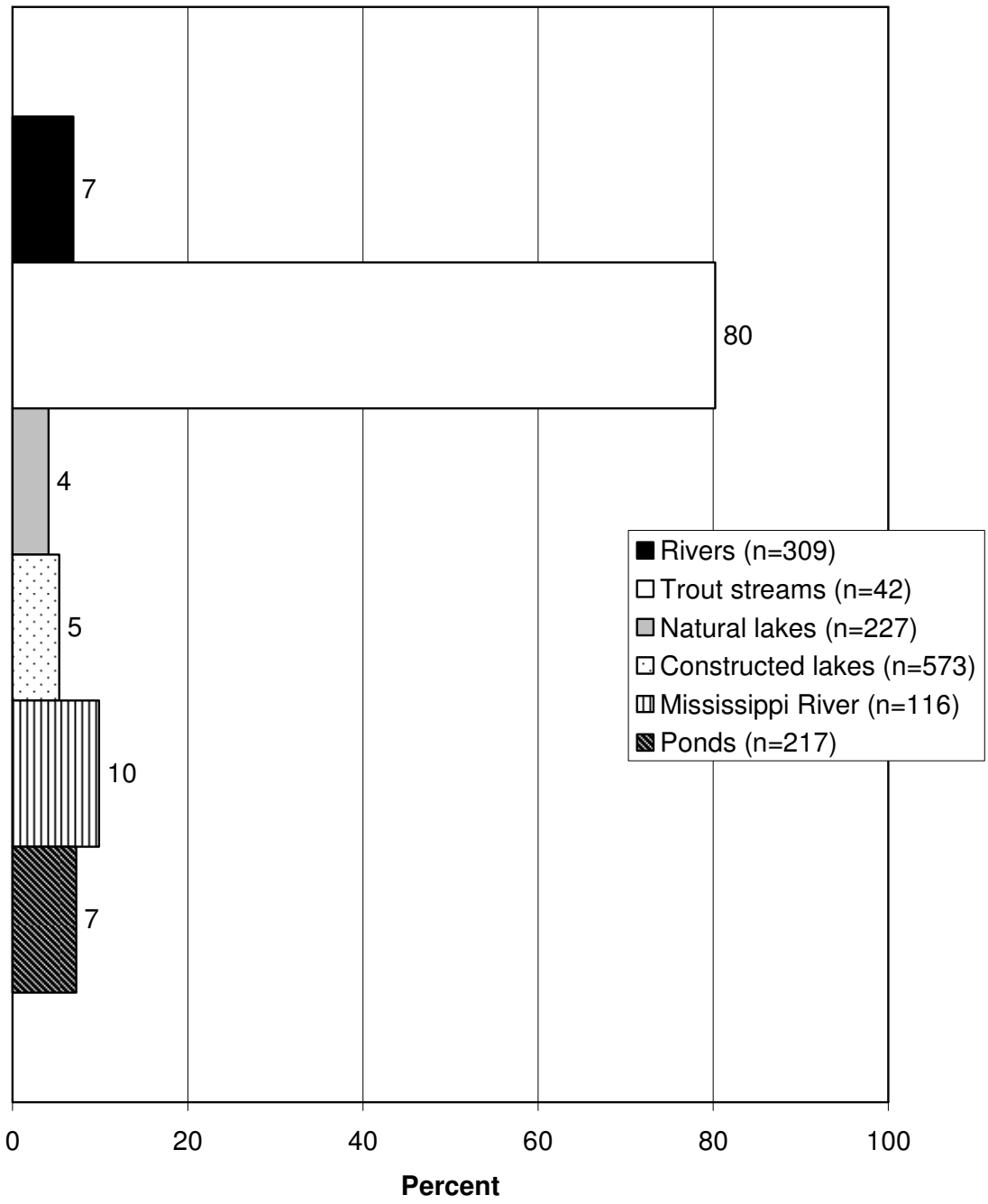
Trout / not sure of type of trout.
(Species fished crosstabulated by water body type most often fished.)



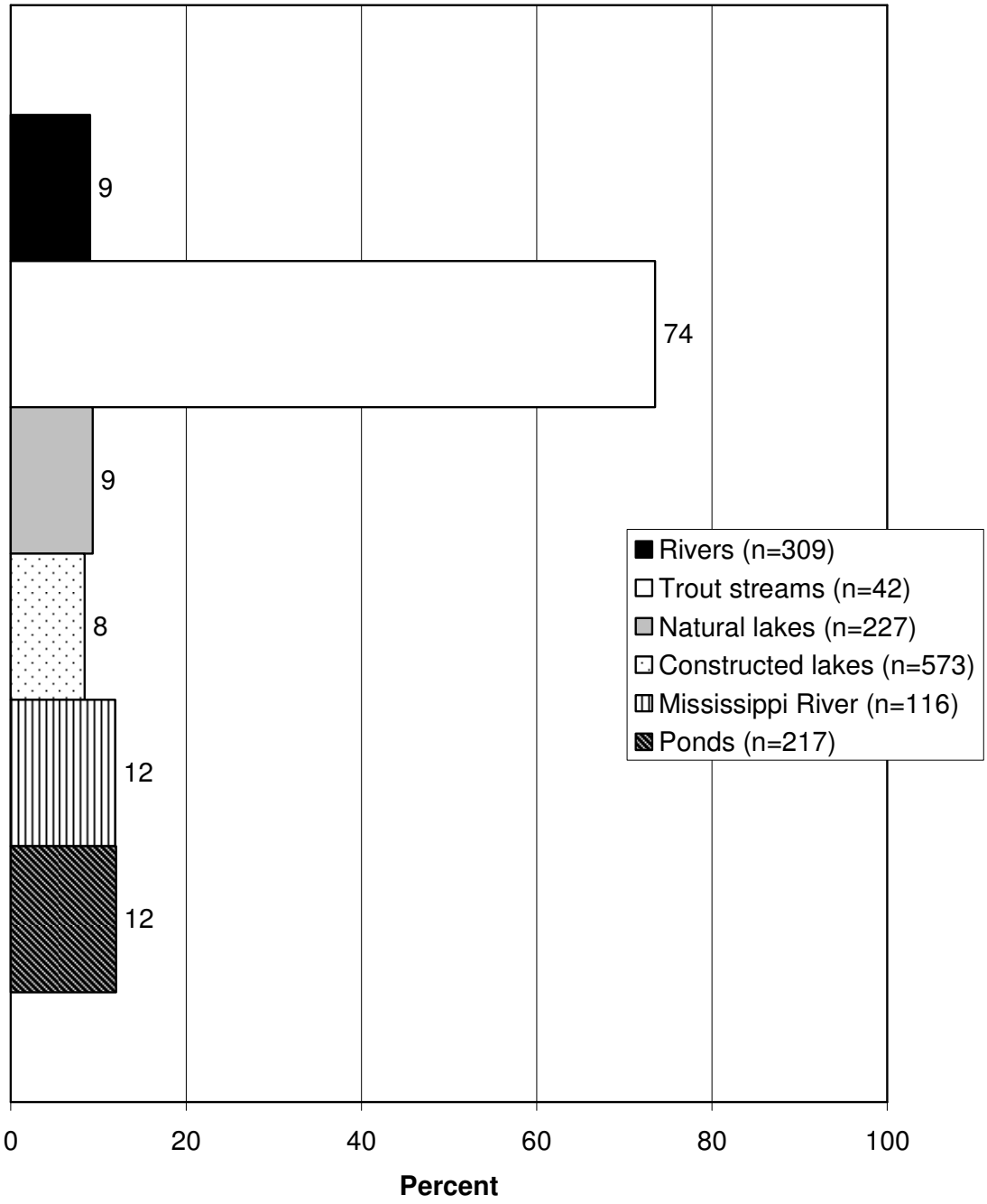
Brook trout.
(Species fished crosstabulated by water body type most often fished.)



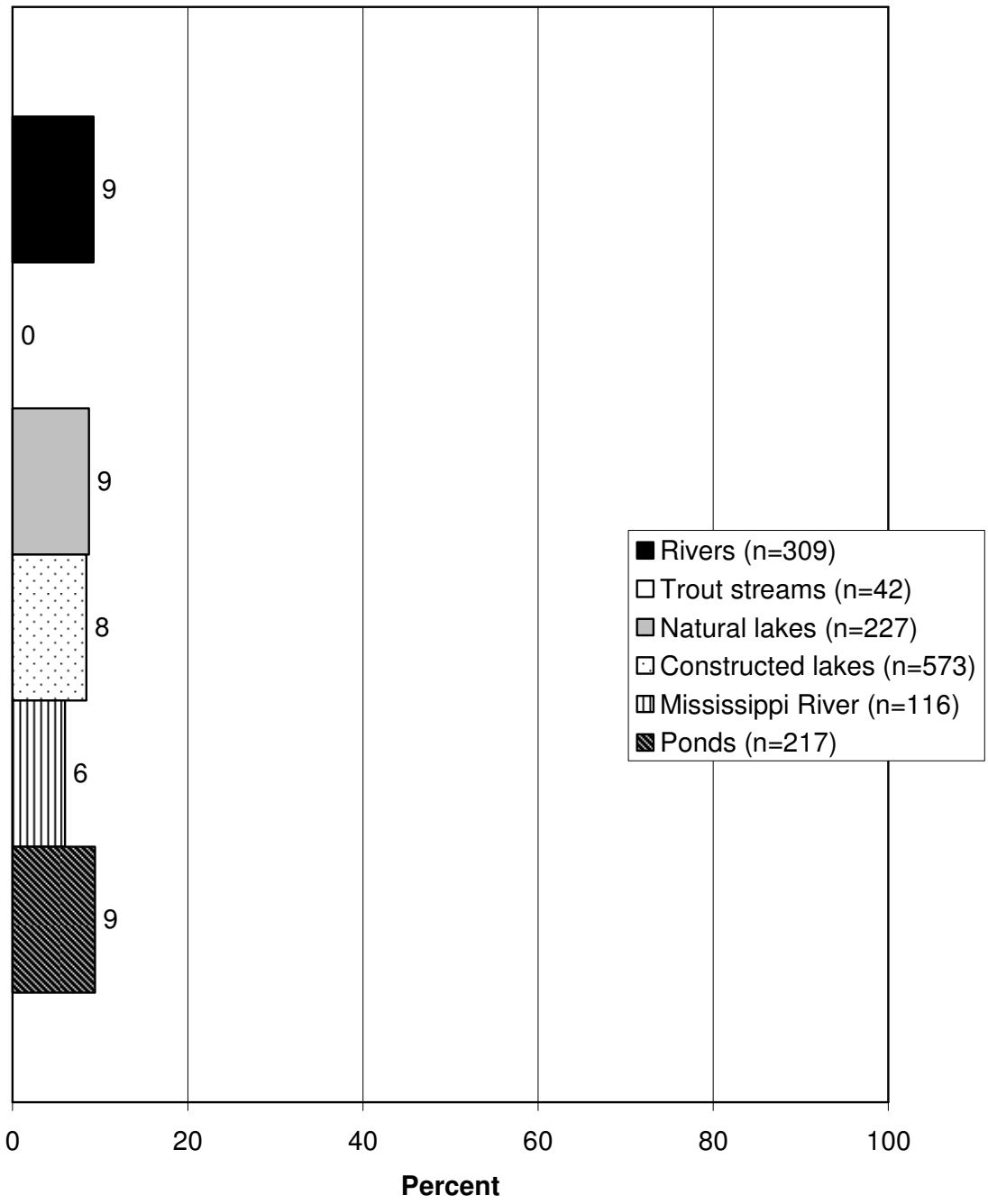
Brown trout.
(Species fished crosstabulated by water body type most often fished.)



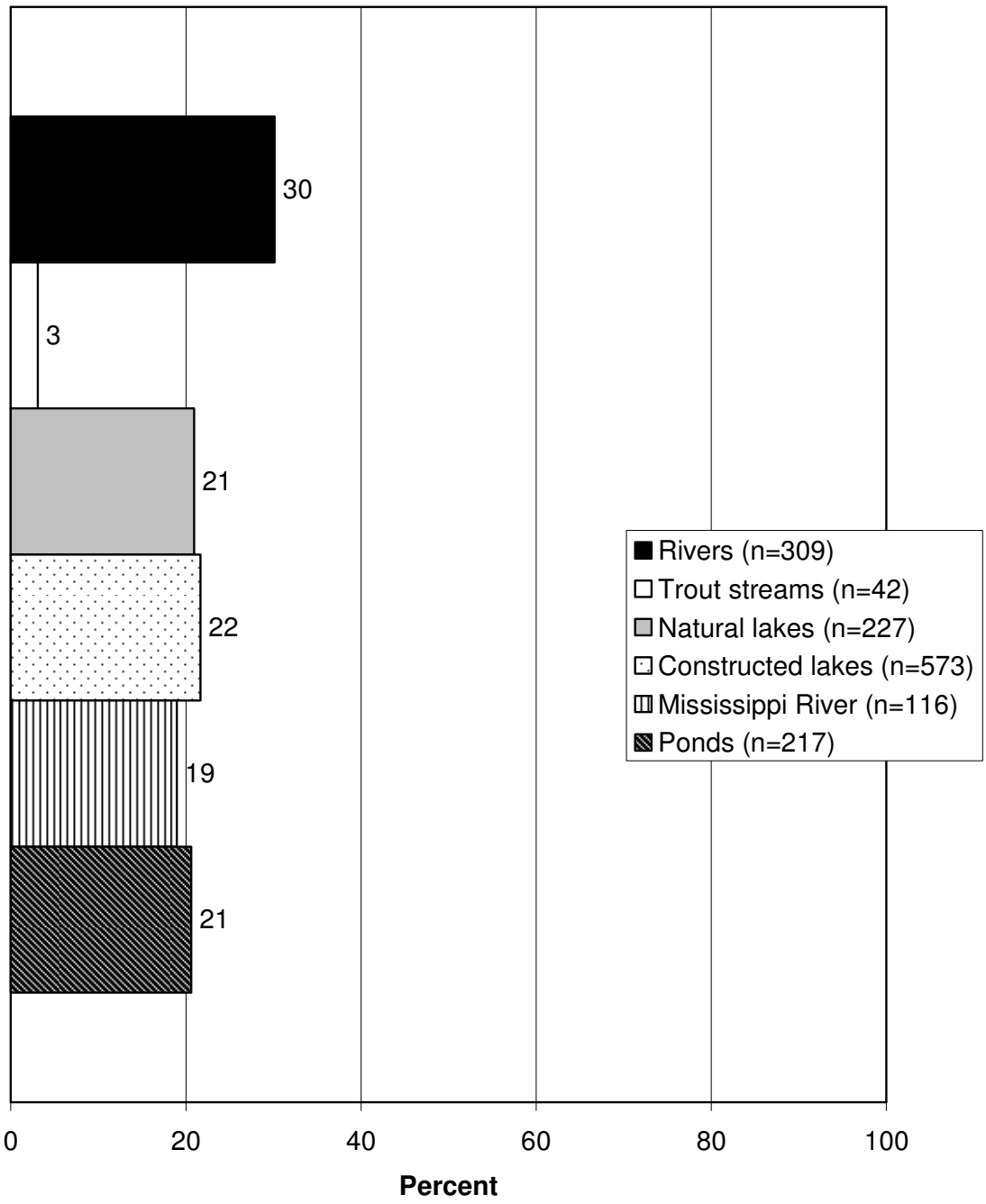
Rainbow trout.
(Species fished crosstabulated by water body type most often fished.)



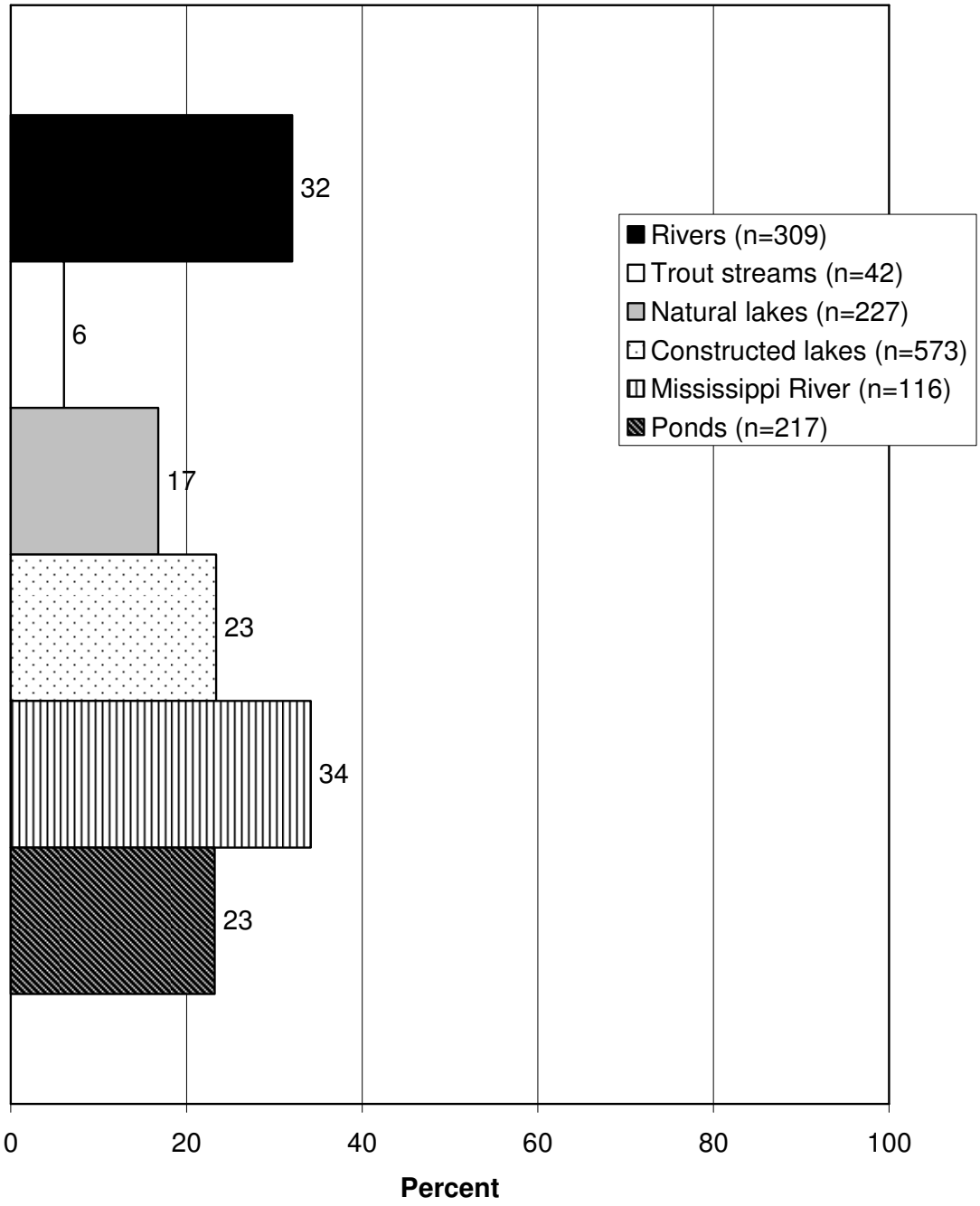
Bullhead / not sure of type of bullhead.
(Species fished crosstabulated by water body type most often fished.)



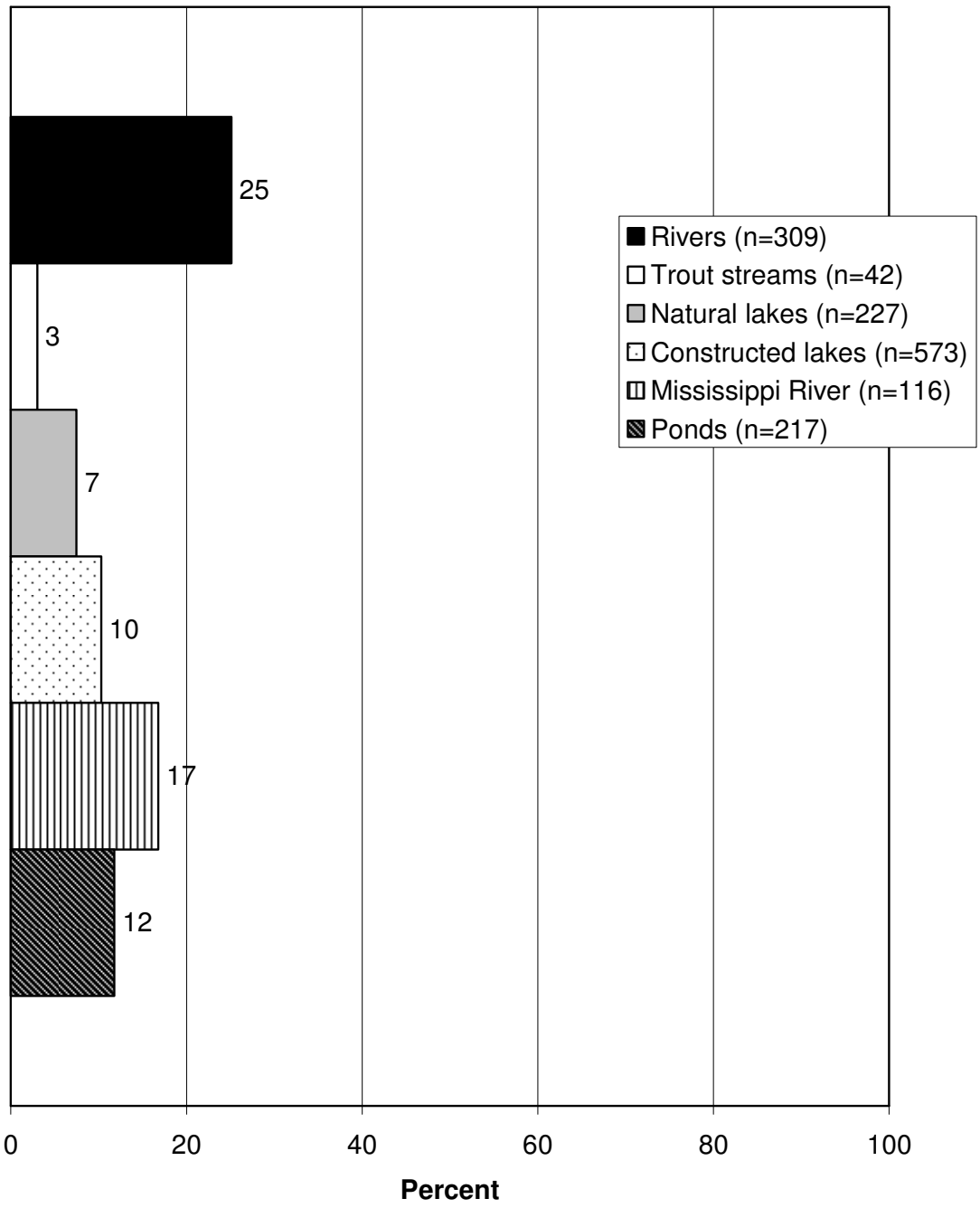
**Catfish / not sure of type of catfish.
(Species fished crosstabulated by water body type most often fished.)**



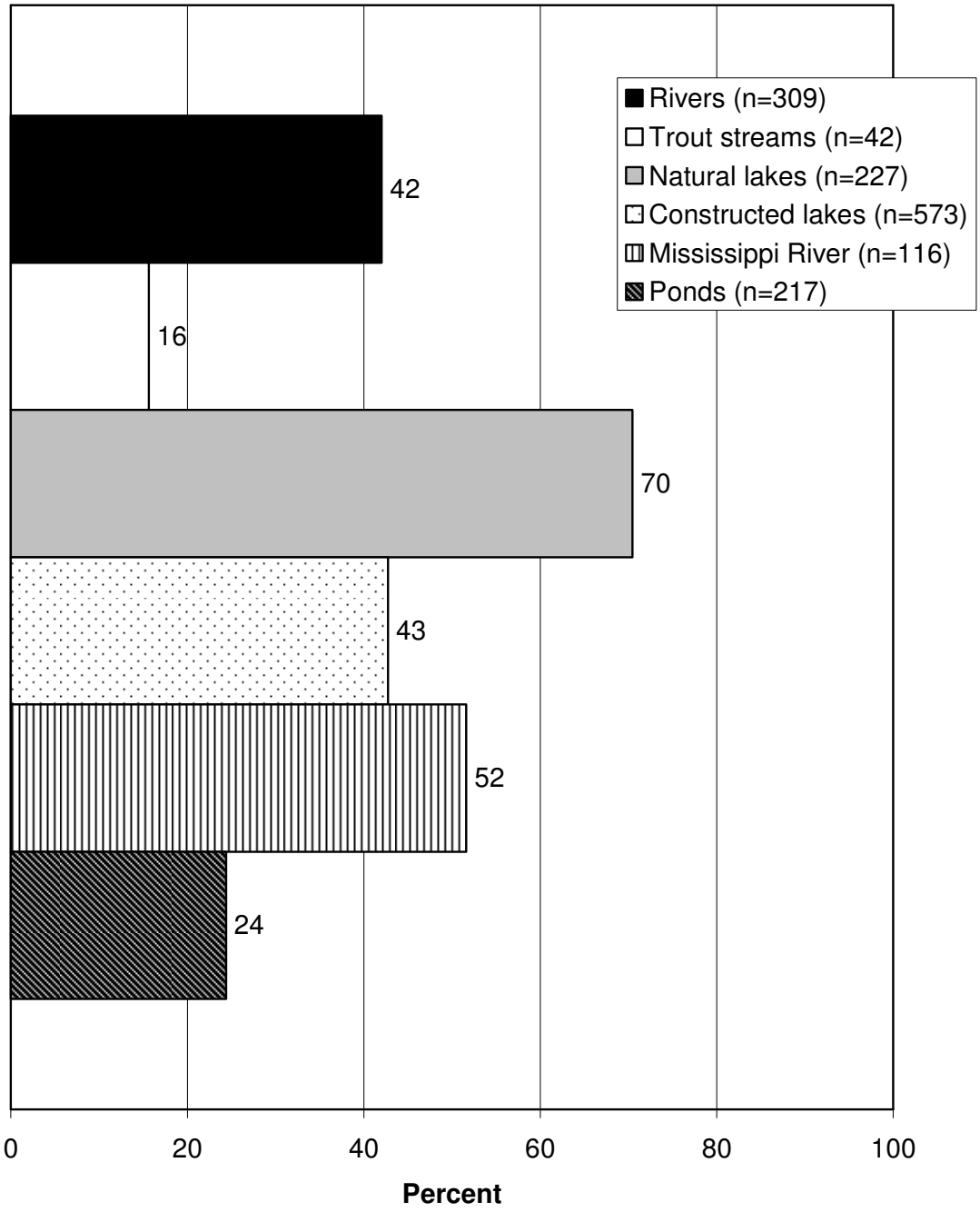
Channel catfish.
(Species fished crosstabulated by water body type most often fished.)



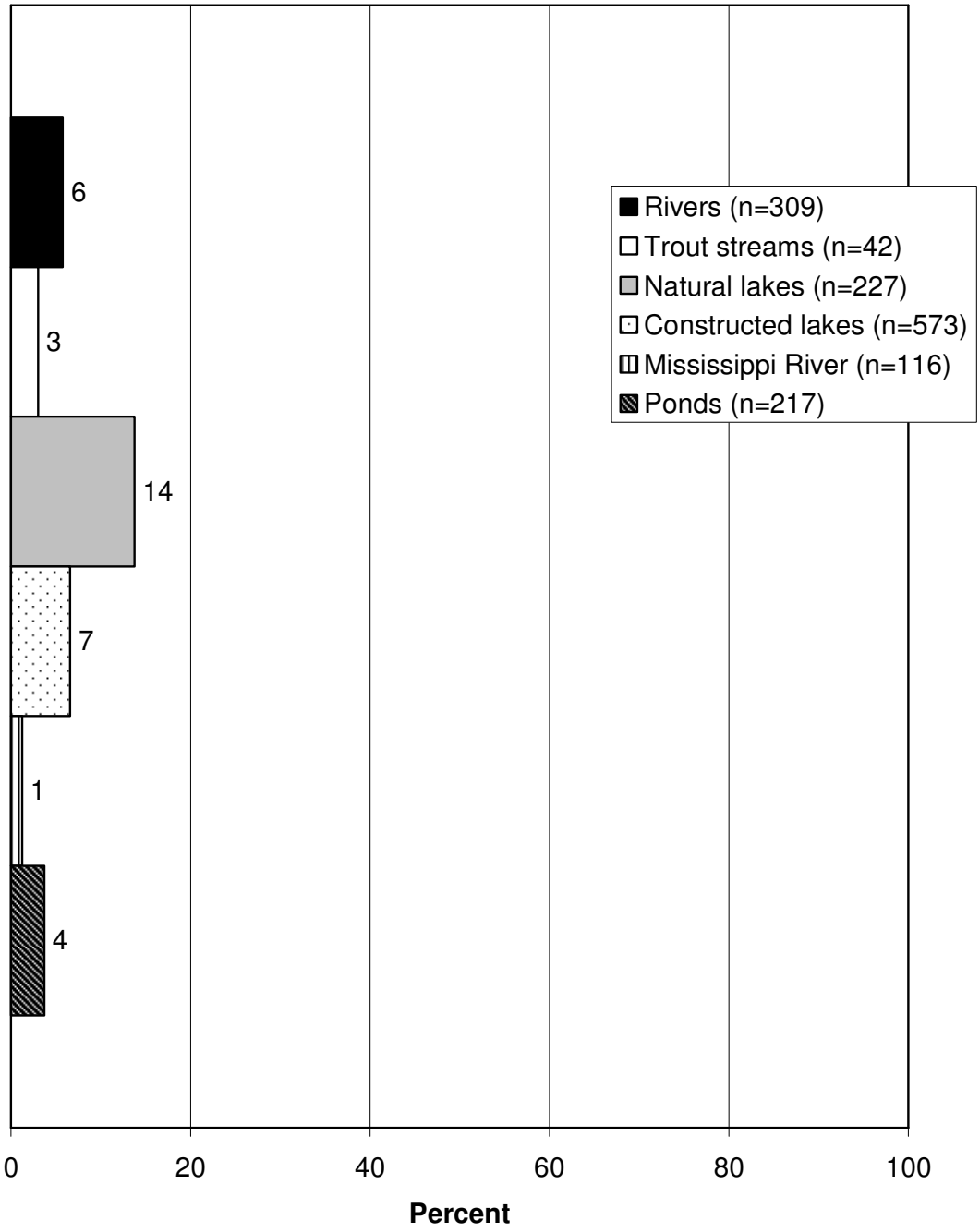
Flathead catfish.
(Species fished crosstabulated by water body type most often fished.)



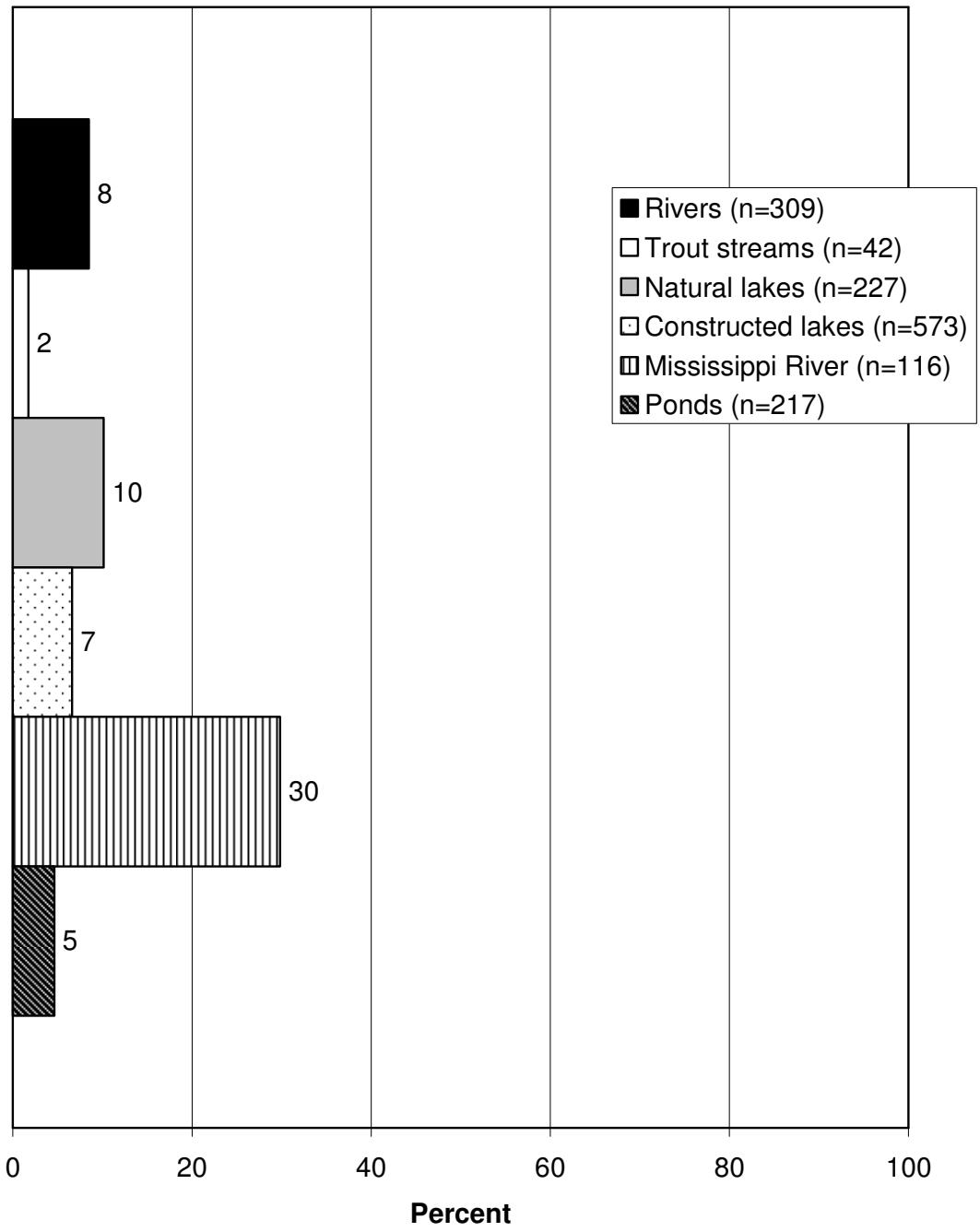
Walleye.
(Species fished crosstabulated by water body type most often fished.)



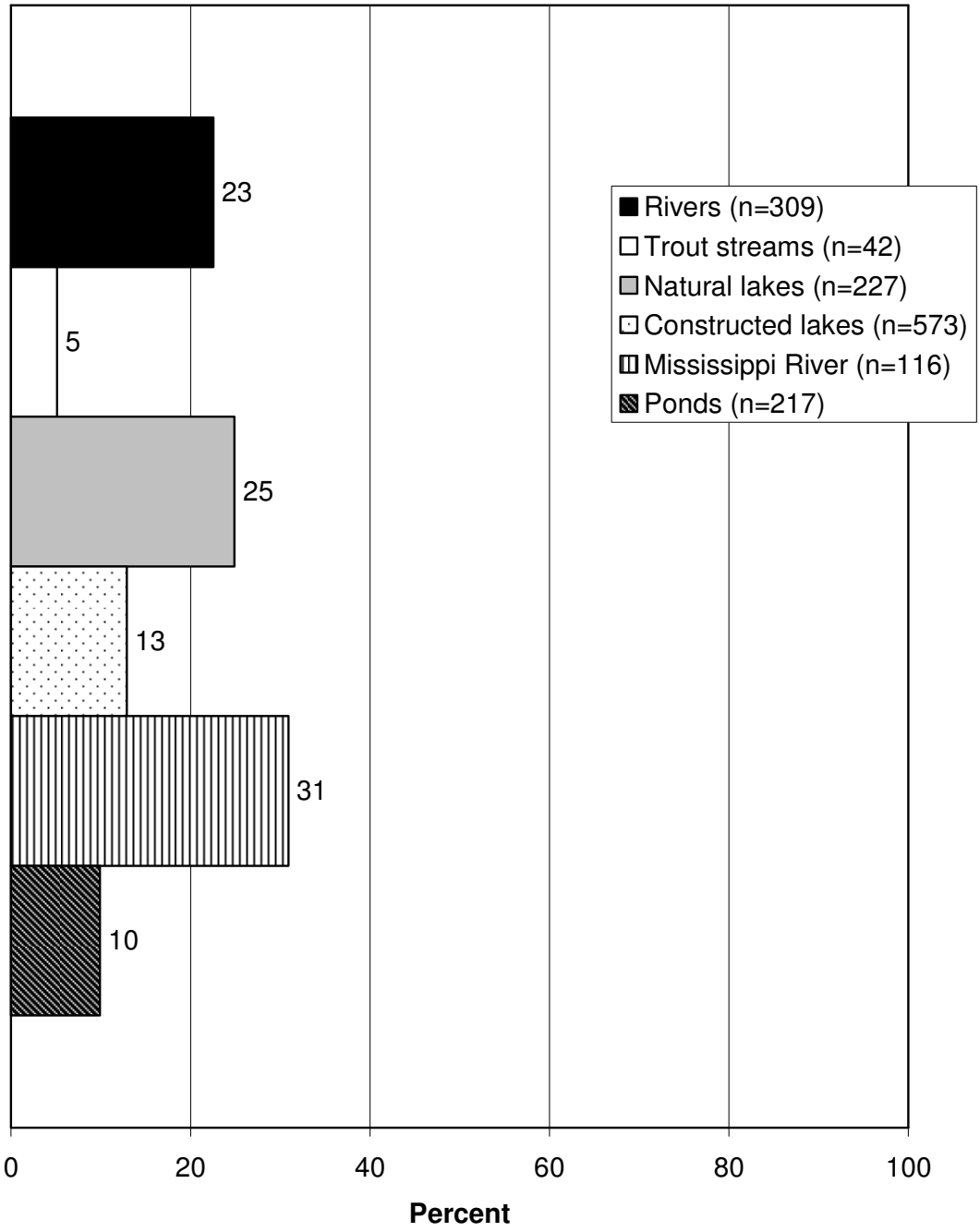
Musky or muskellunge.
(Species fished crosstabulated by water body type most often fished.)



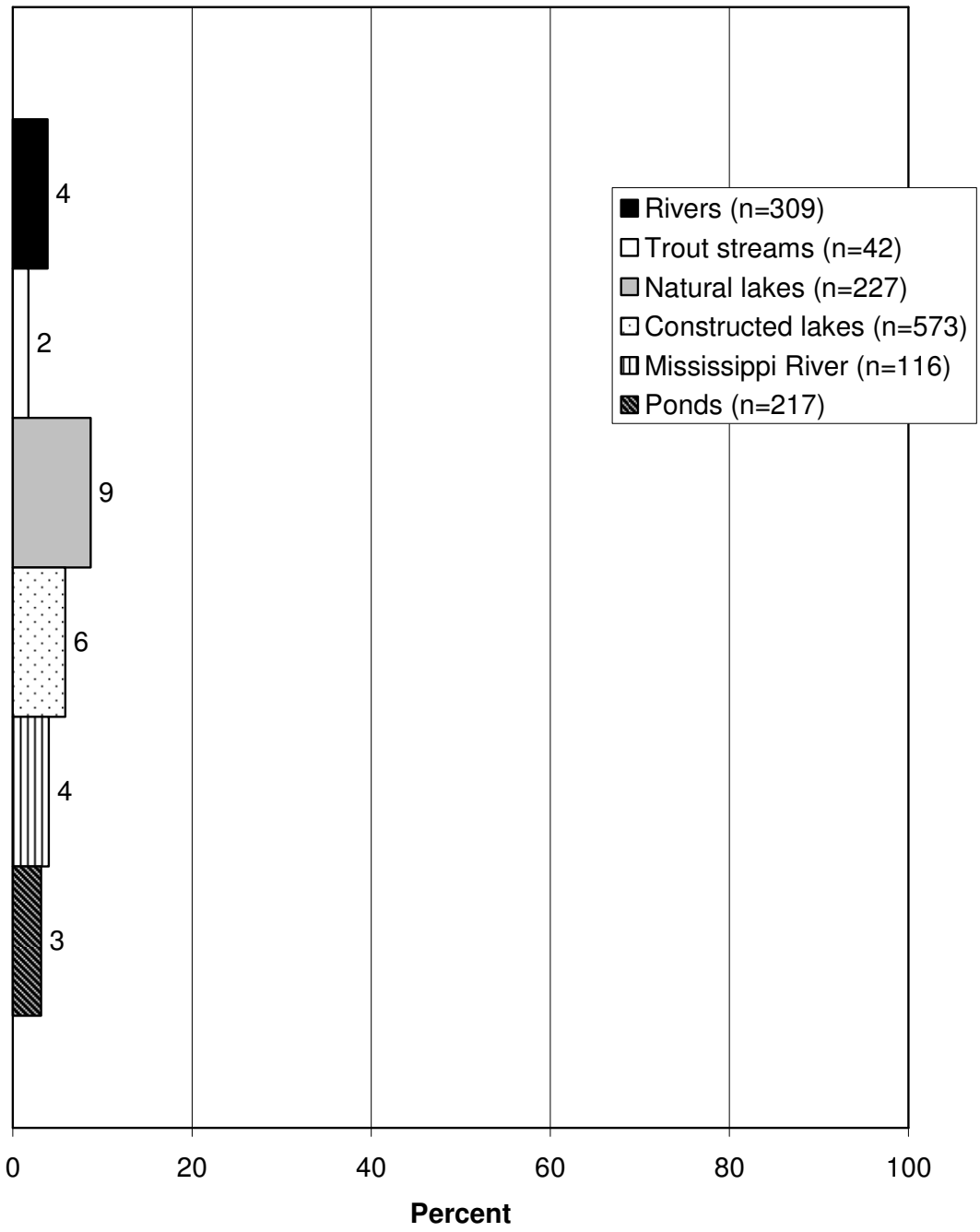
Sauger.
(Species fished crosstabulated by water body type most often fished.)



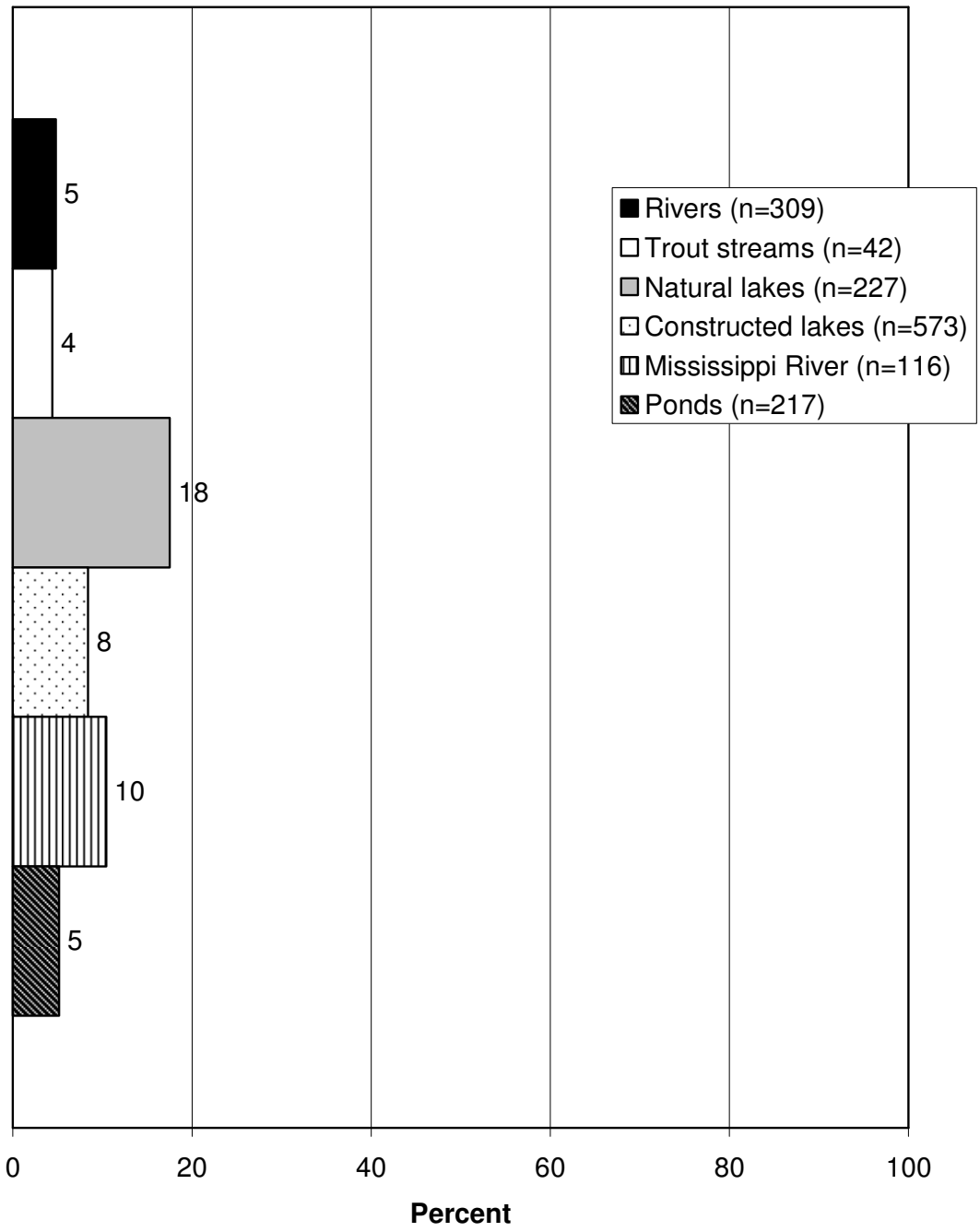
Northern pike.
(Species fished crosstabulated by water body type most often fished.)



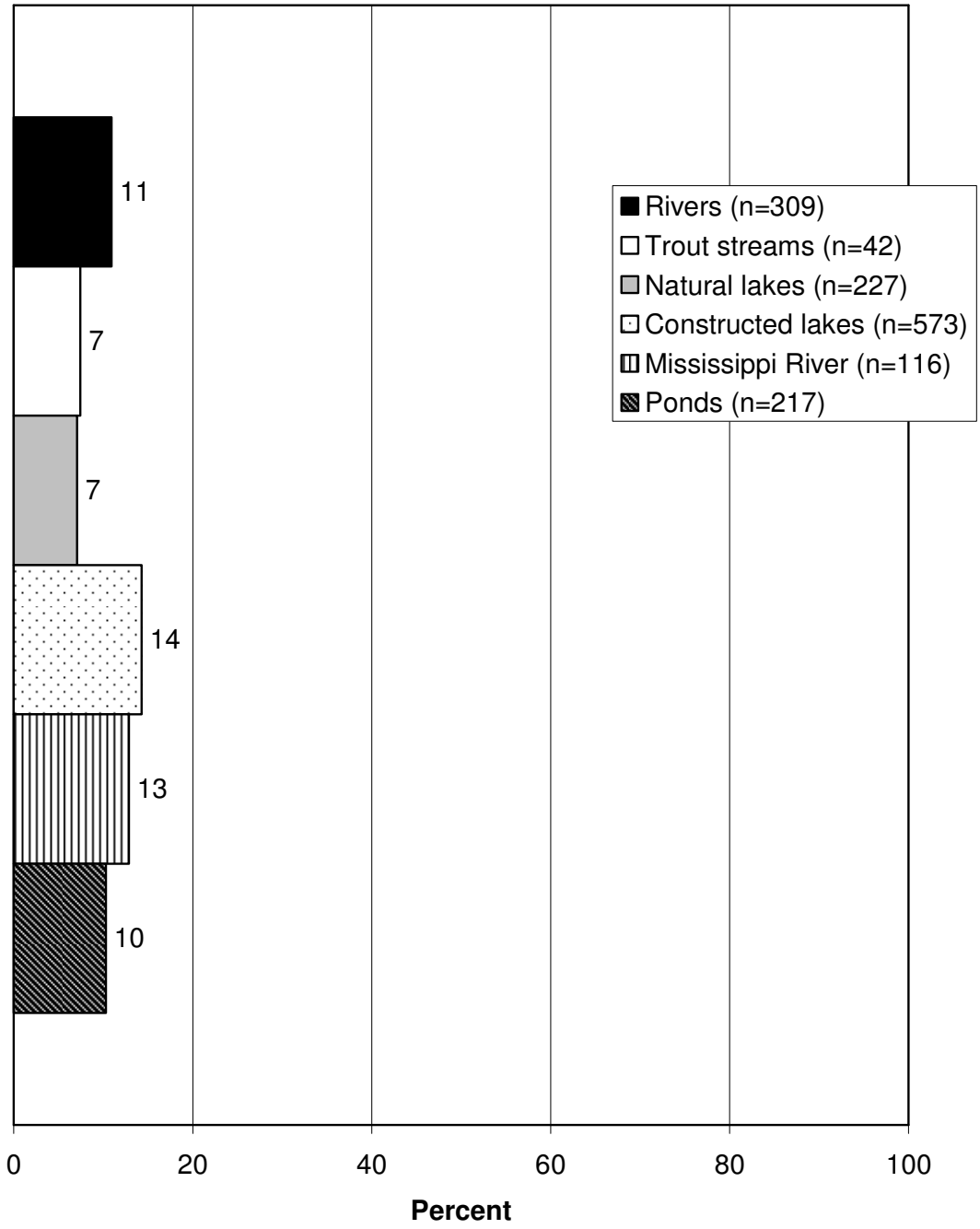
Panfish / not sure of type of panfish.
(Species fished crosstabulated by water body type most often fished.)



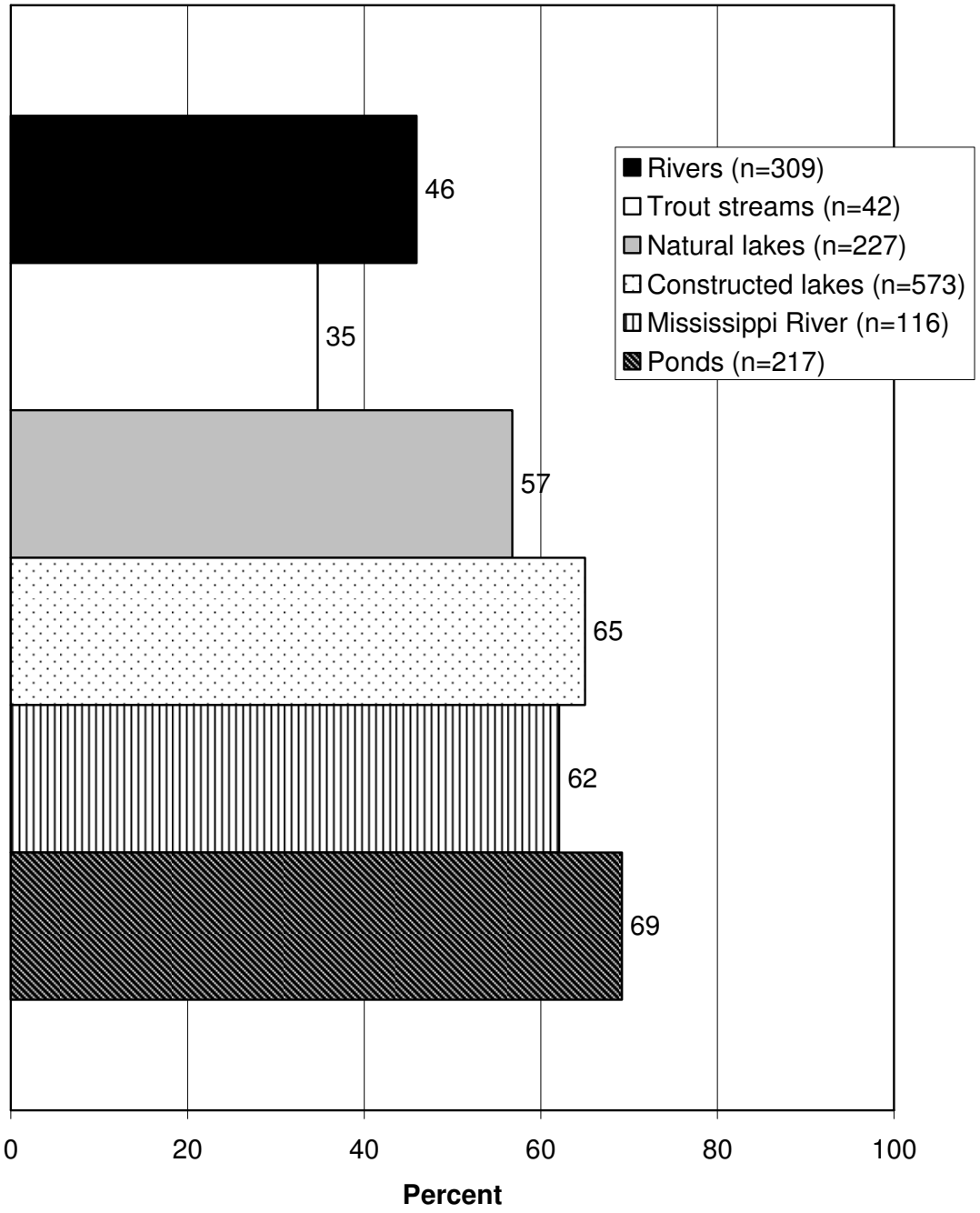
**Perch / not sure of type of perch.
(Species fished crosstabulated by water body type most often fished.)**



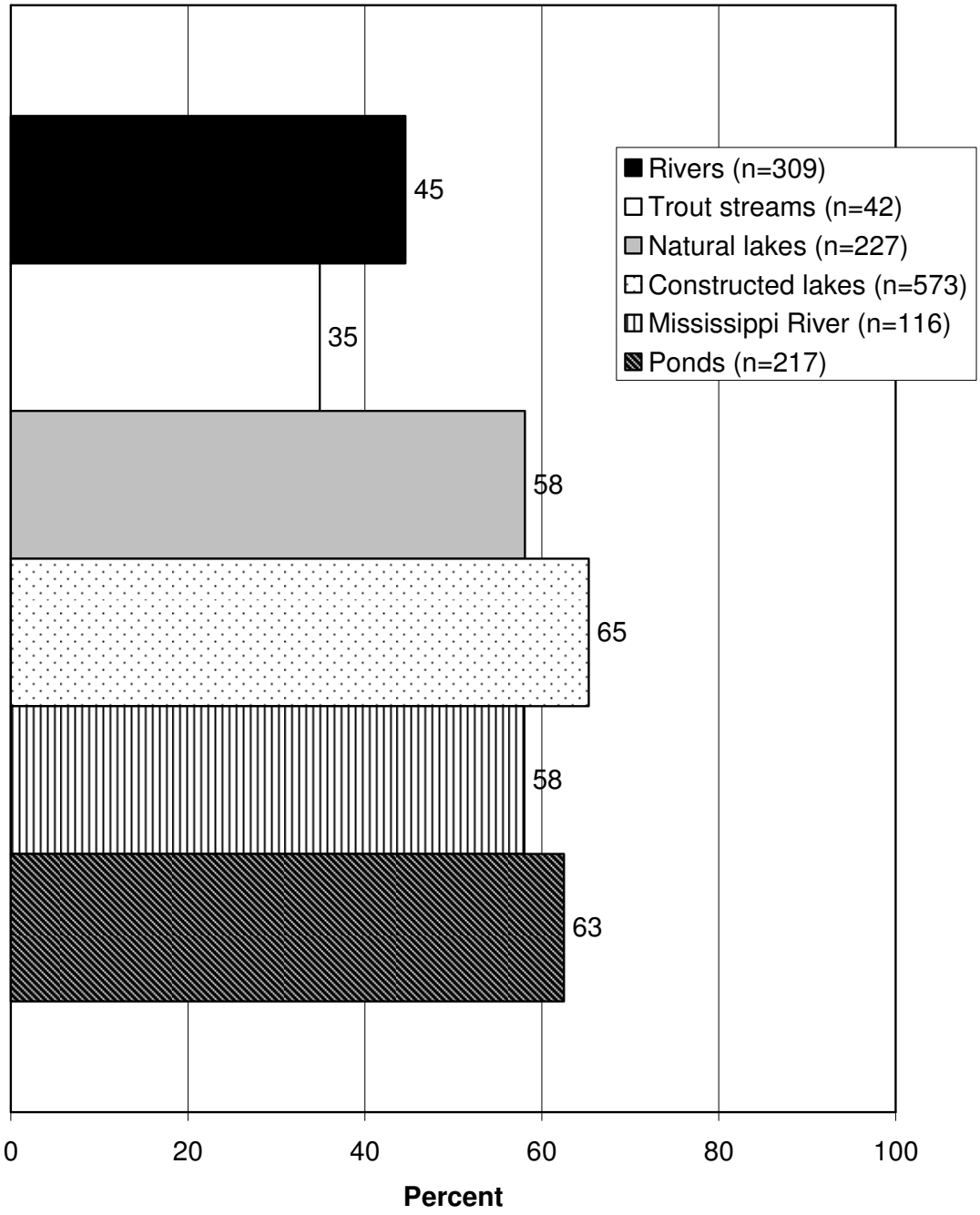
**Sunfish / not sure of type of sunfish.
(Species fished crosstabulated by water body type most often fished.)**



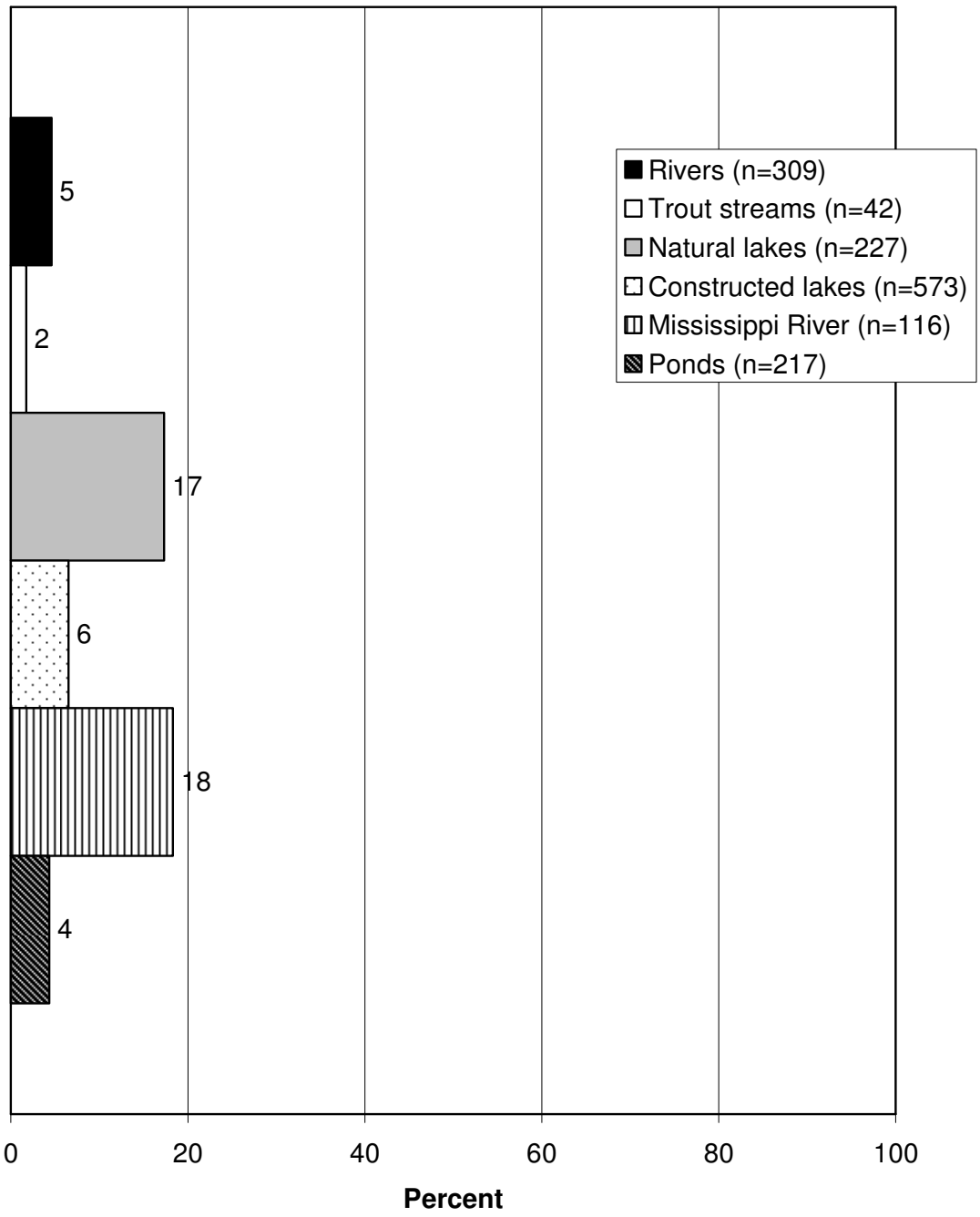
Bluegill.
(Species fished crosstabulated by water body type most often fished.)



Crappie.
(Species fished crosstabulated by water body type most often fished.)



Yellow perch.
(Species fished crosstabulated by water body type most often fished.)

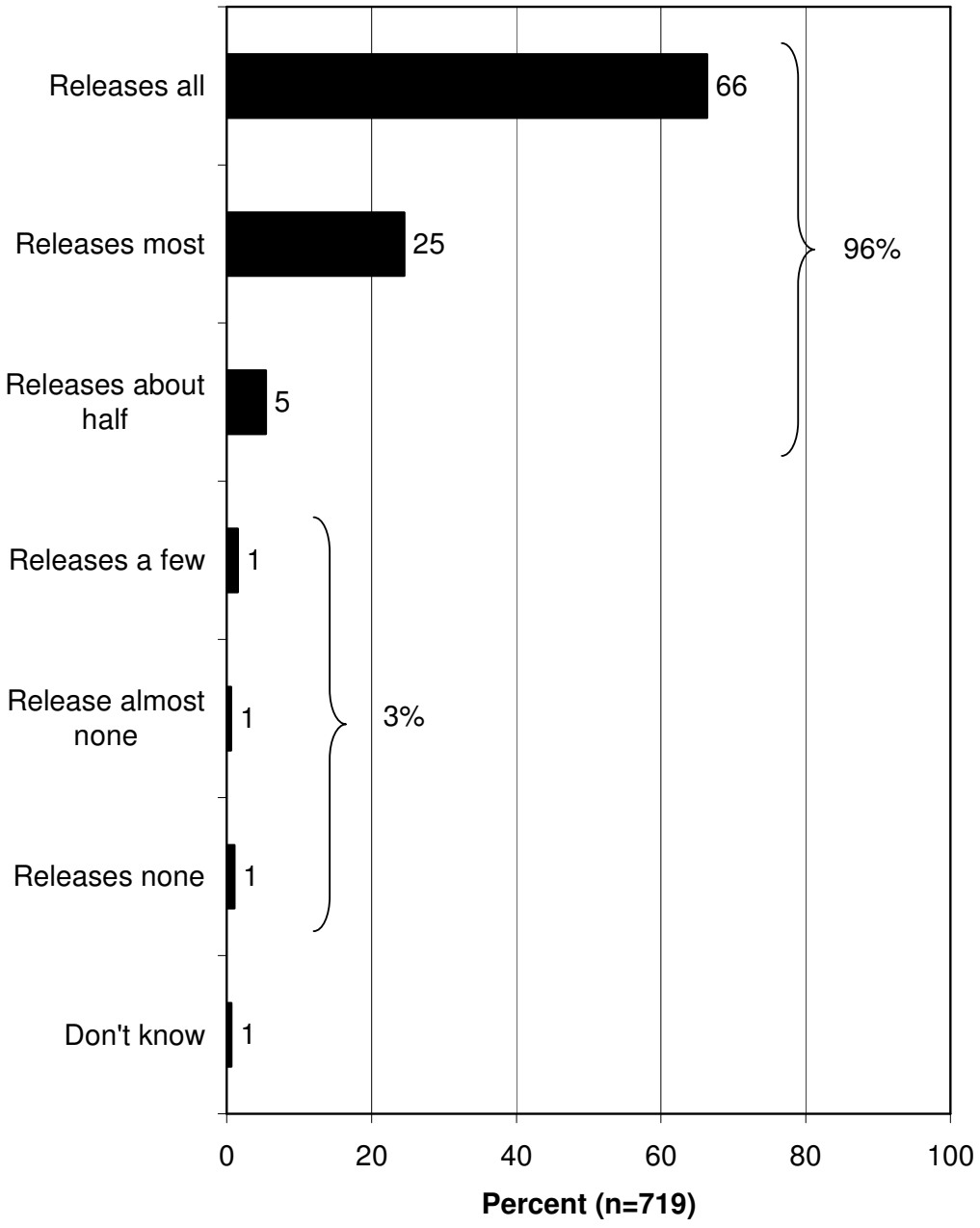


CATCH-AND-RELEASE FISHING

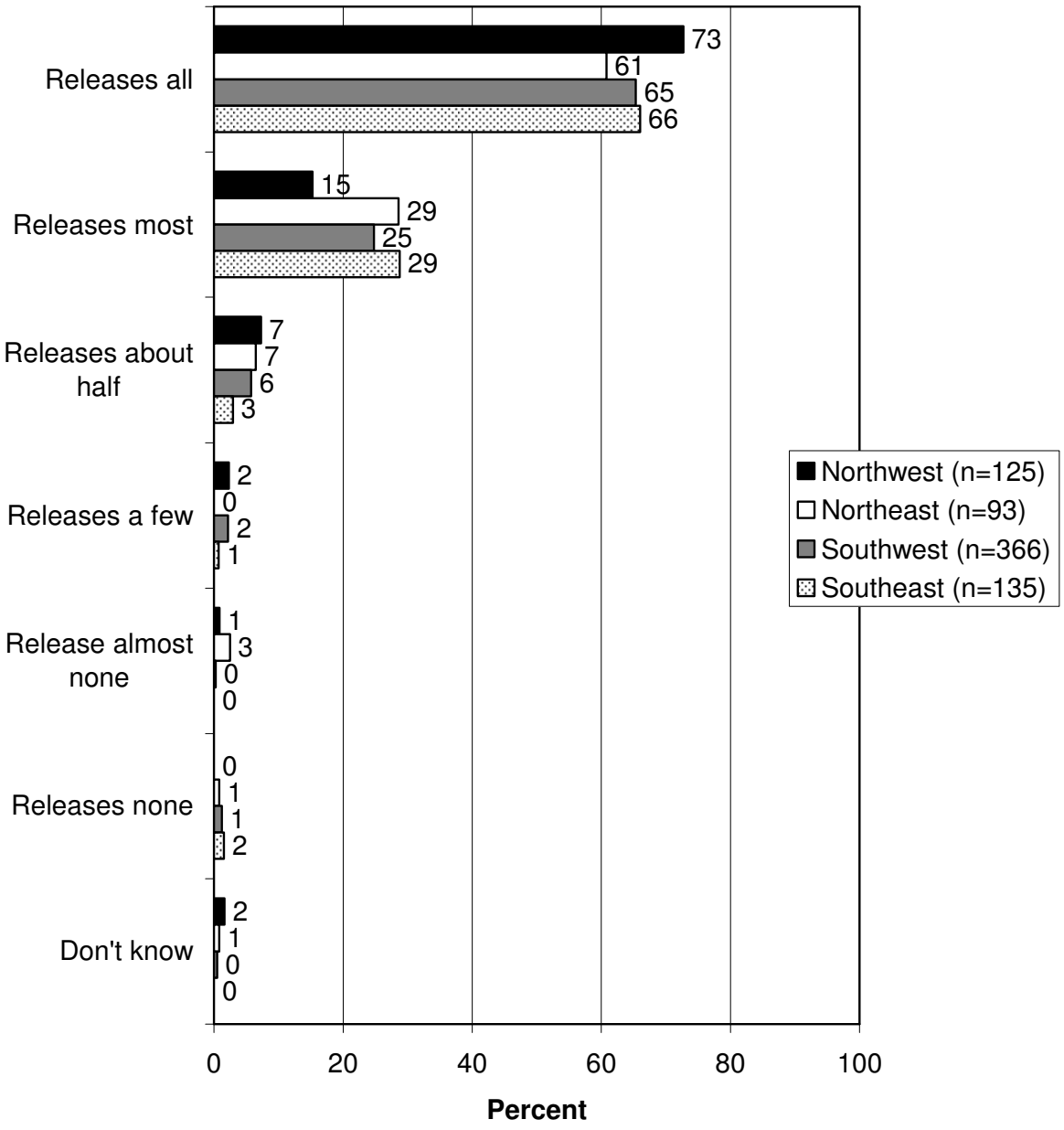
- It was previously indicated that a majority of Iowa anglers (65%) had done catch-and-release fishing at least once in the last year they fished. For each of the following species that they had fished, catch-and-release anglers were asked about the portion of fish they typically release. As the table below shows, bass is released the most, while trout and panfish are the most-kept types of fish.
  - The graphs upon which the table below was made are presented in the following pages.

Species	Releases all	Releases most	Releases about half	Releases a few	Release almost none	Releases none	Don't know
Bass	66	25	5	1	1	1	1
	96			3			
Trout	20	30	22	9	9	10	1
	71			28			
Catfish or bullhead	31	28	22	9	7	3	0
	81			19			
Walleye	21	30	26	10	8	4	1
	77			22			
Sauger	29	28	26	5	6	3	2
	83			15			
Northern pike	50	20	15	8	5	1	1
	86			14			
Musky	79	2	3	0	2	2	12
	84			4			
Panfish	25	21	26	14	9	5	1
	72			27			

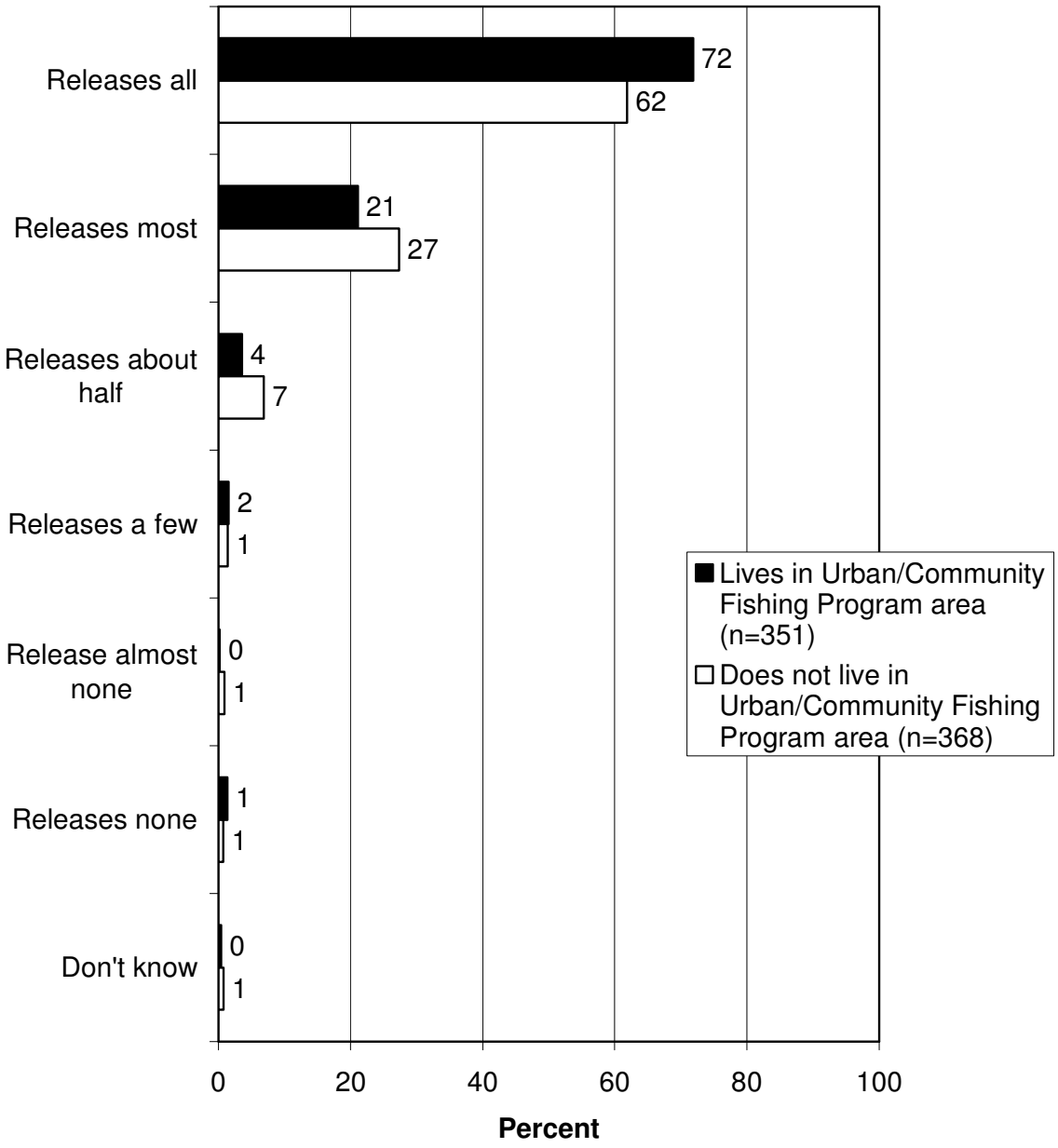
Q56. You said you fished for bass. What portion of the bass you catch do you release? (Asked of those who fished for bass and did catch-and-release fishing.)



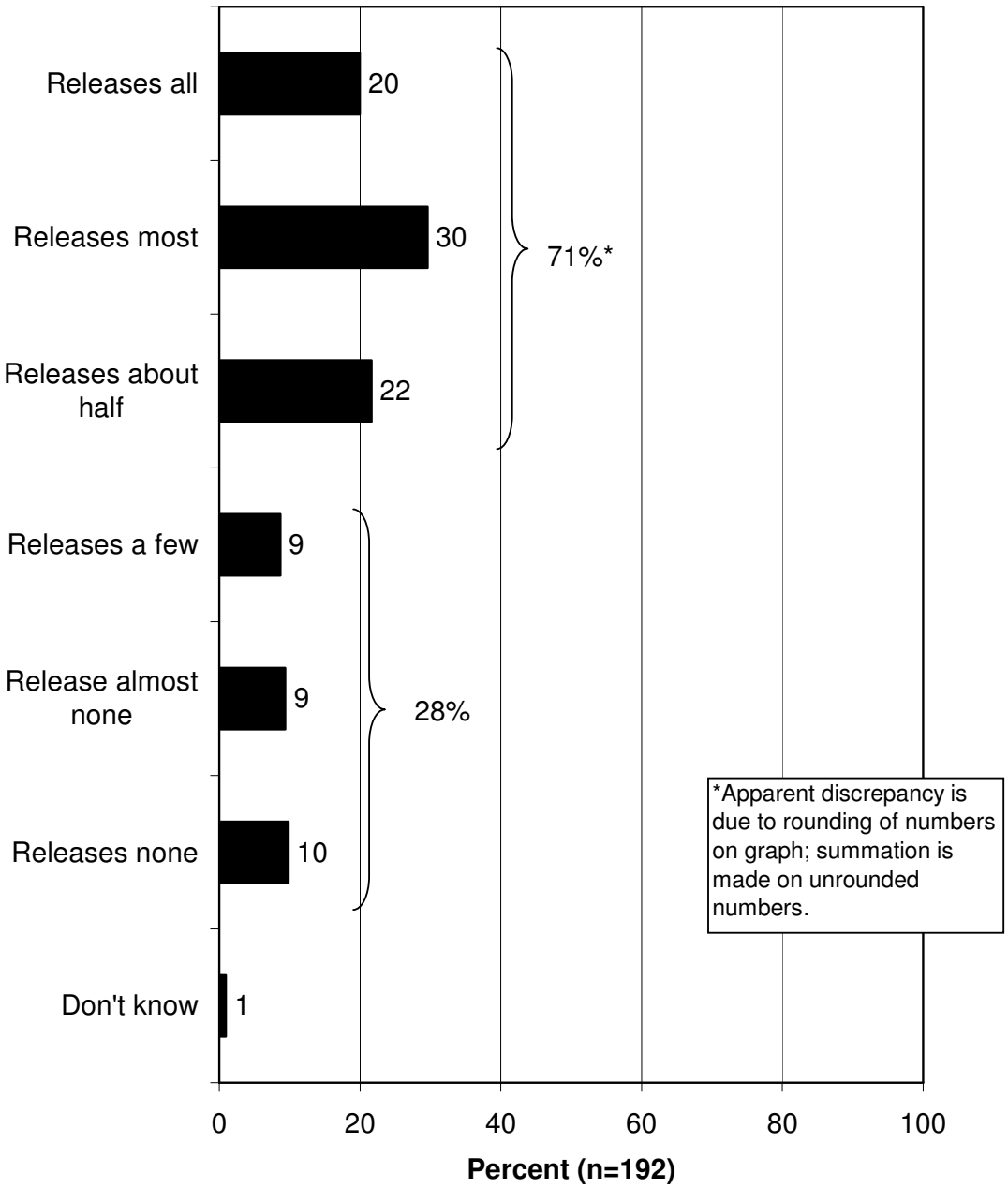
Q56. You said you fished for bass. What portion of the bass you catch do you release? (Asked of those who fished for bass and did catch-and-release fishing.)



Q56. You said you fished for bass. What portion of the bass you catch do you release? (Asked of those who fished for bass.)



Q57. You said you fished for trout. What portion of the trout you catch do you release? (Asked of those who fished for trout and did catch-and-release fishing.)



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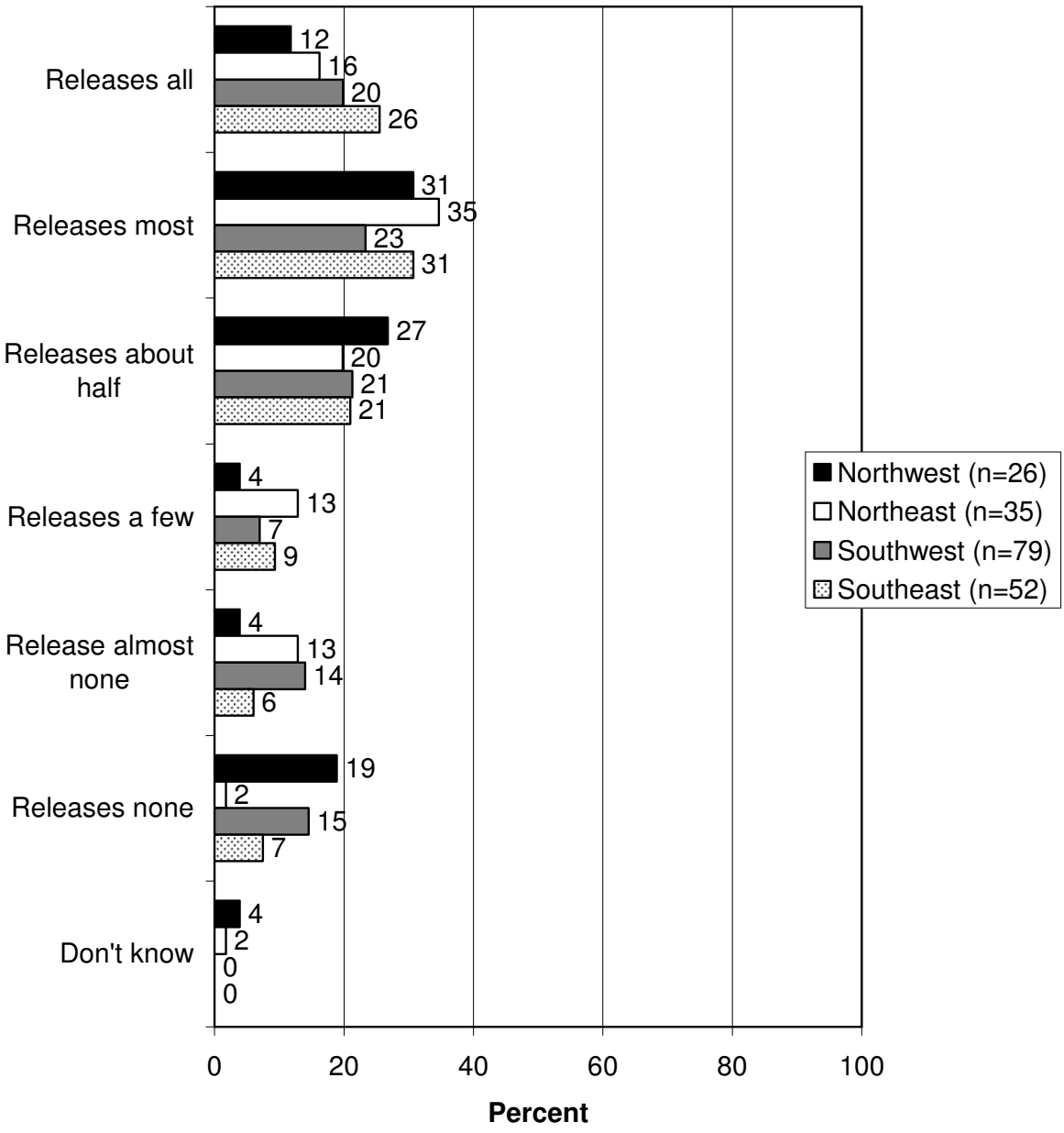

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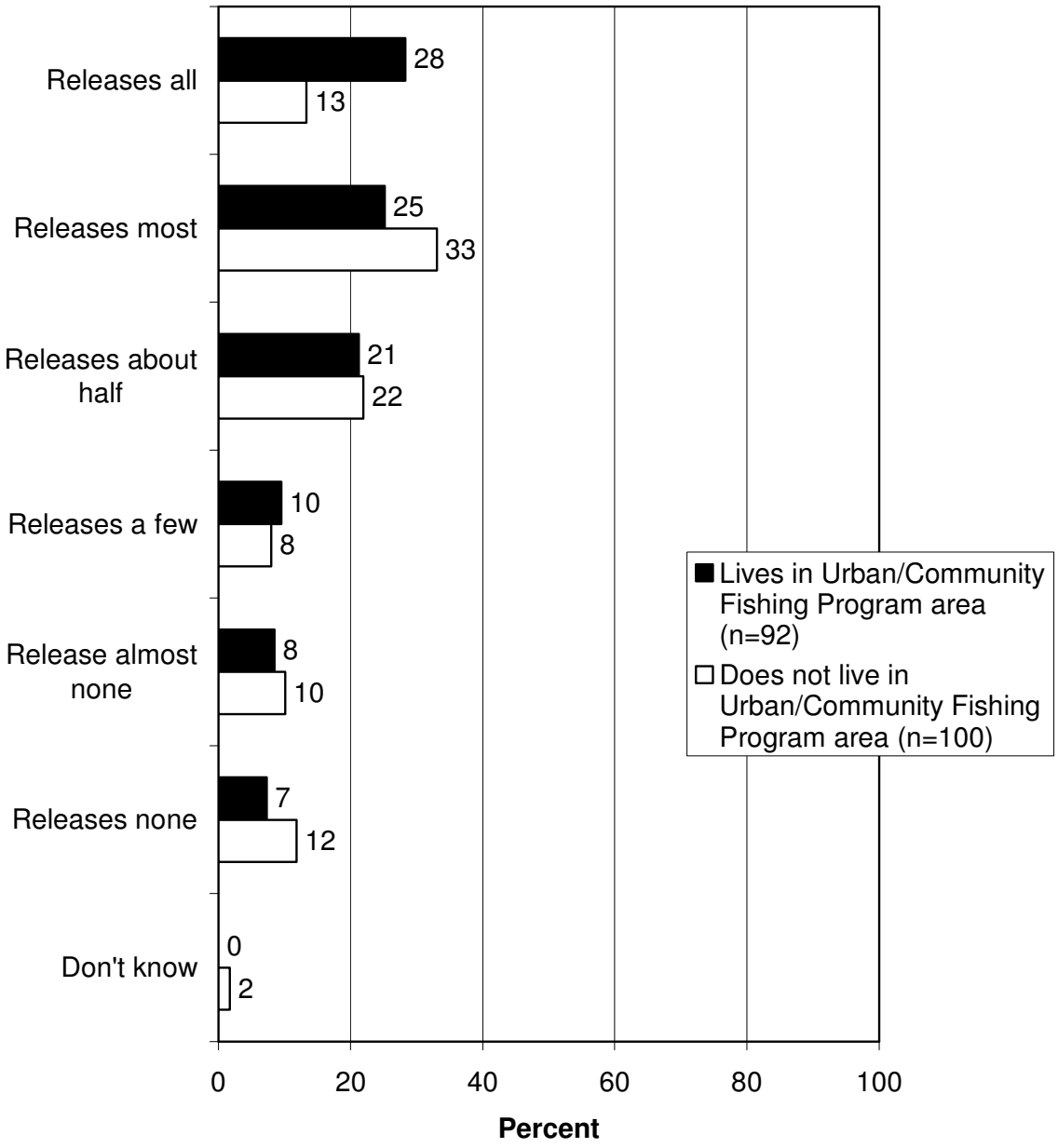
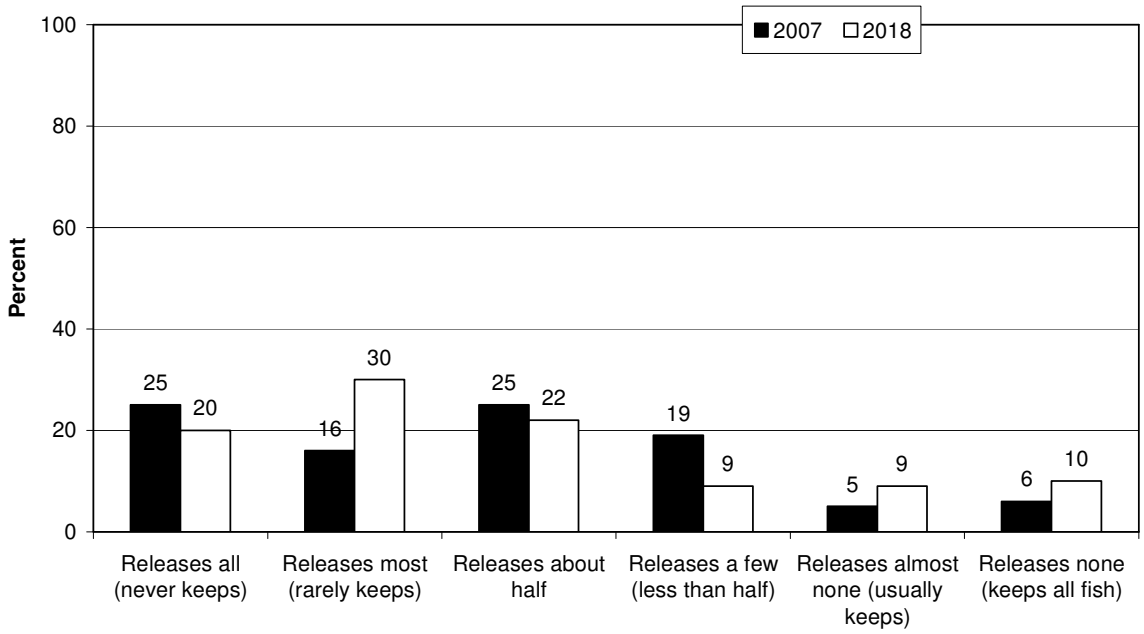
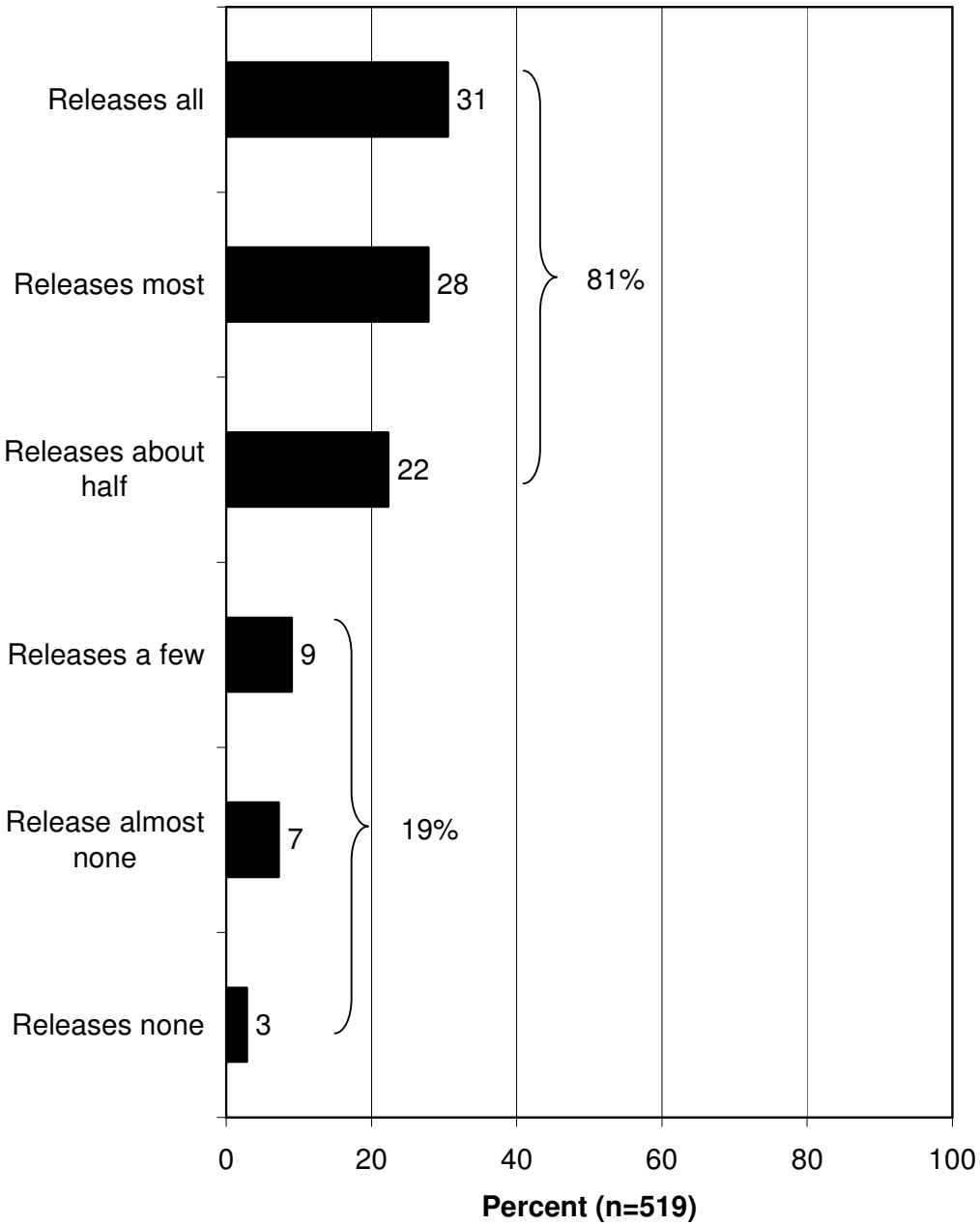


Q58. You said you fished for trout. What portion of the trout you catch do you release? (Asked of those who fished for trout and did catch-and-release fishing.)



Q58. You said you fished for catfish or bullhead. What portion of the catfish or bullhead you catch do you release? (Asked of those who fished for catfish and did catch-and-release fishing.)



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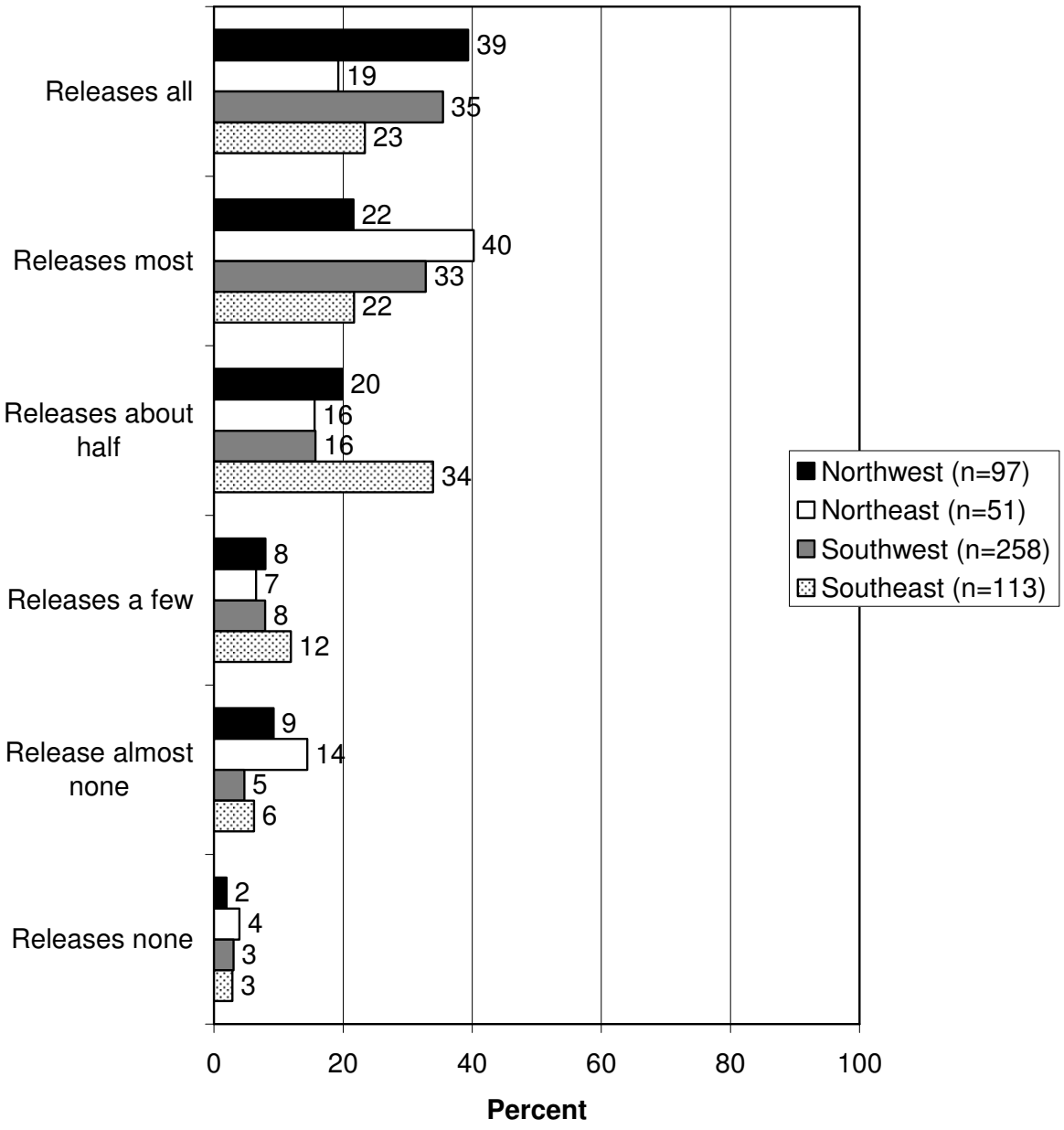

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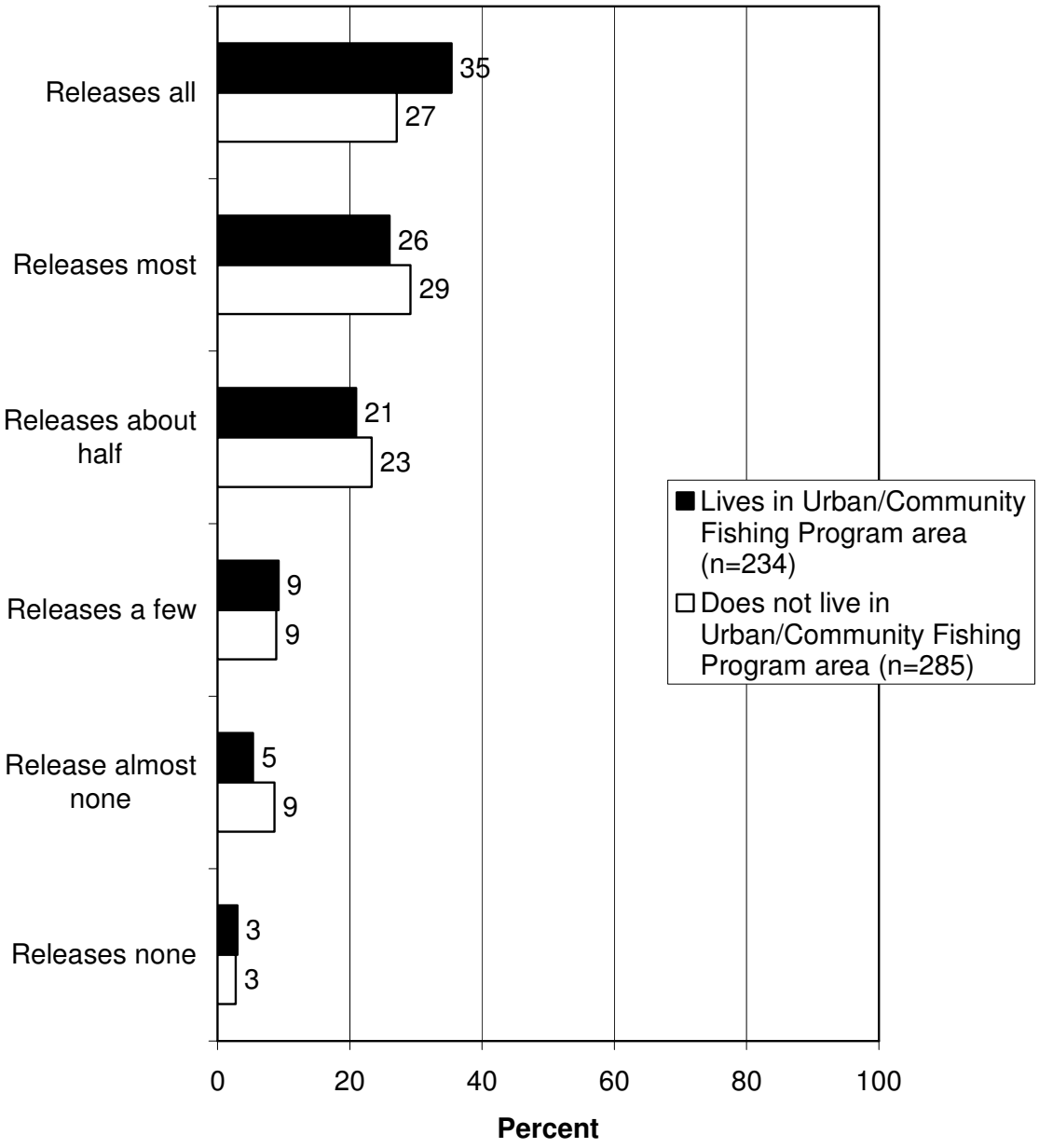
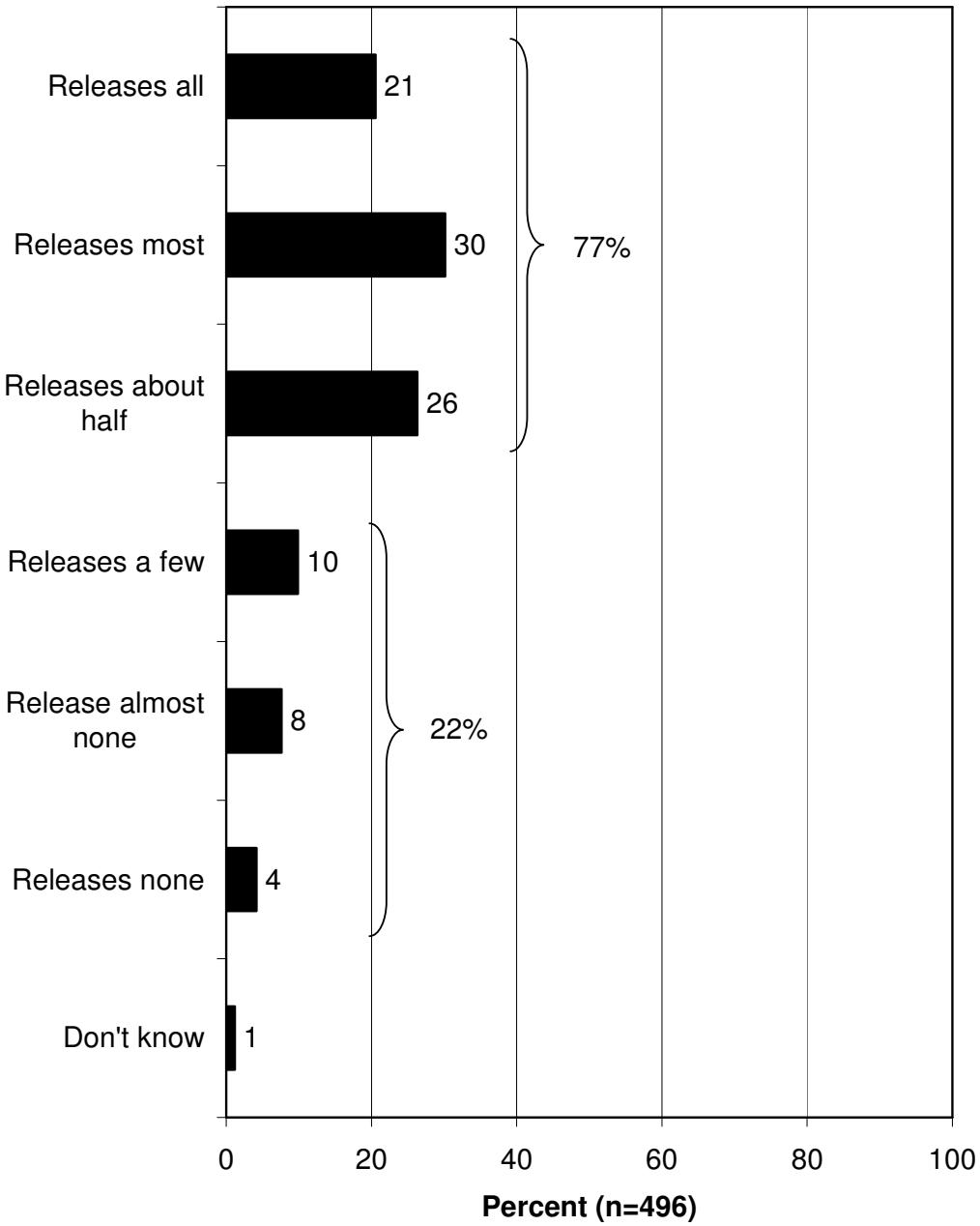


Q59. You said you fished for walleye. What portion of the walleye you catch do you release? (Asked of those who fished for walleye and did catch-and-release fishing.)



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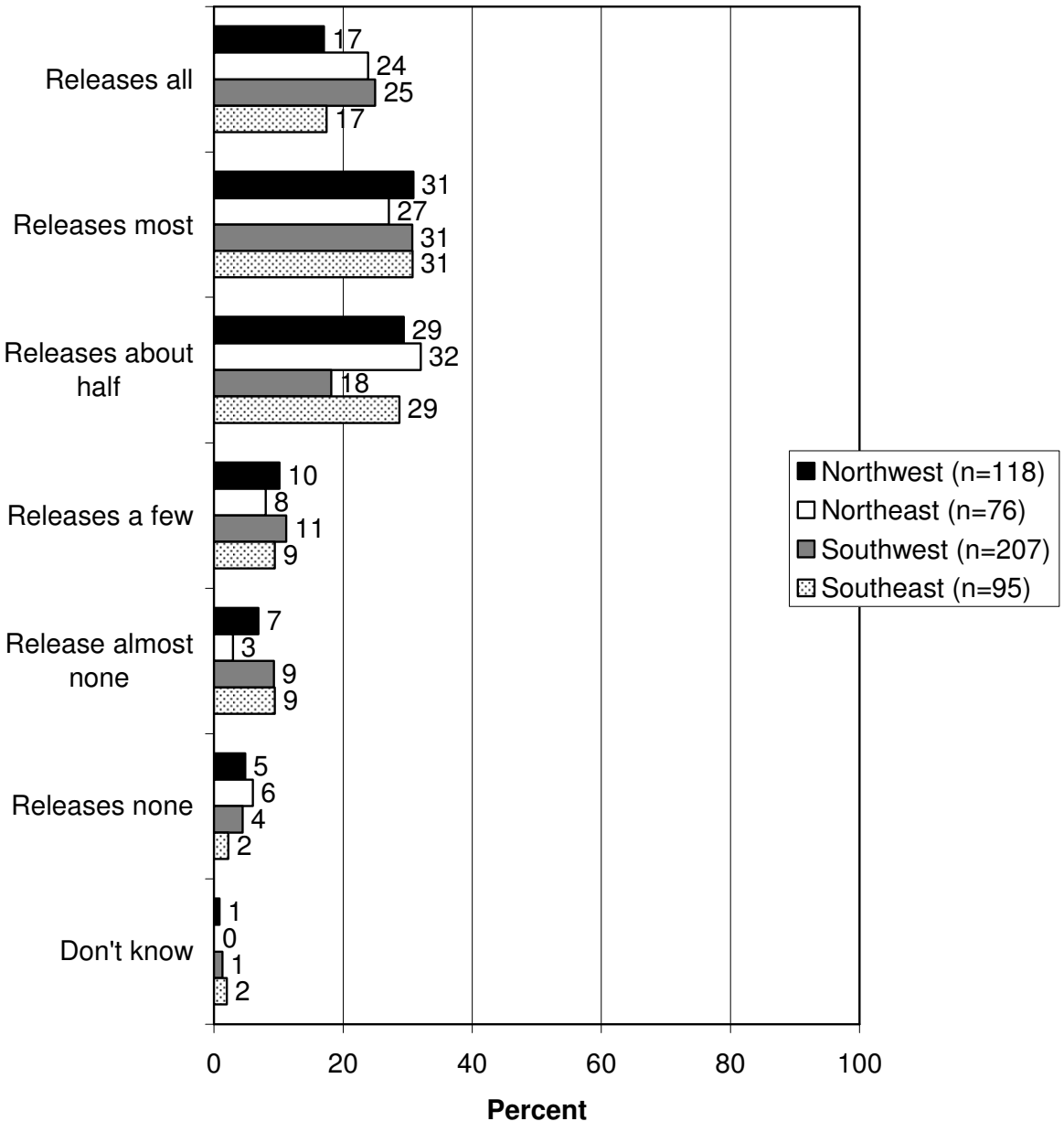

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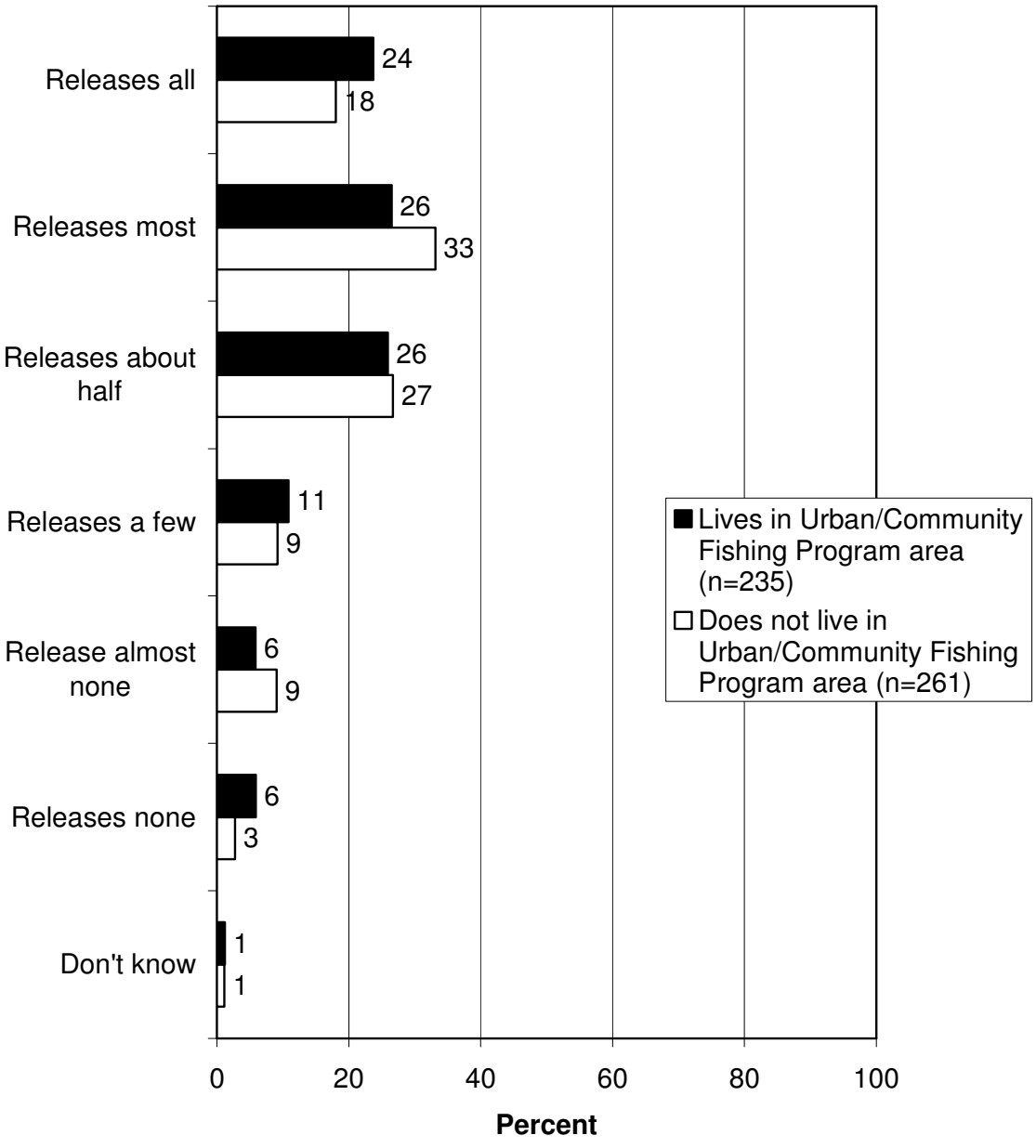
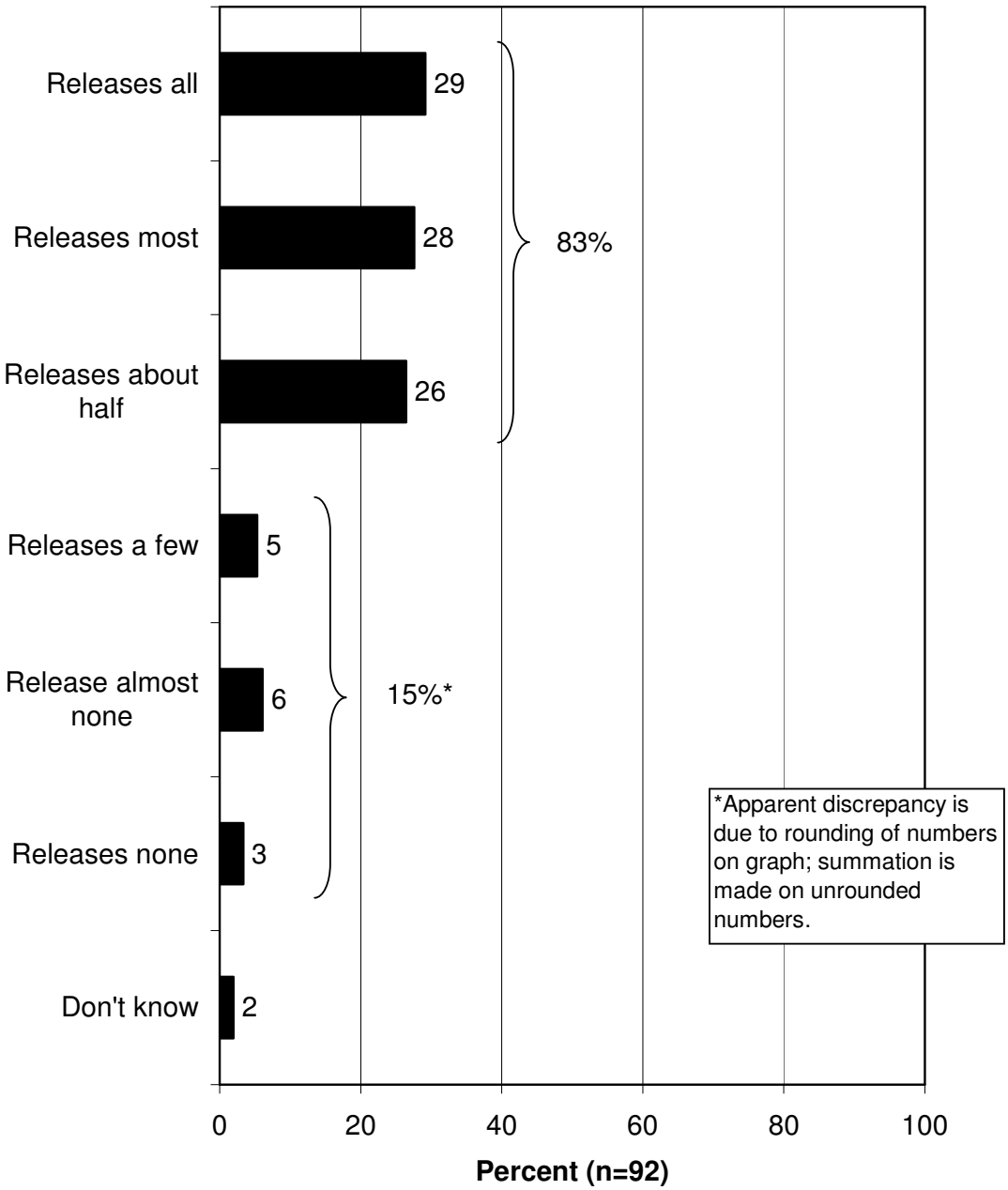


Q60. You said you fished for sauger. What portion of the sauger you catch do you release? (Asked of those who fished for sauger and did catch-and-release fishing.)



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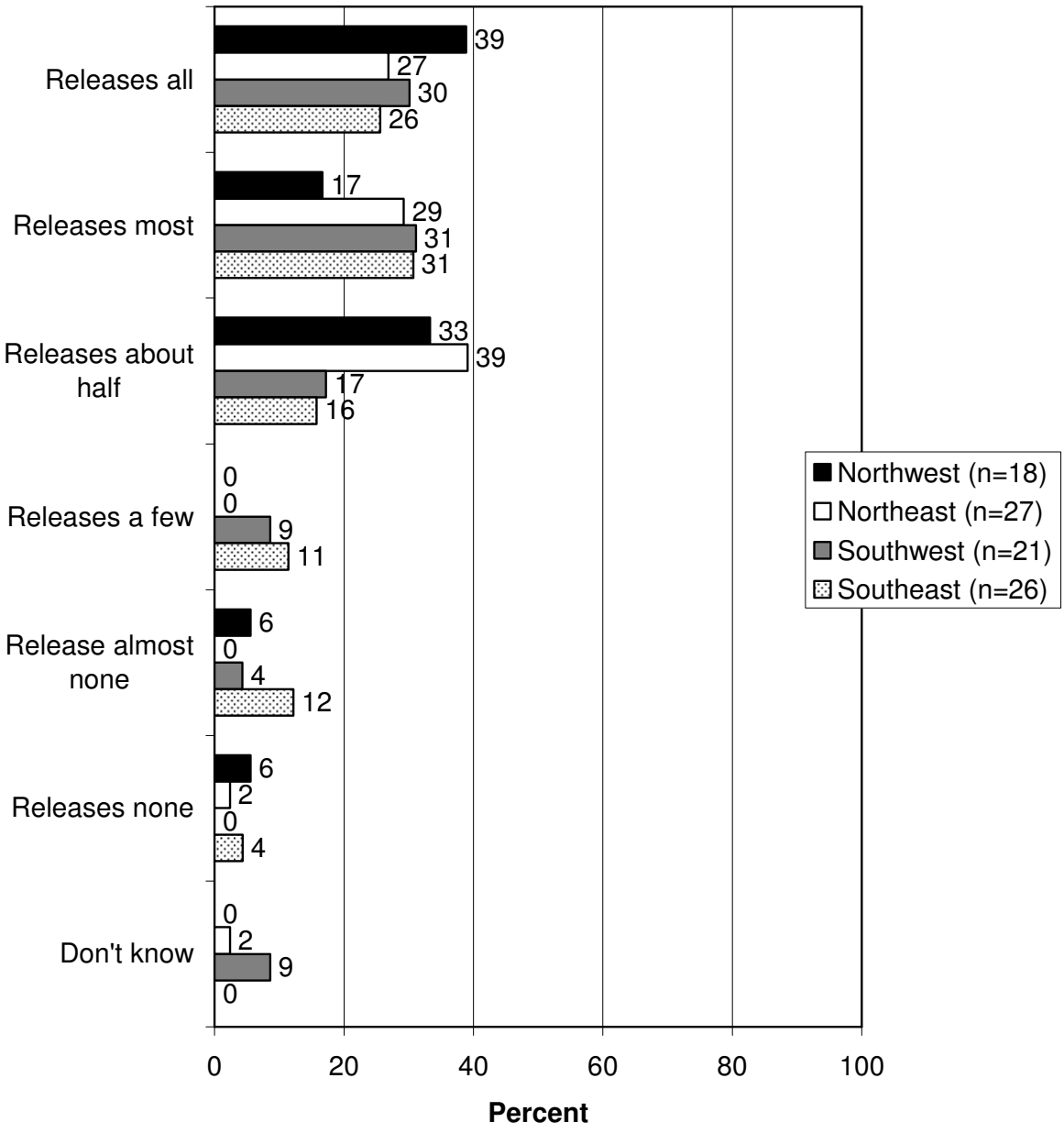

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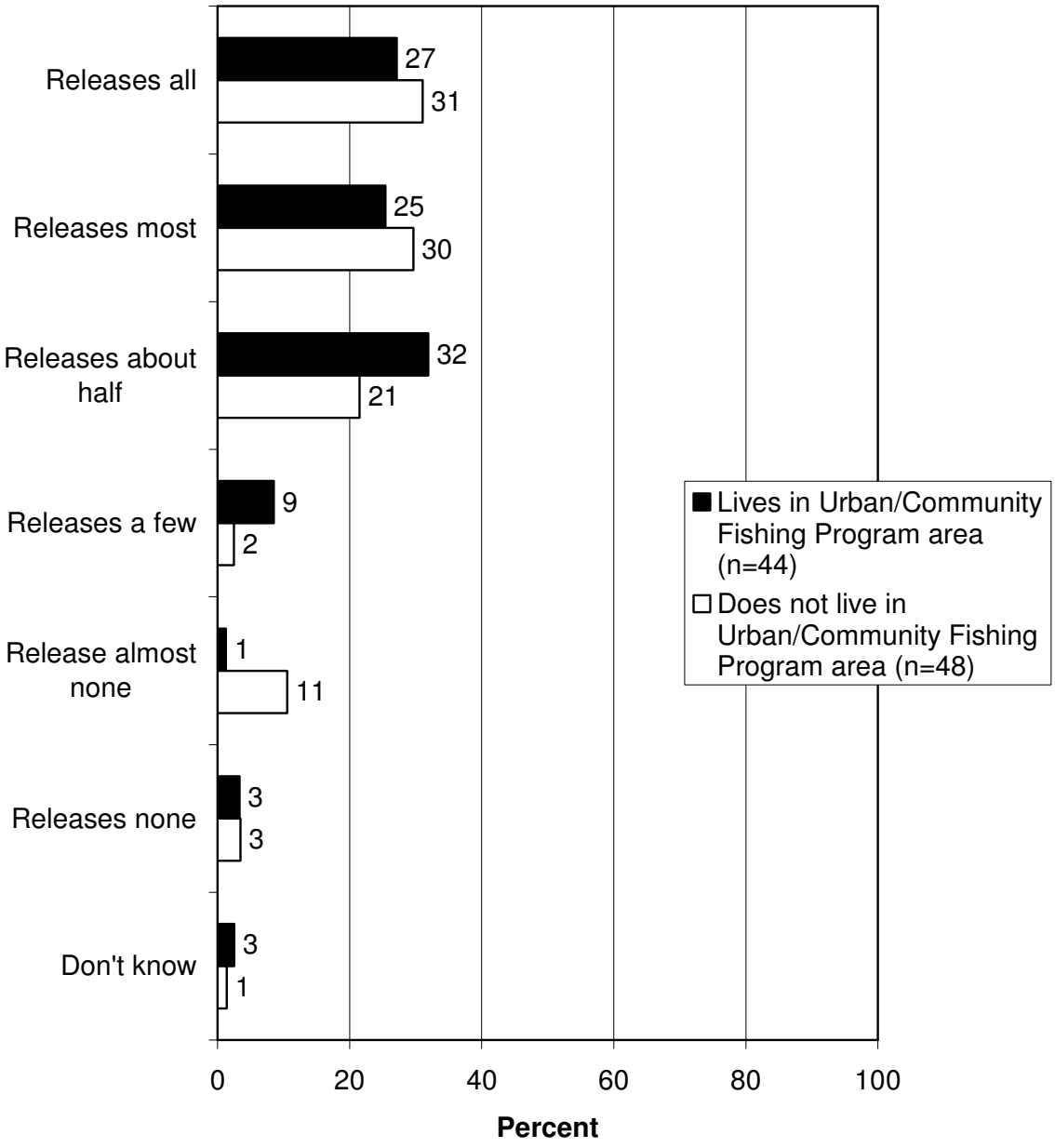
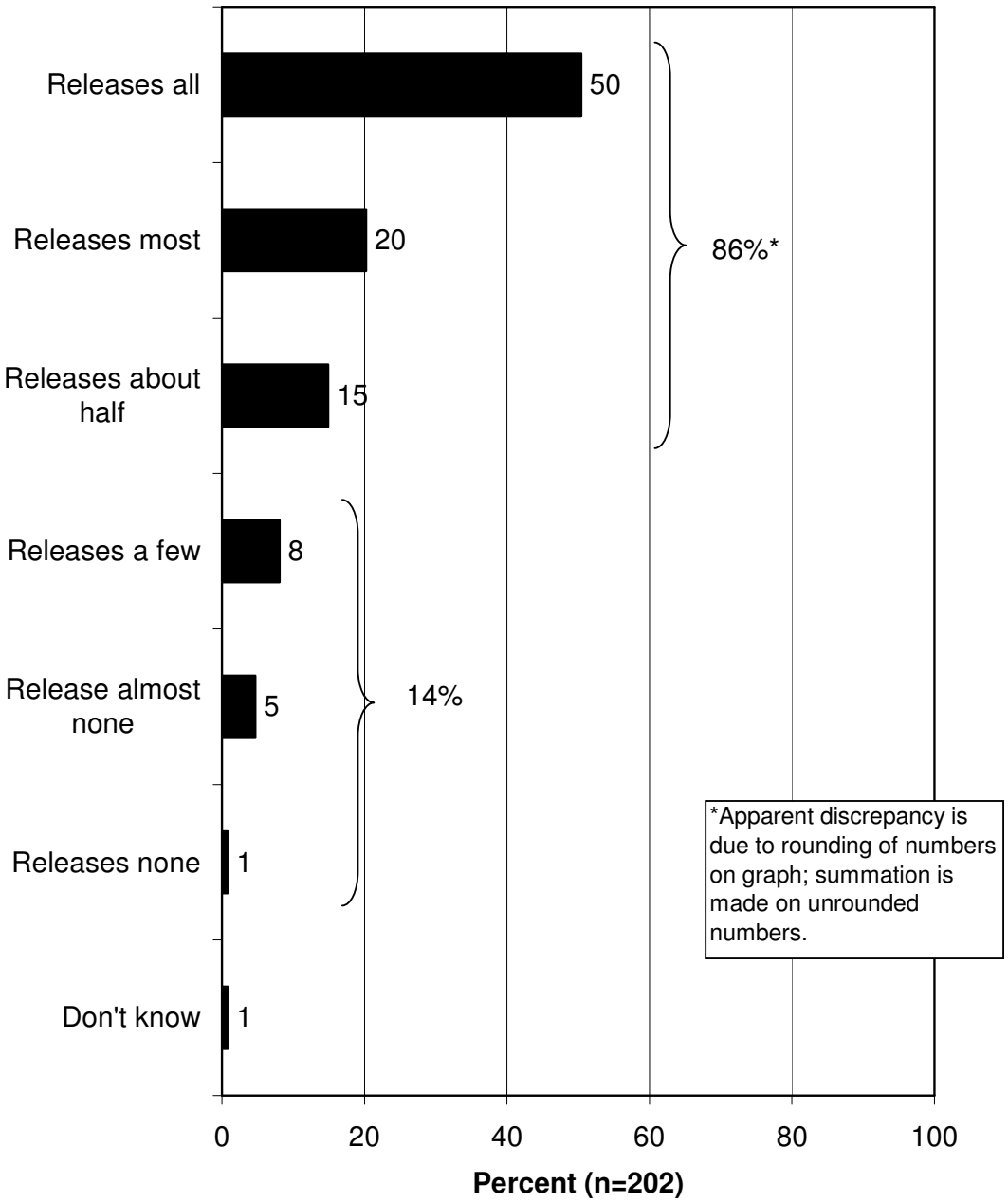


Q61. You said you fished for northern pike. What portion of the northern pike you catch do you release? (Asked of those who fished for northern pike and did catch-and-release fishing.)



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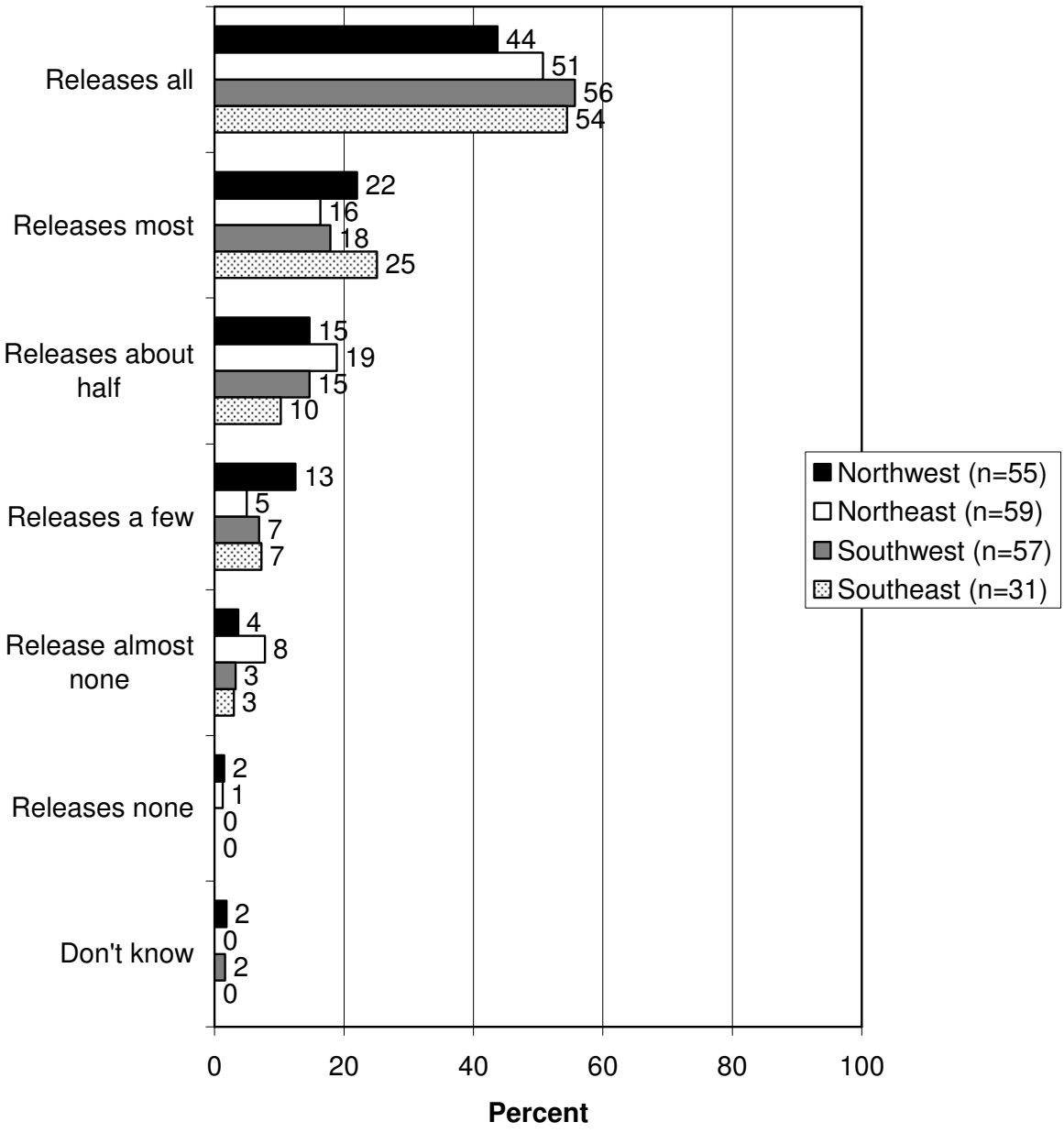

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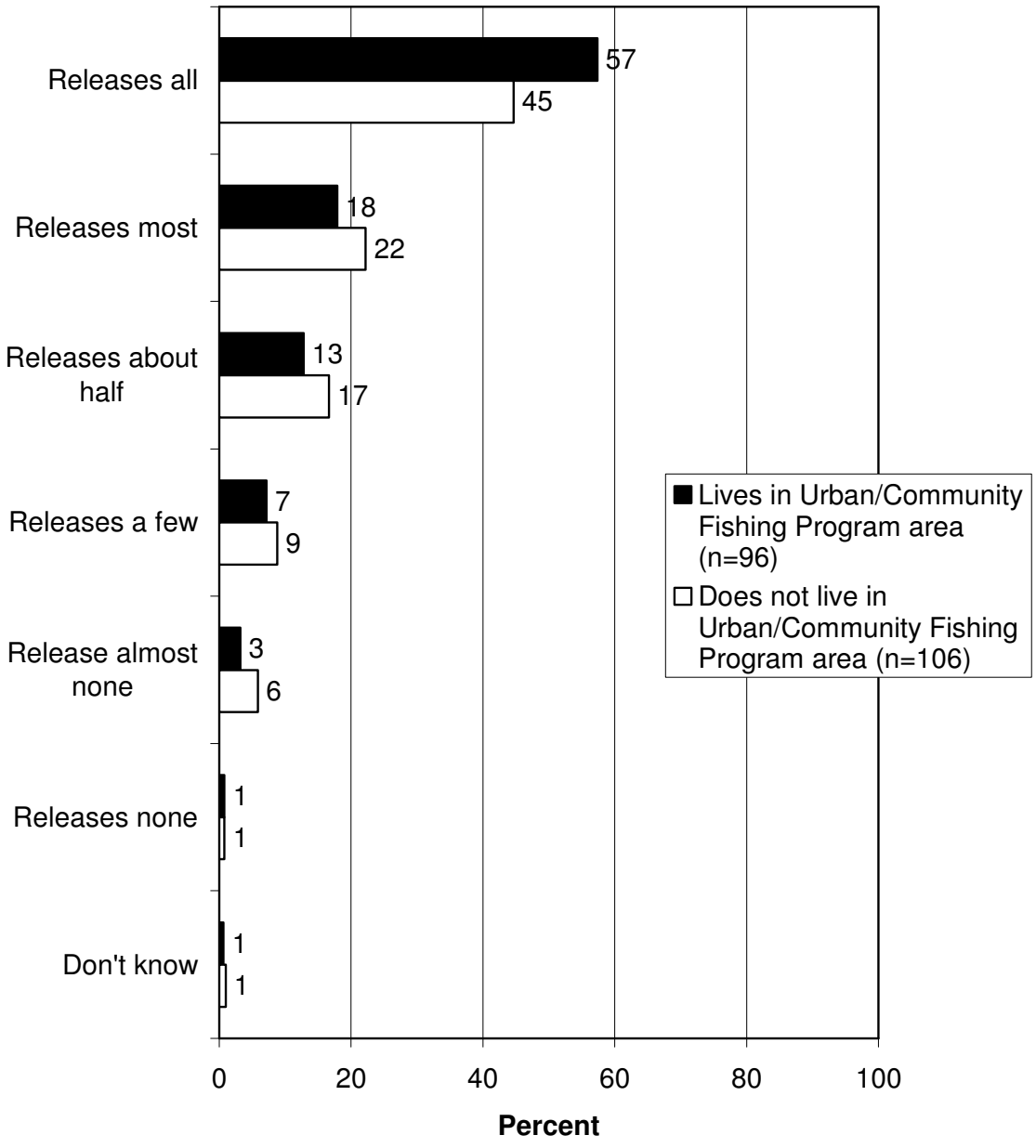
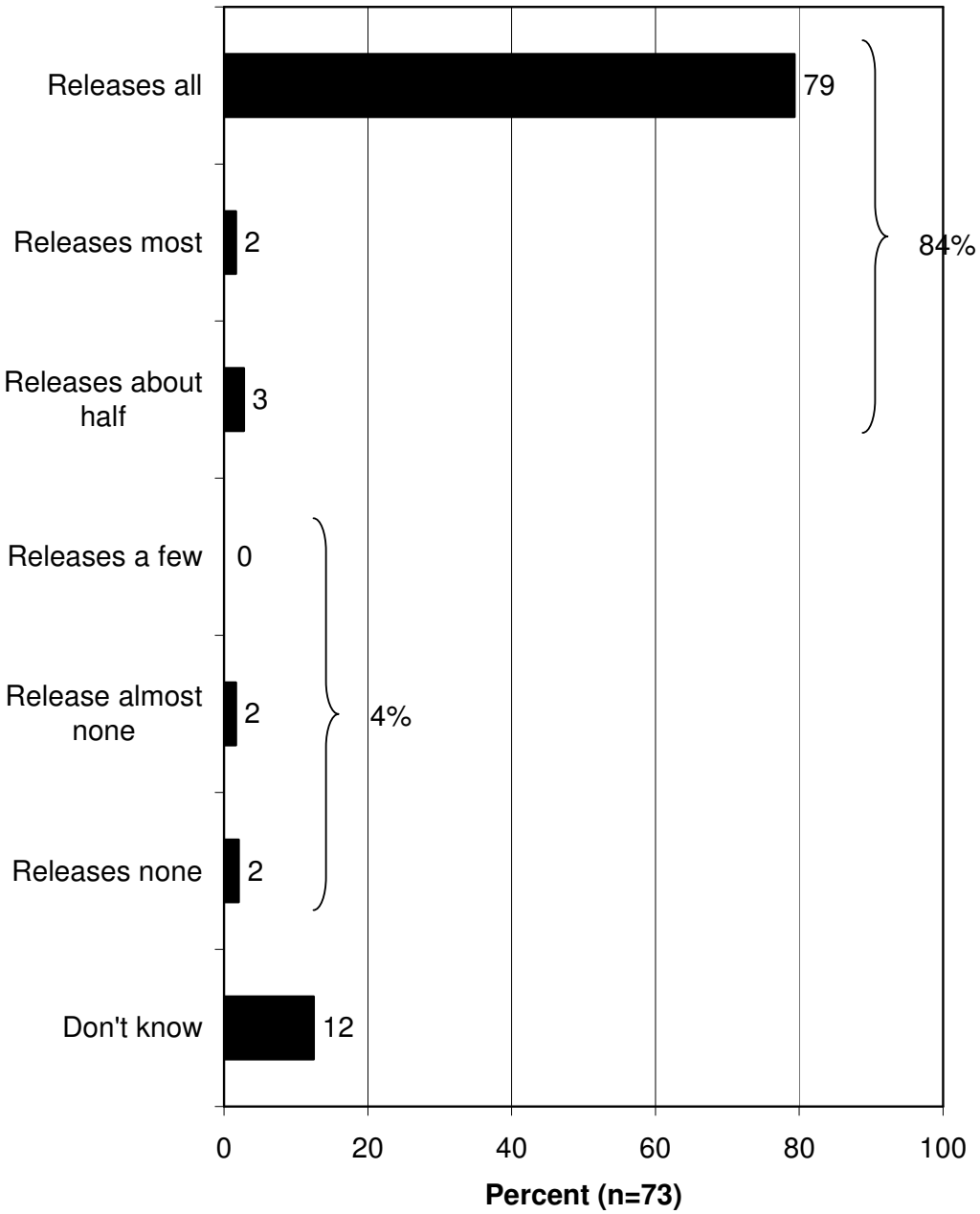


Q62. You said you fished for musky. What portion of the musky you catch do you release? (Asked of those who fished for musky and did catch-and-release fishing.)



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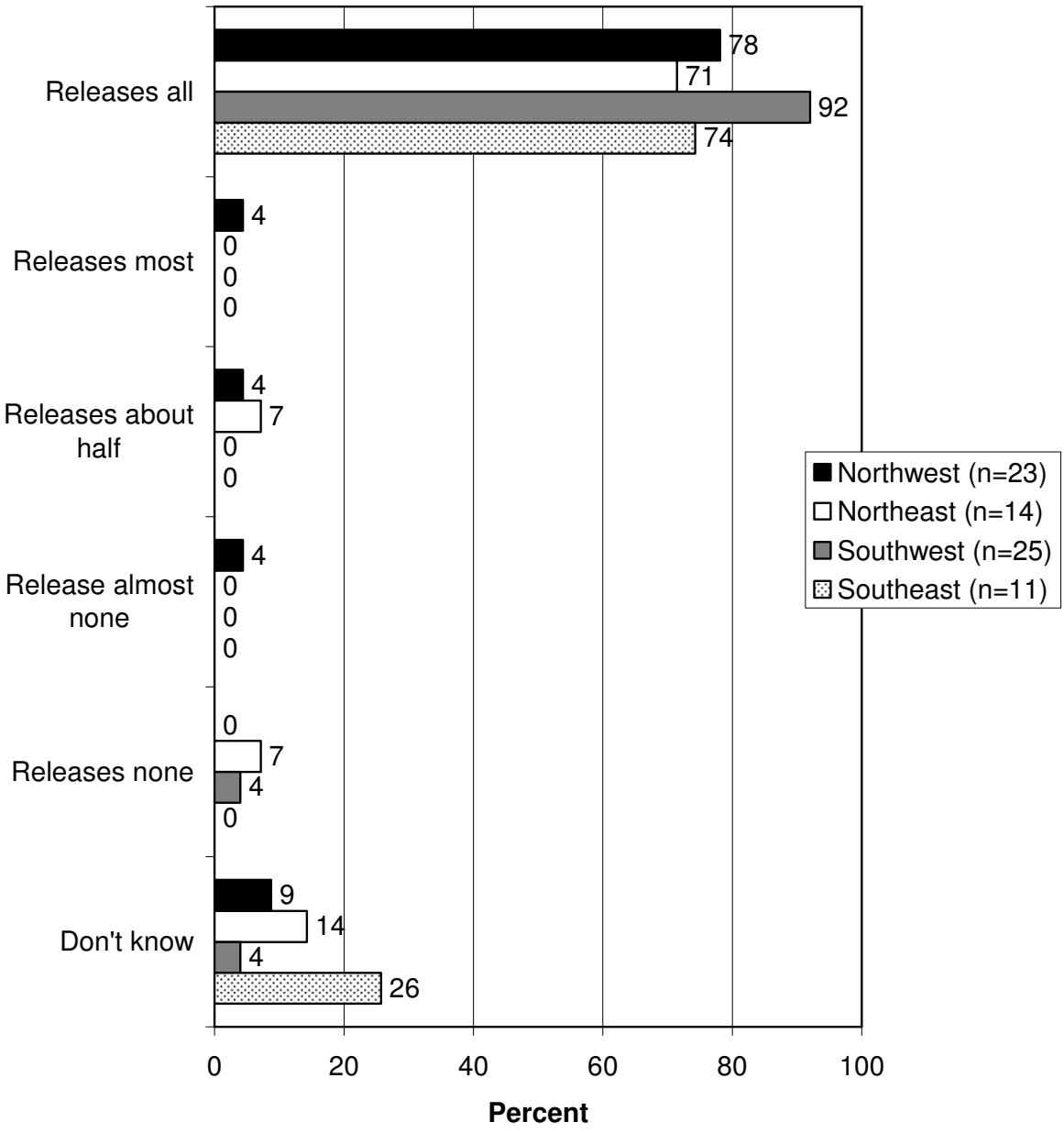

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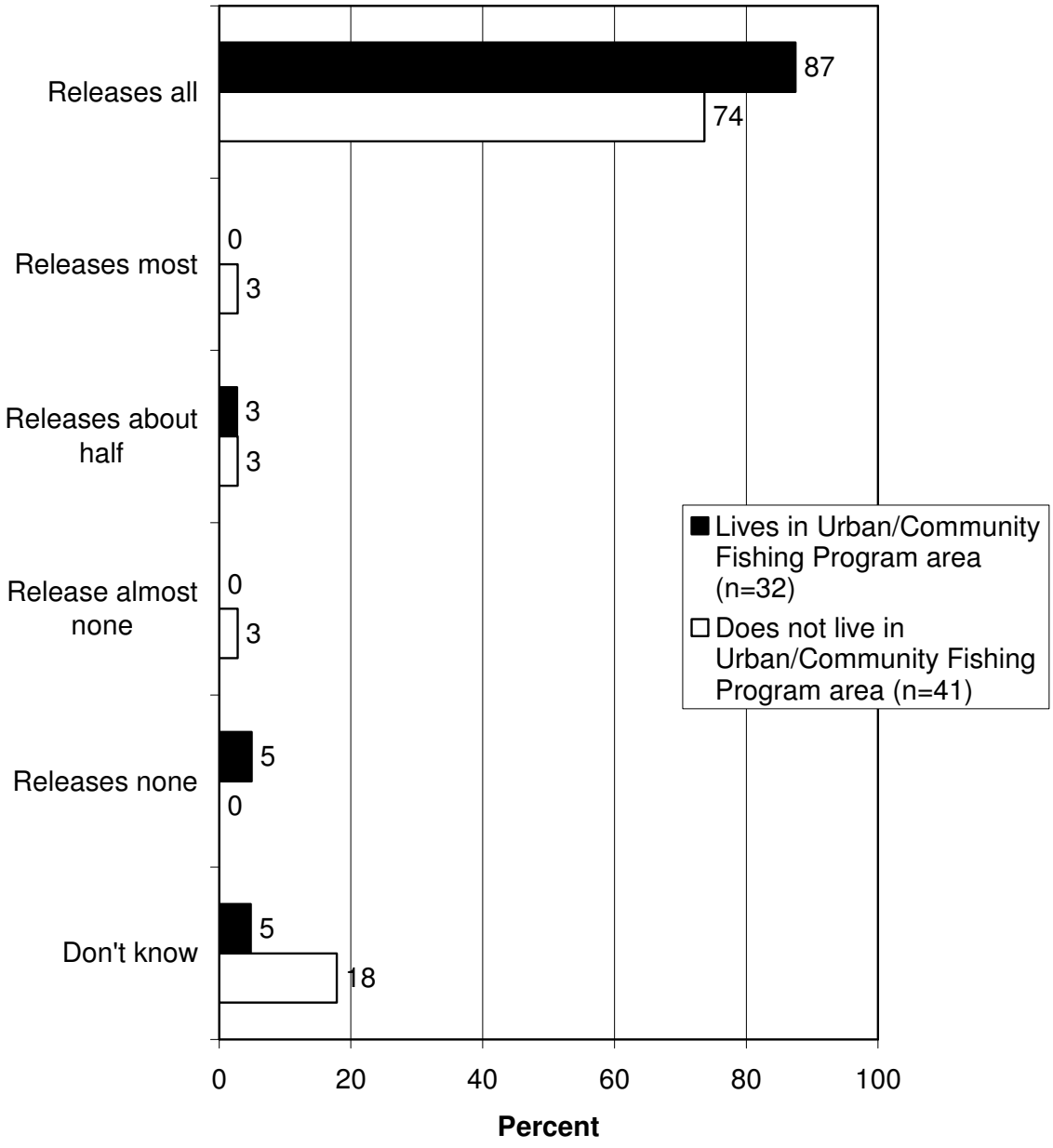
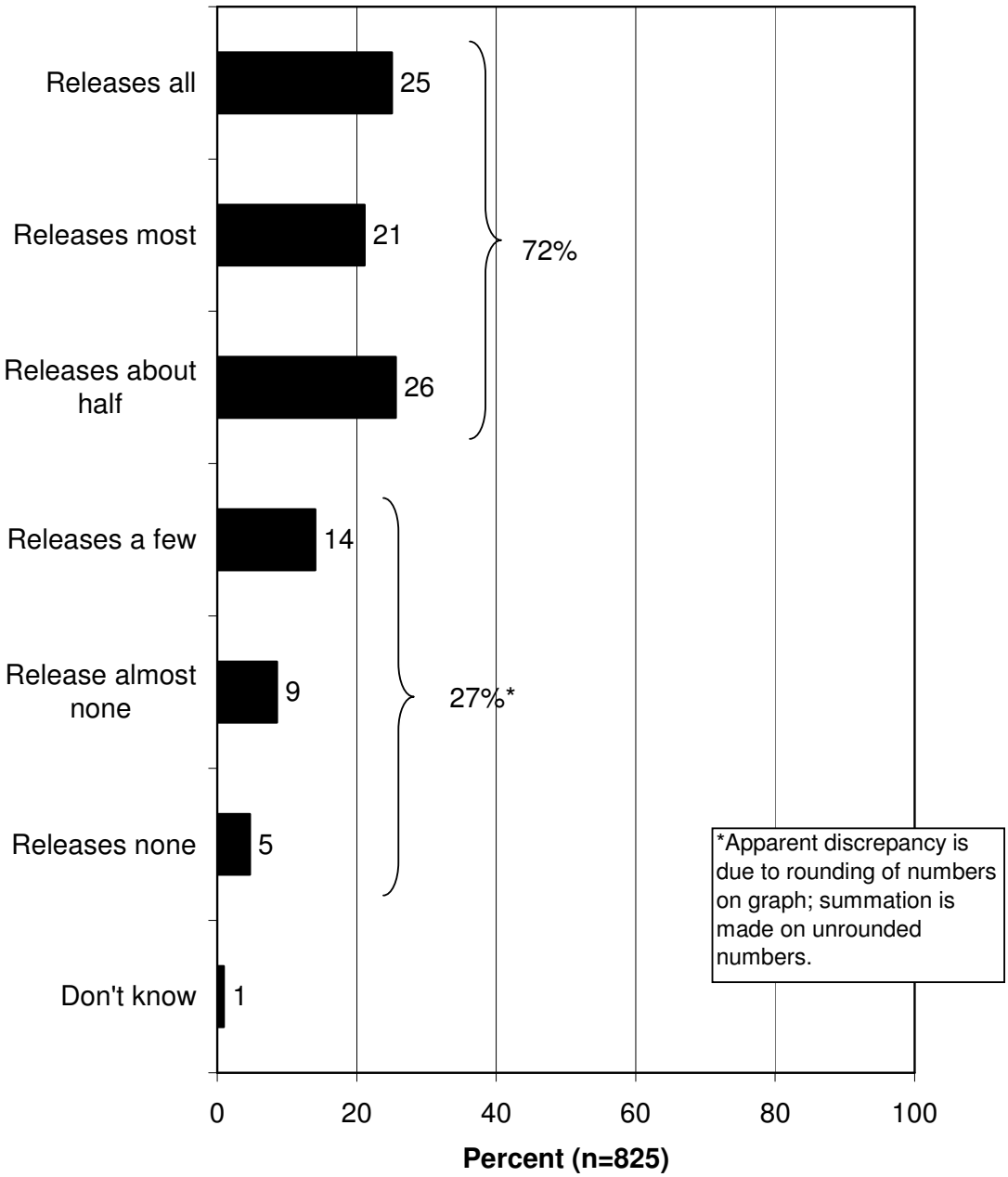


Q63. You said you fished for panfish. What portion of the panfish you catch do you release? (Asked of those who fished for panfish and did catch-and-release fishing.)



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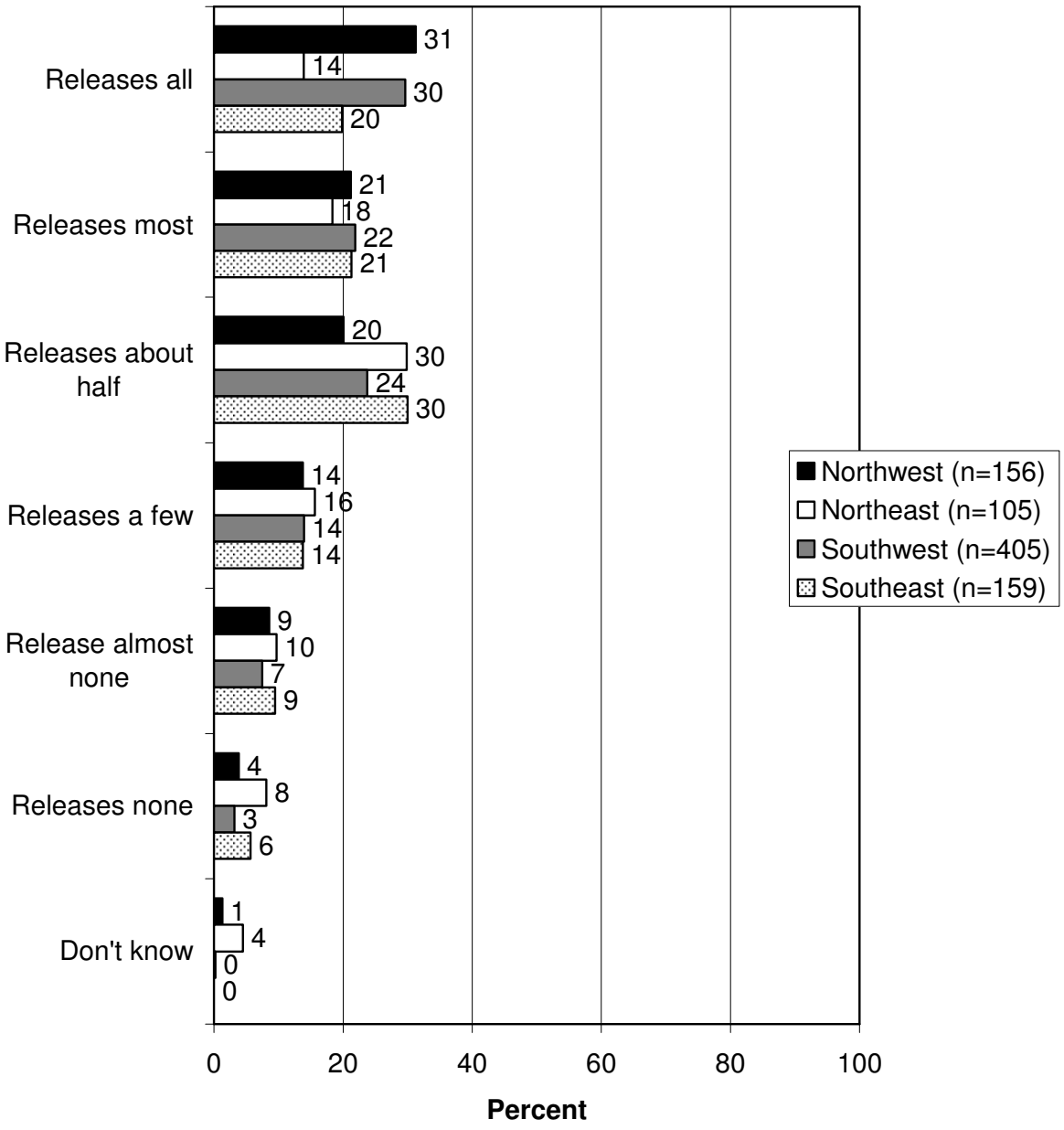

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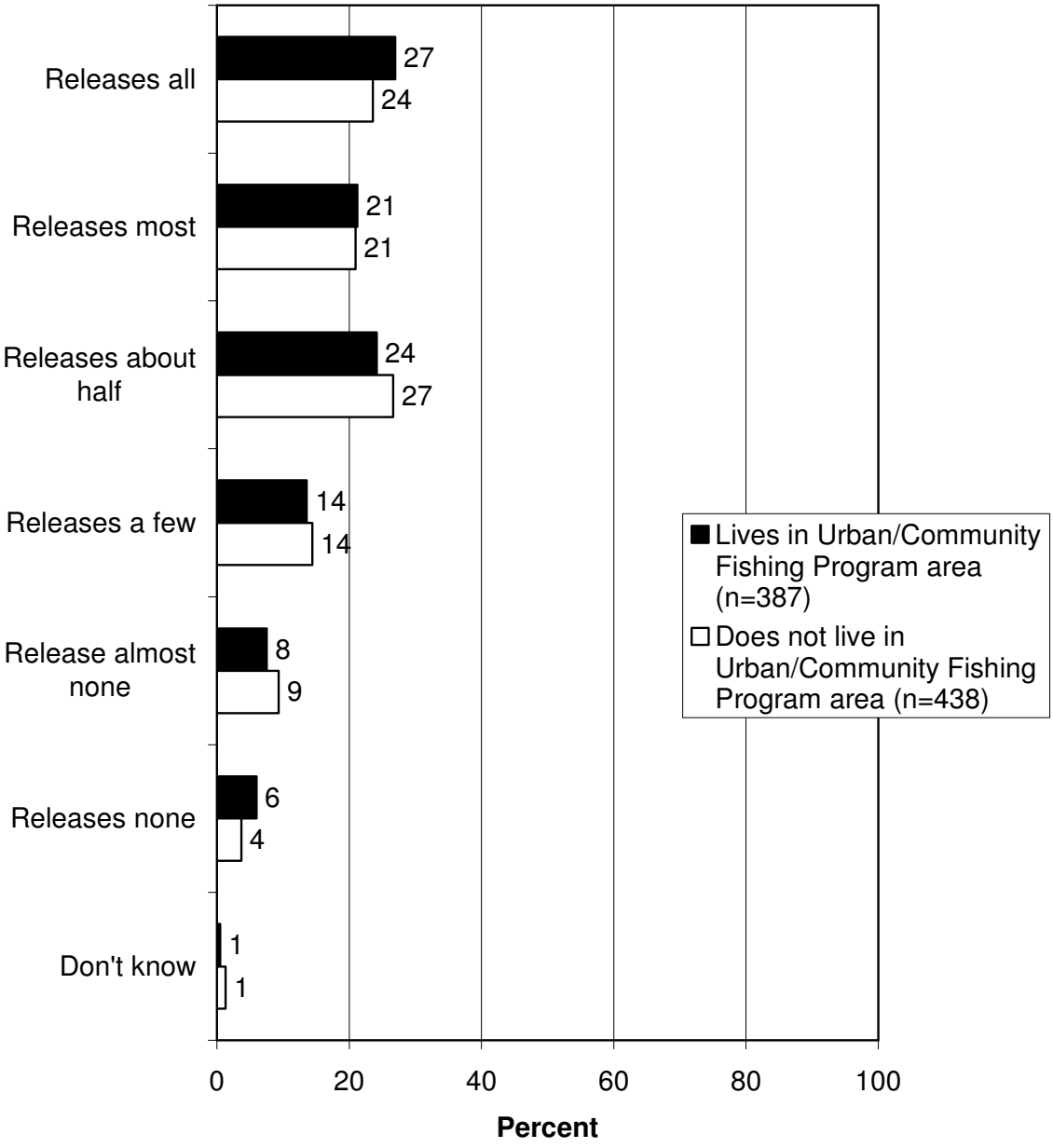
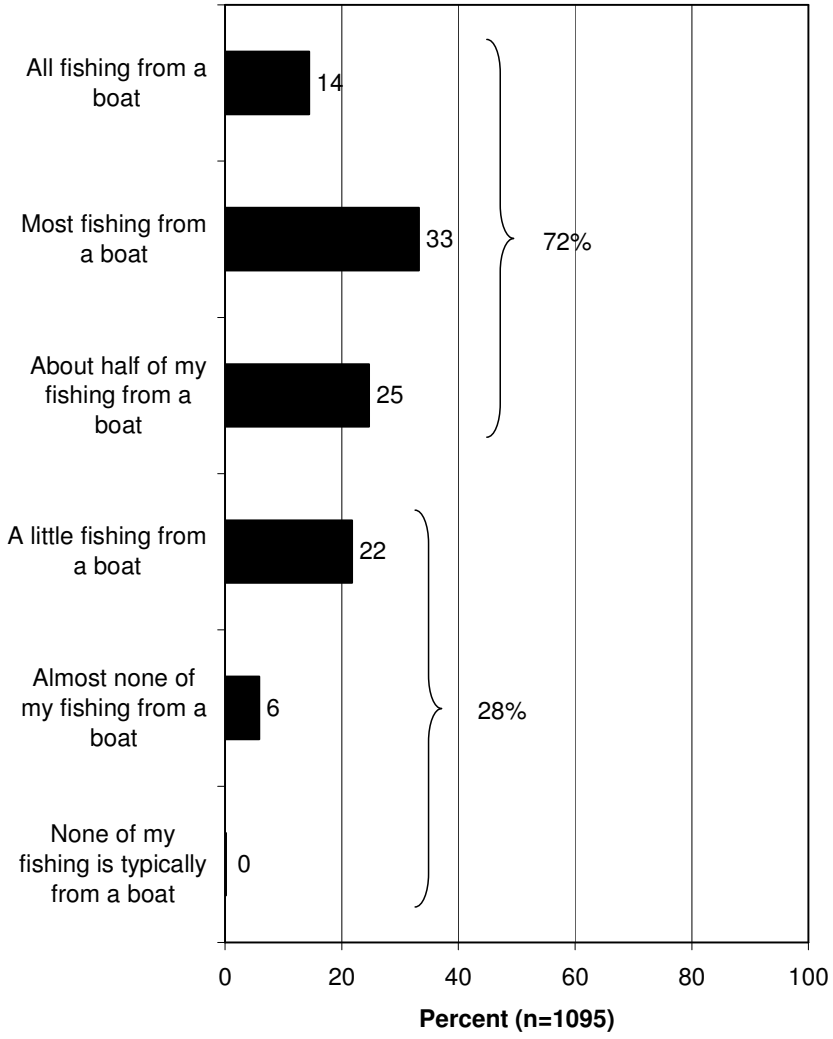


FISHING FROM A BOAT

- It was previously indicated that 67% of Iowa anglers had fished from a boat at least once in the last year they fished.
  - Anglers who had fished from a boat were asked about the amount of their fishing that is typically done from a boat: 14% say that all their fishing is from a boat, another 33% say that most of their fishing is from a boat, and 25% say at least half is done that way, for a total of 72% of "boater-anglers" doing at least half of their fishing from a boat.

Q65. About how much of your fishing is typically done from a boat? (Asked of those who fished from a boat.)



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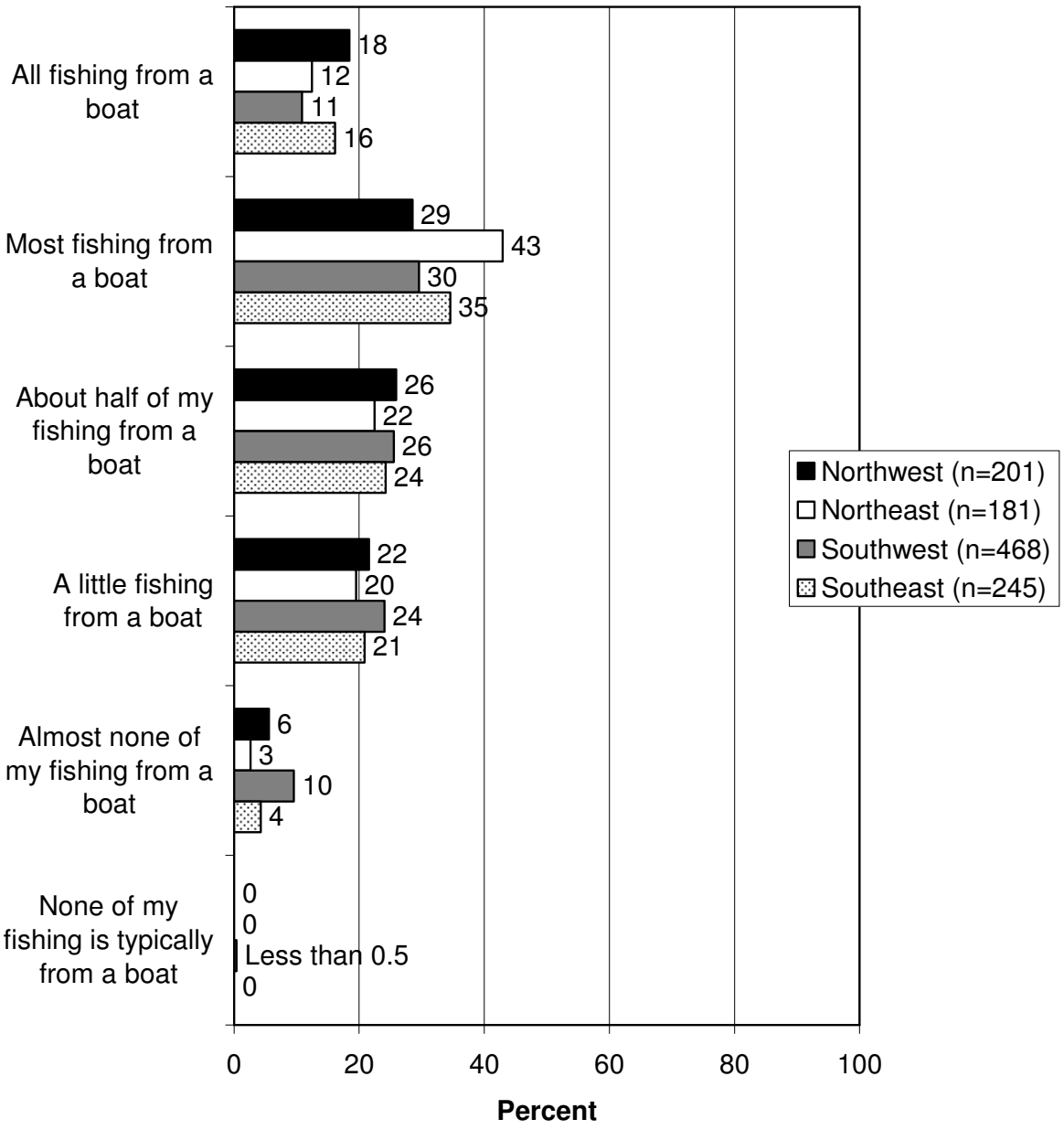

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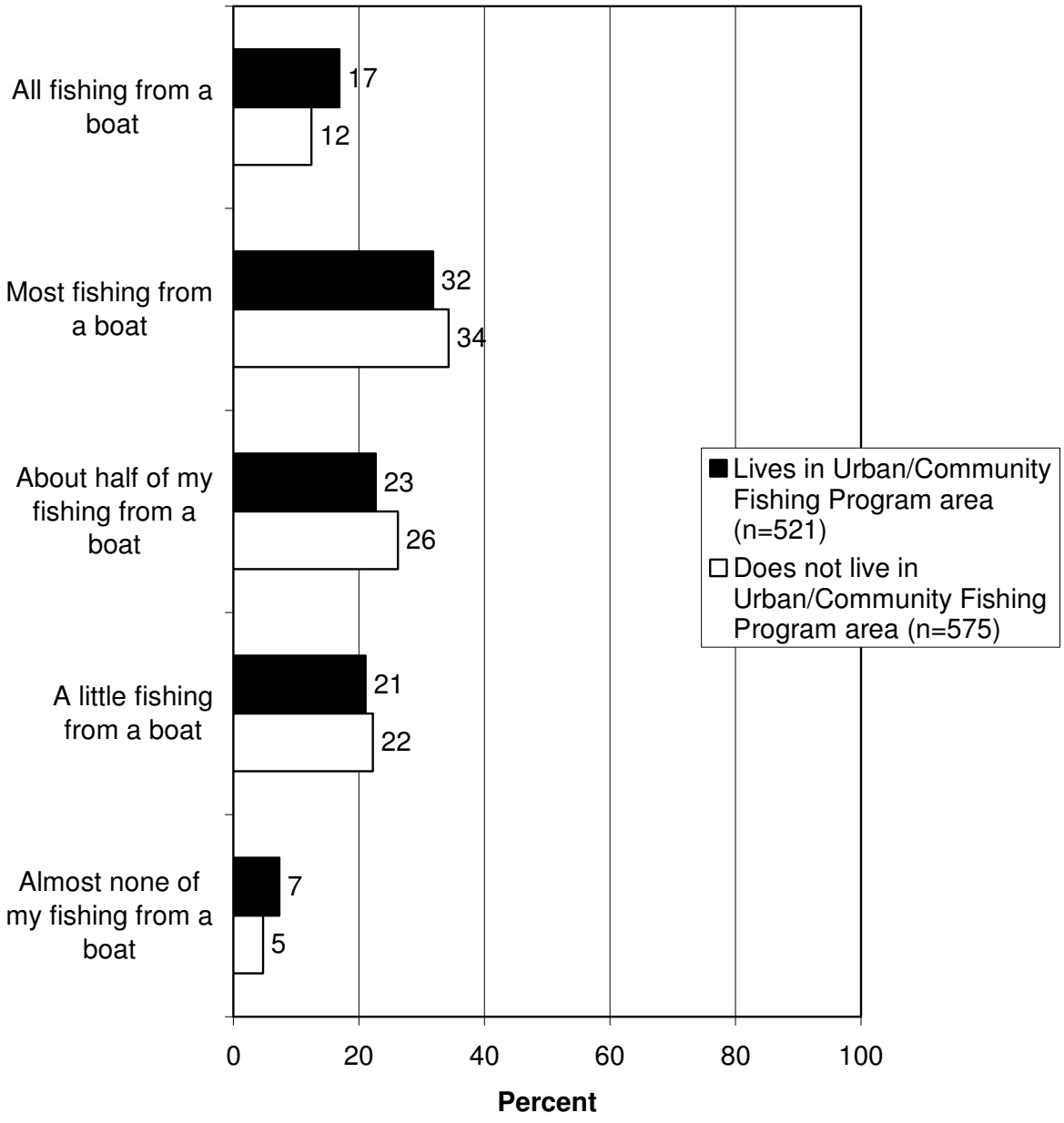
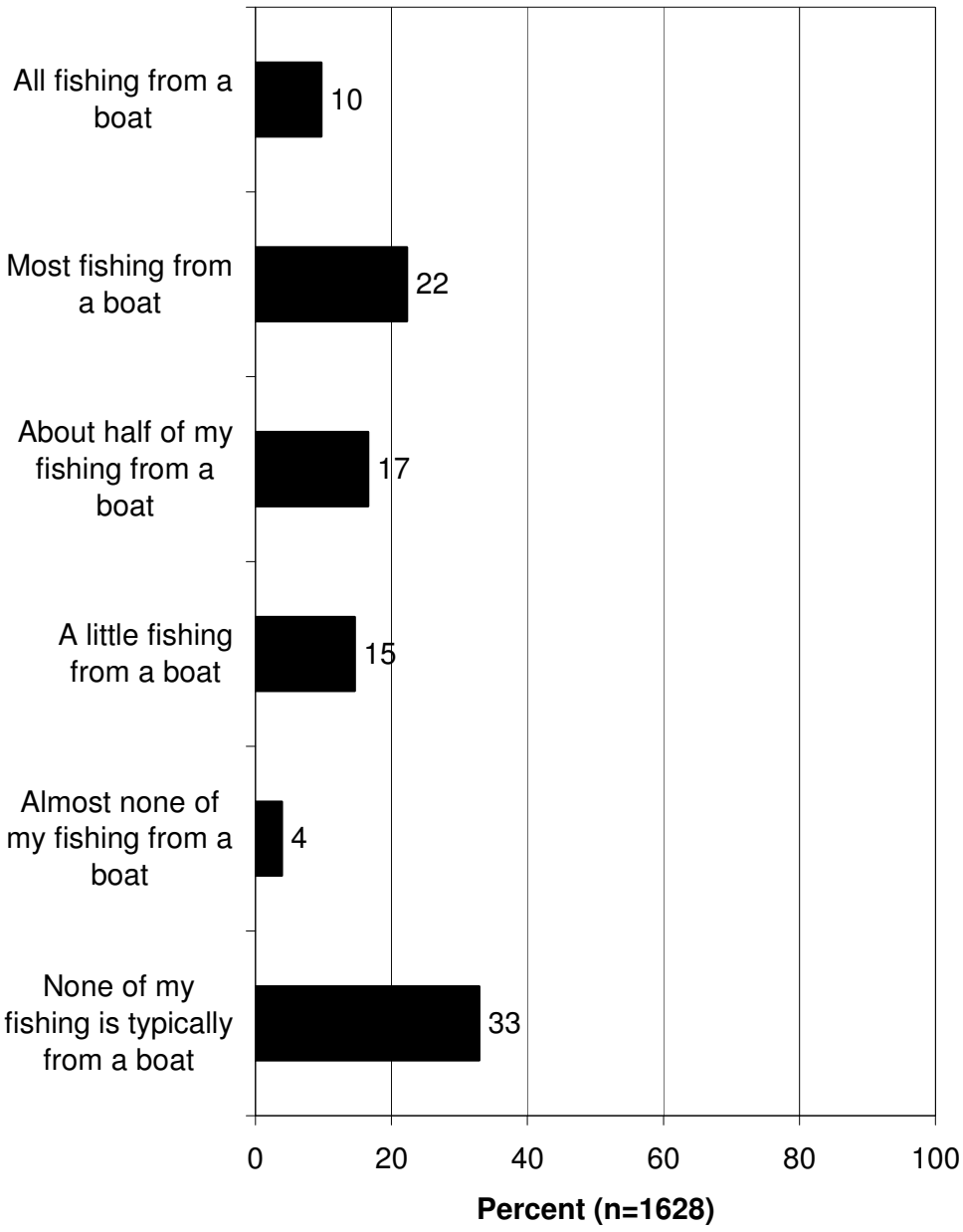


Q65. About how much of your fishing is typically done from a boat? (Among all anglers.)



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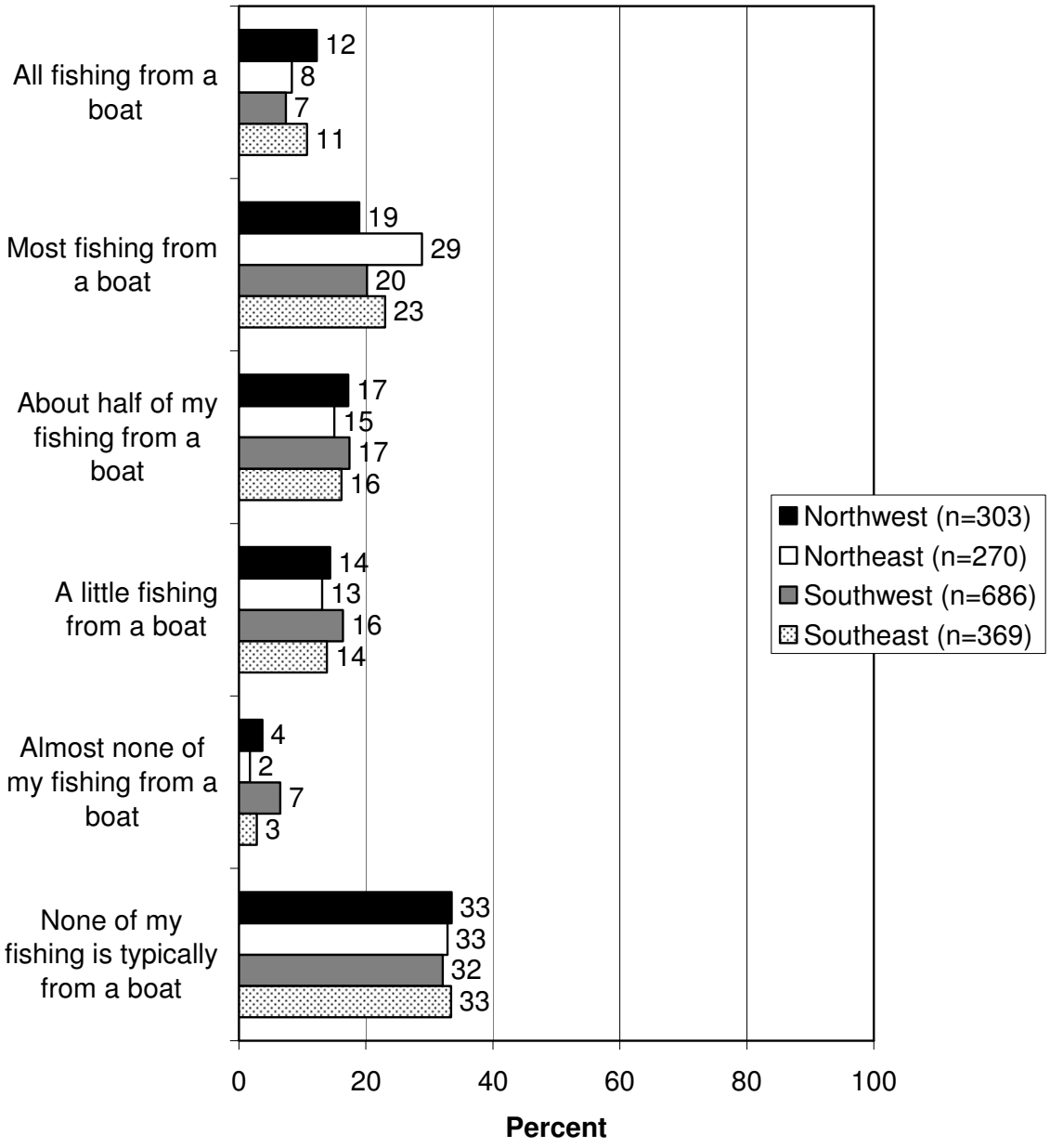
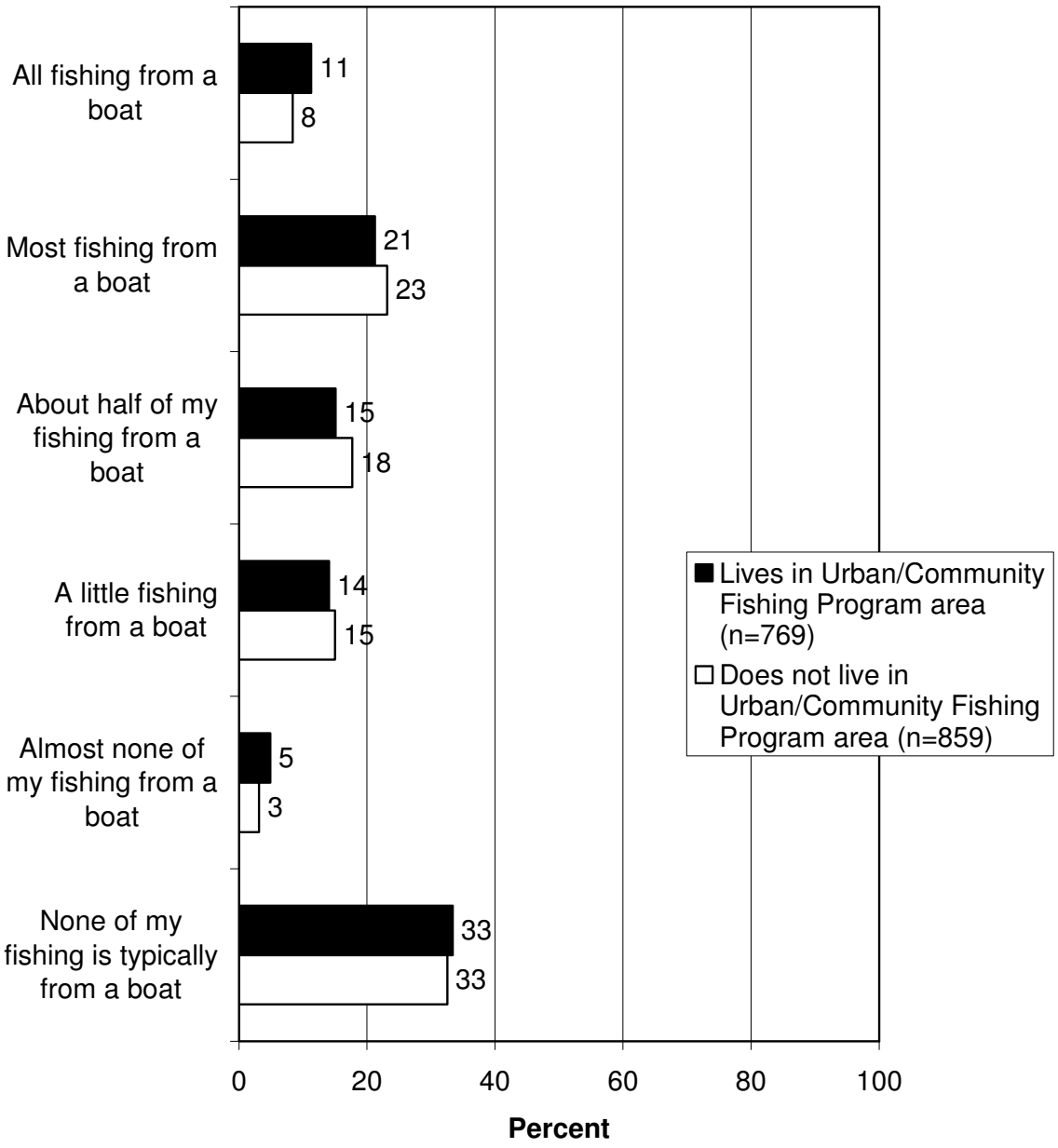


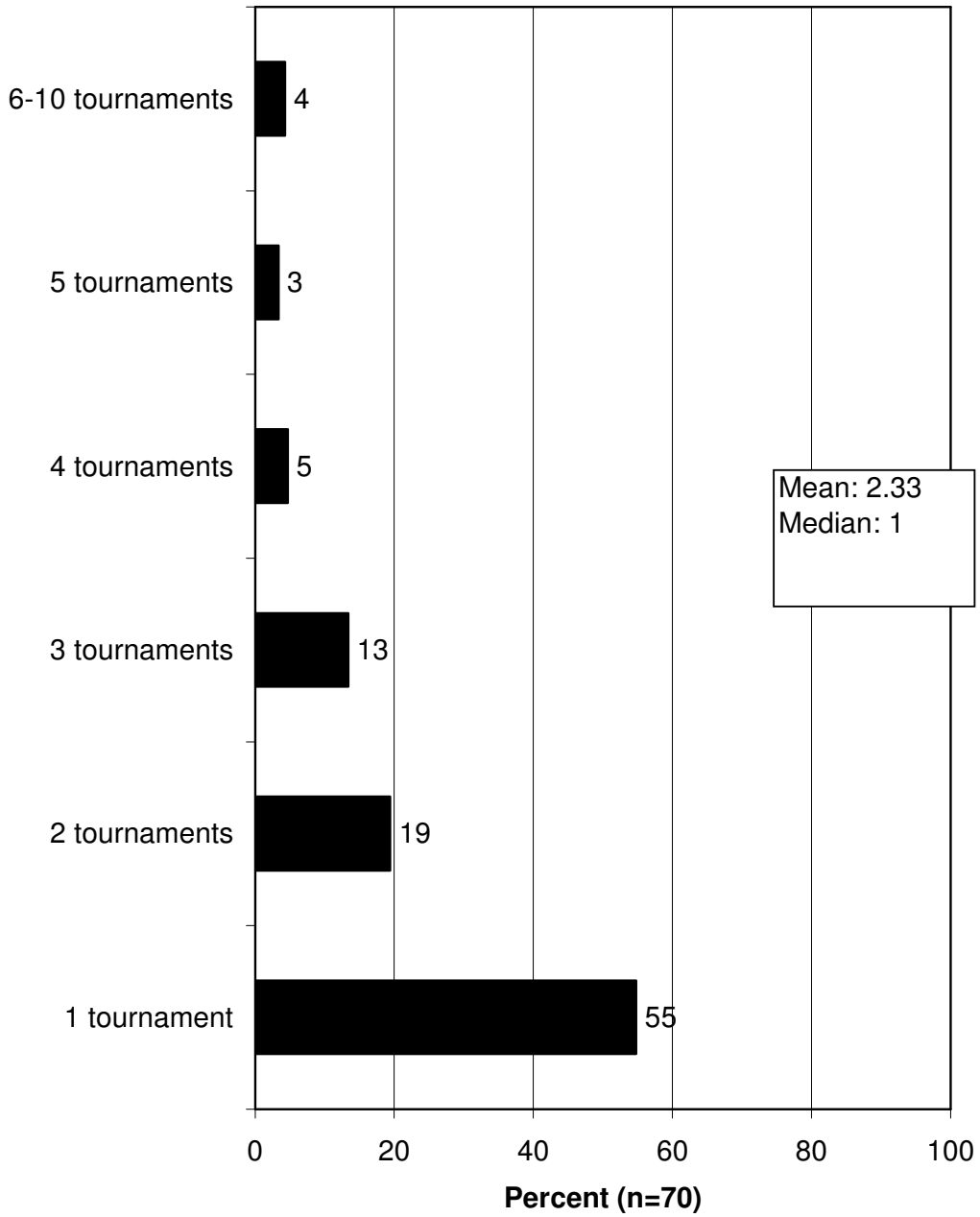
Q65. About how much of your fishing is typically done from a boat?



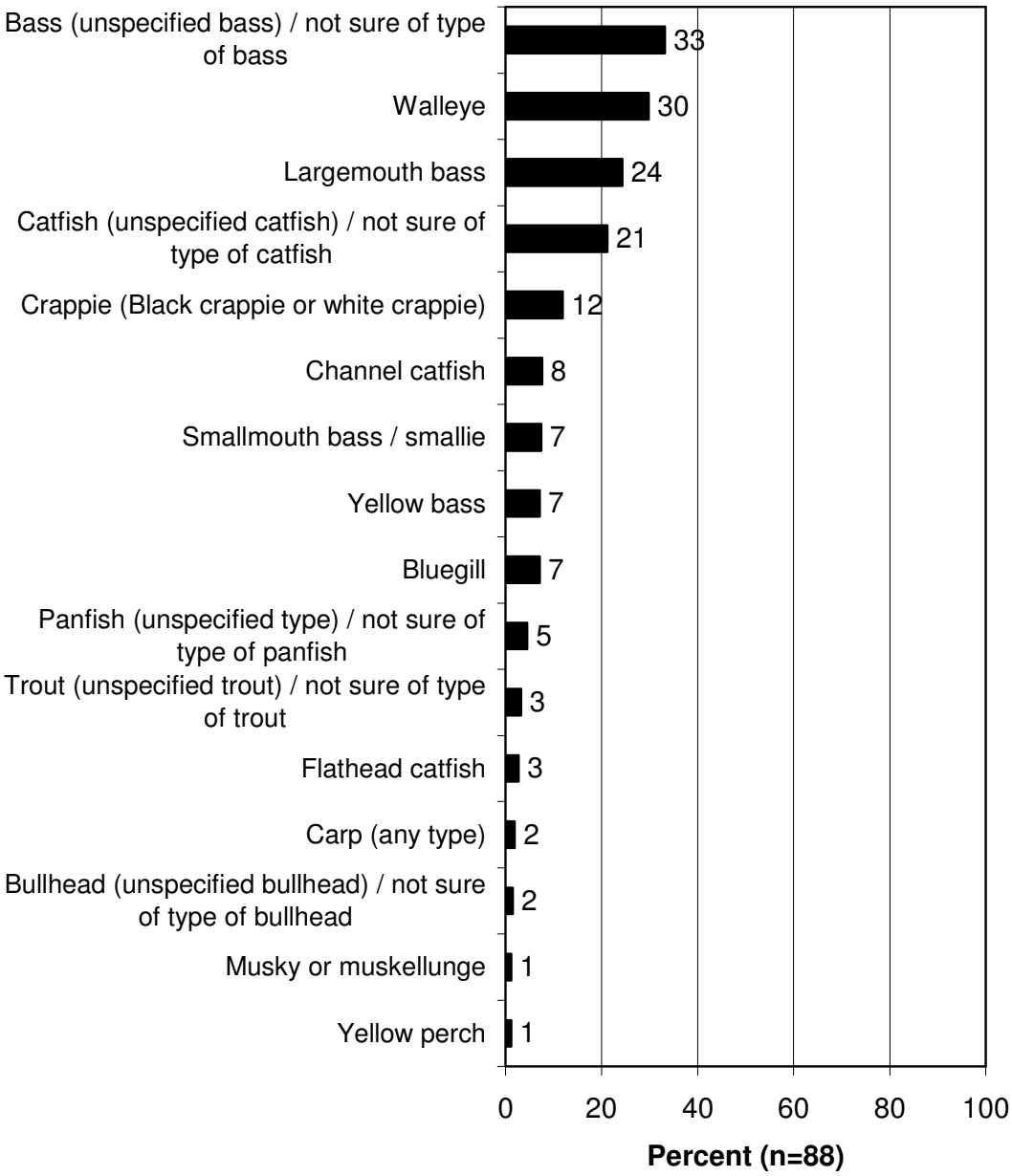
TOURNAMENT FISHING

- It was previously indicated that 6% of Iowa anglers had fished in a tournament at least once in the last year they fished.
  - Those who fished in a tournament did so a mean of 2.3 times and a median of 1 time in the last year they fished; 55% fished in a tournament 1 time.
  - Tournament anglers most commonly fished in the tournament for bass (unspecified) (33% stated this), walleye (30%), largemouth bass (24%), catfish (unspecified) (21%), and crappie (12%).
    - The sample size of tournament anglers was too small for crosstabulations.
  - In addition, a table is included that shows the percentage of anglers who fished each species who fished in tournaments. For example, among all anglers who fished for any type of bass, 6.8% fished in a tournament. (Note that *all* anglers who fished for madtom or stone cat fished in a tournament, whereas *no* anglers who fished for paddlefish, redhorse, or skipjack herring fished in a tournament.)

Q67. You said you fished in a tournament. In how many tournaments did you fish in Iowa in the [past 12 months / last year you fished]? (Asked of those who fished in a tournament.)



Q70-Q72. Which species did you fish for in tournaments in Iowa in the [past 12 months / last year you fished]? (Asked of those who fished in a tournament.)



Species	Percent of anglers fishing this species who fished in a tournament
Any bass	6.8
Bass / not sure of type of bass	5.7
Largemouth bass	7.0
Rock bass	8.6
Smallmouth bass / smallie	10.1
Spotted bass	10.7
Striped bass / stripers	10.4
Yellow bass	7.4
Any trout	7.2
Trout / not sure of type of trout	4.9
Brook trout	9.9
Brown trout	6.2
Rainbow trout	8.1
Bullhead / not sure of type of bullhead	5.7
Catfish / not sure of type of catfish	6.6
Black bullhead	11.7
Blue catfish	16.6
Brown bullhead	27.0
Channel catfish	6.7
Flathead catfish	11.8
Madtom	100.0
Stone cat	100.0
Yellow bullhead	18.8
Walleye	8.5
Sauger	15.7
Northern pike	9.2
Musky or muskellunge	16.9
Any panfish	6.4
Panfish / not sure of type of panfish	9.7
Perch / not sure of type of perch	9.0
Sunfish / not sure of type of sunfish	5.2
Bluegill	5.6
Crappie	6.2
Drum	15.4
Green sunfish	11.8
Orangespotted sunfish	13.3
Pumpkinseed	8.8
Redear sunfish	5.0
Warmouth	6.0
Yellow perch	11.7
Bowfin	27.3
Carp	9.5
Chub	15.6
Drum	14.6
Paddlefish	0.0
Redhorse	0.0
Shad	6.4
Shiner	45.8
Skipjack herring	0.0
White sucker	12.6

ATTITUDES TOWARD FISHING AND FISHING MANAGEMENT IN IOWA

- The majority of Iowa anglers (68%) rate fishing in Iowa as *excellent* or *good* (with 56% saying *good*), while 31% rate it as *fair* or *poor* (with 27% saying *fair*).
  - These results are nearly identical to those from 2007.

- The survey asked those anglers who have fished in Iowa for at least 10 years to rate whether Iowa's fishing is better or worse now compared to 10 years ago. A slightly greater percentage think that fishing is better (26%) than think it is worse (20%). The most common answer is that fishing is the same now as compared to 10 years ago (44%).

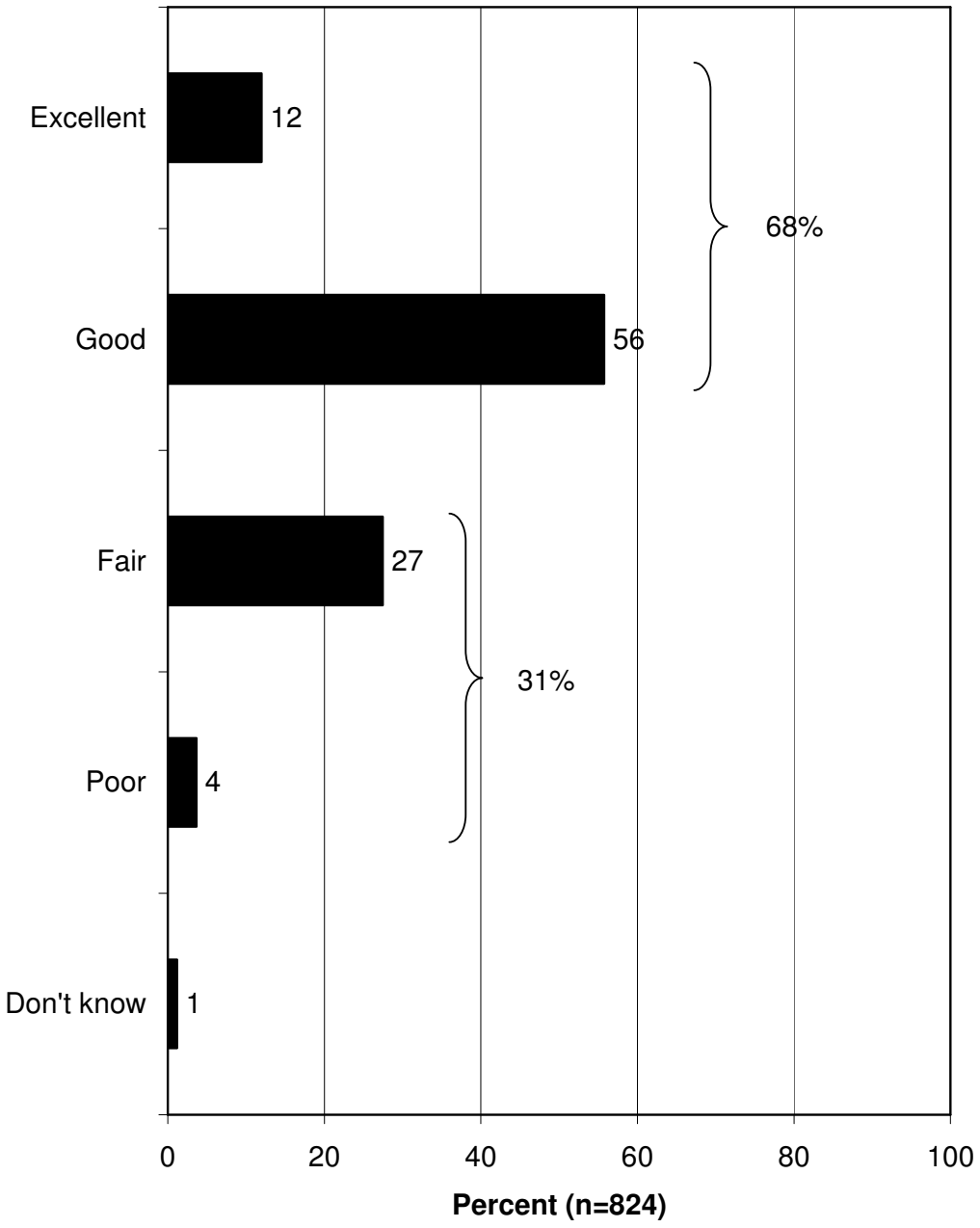
- The majority of Iowa anglers (76%) rate the Department as *excellent* or *good* in managing fishing and fisheries in Iowa (with 50% saying *good*), while 17% rate the Department as *fair* or *poor* (with 14% saying *fair*).
  - Since 2007 there has been a shift of anglers moving from *good* to *excellent* in their ratings of the Department. Although a slight improvement in the ratings of the Department is observed, results of the more general question of rating fishing in Iowa have remained largely unchanged.
  - Anglers who rated management of fishing and fisheries in the higher end of the scale (*excellent* or *good*) most commonly gave as their reasoning a general positive statement, stated that their experience with agency personnel or agency efforts was positive, gave a stocking-related reason, or stated that fishing is good and that fisheries are managed well.
  - Those anglers who rated management of fishing and fisheries in the lower end of the scale (*fair* or *poor*) most commonly gave as their reasoning that they disagree with some aspect of fish stocking, that water quality is bad, or that they have a specific problem with fishing regulations or management.

- The majority of Iowa anglers describe fishing management in Iowa as regulated the right amount (78%). Otherwise, more of them say that fishing is under-regulated (10%) than over-regulated (4%).

- Iowa anglers were asked to rate public access to various water body types in the state.
  - The majority of Iowa anglers (66%) rate public access to Iowa's inland rivers and streams for fishing as *excellent* or *good* (52% *good*), while 26% rate such access as *fair* or *poor* (21% *fair*).
  - Similarly, 64% of anglers rate public access to Iowa's reservoirs for fishing as *excellent* or *good* (50% *good*), while 16% rate the access as *fair* or *poor* (15% *fair*). A sizable percentage (19%) do not know.
  - Most anglers (80%) rate public access to Iowa's lakes for fishing as *excellent* or *good* (60% *good*), while 14% rate access as *fair* or *poor* (13% *fair*).
  - Just under half of anglers (48%) rate public access to Iowa's ponds and pits for fishing as *excellent* or *good* (40% *good*), compared to 37% who rate the access as *fair* or *poor* (27% *fair*). A large percentage (15%) do not know.
  - There are more who rate public access for fishing in the Mississippi River as *excellent* or *good* (40%; 28% *good*) than who rate it as *fair* or *poor* (11%; 9% *poor*). However, the top response is "don't know" (48%).
    - Among those who live in counties bordering the Mississippi River, 78% rate access *excellent* or *good* (48% *good*), while 20% rate it *fair* or *poor* (10% *fair*).
  - Finally, a majority of anglers (72%) don't know how to rate public access for fishing in the Missouri River. Otherwise, 19% rate access as *excellent* or *good* (13% *good*), while 9% rate it as *fair* or *poor* (7% *fair*).
    - Among those who live in counties bordering the Missouri River, there is a three-way split between those who rate access *excellent* or *good* (32%; 17% *good*), those who rate it *fair* or *poor* (34%; 18% *fair*), and those who do not know (34%).

- A strong majority of Iowa anglers (78%) agree, after being informed that one of the uses of funds from license fees is to improve Iowa's fishing, that anglers are currently getting their money's worth for those fees; only 10% disagree.

Q101. How would you rate the fishing in Iowa?



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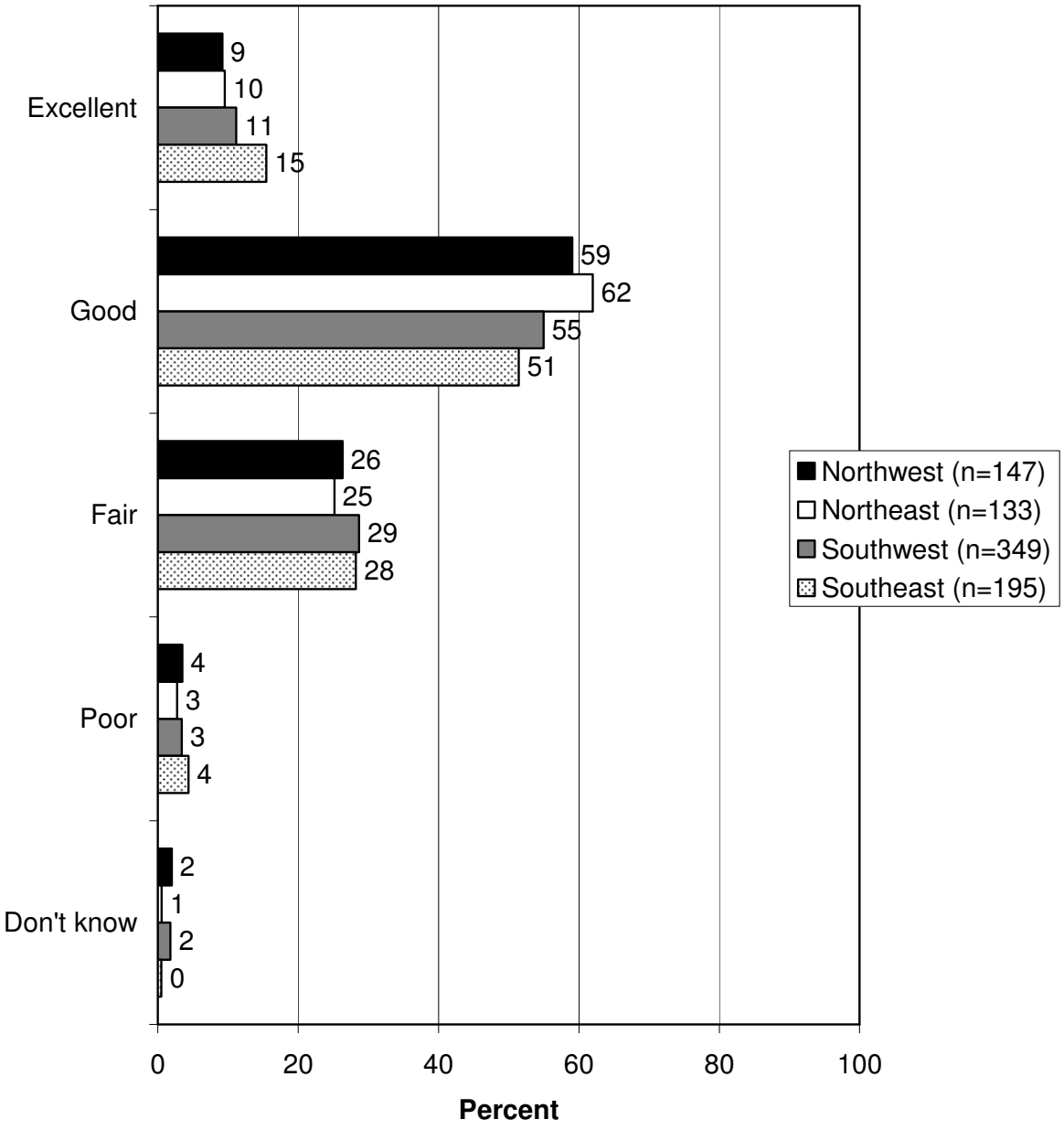

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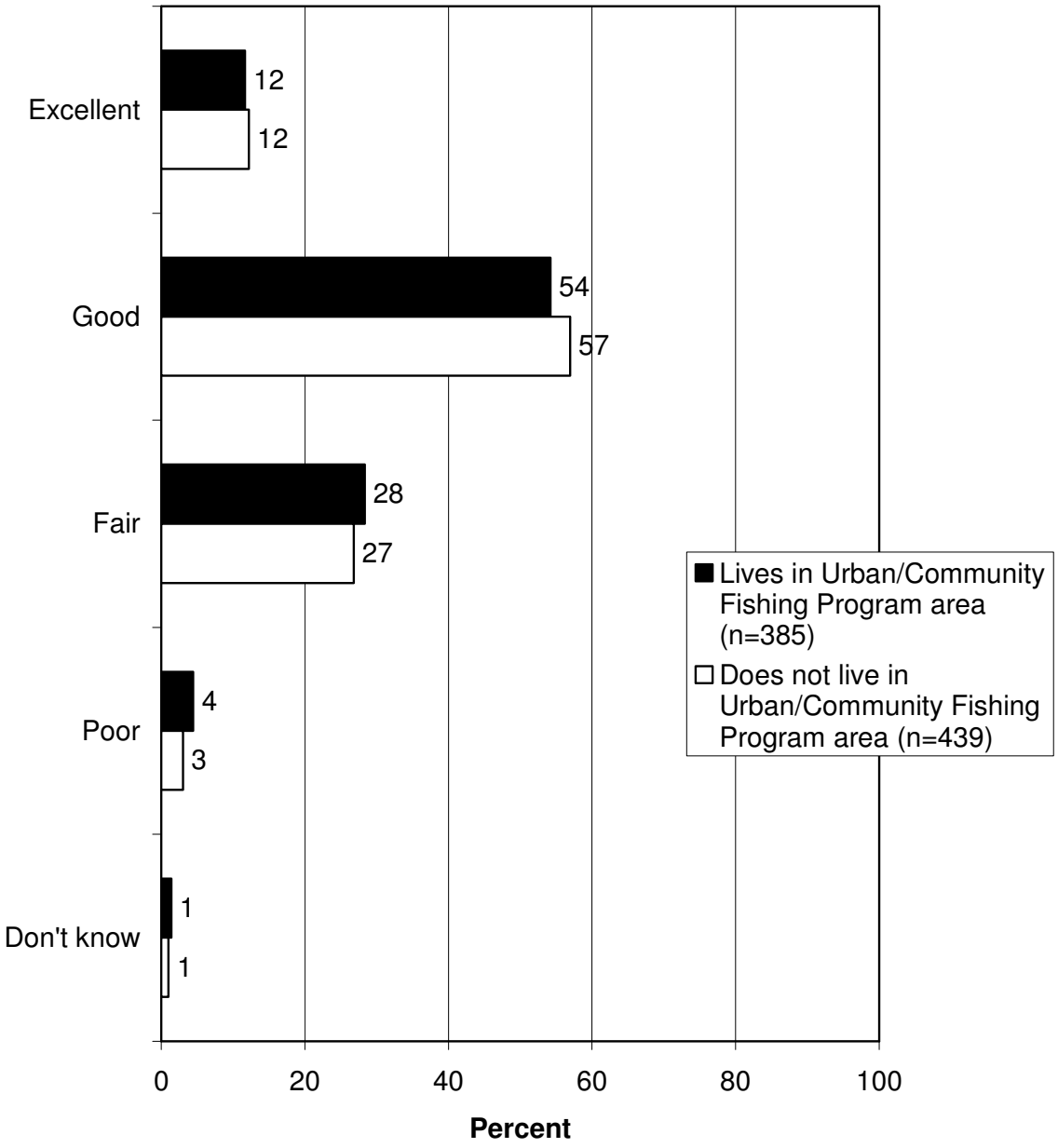

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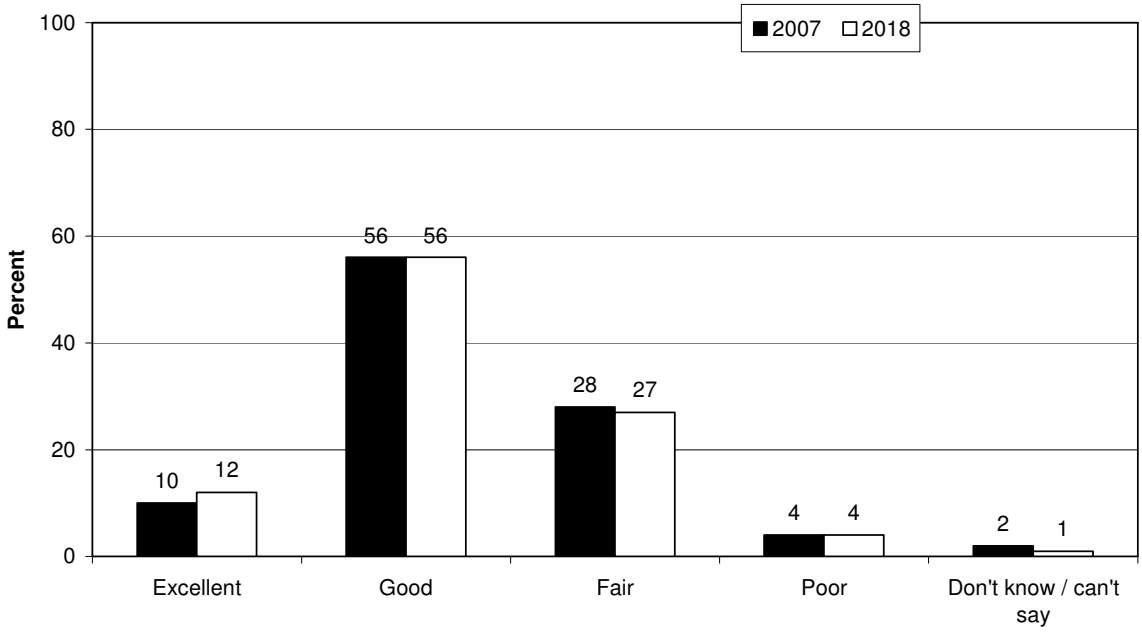
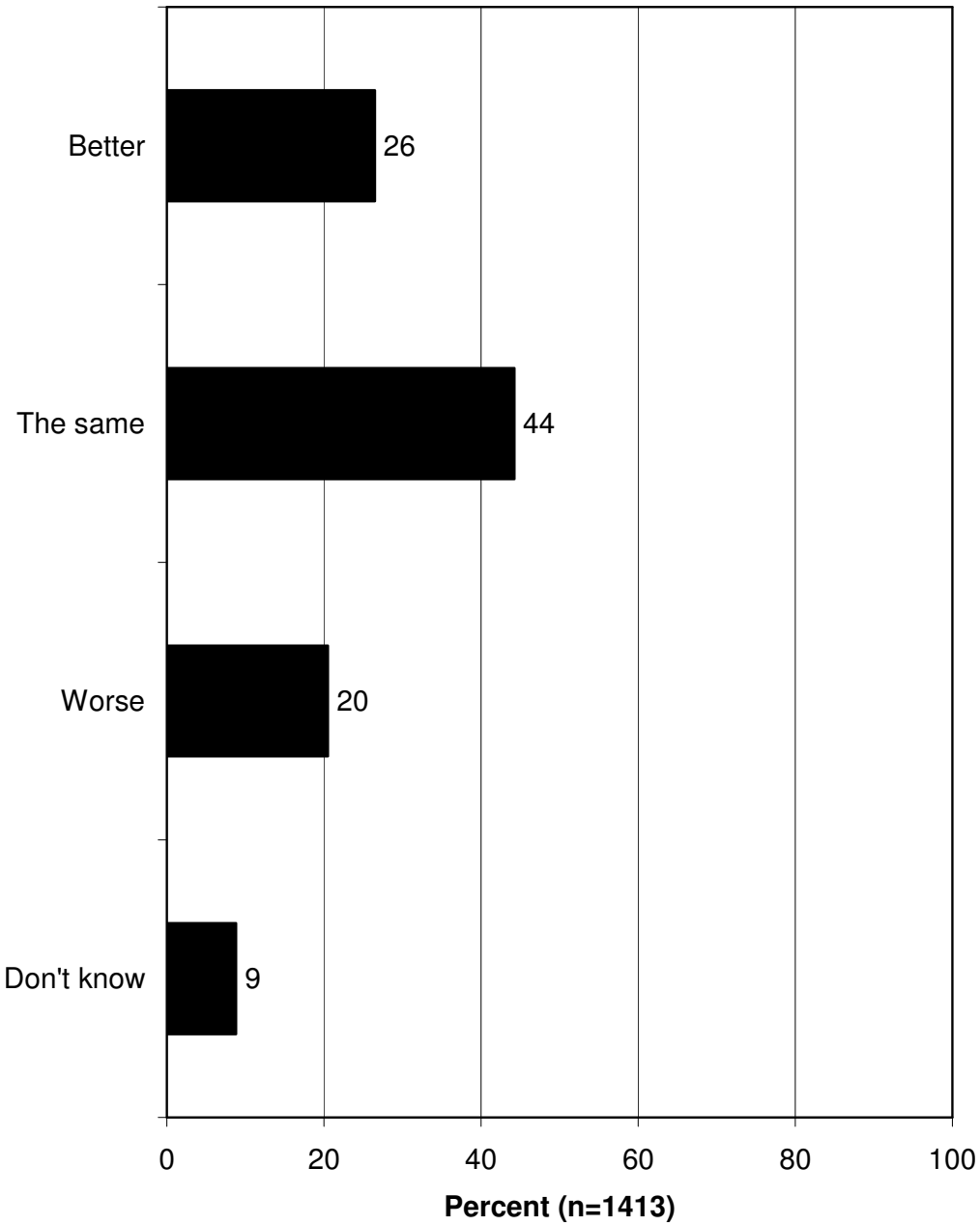


Q99. Do you think the fishing in Iowa is better or worse now compared to 10 years ago? (Asked of those who have been fishing 10 or more years in Iowa.)



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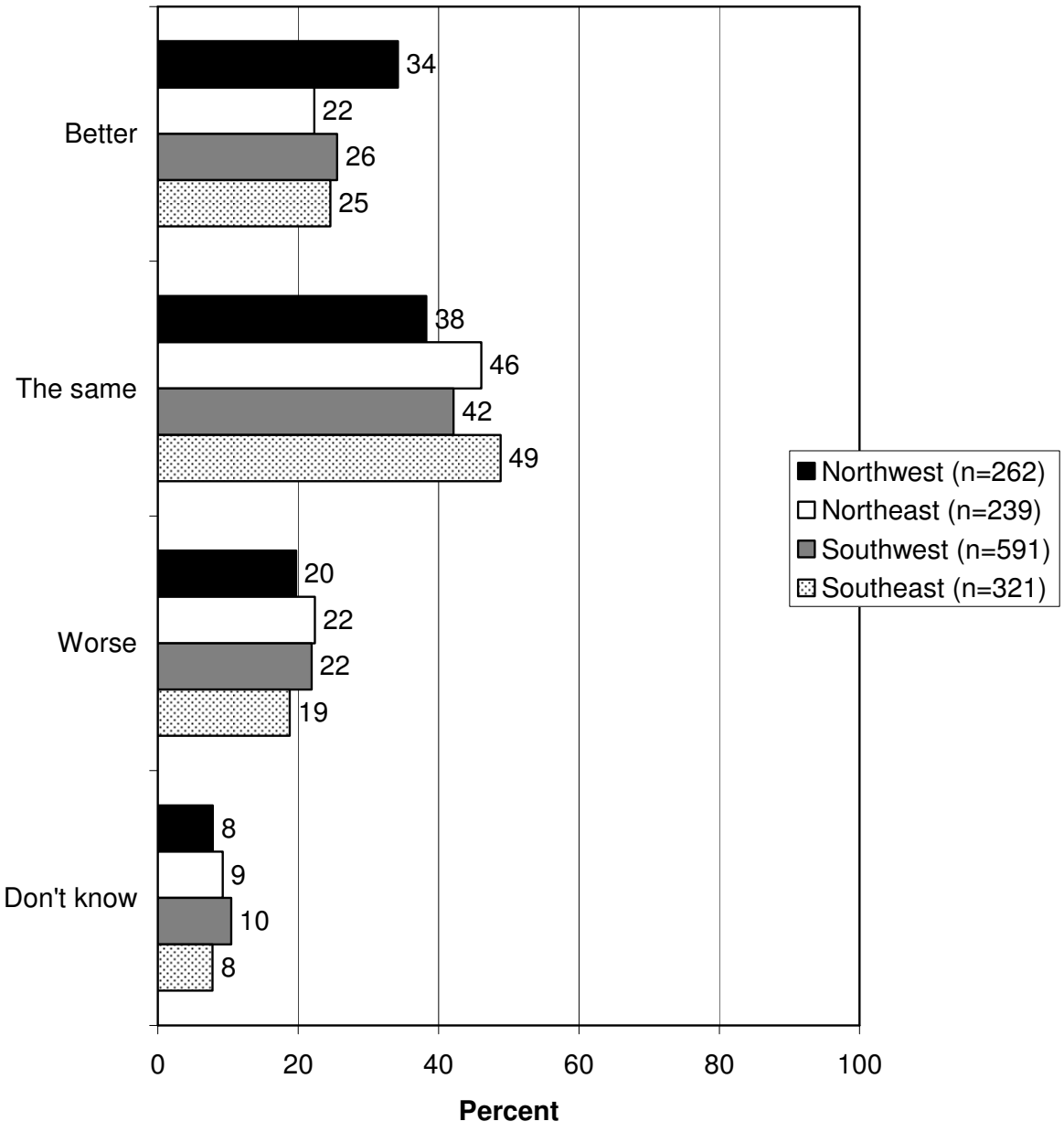

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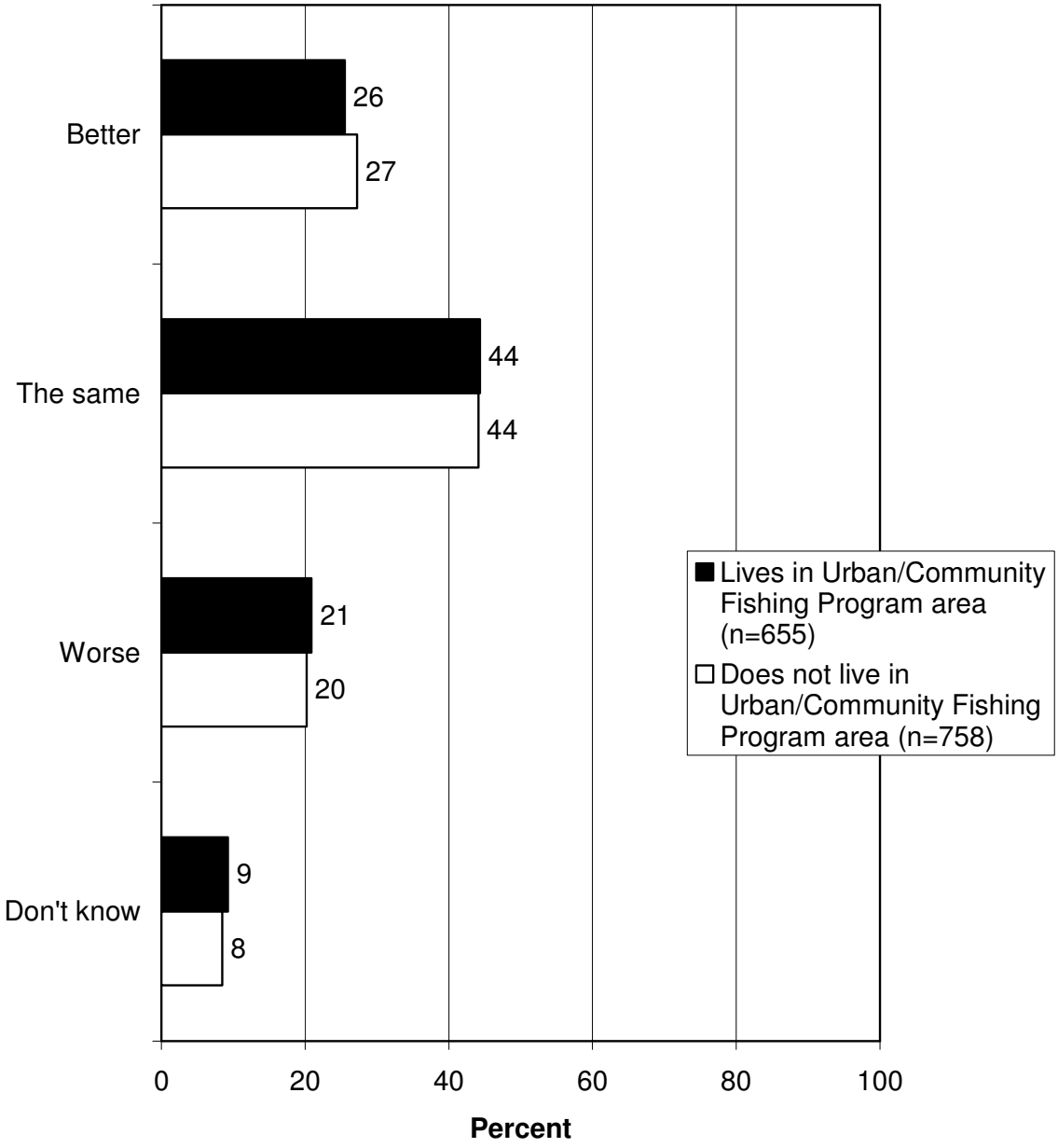

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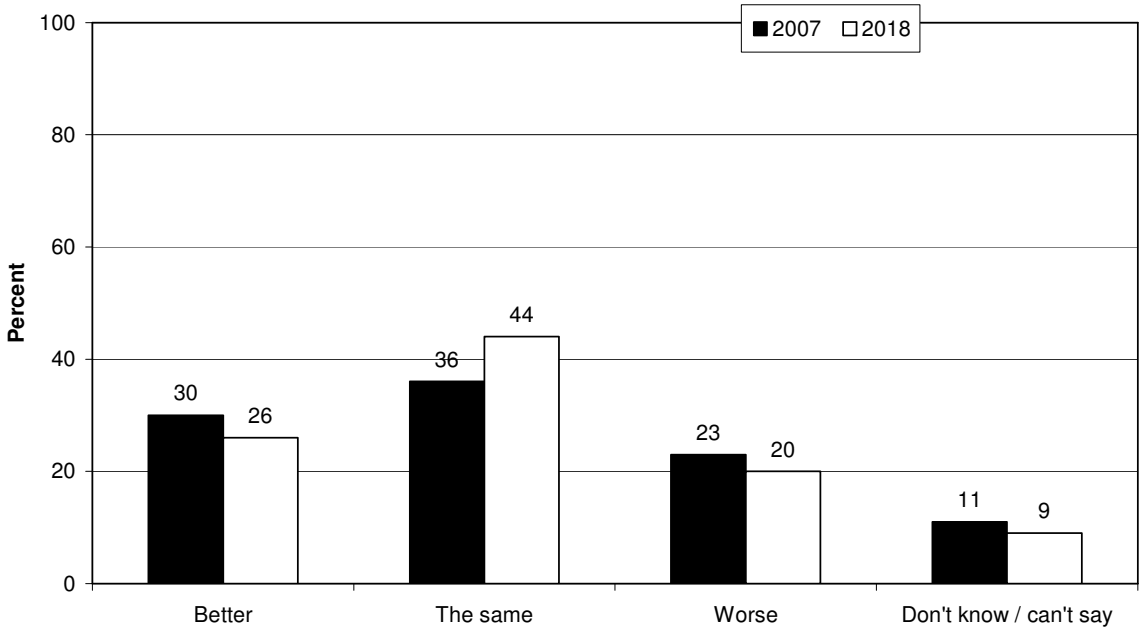
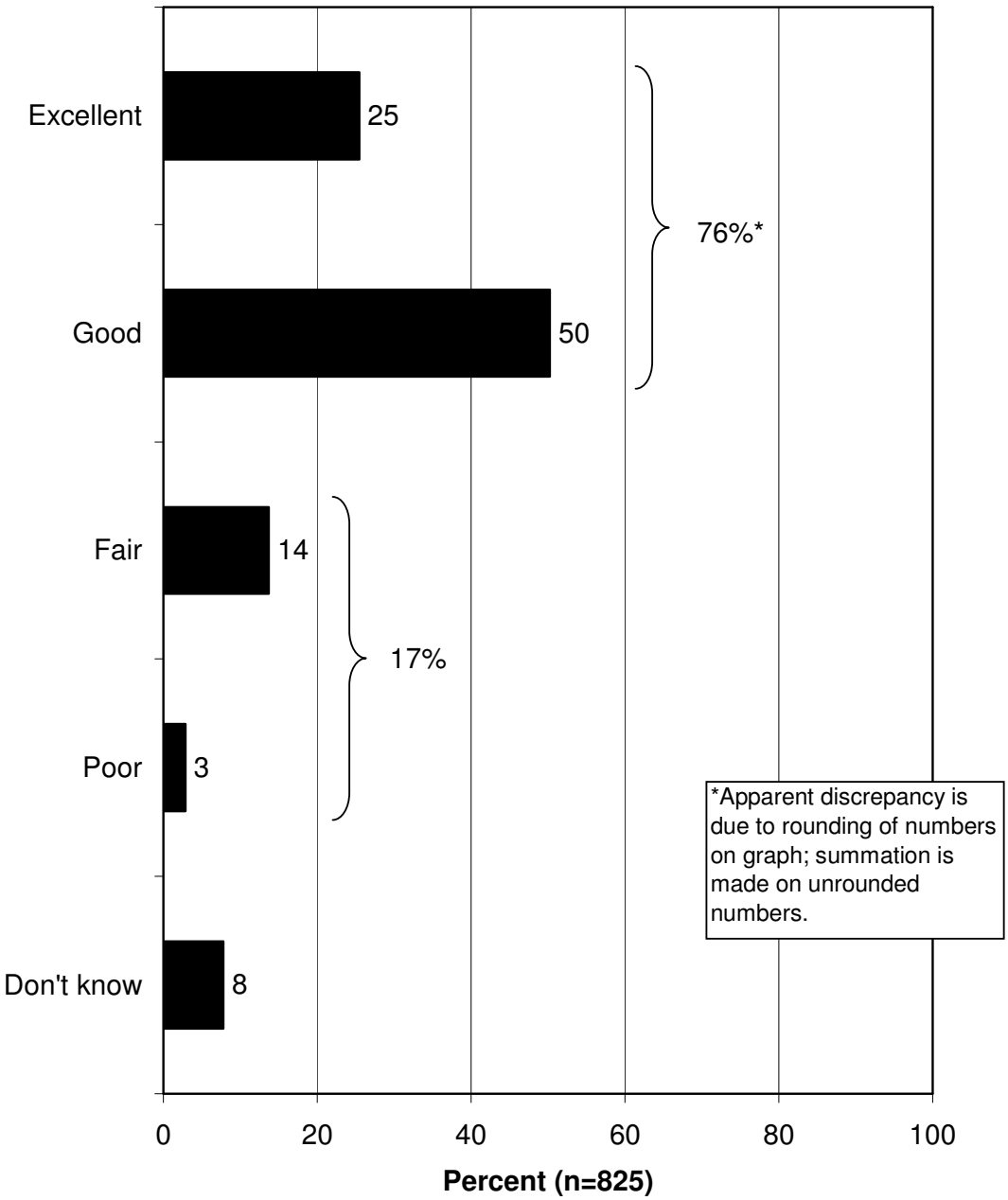


Q102. How would you rate the Iowa Department of Natural Resources in managing fisheries and fishing?



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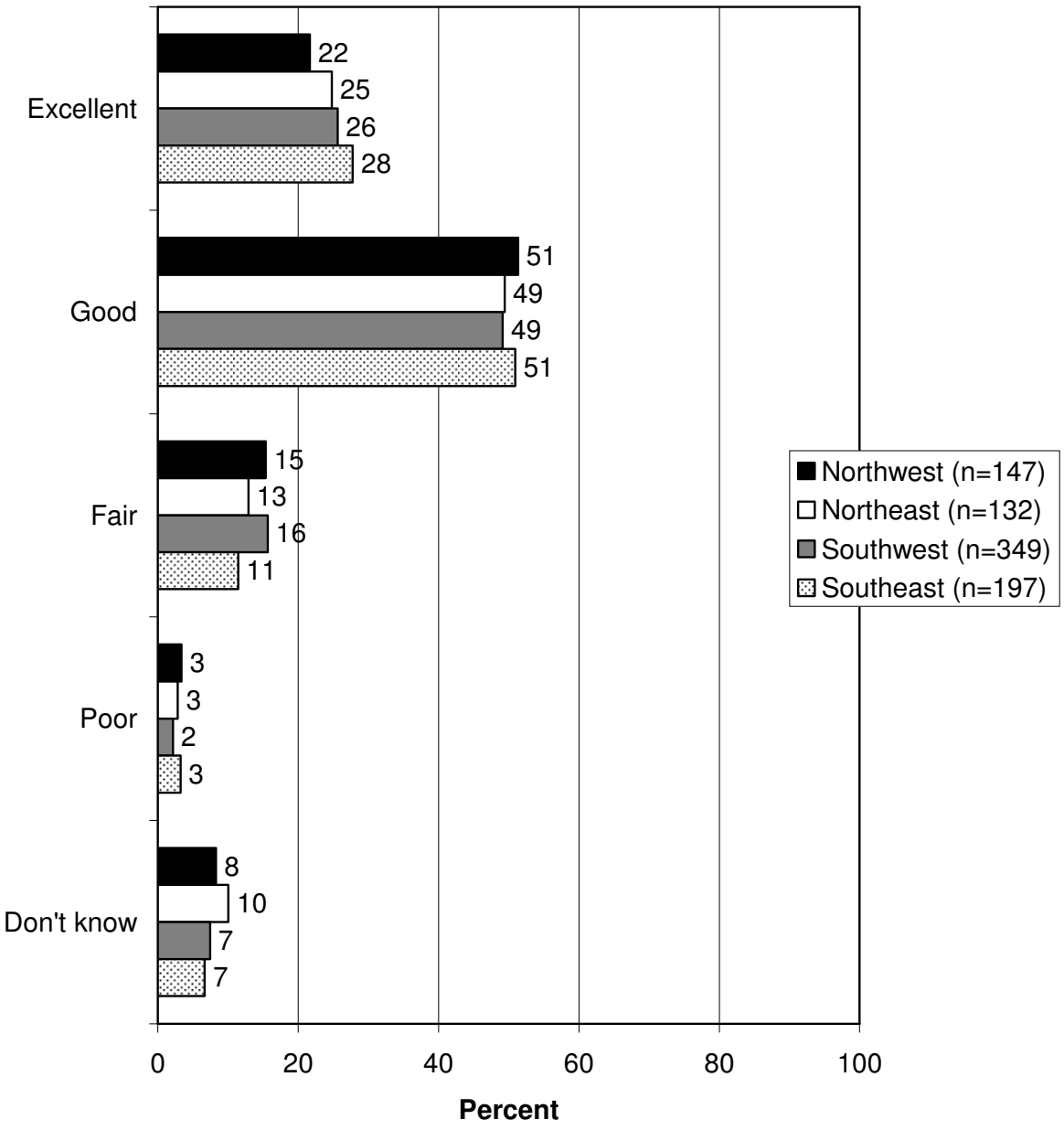

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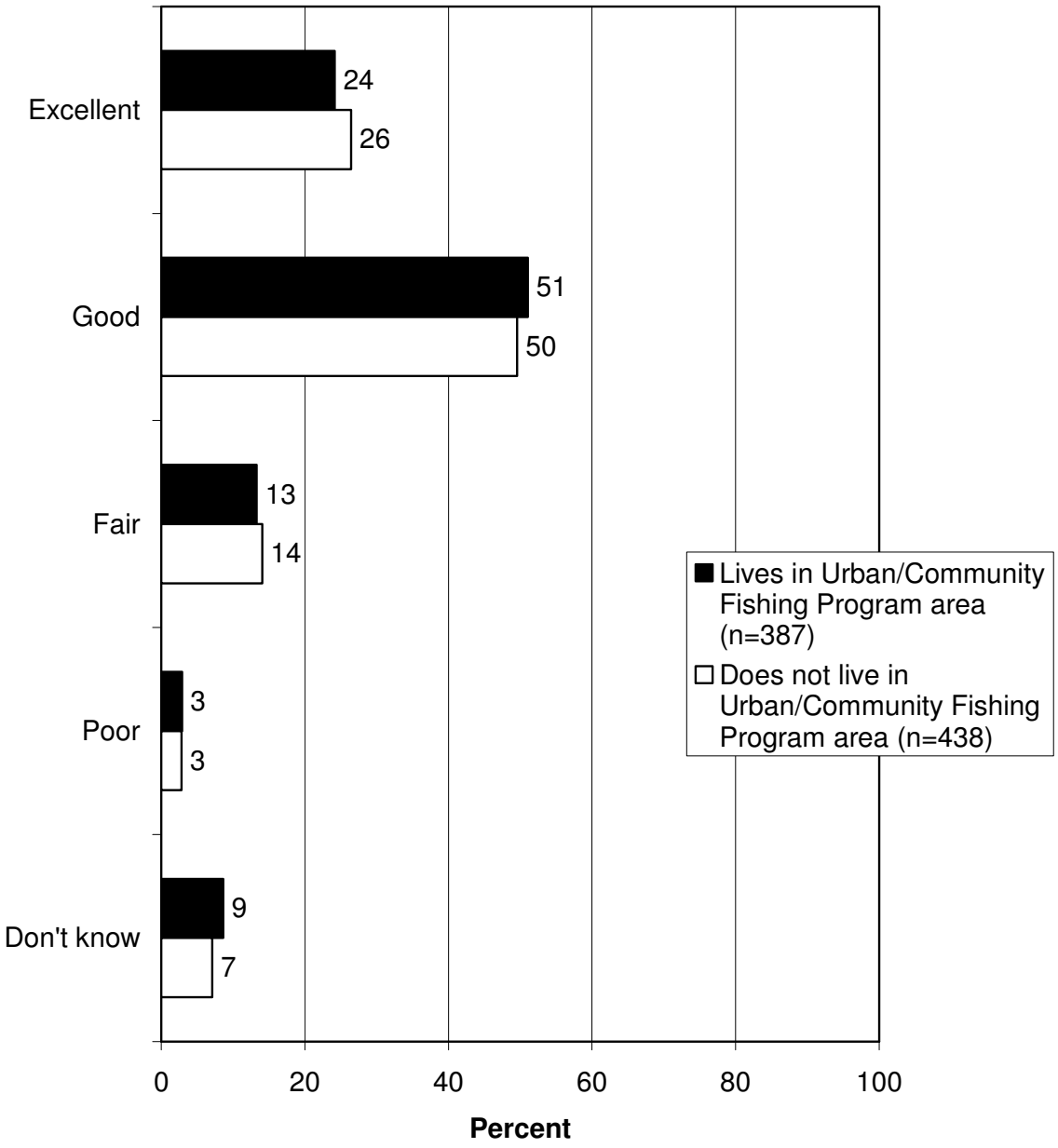

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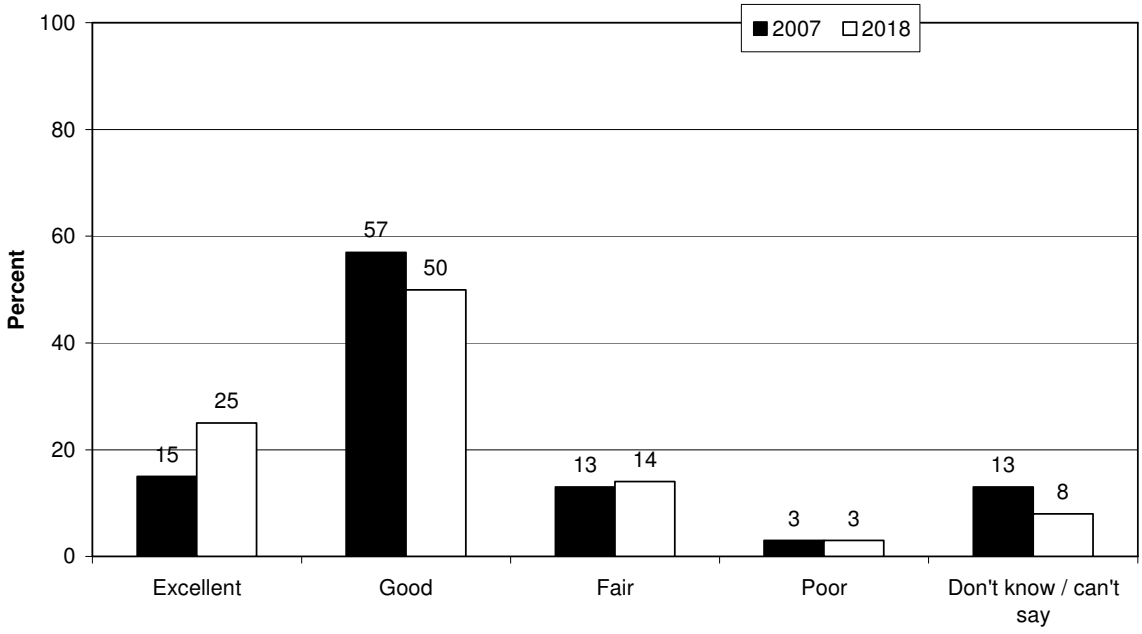

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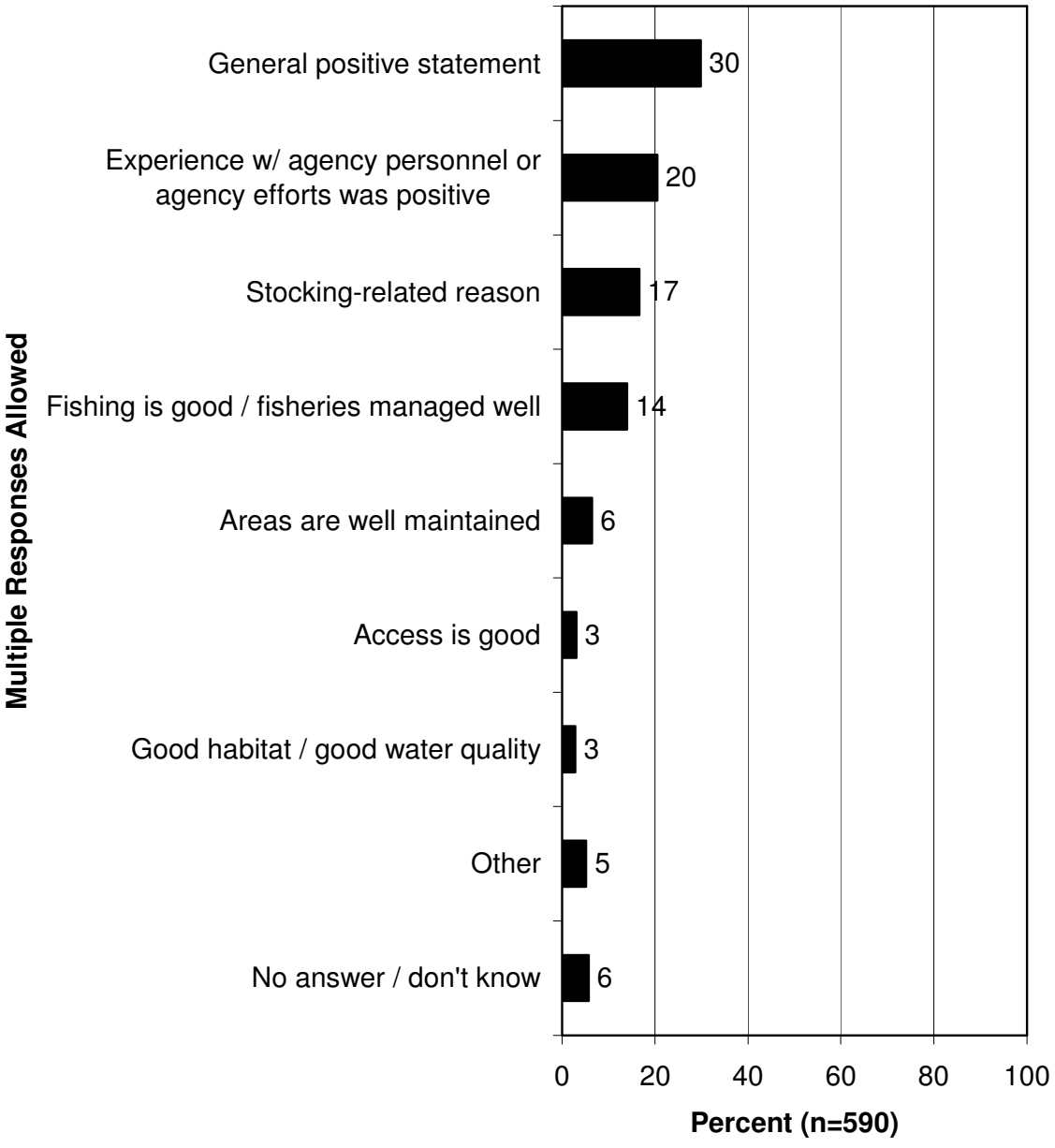

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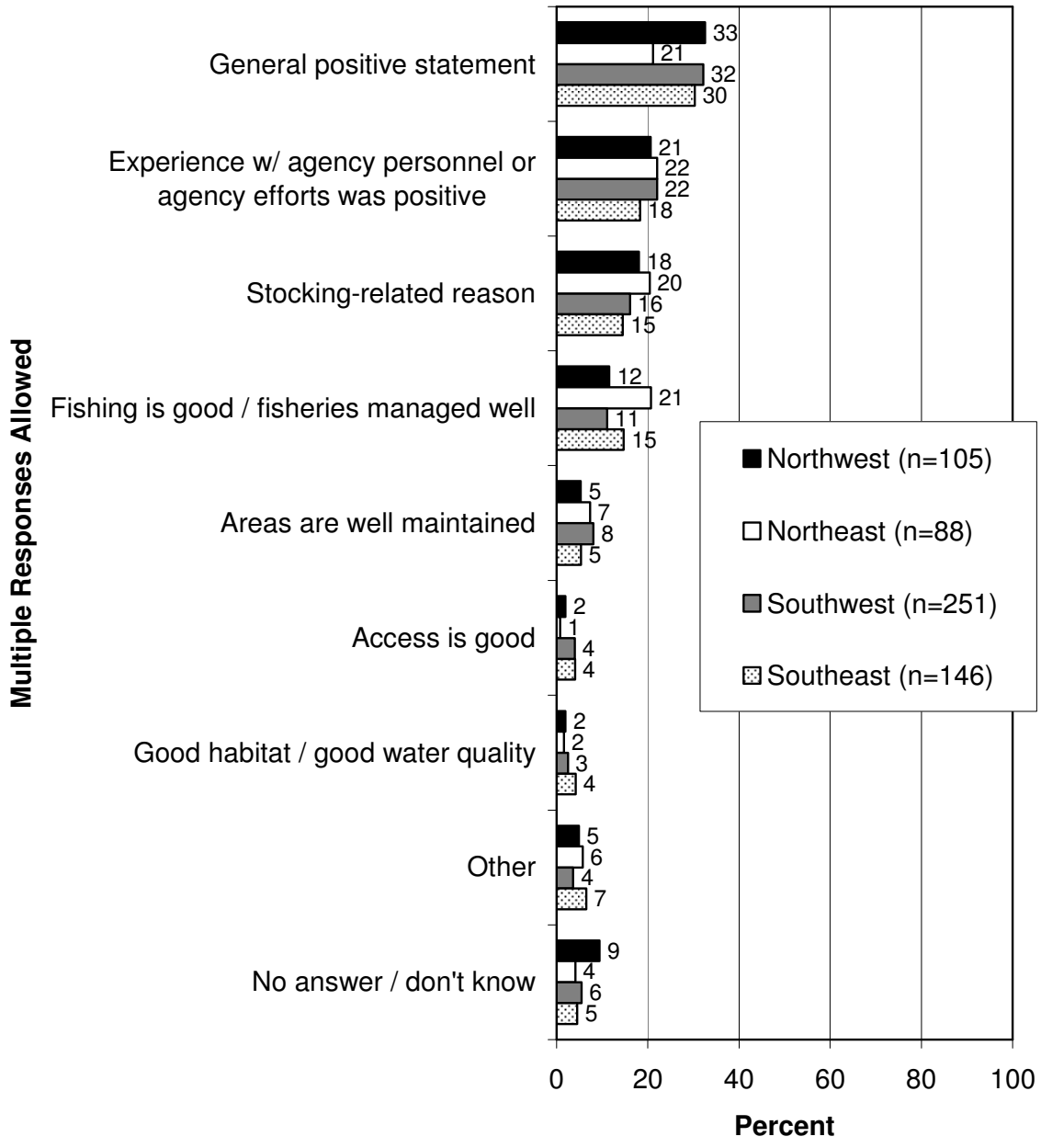

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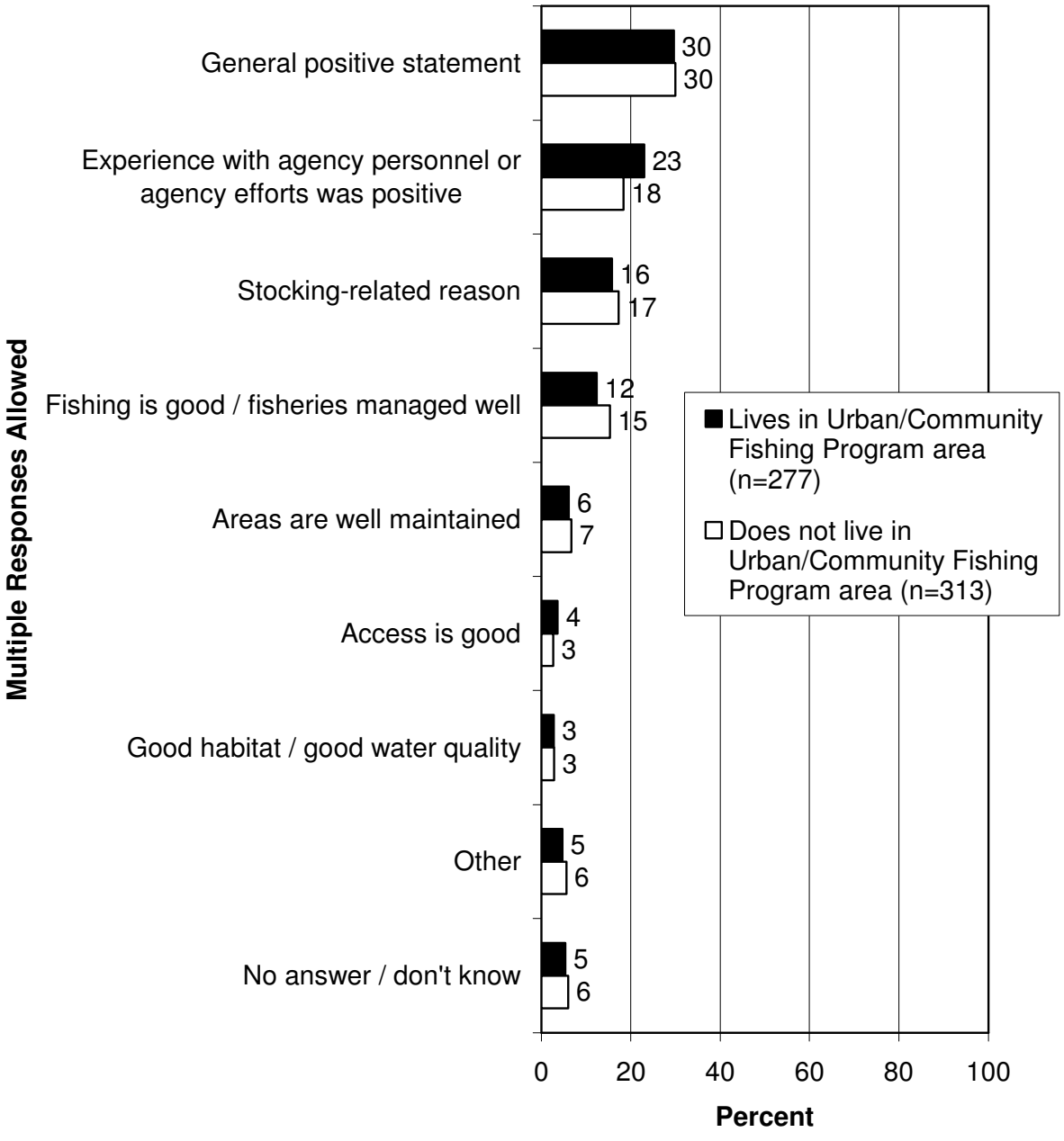

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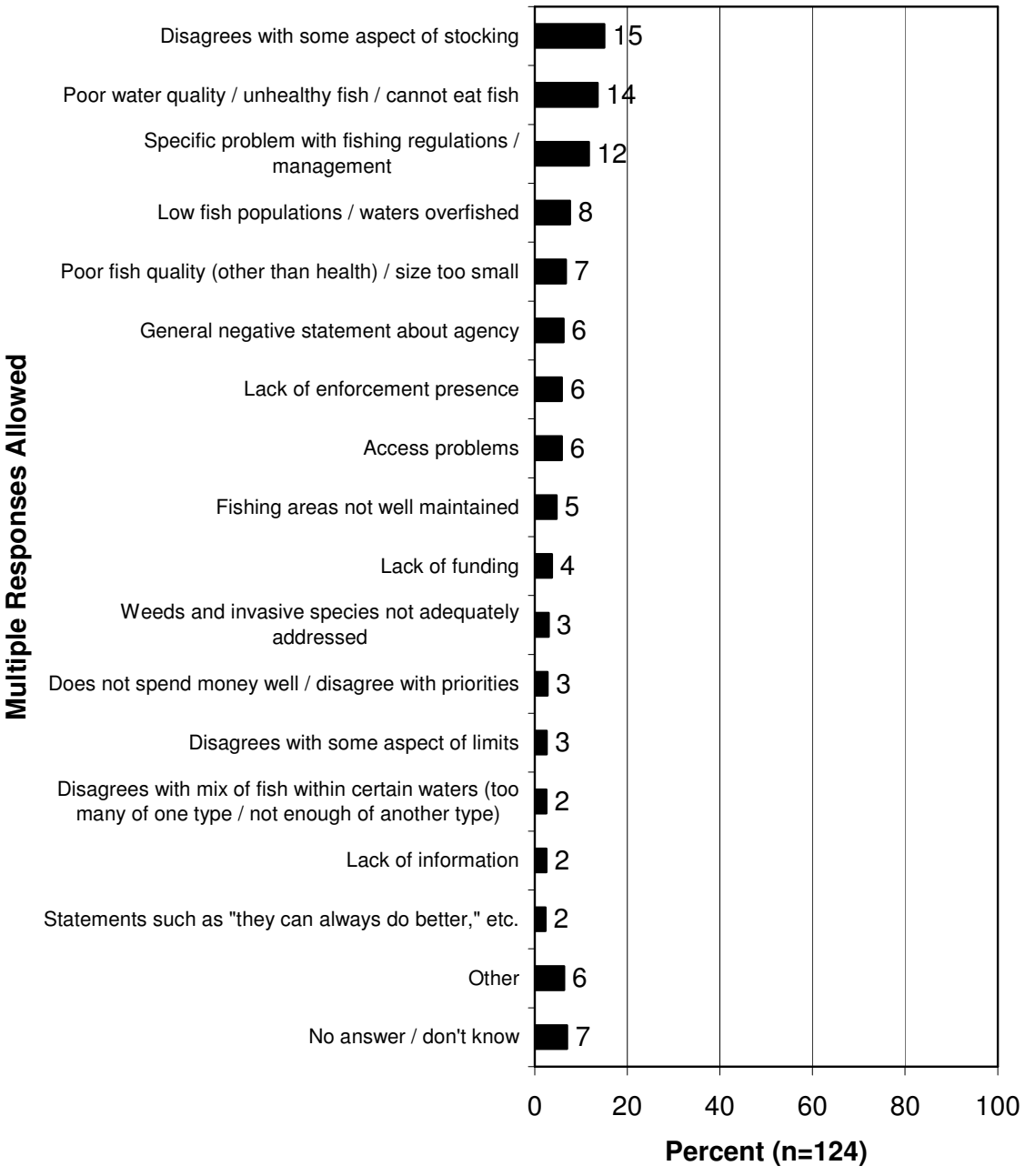

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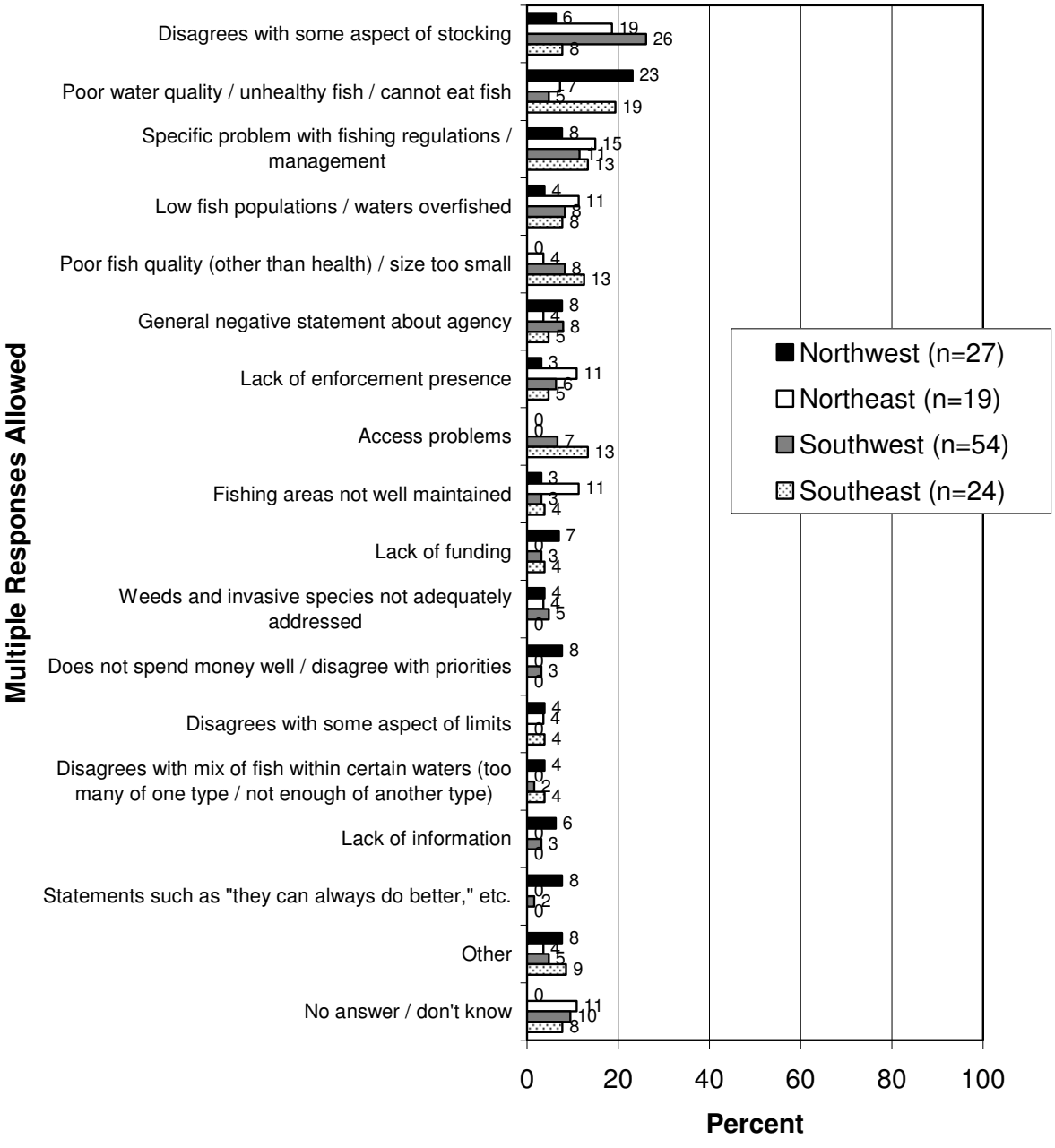

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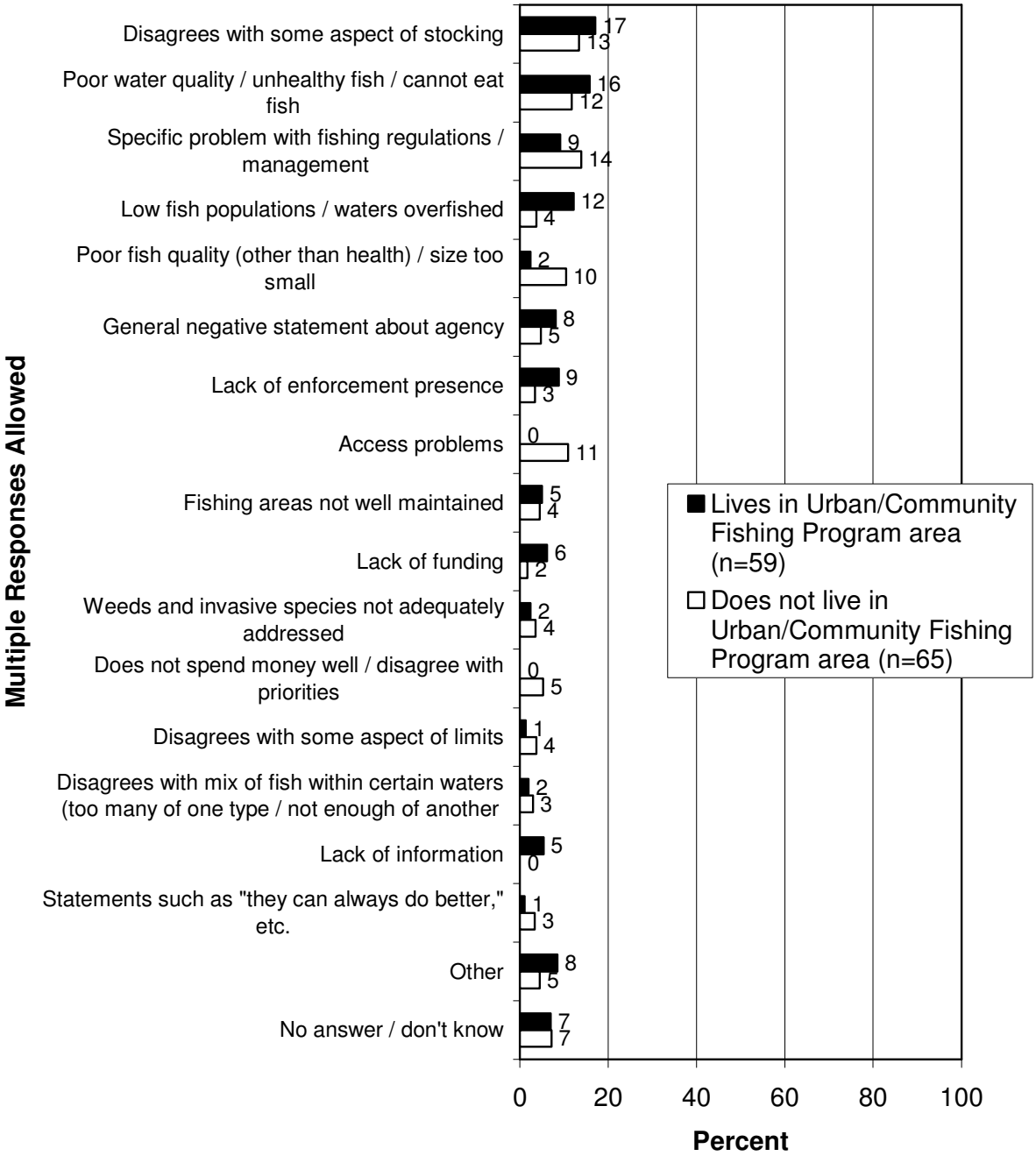

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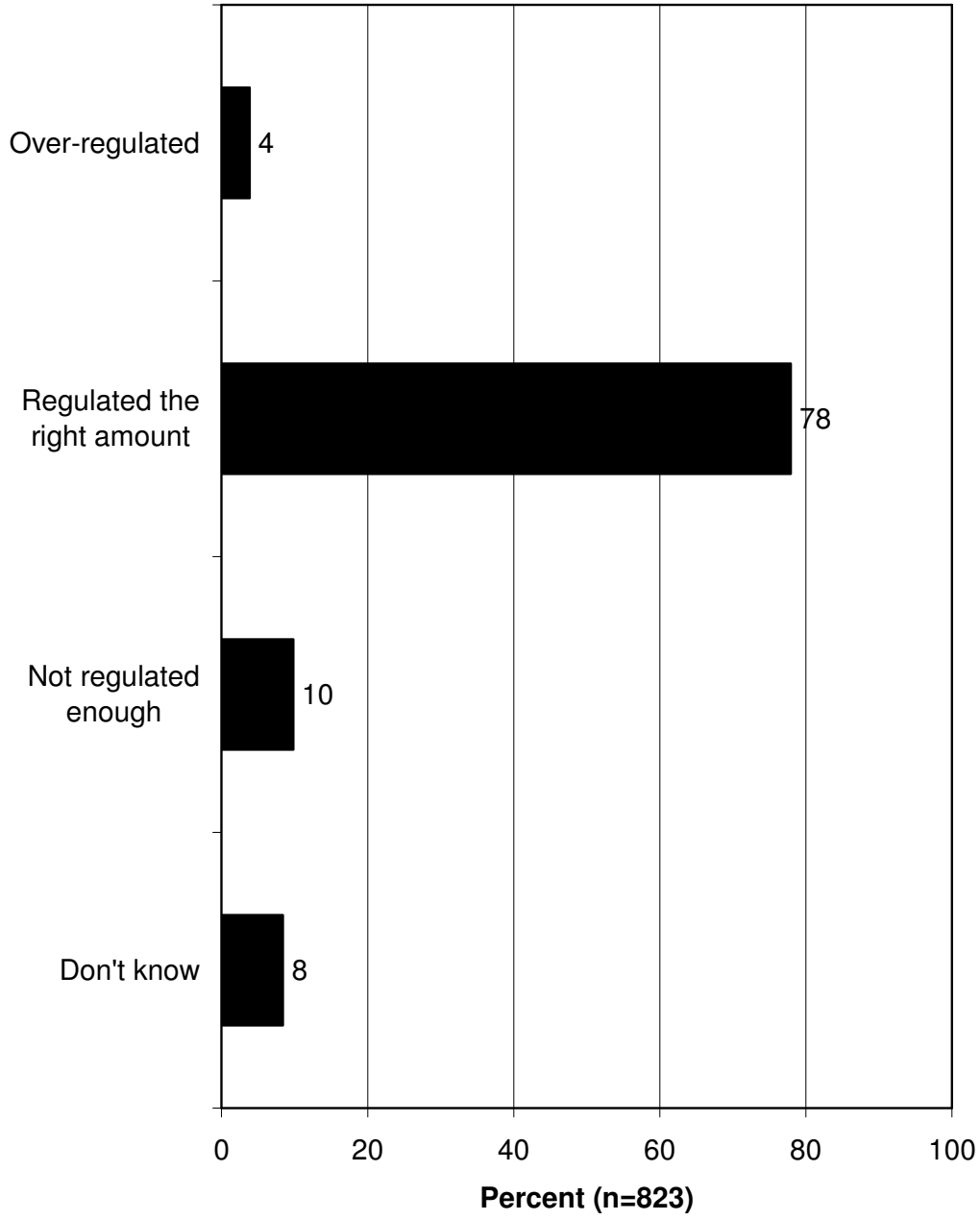

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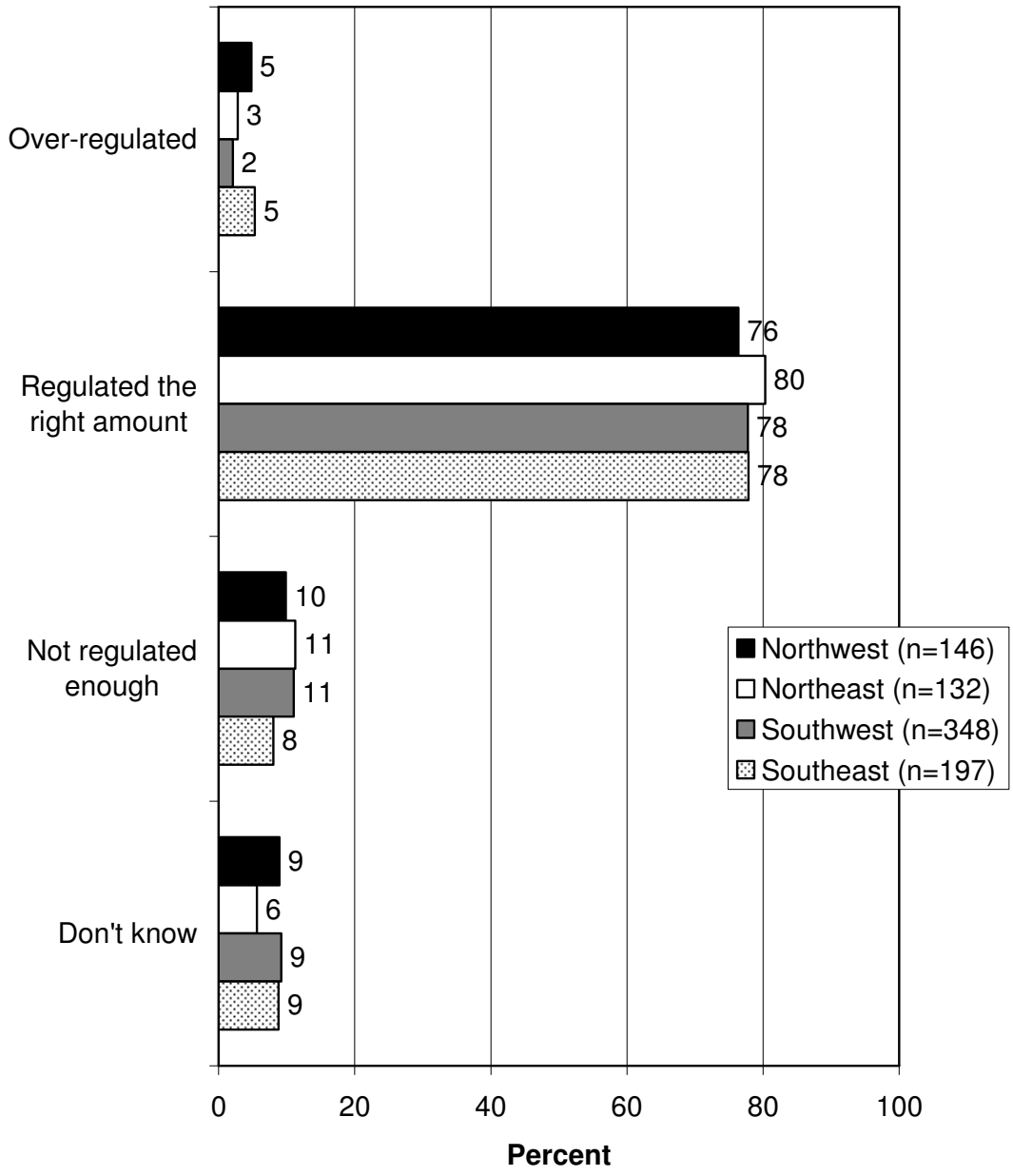

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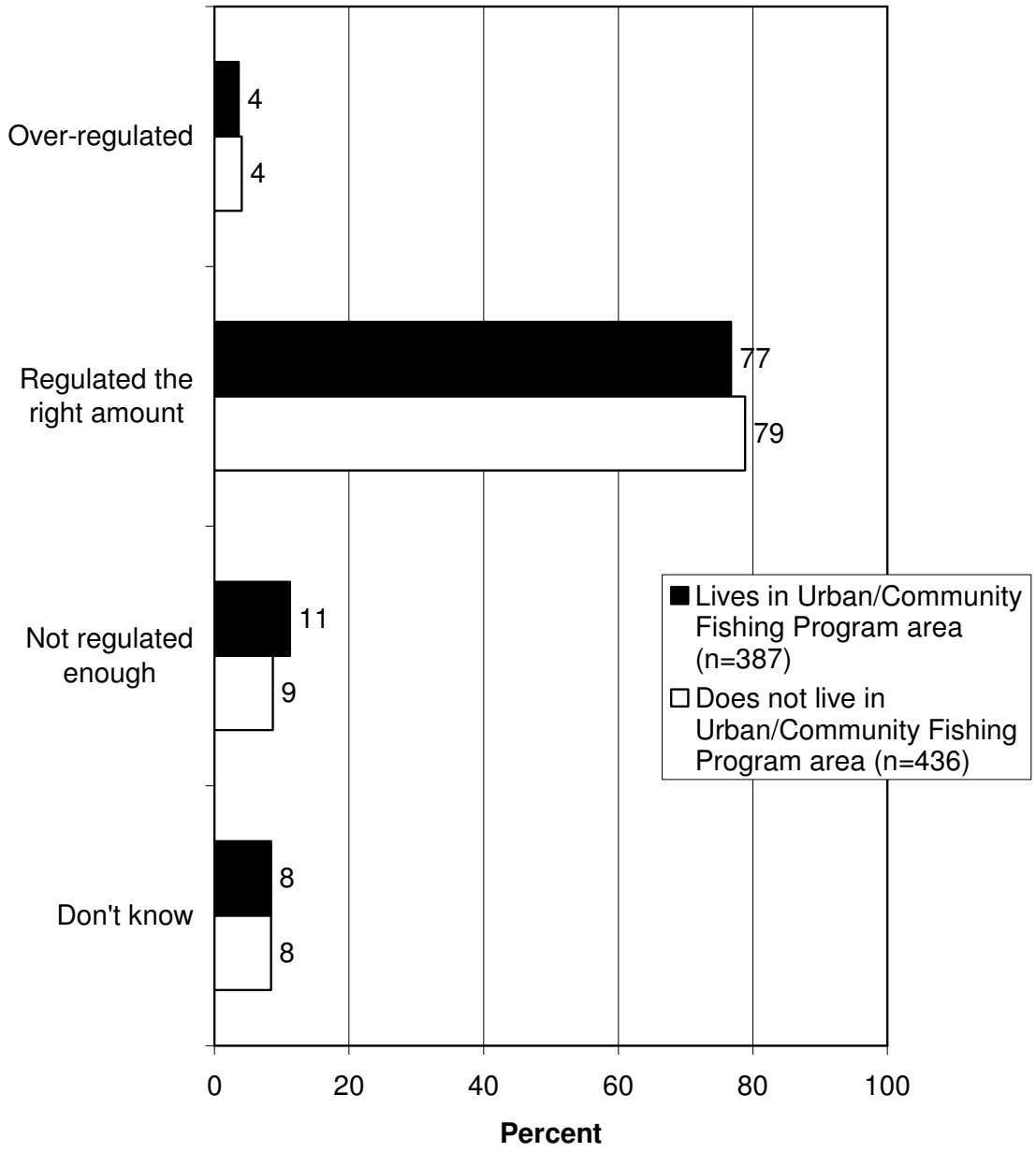

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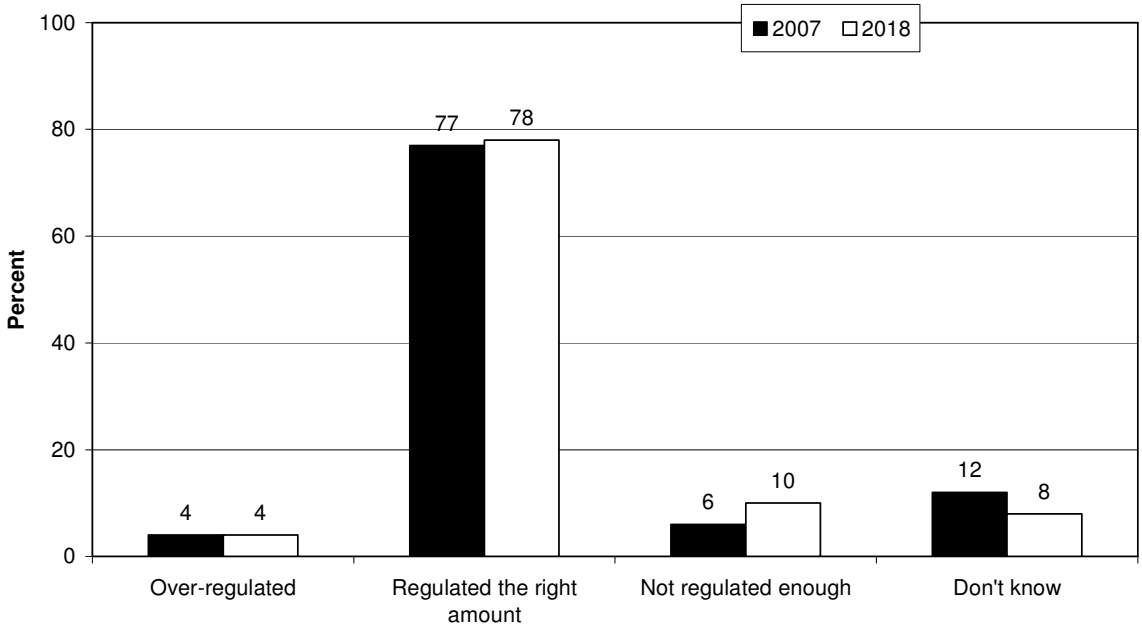

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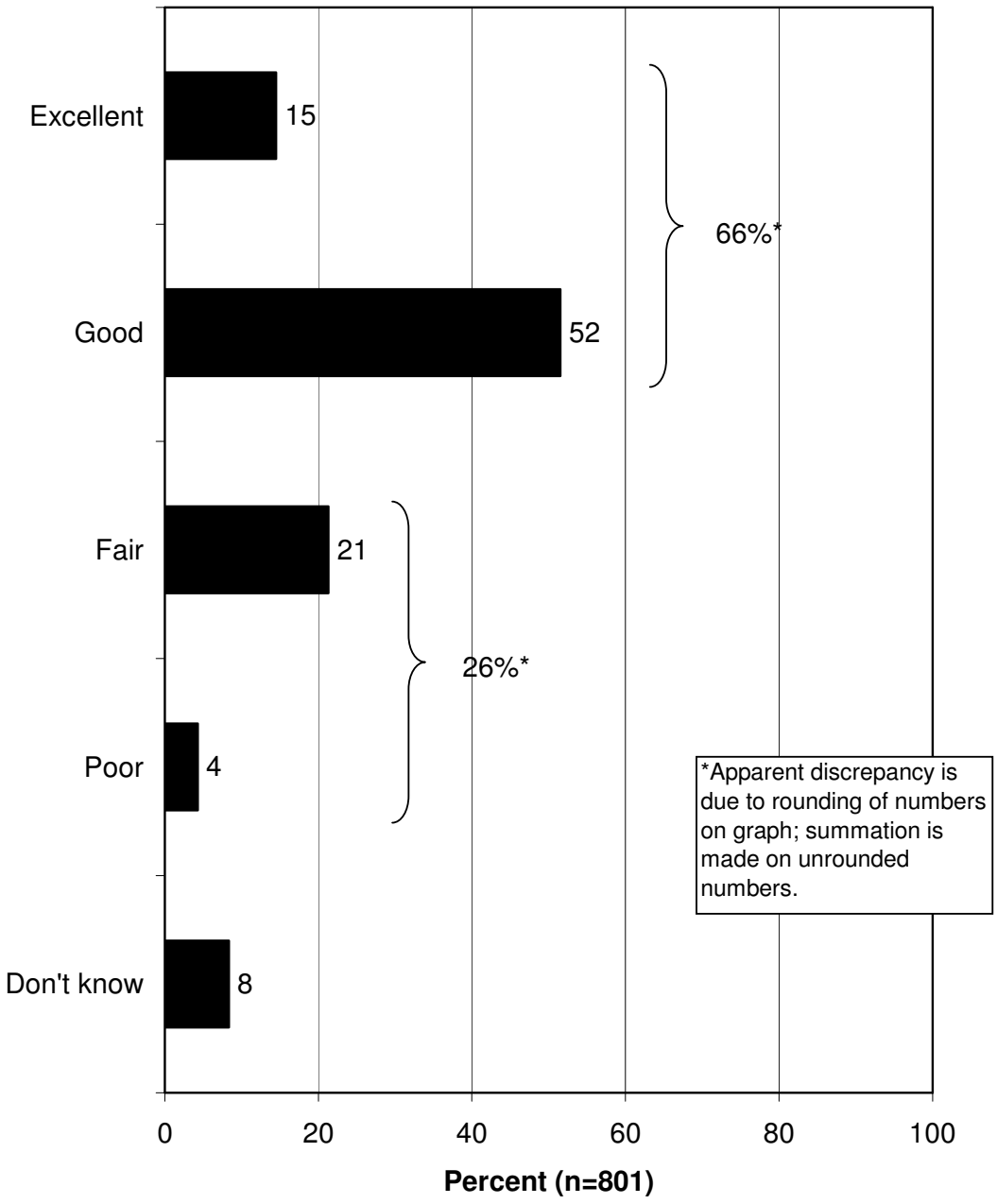

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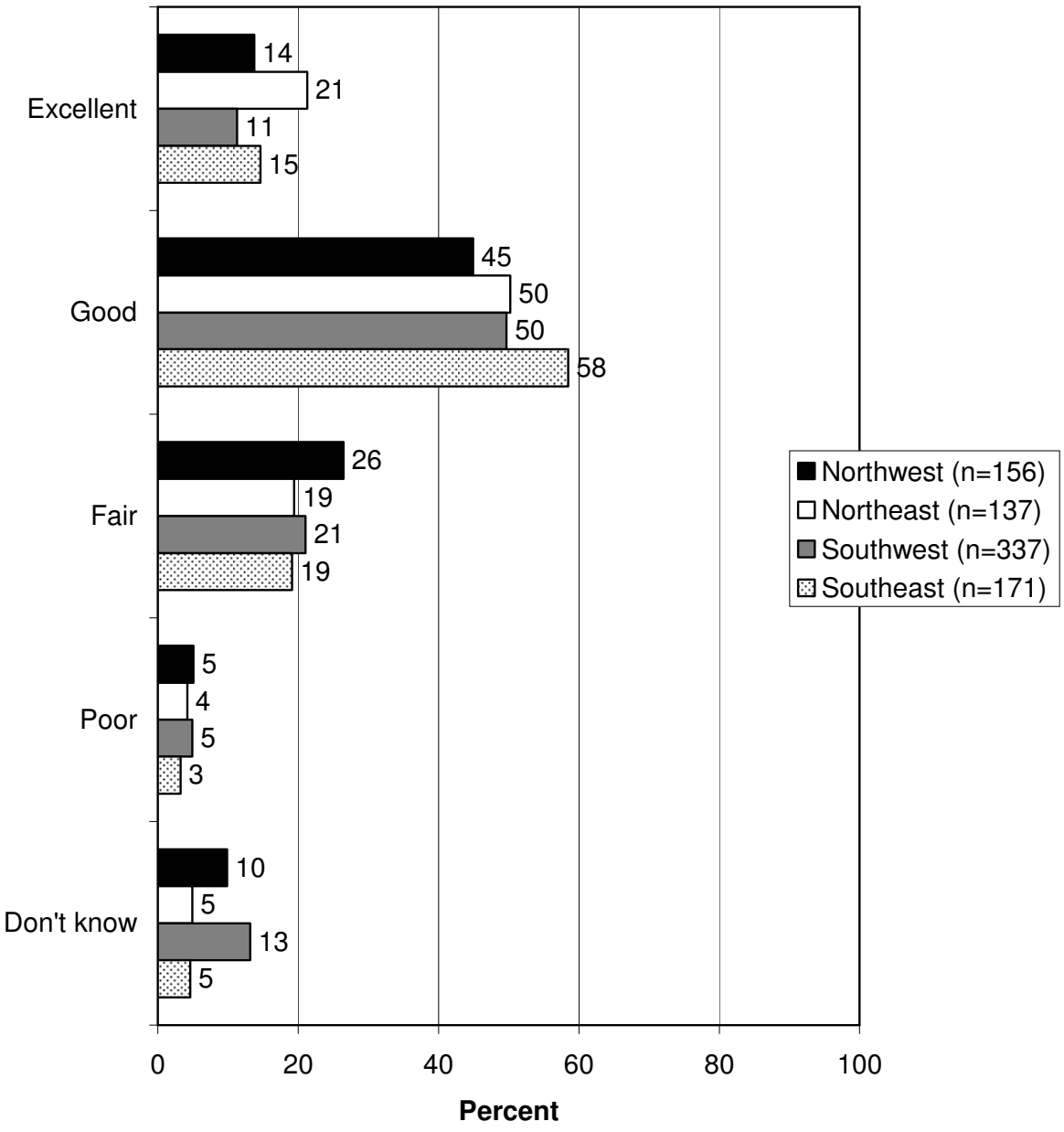

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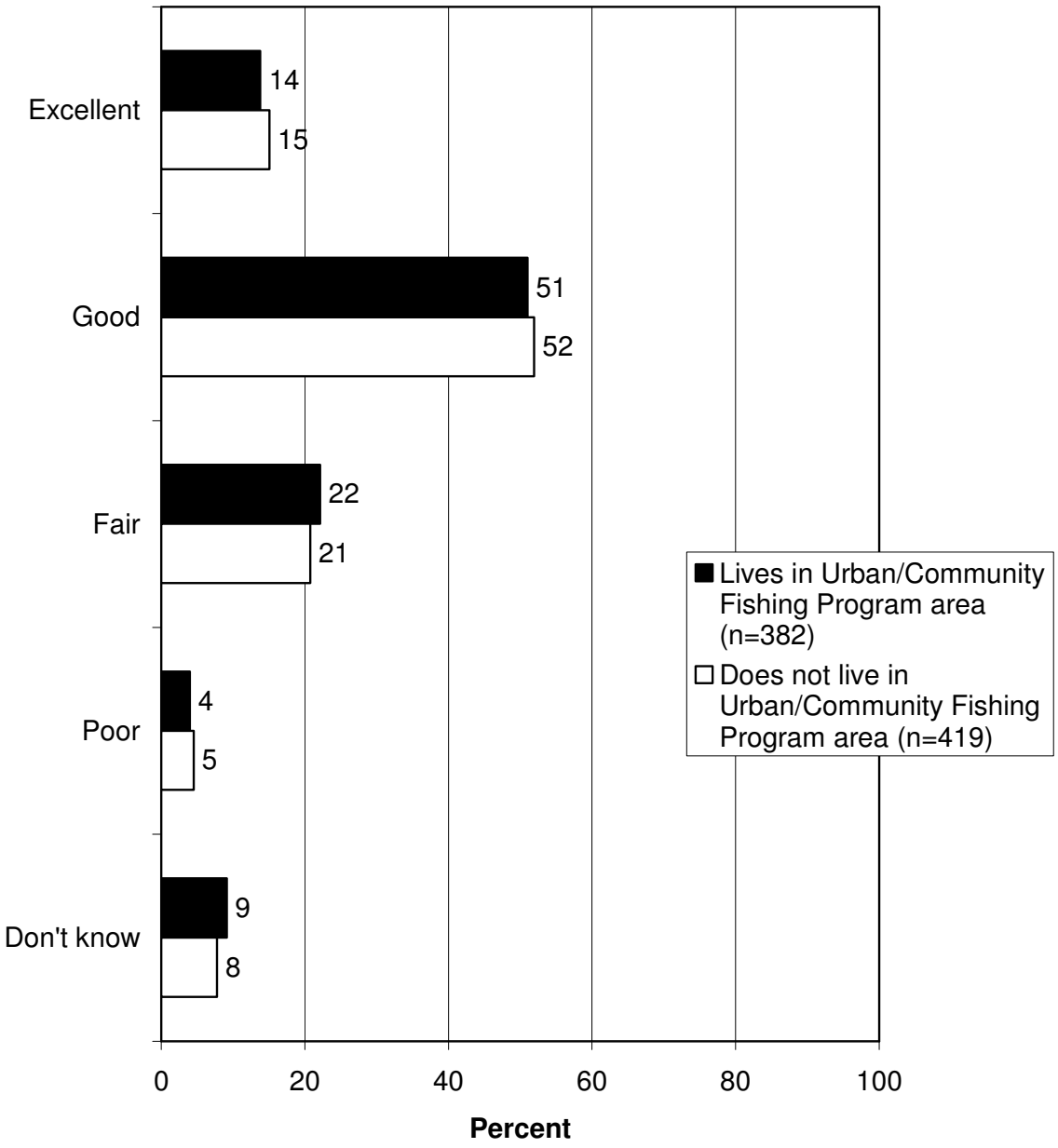

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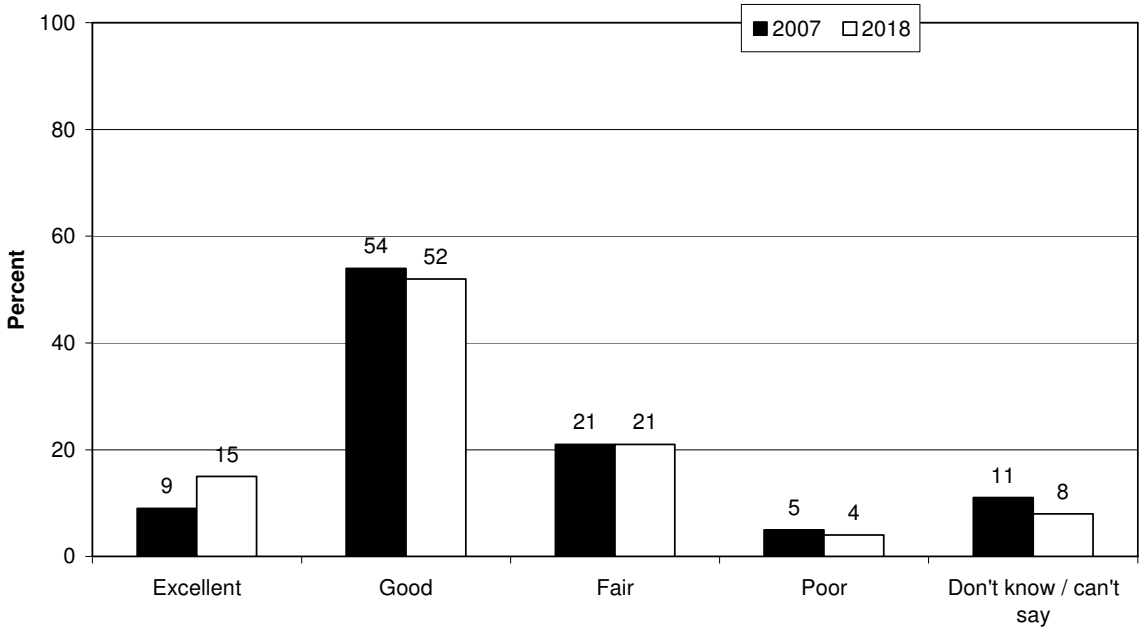

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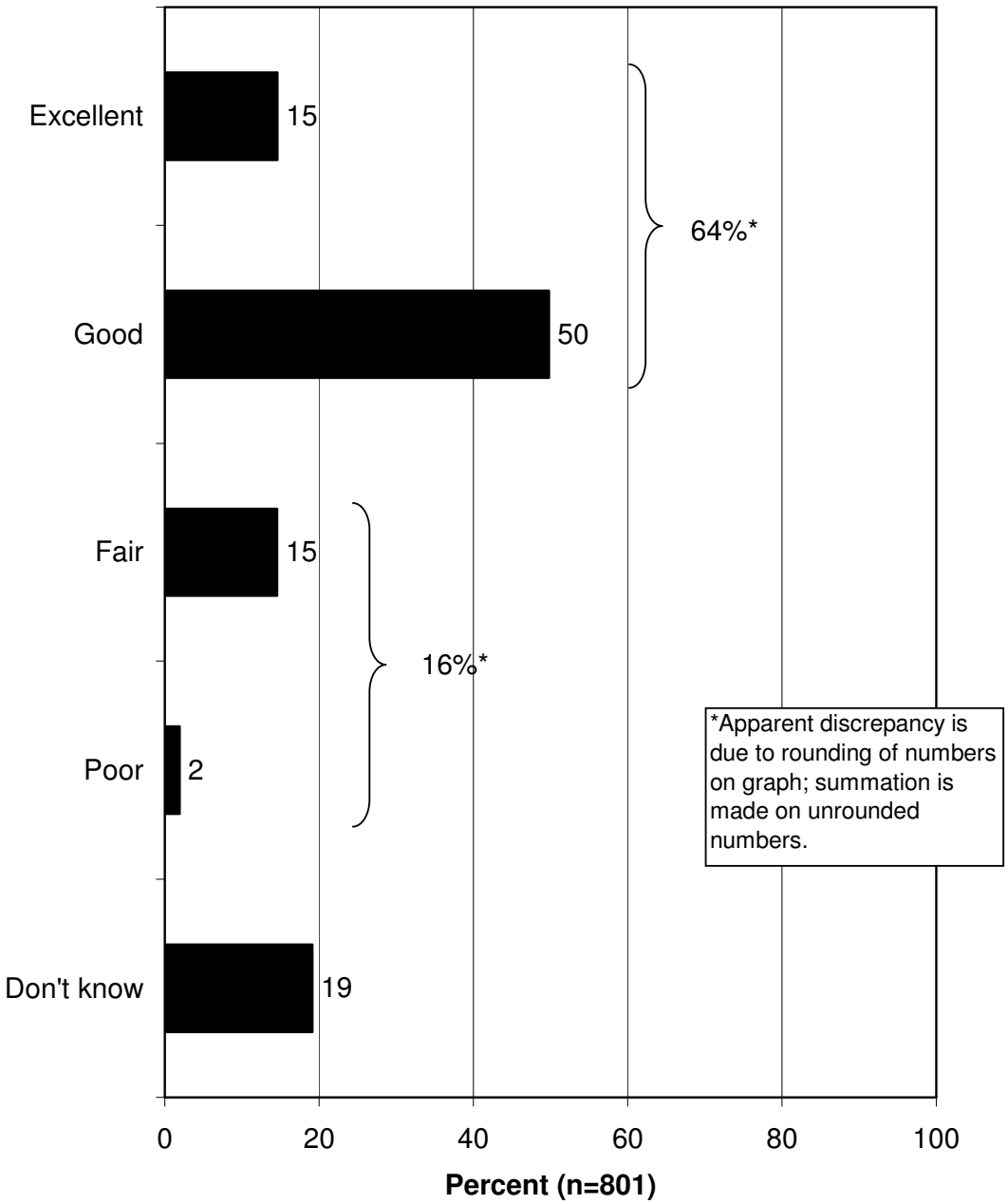

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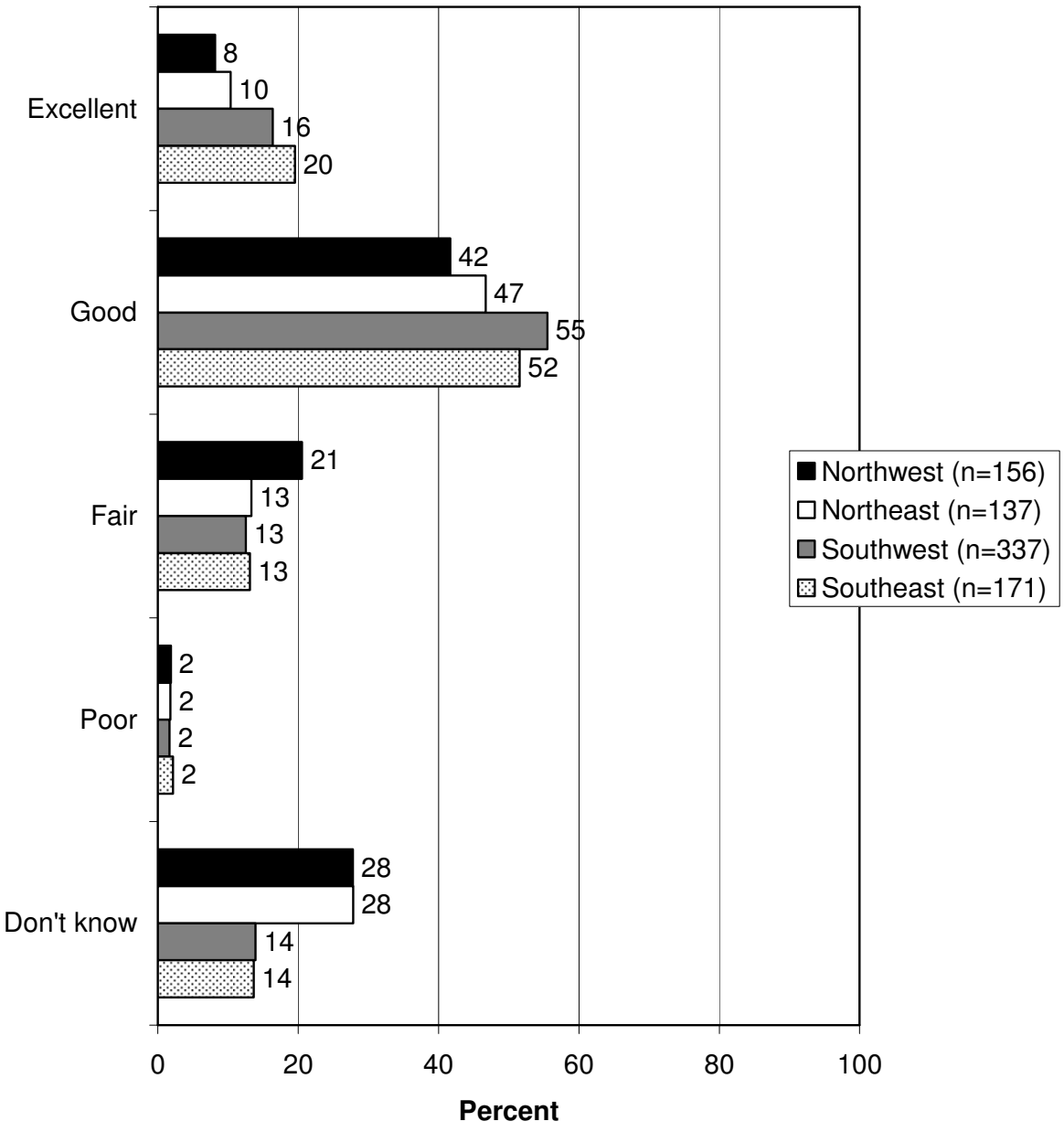

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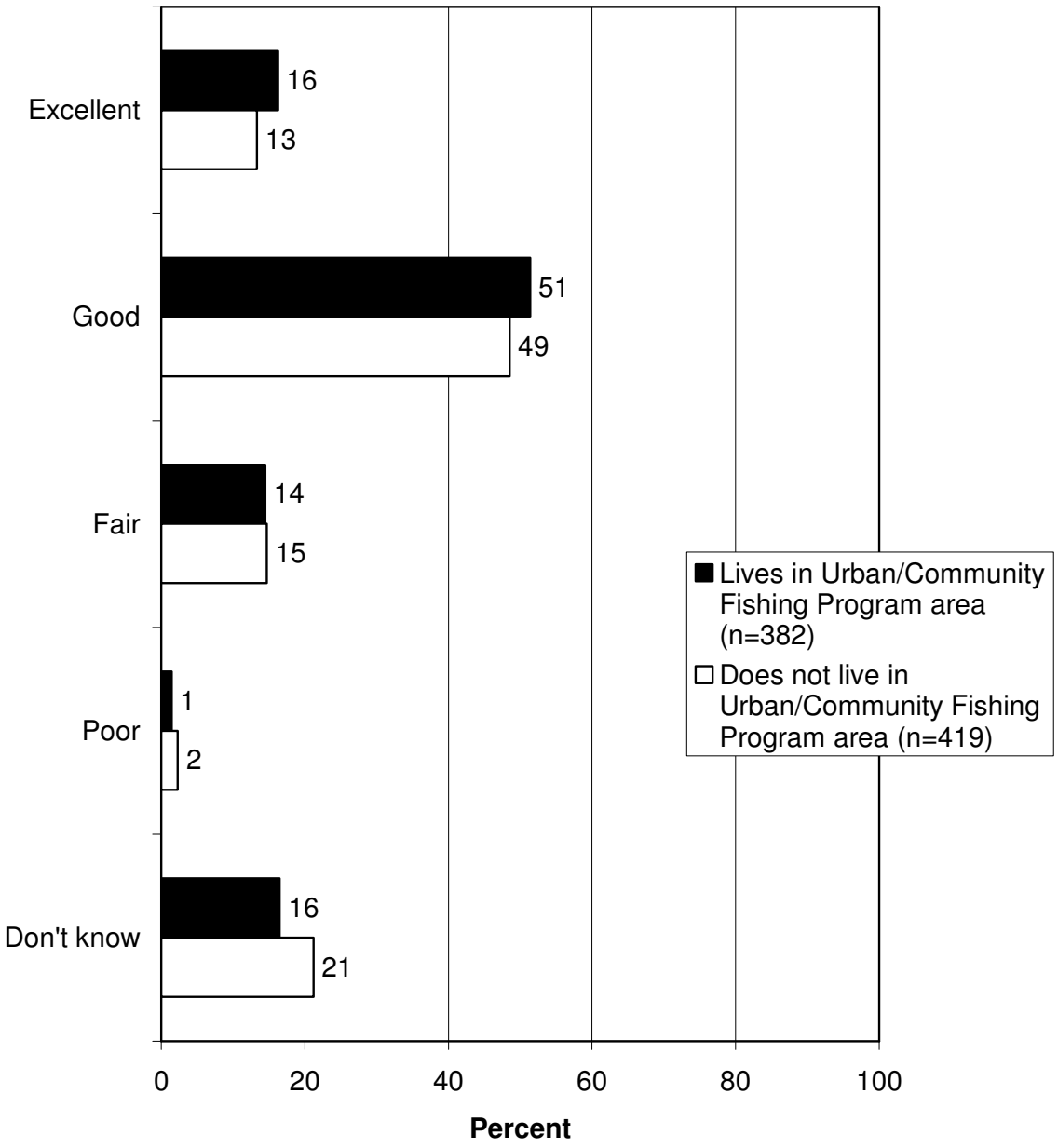

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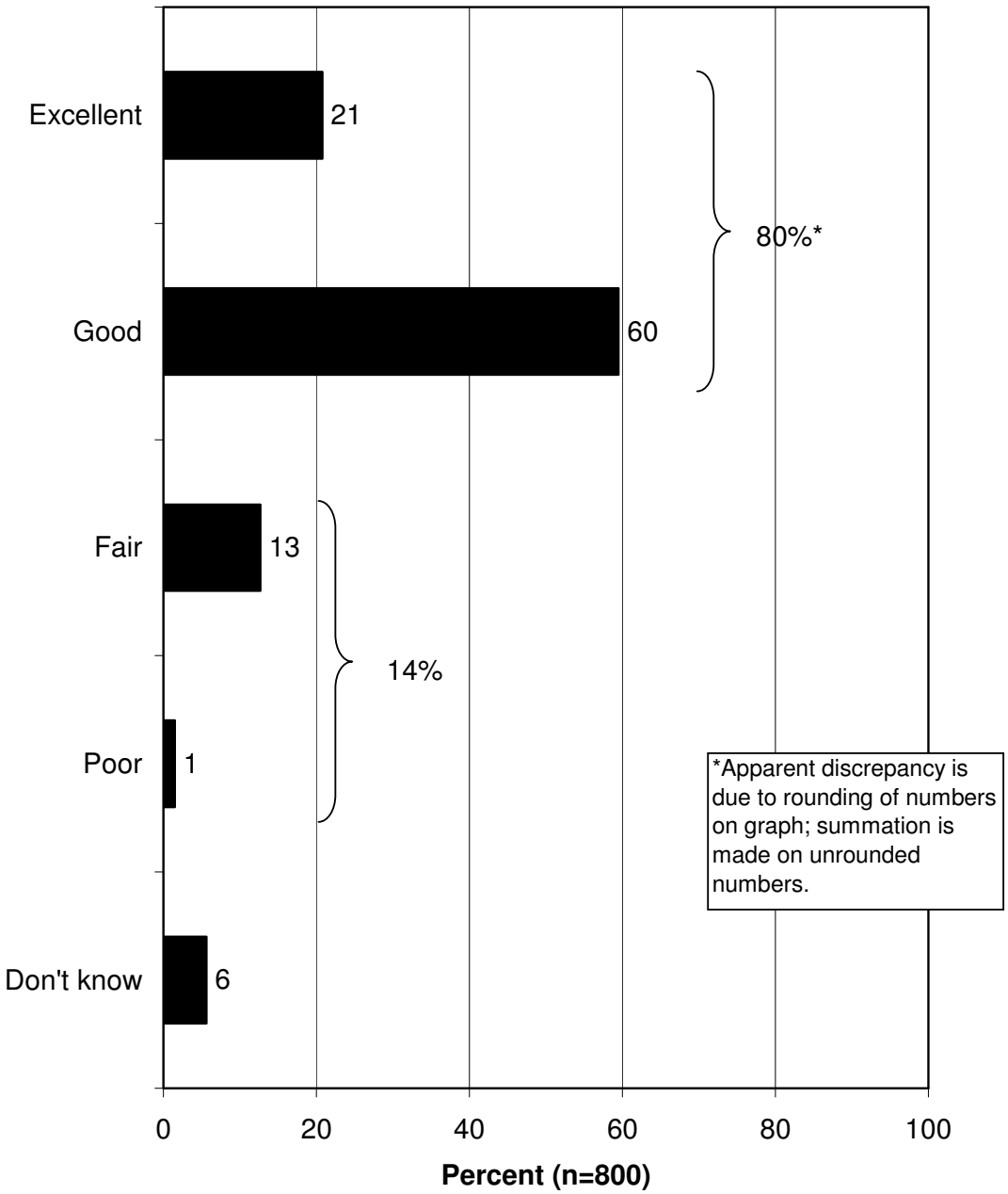

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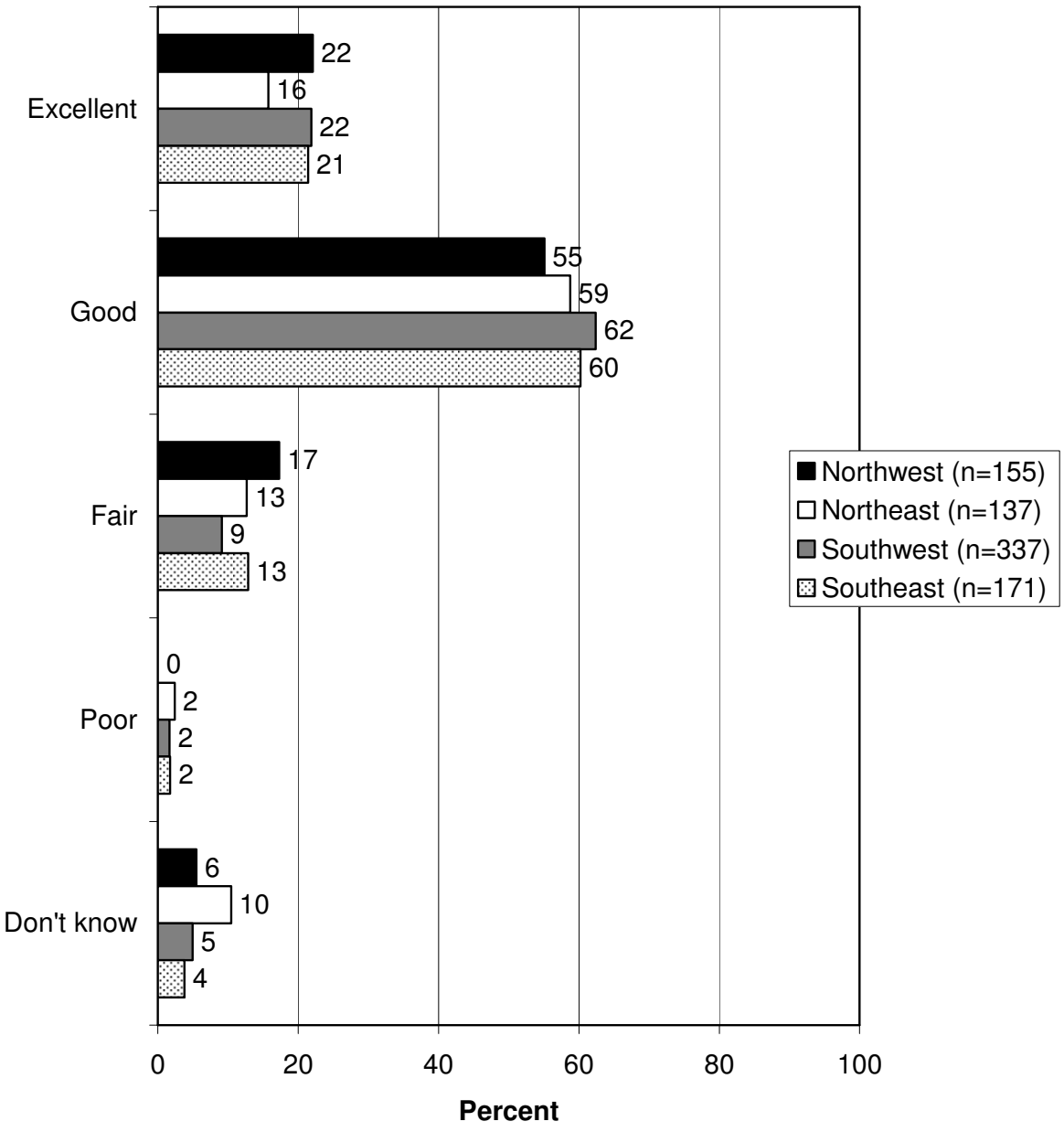

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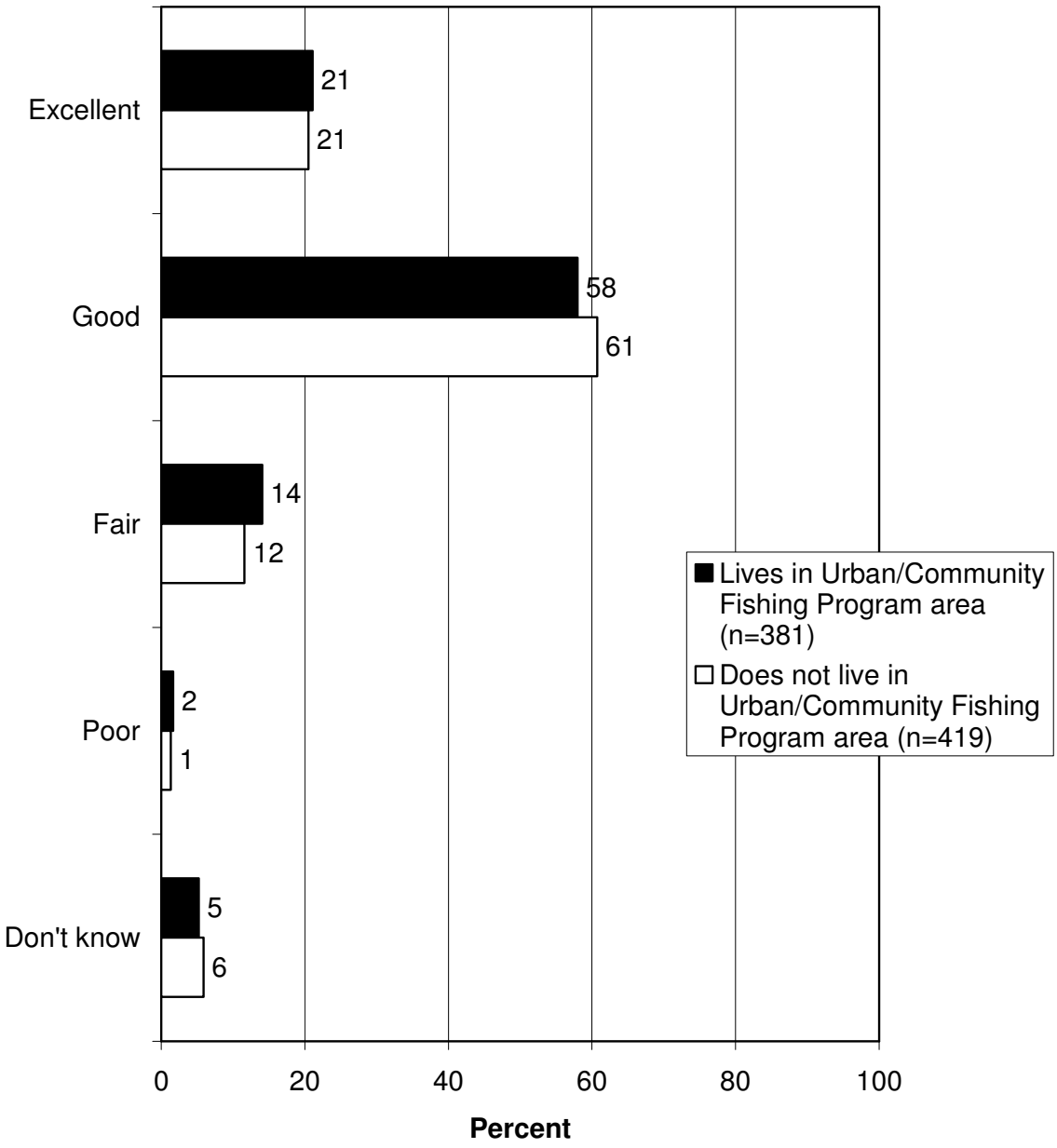

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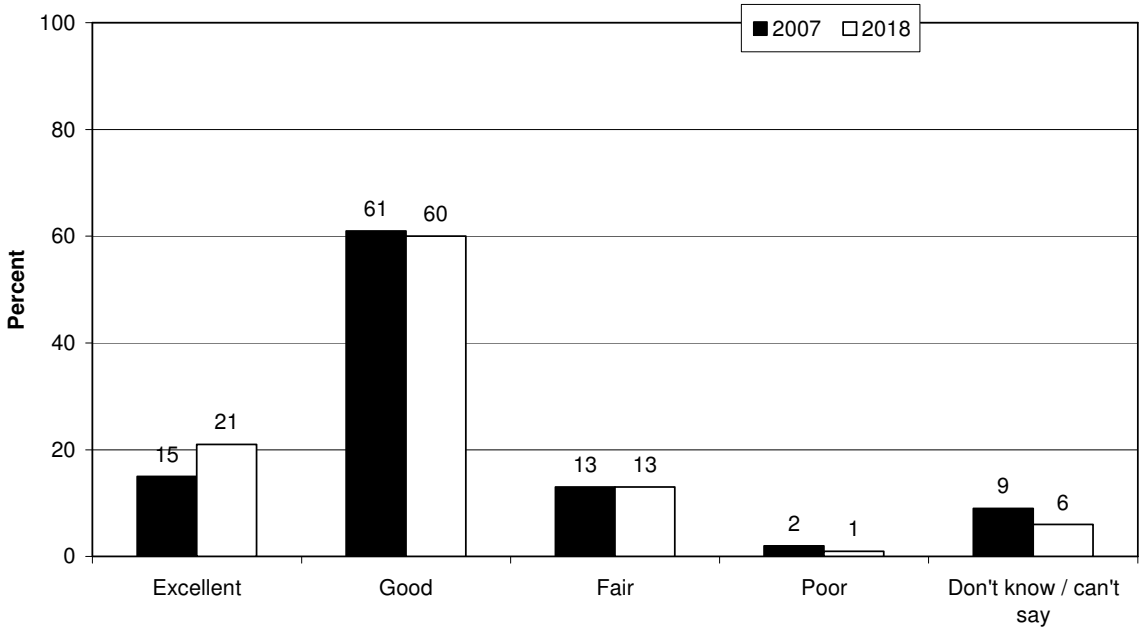

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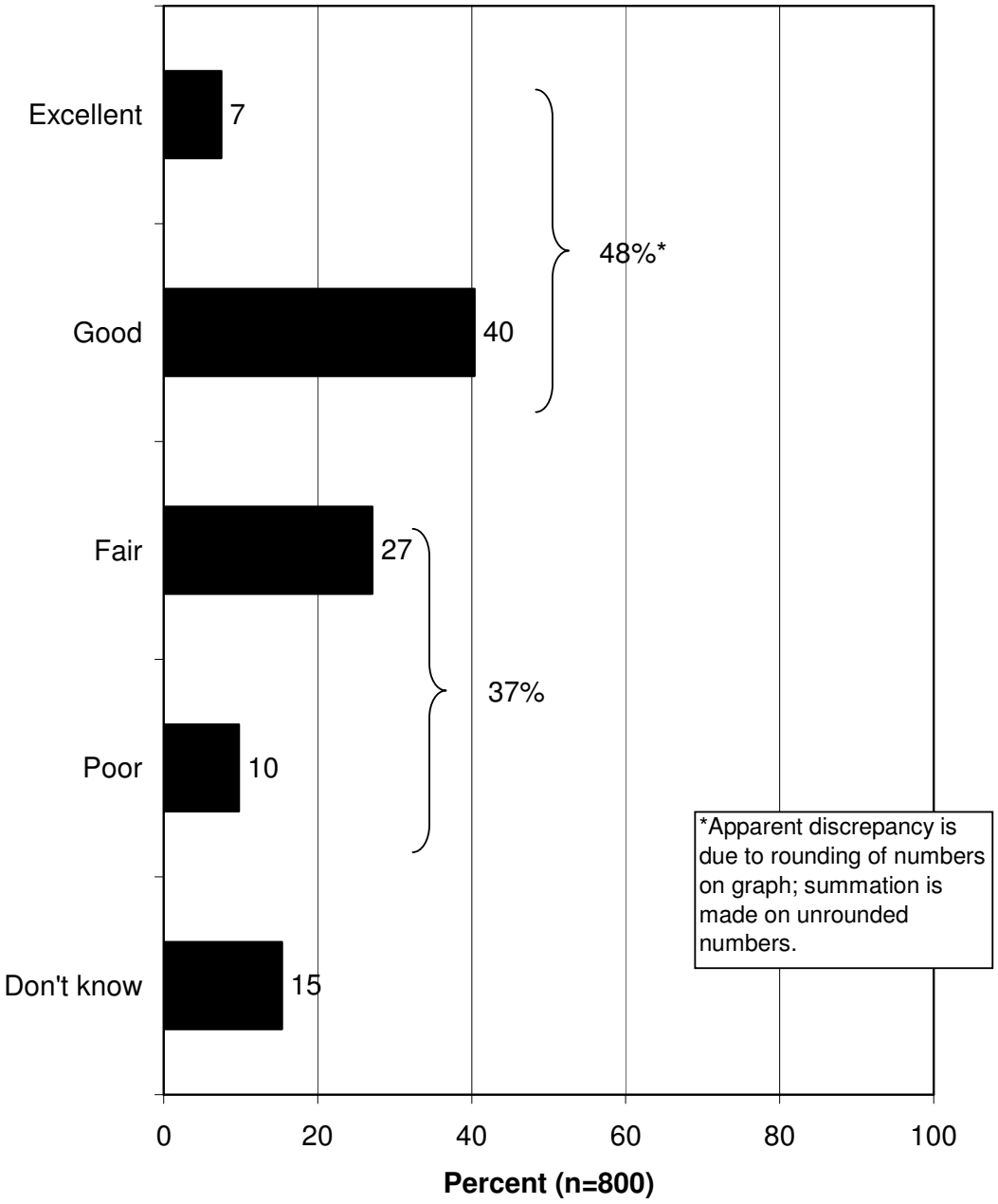

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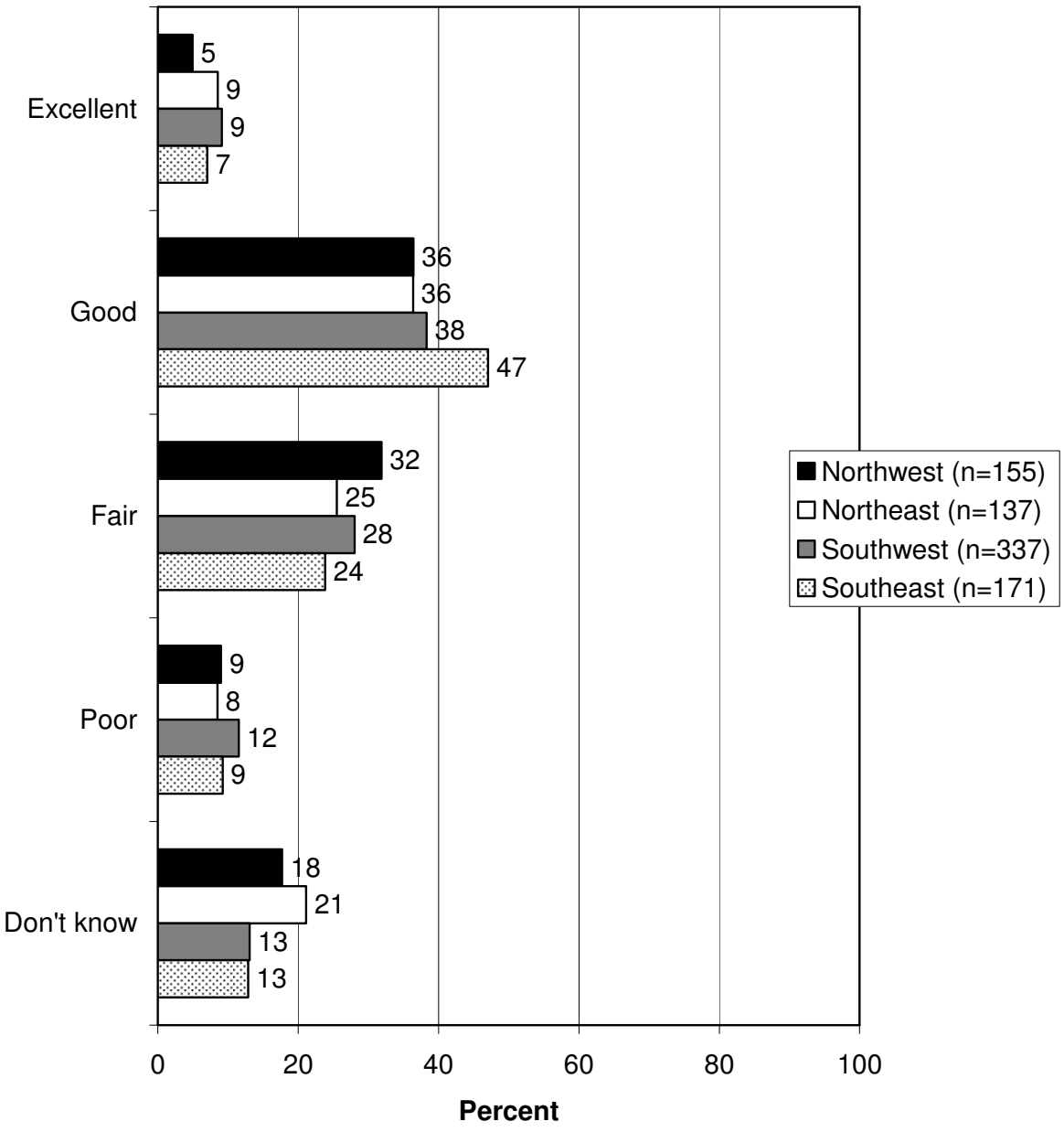

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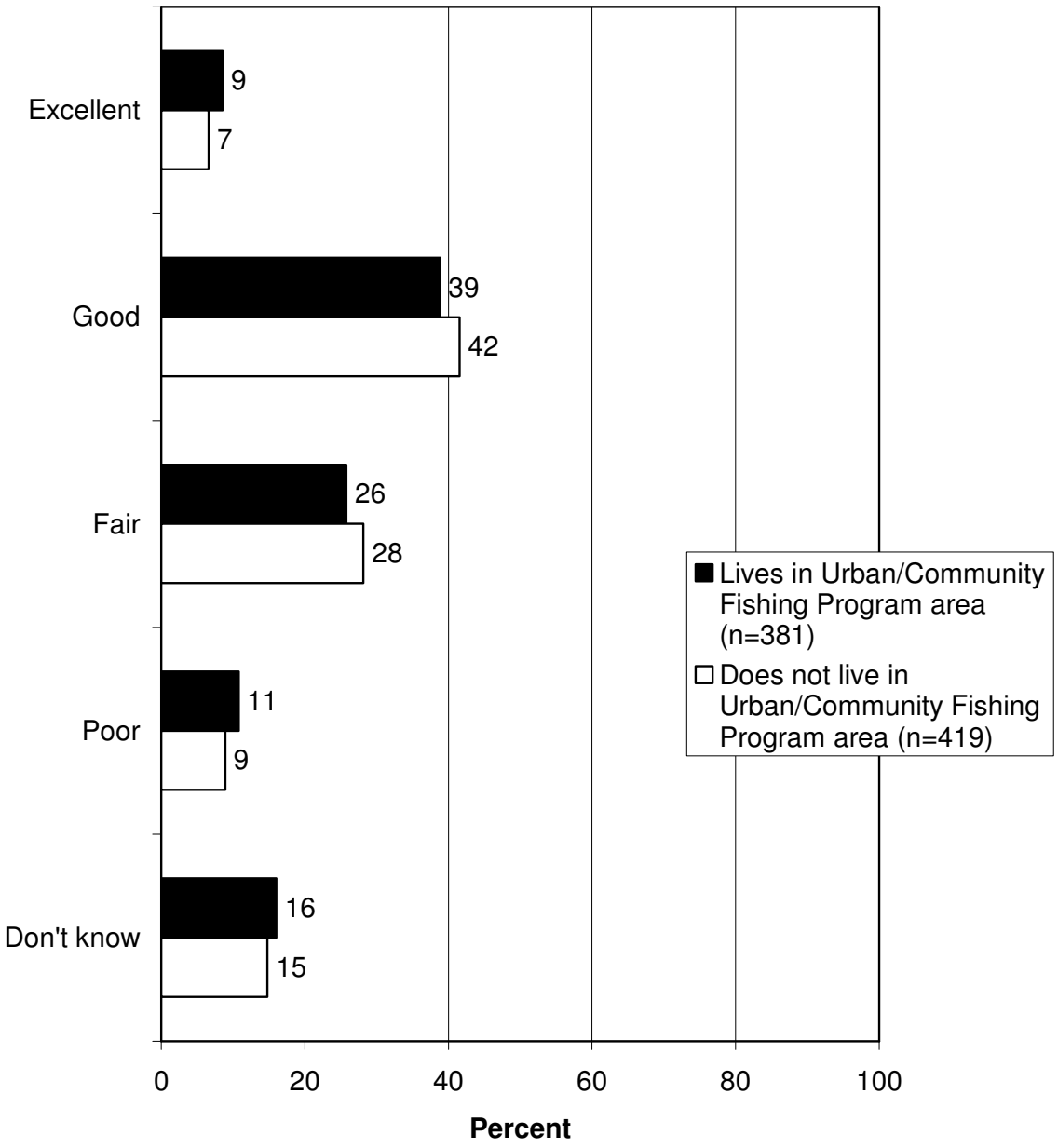

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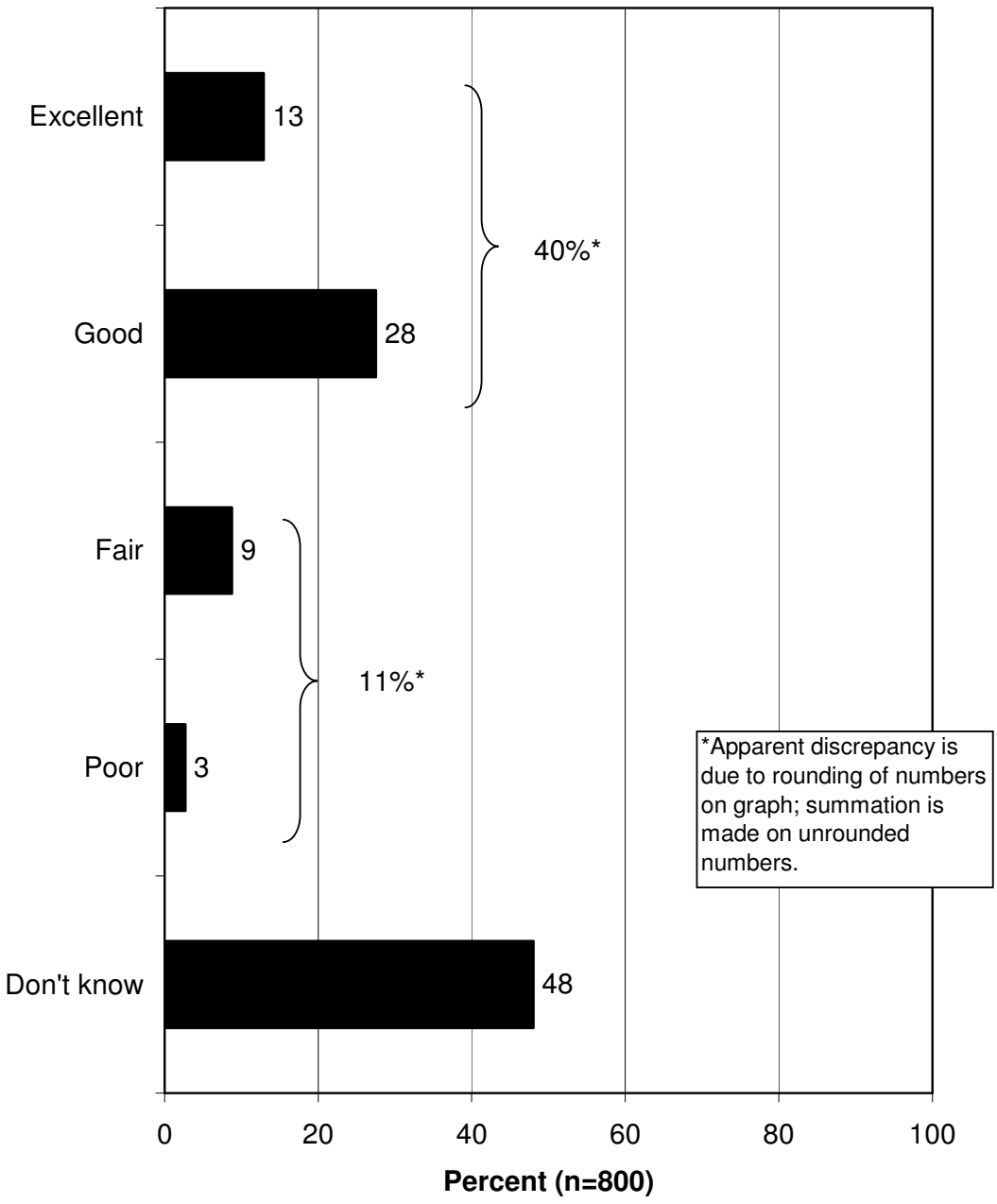

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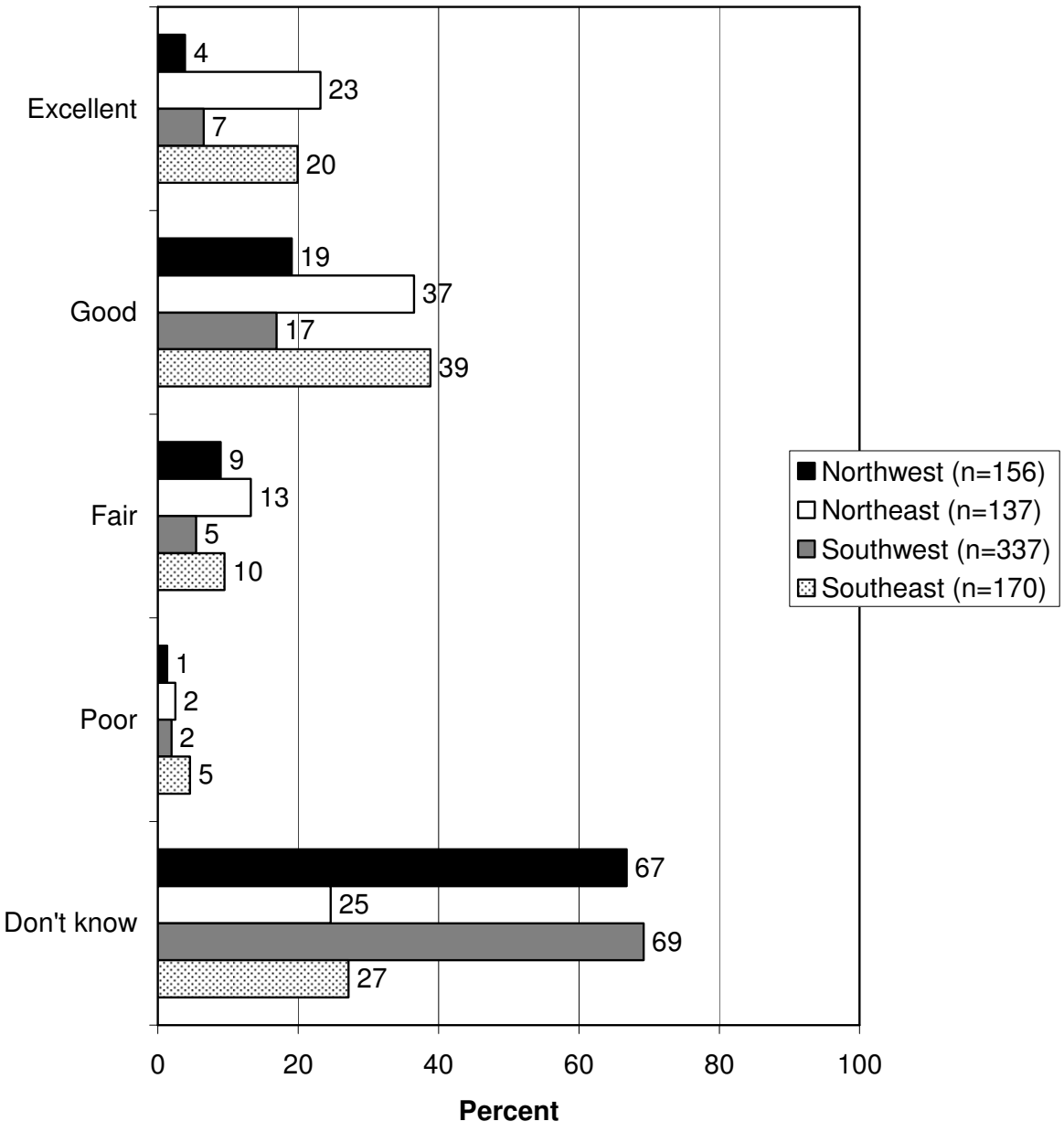

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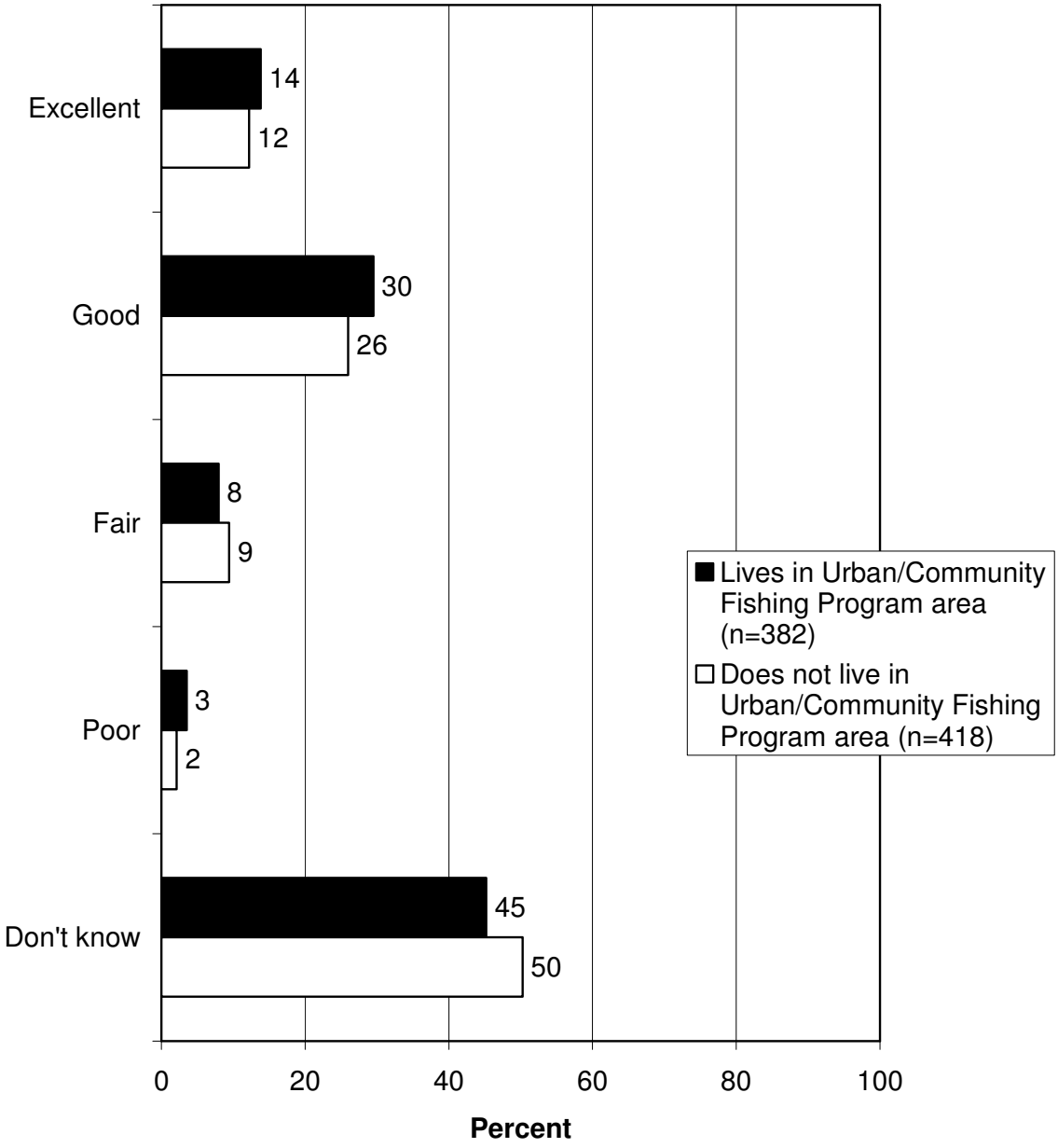

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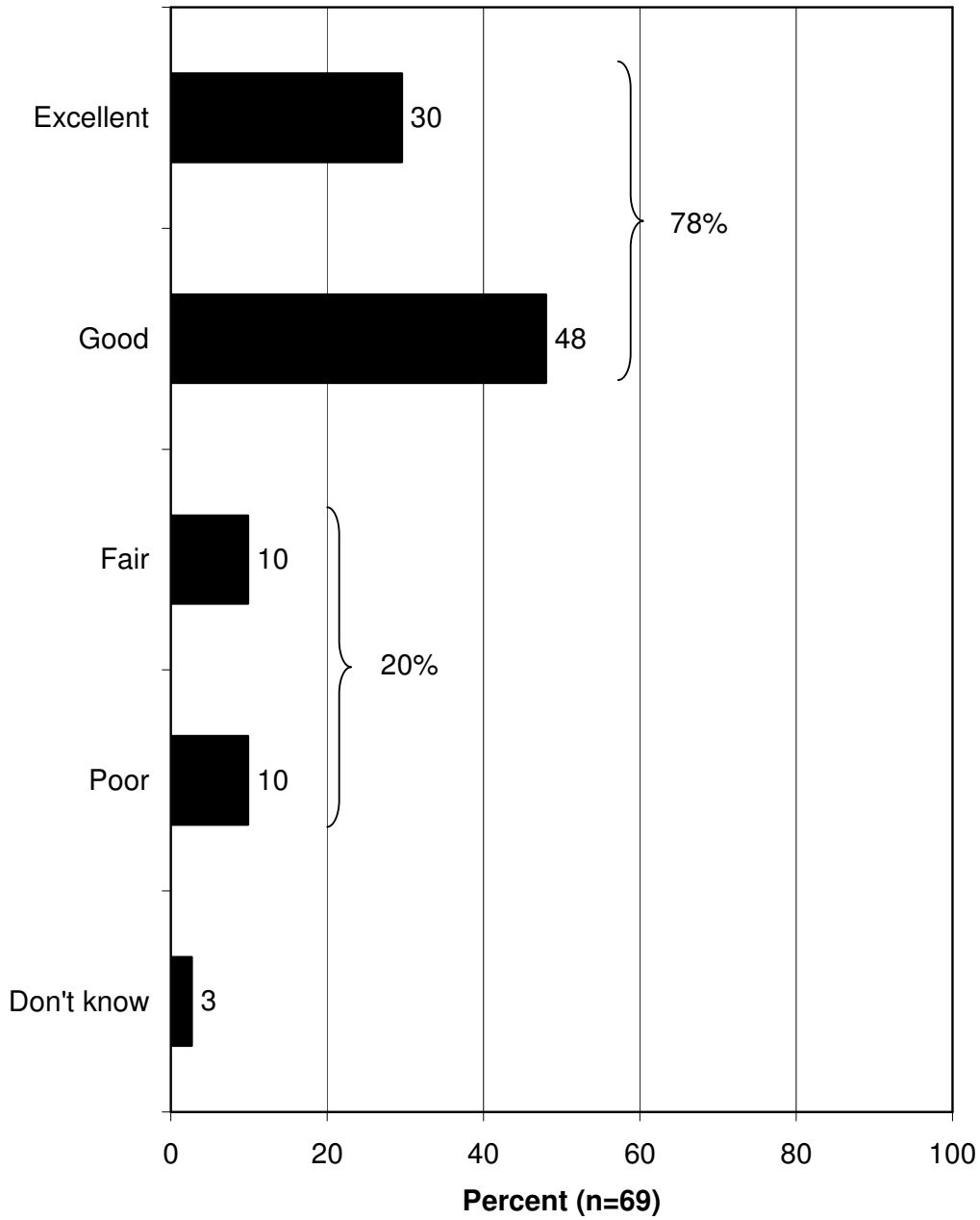

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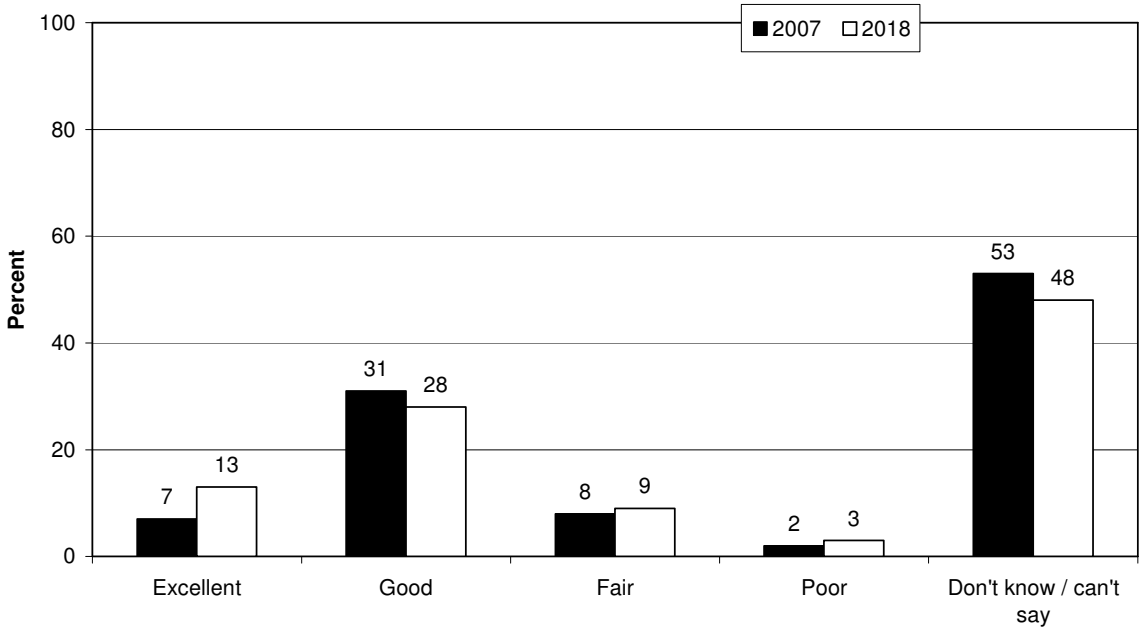

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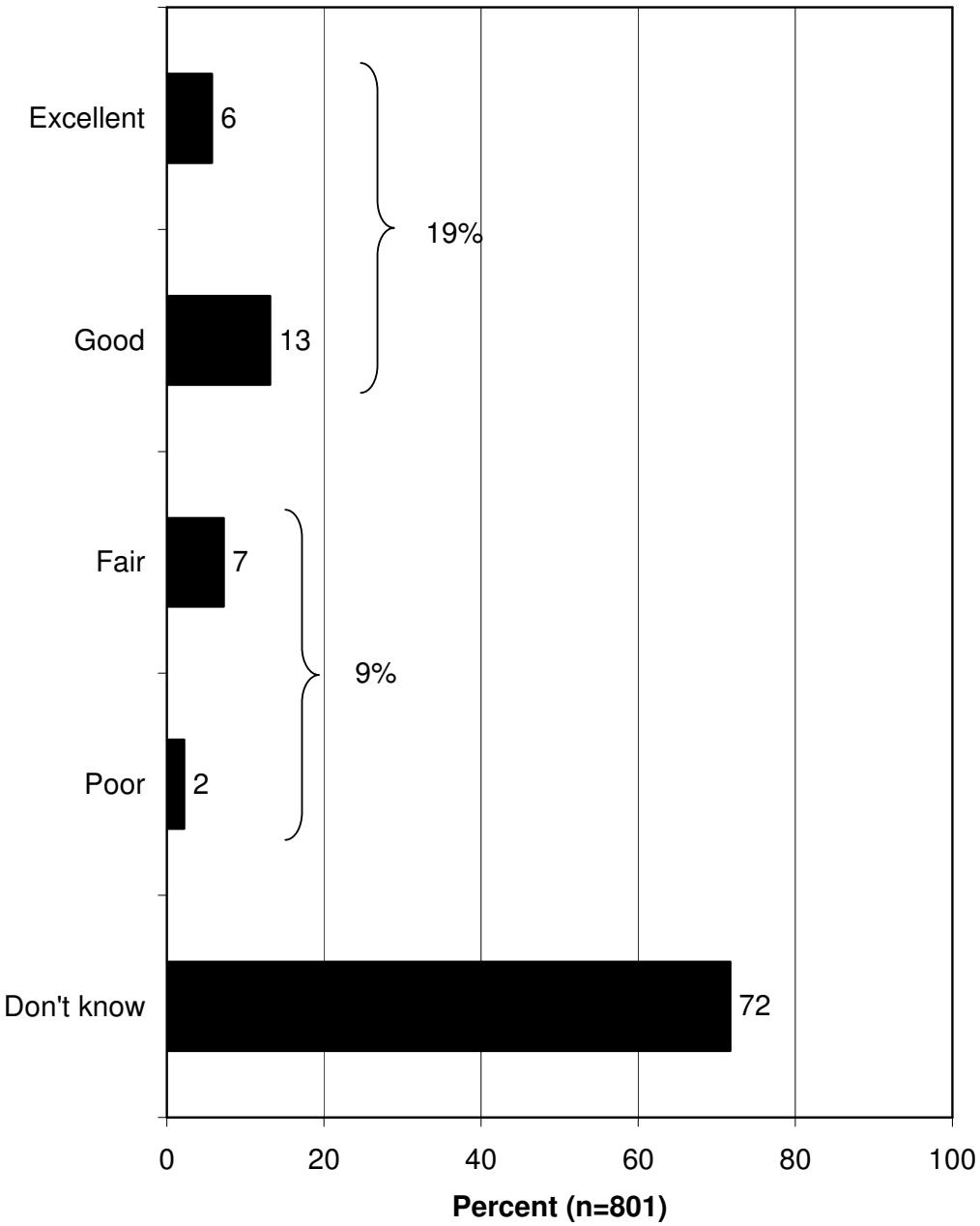

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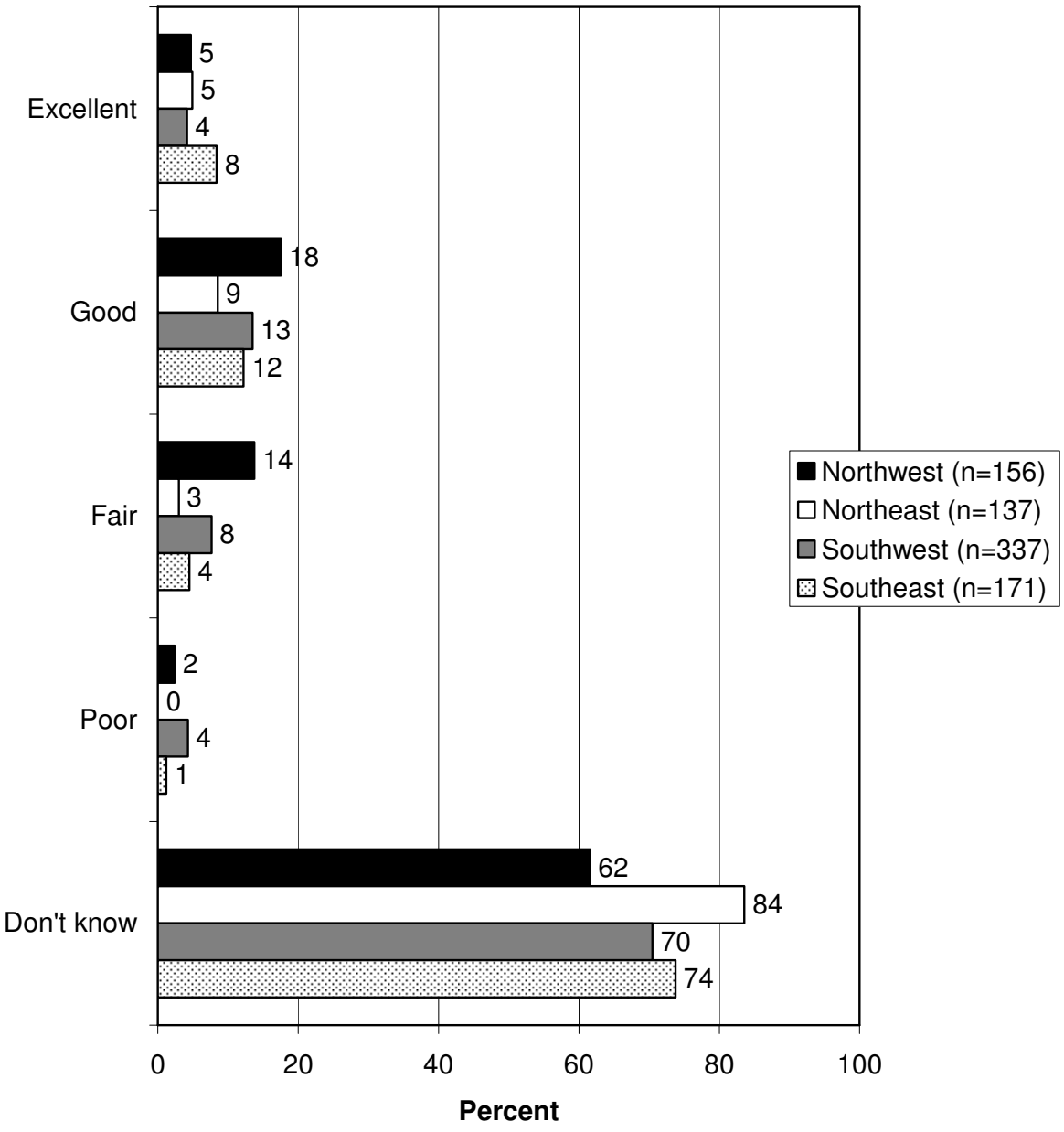

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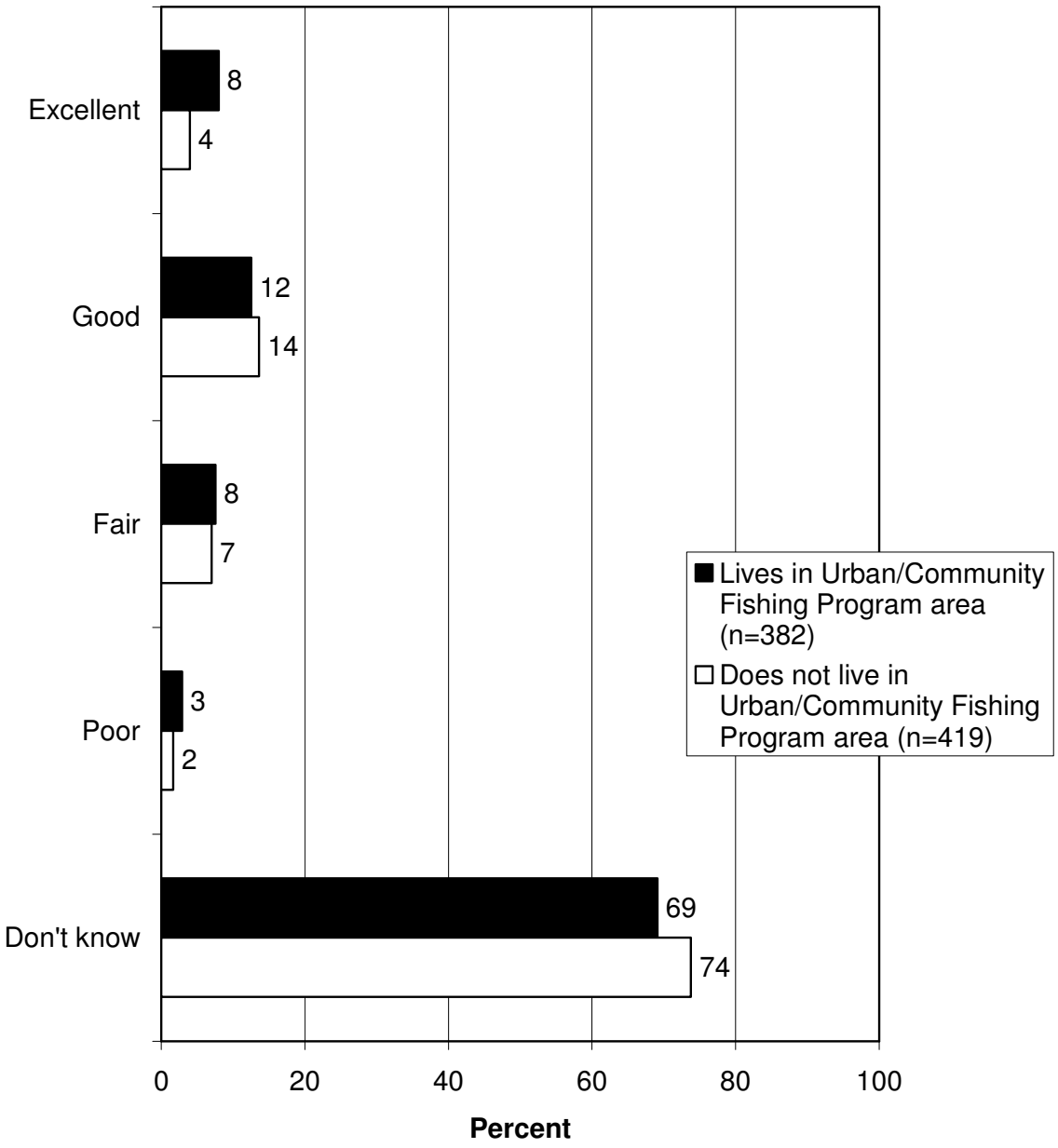

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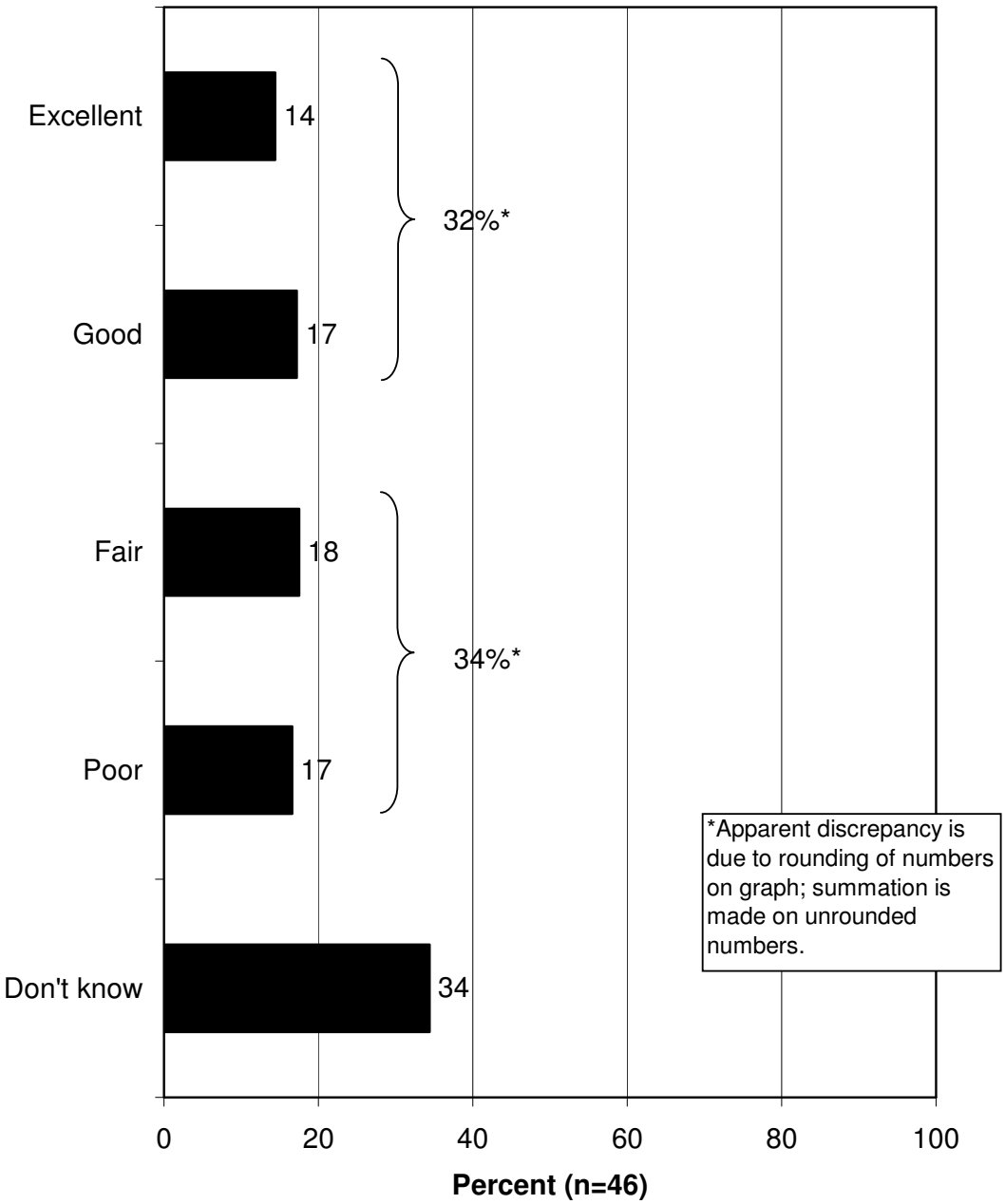

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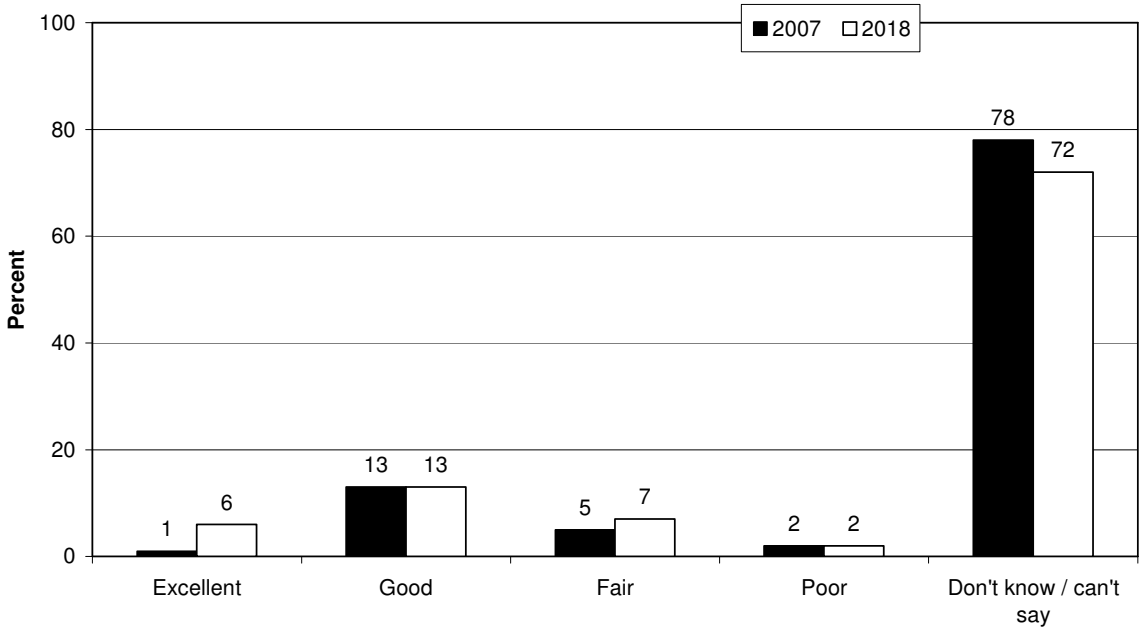

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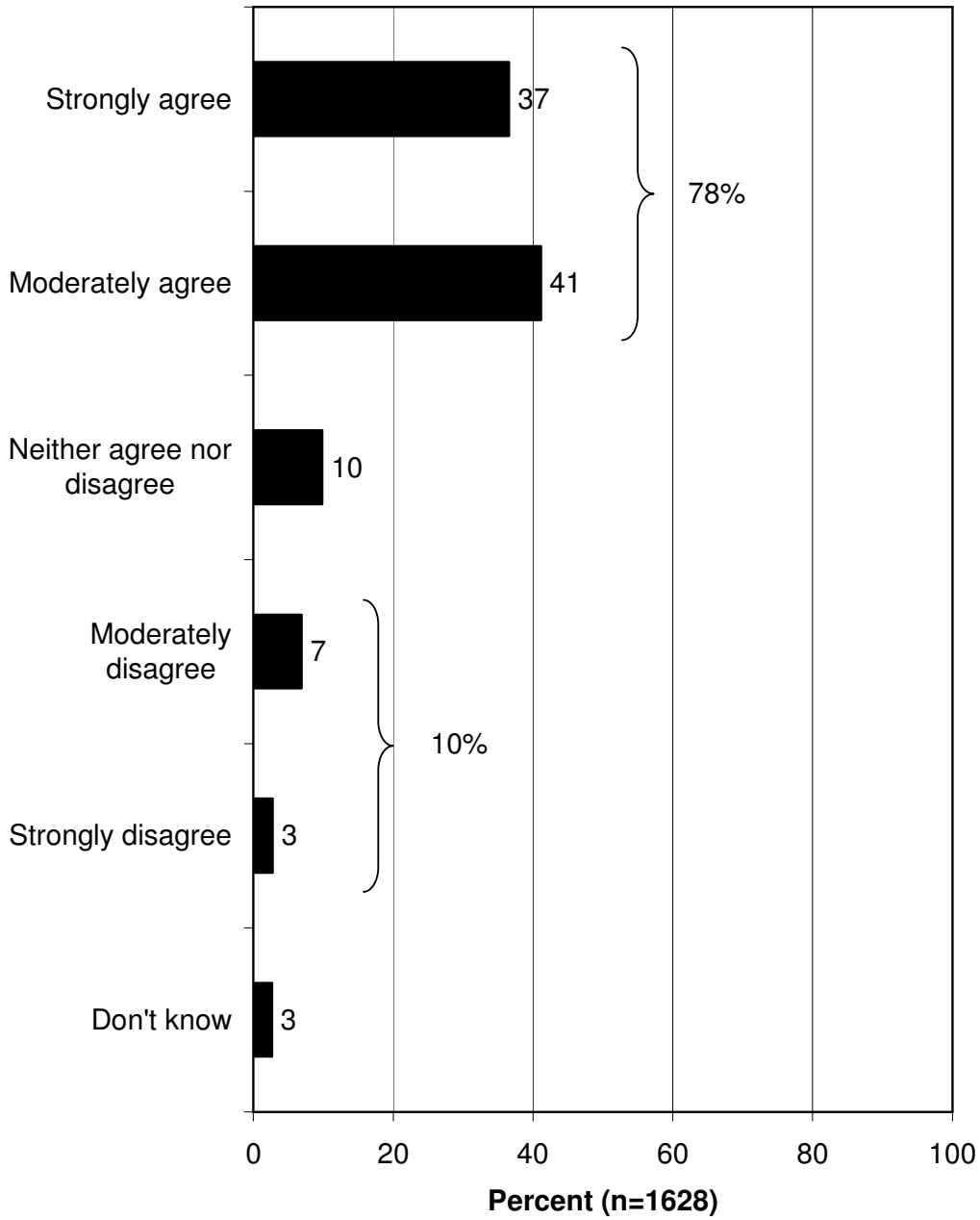

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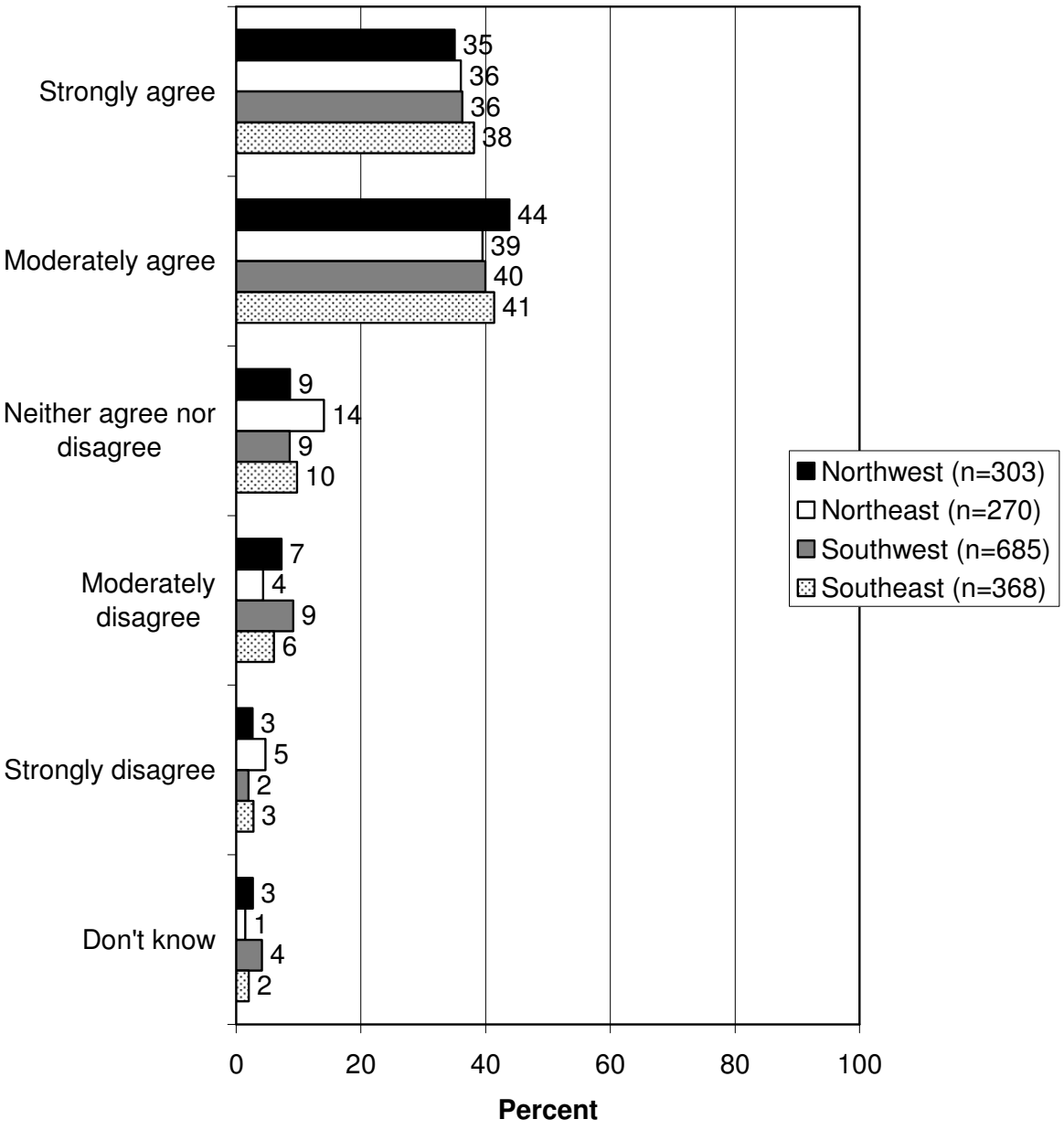

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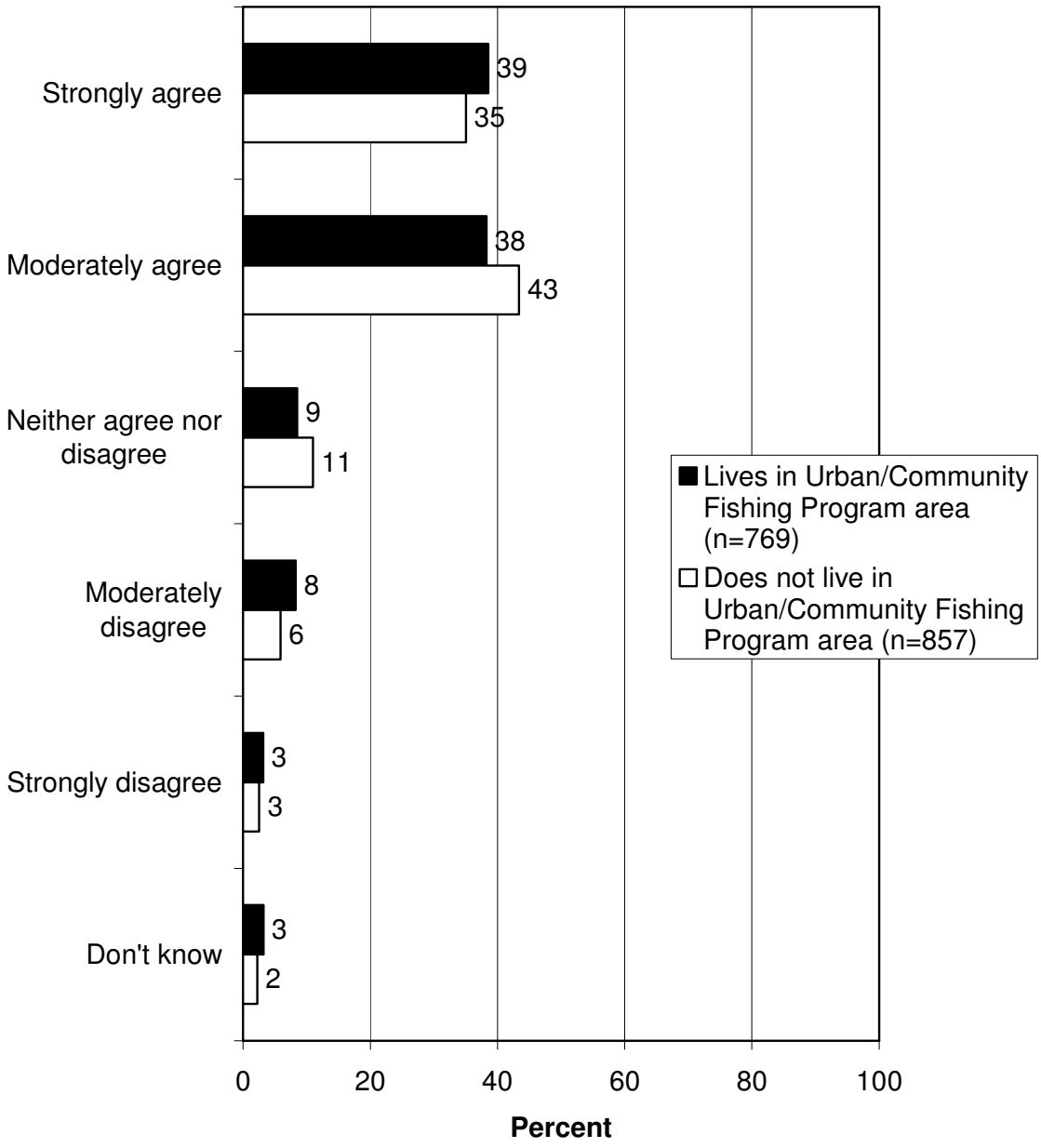

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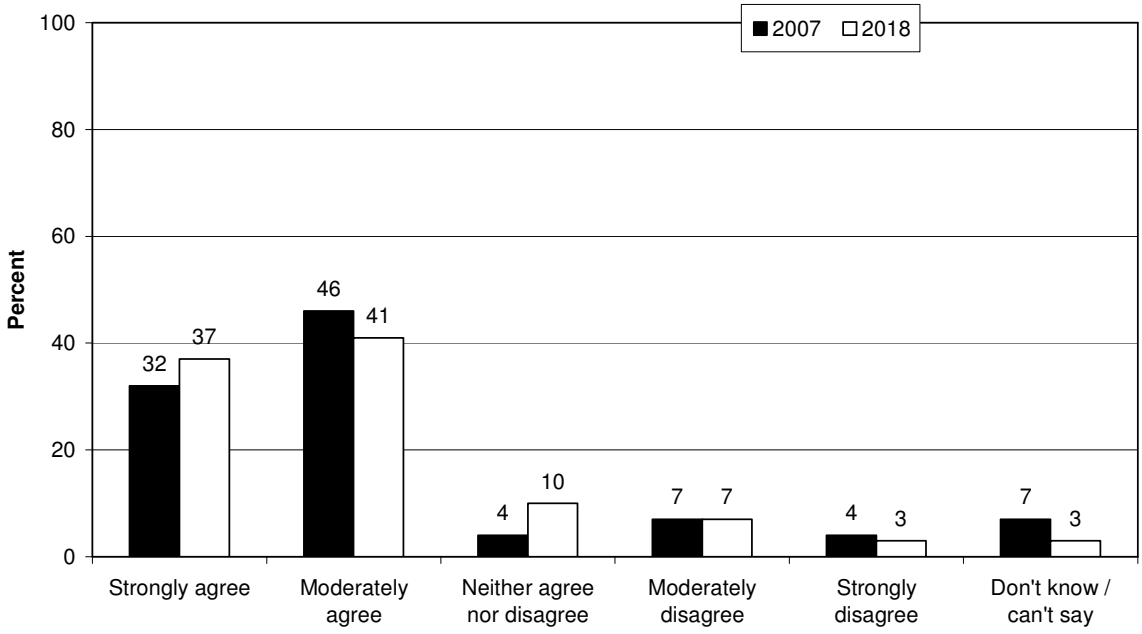


POND FISHING OPPORTUNITIES

- Among those who fished ponds in Iowa, the most common types of ponds fished are a pond on a farm (60% fished this type) and a pond on private property (58%). Those pond types are distantly followed by a city, town, or local park pond (36%); a pond on state or federal land (28%); and a pond in a neighborhood or residential community (21%).
  - The last three pond types (the public ponds) are much more frequently fished by those who live in an Urban/Community Fishing Program area compared to those who do not.

- A majority of anglers who fished ponds (54%) stated that they have mostly fished private ponds. Meanwhile, 20% fished private and public ponds about equally and 25% fished mostly public ponds.
  - Southeast pond anglers are more likely to fish private ponds compared to pond anglers from other regions.
  - As suggested earlier, those who live in Urban/Community Fishing Program areas are much more likely to fish public ponds than those who do not live in such areas.
  - A third of pond anglers (34%) fish only private ponds in Iowa (this corresponds to 15% of all anglers).
  - The demographic correlations graph shows that the groups most associated with fishing only private ponds are those who do not live in Urban/Community Fishing Program areas, residents of the Southwest and Southeast Regions, and those who fished all 3 of the past 3 years.

- A strong majority of anglers who fished ponds (77%) say the ponds they have fished are mostly located in a rural or country area. Otherwise, 10% fished ponds mostly in a city or town and 12% fished both about equally.
  - Unsurprisingly, those who live in Urban/Community Fishing Program areas fish ponds in a city or town more often than those who do not.

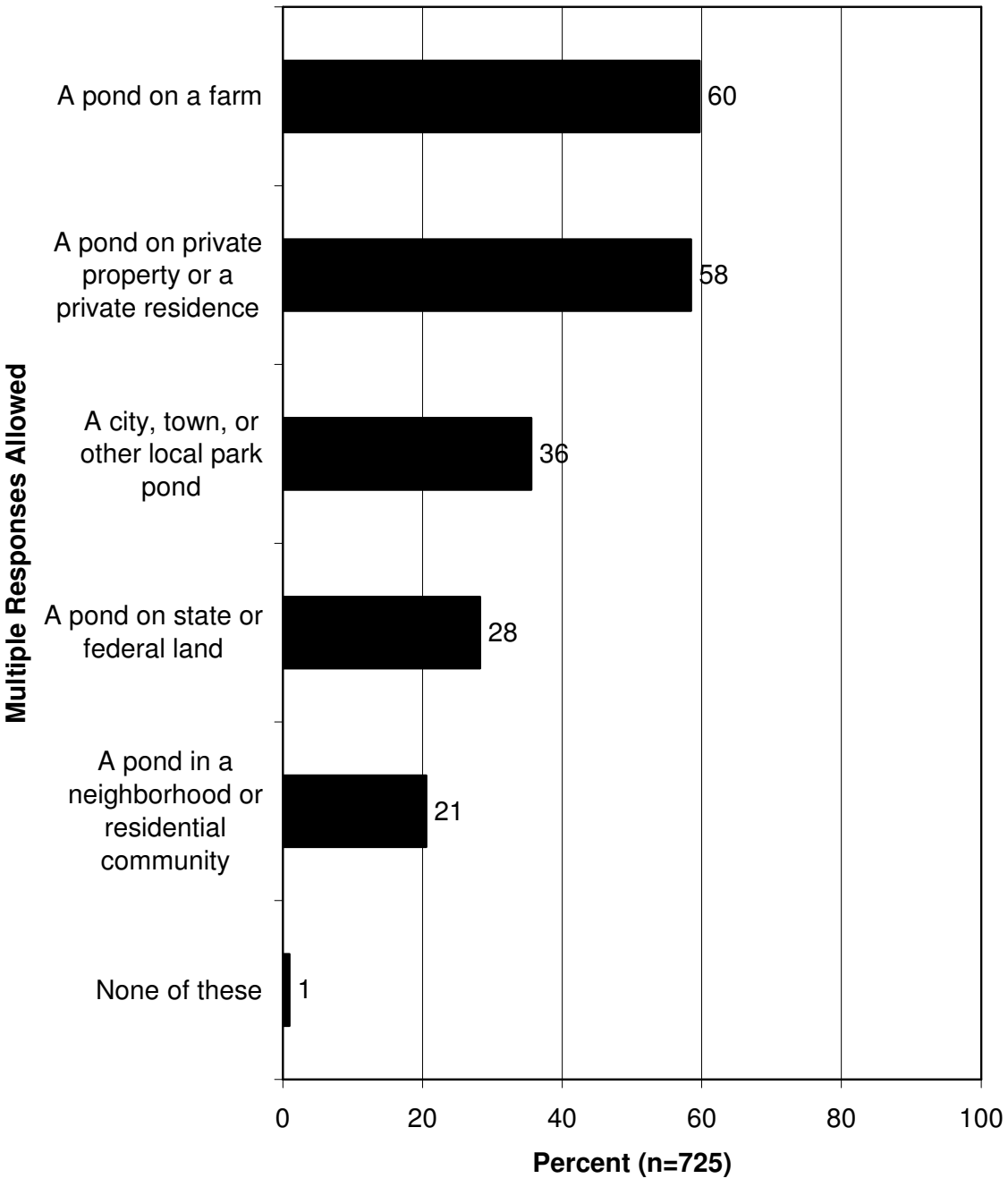
- Those who fished a pond typically travel a mean of 20.8 miles, one-way, to fish ponds in Iowa. The median is 10 miles; in other words, 50% of pond anglers travel 10 miles or less to fish ponds.
  - Of pond anglers who live in Urban/Community Fishing Program areas, 43% travel 10 miles or less and 66% travel 20 miles or less to fish ponds.

- A majority of anglers (58%) rate the fishing opportunities within a few miles of their home as *excellent* or *good* (39% *good*). However, a notable percentage (41%) rate the opportunities as *fair* or *poor* (28% *fair*). (Note that this question was asked of all anglers, not just those who fished ponds.)

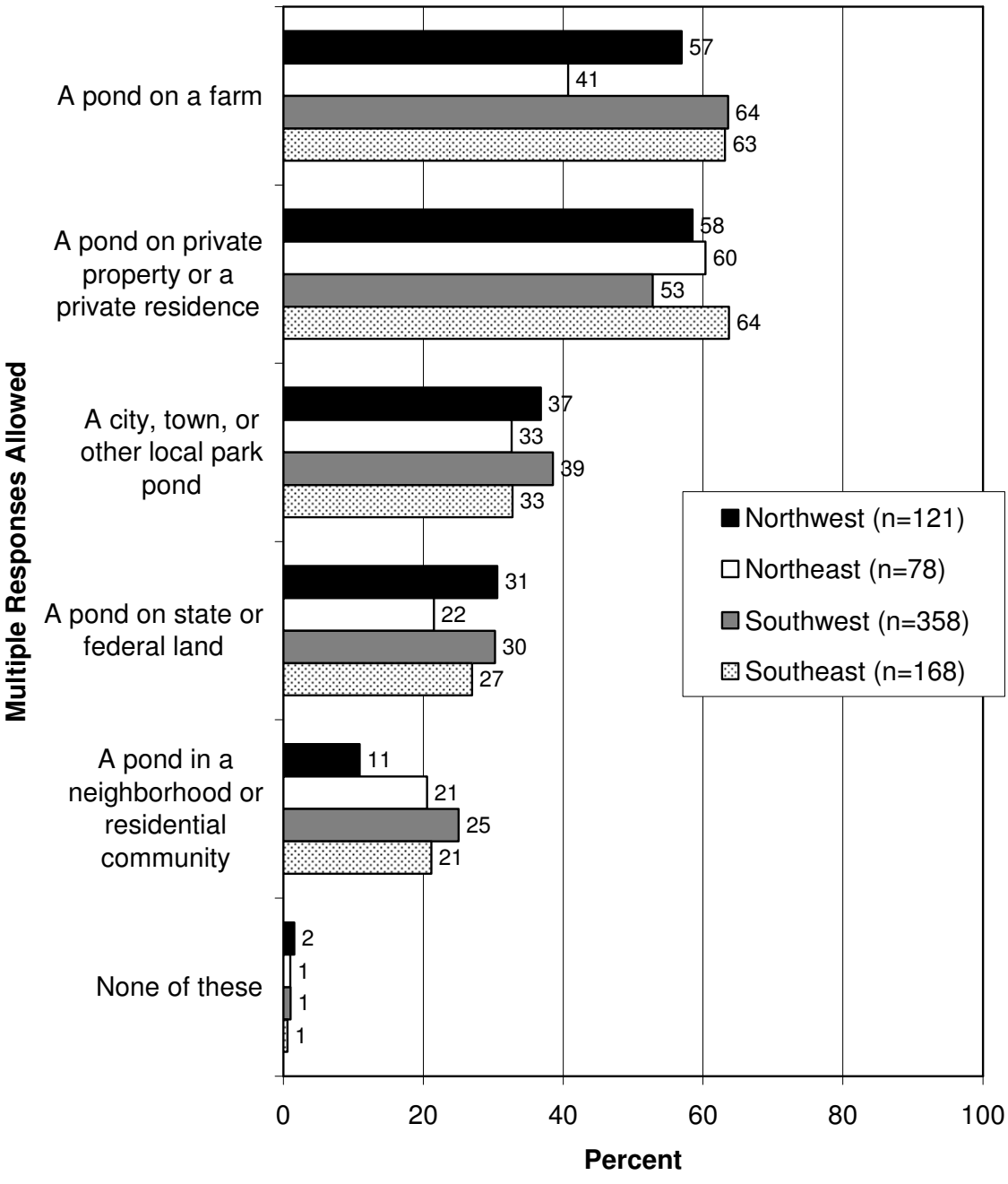
- Anglers are *willing* to travel a mean of 96.6 miles (median of 60 miles), one-way, to fish in Iowa.

- Finally in this section, anglers were presented with the following statement and question: *Currently, Iowa has many local fishing opportunities across the state in both urban and rural areas. Assuming there is a fishing pond within a few miles of your home, regardless of where you live, is there anything that would make it easier for you to [fish / fish more often] at local or nearby ponds?*
  - Two thirds of anglers (68%) said there is nothing that would make it easier. Meanwhile, 12% said better access in general, including shore access, would make fishing at nearby ponds easier. No other item was named by more than 4% of anglers.

Q80. Which of the following types of ponds have you fished in Iowa? What about...? (Asked of those who fished ponds in Iowa.)



Q80. Which of the following types of ponds have you fished in Iowa? What about...? (Asked of those who fished ponds in Iowa.)



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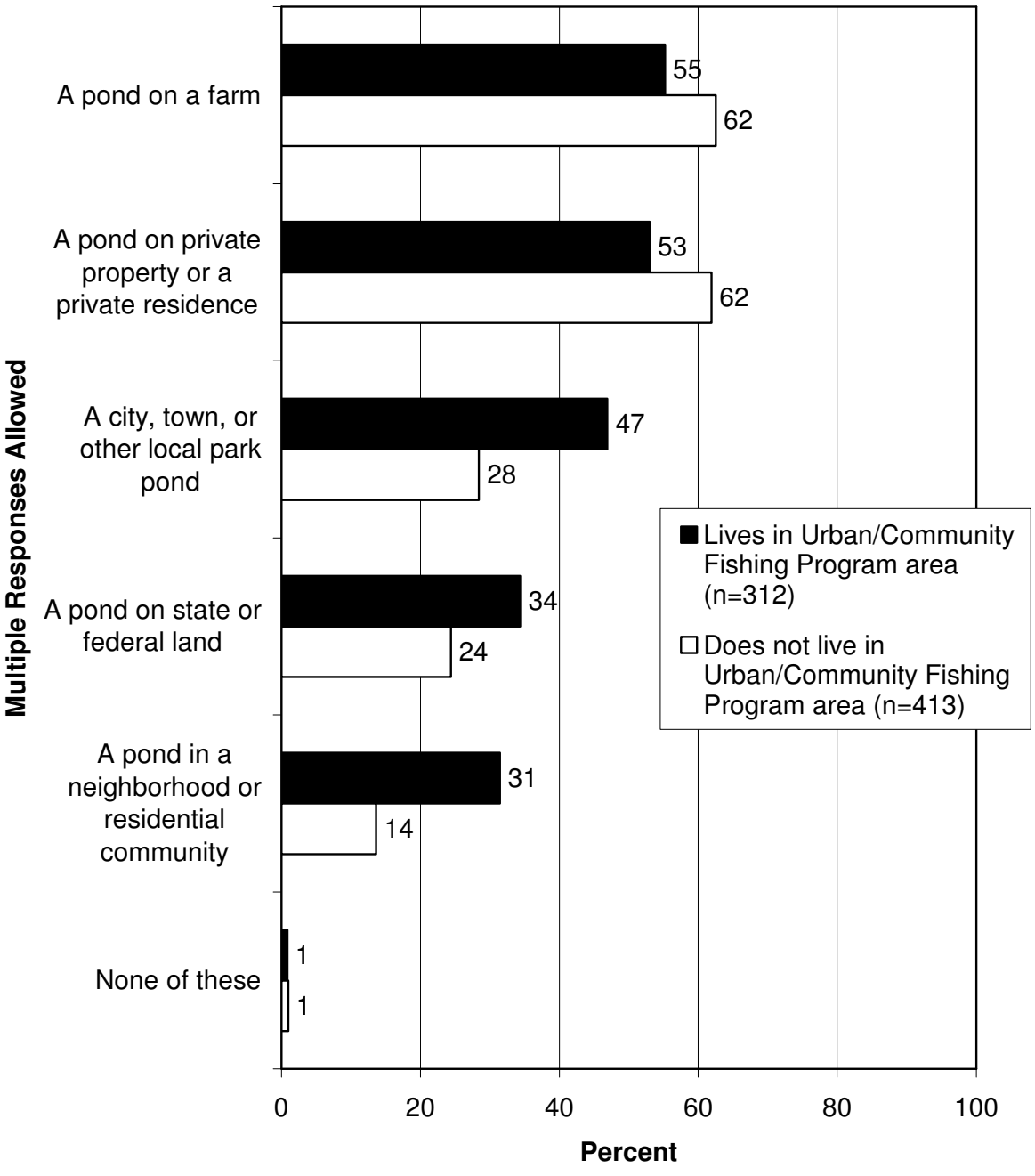
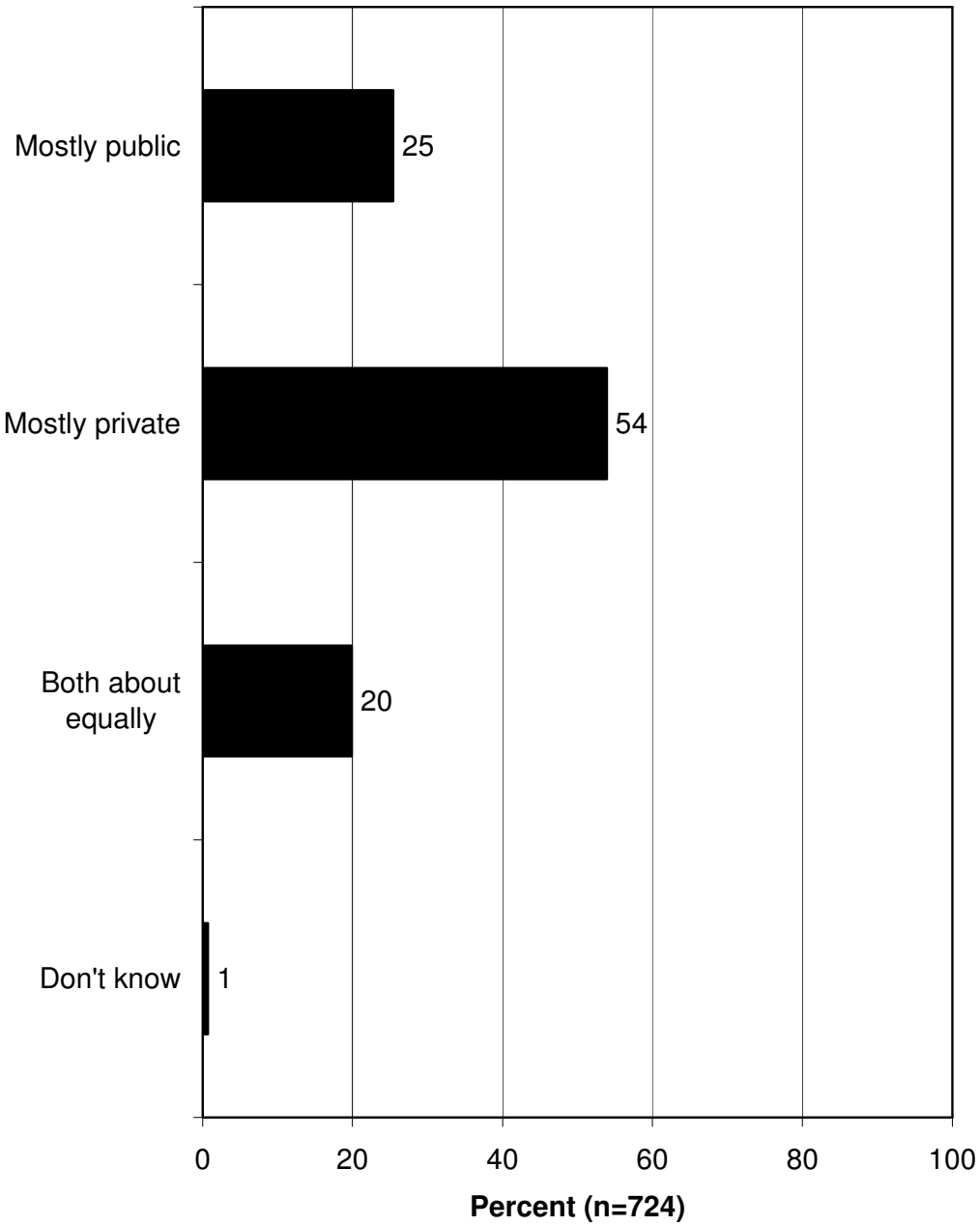


Q82. Do you consider the ponds you have fished in Iowa to be mostly public ponds, mostly private ponds, or both about equally? (Asked of those who fished a pond in Iowa.)



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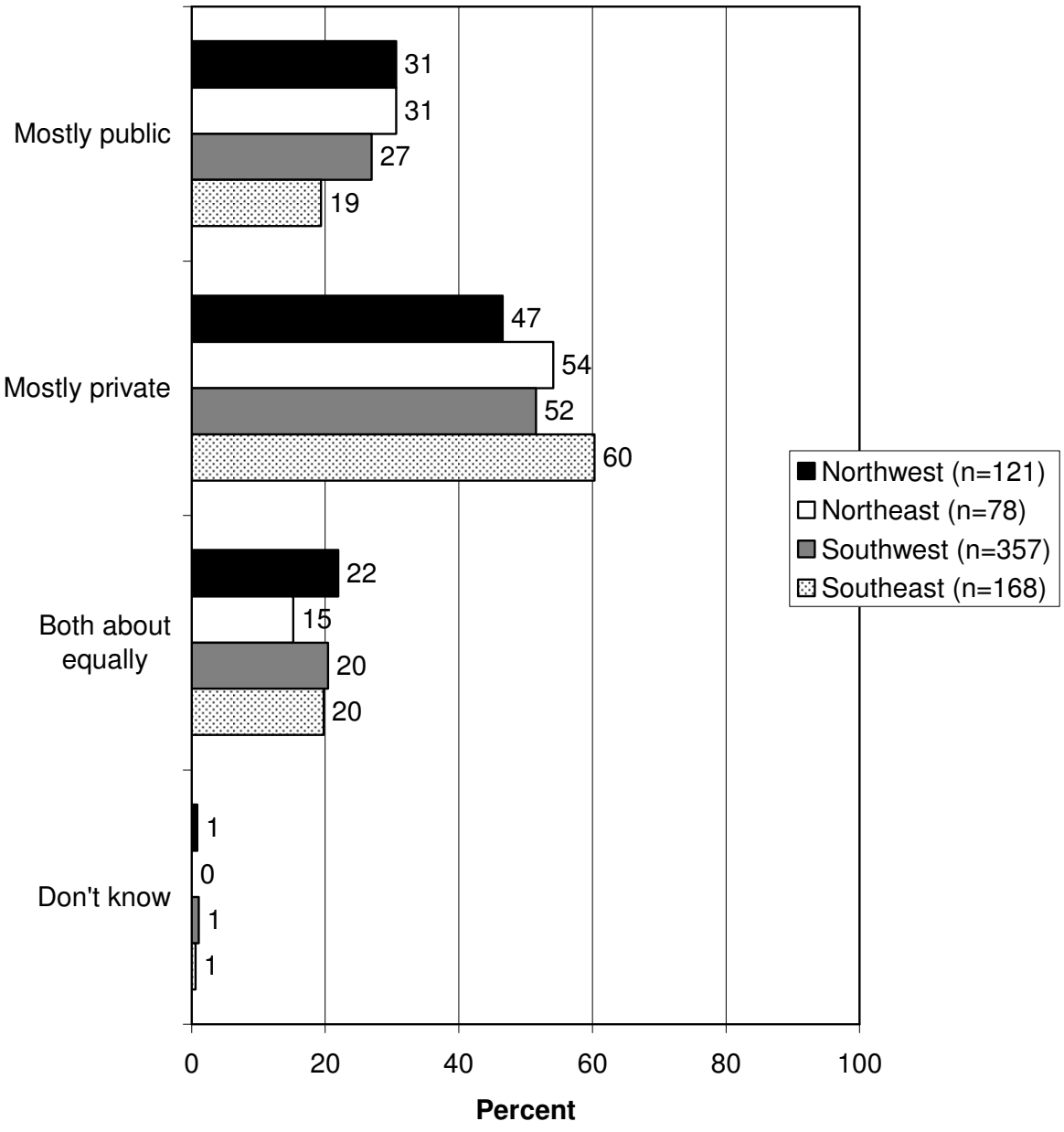

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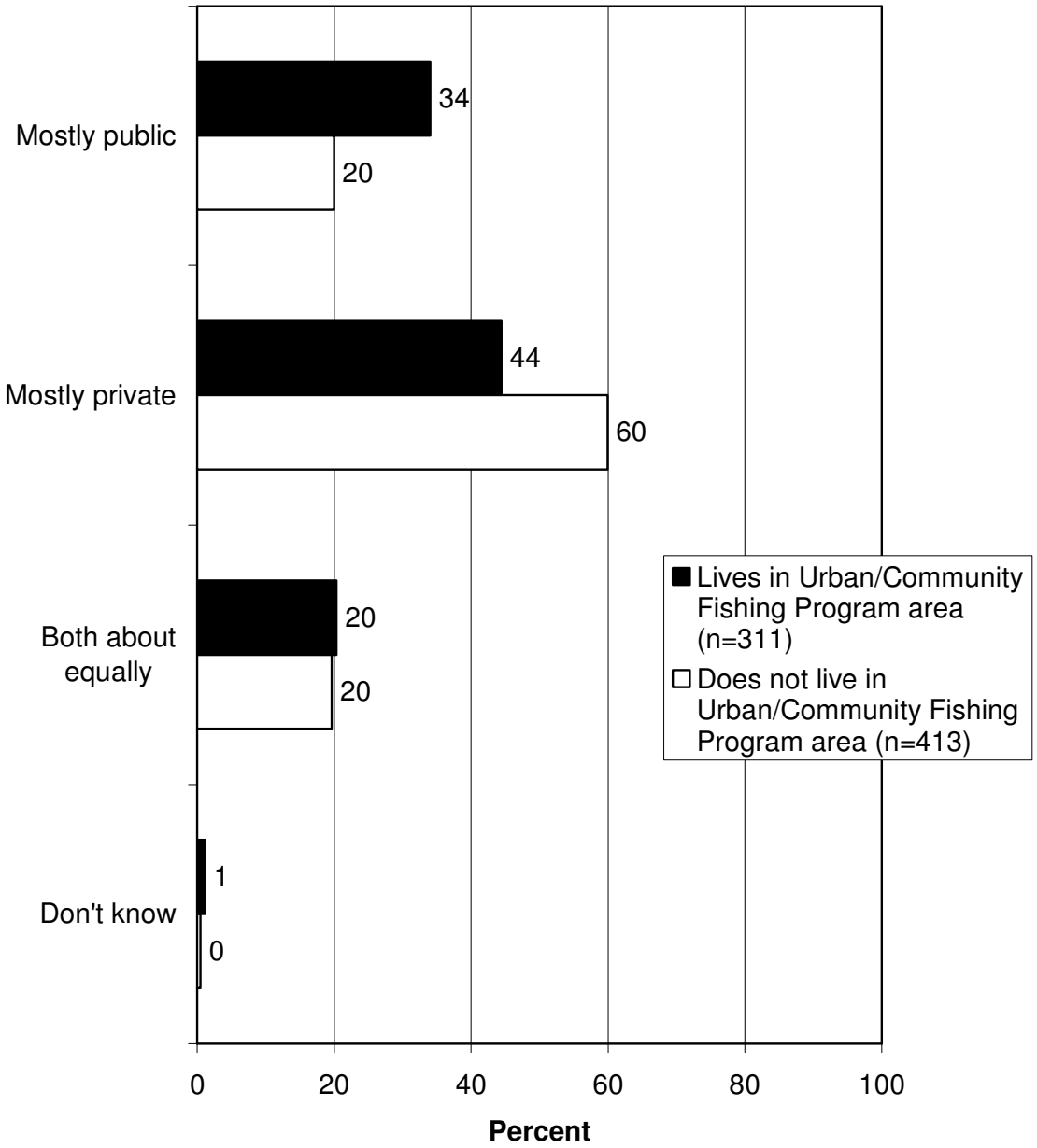
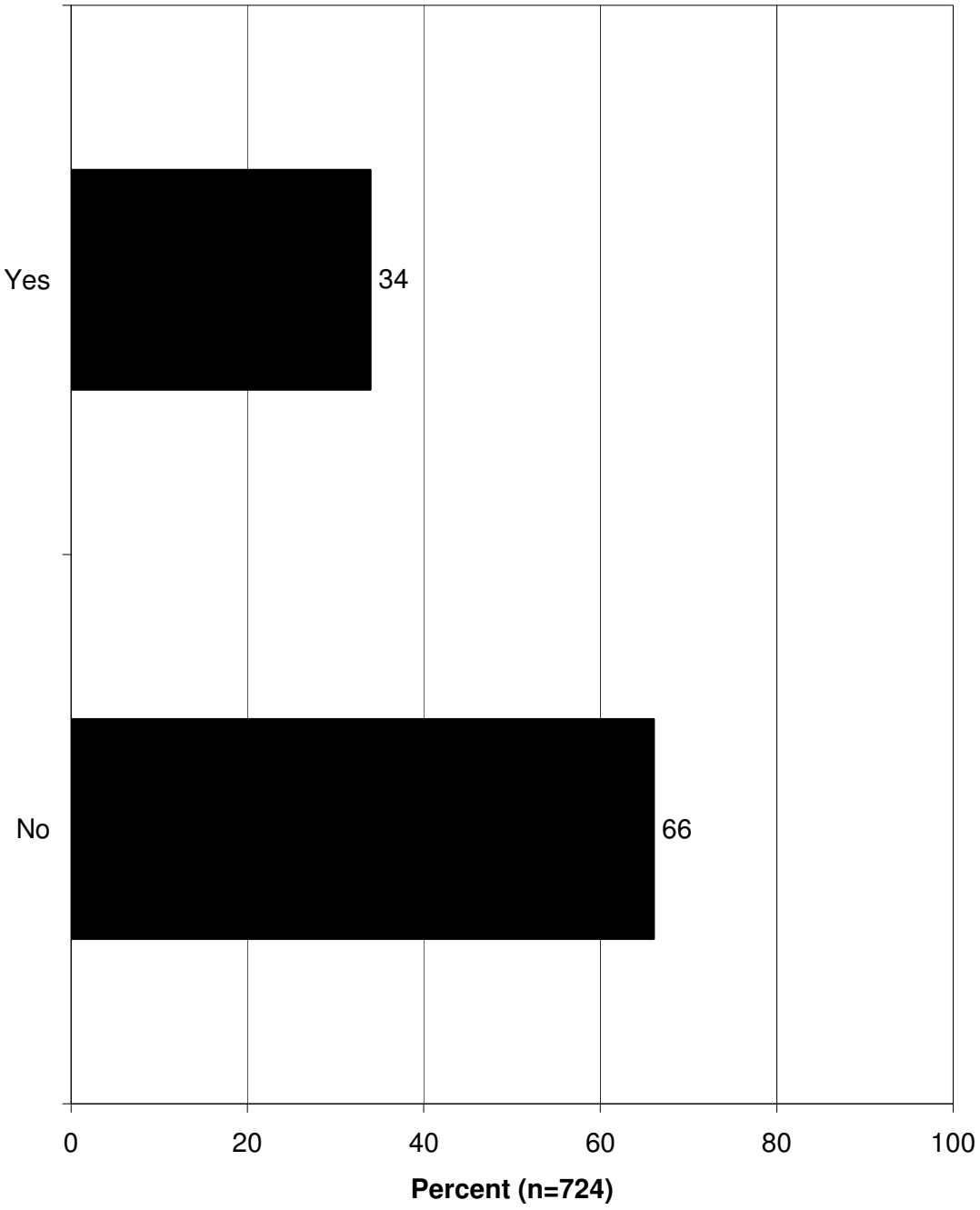


Q83. Do you fish only private ponds in Iowa? (Asked of those who fished a pond in Iowa.)



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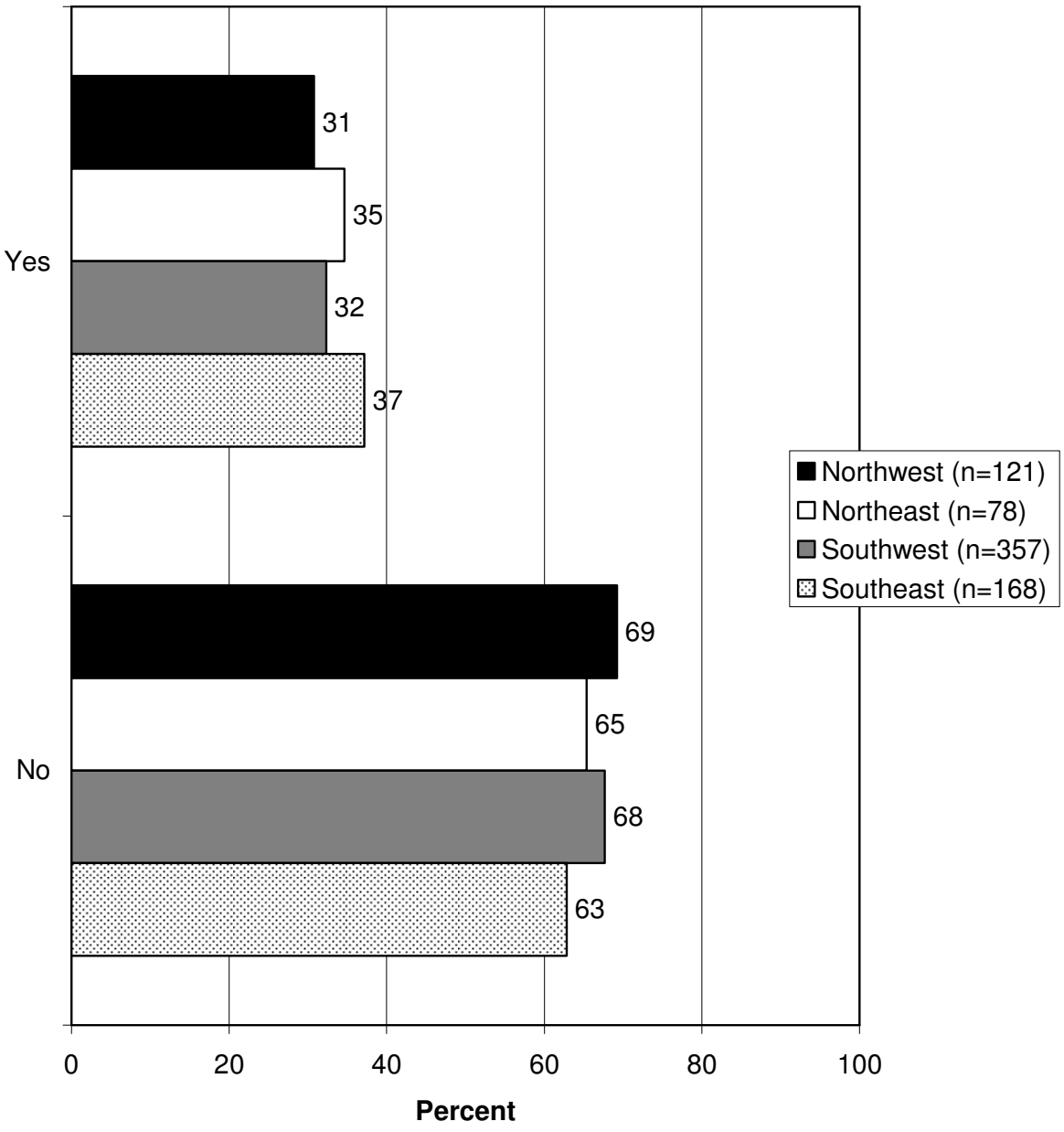

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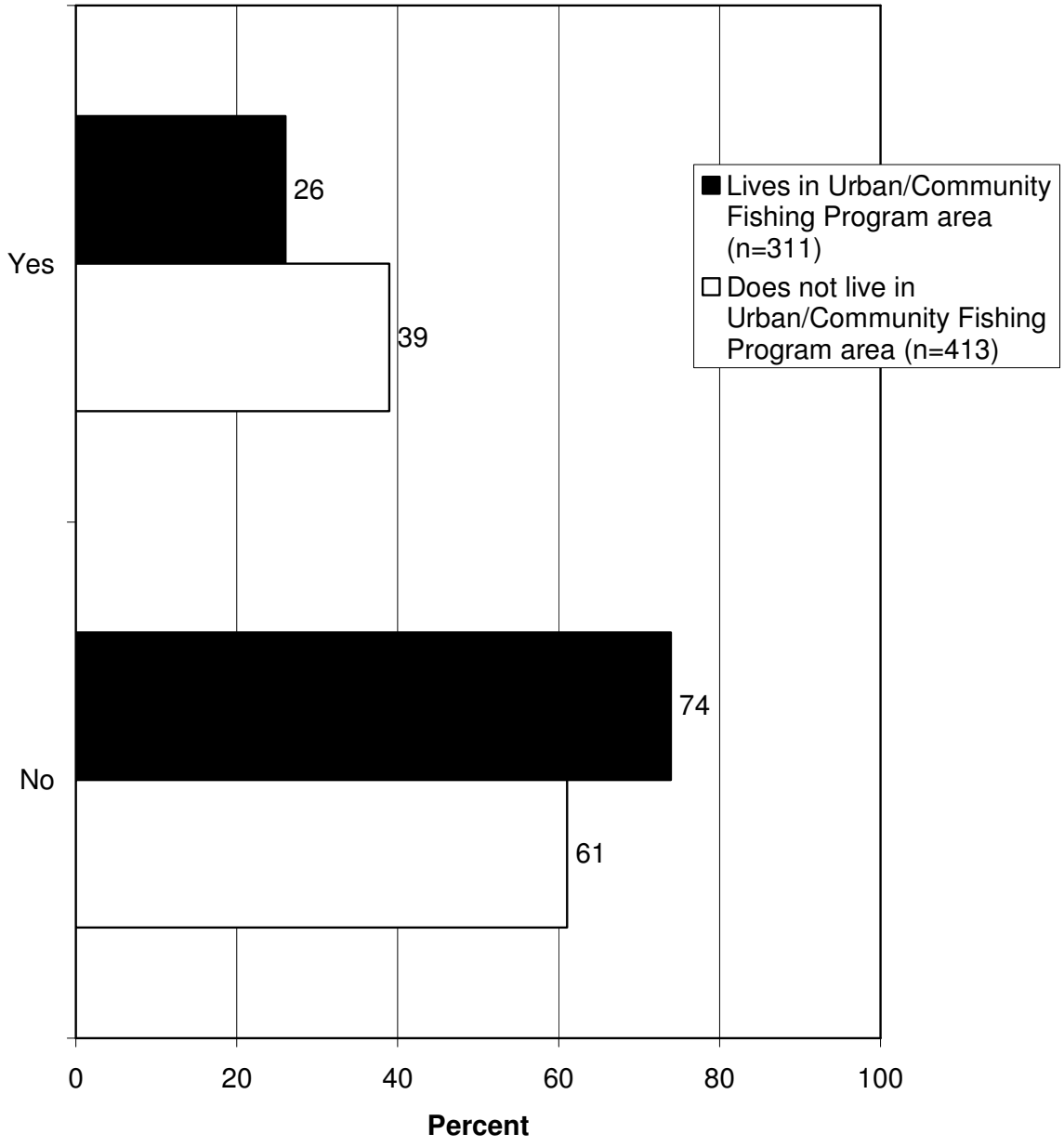
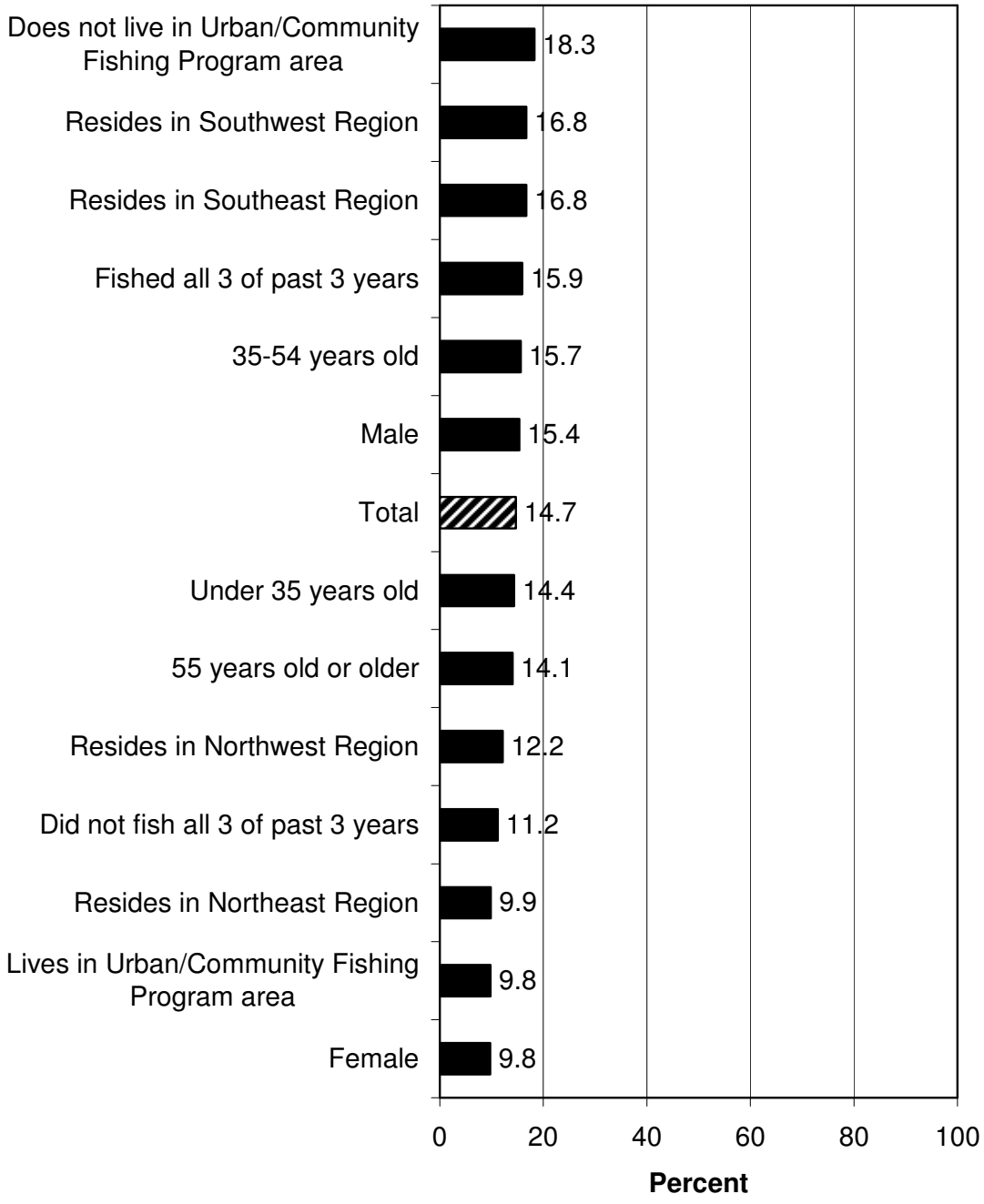
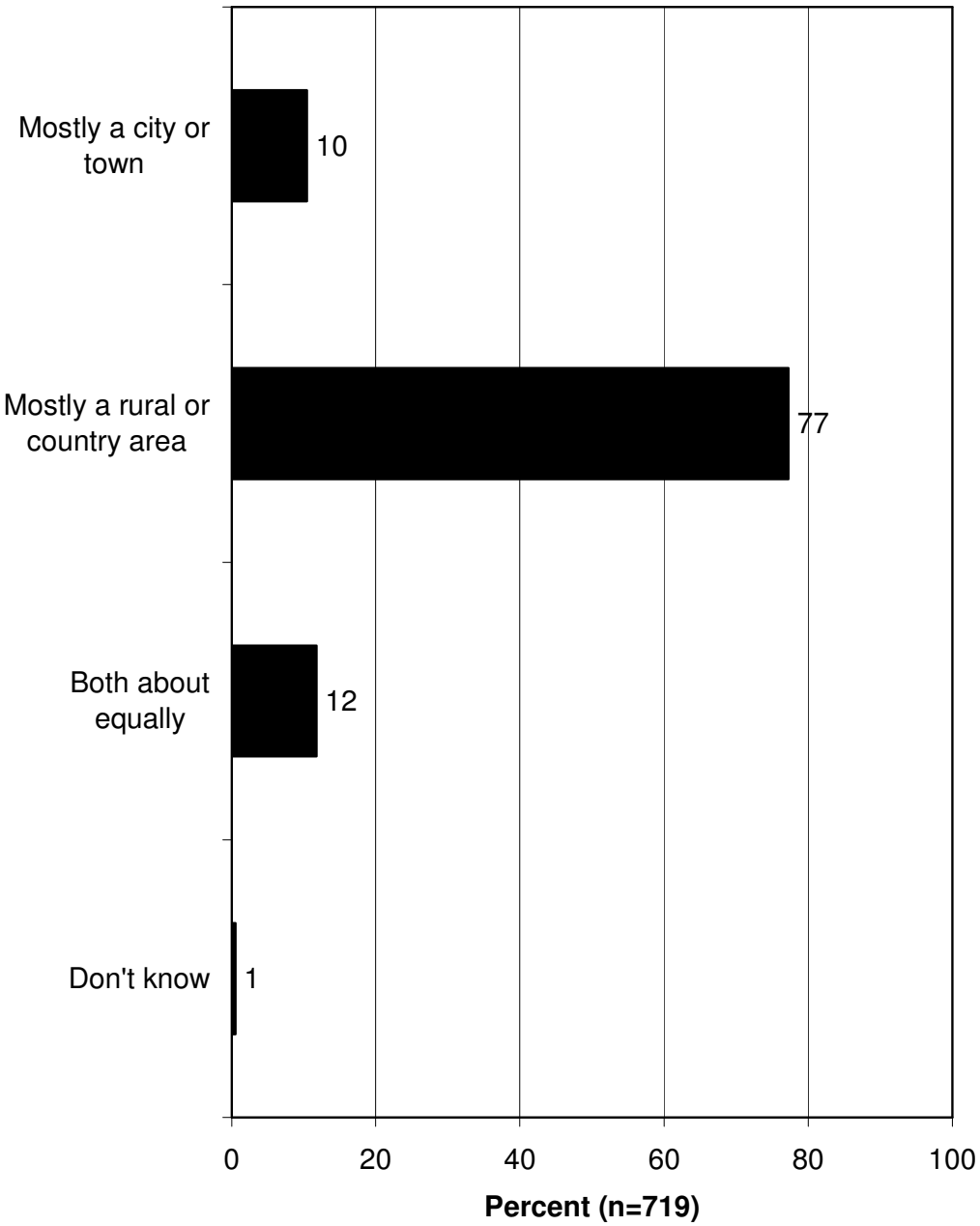


Percent of all anglers who indicated that they fish in ponds and that all of the ponds they fish in are private:



Q84. Do you consider the ponds you have fished in Iowa to be mostly in a city or town, mostly in a rural or country area, or both about equally? (Asked of those who fished a pond in Iowa.)



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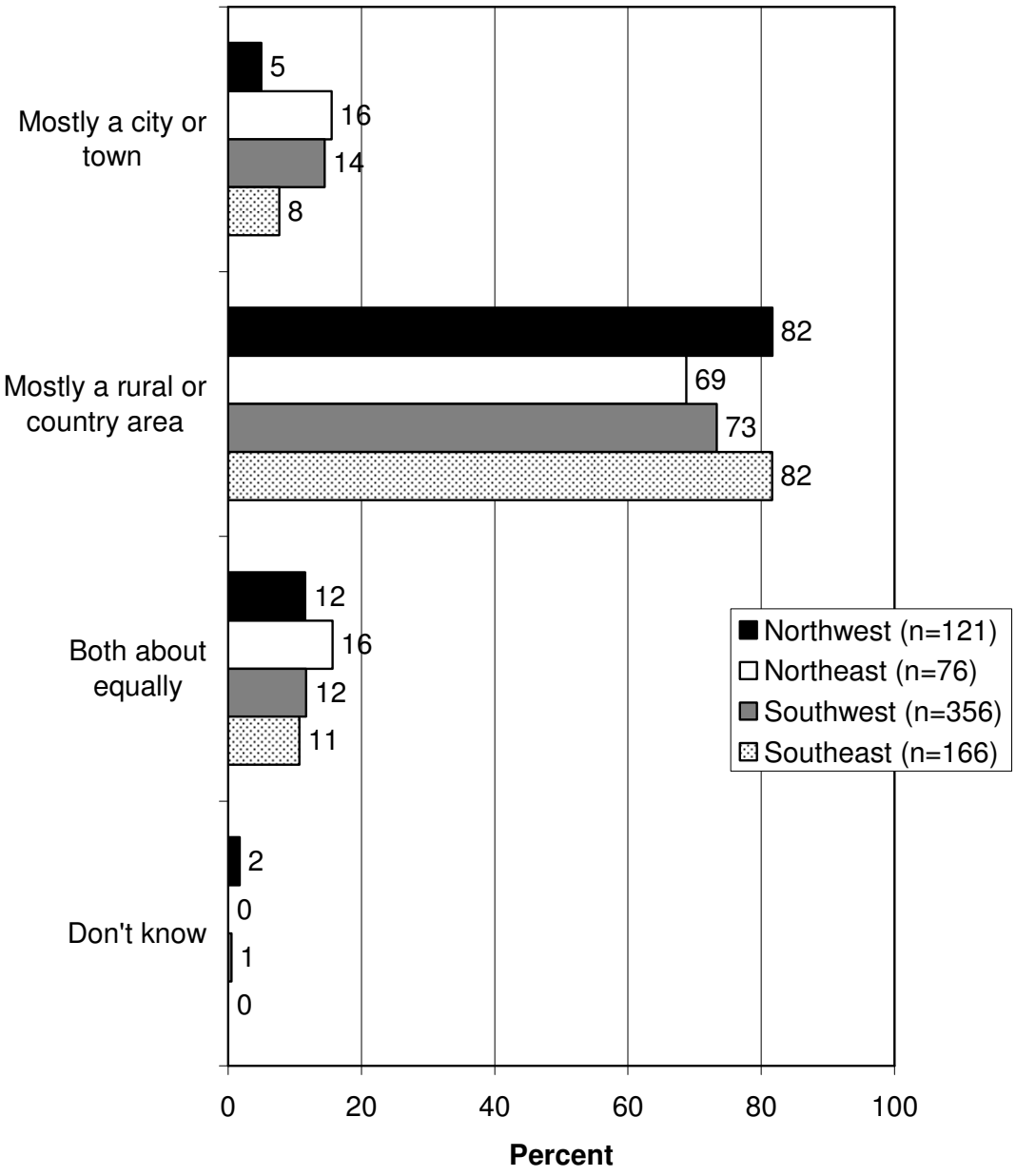

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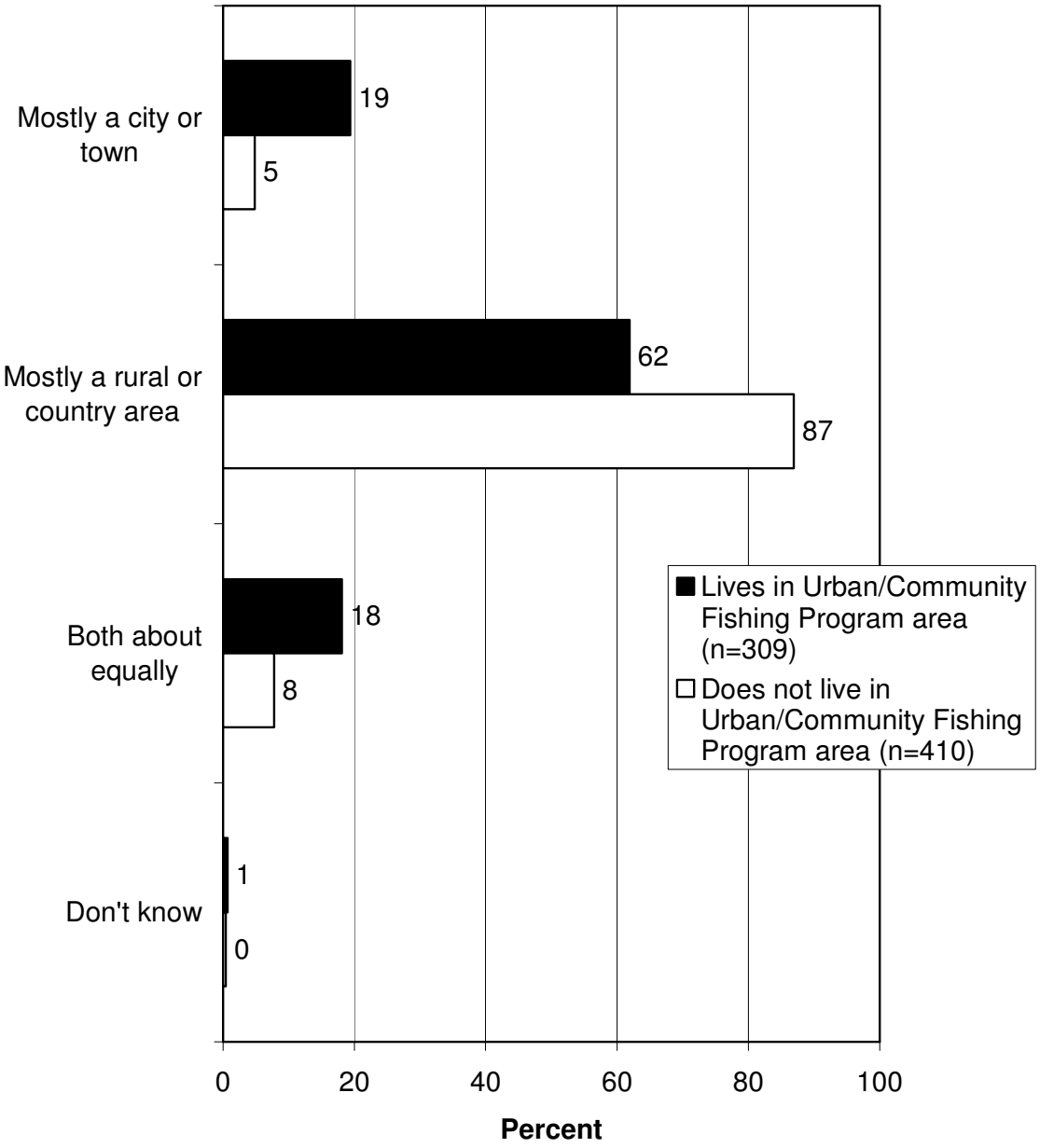
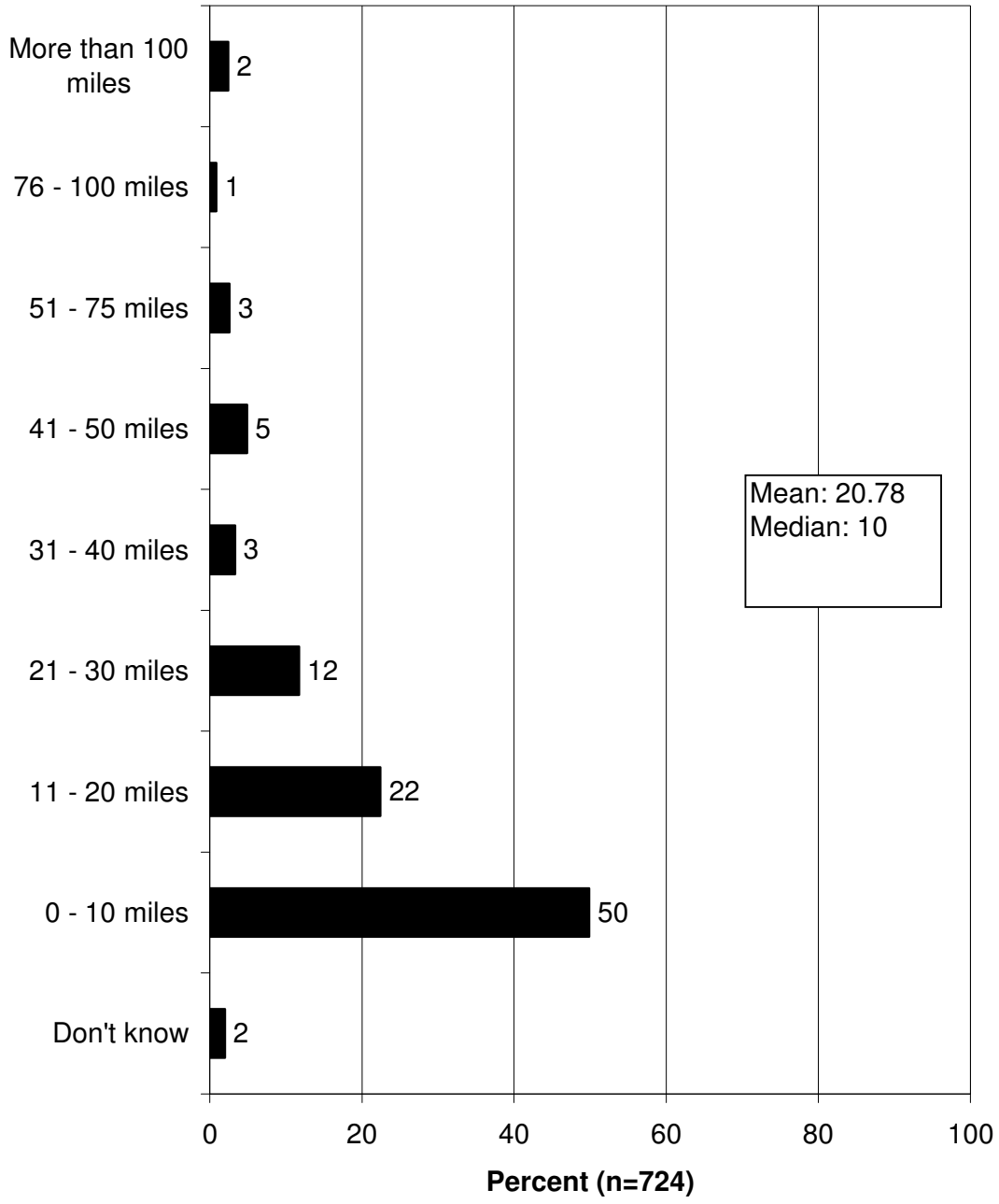


Q86. How far, in miles, one-way, do you typically travel to fish ponds in Iowa? (Asked of those who fished a pond in Iowa.)



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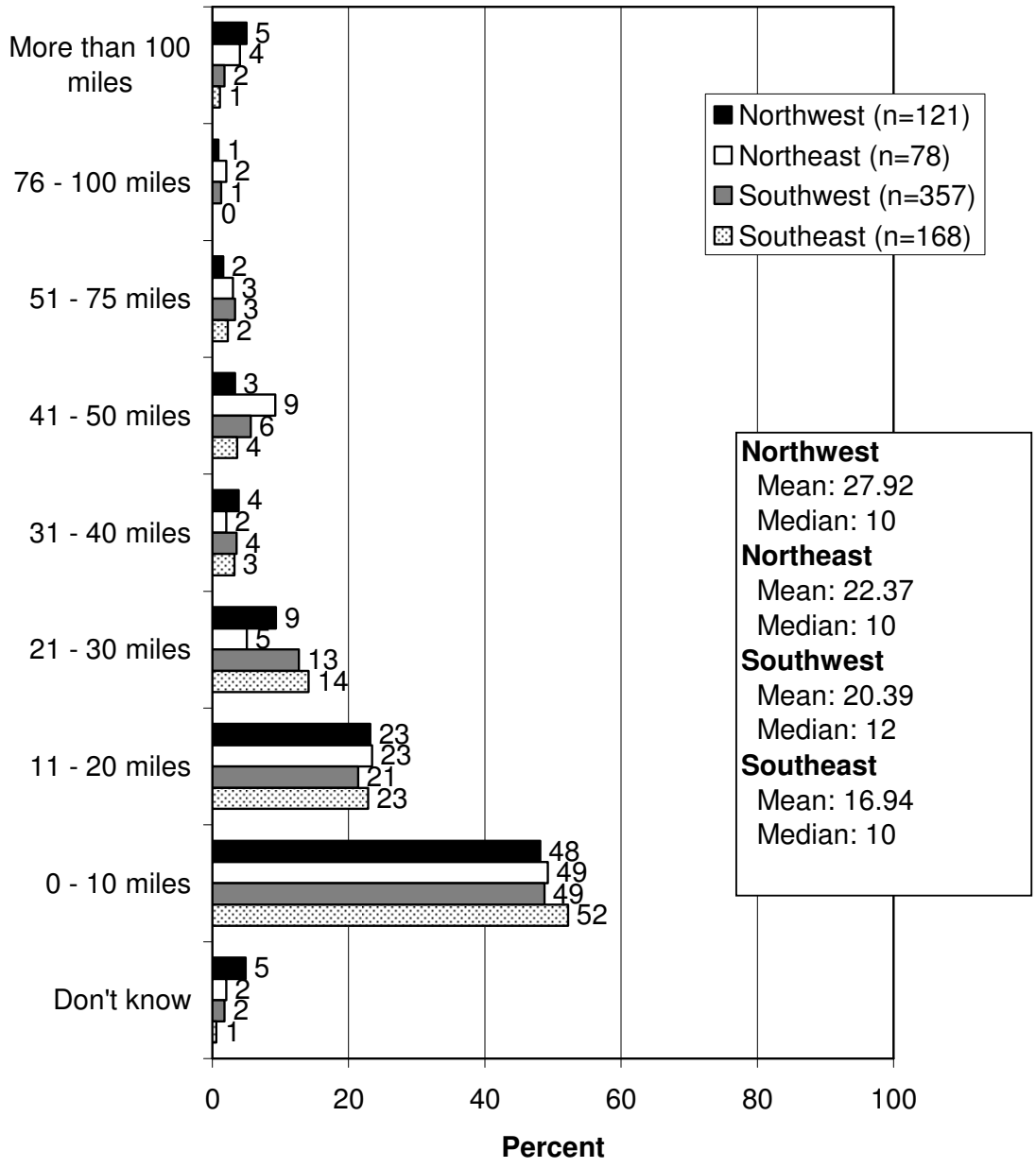

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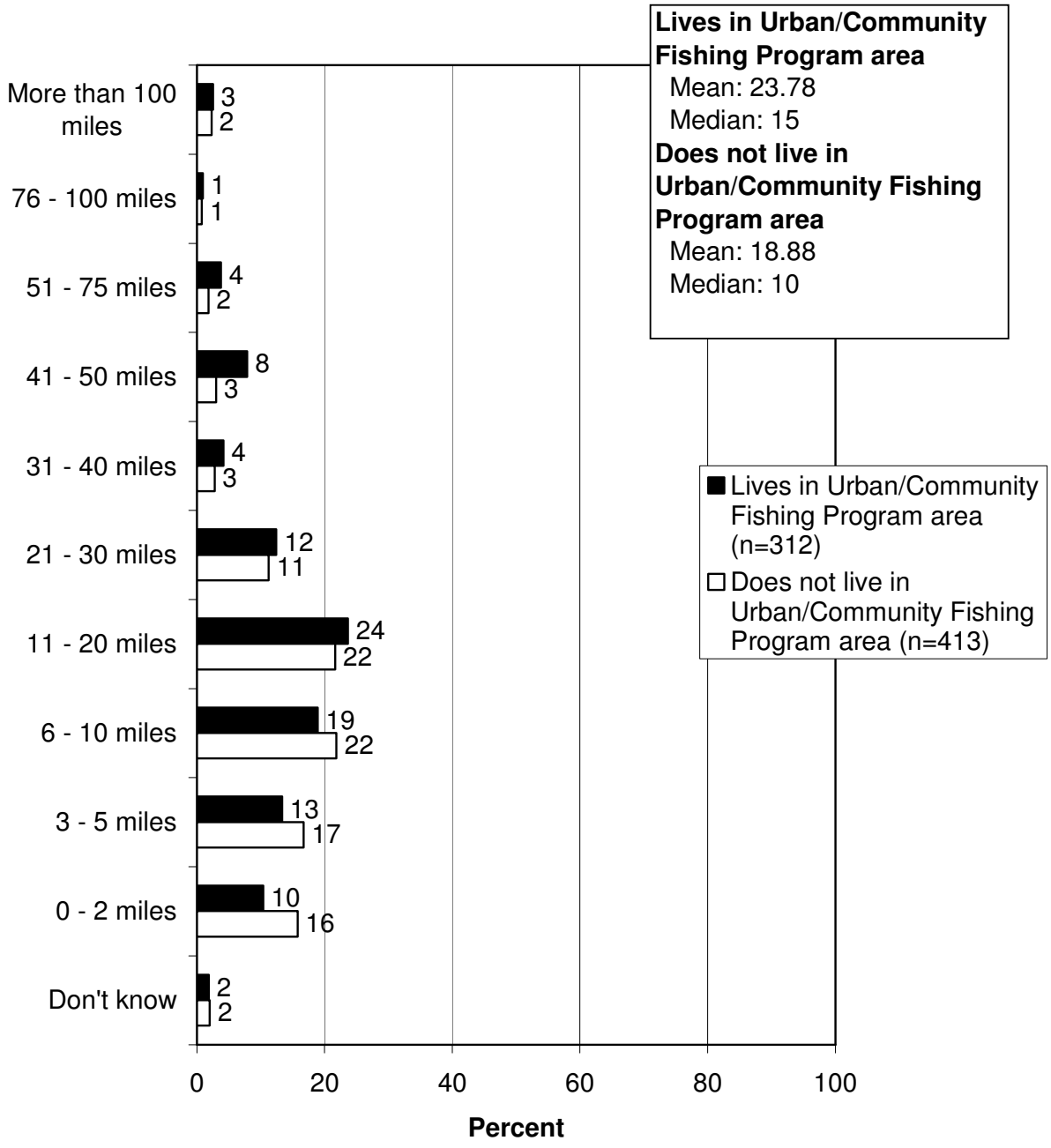
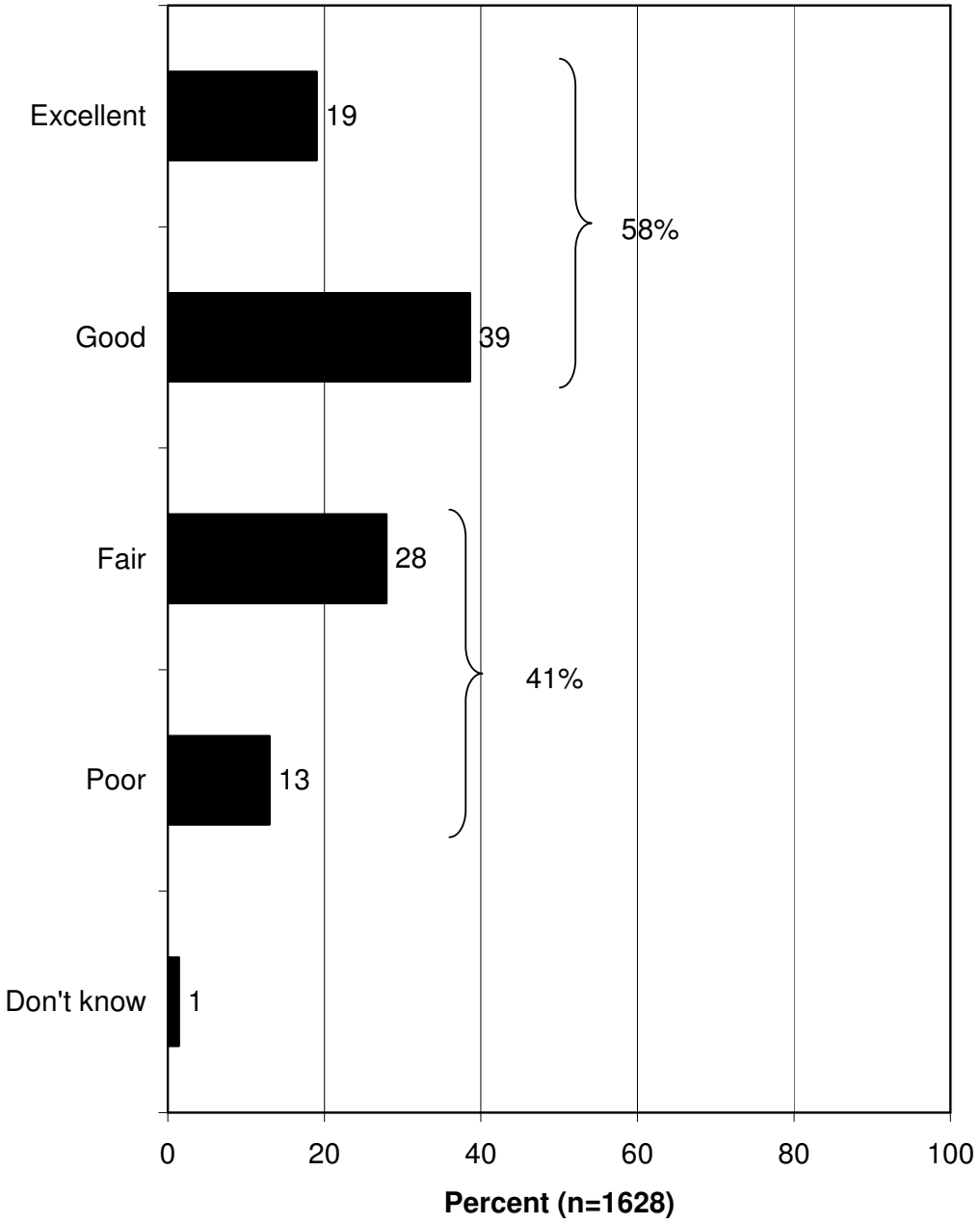


Q88. How would you rate the fishing opportunities within a few miles of your home?



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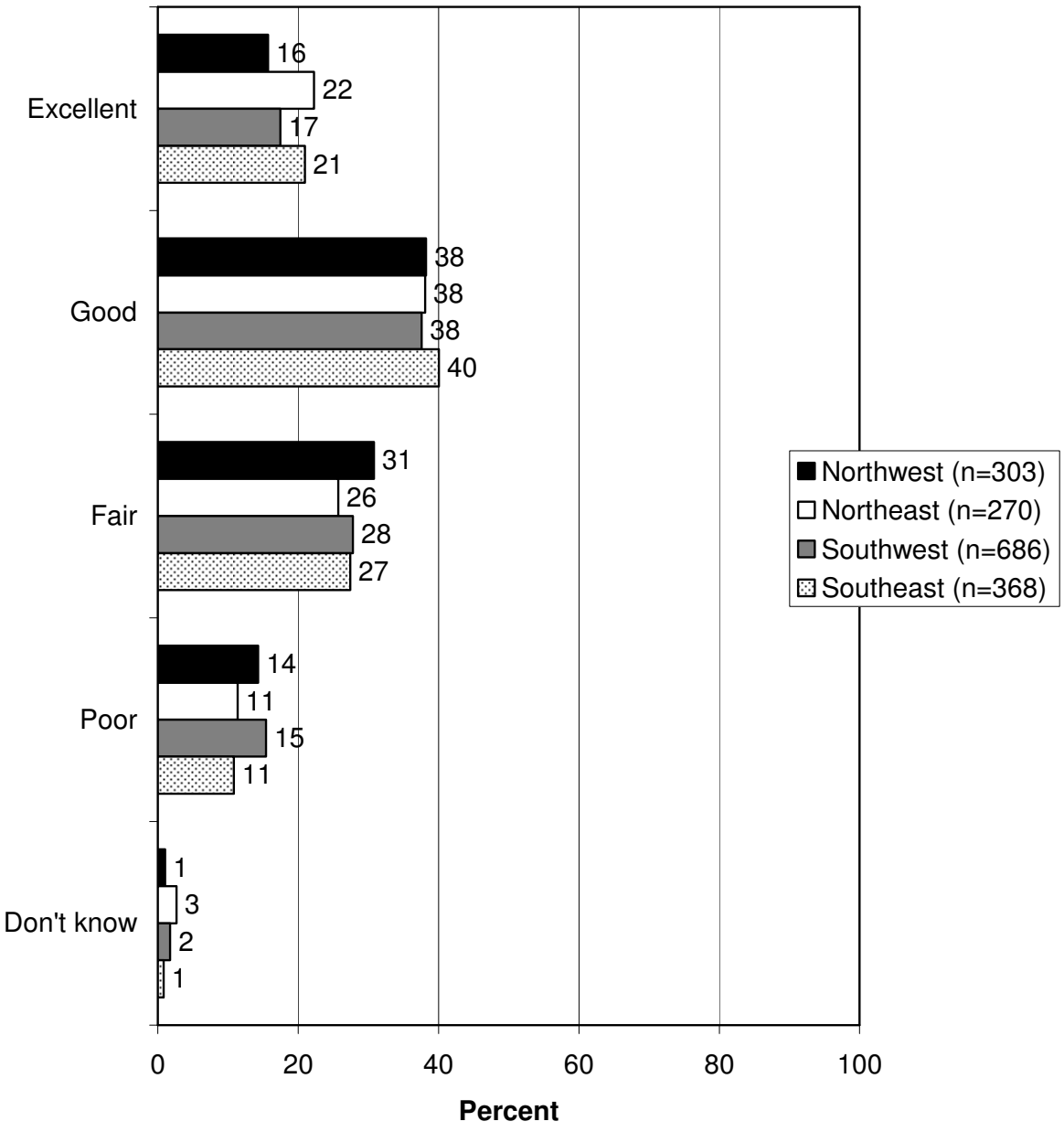

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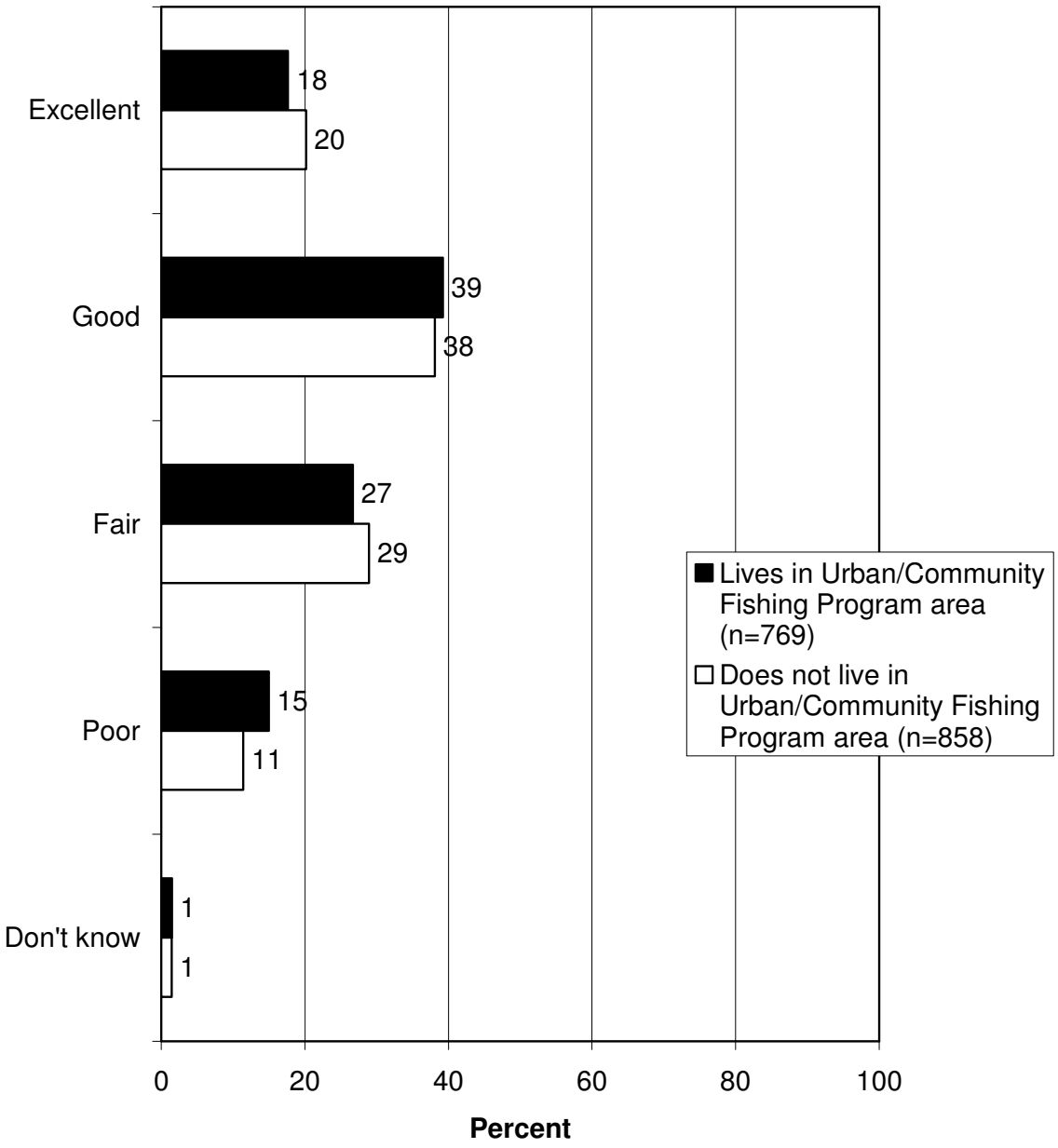
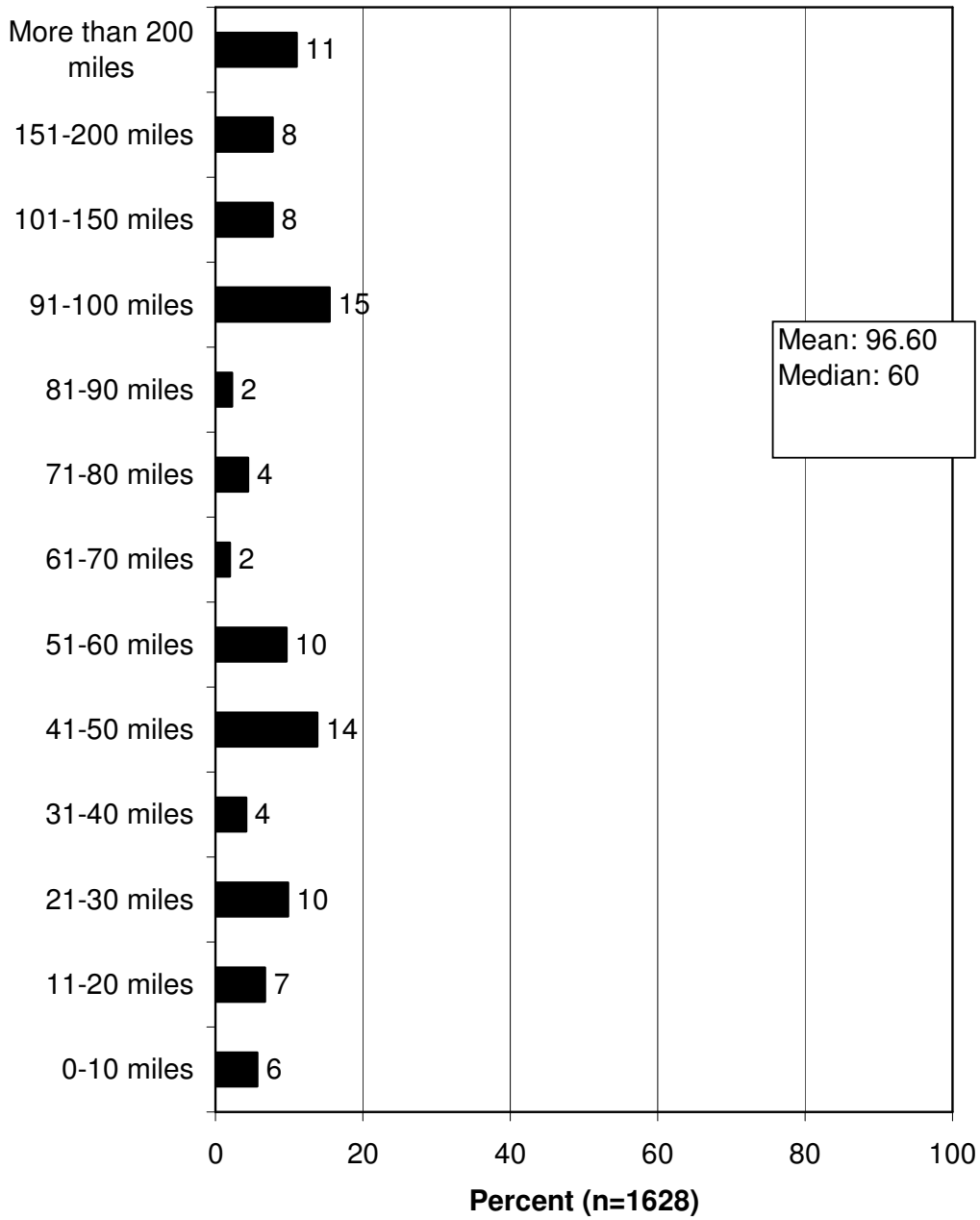


Q90. How far, in miles, one-way, are you willing to travel to fish in Iowa?



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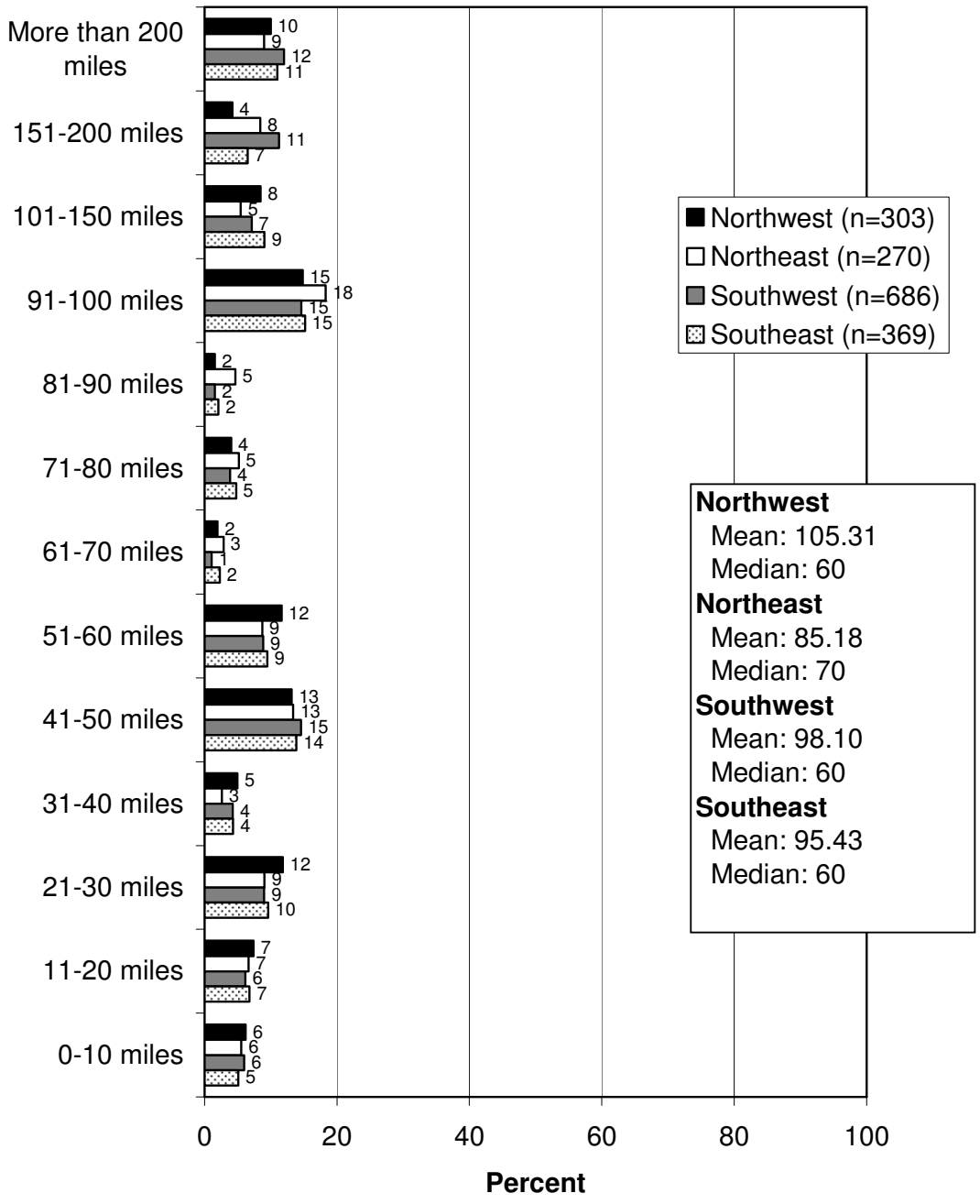

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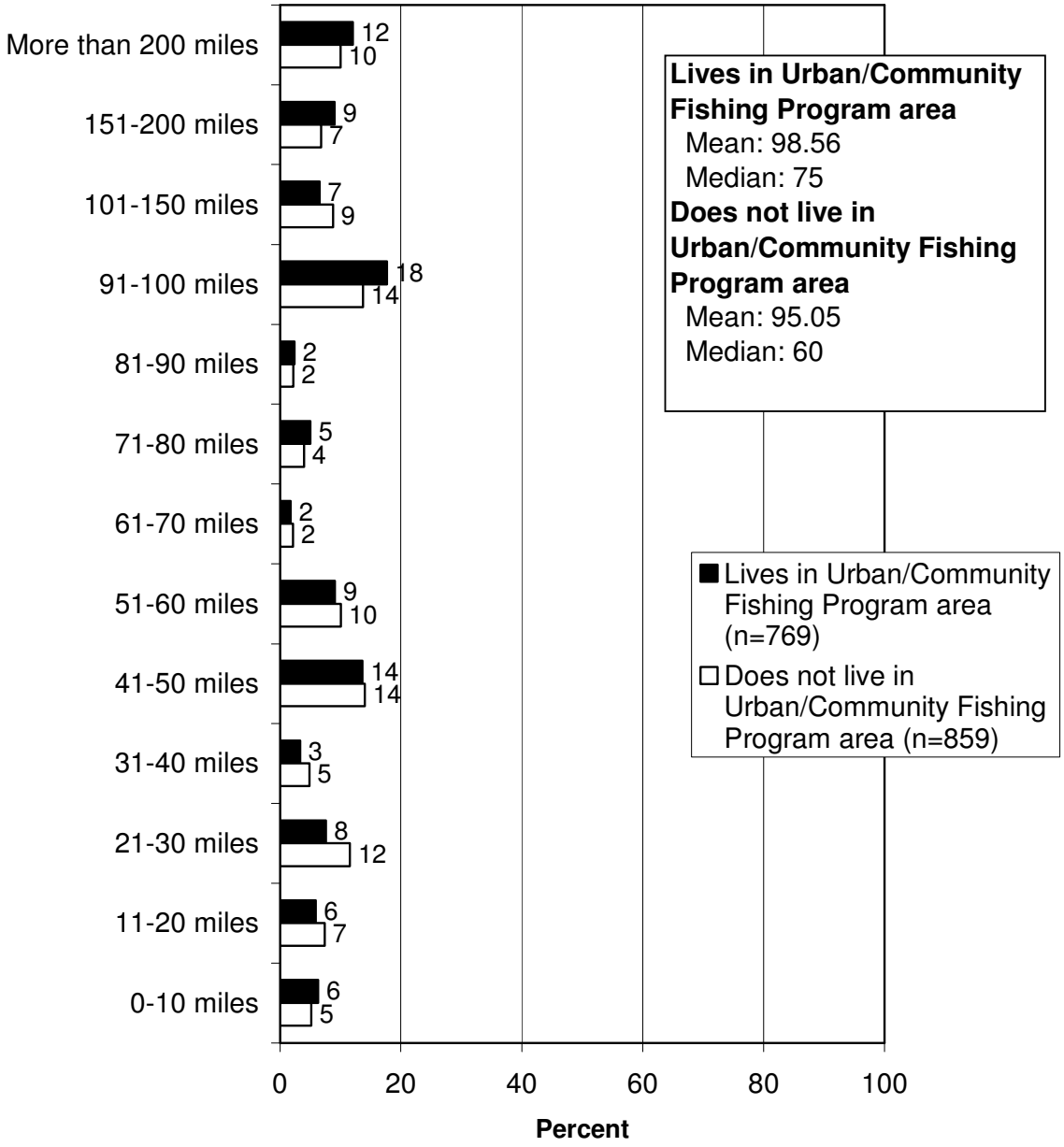
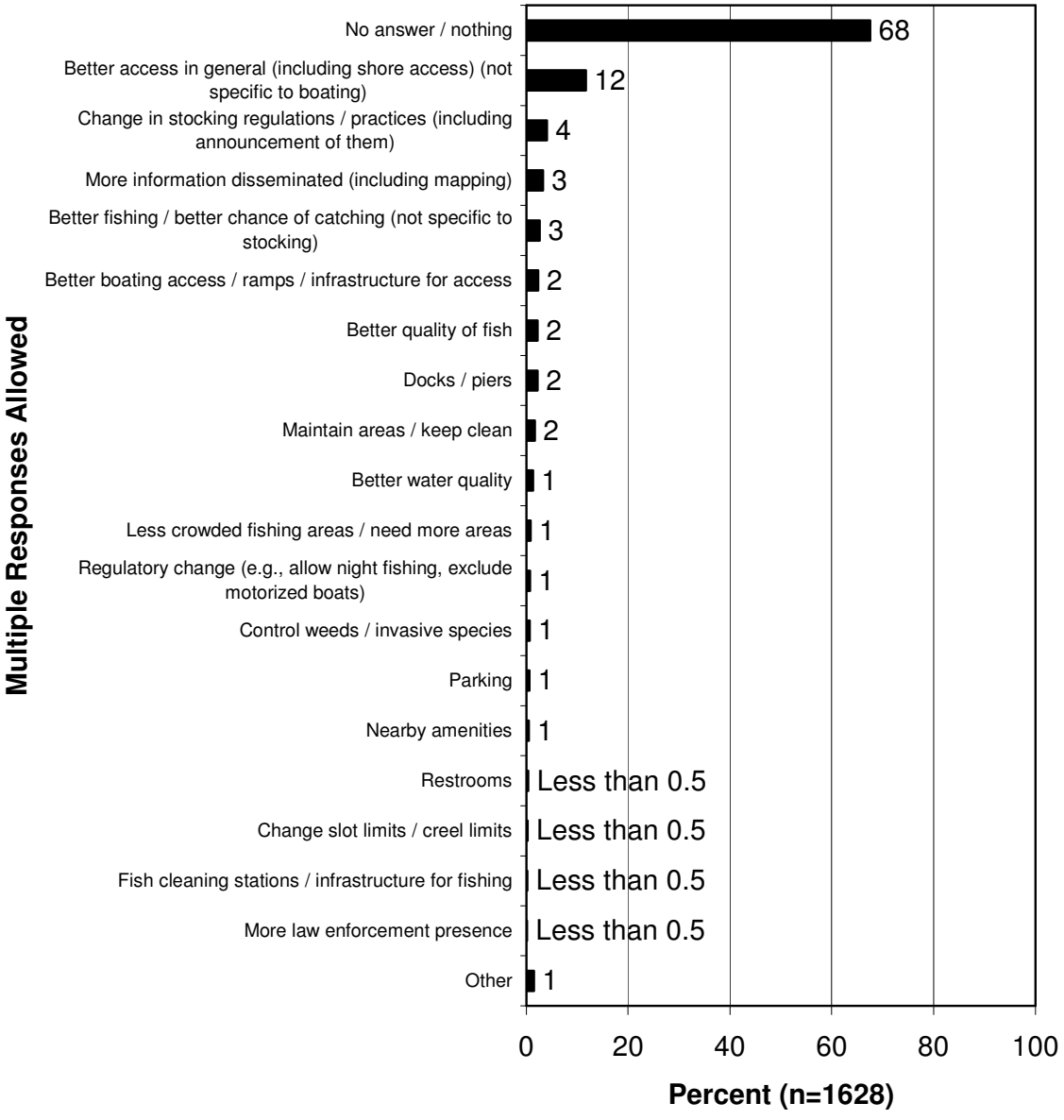


Q93. Currently, Iowa has many local fishing opportunities across the state in both urban and rural areas. Assuming there is a fishing pond within a few miles of your home, regardless of where you live, is there anything that would make it easier for you to [fish / fish more often] at local or nearby ponds?



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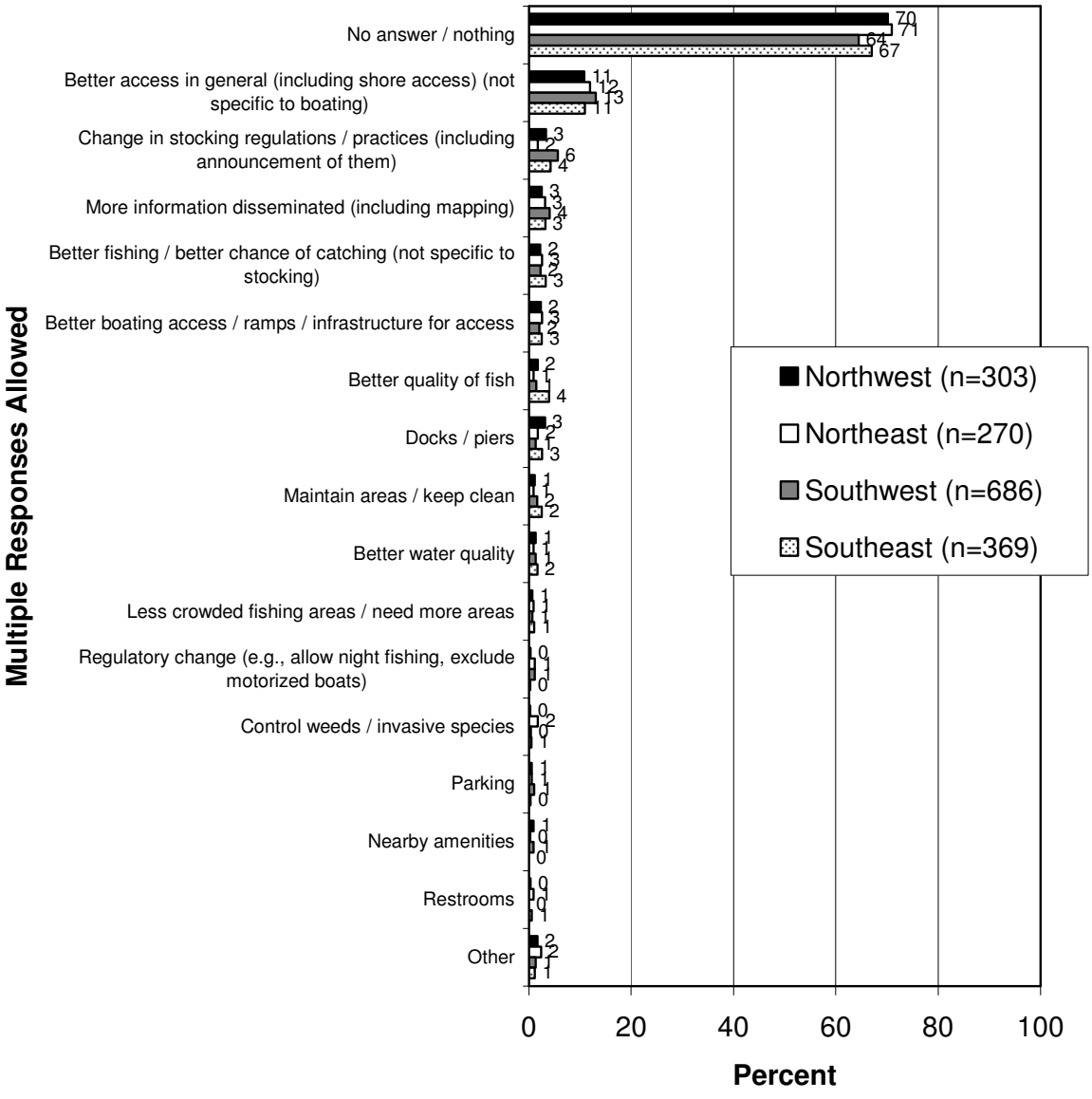

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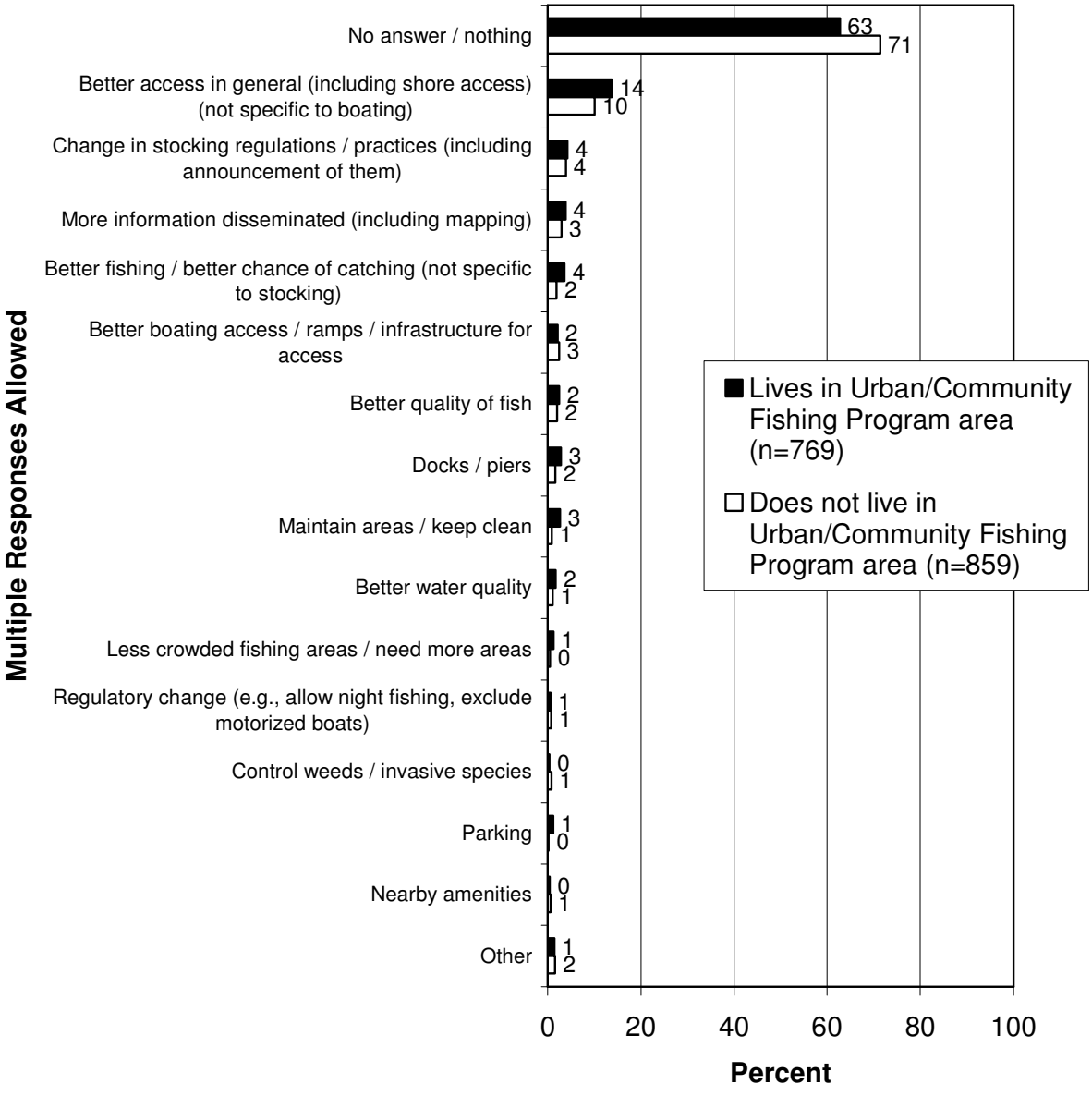


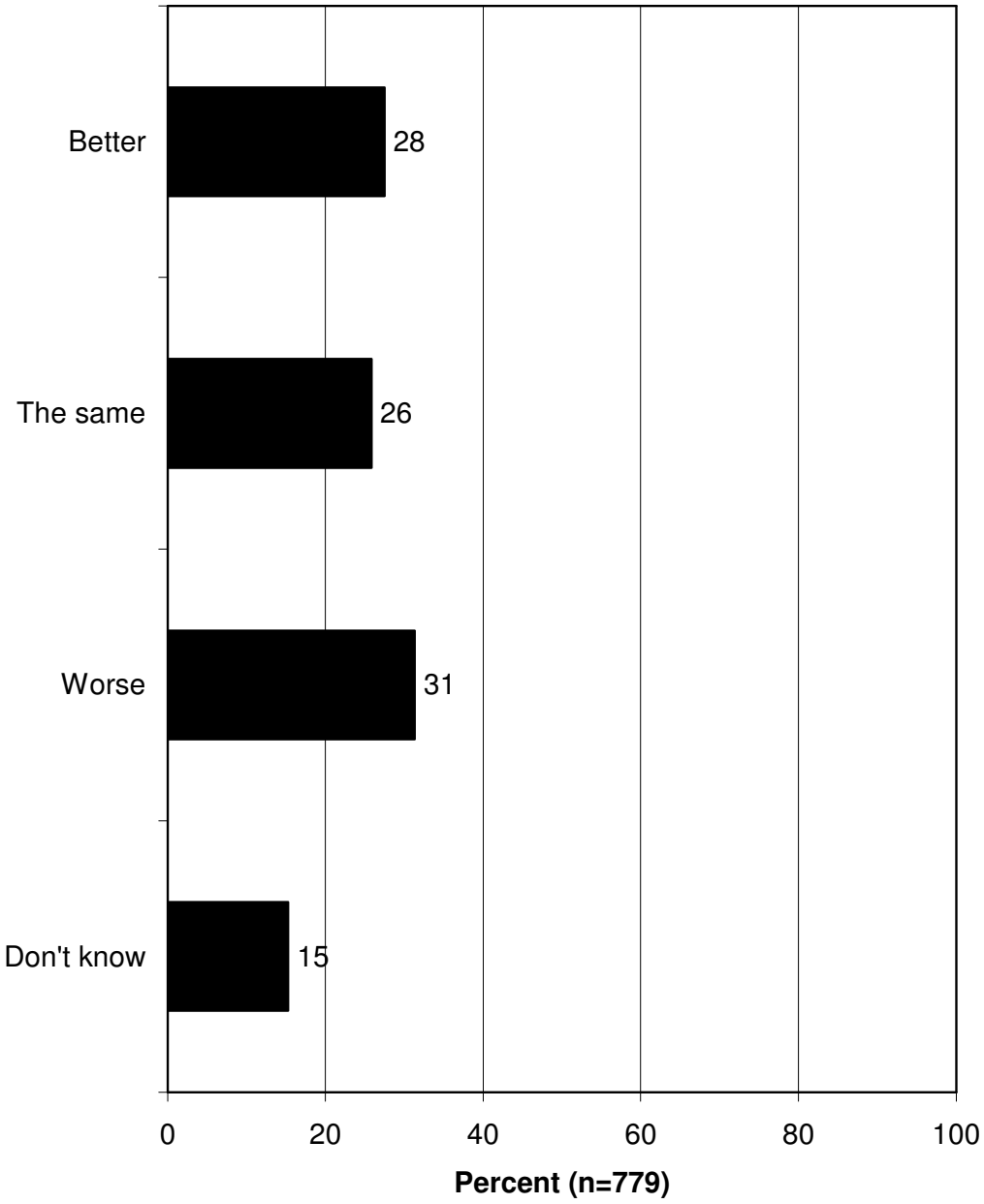
WATER QUALITY IN IOWA

- Anglers were asked about water quality now compared to 10 years ago, and they are about evenly divided: 28% think it is better now than it was 10 years ago, while 31% think it is worse now. Meanwhile, 26% think it is the same and 15% do not know.

- When asked to rate the current quality of Iowa's waters, anglers are evenly divided between those who think it is *excellent* or *good* (47%; 42% *good*) and those who think it is *fair* or *poor* (also 47%; 32% *fair*).

- When asked to name the most important water quality issue where they fish most often in Iowa, anglers most commonly say agricultural runoff (29% state this), followed by litter or trash (12%); 14% say that there is no important issue.

Q114. Do you think the water quality in Iowa waters is better or worse now compared to 10 years ago? (Asked of those who have been fishing at least 10 years in Iowa.)



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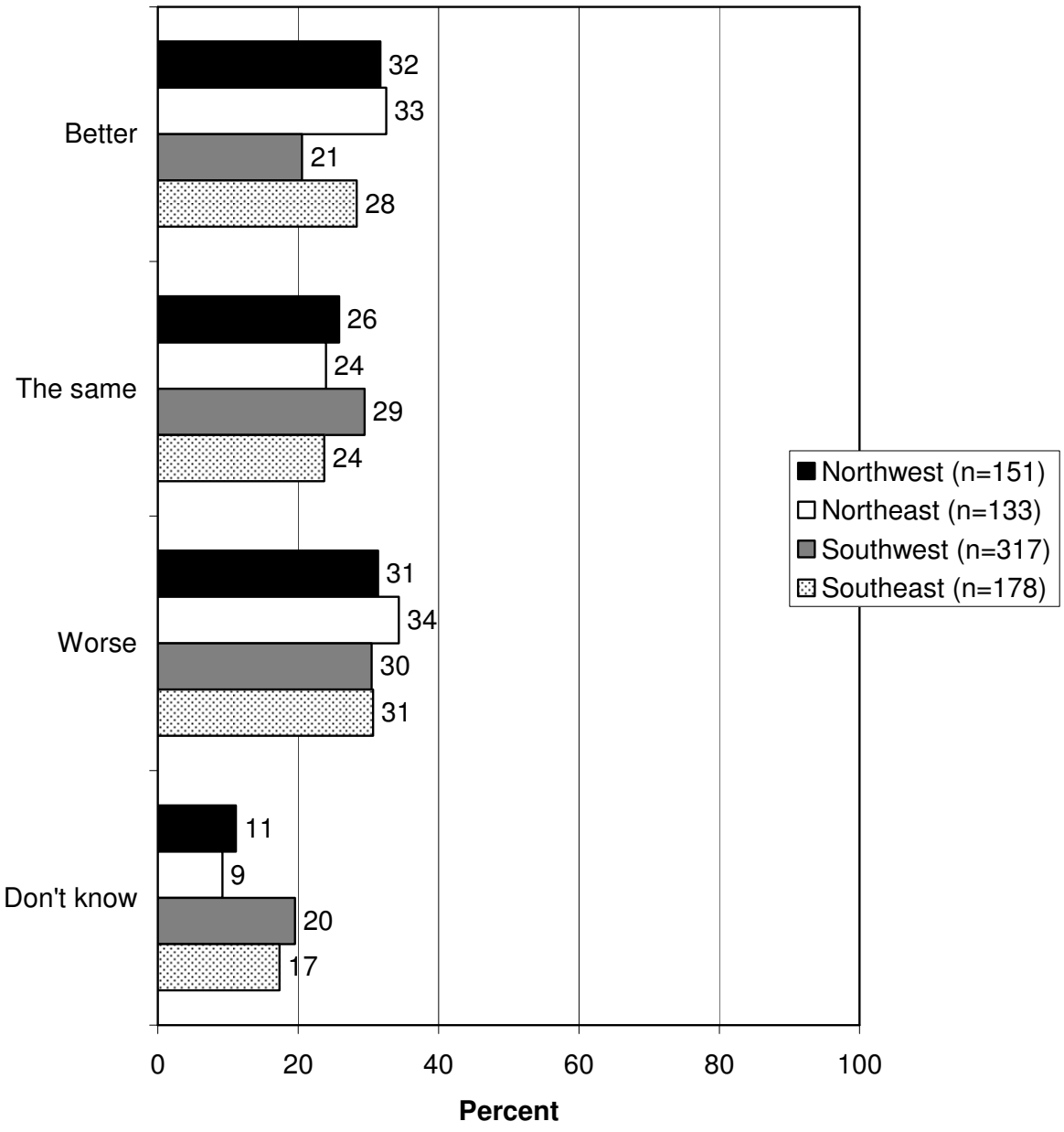

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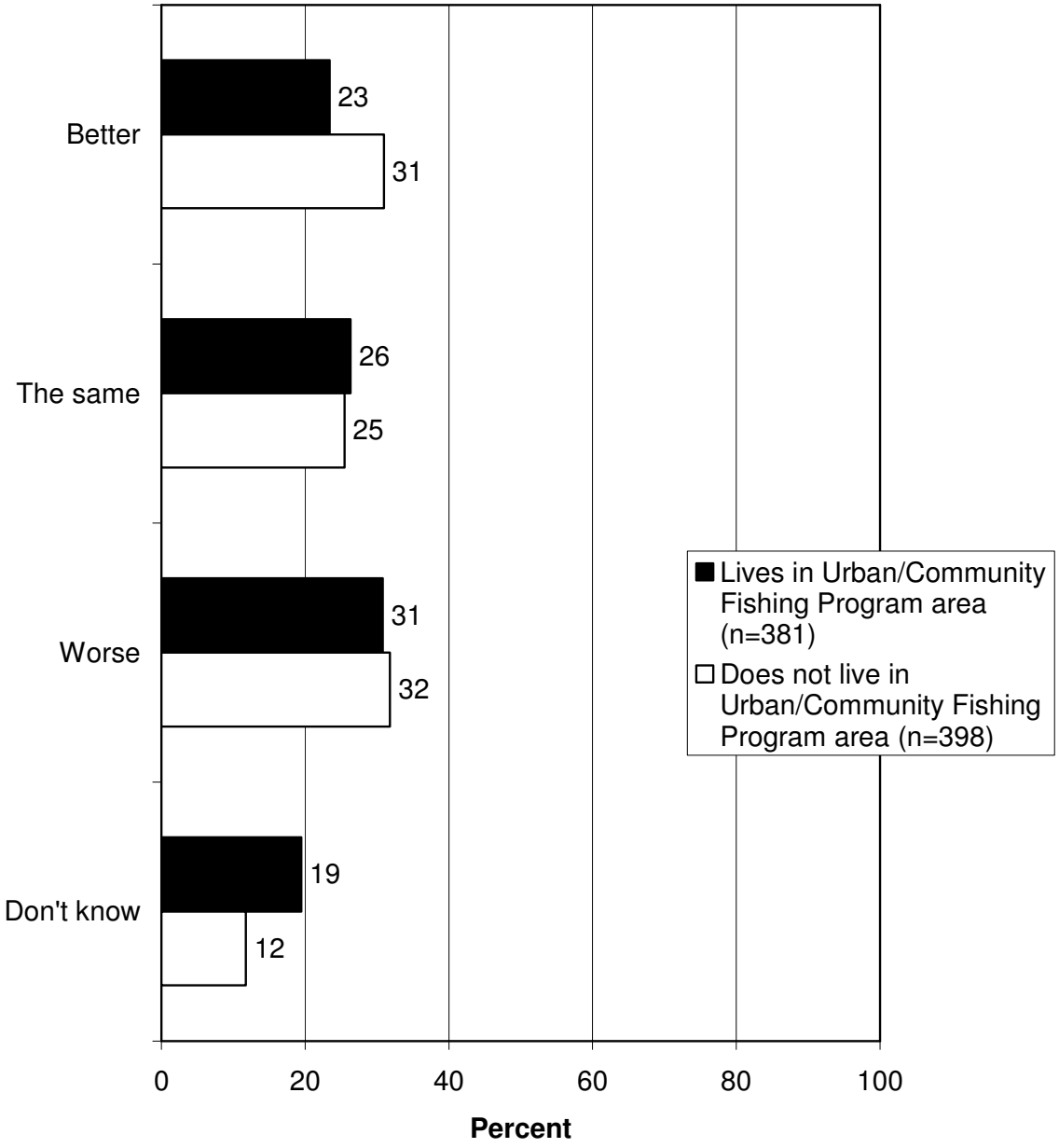

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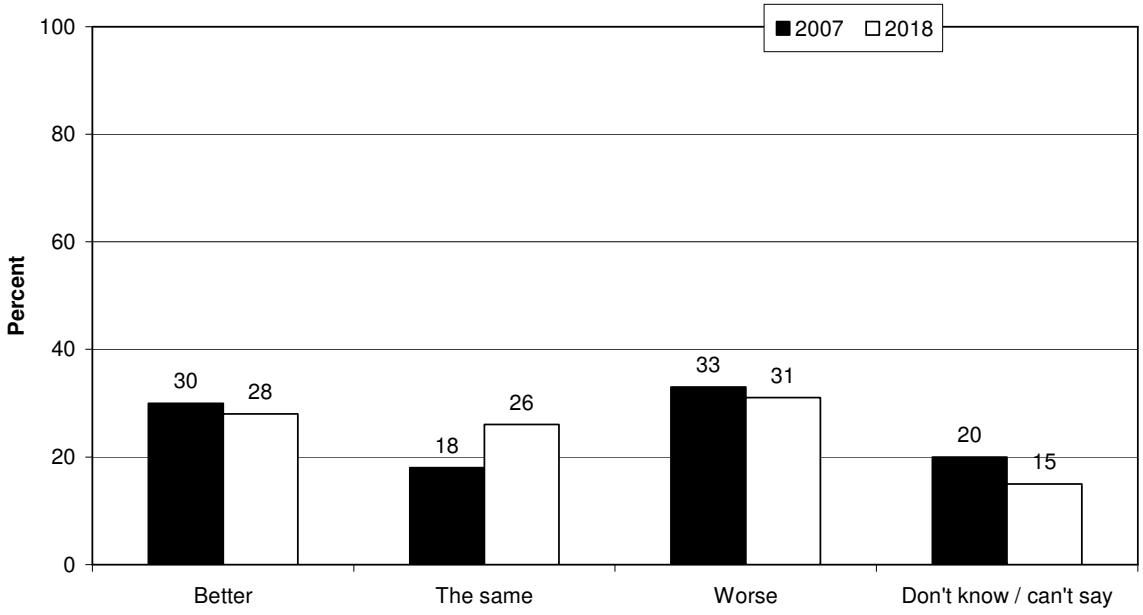
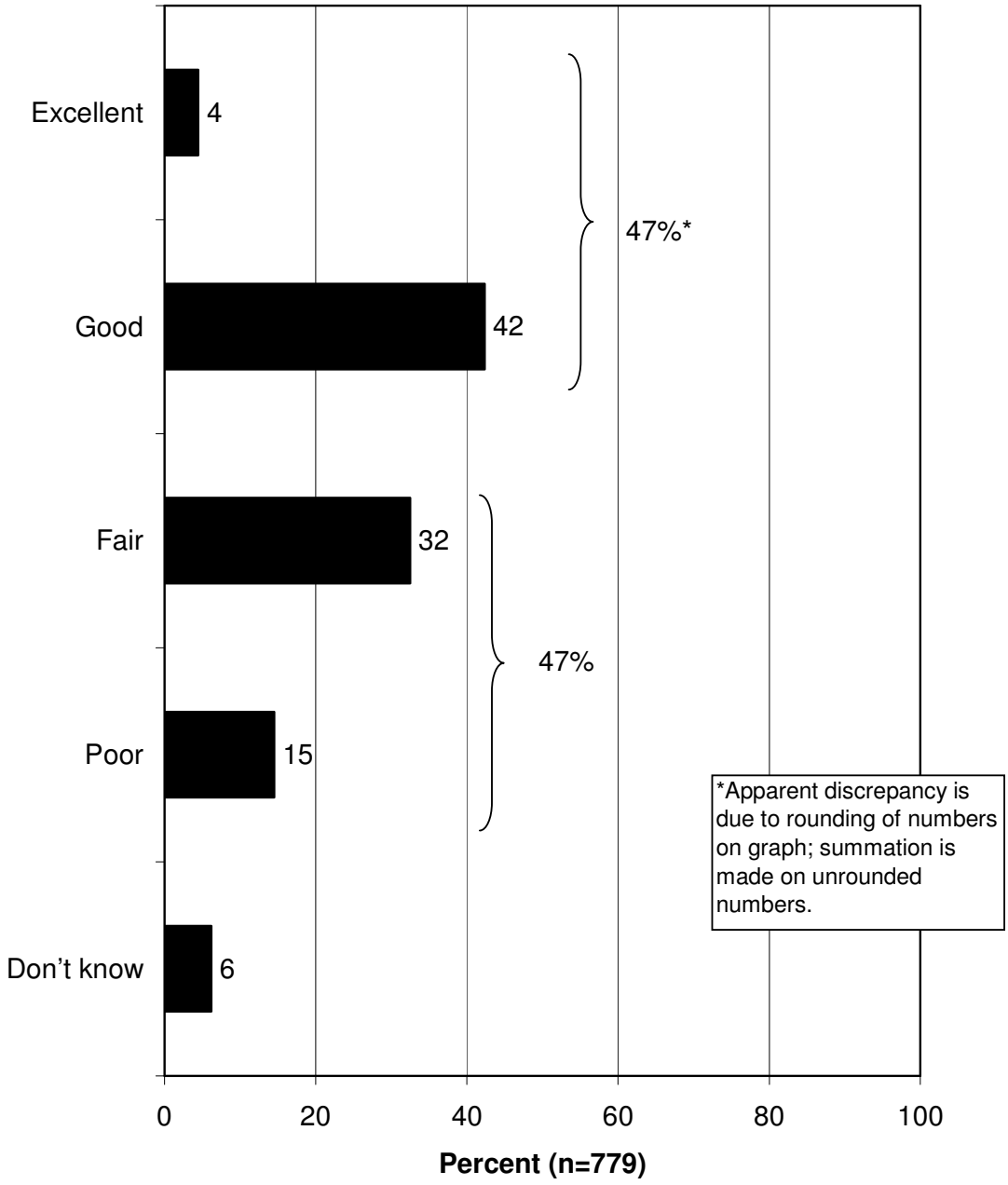


Q115. How would you rate the current quality of Iowa waters?



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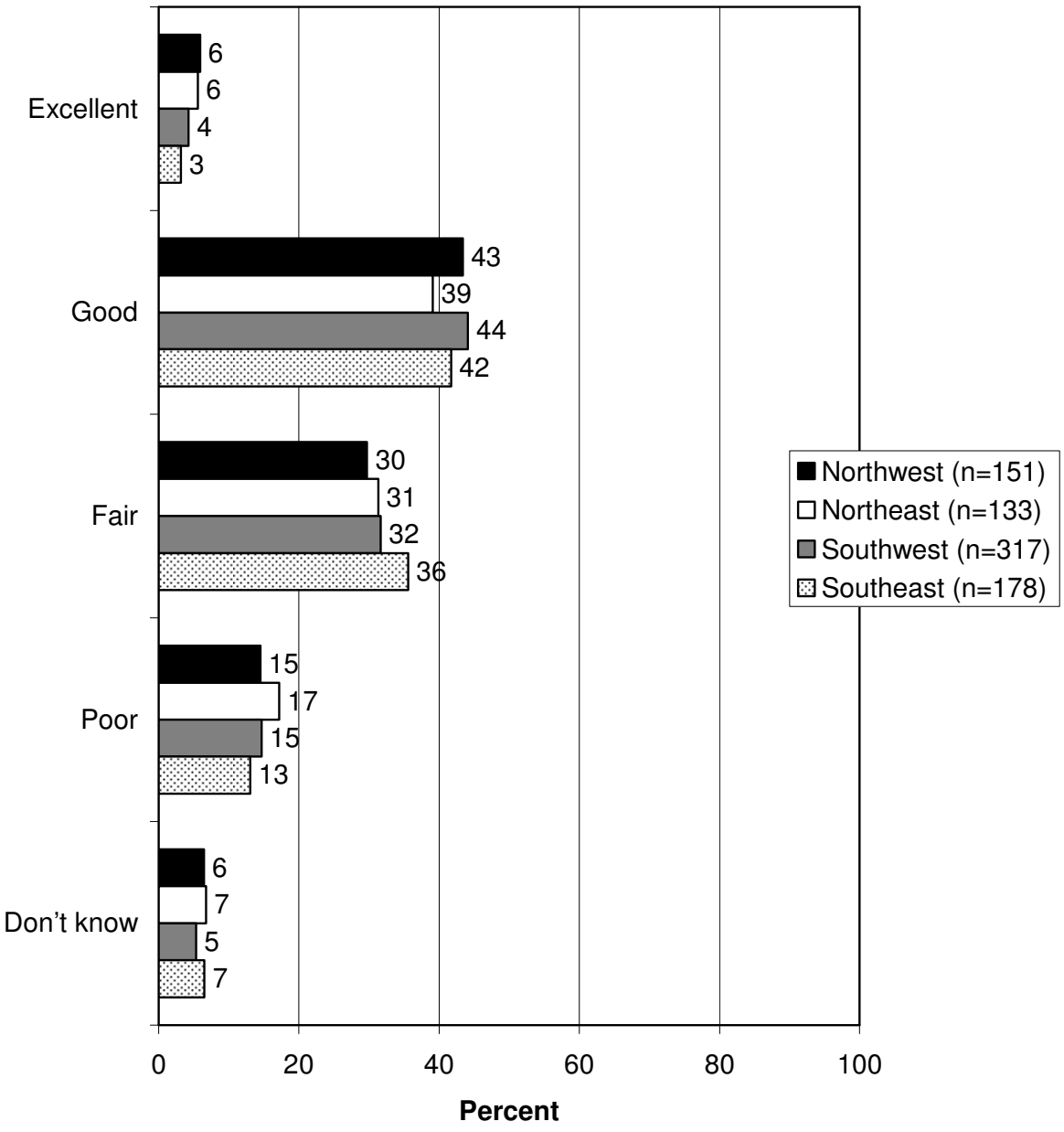

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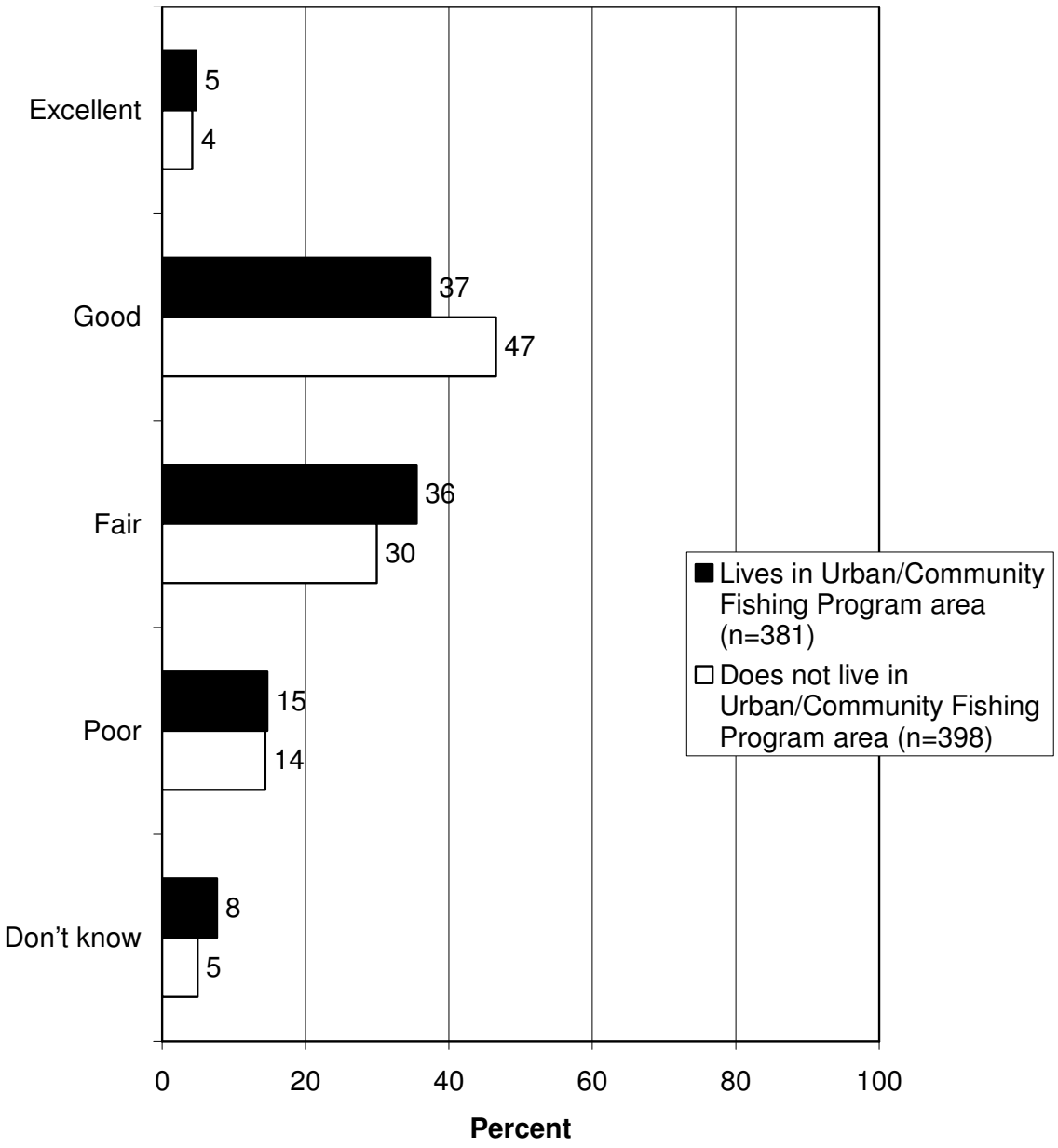
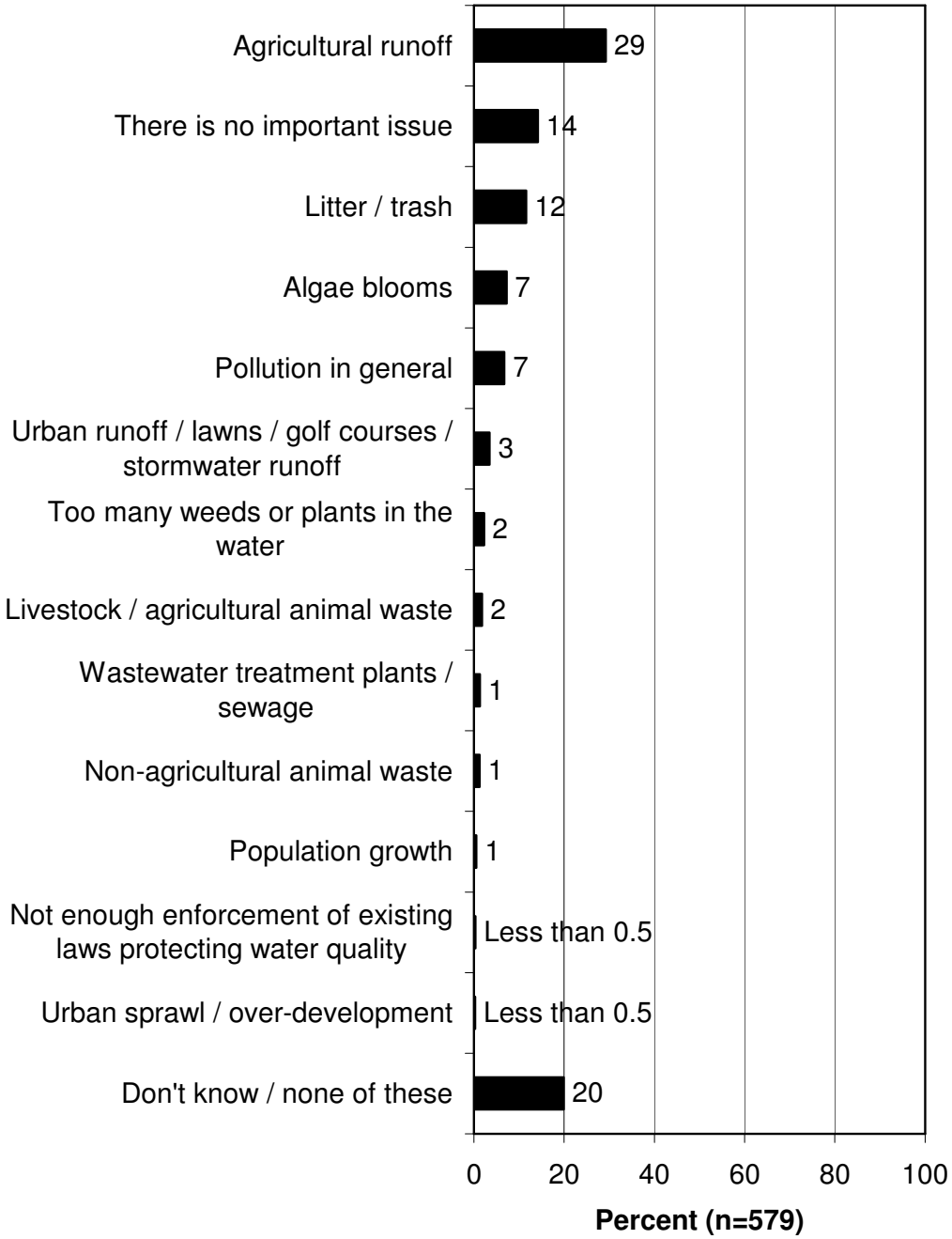


Q116. What specific issue related to water quality is the most important issue where you fish most often in Iowa?



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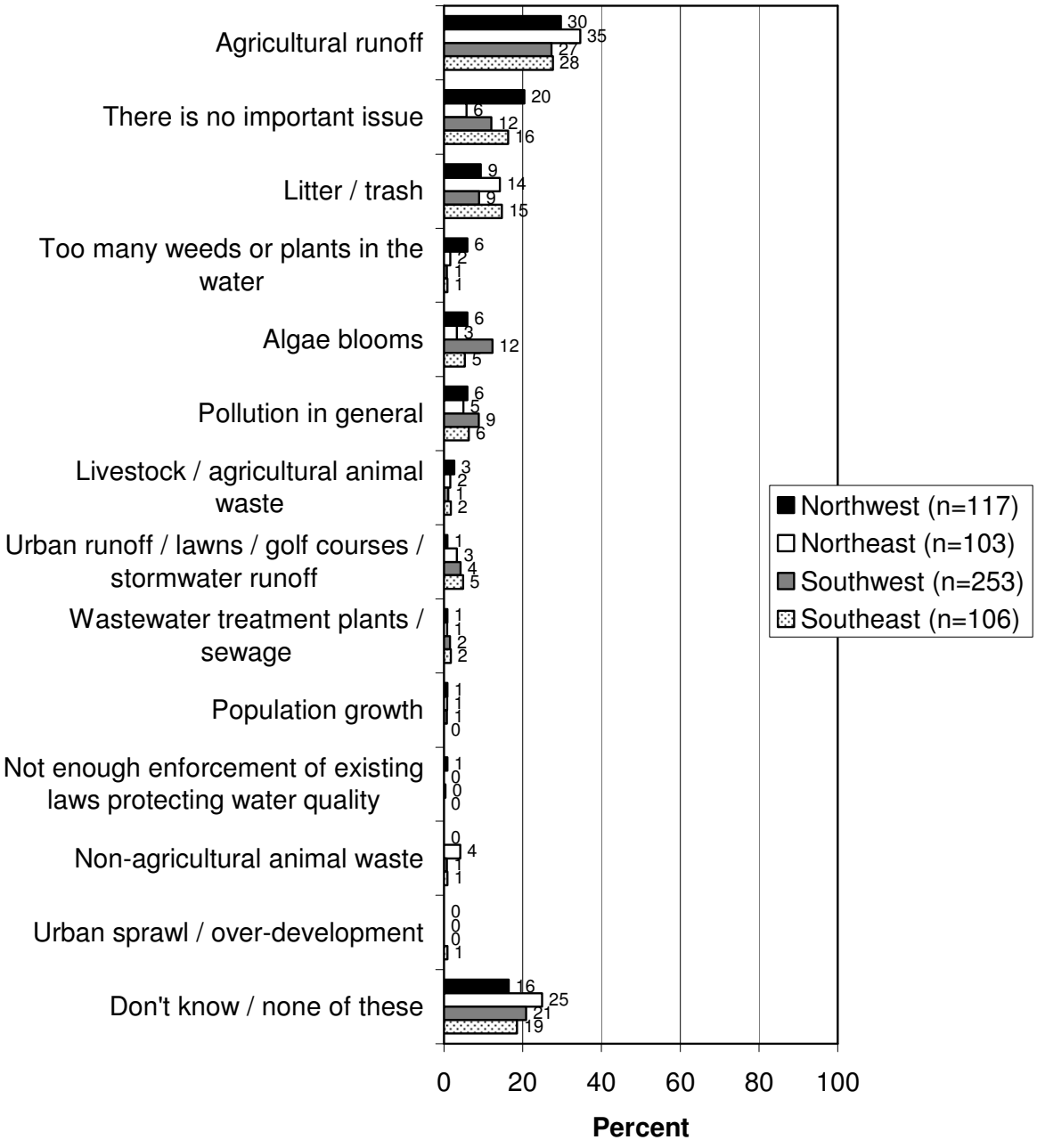

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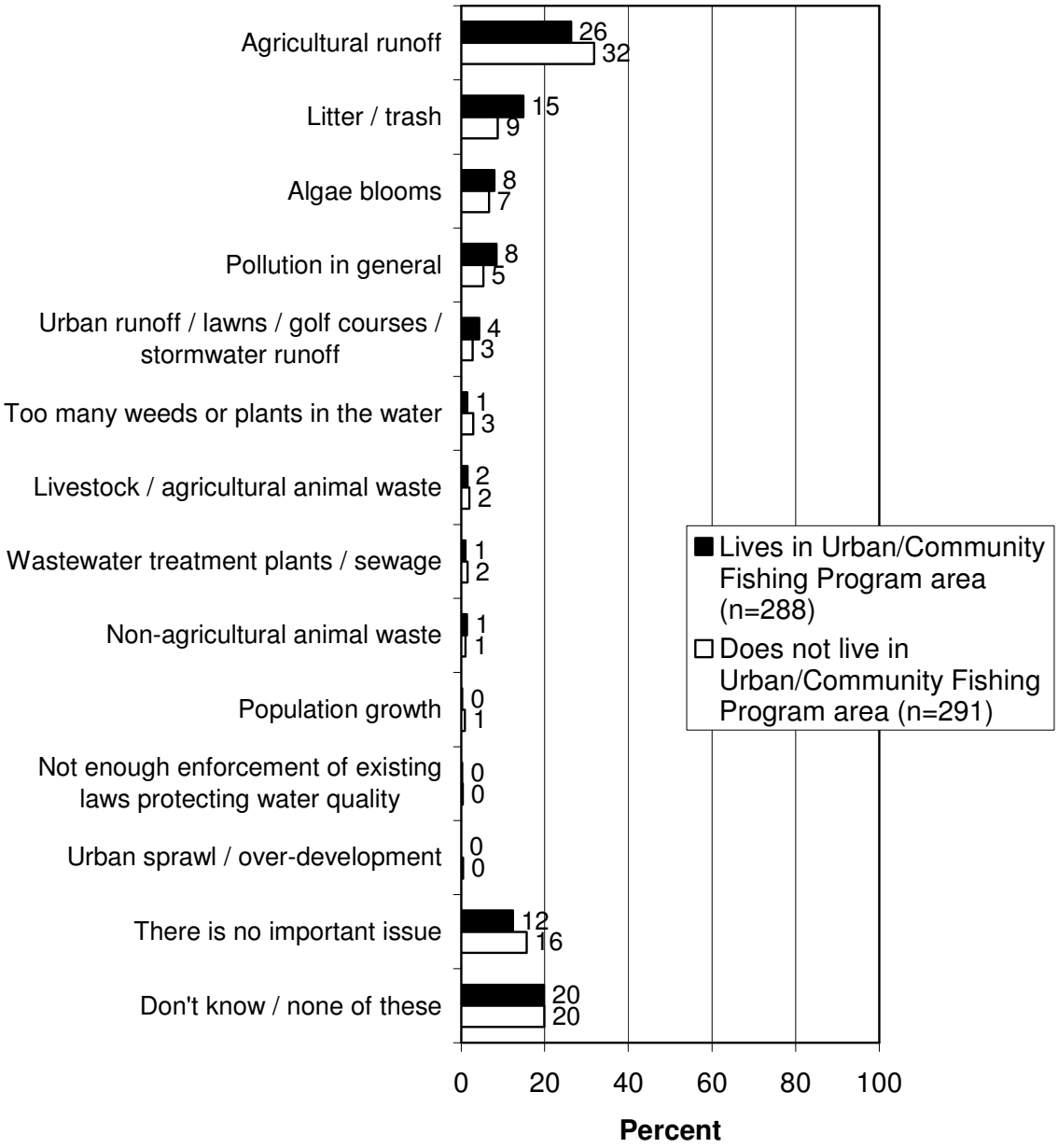
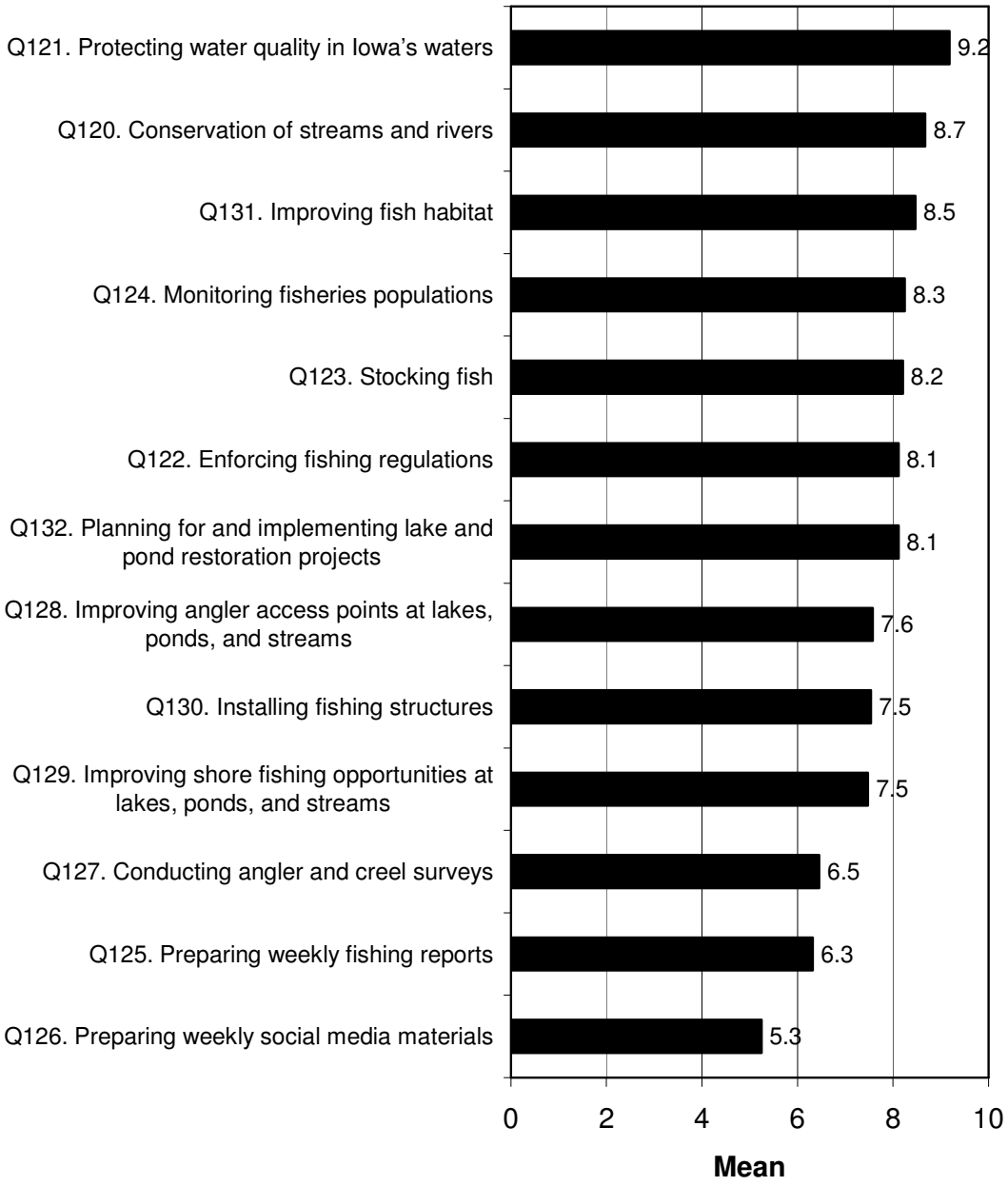


RATINGS OF DEPARTMENT PRIORITIES

- Anglers were asked to rate the importance of 13 efforts related to fishing by the Department, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important. The Department efforts are listed below, in descending order of their mean ratings. In general, the ecological efforts, such as protecting water quality or improving habitat, are given higher ratings than the recreation-related efforts, such as stocking fish or improving access.
  - Protecting water quality in Iowa's waters (mean rating of 9.2)
  - Conservation of streams and rivers (8.7)
  - Improving fish habitat (8.5)
  - Monitoring fisheries populations (8.3)
  - Stocking fish (8.2)
  - Enforcing fishing regulations (8.1)
  - Planning for and implementing lake and pond restoration projects (8.1)
  - Improving angler access points at lakes, ponds, and streams (7.6)
  - Installing fishing structures (7.5)
  - Improving shore fishing opportunities at lakes, ponds, and streams (7.5)
  - Conducting angler and creel surveys (6.5)
  - Preparing weekly fishing reports (6.3)
  - Preparing weekly social media materials (5.3)

Q120-Q132. Mean ratings of importance for each of the following for the Department, on a scale of 0 to 10, with 0 being not at all important and 10 being extremely important.



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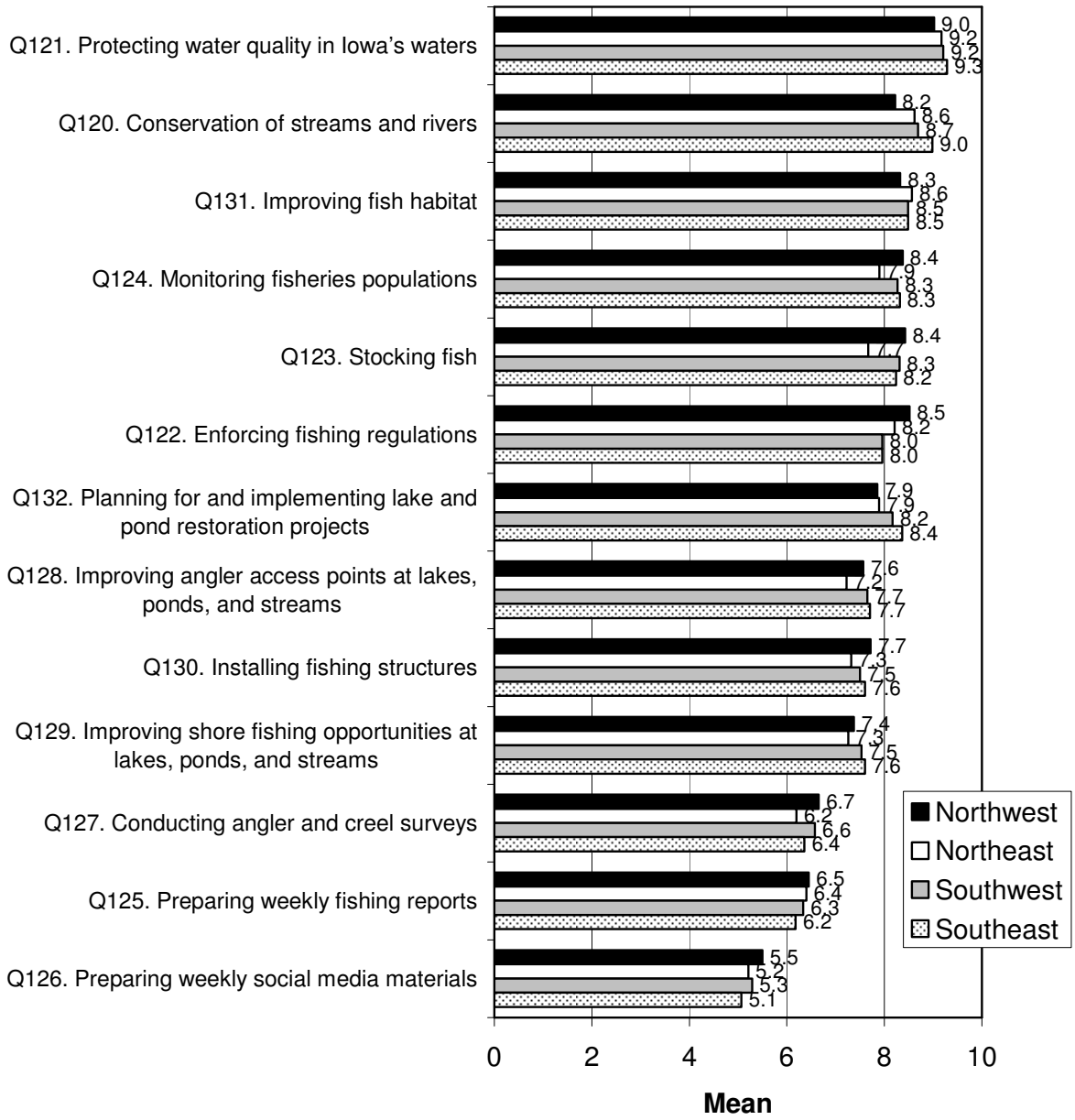

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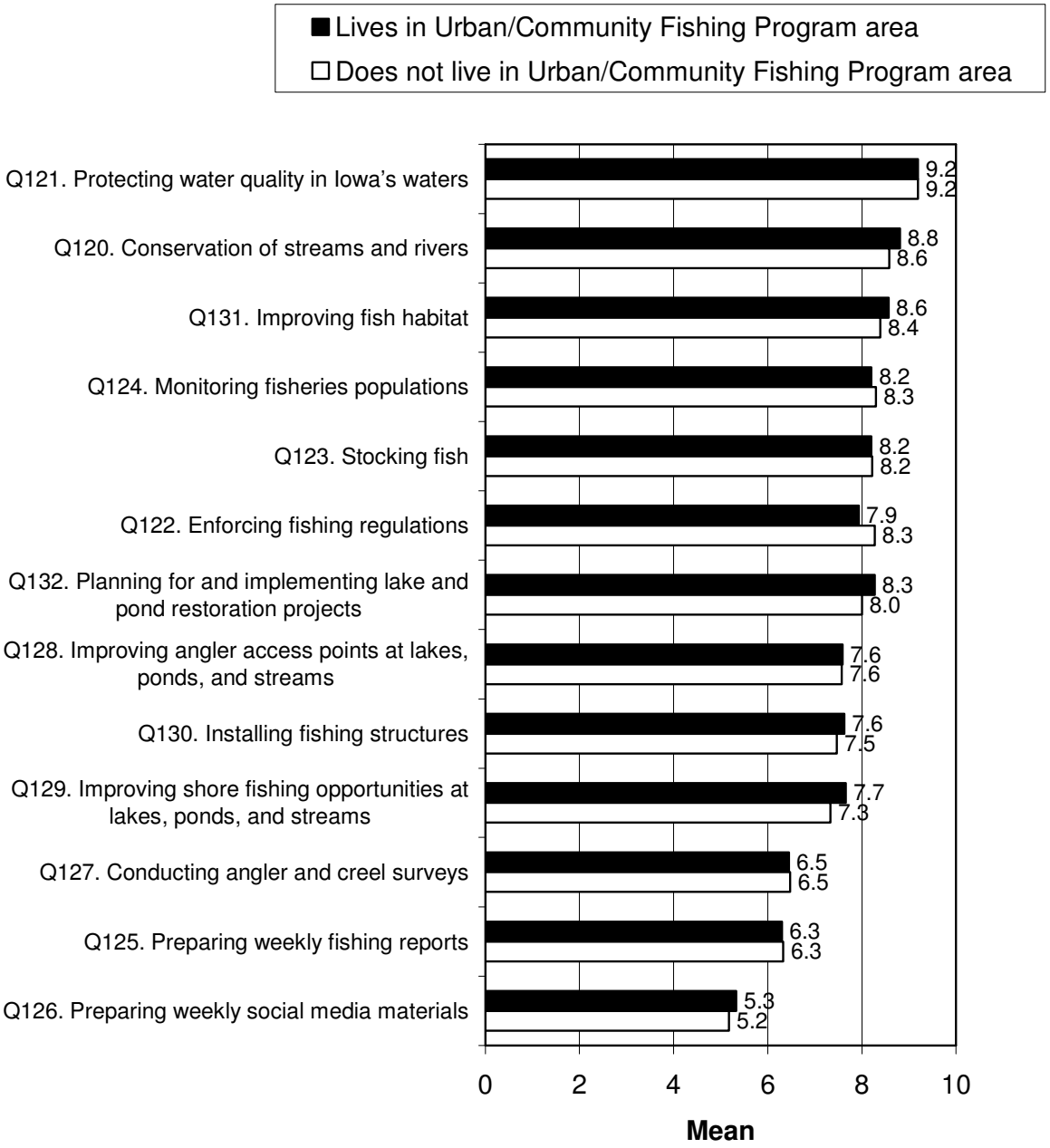
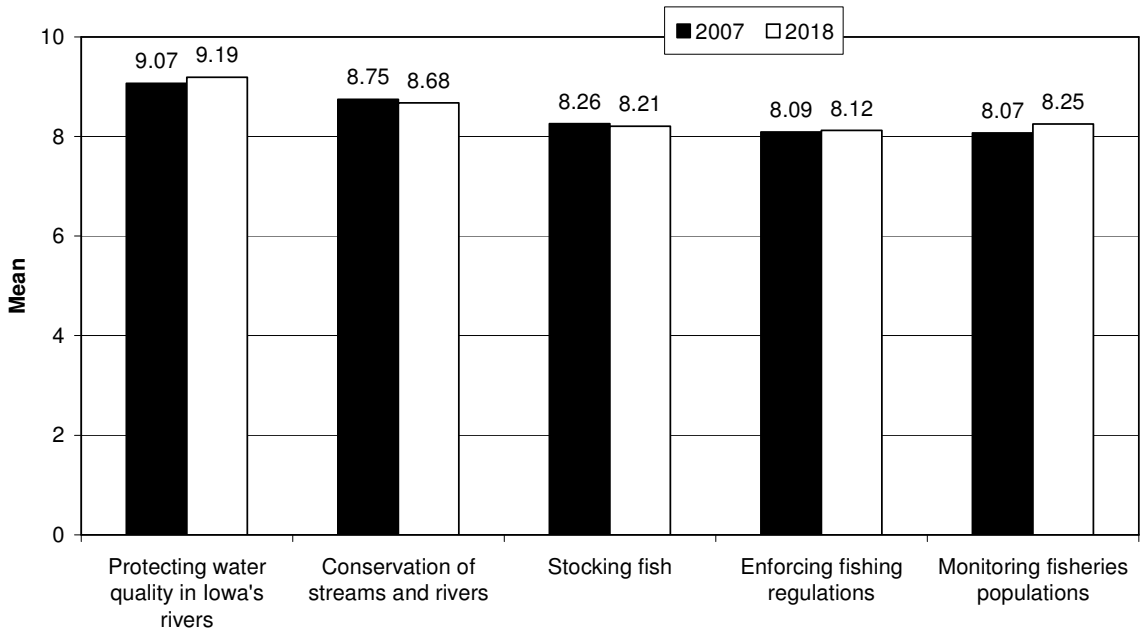


Q120-132. On a scale of 0 to 10, with 0 being not at all important and 10 being extremely important, the mean ratings of importance for the following for the Iowa Department of Natural Resources.



FISH CONSUMPTION

- The large majority of Iowa anglers (80%) eat (or their family members eat) the fish they catch at least some of the time.
  - Those who live in an Urban/Community Fishing Program area are less likely to eat the fish they catch than those who do not live in a program area.

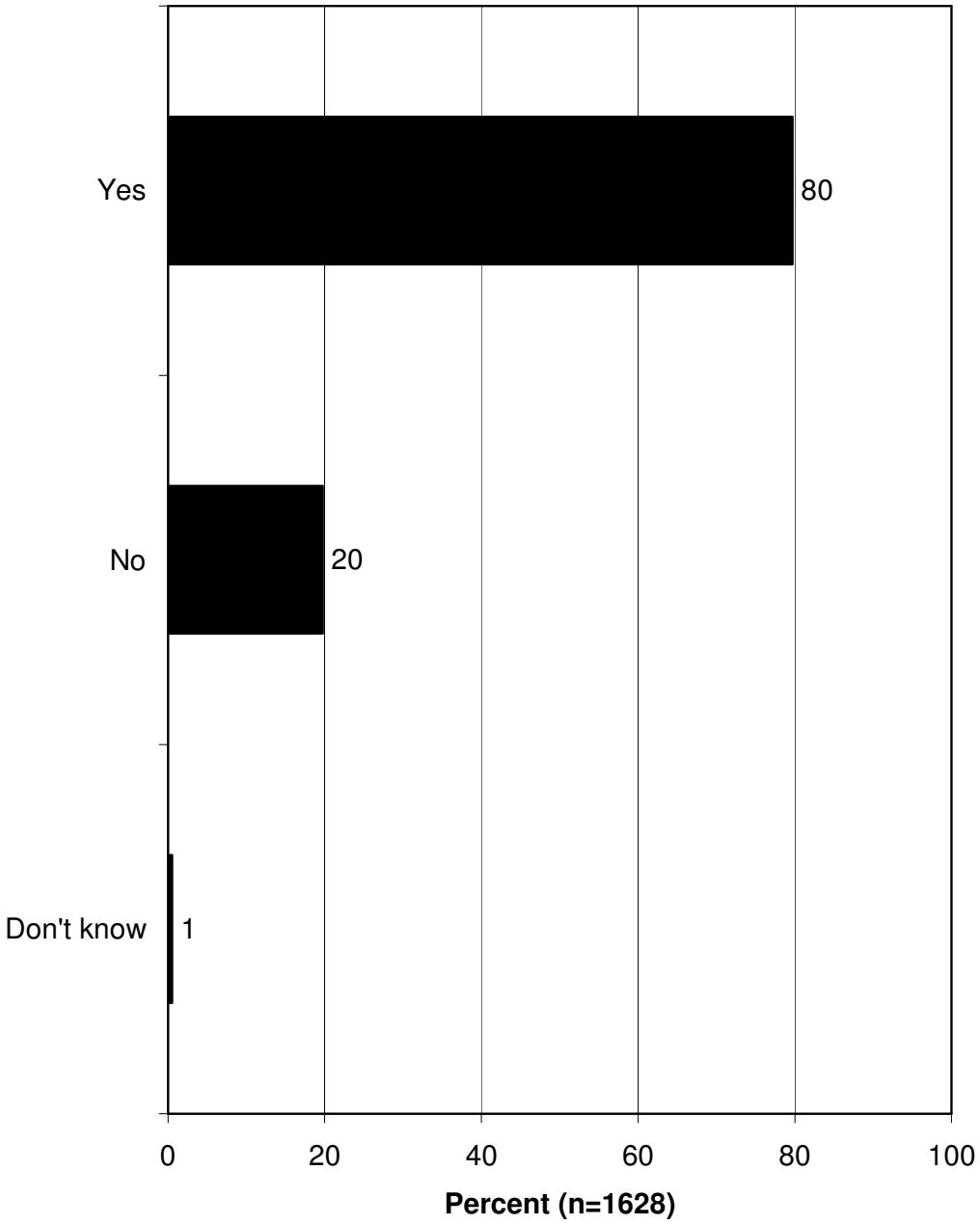
- Those who eat the fish they catch do so a mean of 13.6 times a year; the median is 6 meals a year.
  - The results of these questions indicate that Iowa anglers consumed approximately 4.59 million meals of Iowa-caught fish in the past year.

- Most of those who consume fish that they have caught (78%) do *not* limit their consumption based on safety concerns about eating the fish caught in Iowa. Nonetheless, 6% of such anglers limit their consumption very much, and 15% limit it a little.
  - Among those who limit their consumption very much or a little, 29% are concerned about heavy metals or mercury, 23% are concerned about agricultural runoff in general, and 15% are concerned about nutrients in the water from runoff.

- The overwhelming majority of those who consume fish that they have caught (84%) consider Iowa's fish to be safe for eating; however, a small percentage (5%) consider Iowa's fish to be unsafe for eating.
  - In a related question, 52% of anglers who do not eat the fish they catch would be likely to eat the fish if they felt it was safer. A third of this group (33%), however, would still be unlikely to eat the fish.

- Over a third of anglers (37%) have been aware of at least one fish advisory about eating fish from Iowa waters.
  - This percentage has decreased since 2007 (49%).
  - Mercury is the most common contaminant for which these anglers have seen or heard advisories.

Q133. Do you or your family members ever eat the fish you catch?



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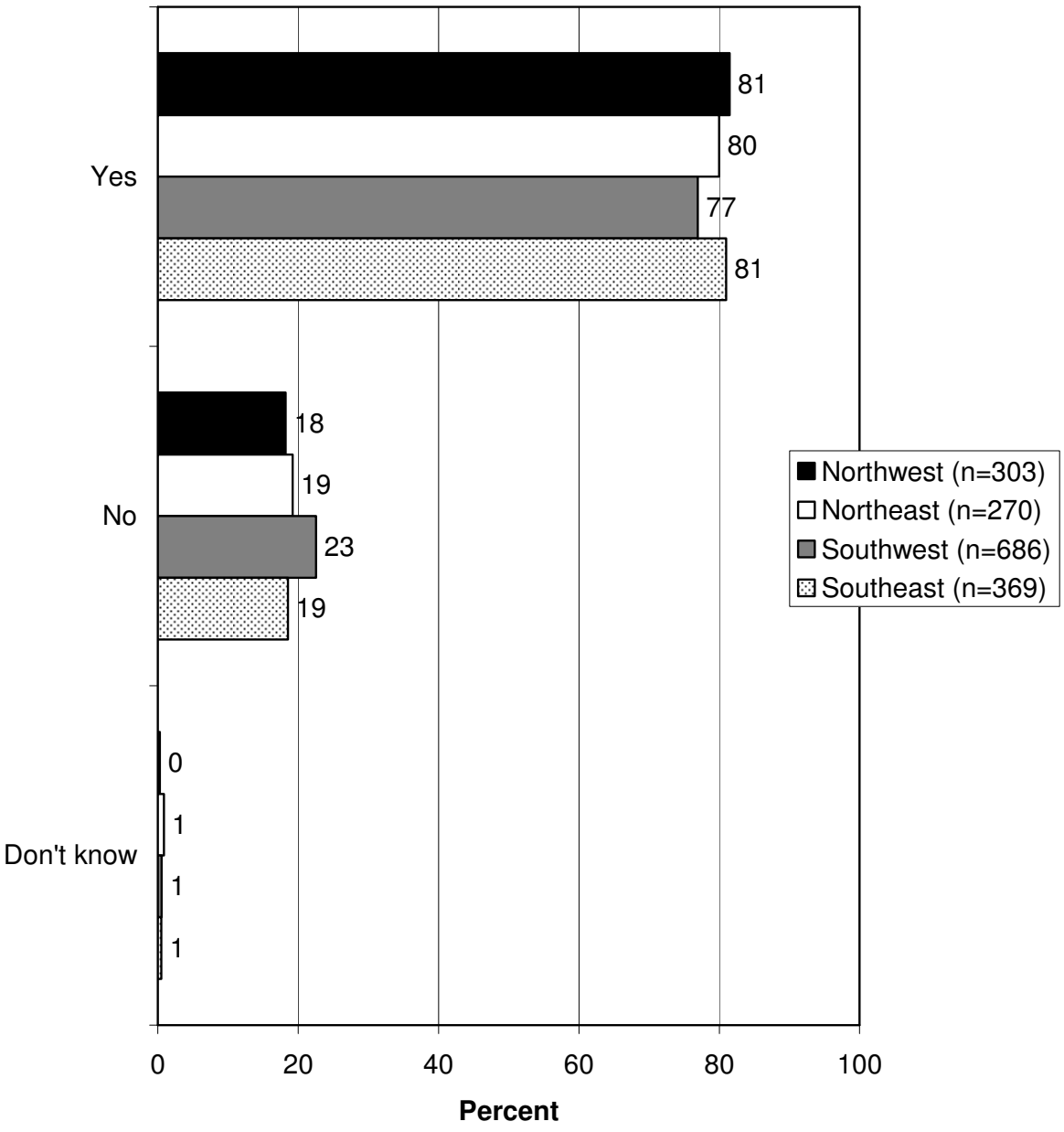

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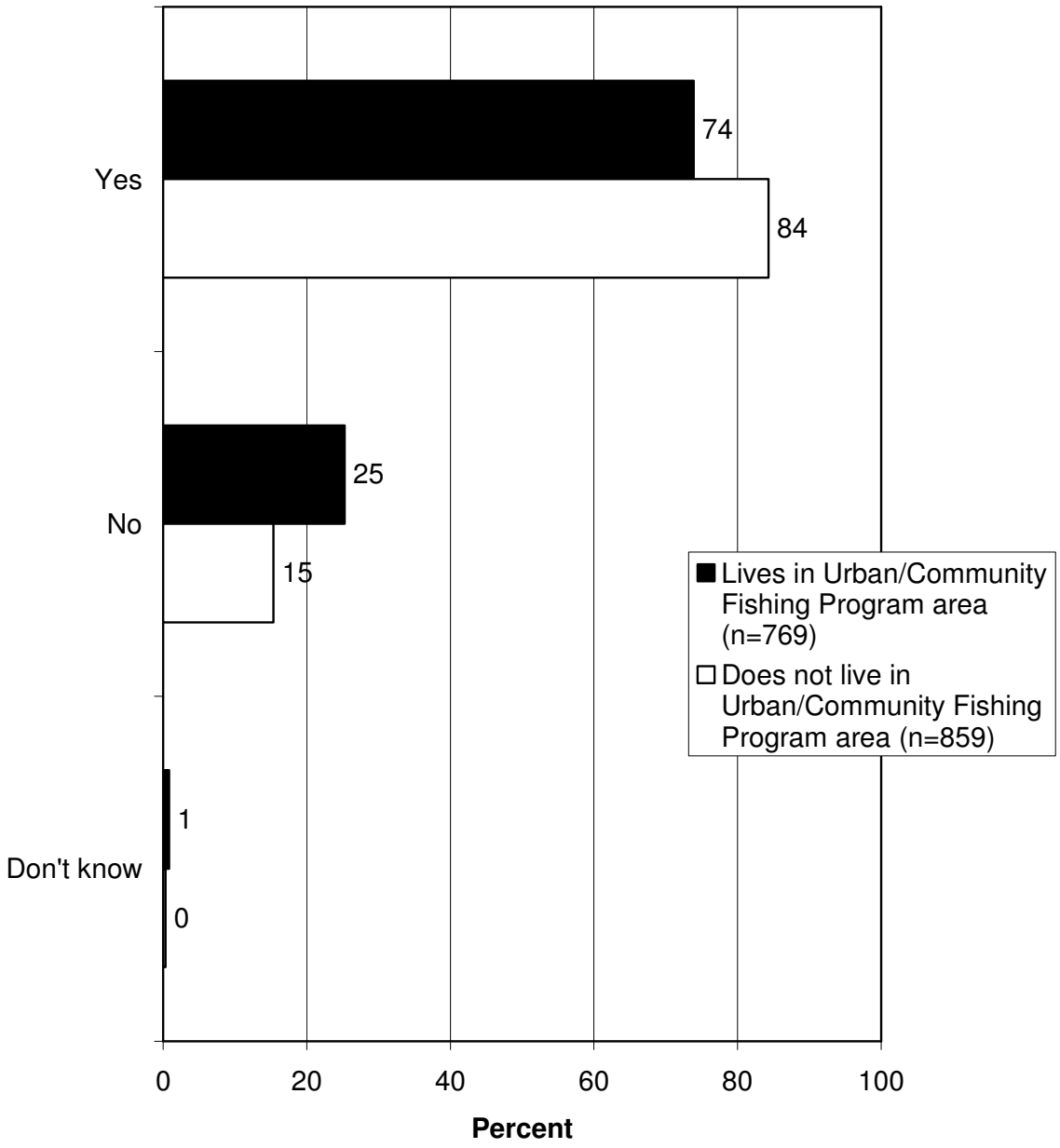

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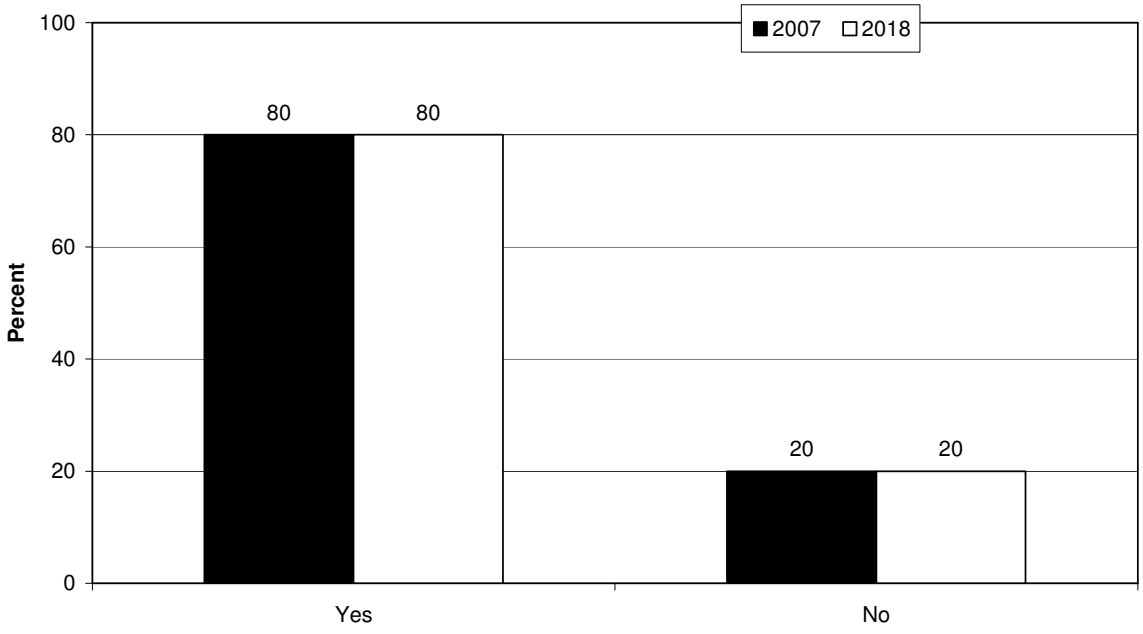
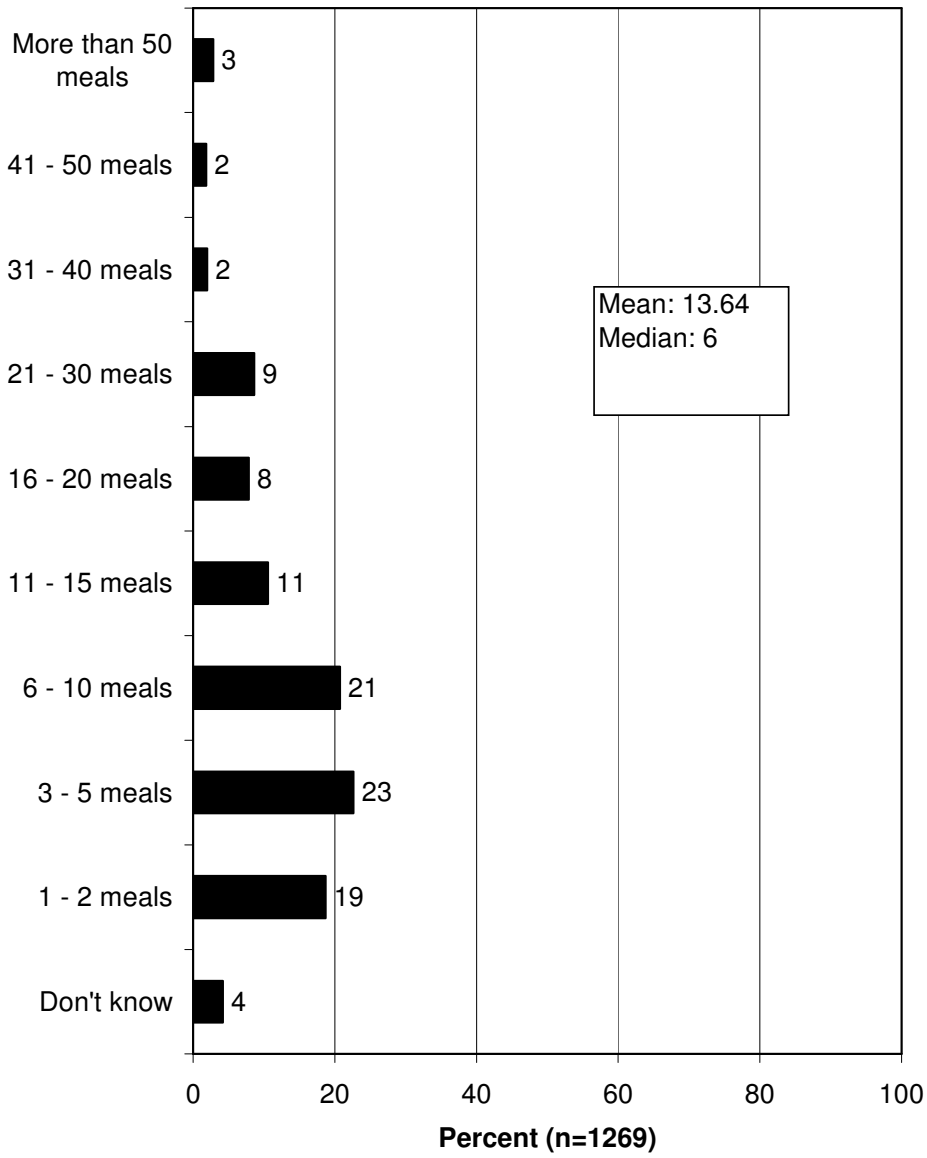


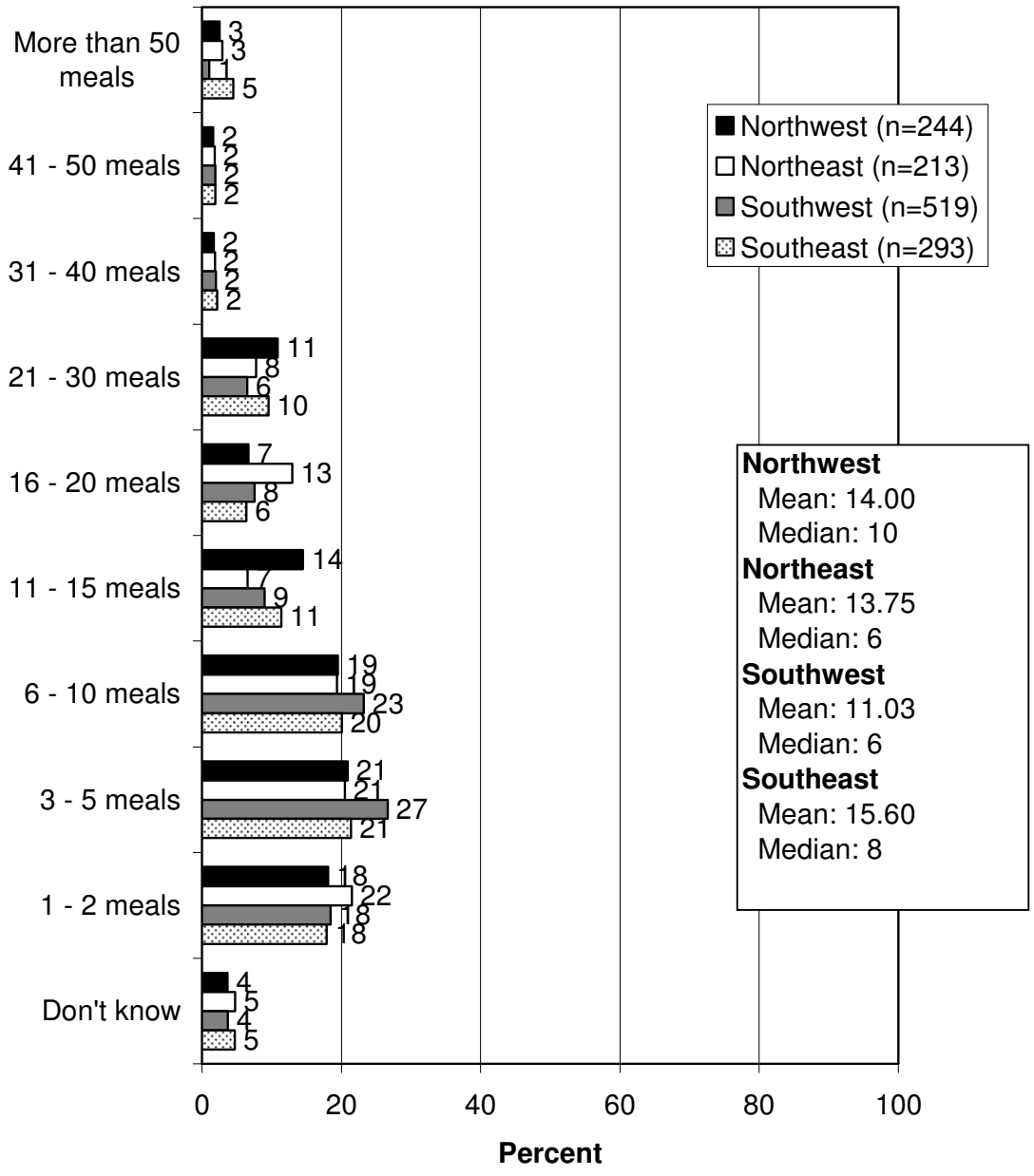
Q135. How many meals do you typically eat of fish that you've caught in Iowa in a year? (Asked of those who ever eat the fish they catch.)



Calculation of Estimated Number of Meals of Iowa-Caught Fish Consumed in 2018

Total number of Iowa anglers: 507,927
Percent fished in past 12 months (approximates those who fished in 2018): 83.135%
Total number who fished in past 12 months: 422,265
Percent of anglers who fished last year who consume Iowa fish: 79.716%
Total number of Iowa anglers who consume fish: 336,613
Mean number of meals typically eaten annually by these anglers: 13.64
Total number of estimated meals of Iowa fish in 2018: 4,591,258

Q135. How many meals do you typically eat of fish that you've caught in Iowa in a year? (Asked of those who ever eat the fish they catch.)



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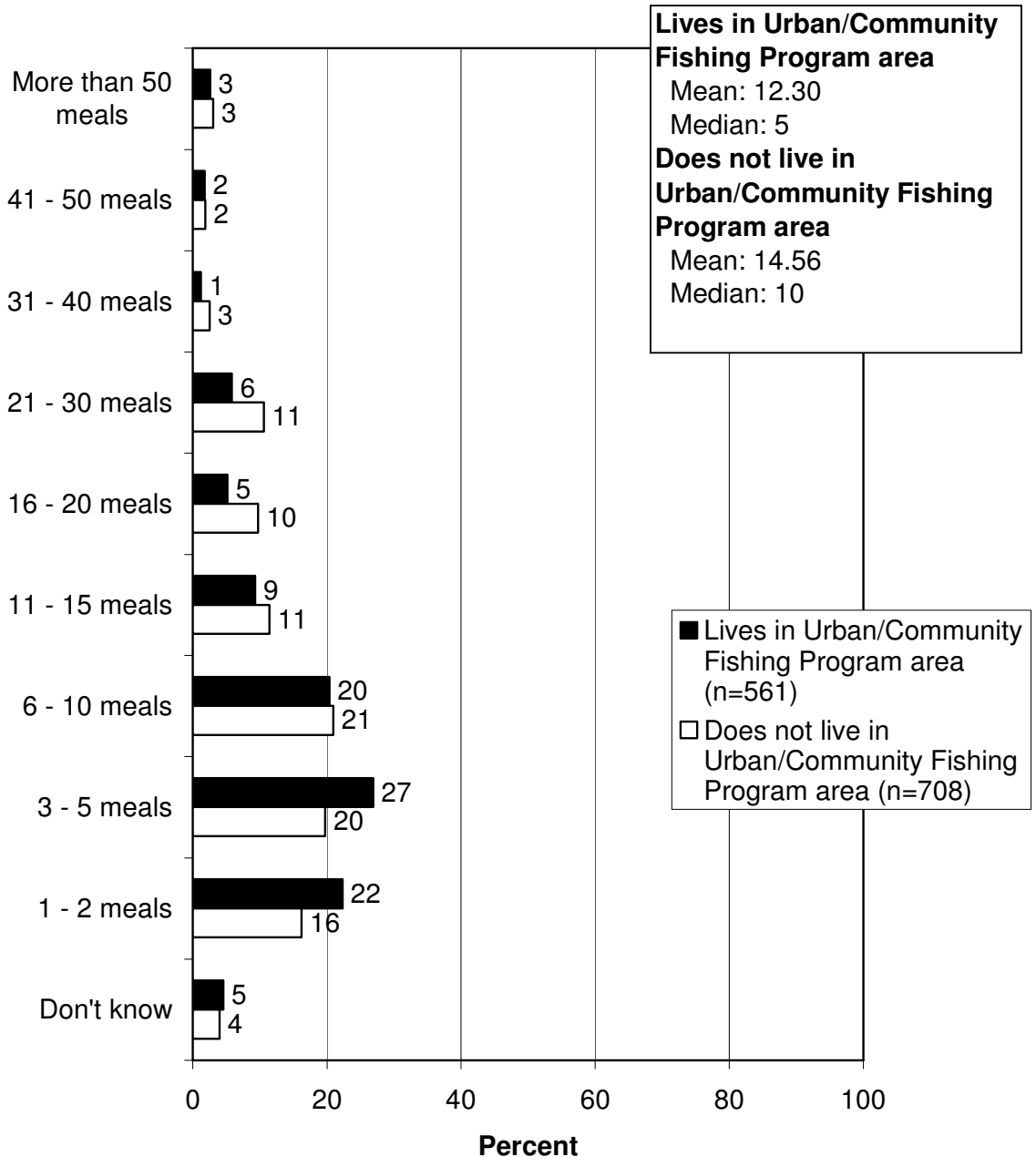
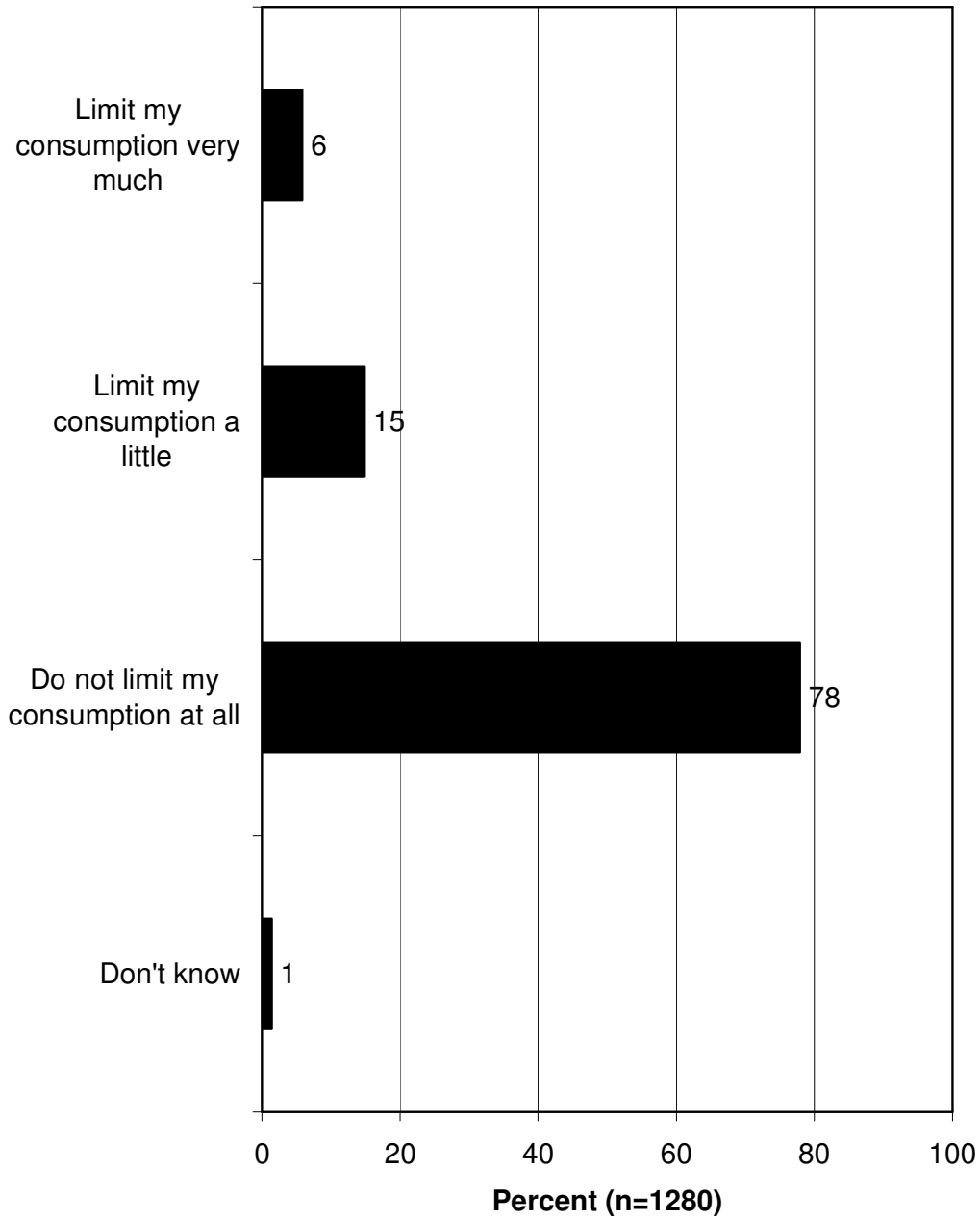


Q137. Do you limit your consumption of fish that you catch in Iowa because of concerns about the safety of eating fish caught in Iowa? (Asked of those who ever eat the fish they catch.)



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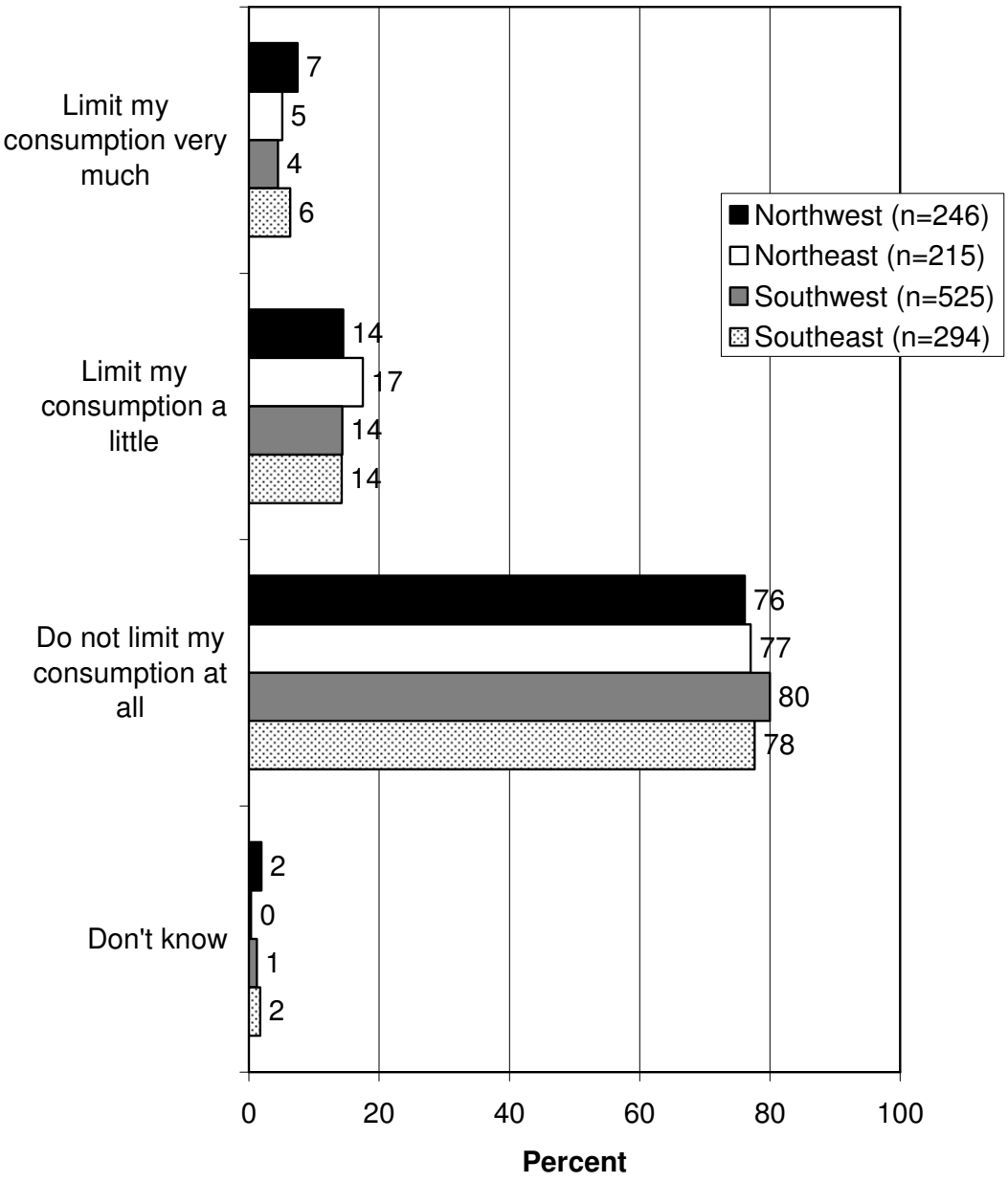

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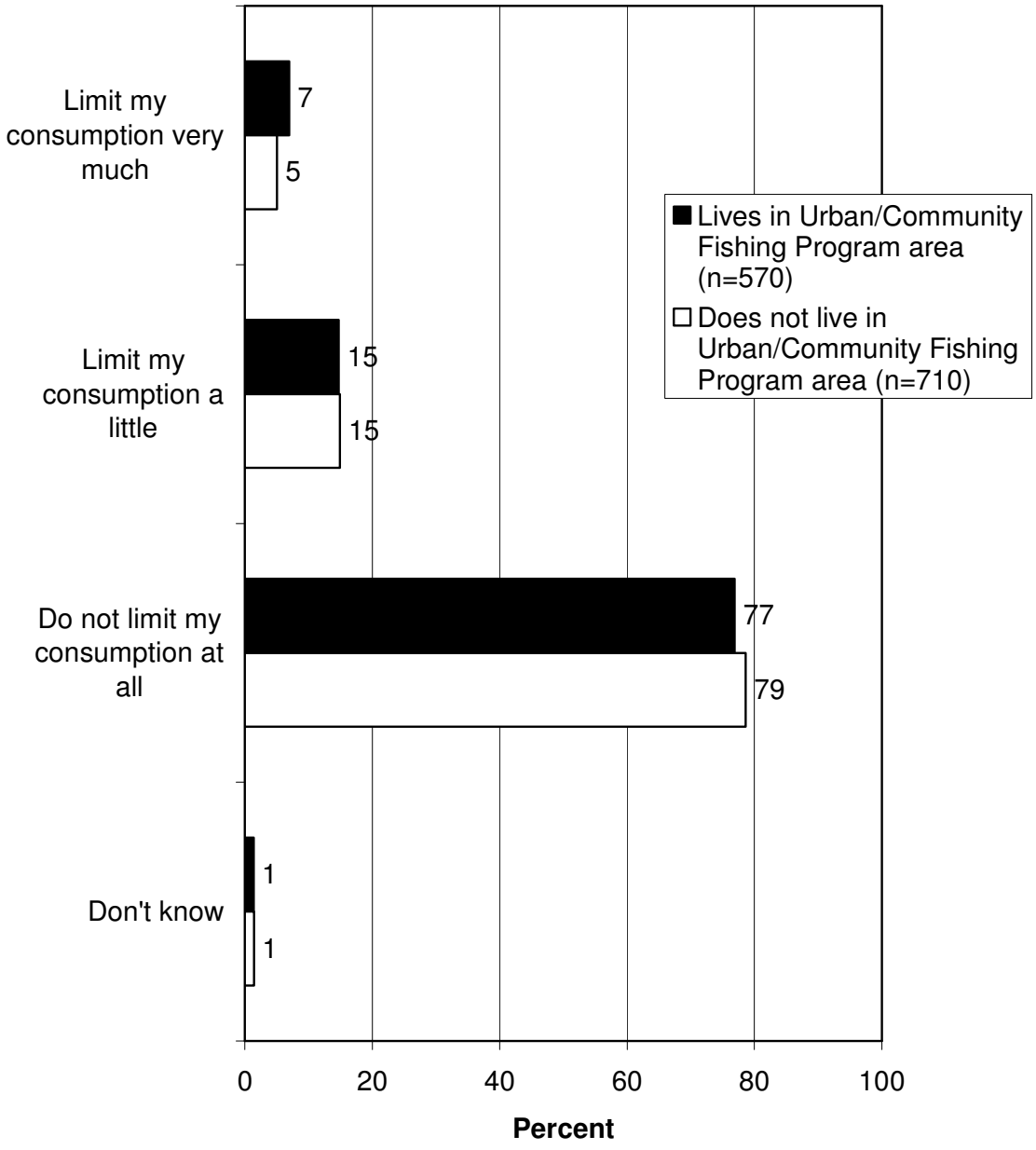
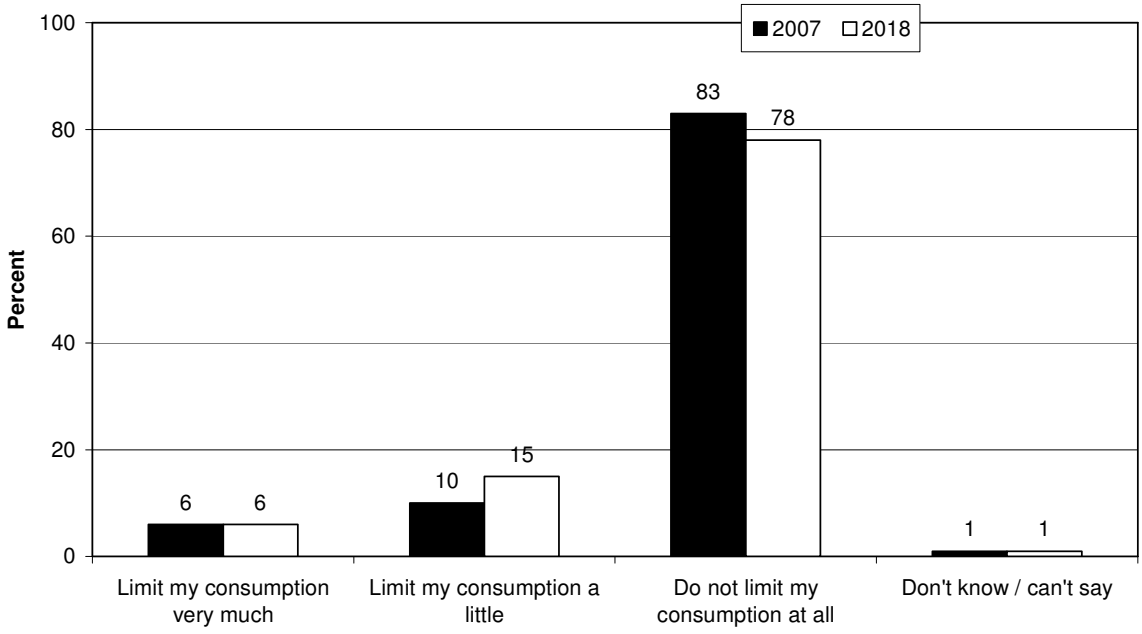
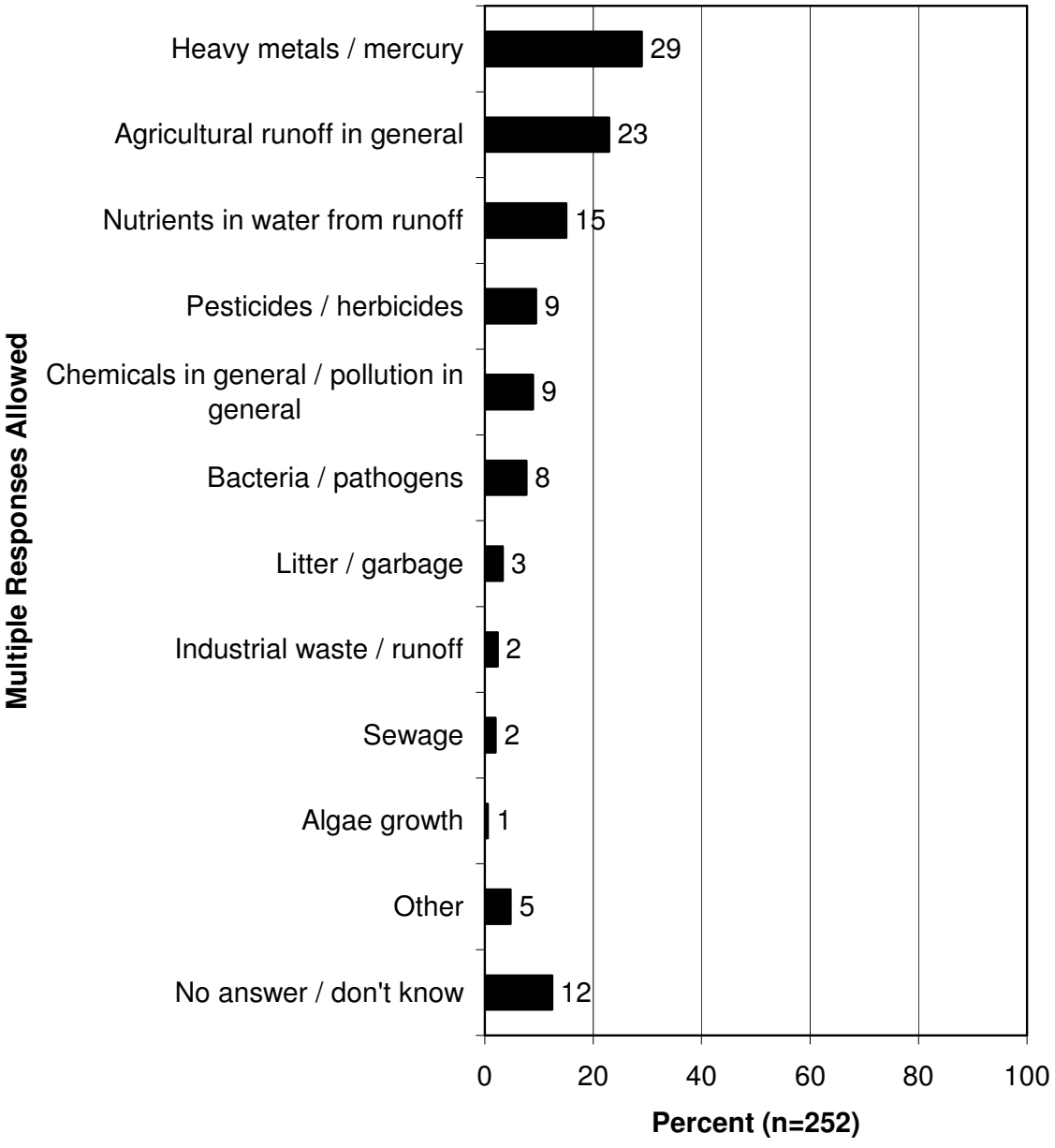


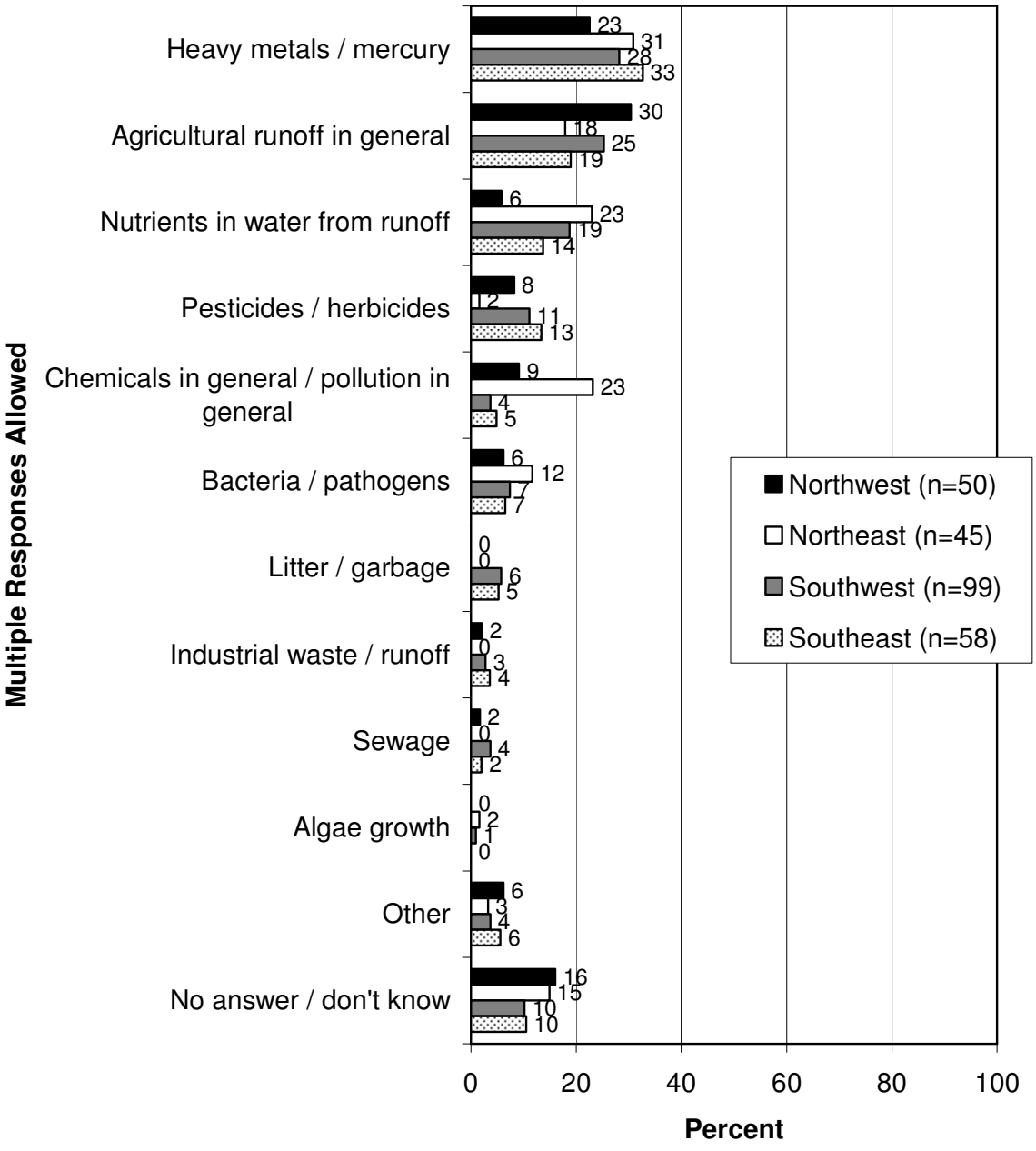
Q137. Do you limit your consumption of fish that you catch in Iowa because of concerns about the safety of eating fish caught in Iowa?



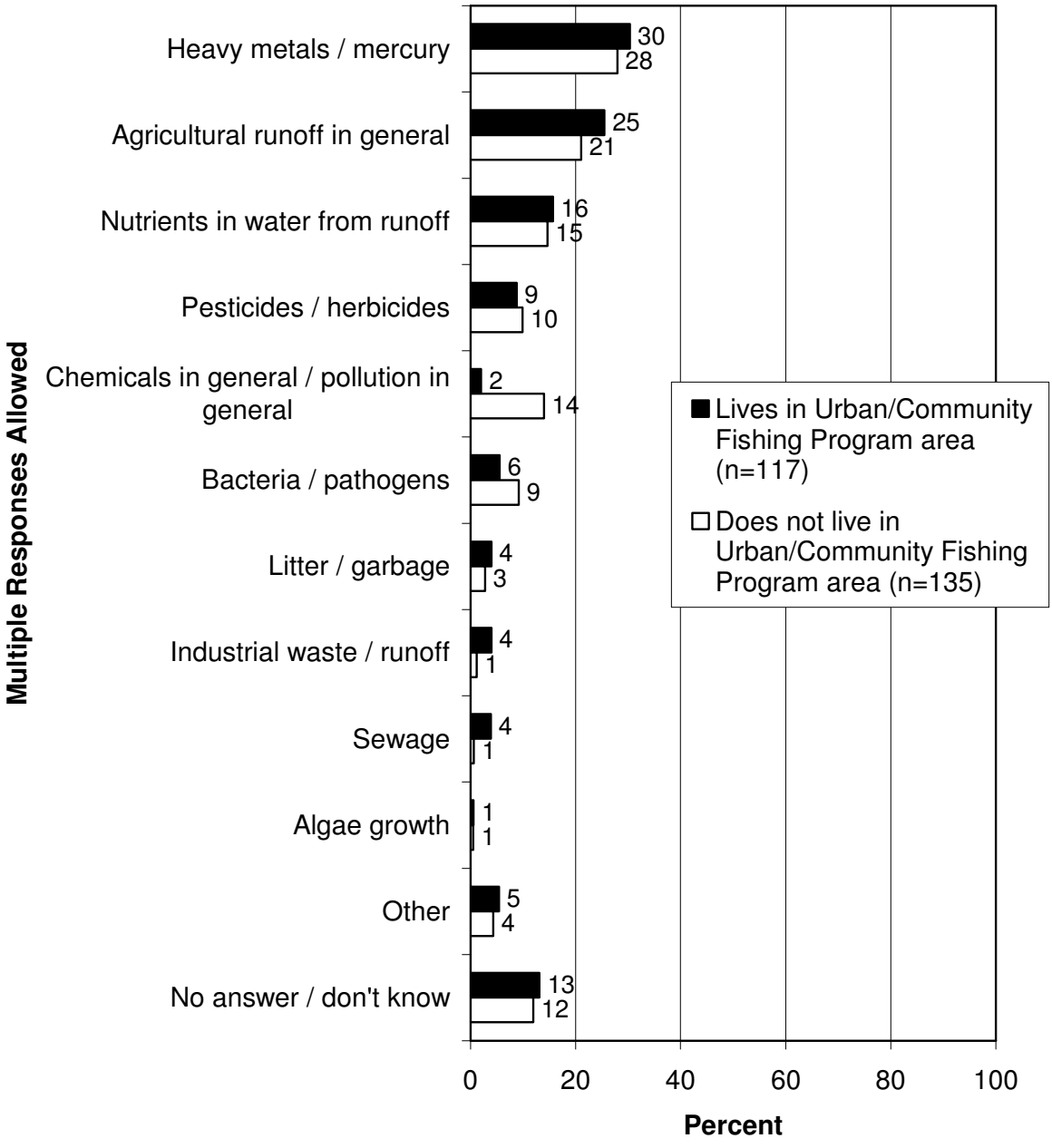
Q138. What contaminants or pollutants are you concerned about? (Asked of those who limit fish consumption very much or a little.)



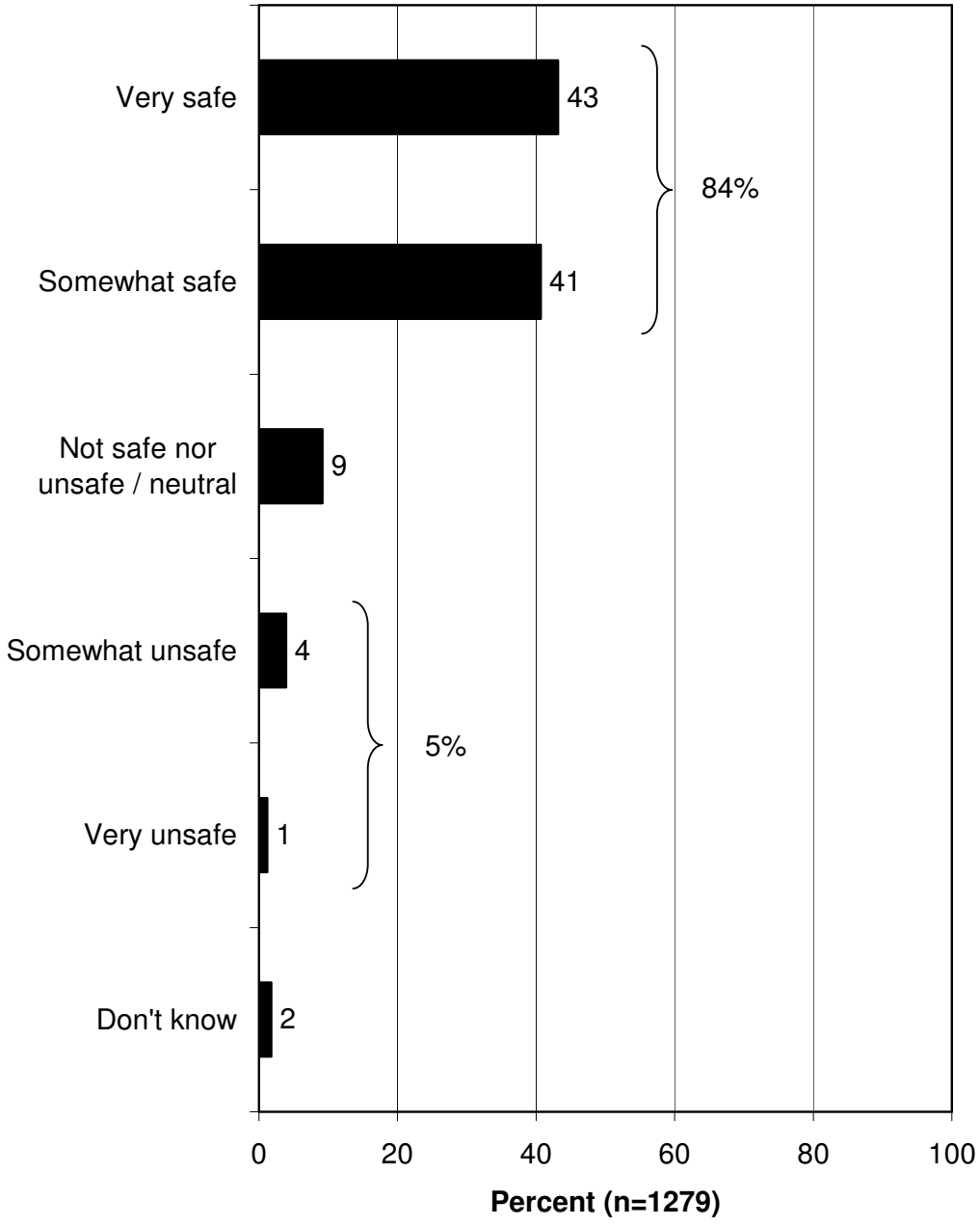
Q138. What contaminants or pollutants are you concerned about? (Asked of those who limit fish consumption very much or a little.)



Q138. What contaminants or pollutants are you concerned about? (Asked of those who limit fish consumption very much or a little.)



Q139. How safe from contamination do you consider fish caught in Iowa to be for eating? (Asked of those who ever eat the fish they catch.)



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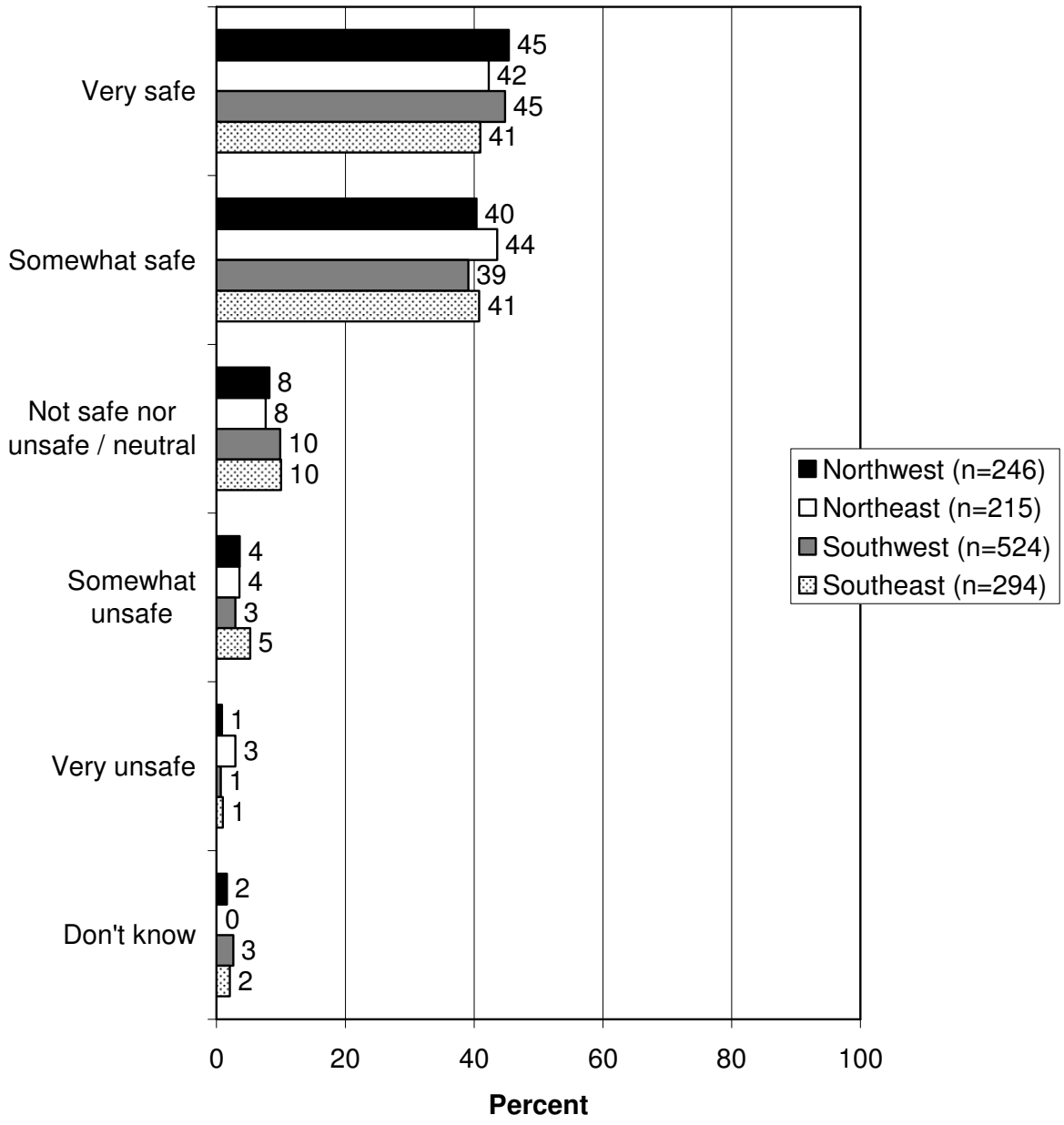

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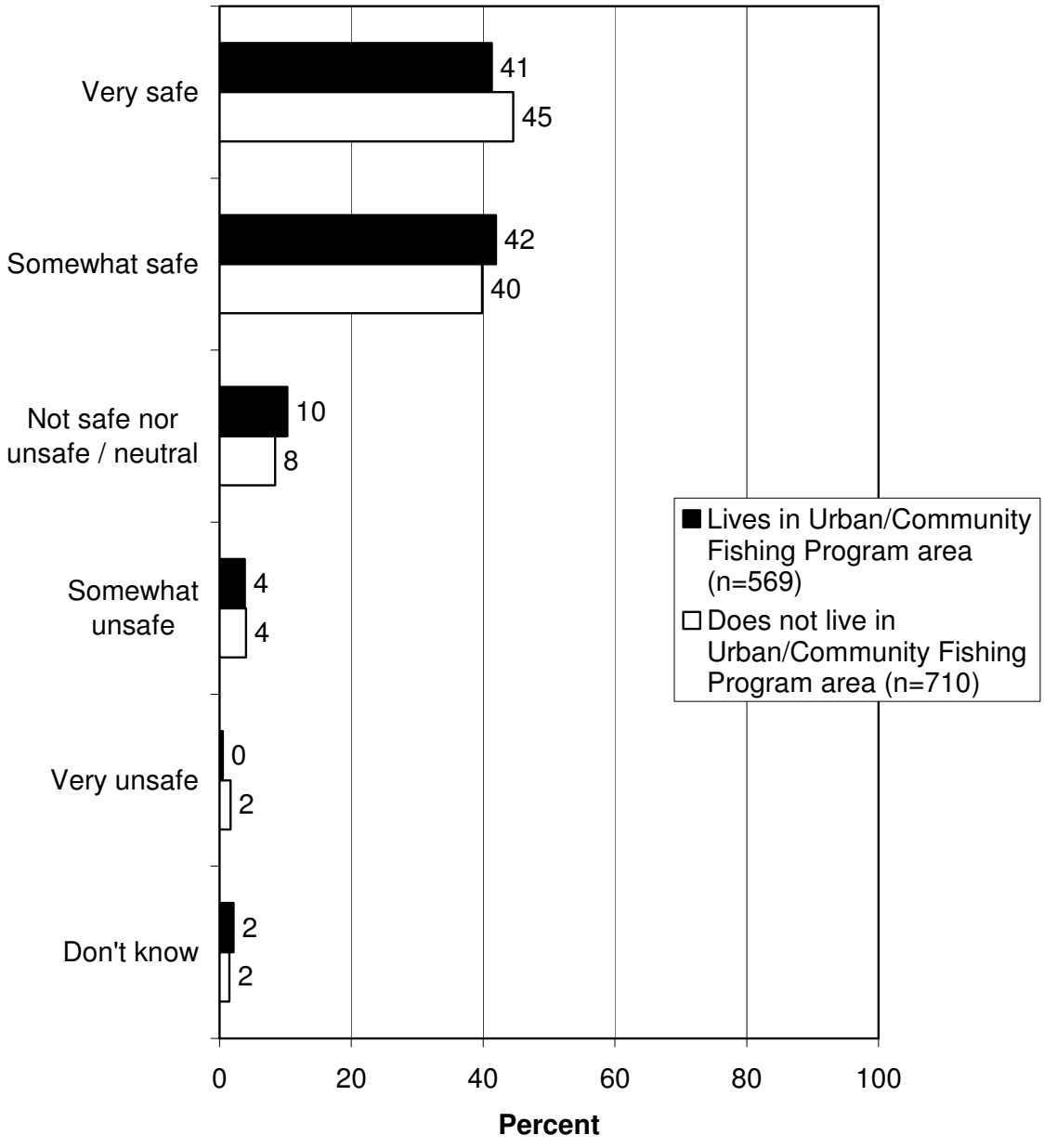

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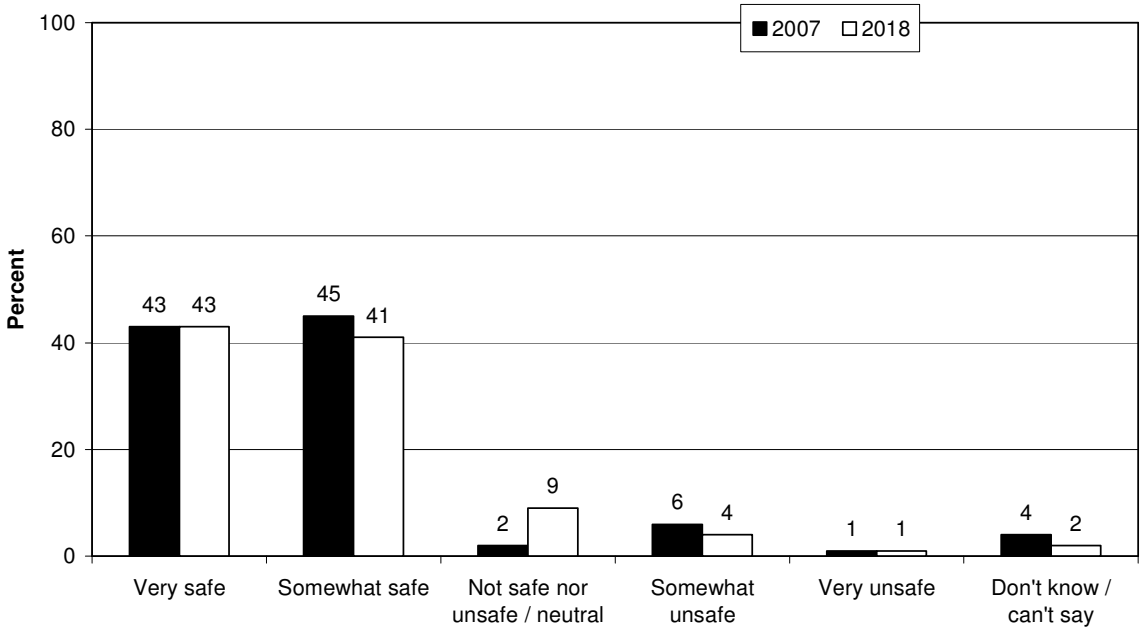
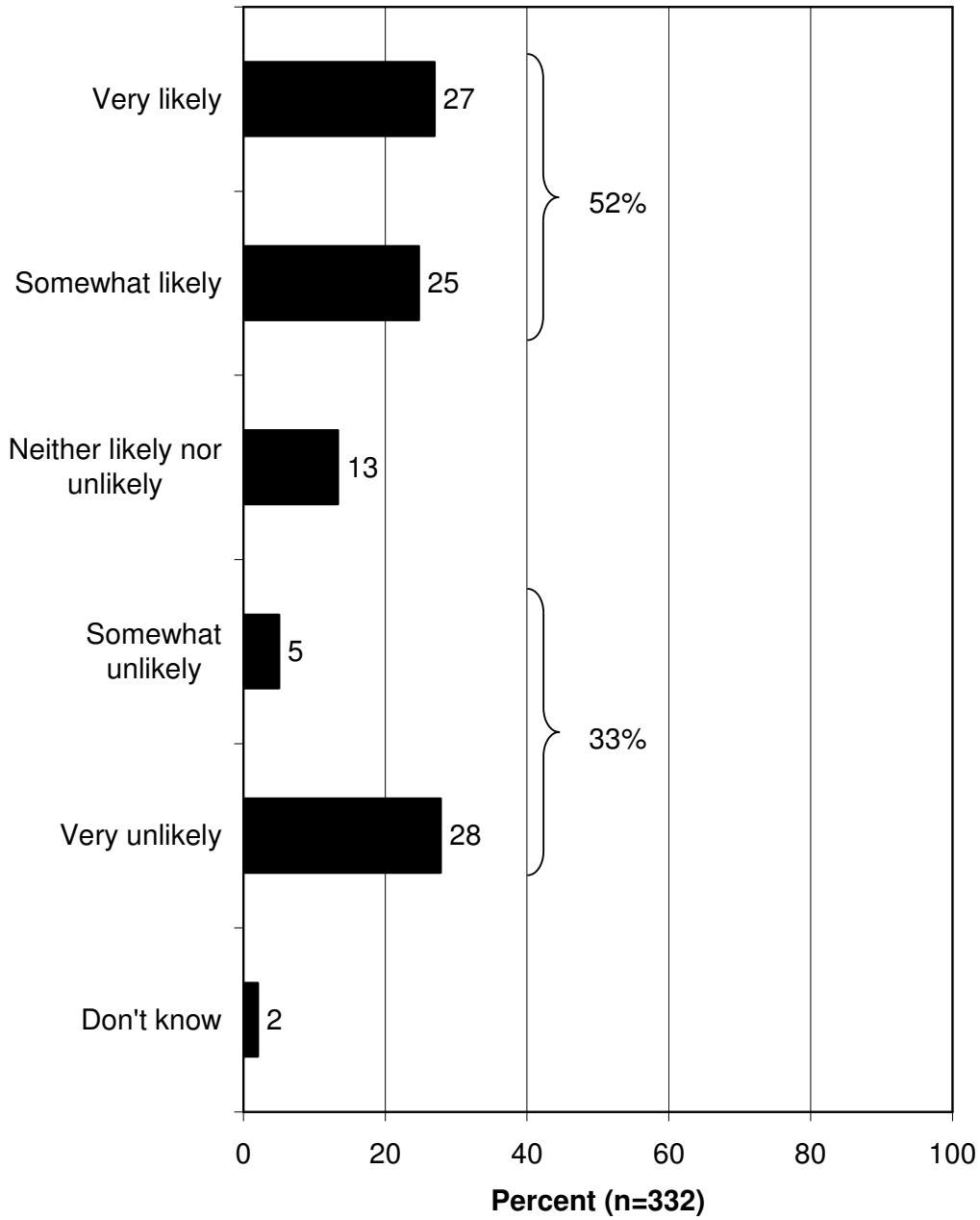
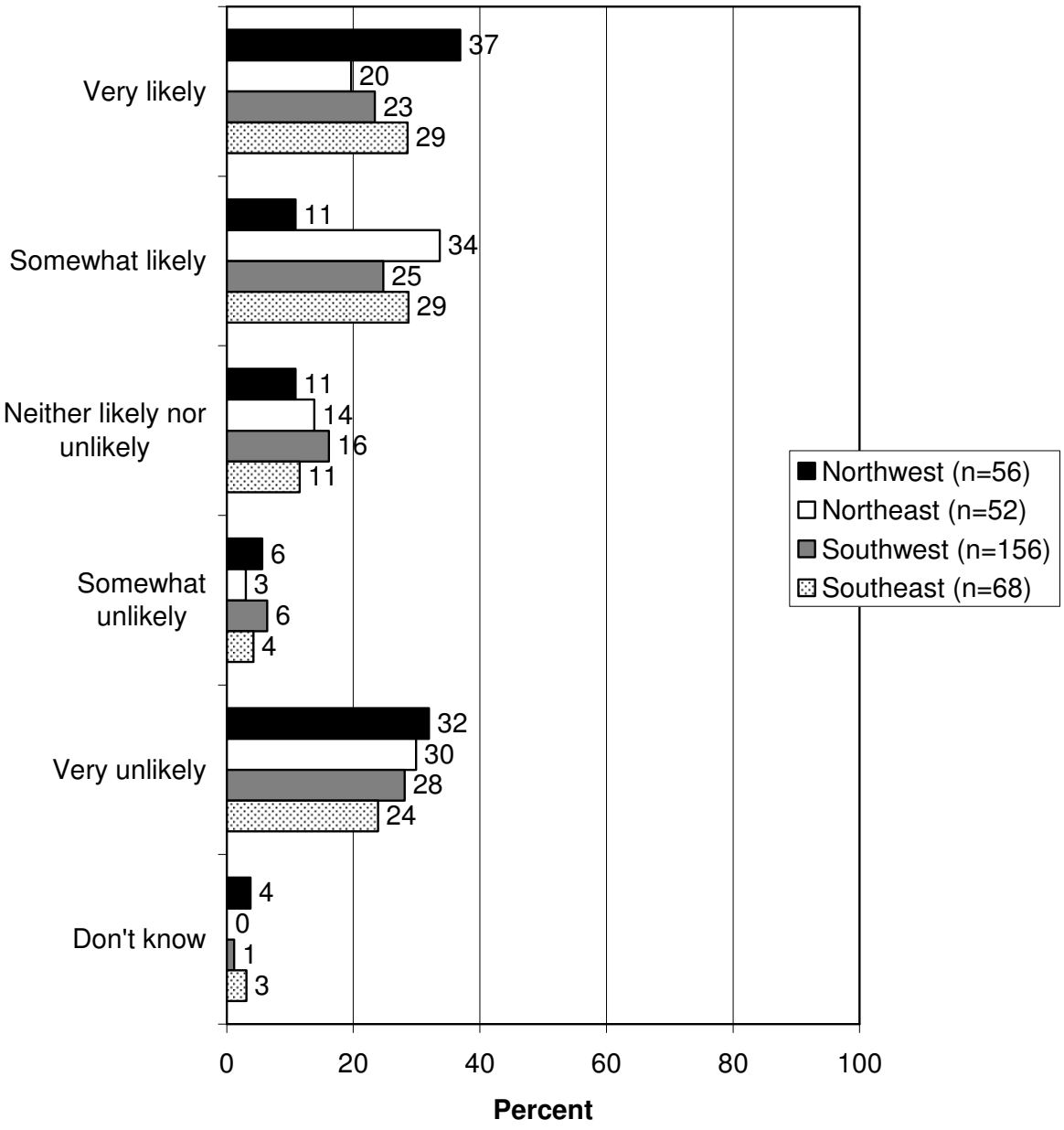


Q140. How likely or unlikely would you be to eat the fish you catch in Iowa if you felt that they were safer to eat? (Asked of those who do not eat the fish they catch.)



Q140. How likely or unlikely would you be to eat the fish you catch in Iowa if you felt that they were safer to eat? (Asked of those who do not eat the fish they catch.)



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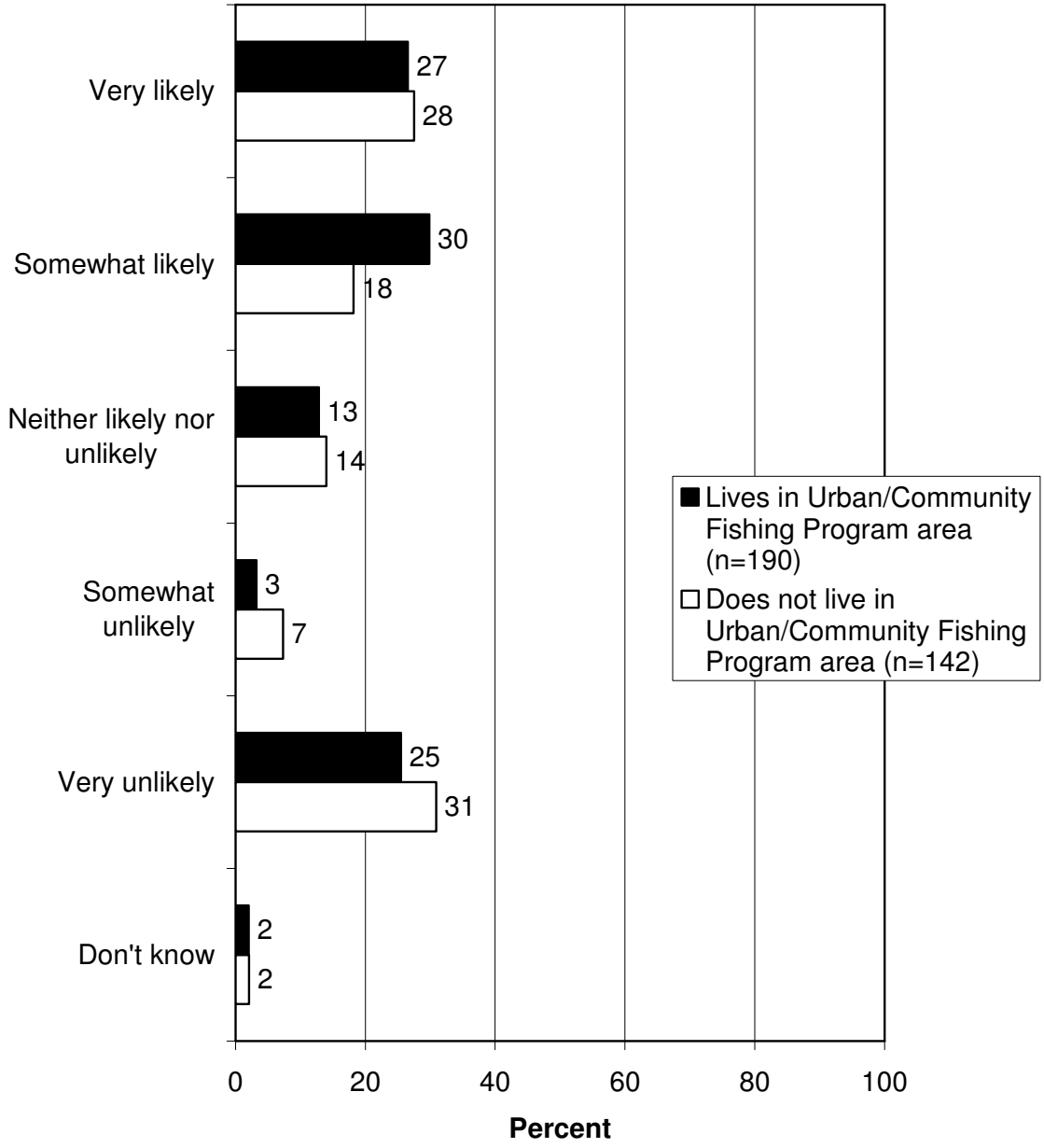
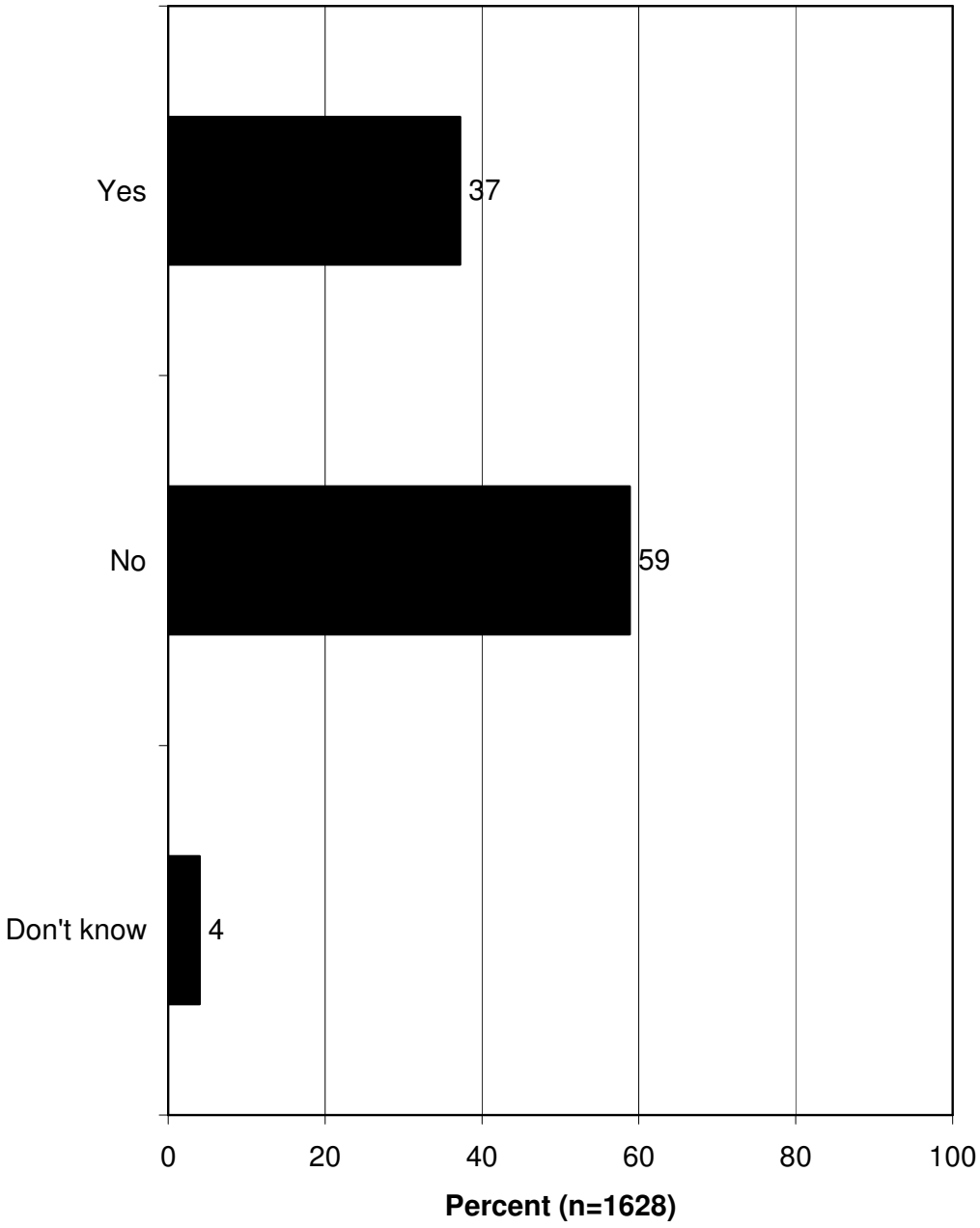


Q141. Have you ever been aware of any advisories about eating fish from Iowa waters?



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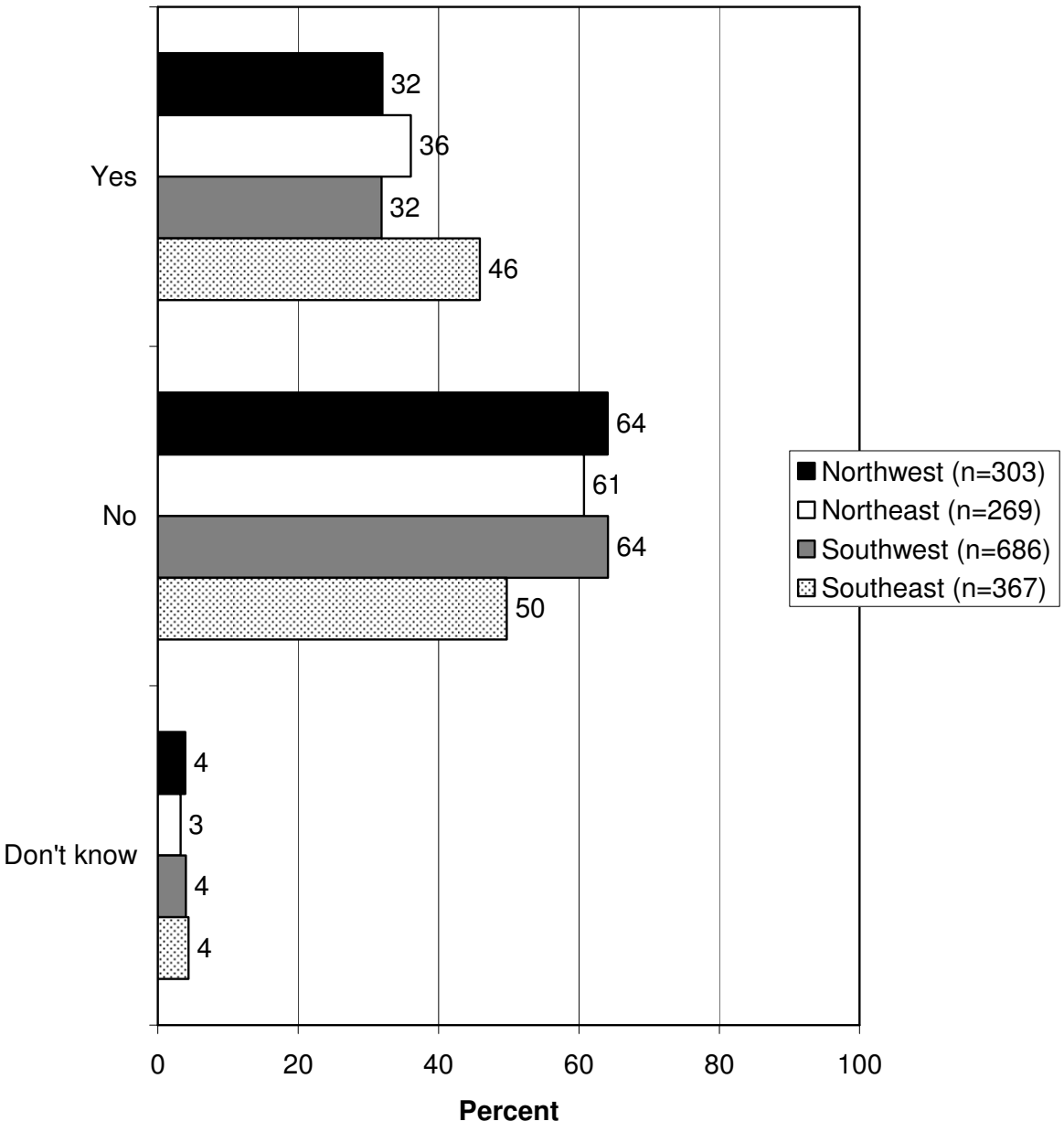

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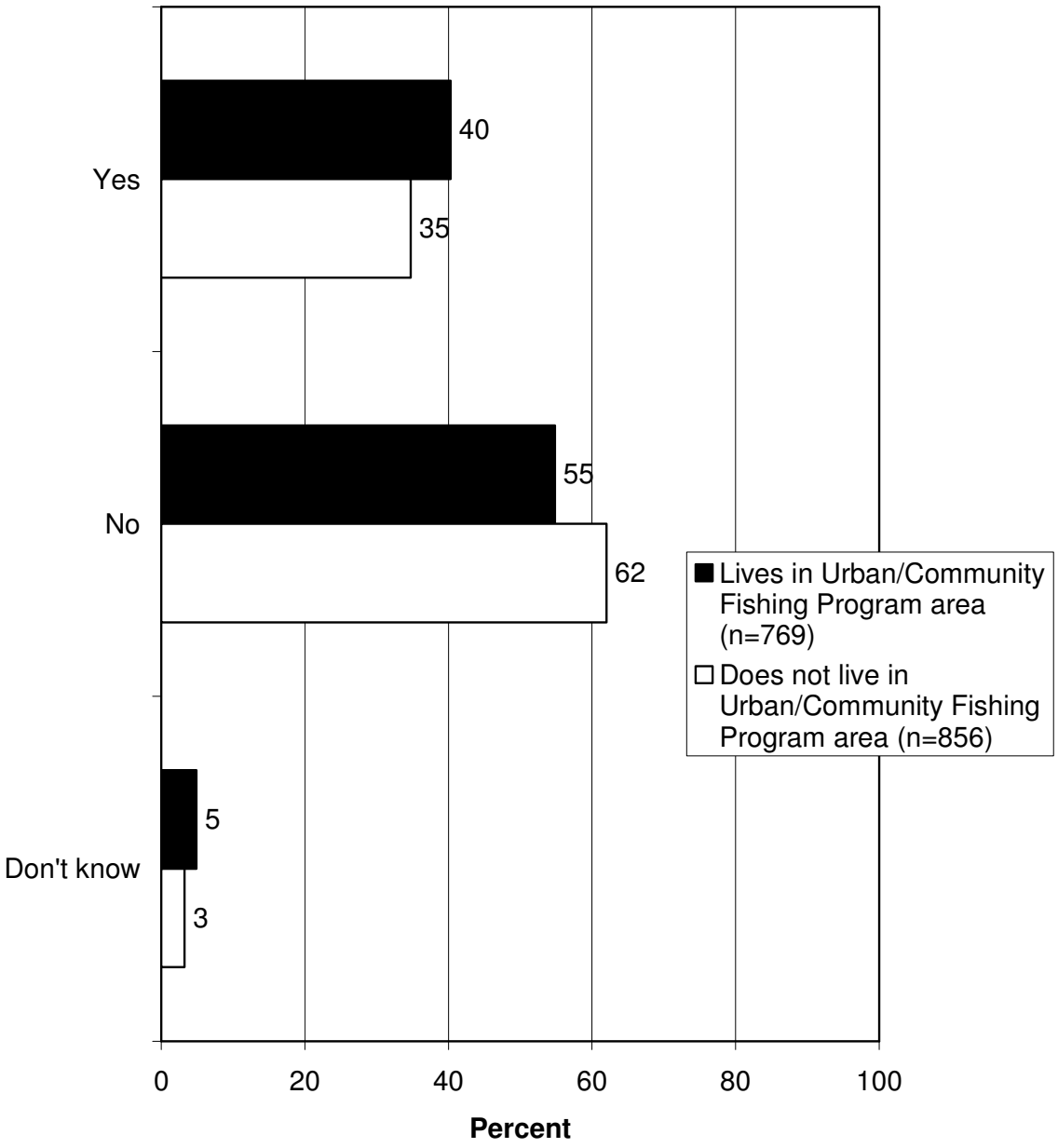

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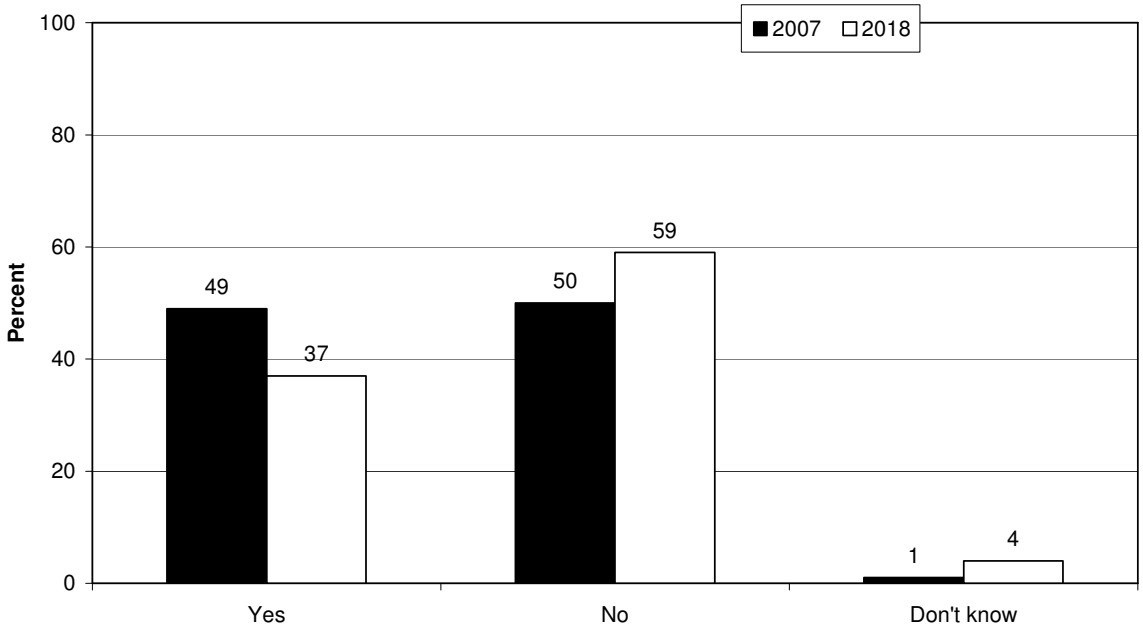
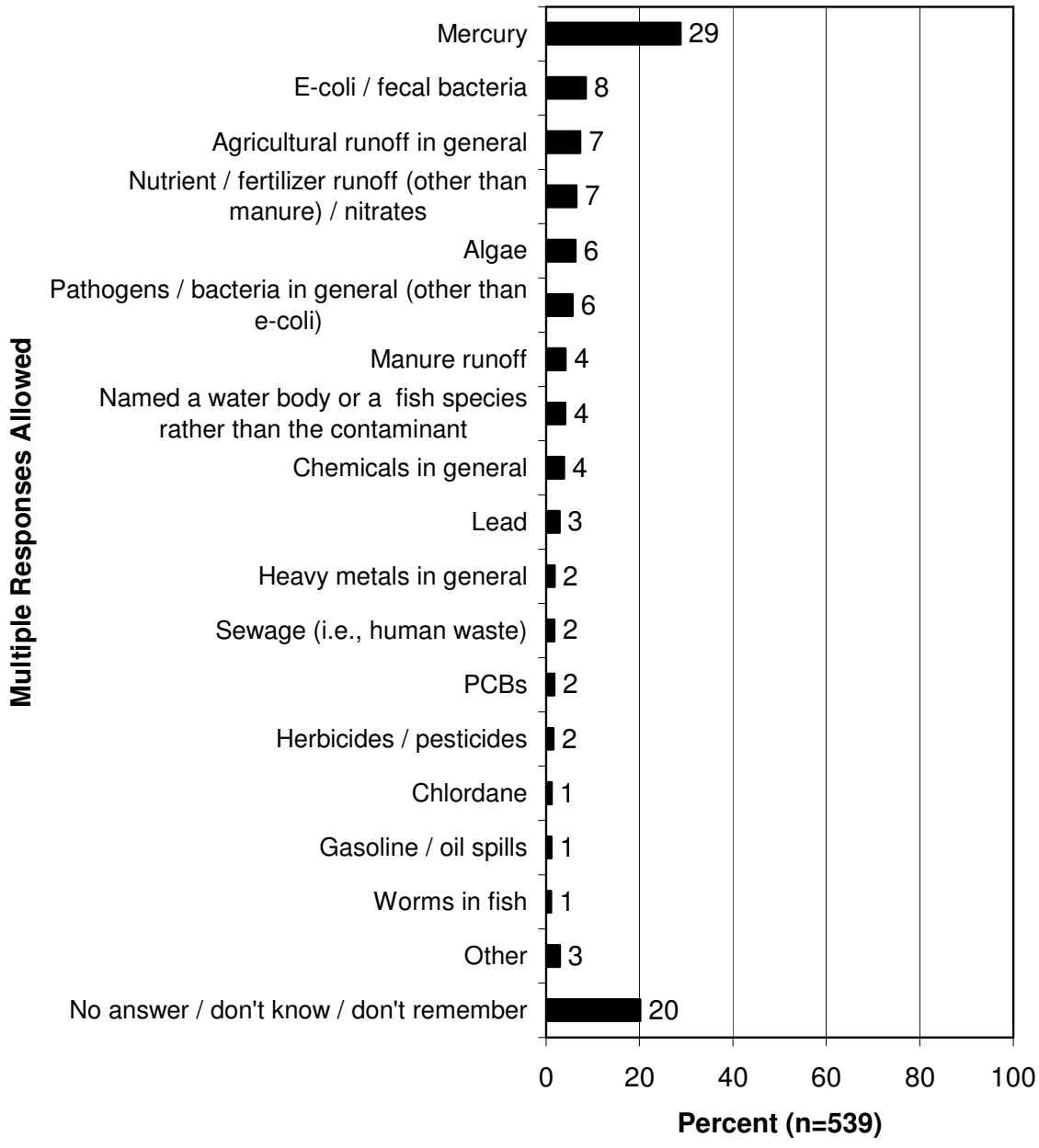


Q142. What contaminants or pollutants have you seen or heard advisories for? (Asked of those who have been aware of advisories about eating fish from Iowa's waters.)



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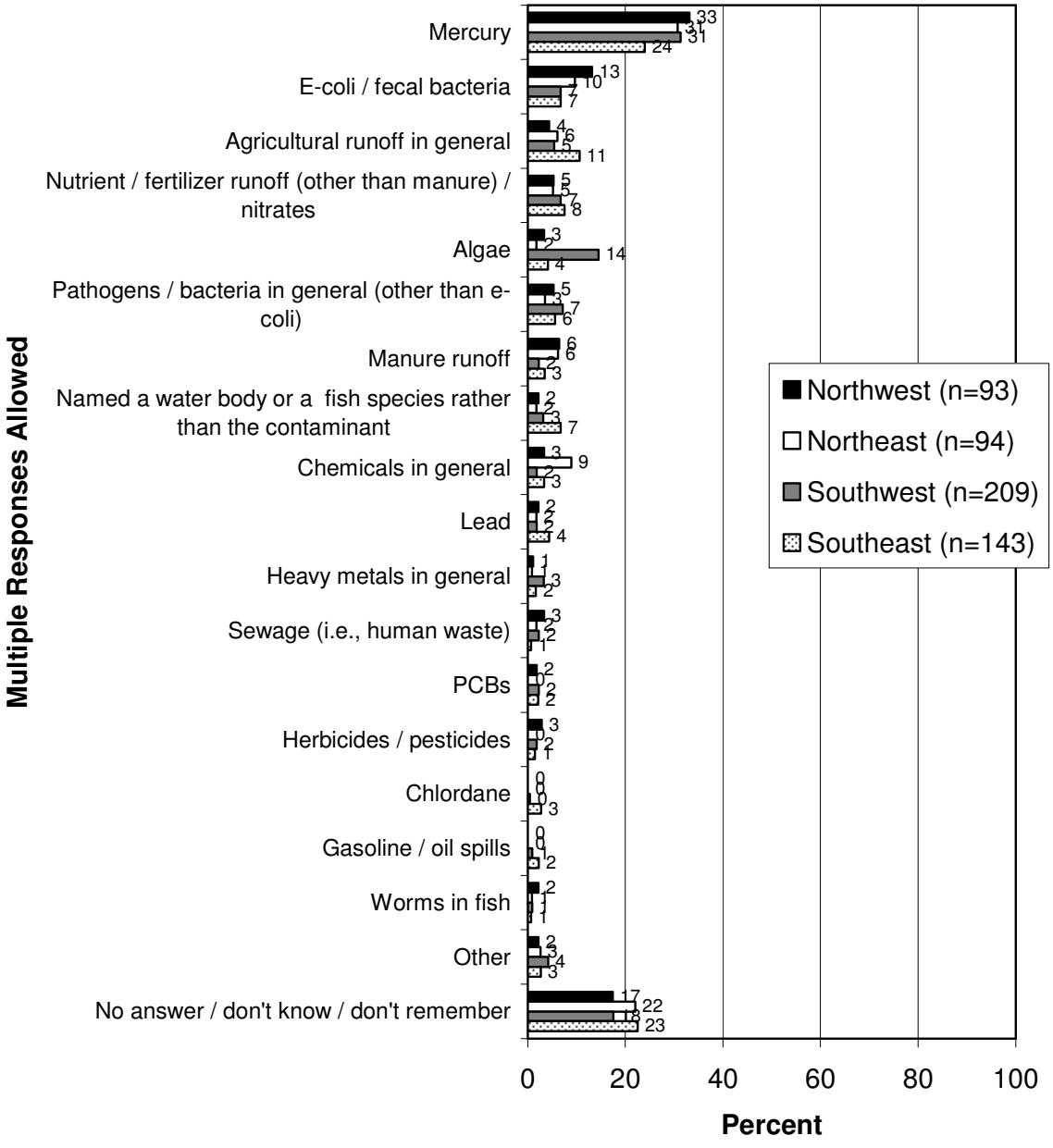

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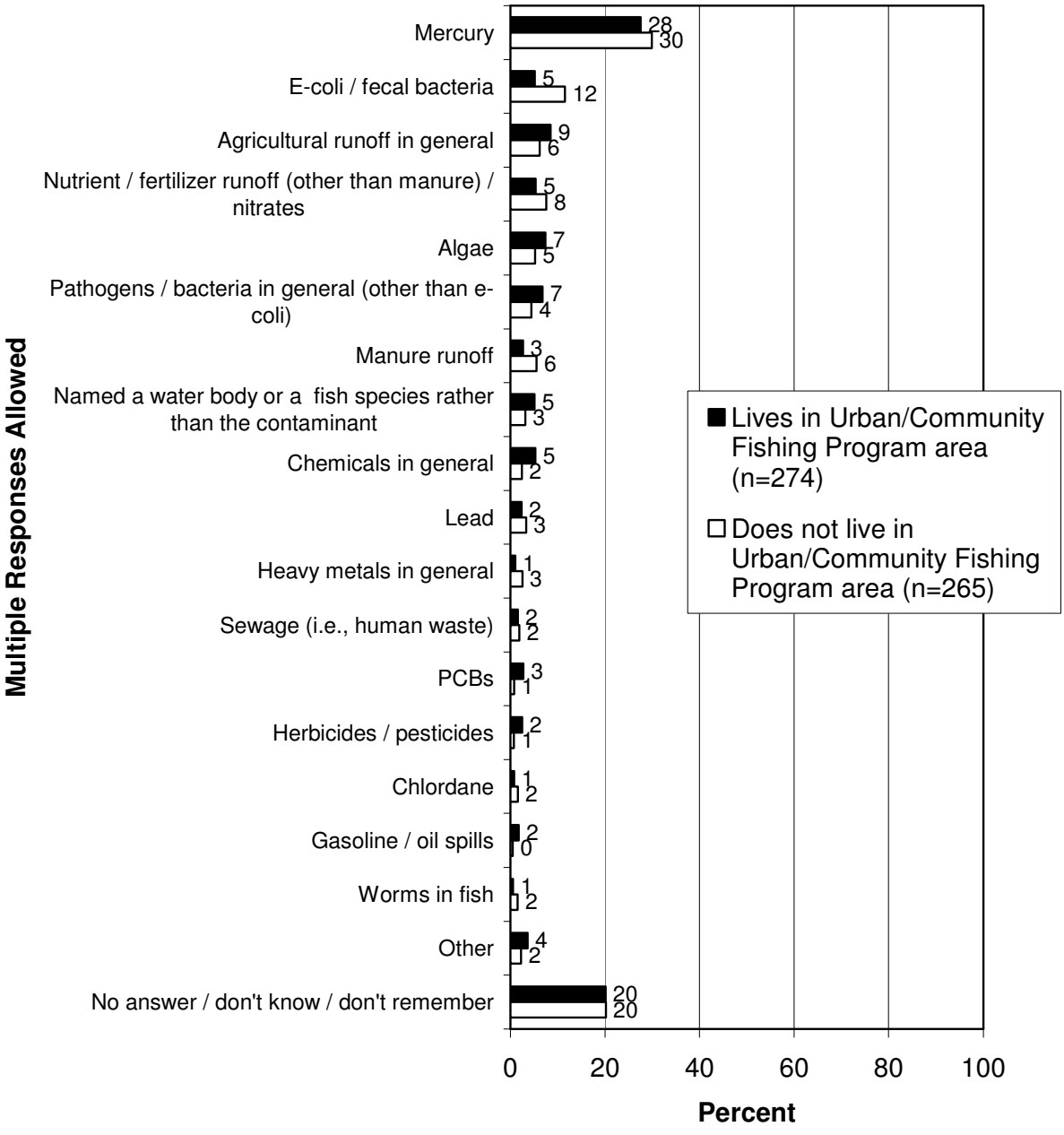
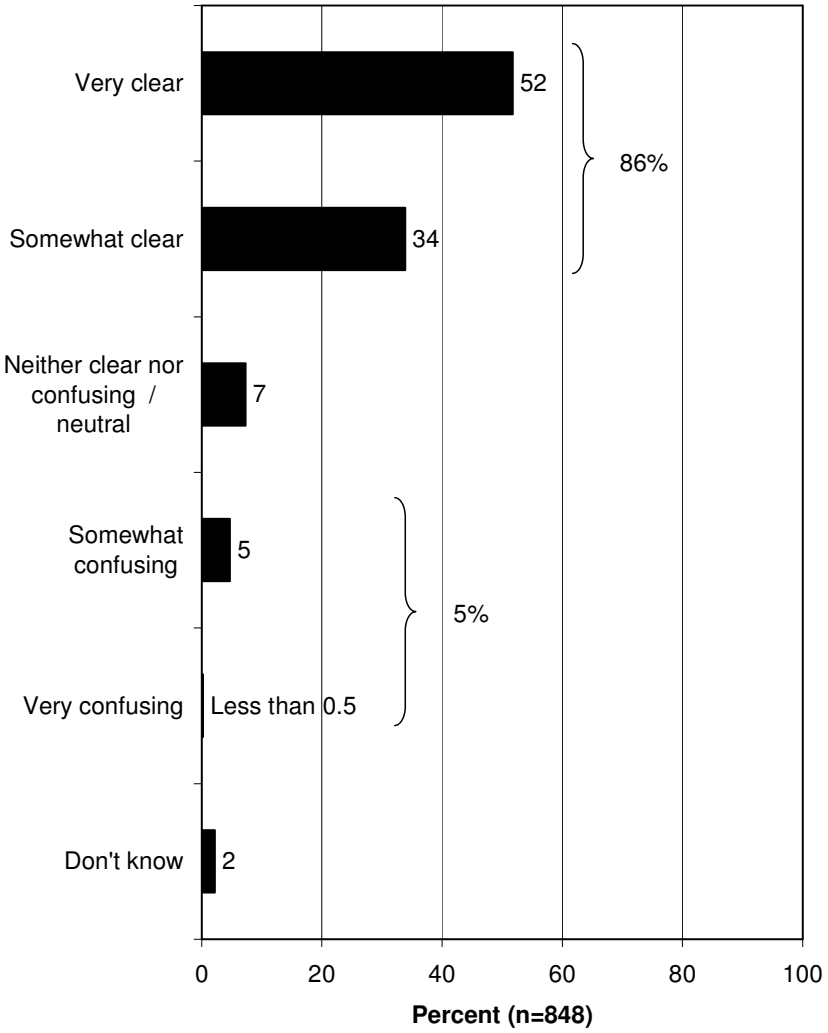


LAW ENFORCEMENT AND FISHING REGULATIONS

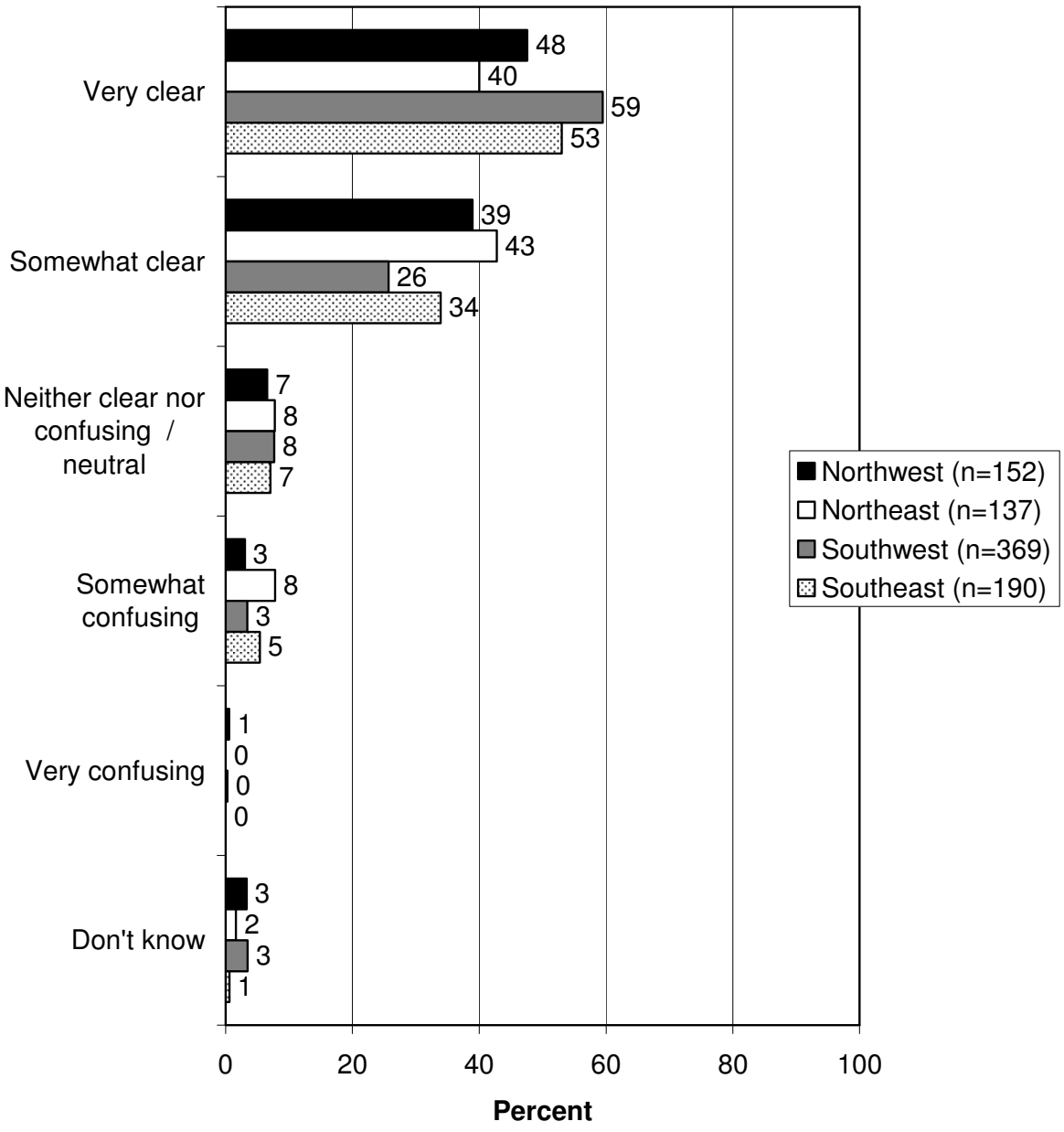
- Most anglers (86%) think Iowa's fishing regulations are clear, compared to only 5% who think they are confusing.

- A solid majority of anglers (73%) rate Iowa's enforcement of fishing regulations and laws as *excellent* or *good* (with 50% saying *good*). Nonetheless, 21% rate it as *fair* or *poor* (16% *fair*).

Q143. How would you describe your feelings about the clarity of Iowa's fishing regulations?



Q143. How would you describe your feelings about the clarity of Iowa's fishing regulations?



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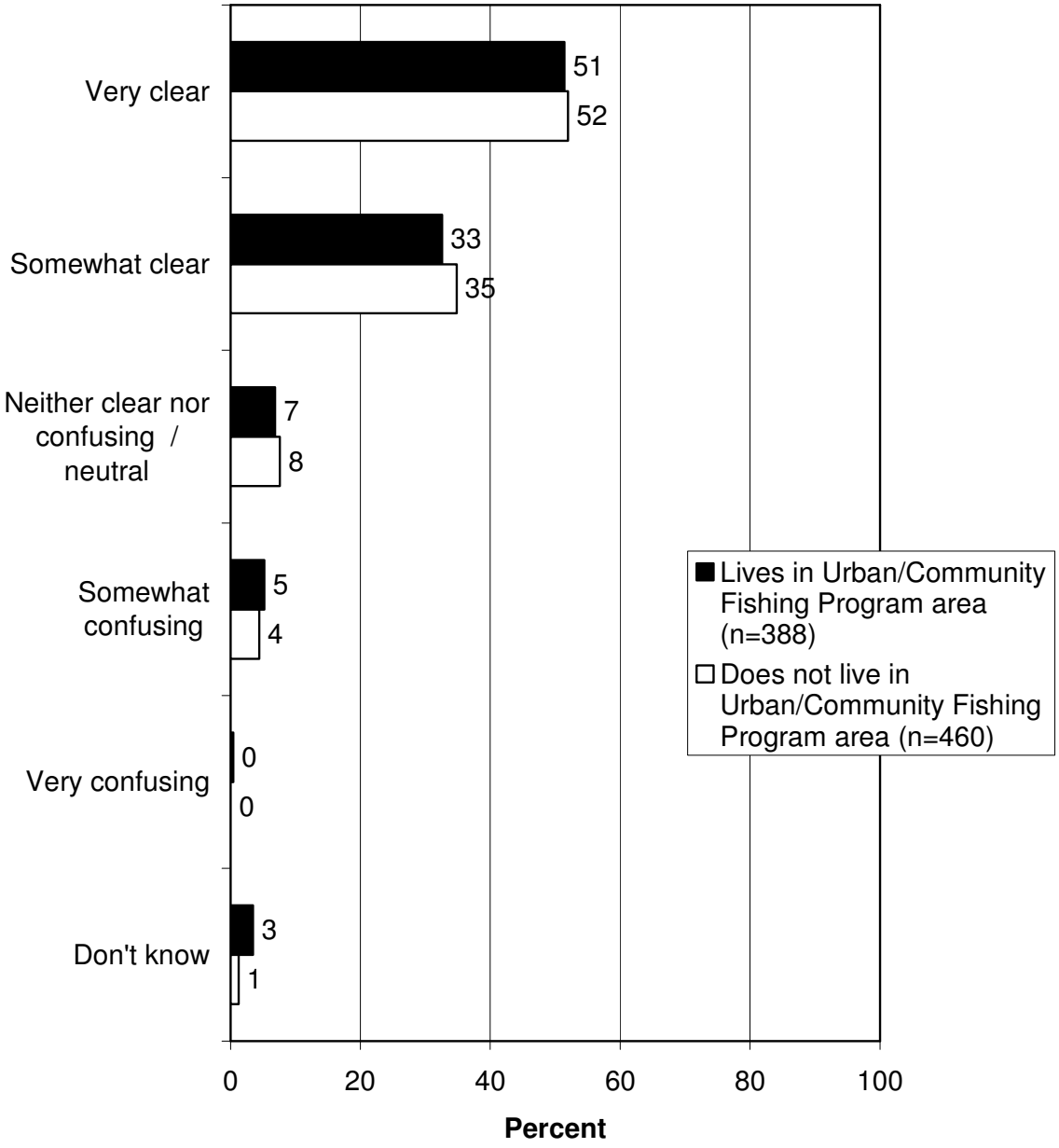

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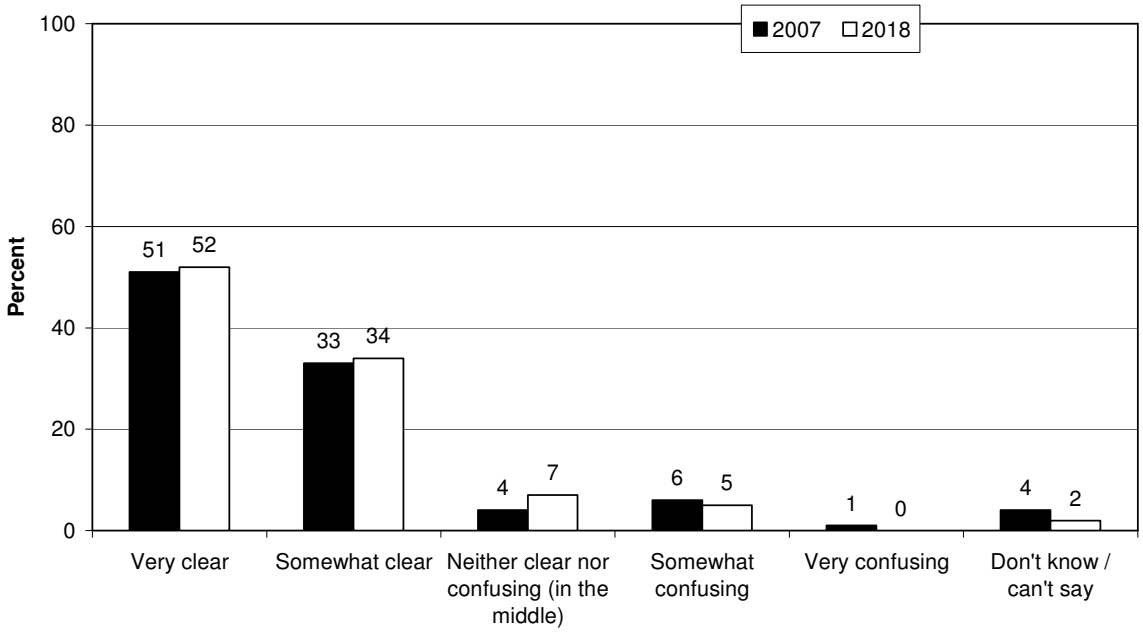
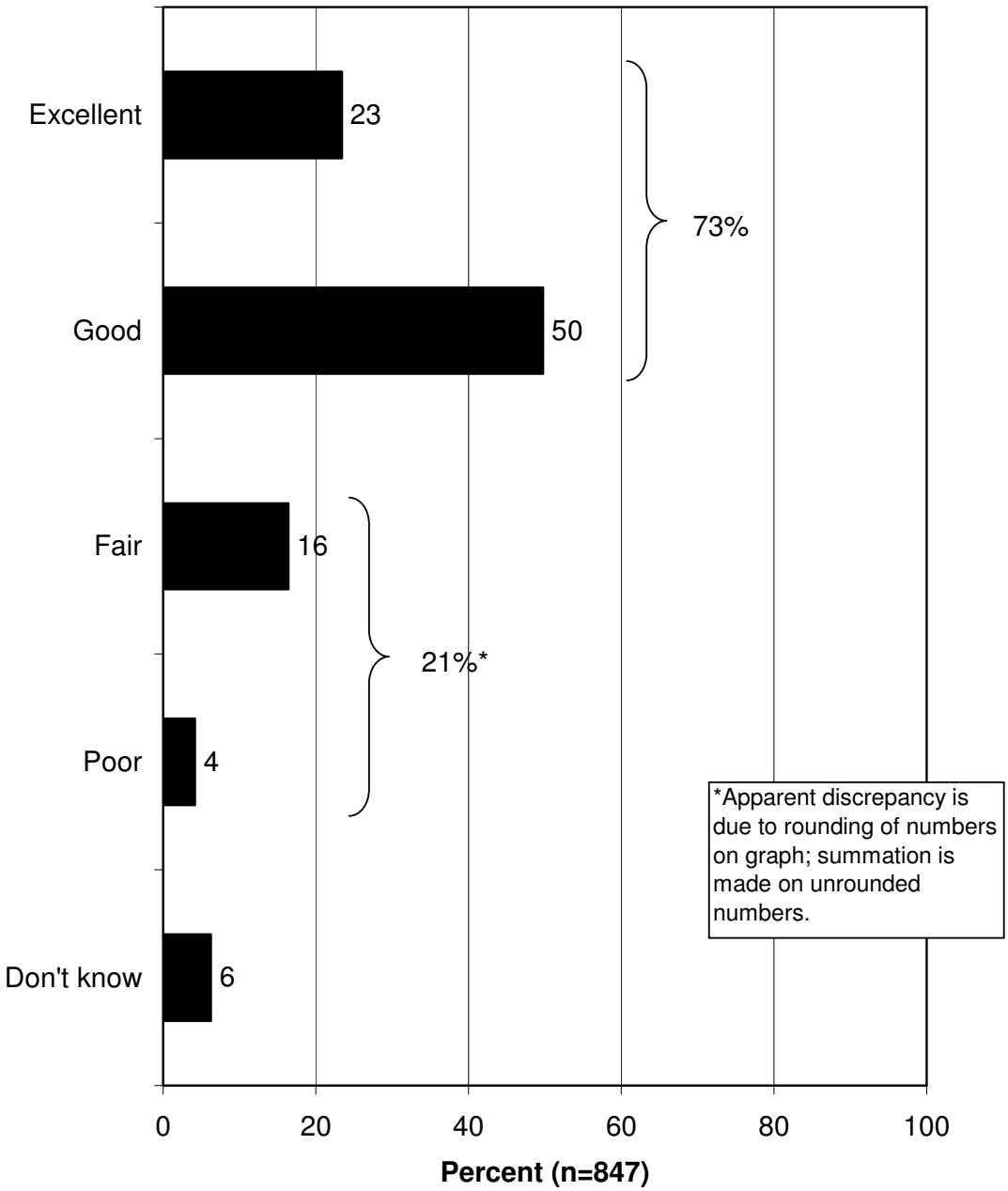


Q144. How would you rate Iowa's enforcement efforts of fishing regulations and laws?



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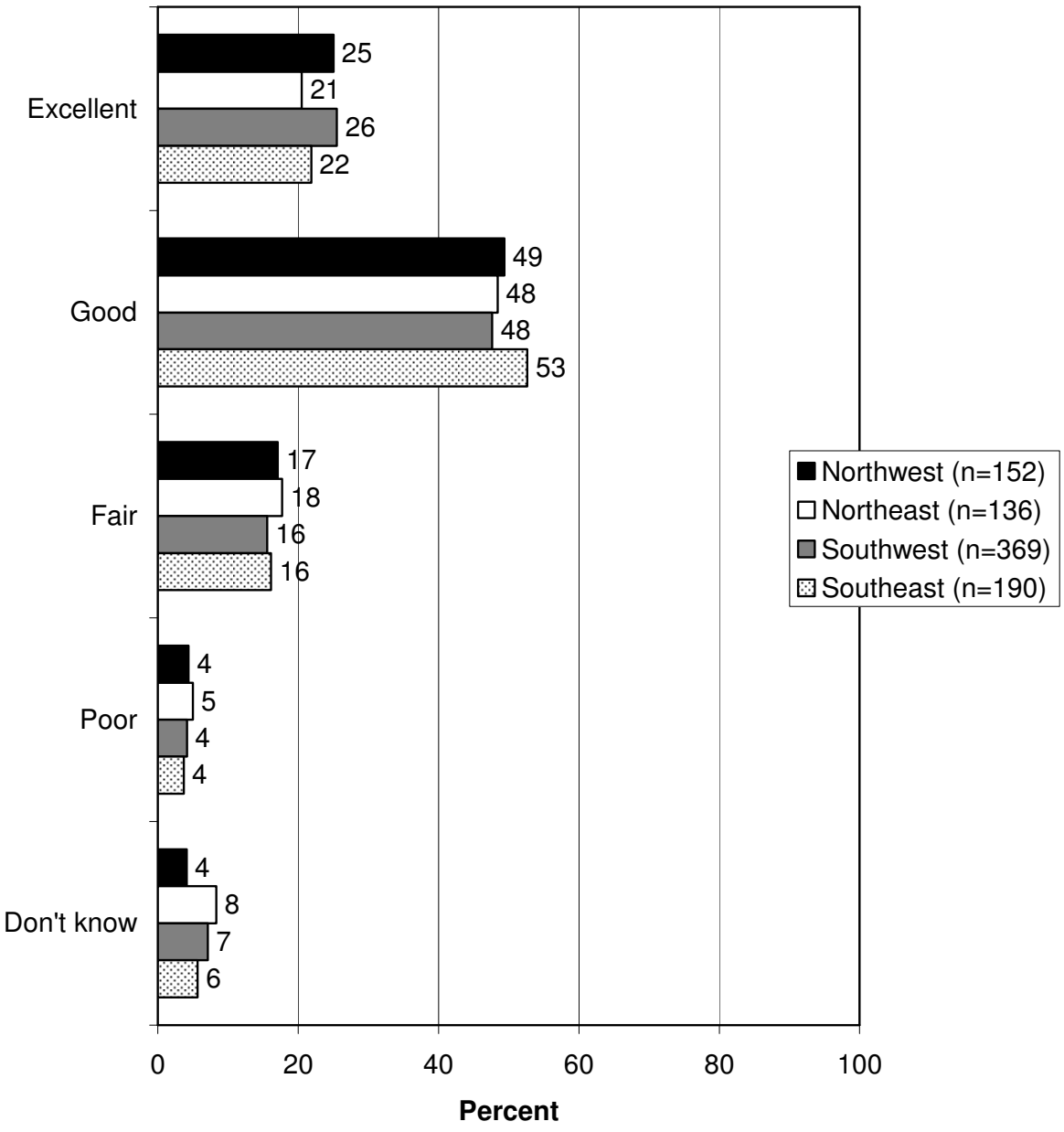

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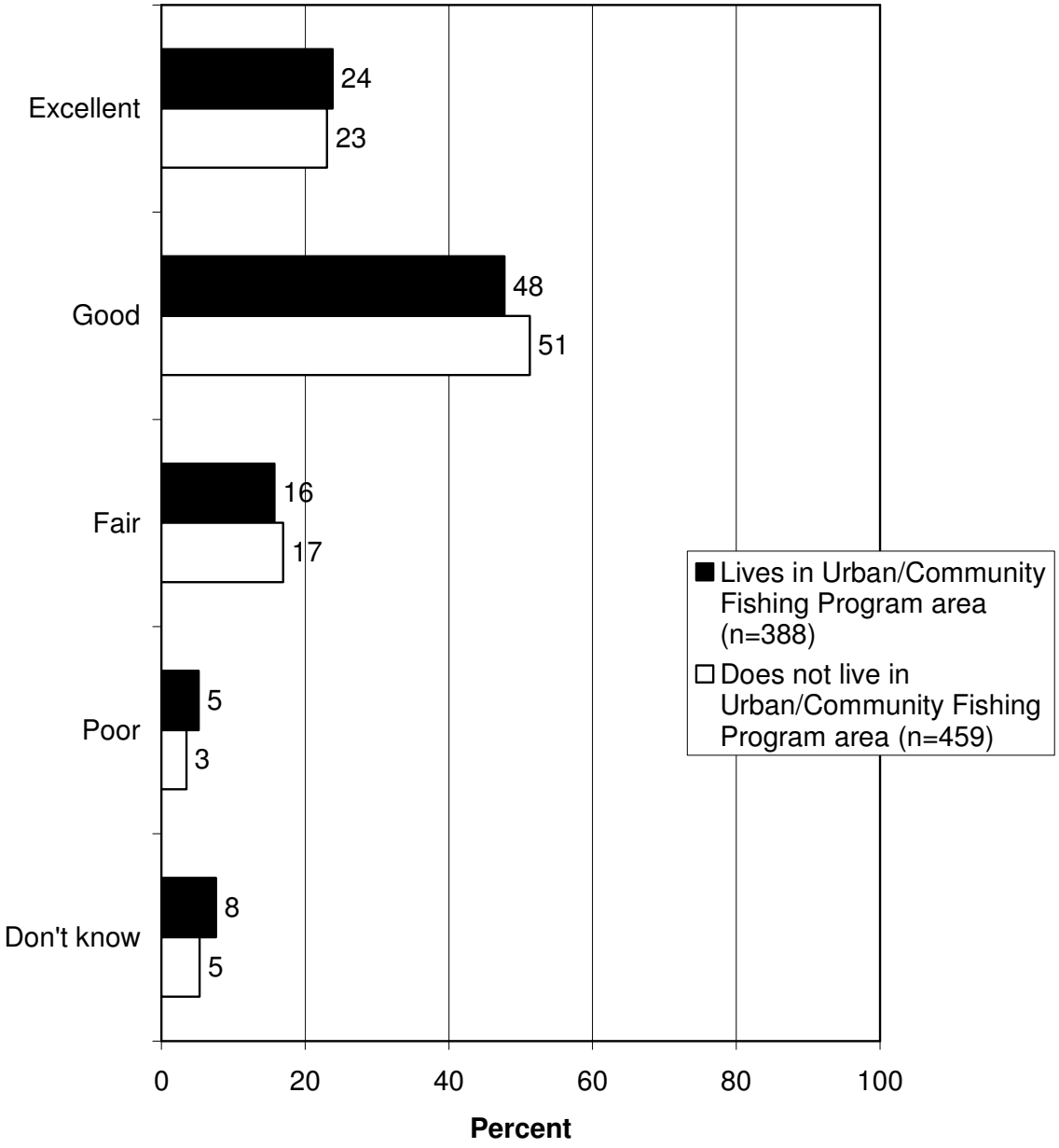

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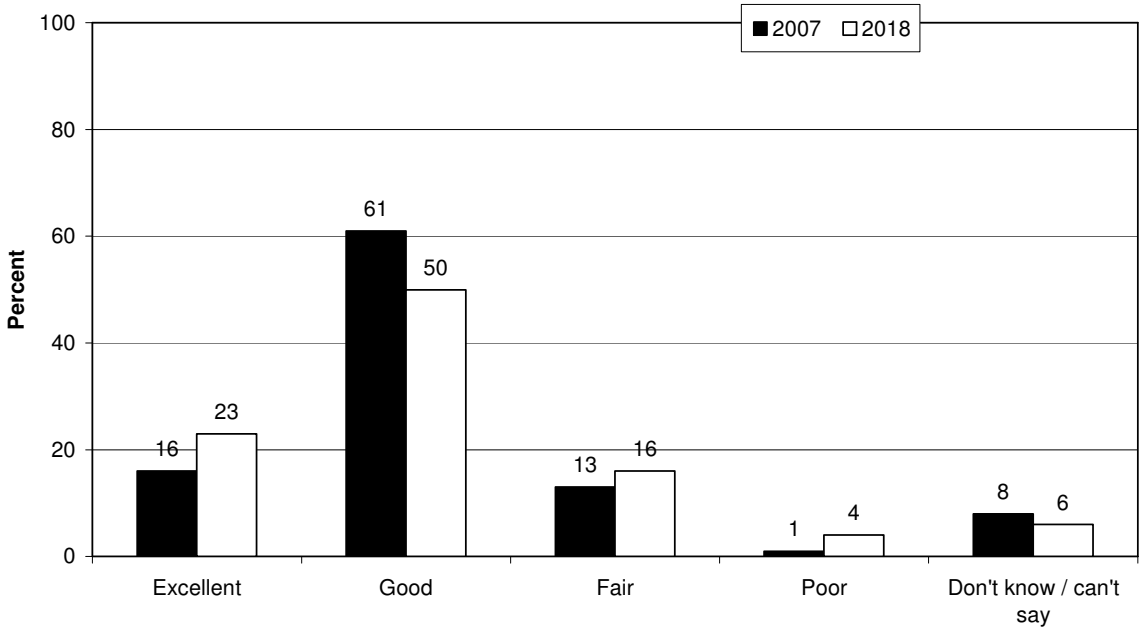


ATTITUDES TOWARD PANFISH REGULATIONS

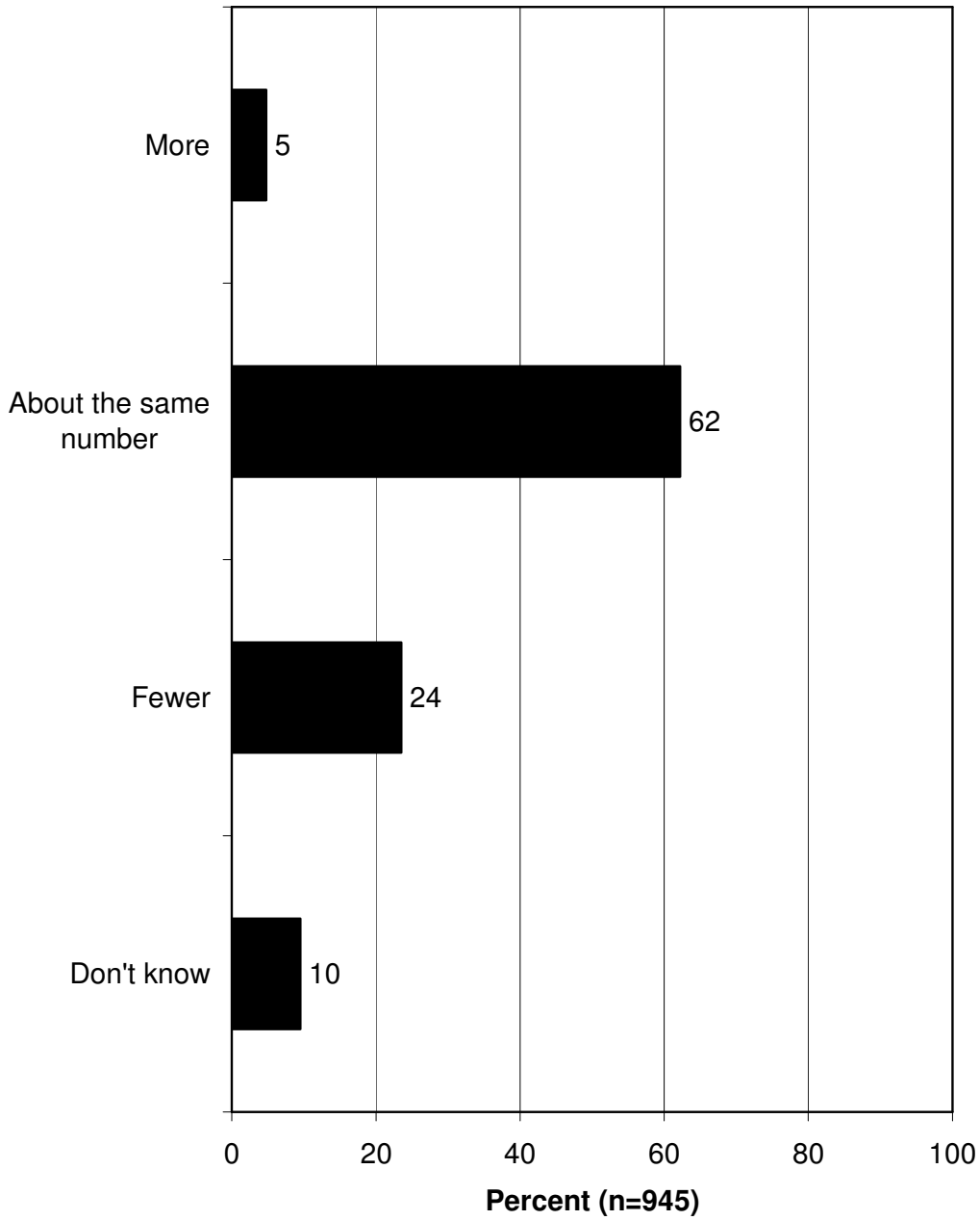
- A majority of those who fished for bluegill (62%) say they have been harvesting about the same number of bluegill since the bag limit began in 2009. Nonetheless, it appears that the bag limit had some impact, as 24% of bluegill anglers say they have been harvesting fewer bluegill compared to 5% who say they have been harvesting more.

- Likewise, a majority of those who fished for crappie (56%) say they have been harvesting about the same number of crappie since the bag limit began in 2009; 28% have been harvesting fewer compared to 8% who have been harvesting more.

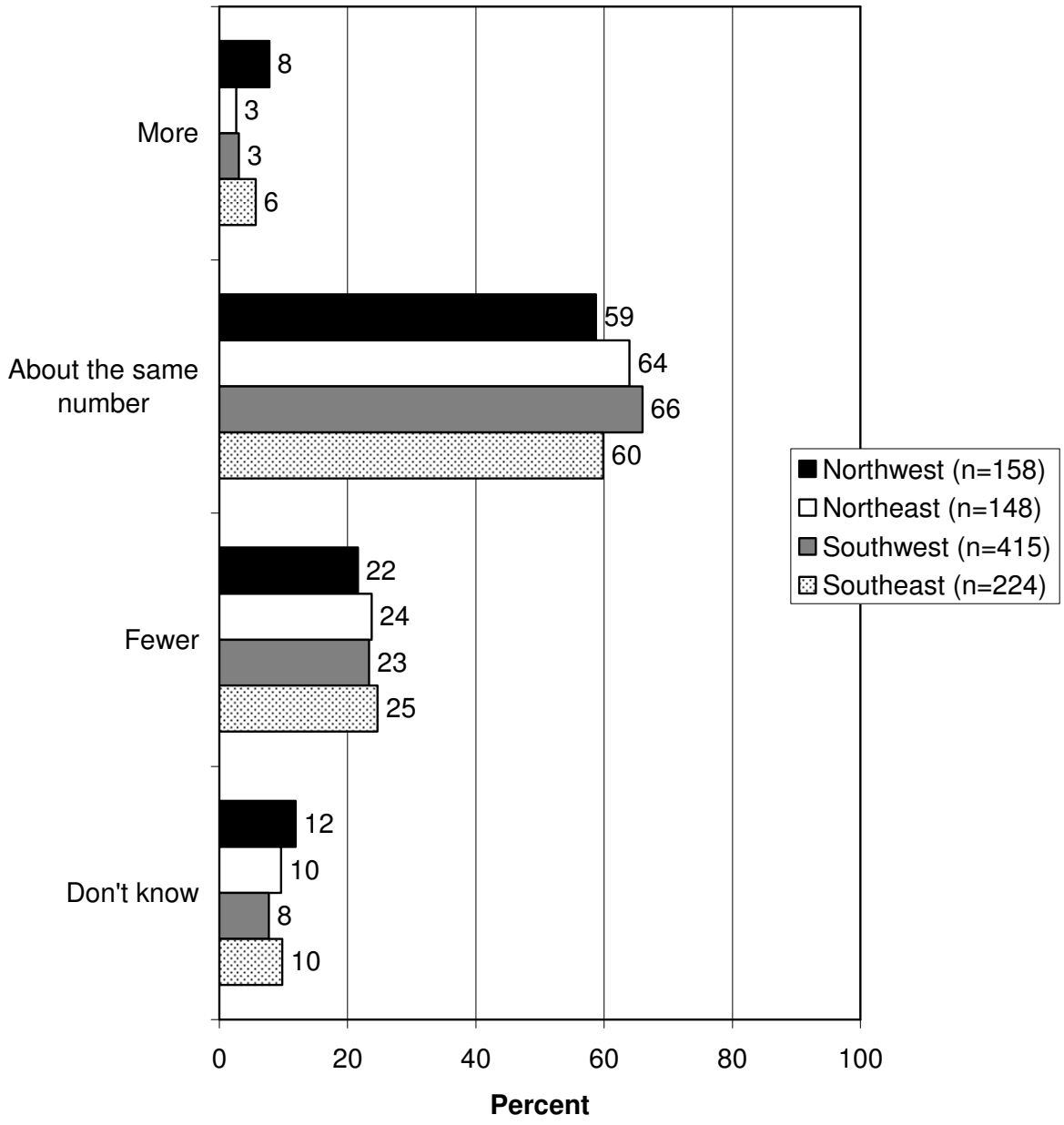
- A majority of those who fished for bluegill (78%) are satisfied with the daily bag limit of 25 (57% are *very* satisfied), compared to just 8% who are dissatisfied.
  - Results are very similar among bluegill anglers who live in counties bordering the Mississippi River: 75% are satisfied with the bag limit (53% are *very* satisfied) and 11% are dissatisfied.
  - Among bluegill anglers who are dissatisfied with the bag limit, 60% want the limit to be more than 25 bluegill per day, as opposed to 36% who want a lower limit.
    - Southeast anglers in this group are markedly more likely than those in other regions to want a higher bag limit.
    - Likewise, anglers in this group who live in the Mississippi River corridor more commonly want a higher bag limit (75% do) compared to anglers statewide. (Note that only 9 anglers meet these conditions.)

- The same questions were asked of those who fished for crappie: 78% are satisfied with the daily bag limit of 25 (57% are *very* satisfied), compared to just 9% who are dissatisfied.
  - Among crappie anglers who live in the Mississippi River corridor, 72% are satisfied with the bag limit (51% are *very* satisfied) and 10% are dissatisfied.
  - Among crappie anglers who are dissatisfied with the bag limit, 44% want the limit to be more than 25 crappie per day, while 53% want the limit to be fewer than 25 per day.
    - Again, Southeast anglers in this group are more likely than others to want a higher bag limit.
    - Among crappie anglers who are dissatisfied with the bag limit and who live in the Mississippi River corridor, 56% want a higher bag limit and 44% want a lower one (only 9 anglers meet these conditions).

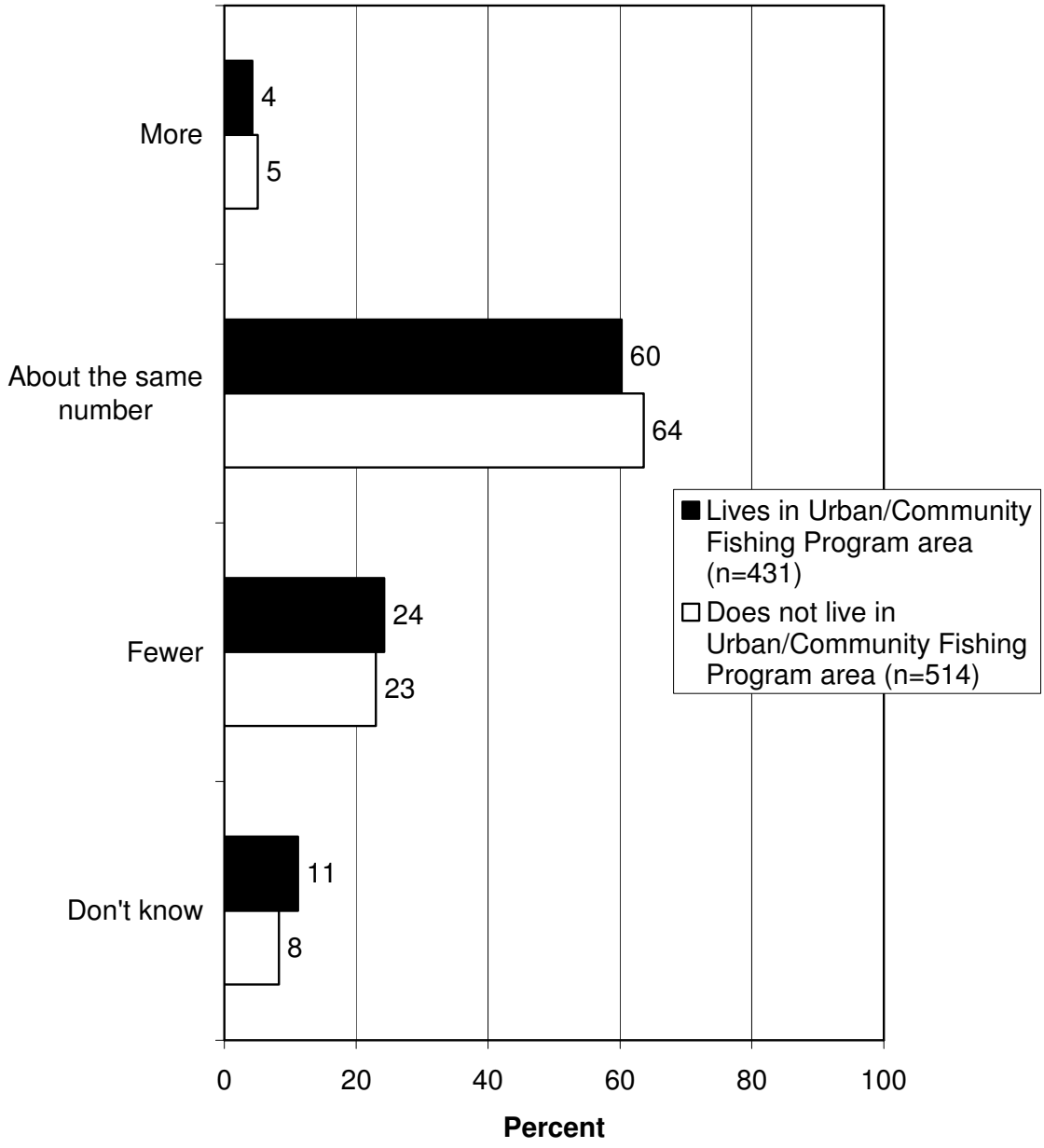
Q147. In your opinion, have you been harvesting more, about the same number, or fewer bluegill in Iowa since the bag limit began in 2009? (Asked of those who fished for bluegill.)



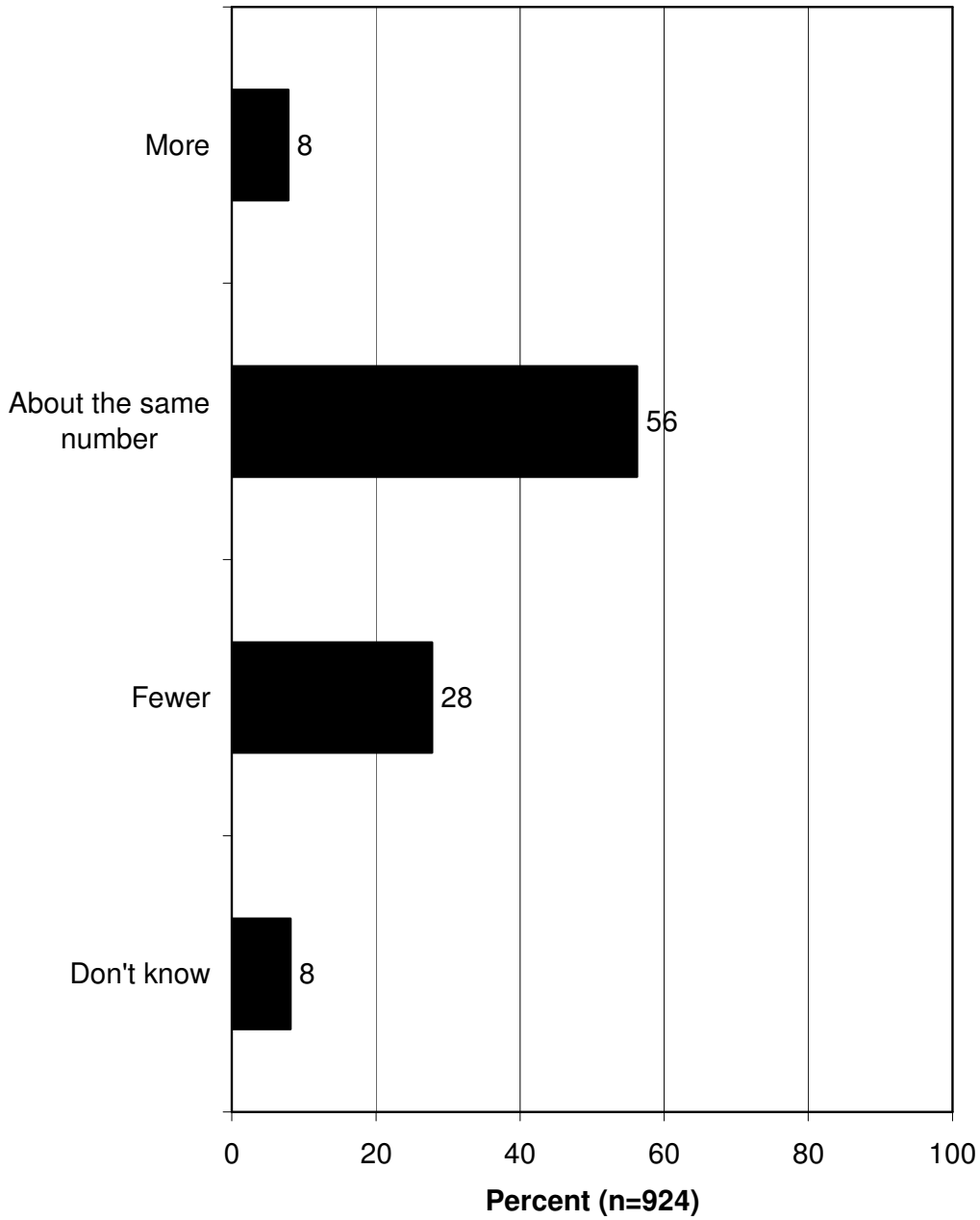
Q147. In your opinion, have you been harvesting more, about the same number, or fewer bluegill in Iowa since the bag limit began in 2009? (Asked of those who fished for bluegill.)



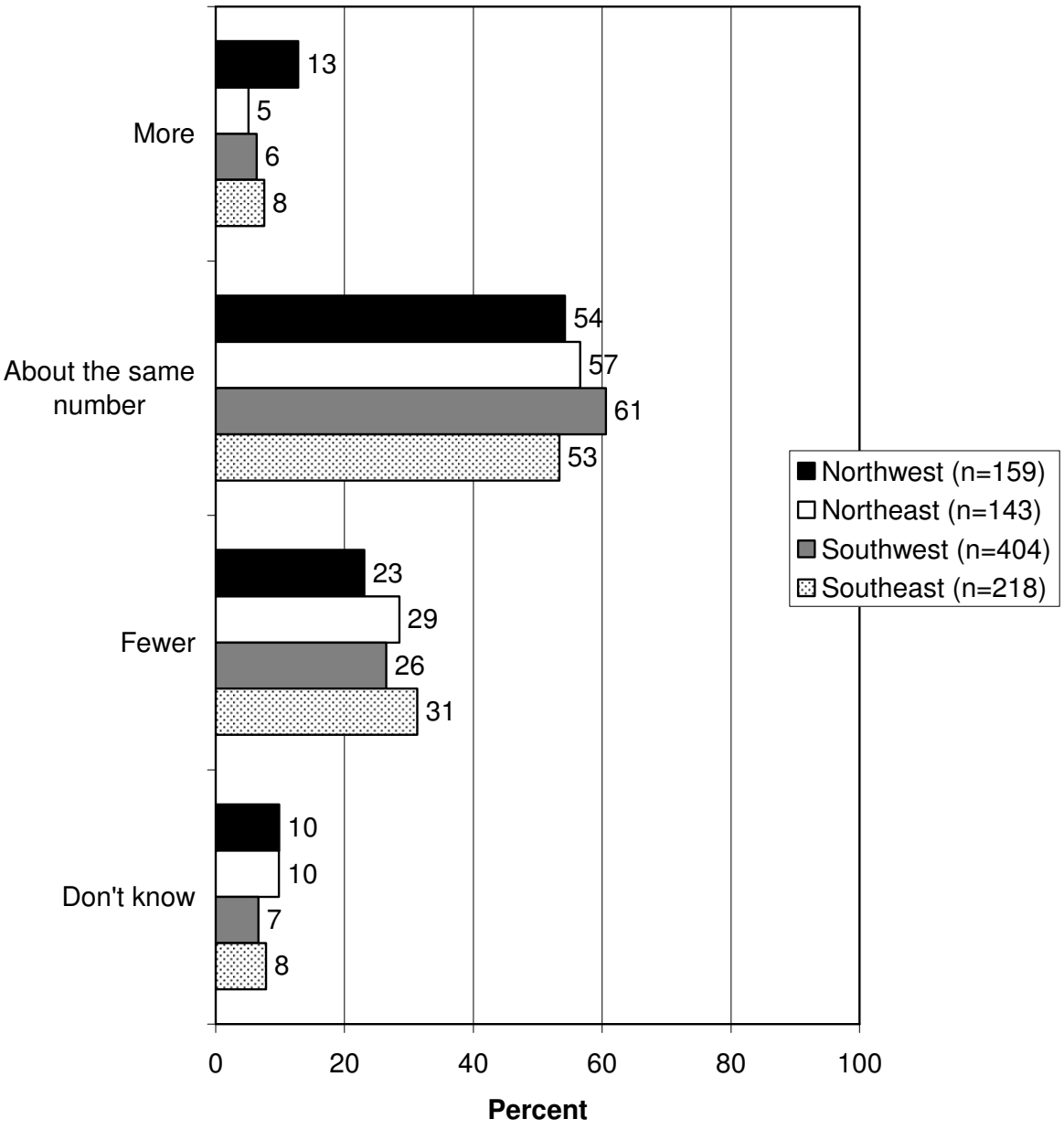
Q147. In your opinion, have you been harvesting more, about the same number, or fewer bluegill in Iowa since the bag limit began in 2009? (Asked of those who fished bluegill.)



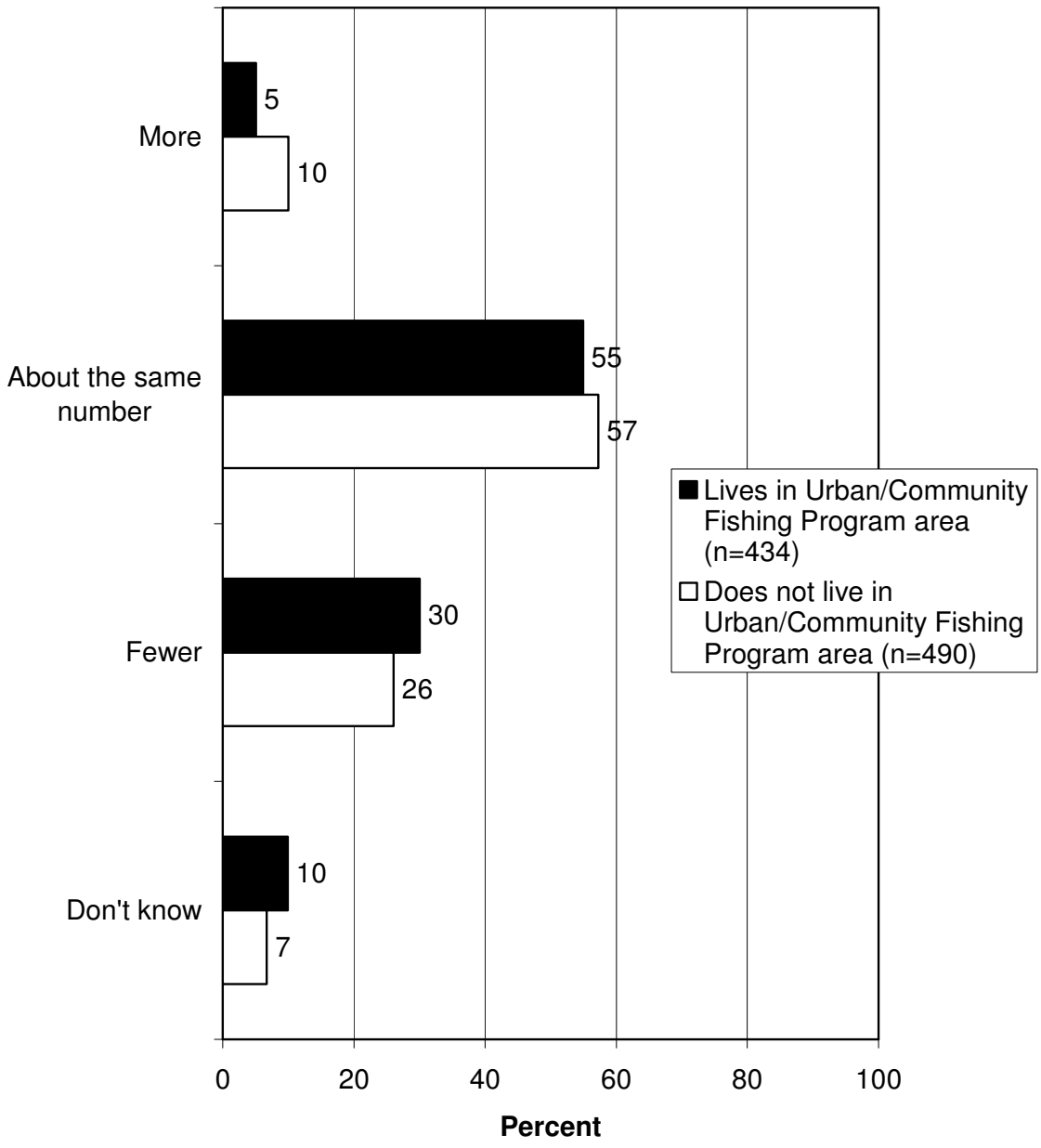
Q148. In your opinion, have you been harvesting more, about the same number, or fewer crappie in Iowa since the bag limit began in 2009? (Asked of those who fished for crappie.)



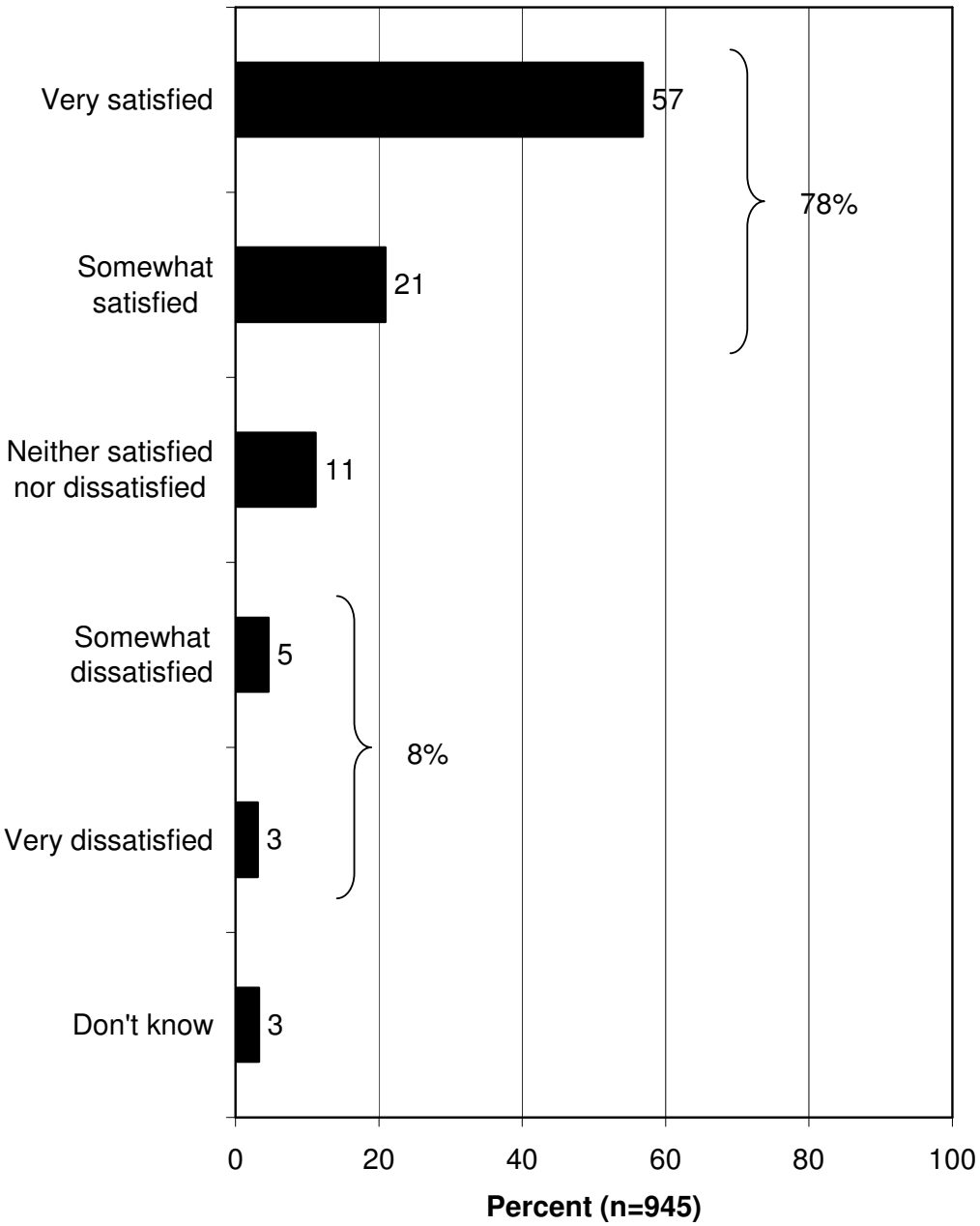
Q148. In your opinion, have you been harvesting more, about the same number, or fewer crappie in Iowa since the bag limit began in 2009? (Asked of those who fished for crappie.)



Q148. In your opinion, have you been harvesting more, about the same number, or fewer crappie in Iowa since the bag limit began in 2009? (Asked of those who fish crappie.)



Q149. How satisfied or dissatisfied are you with the daily bag limit of 25 for bluegill? (Asked of those who fished for bluegill.)



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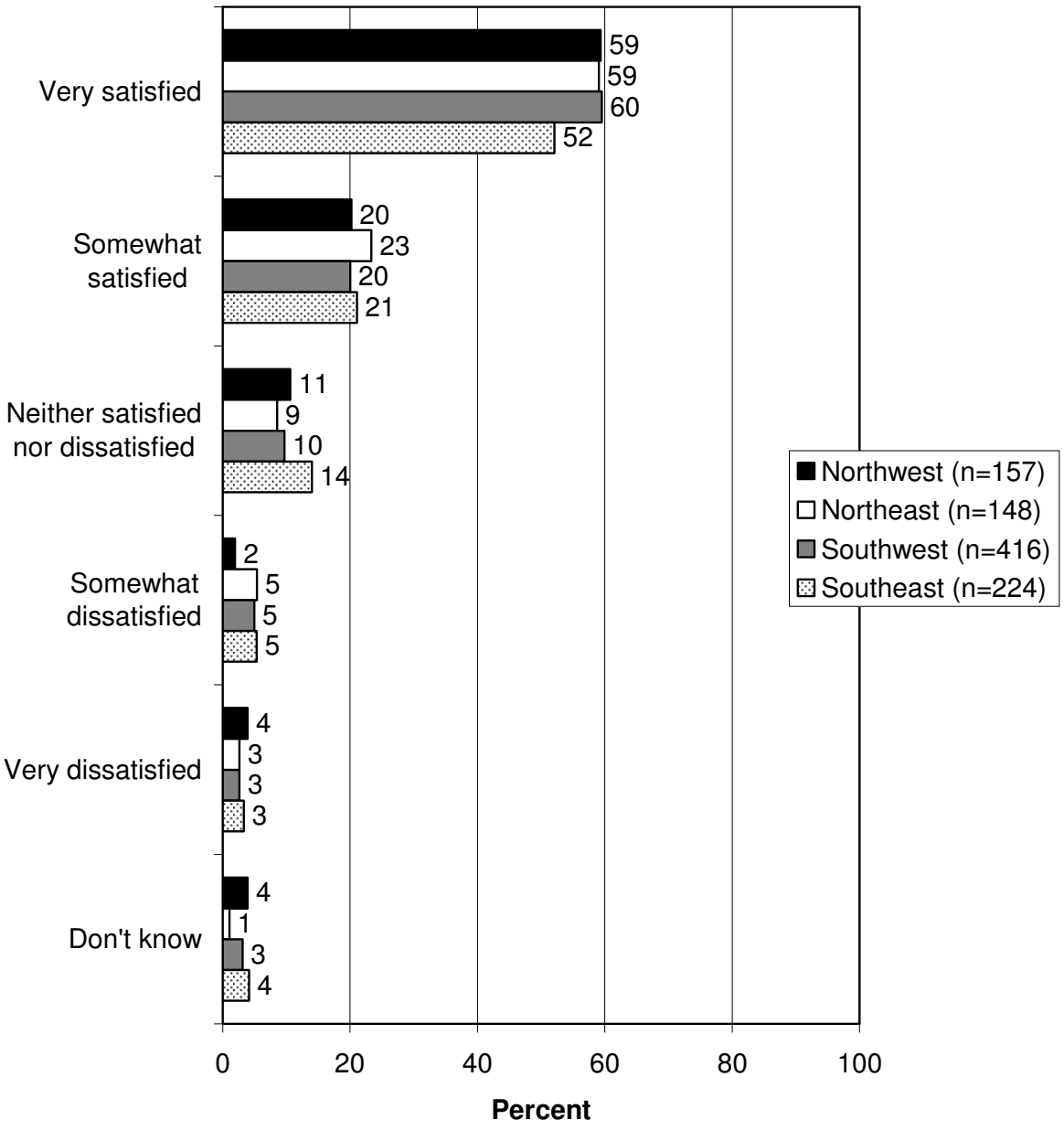

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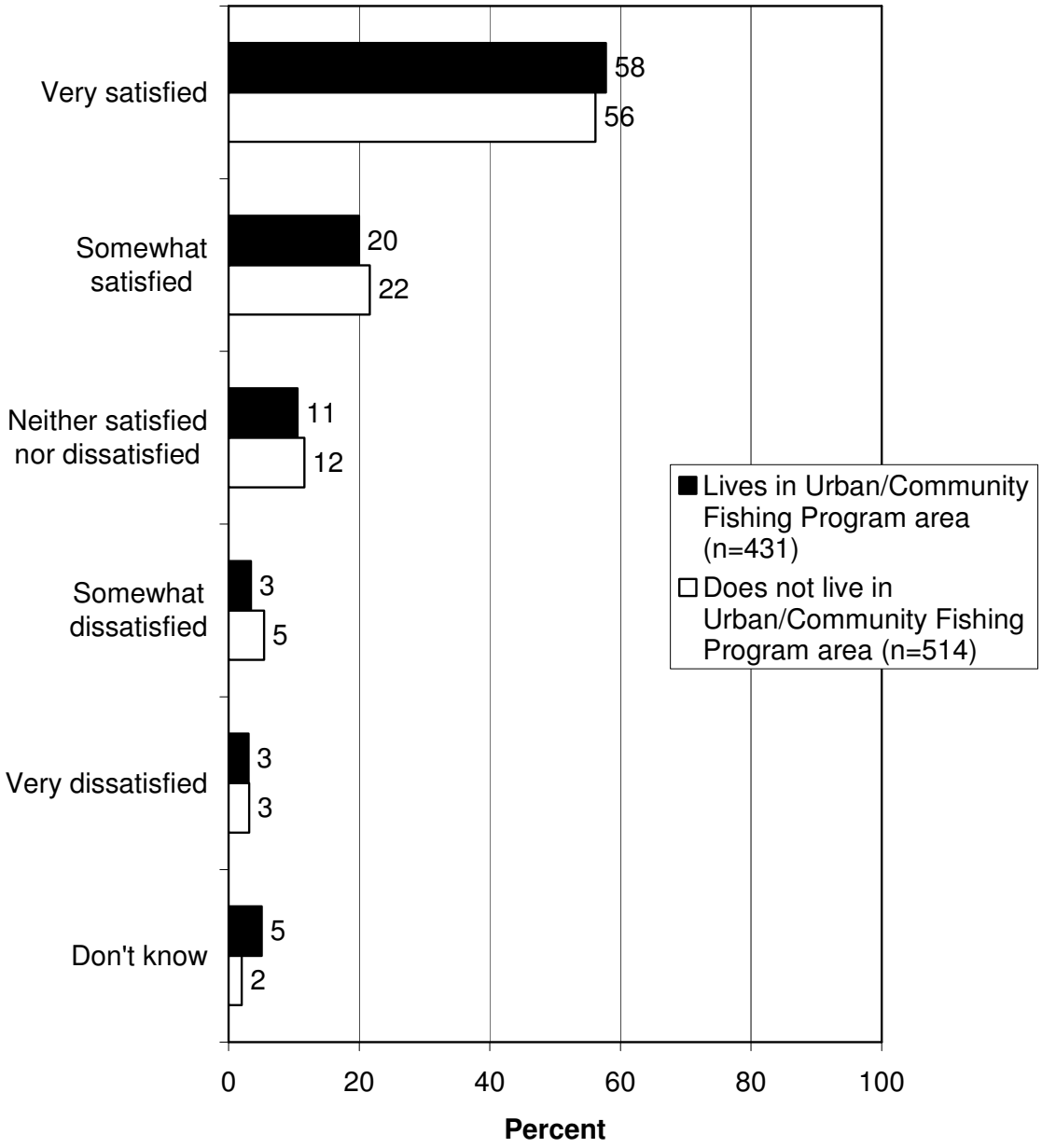
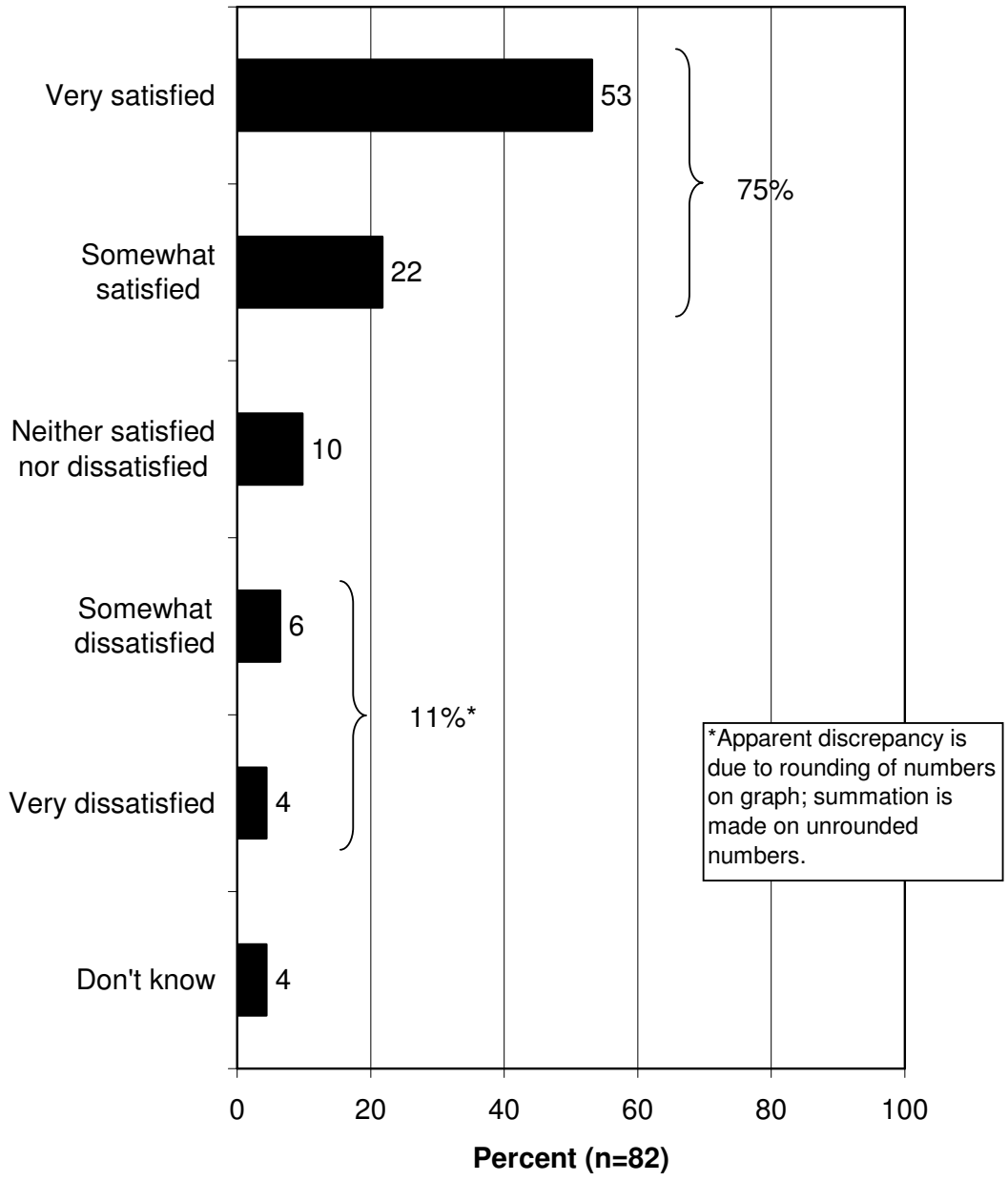
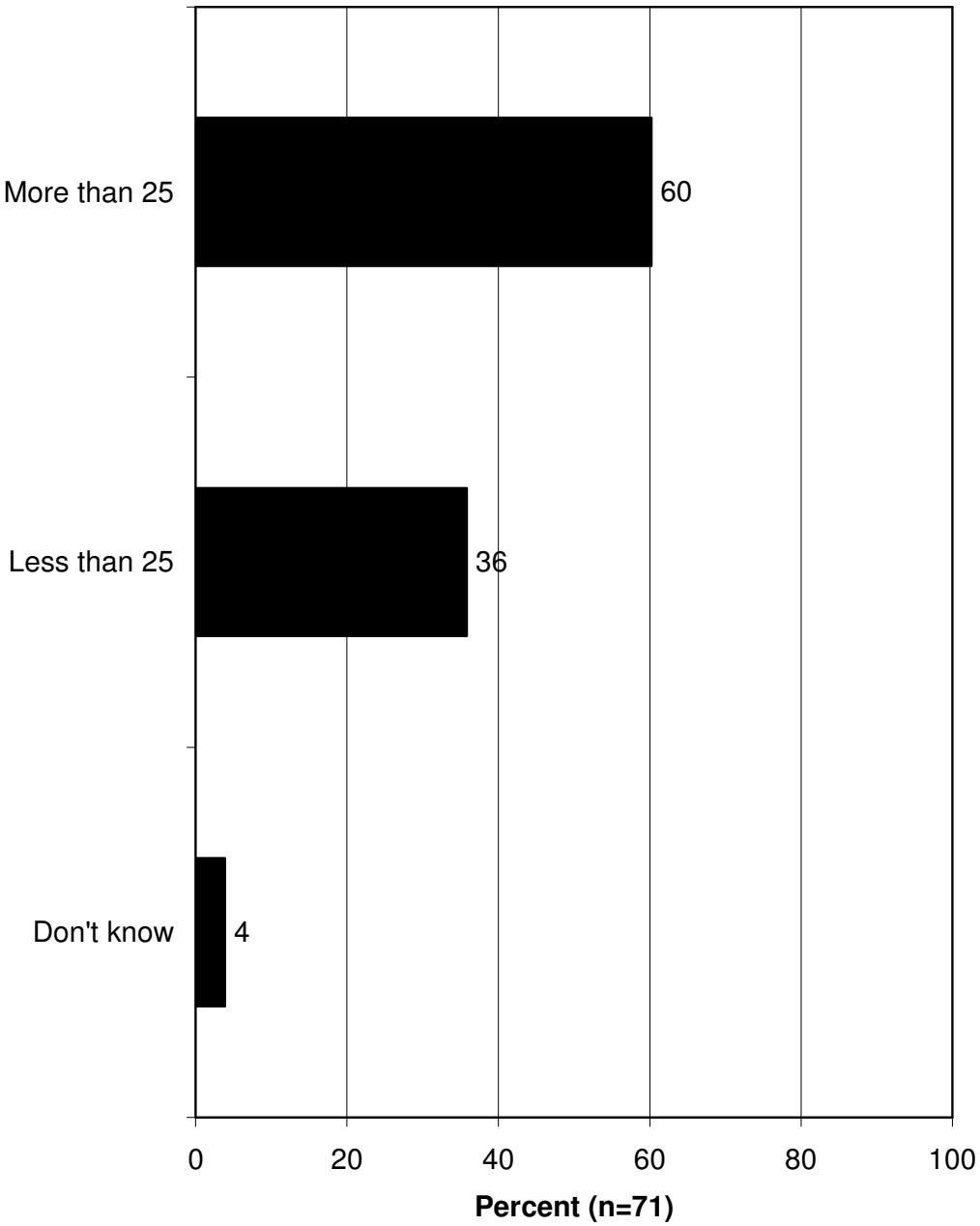


Q149. How satisfied or dissatisfied are you with the daily bag limit of 25 for bluegill? (Asked of those who fished for bluegill and reside in the Mississippi River corridor.)



Q150. Would you prefer that the daily bag limit for bluegill be more or less than 25 bluegill per day? (Asked of those who fished for bluegill and are dissatisfied with the daily bag limit.)



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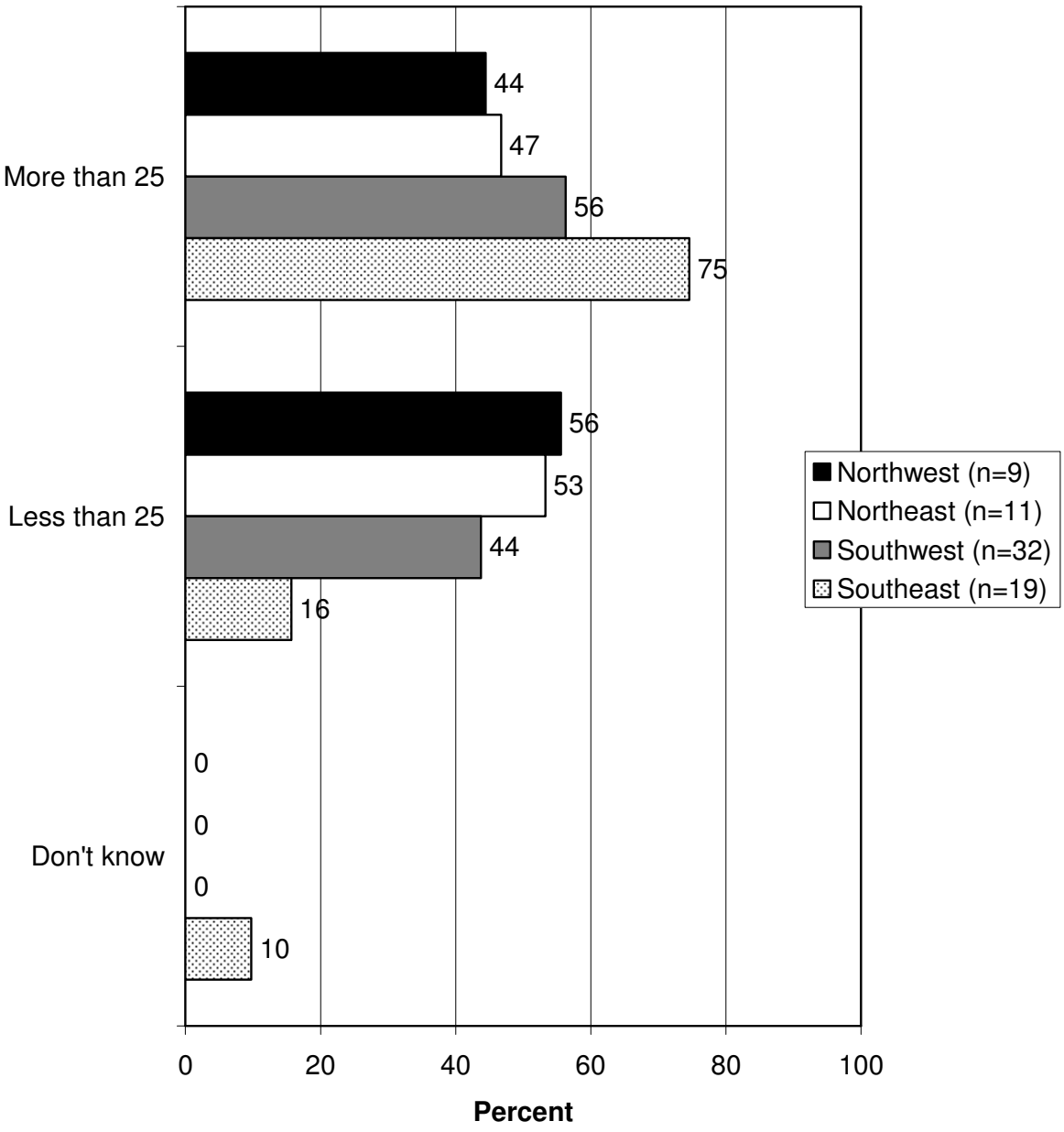

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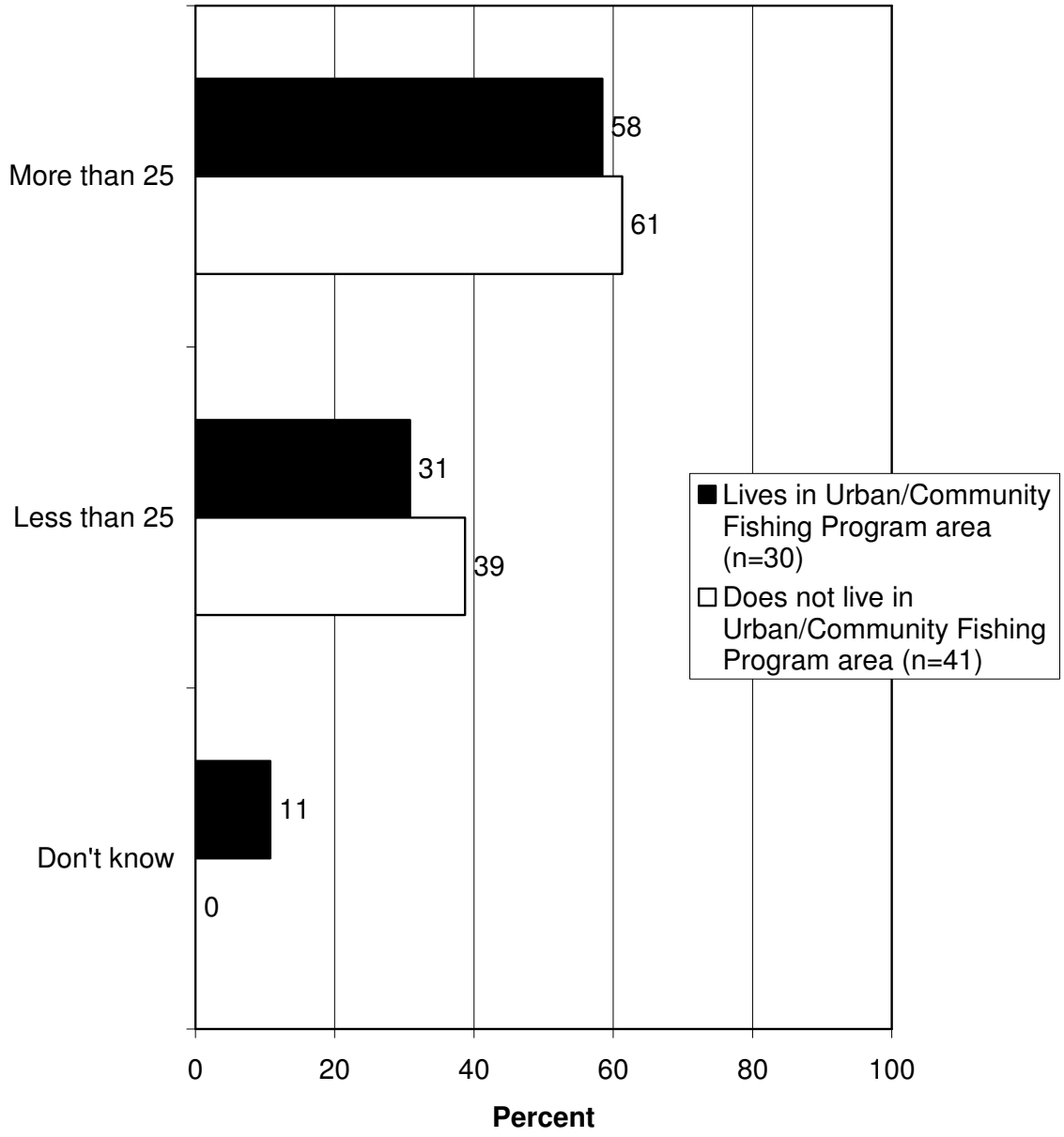
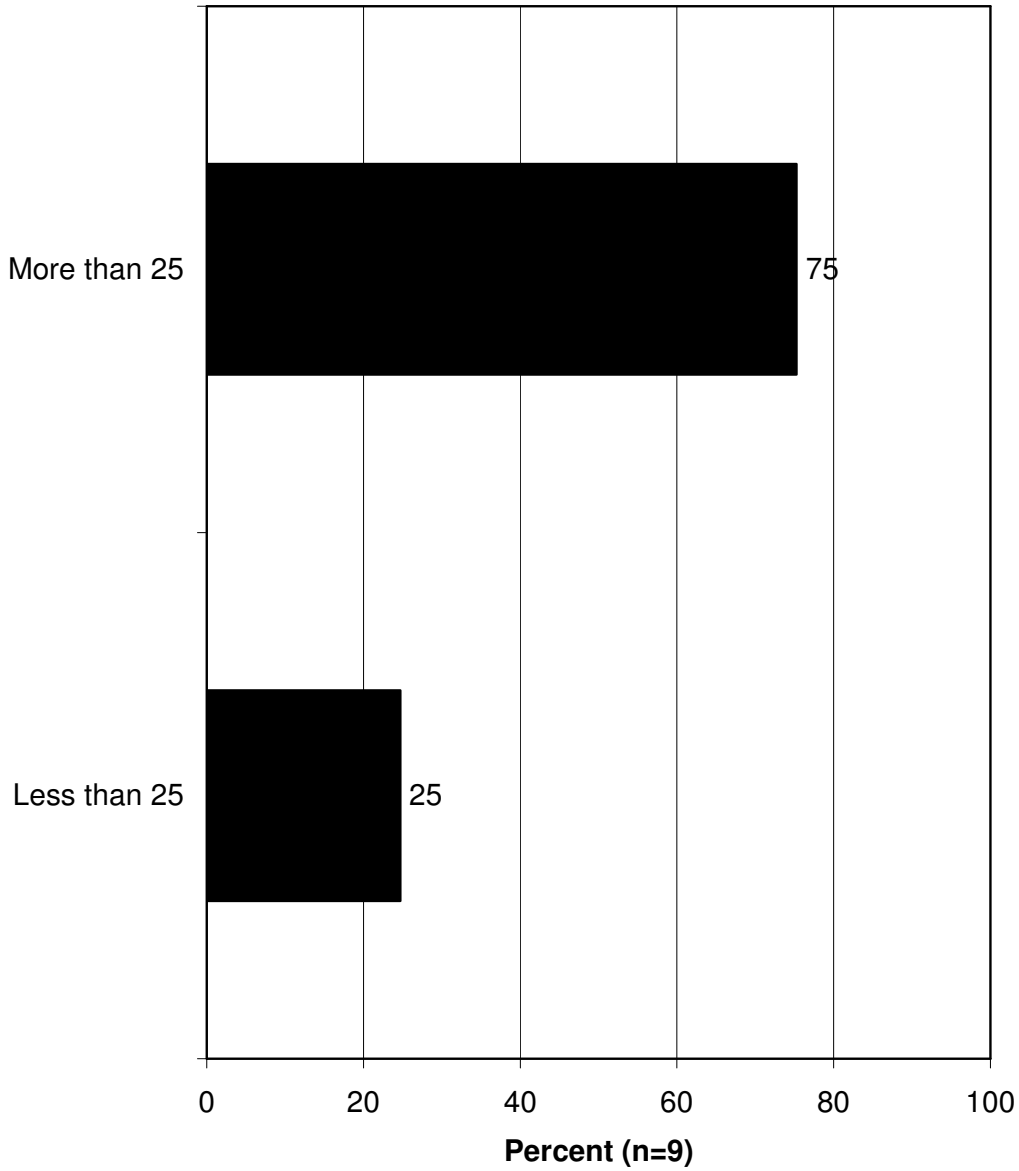
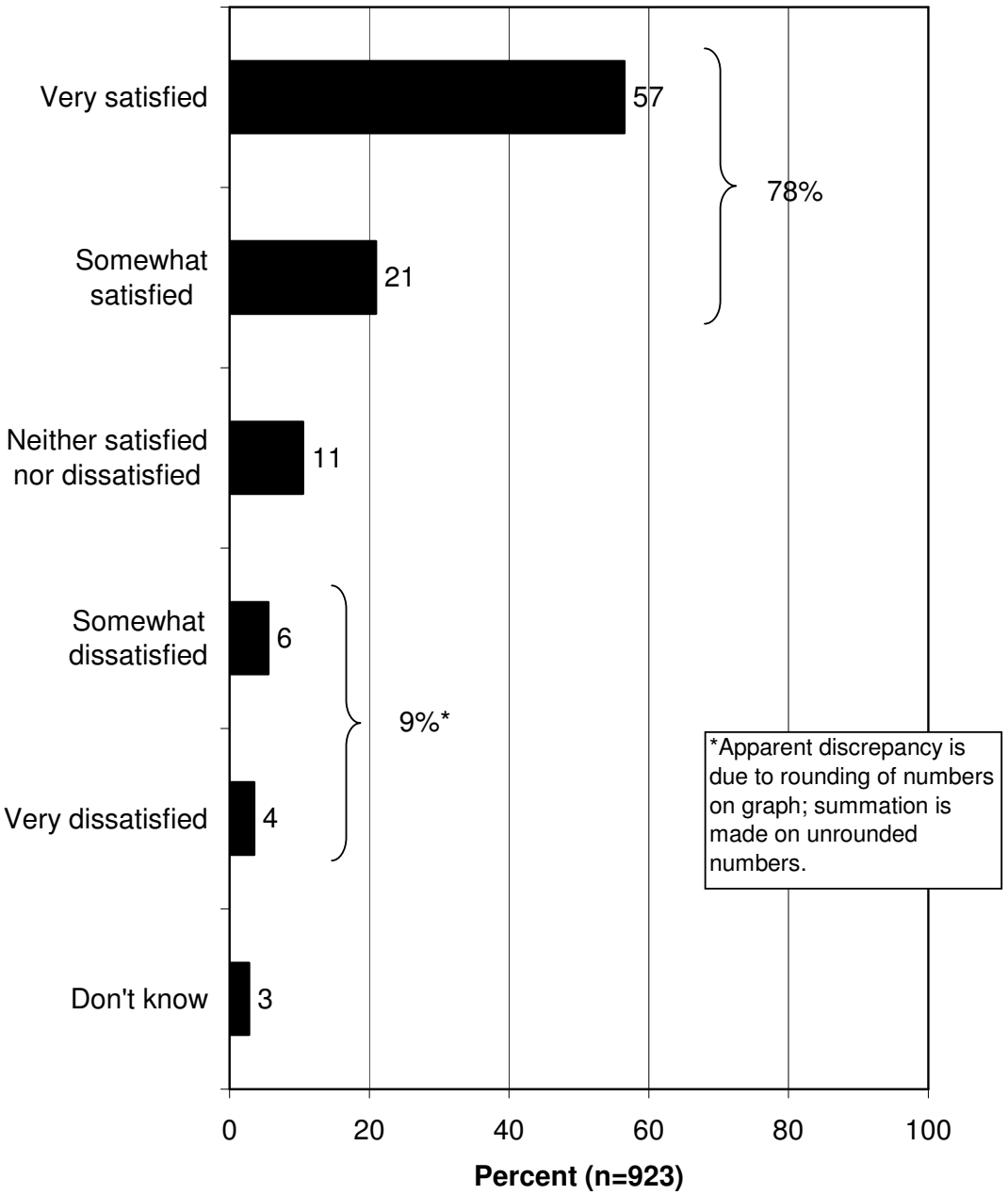


Q150. Would you prefer that the daily bag limit for bluegill be more or less than 25 bluegill per day? (Asked of those who fished for bluegill, are dissatisfied with the daily bag limit, and reside in the Mississippi River corridor.)



Q151. How satisfied or dissatisfied are you with the daily bag limit of 25 for crappie? (Asked of those who fished for crappie.)



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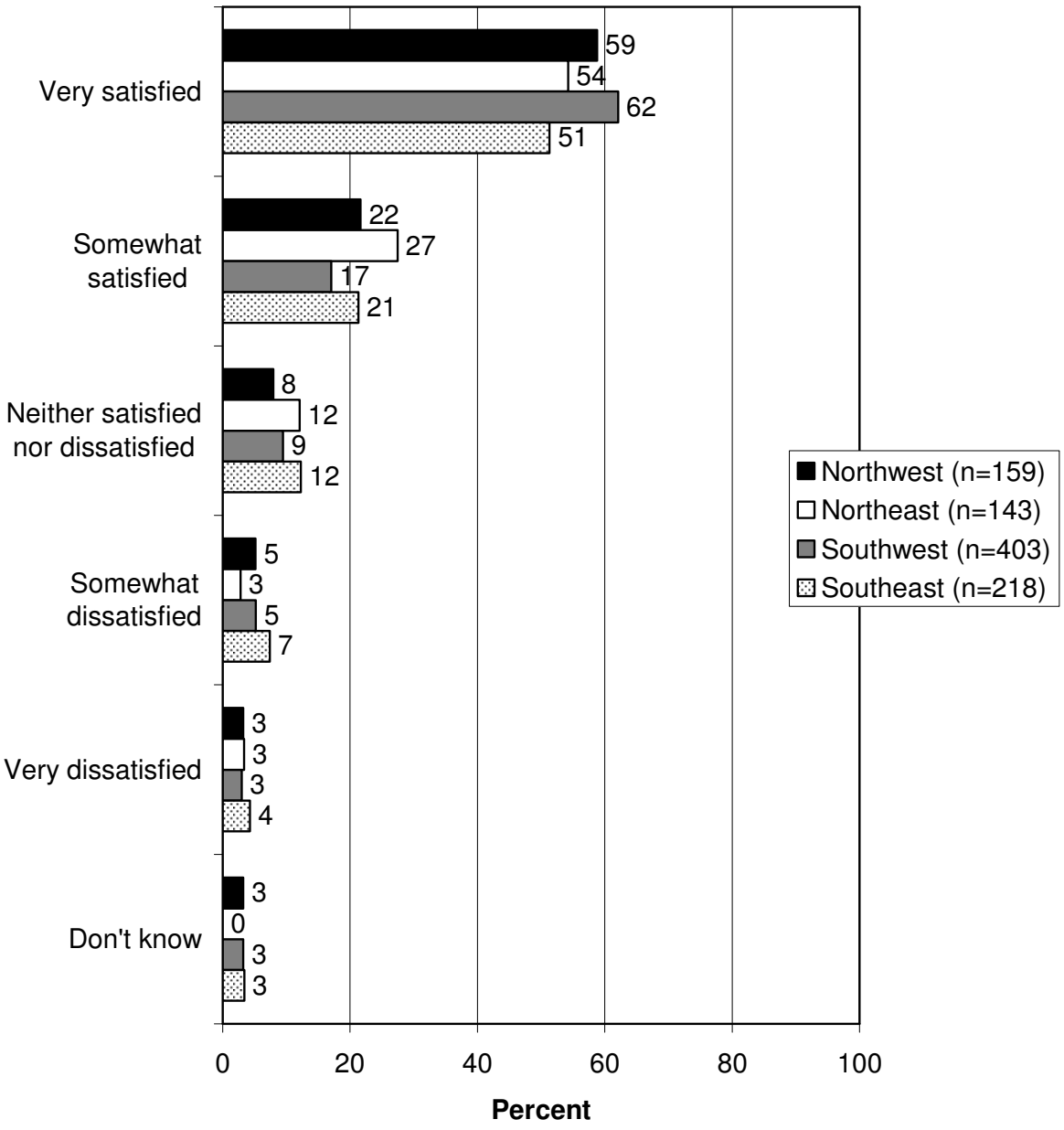

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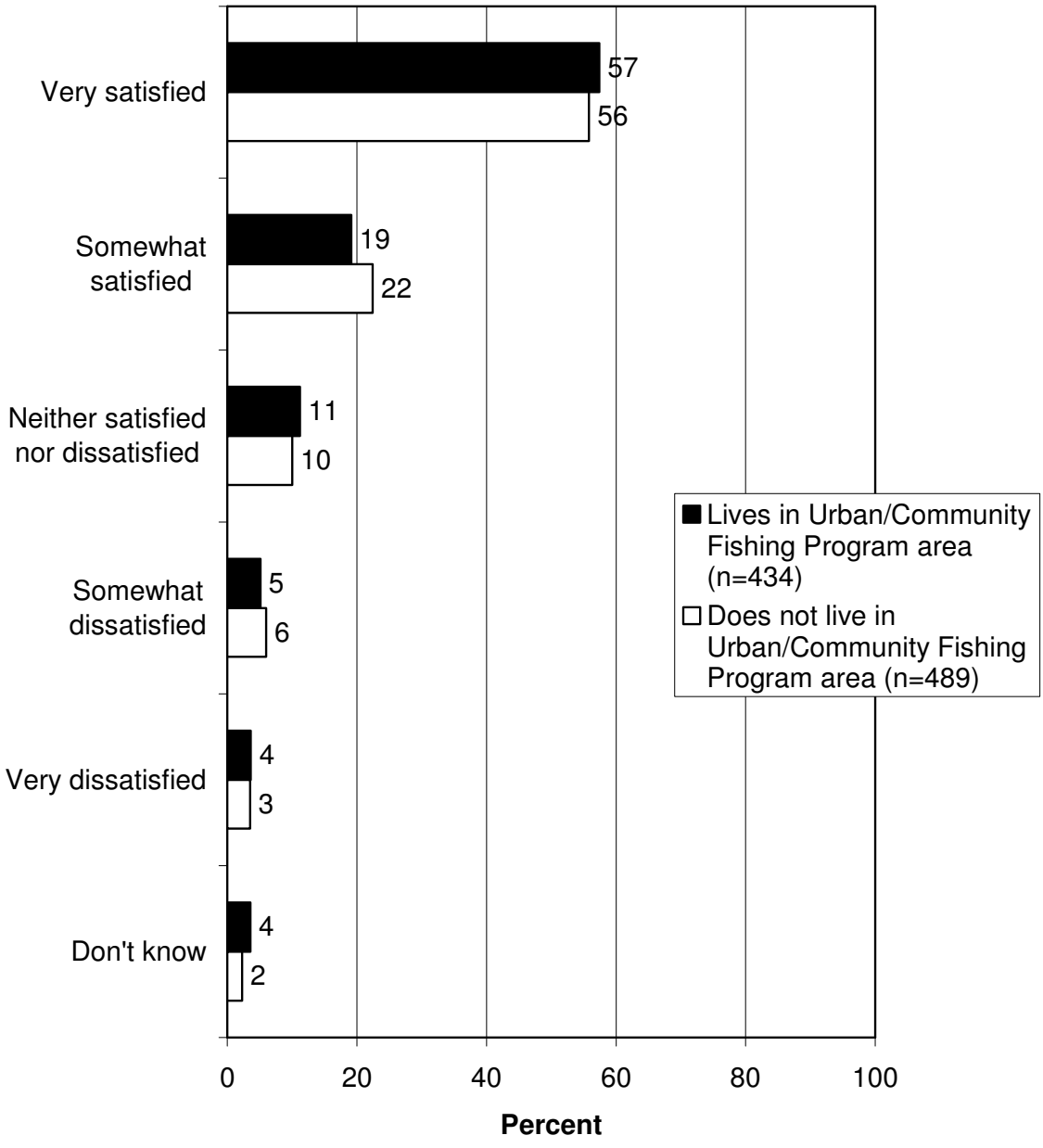
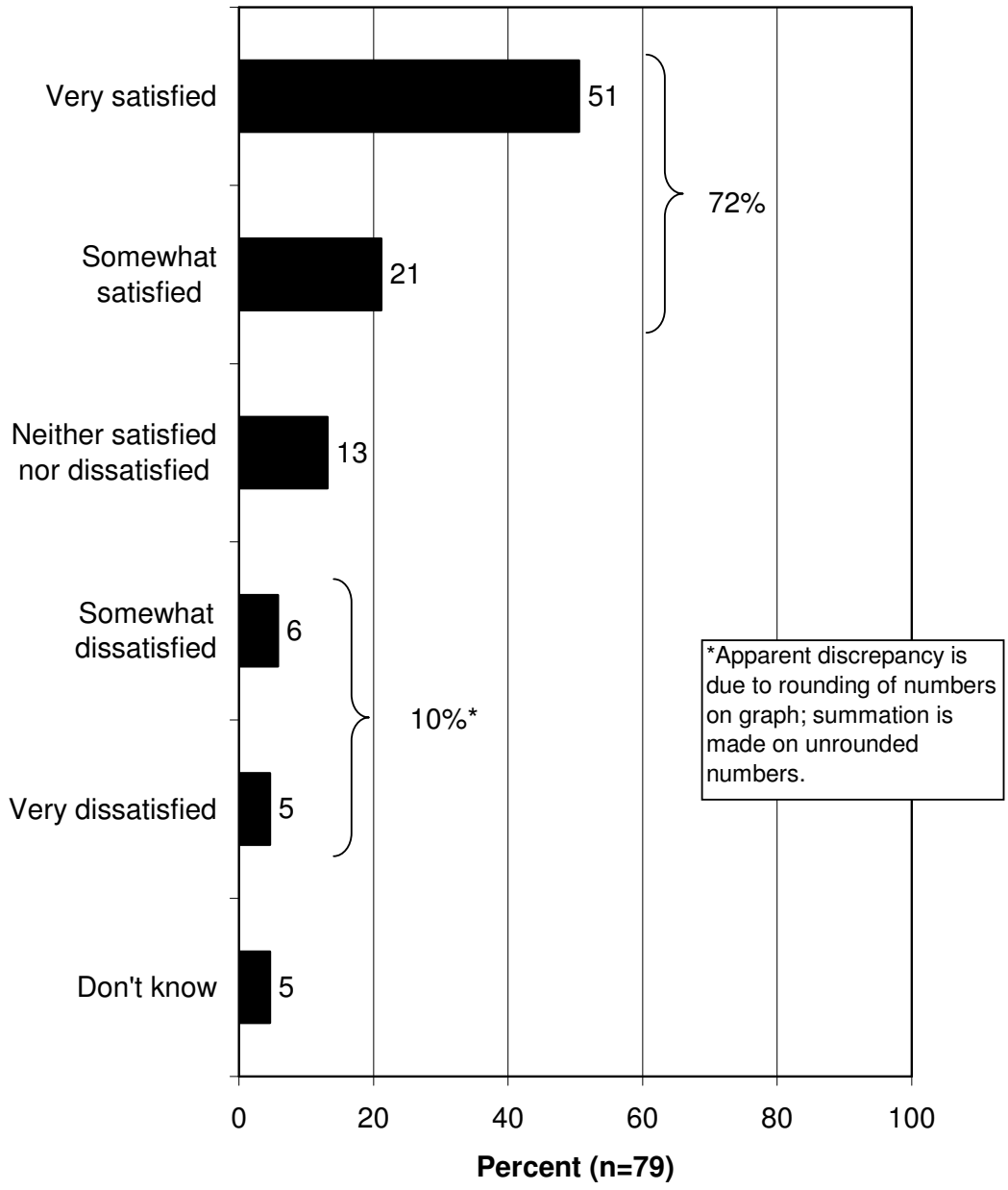
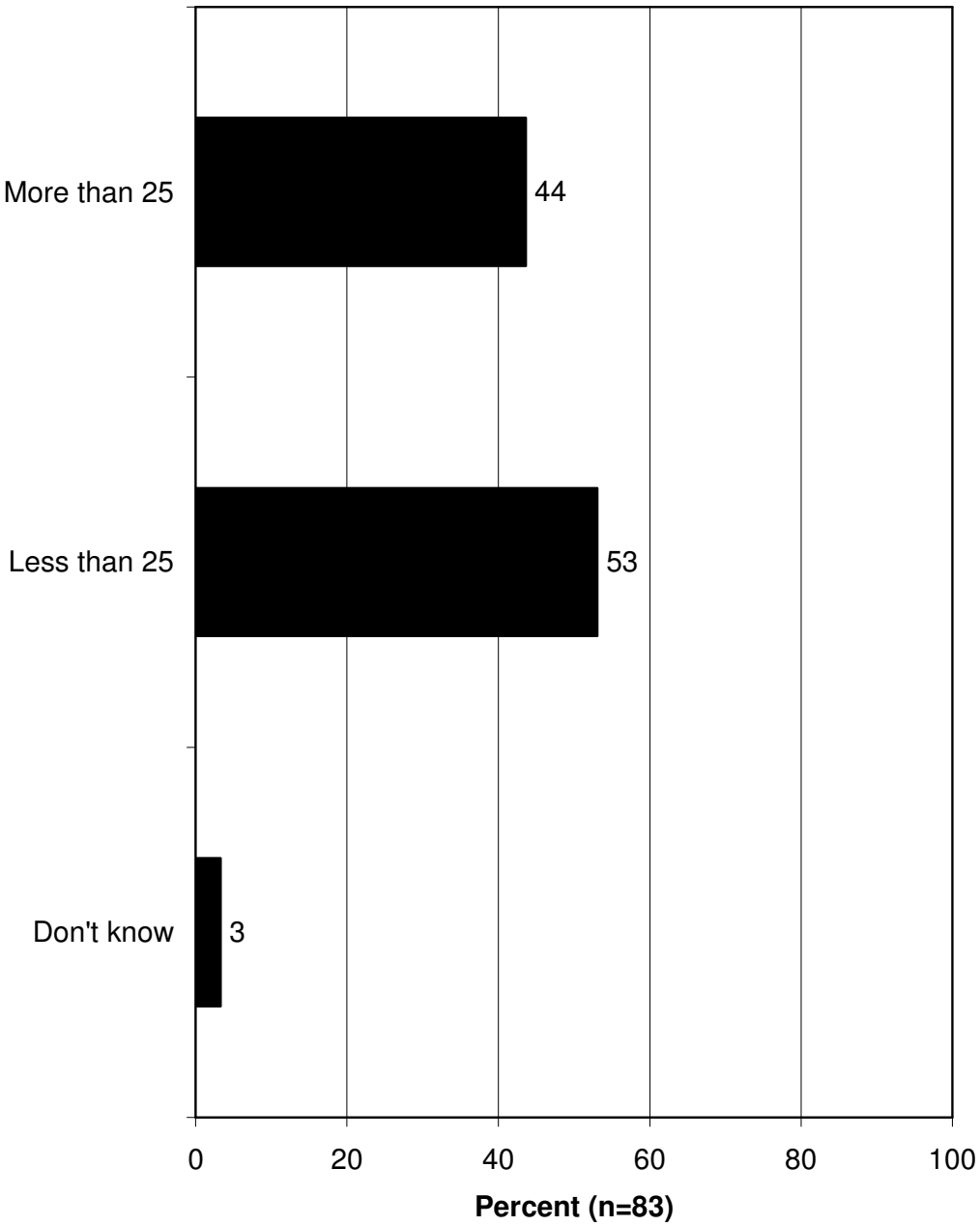


Q151. How satisfied or dissatisfied are you with the daily bag limit of 25 for crappie? (Asked of those who fished for crappie and reside in the Mississippi River corridor.)



Q152. Would you prefer that the daily bag limit for crappie be more or less than 25 crappie per day? (Asked of those who fished for crappie and are dissatisfied with the daily bag limit.)



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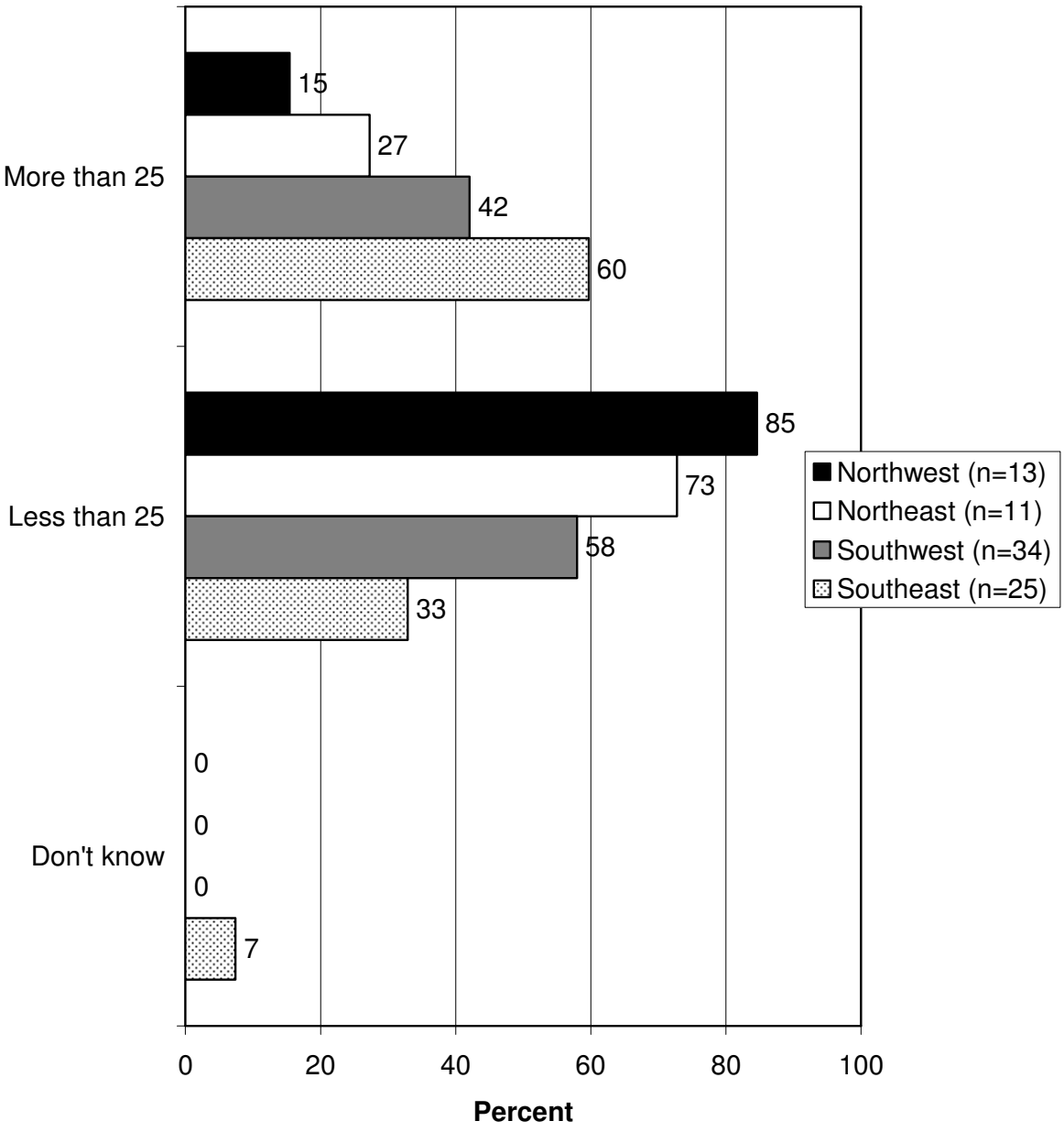

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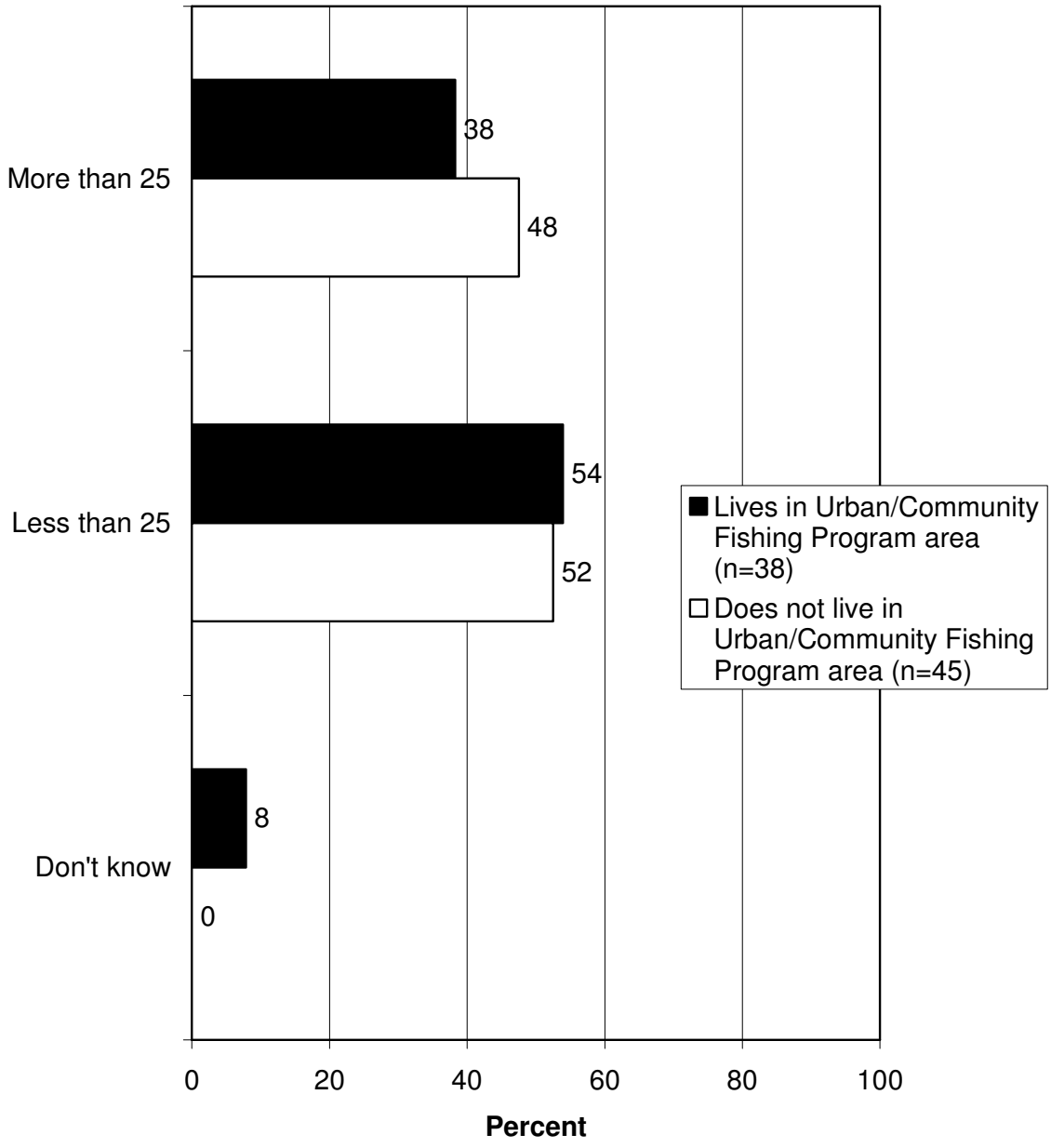

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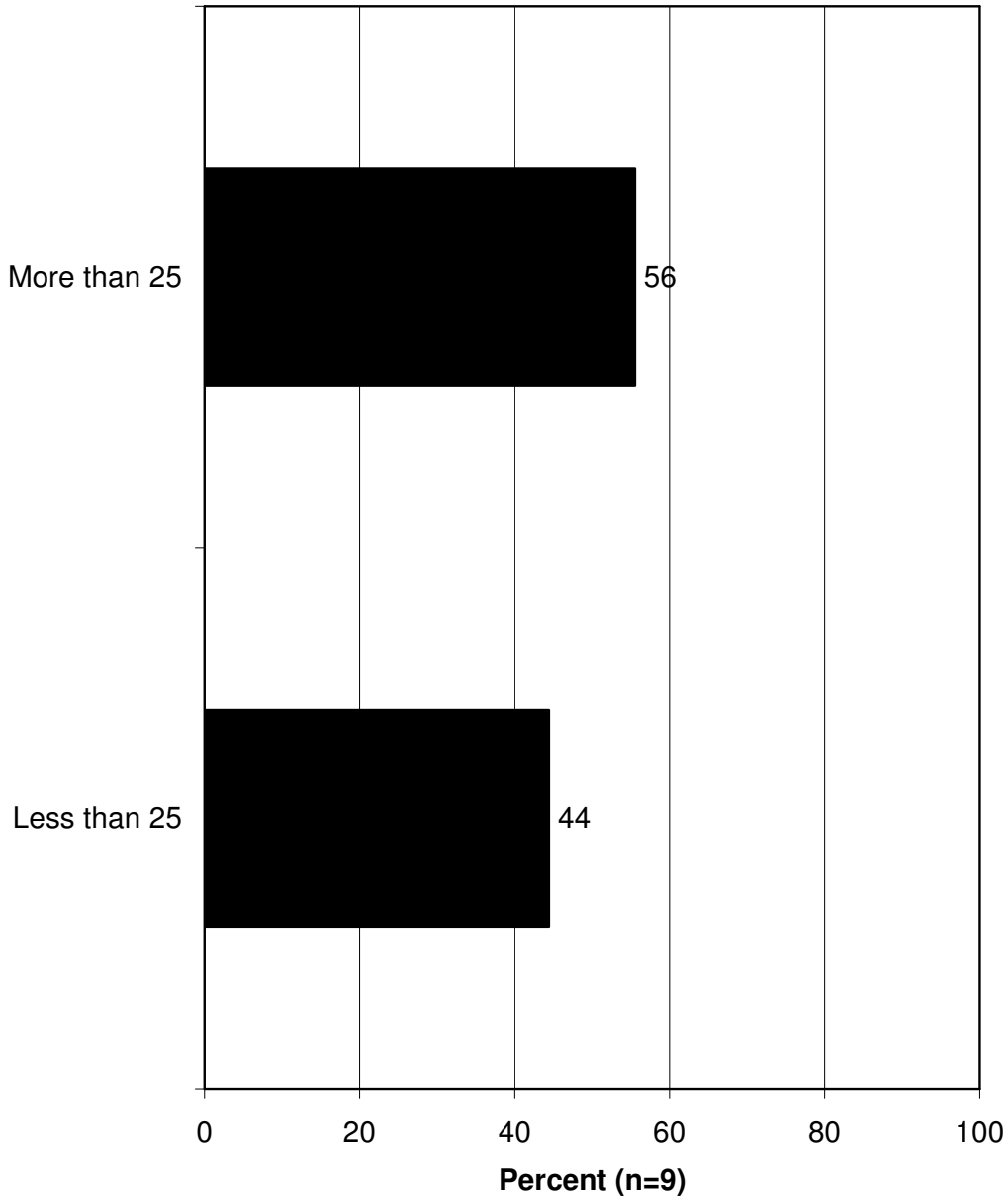


SOURCES OF INFORMATION ABOUT FISHING IN IOWA

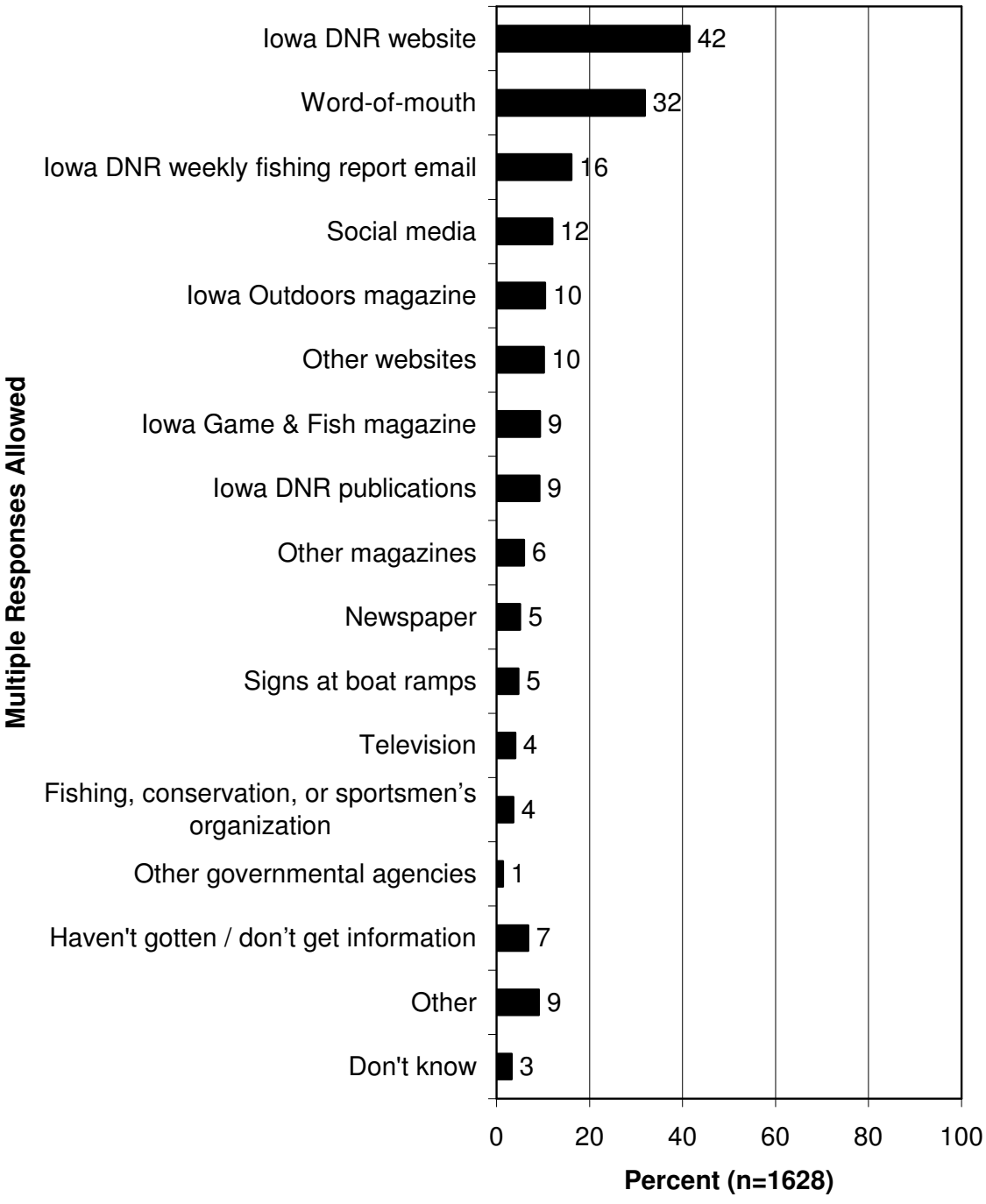
- Anglers were asked, in an open-ended question, what sources they use or have used to get information about fishing. By far the top responses are the Iowa Department of Natural Resource's website (42% stated this) and word-of-mouth (32%). Other information sources cited by at least 10% of anglers include the Department's weekly fishing report email, social media in general, *Iowa Outdoors* magazine, and other websites.
  - In follow-up, those who did not mention the Department's website in the open-ended question were directly asked if they ever visited the website. Combining the results of the two questions, most Iowa anglers (79%) have visited the website.
  - Those who visited the Department's website were most commonly seeking information on regulations, fishing locations, fishing reports, and license information.

- Overall, 38% of anglers have seen or heard information about fishing on social media (such as Facebook, Twitter, or Instagram). (As with the questions about the Department's website, results of the open-ended question were combined with a direct question to those who did not mention social media initially.)
  - Most anglers who saw or heard fishing information on social media (90%) got it from Facebook.

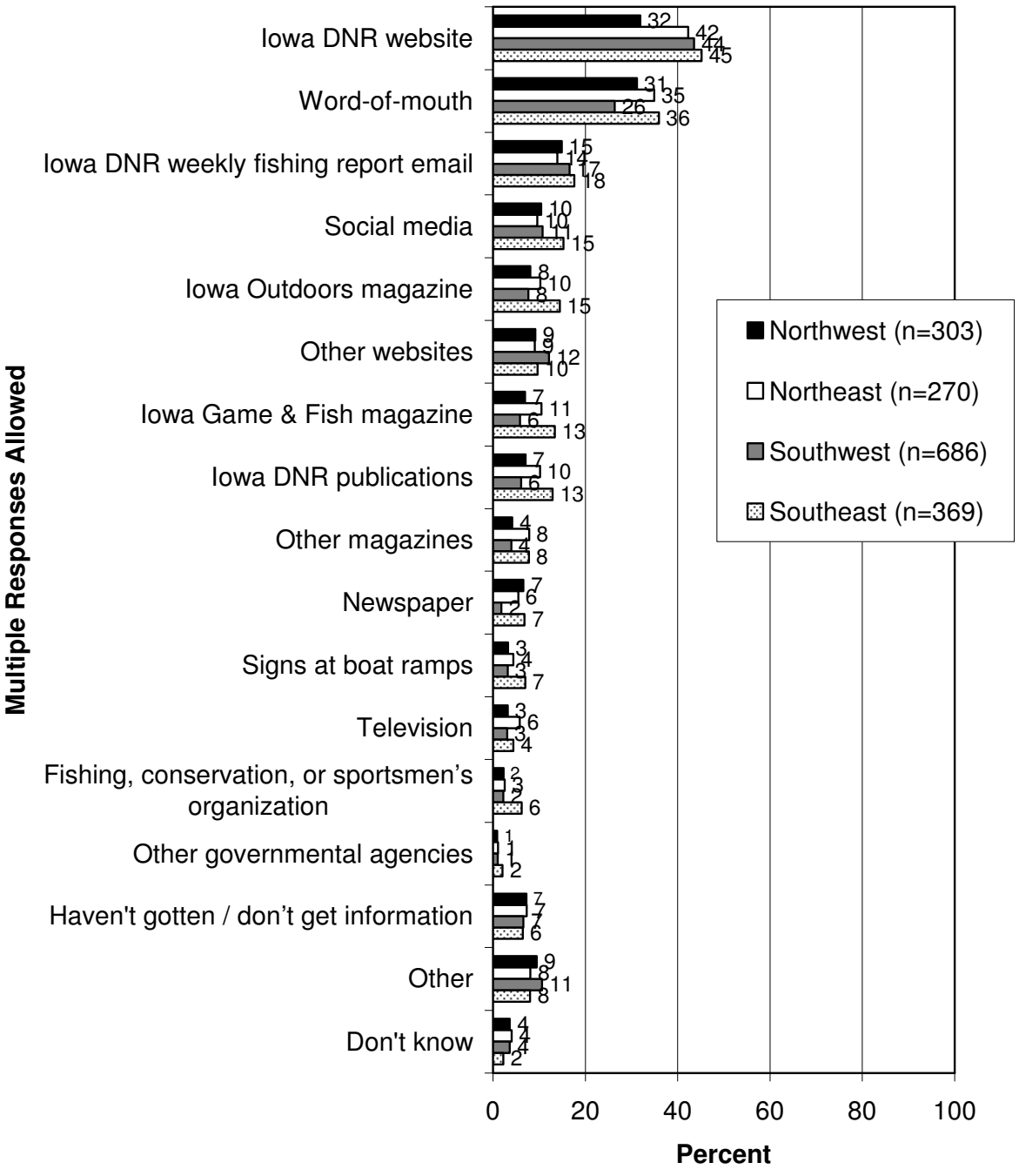
- A majority of anglers (74%) do not follow the Department on social media, whereas 20% follow the Department on Facebook.

- Nearly a quarter of anglers (23%) subscribe to the Department's weekly fishing report email.
  - Those who subscribe to the weekly email were asked how often they use it to plan their fishing trips, on a spectrum from *always* to *never*. The results resemble a bell curve, with *frequently* and *sometimes* being the most common responses.

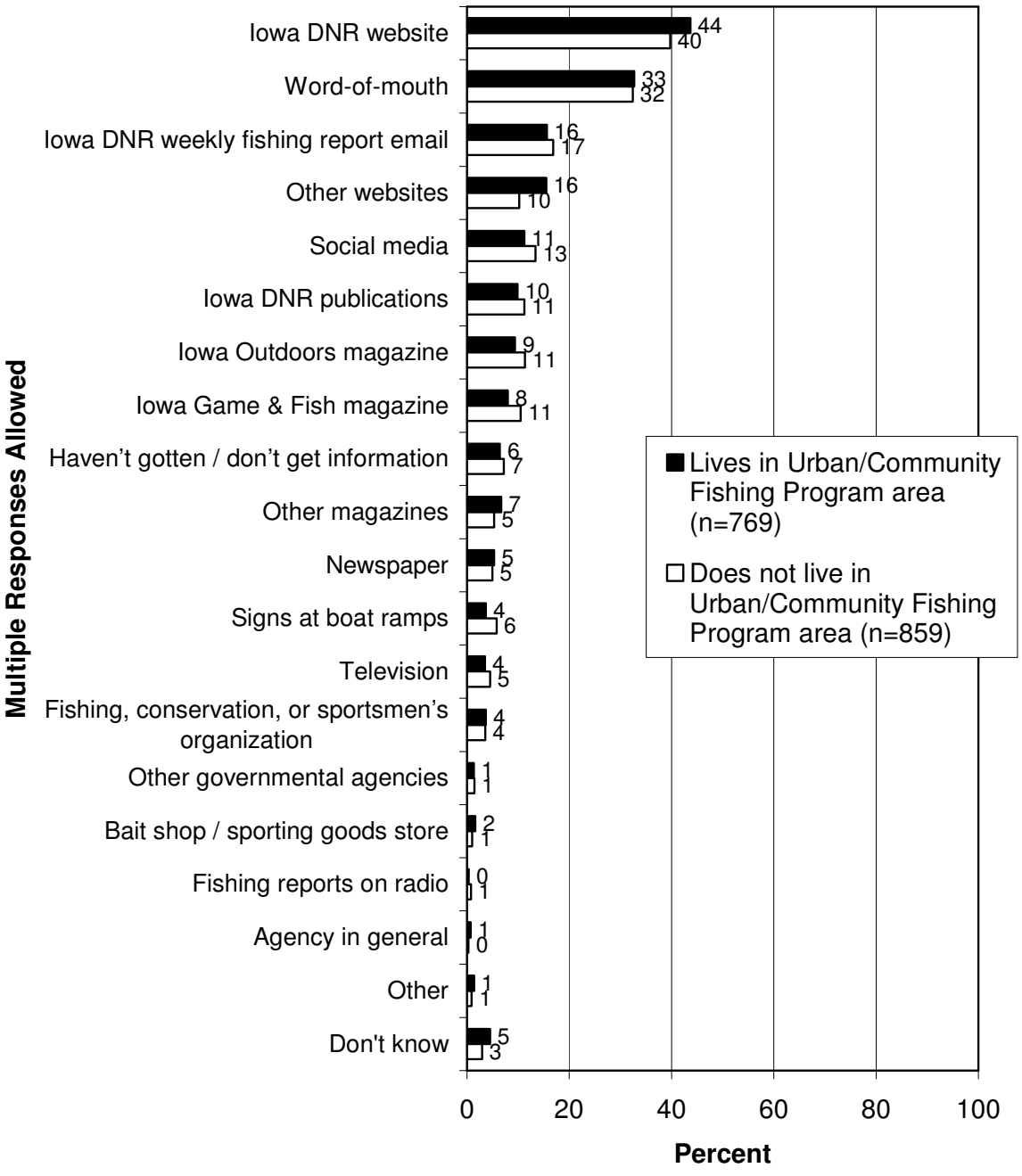
Q155. From what sources have you gotten or do you get information about fishing?



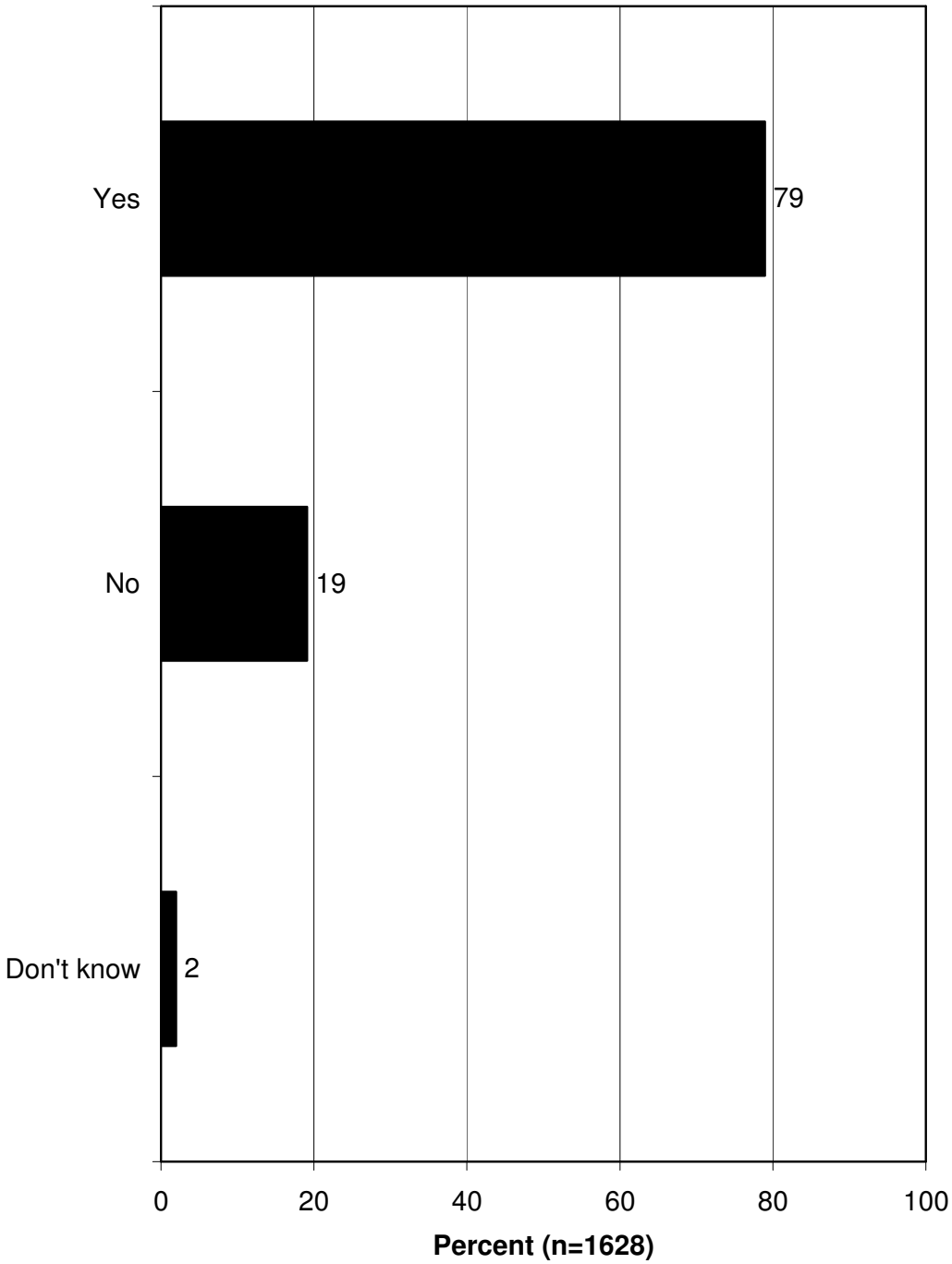
Q155. From what sources have you gotten or do you get information about fishing?



Q155. From what sources have you gotten or do you get information about fishing?



Q157. Have you ever visited the website of the Iowa Department of Natural Resources?



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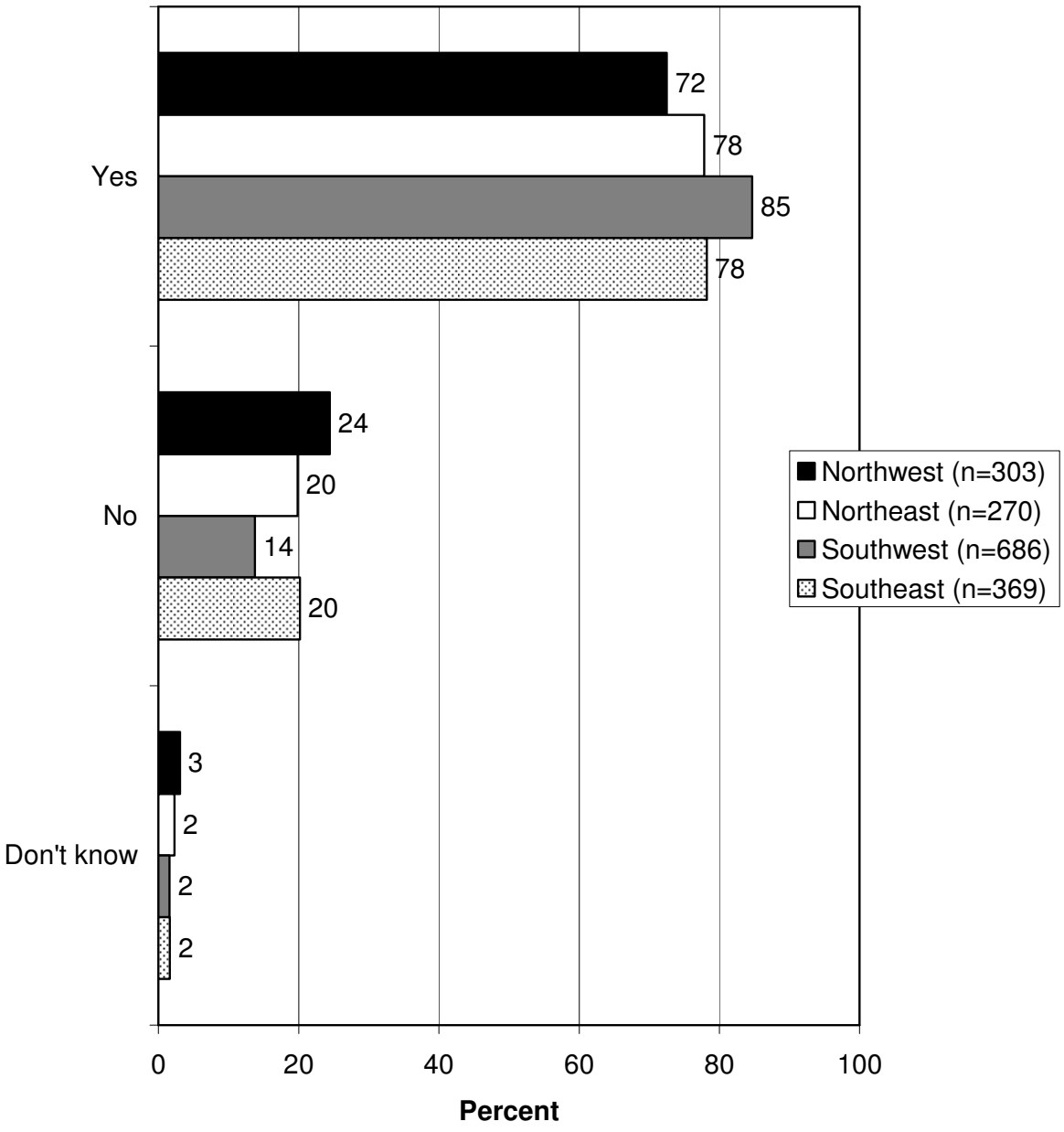

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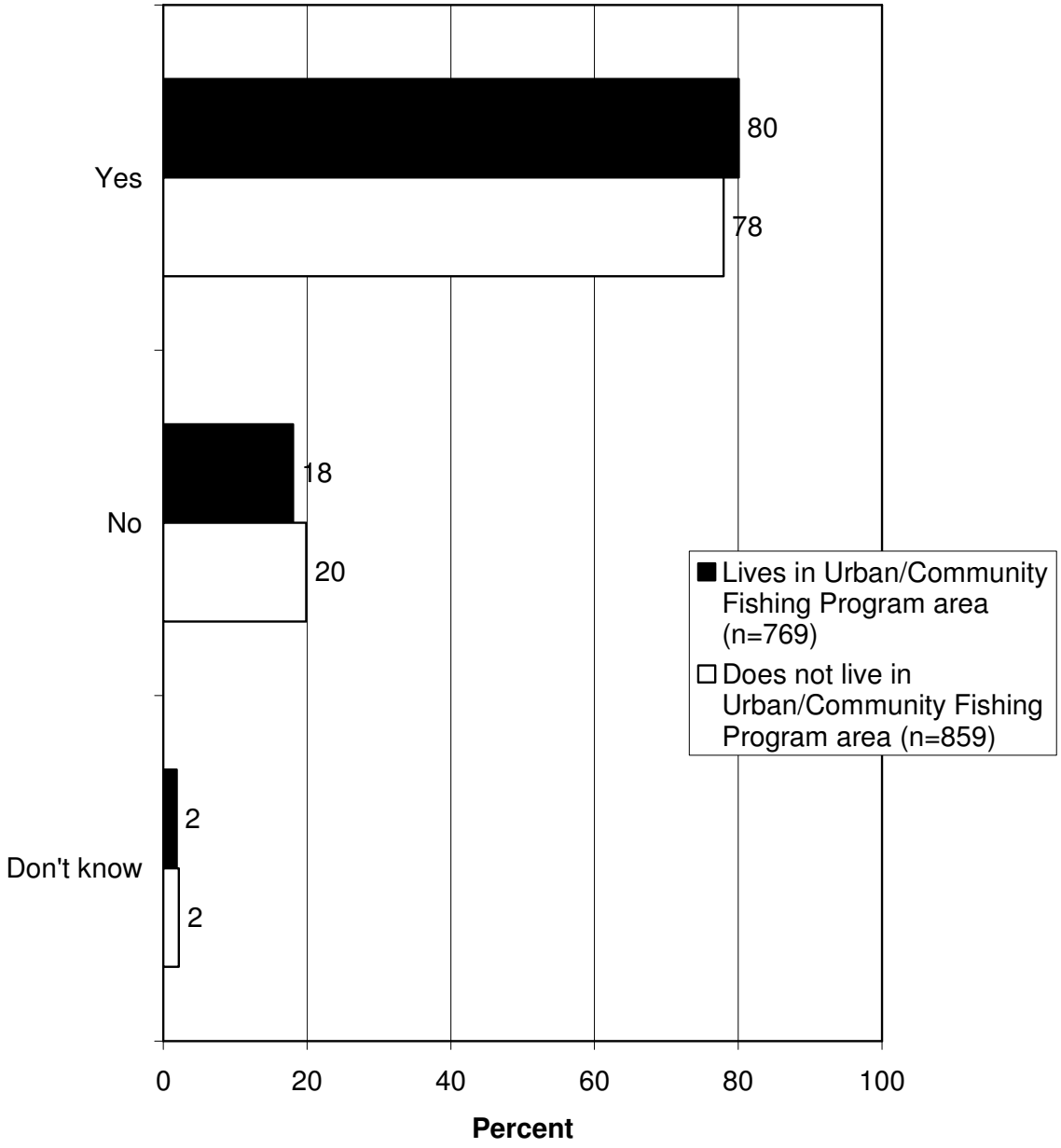
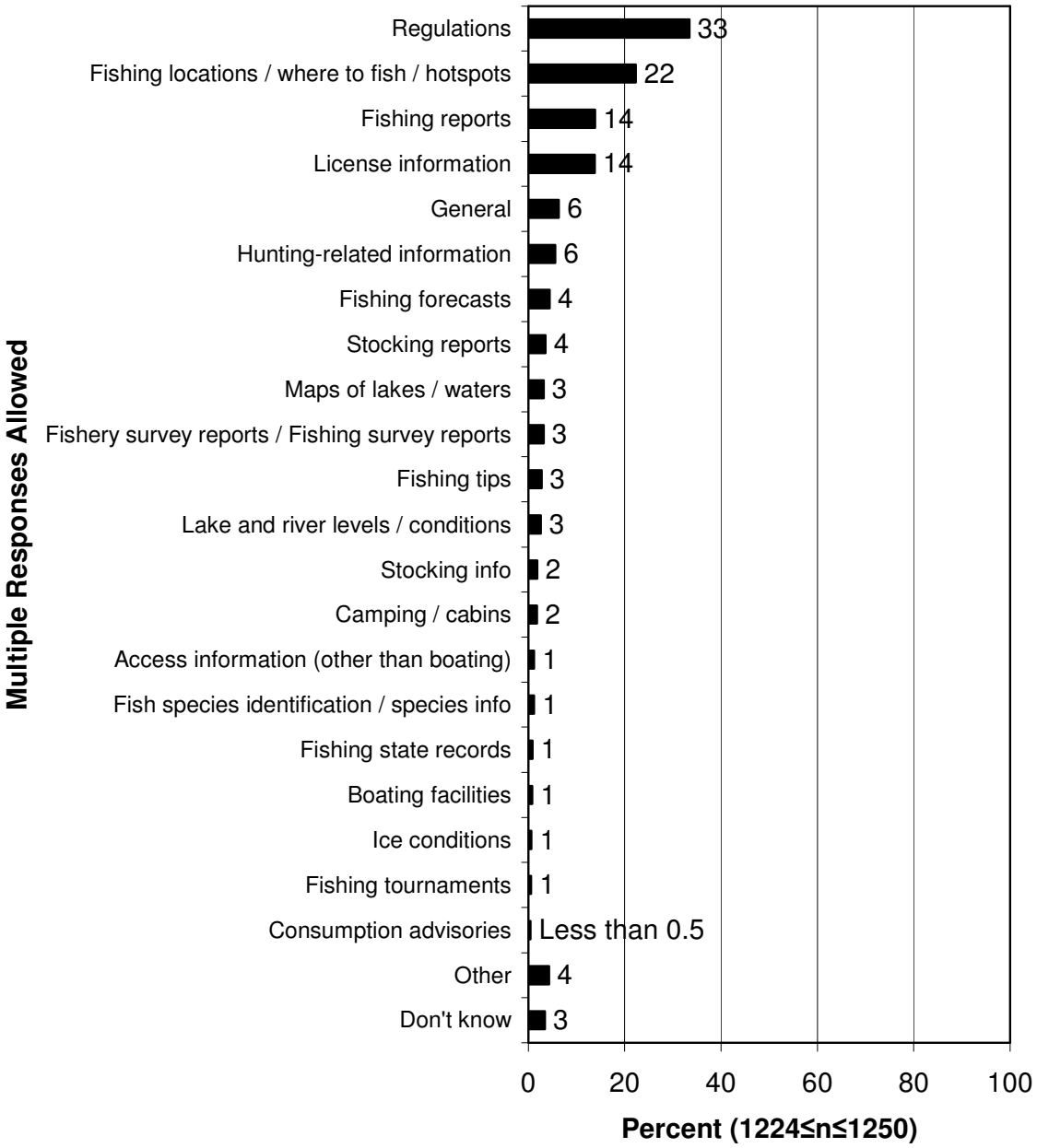


Q160. What fishing information were you trying to get on the Iowa Department of Natural Resources website? (Asked of those who visited the Department's website.)



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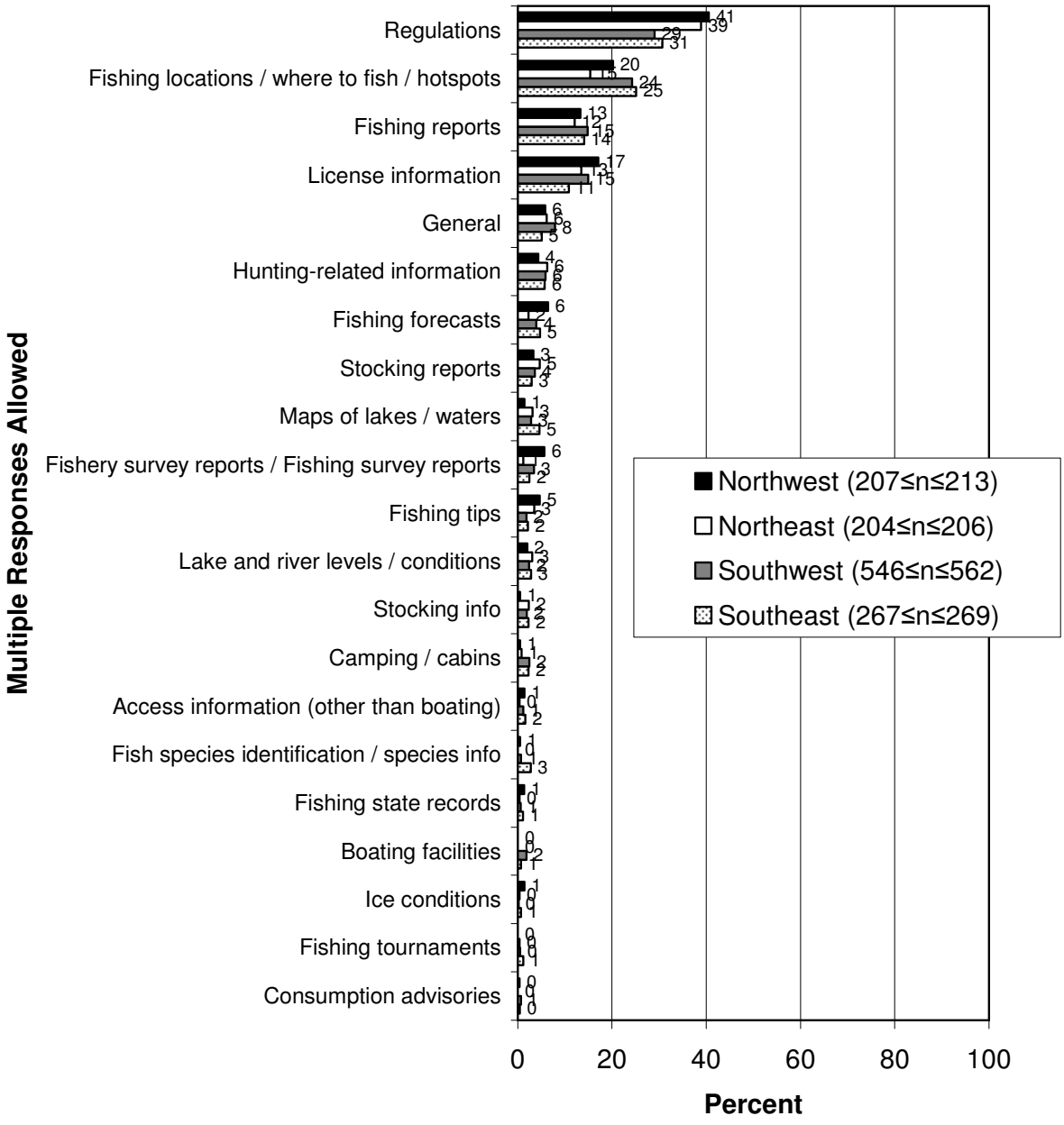

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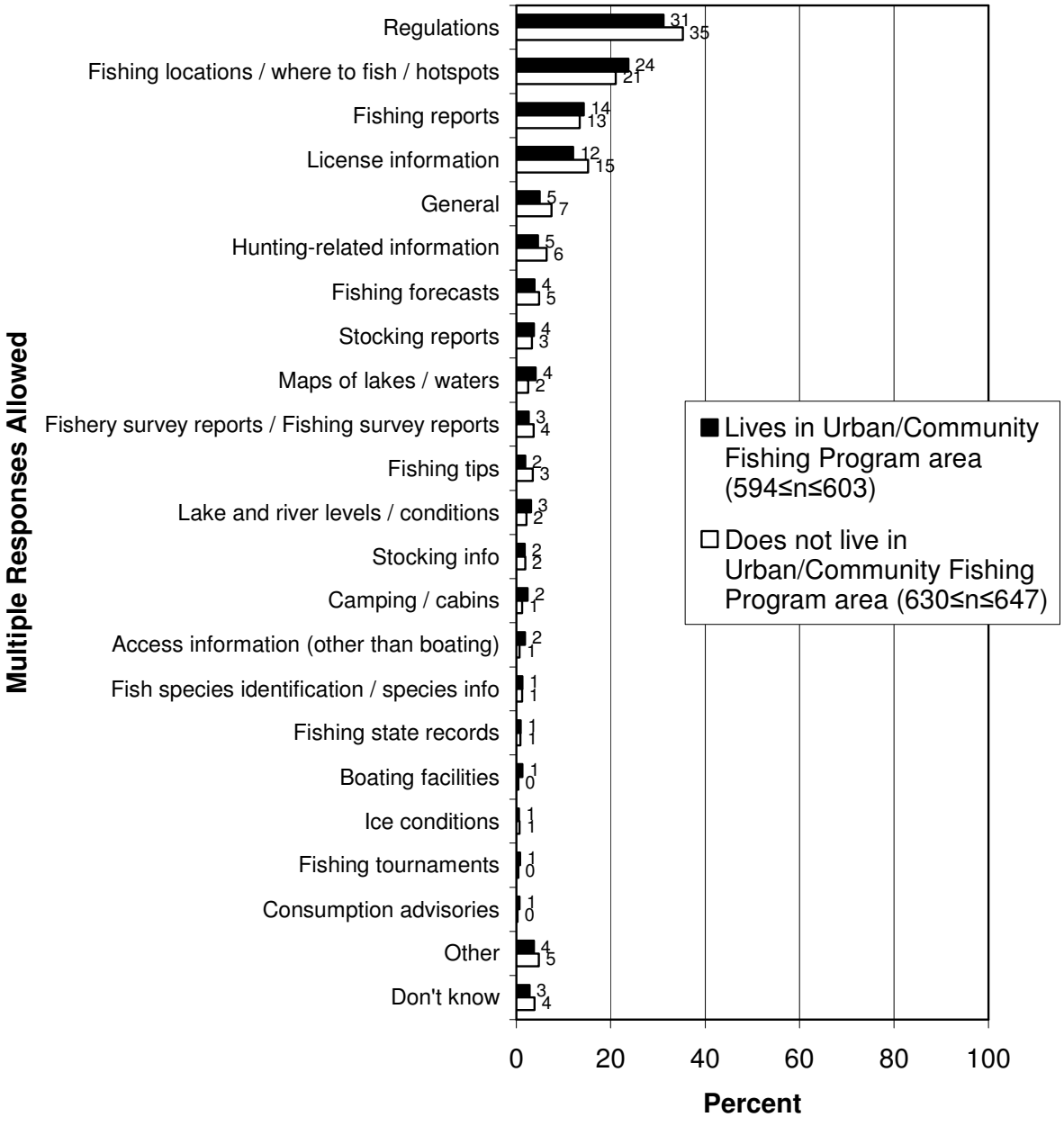
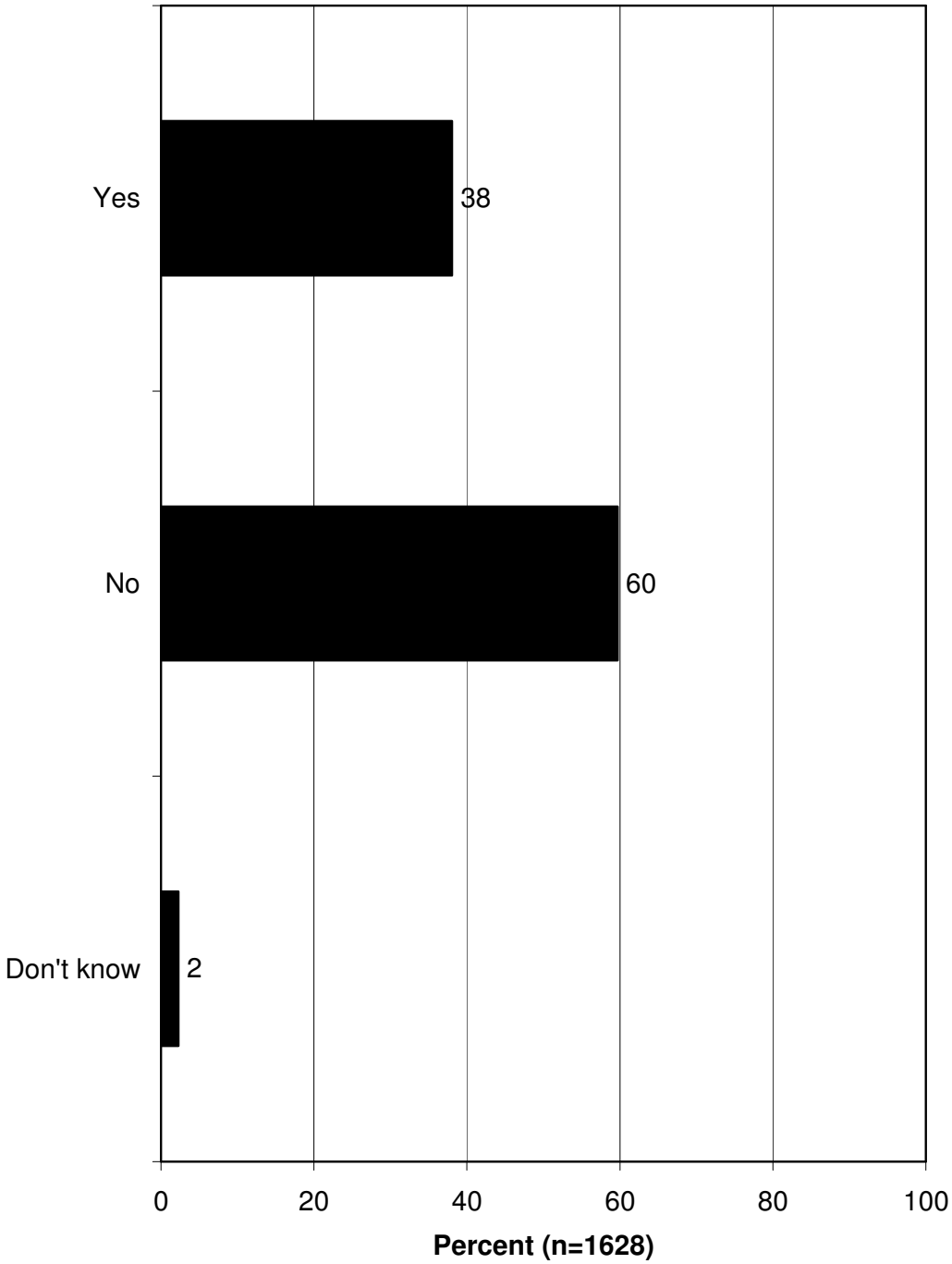


Q162. Have you seen or heard any information about fishing from social media, such as Facebook, Twitter, or Instagram?



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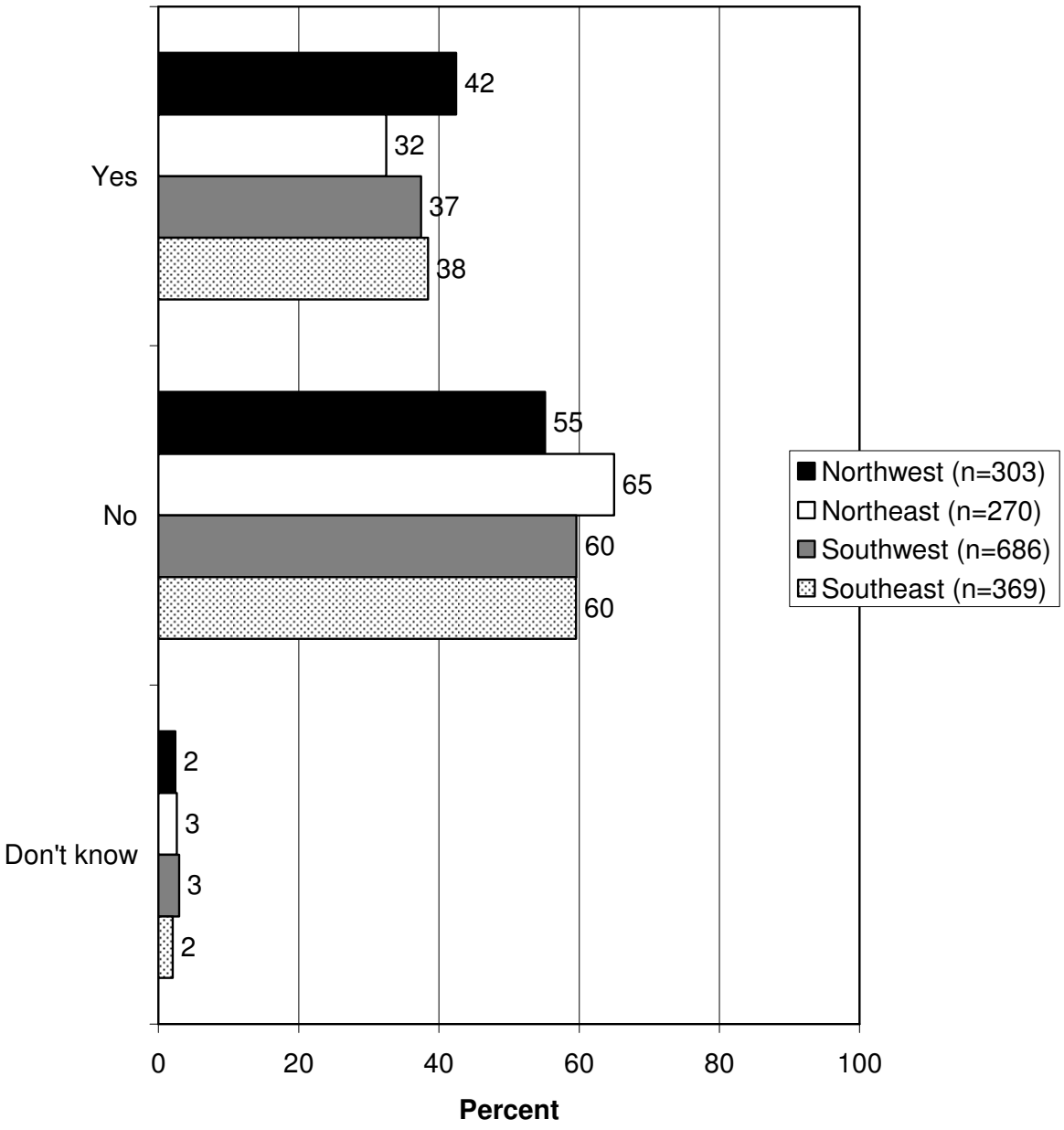

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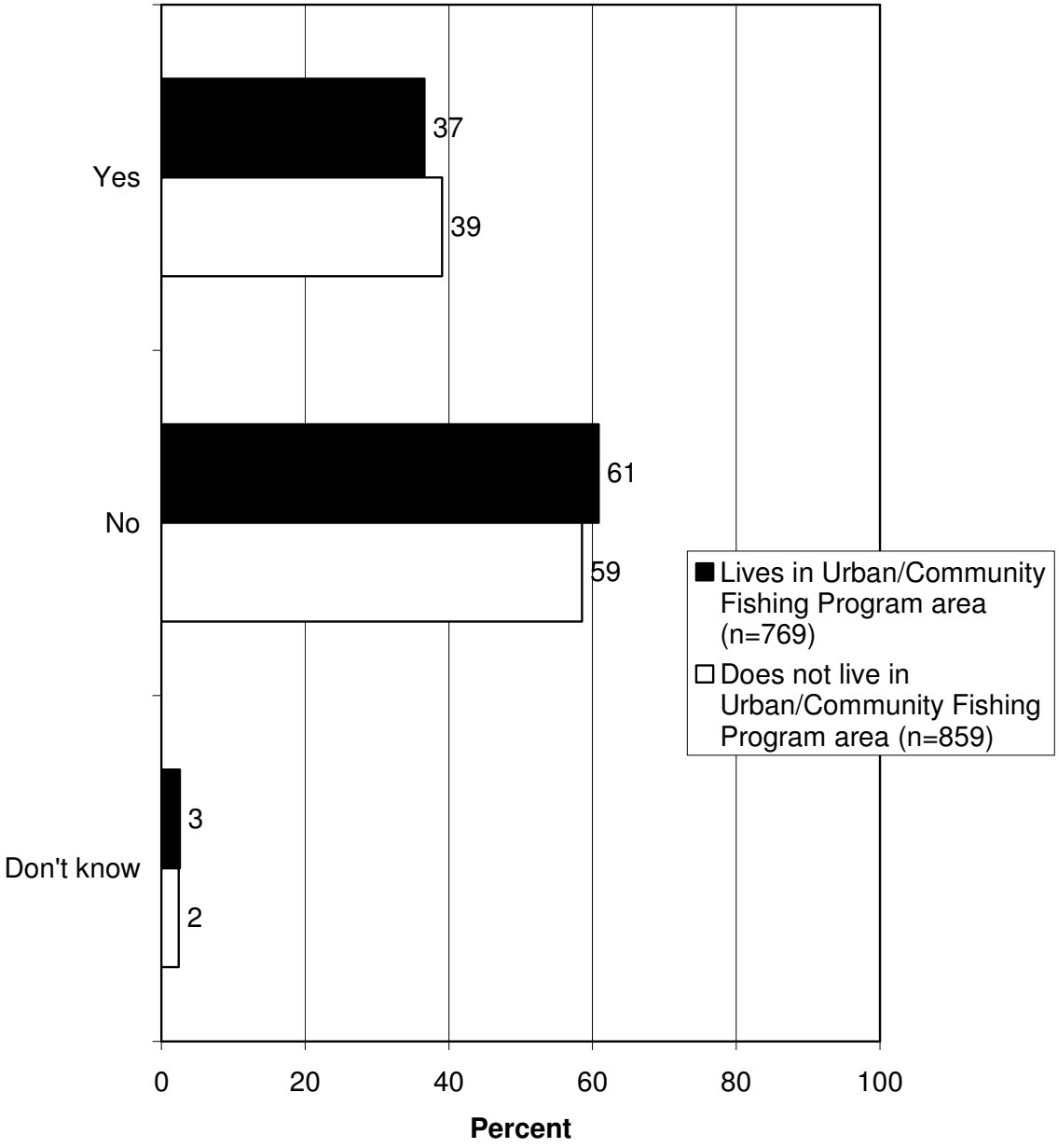
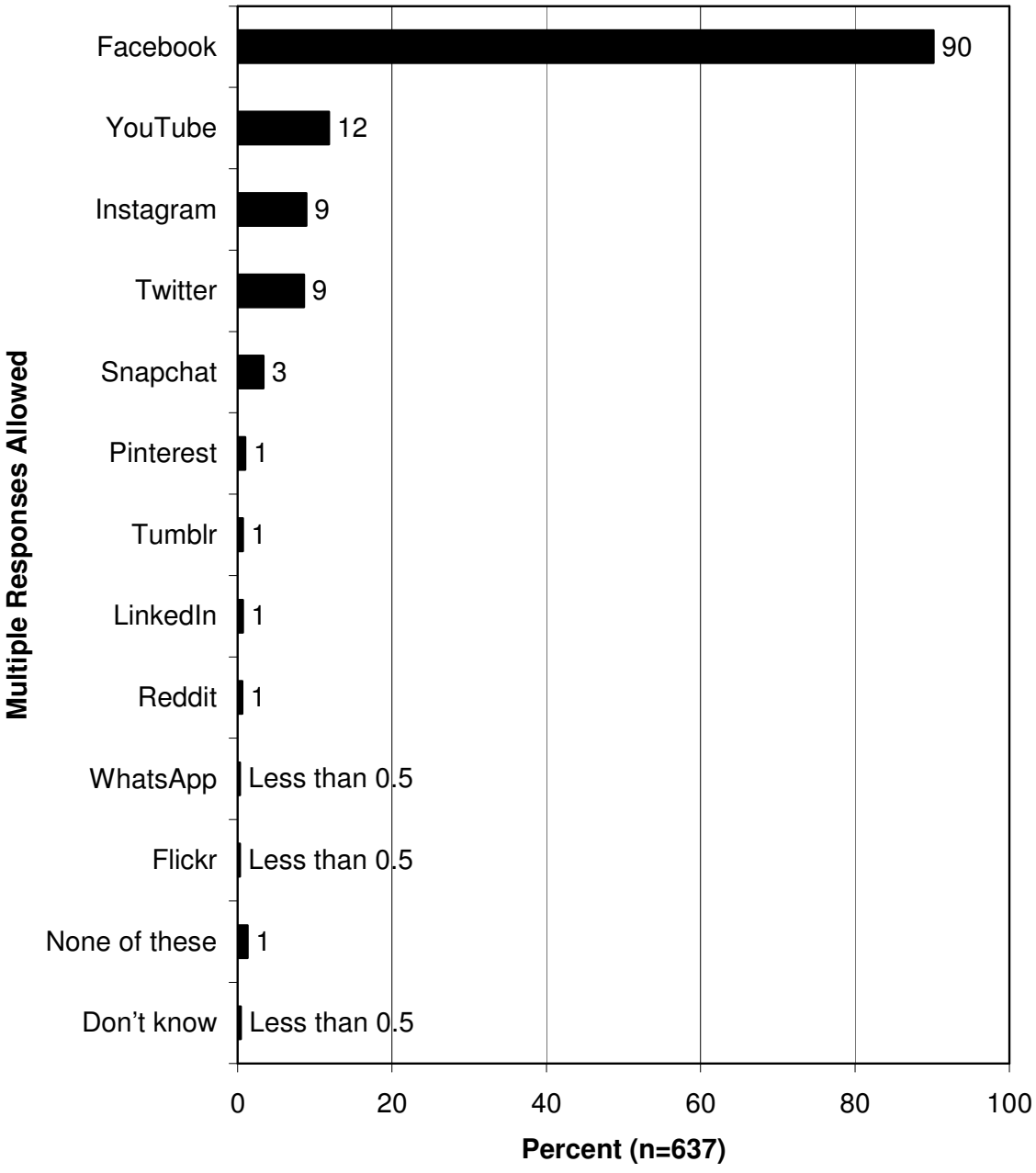
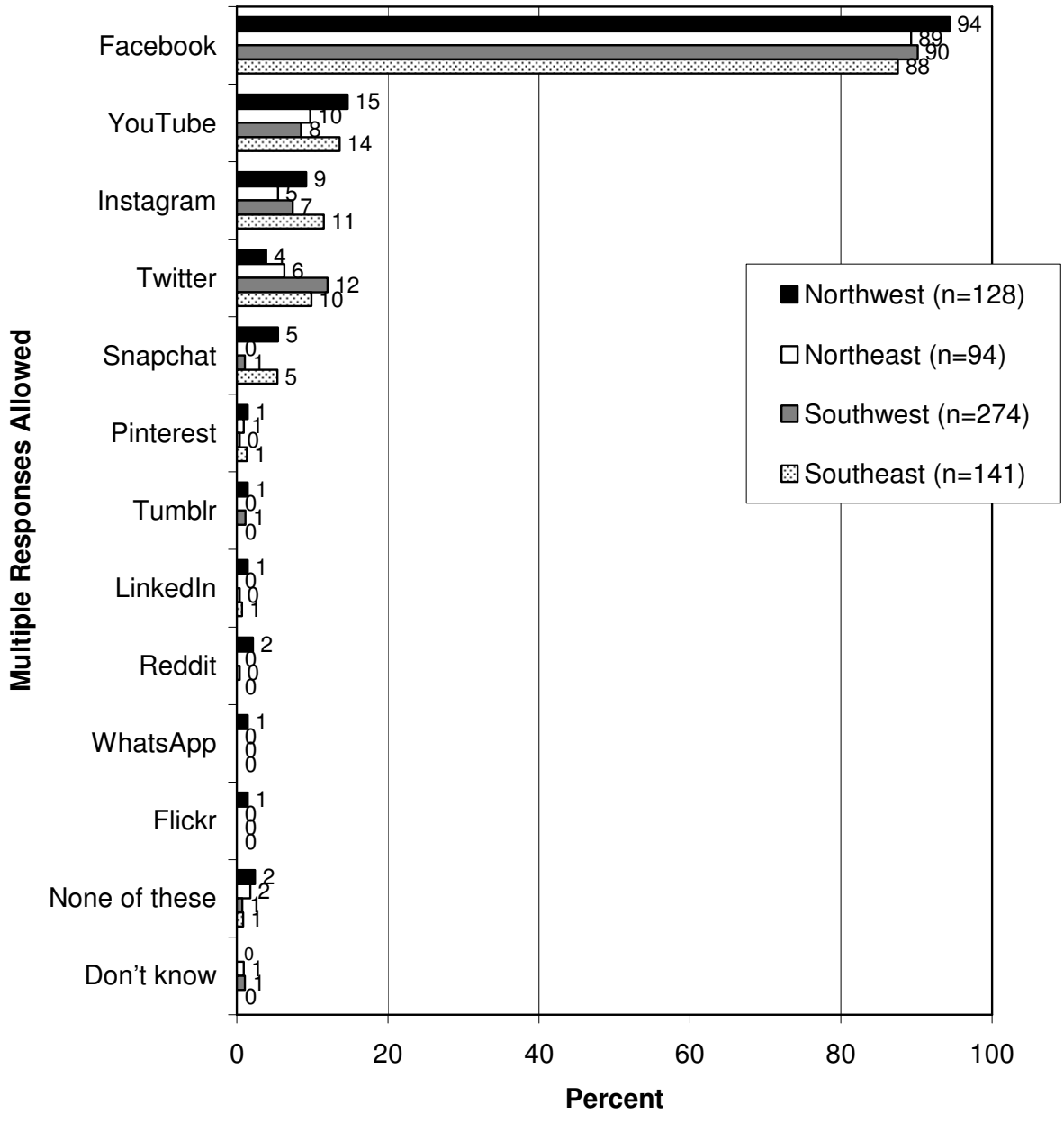


Q165. On which social media did you see or hear information about fishing? (Asked of those who saw or heard information about fishing on social media.)



Q165. On which social media did you see or hear information about fishing? (Asked of those who saw or heard information about fishing on social media.)



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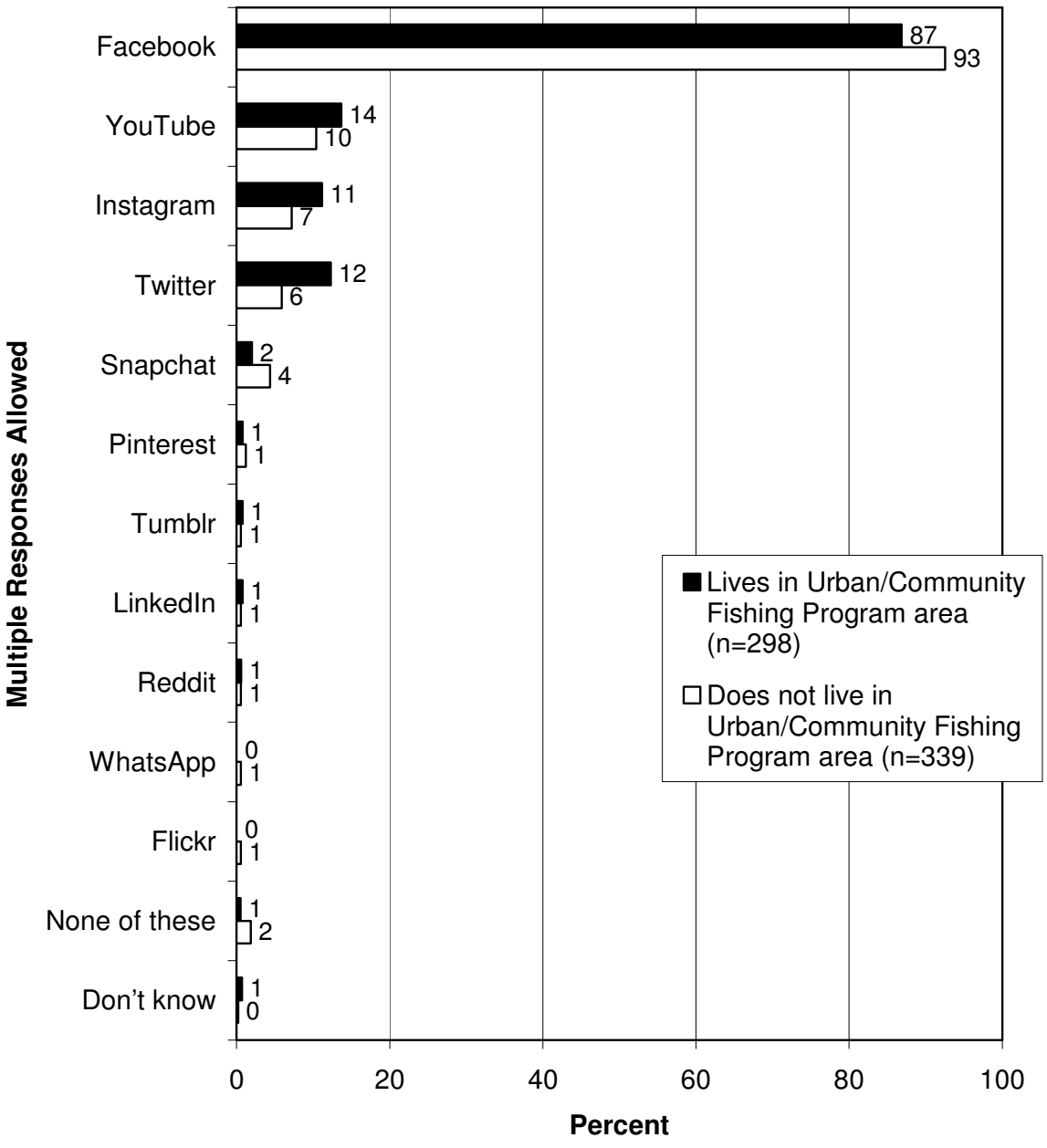
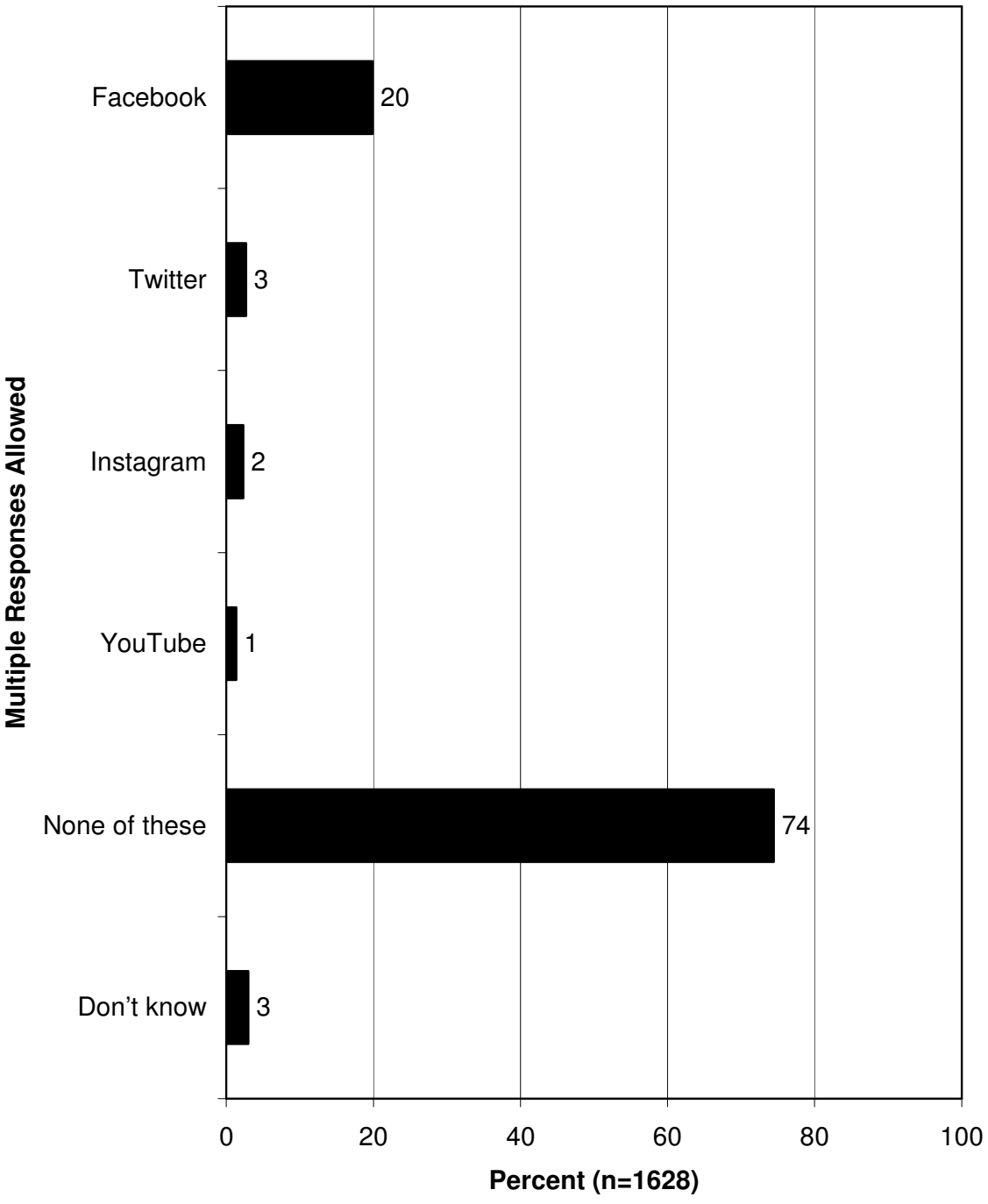


Q168. Do you follow the Iowa Department of Natural Resources on...?



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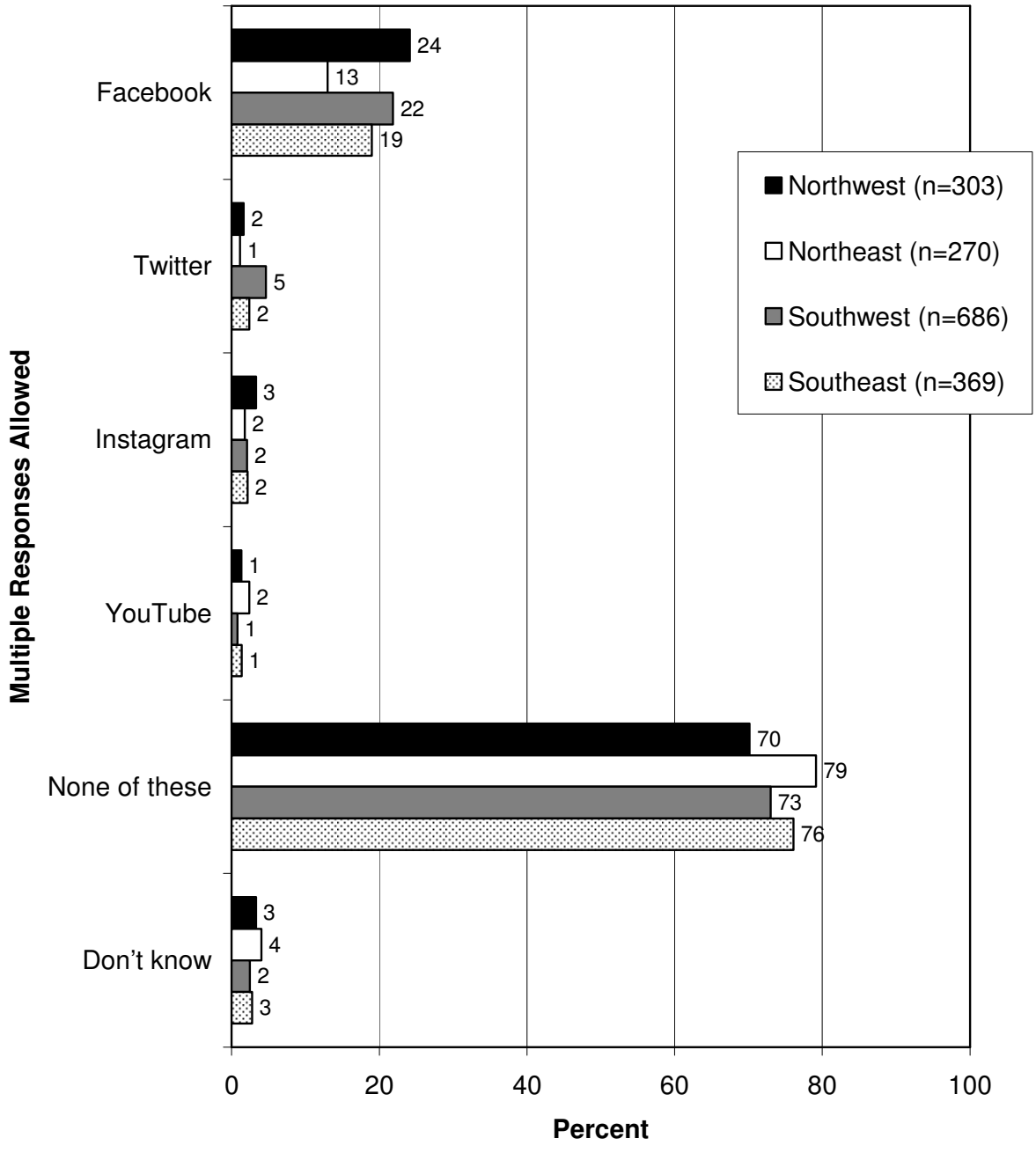
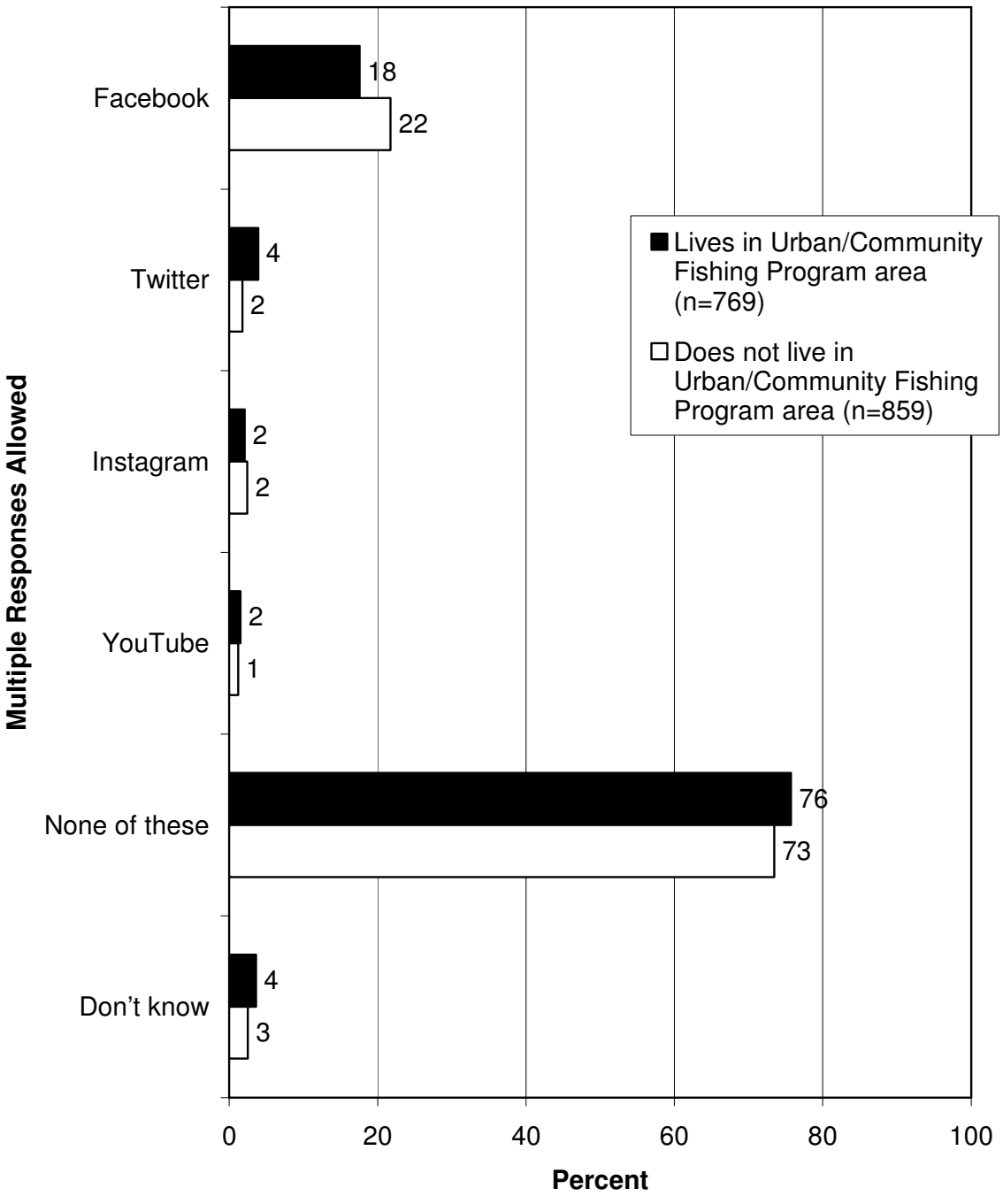
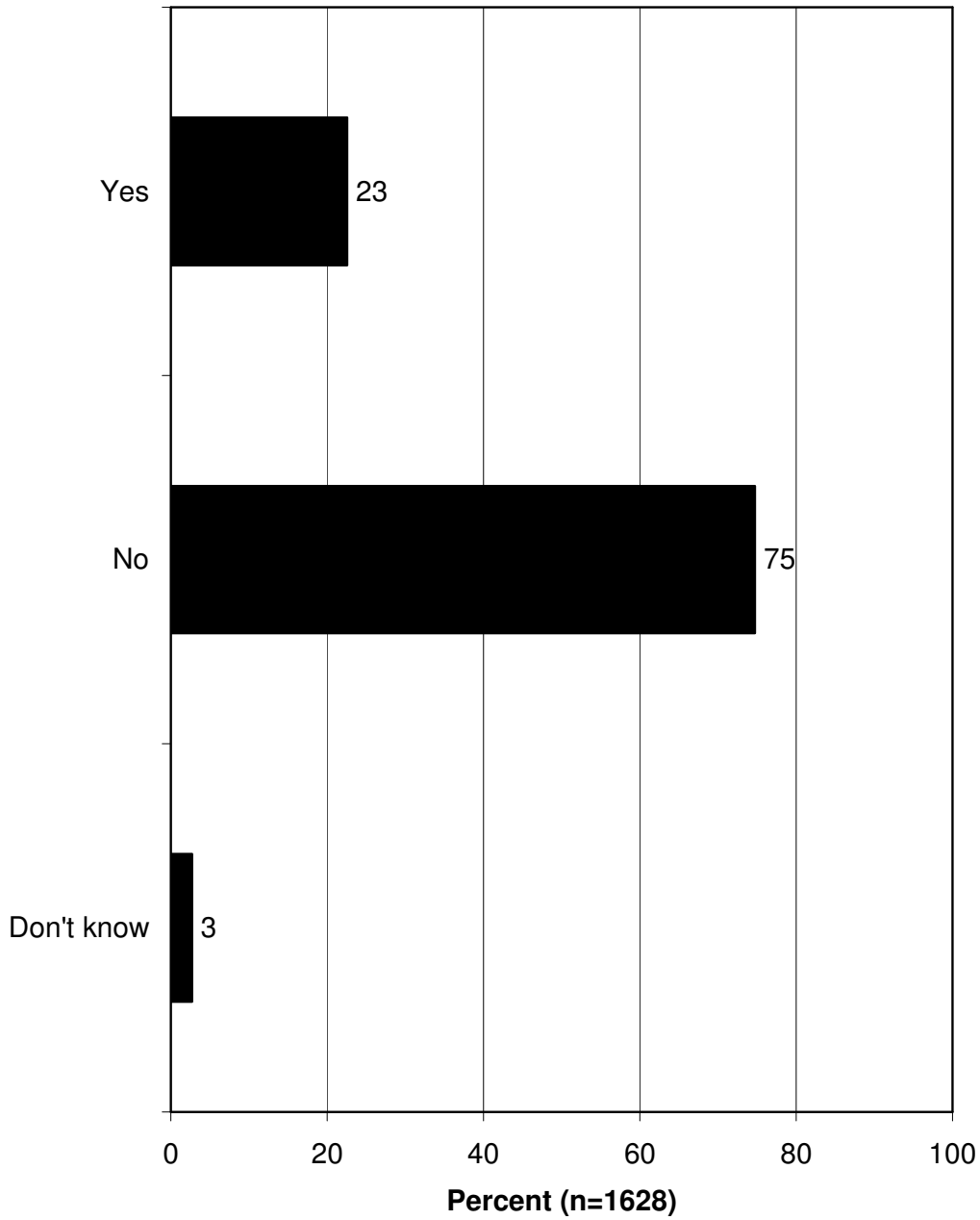


Q168. Do you follow the Iowa Department of Natural Resources on...?



Q169. Do you subscribe to the Department's weekly fishing report email?



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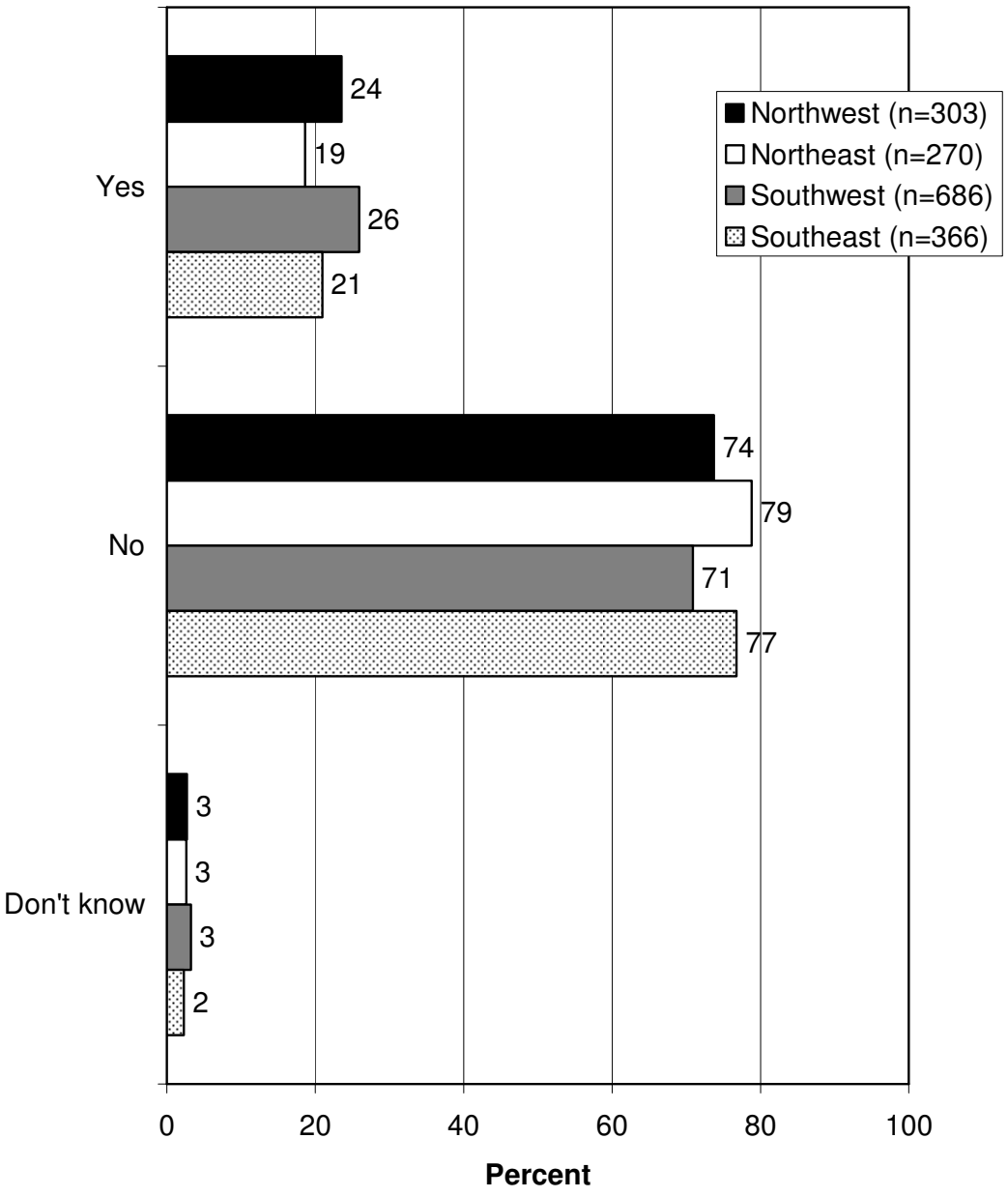

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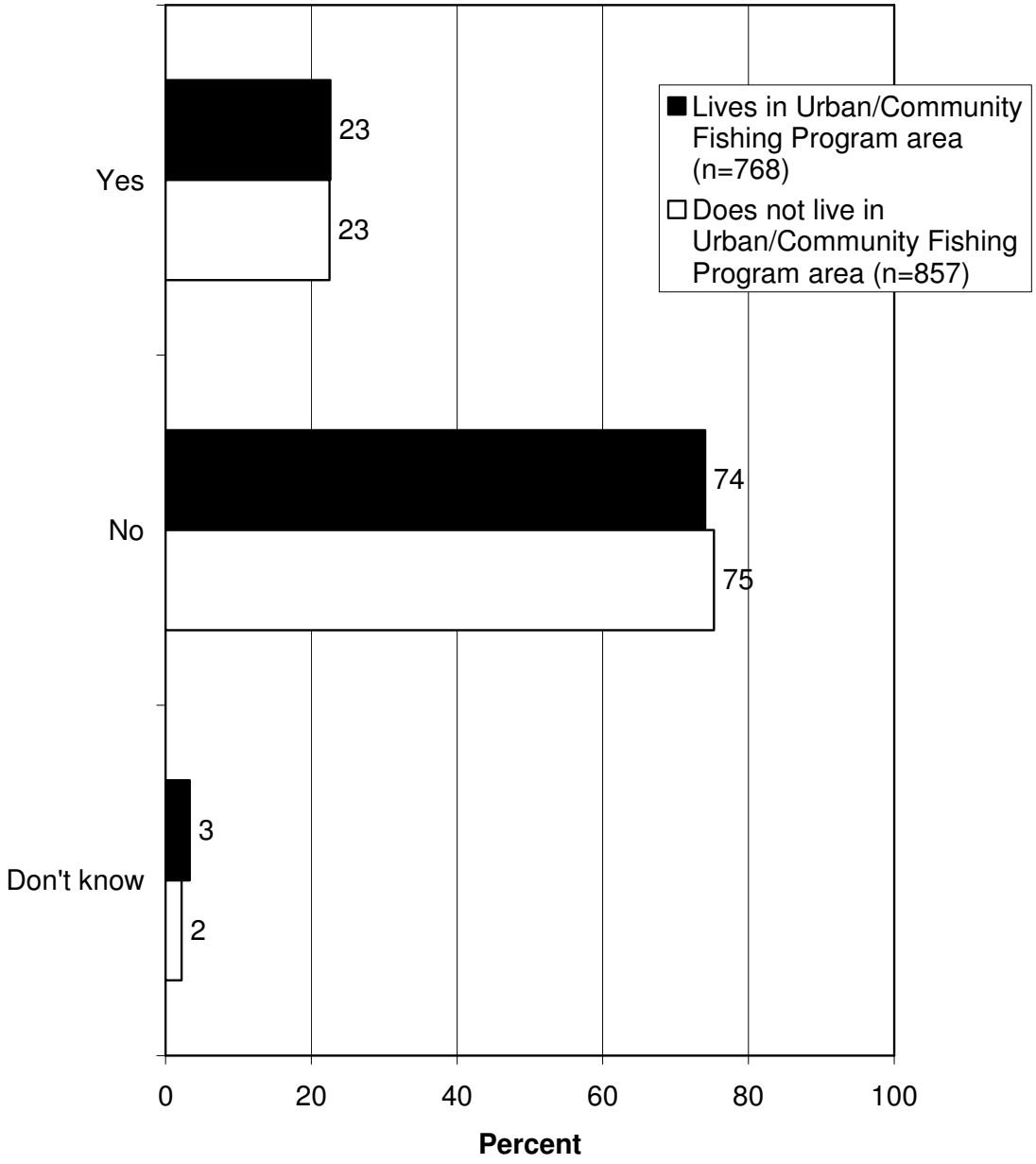
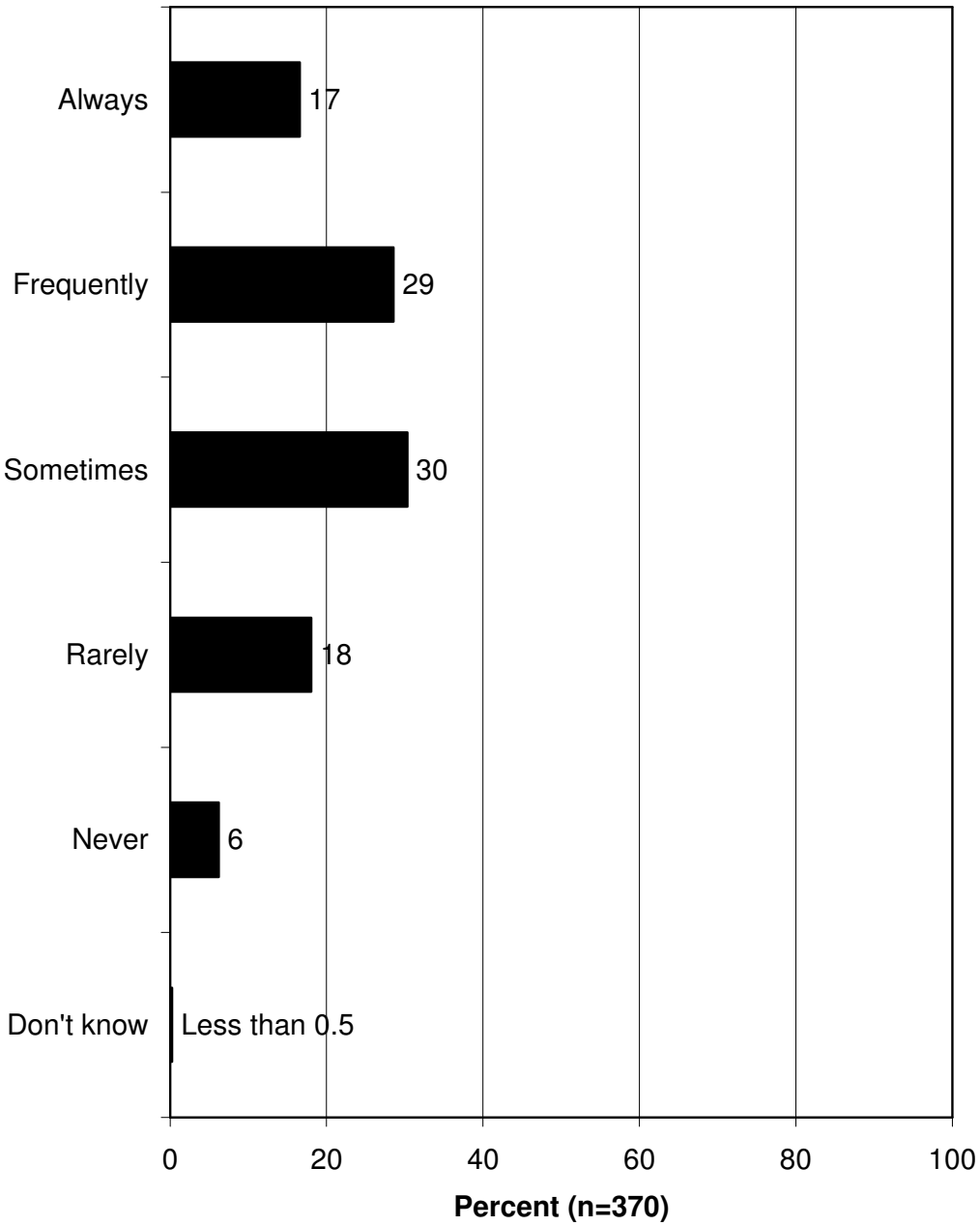


Q170. How often do you use the Department's weekly fishing report email to plan your fishing trip? (Asked of those who subscribe to the Department's weekly fishing report email.)



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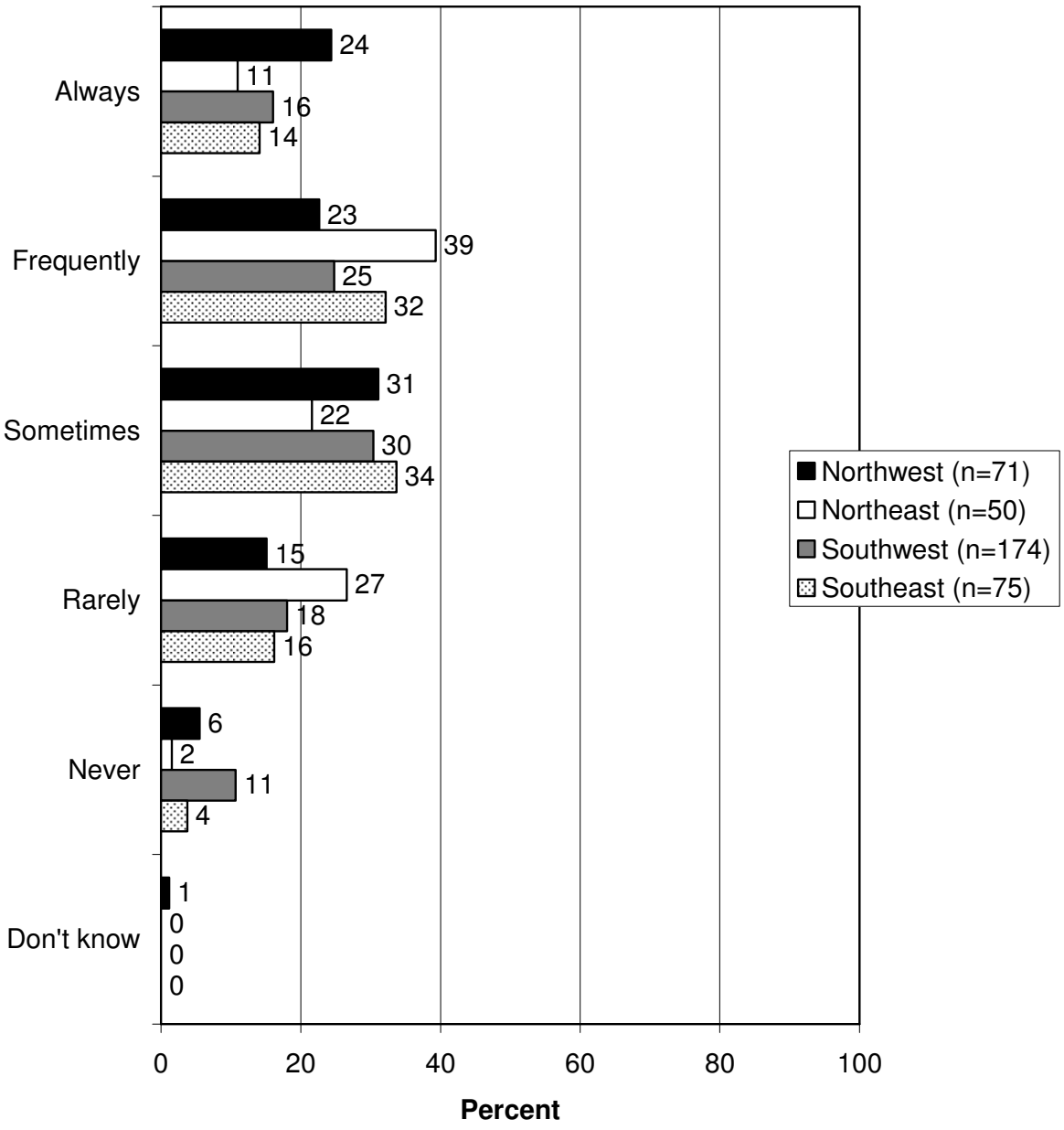

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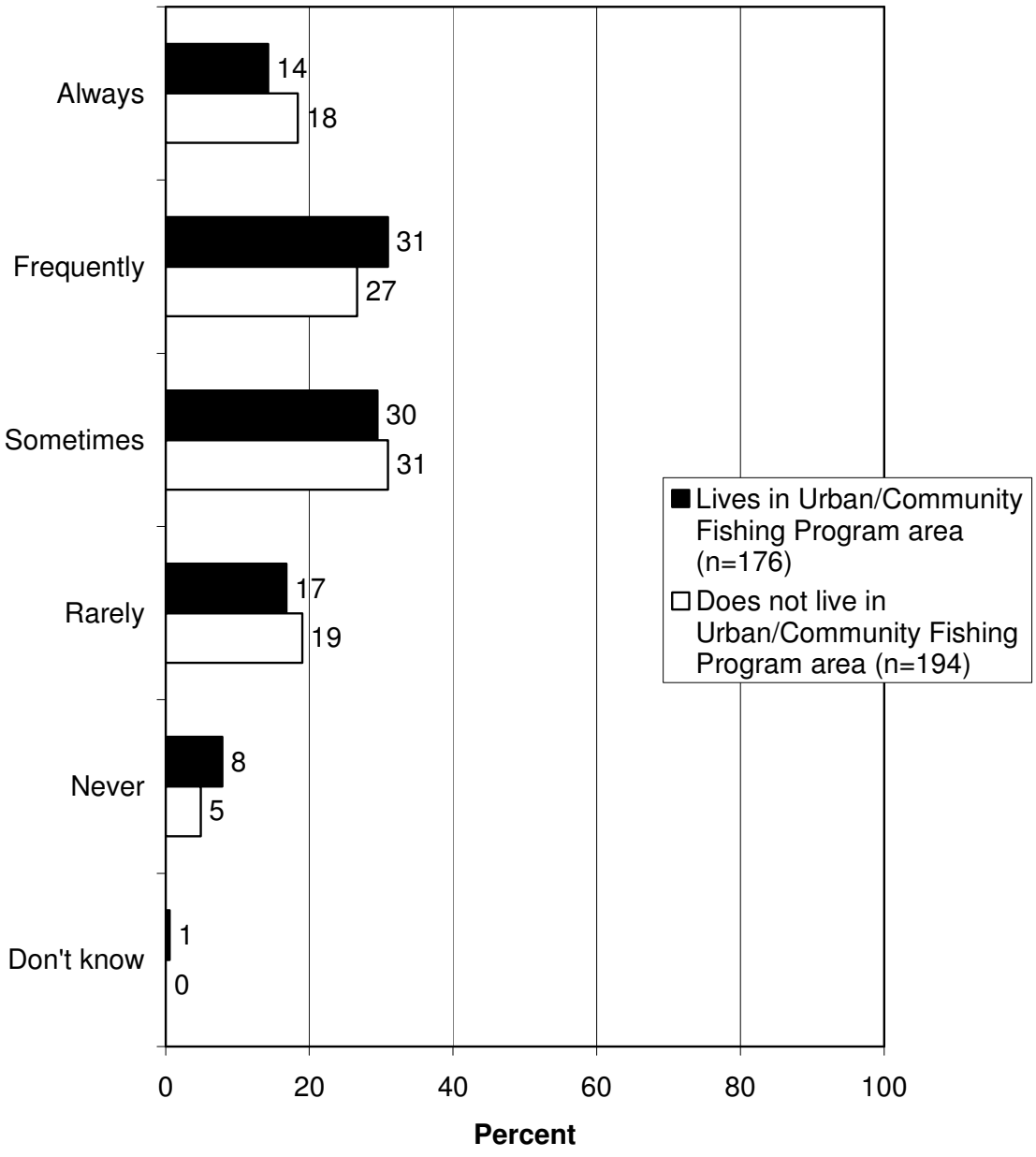
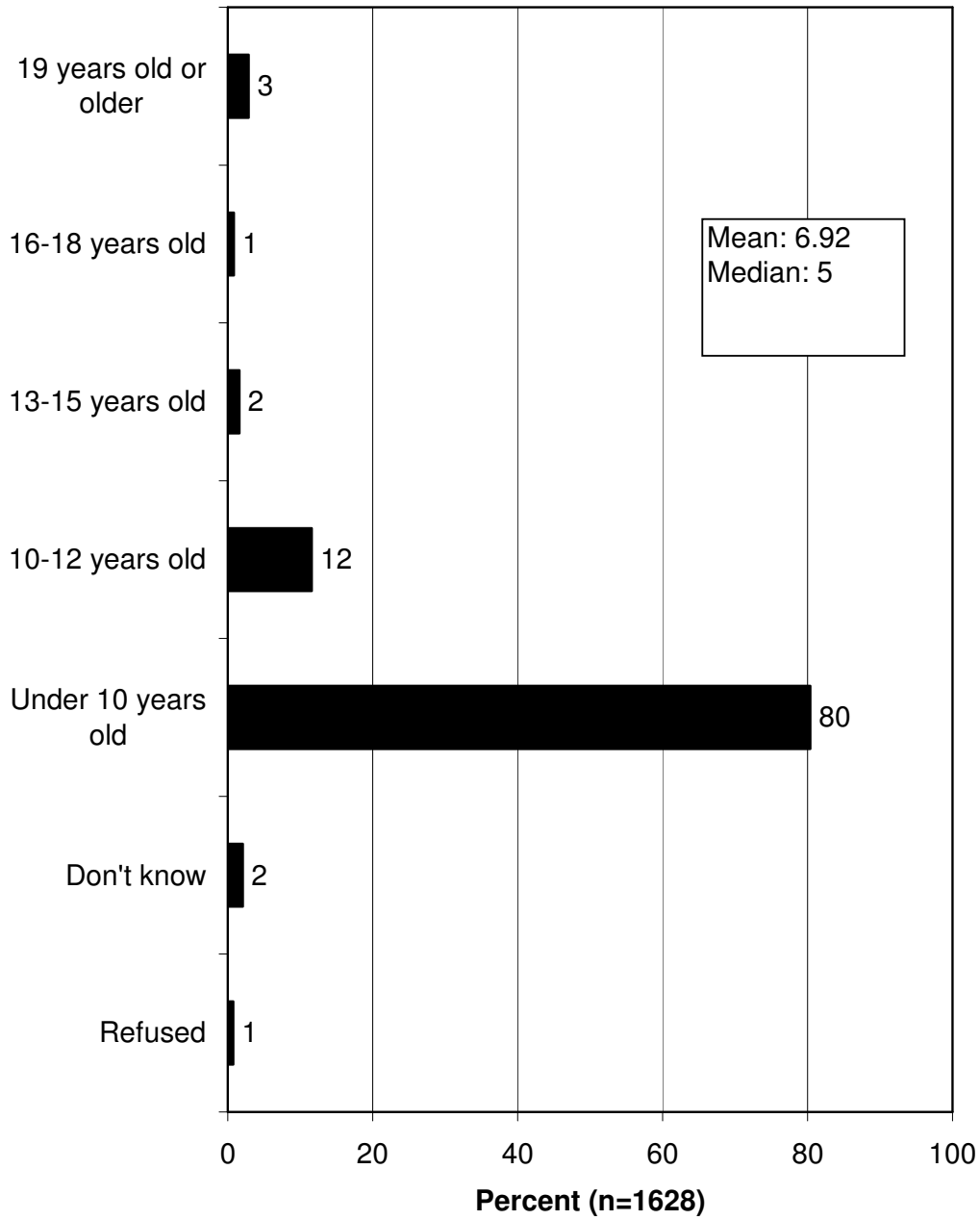


DEMOGRAPHIC DATA

- The Iowa angler survey gathered the following information:
  - Age when they first went fishing.
  - County of residence.
  - Employment status.
    - Occupation (among those who are employed).
  - Age.
  - Gender.

Q173. How old were you when you first went fishing?



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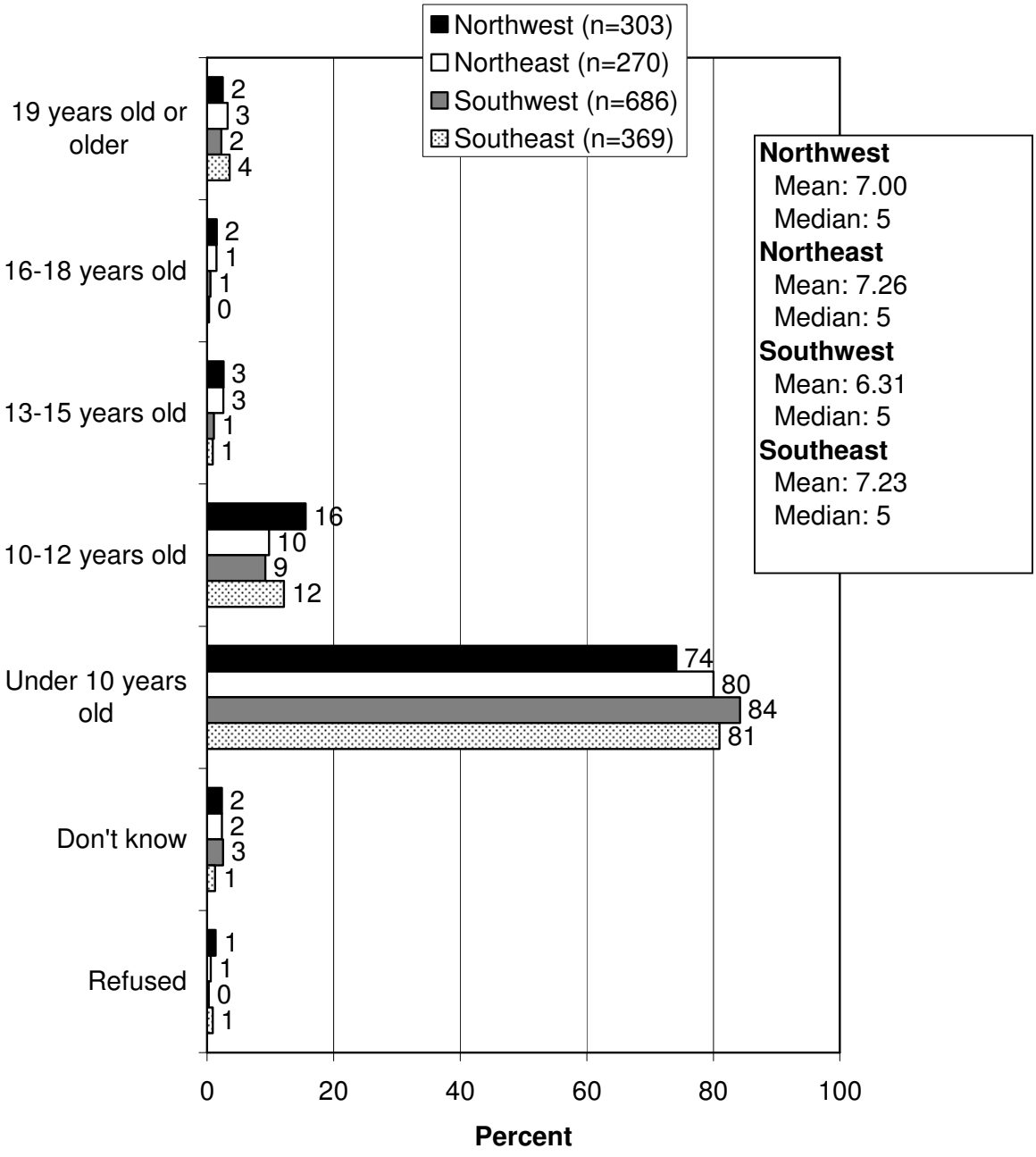
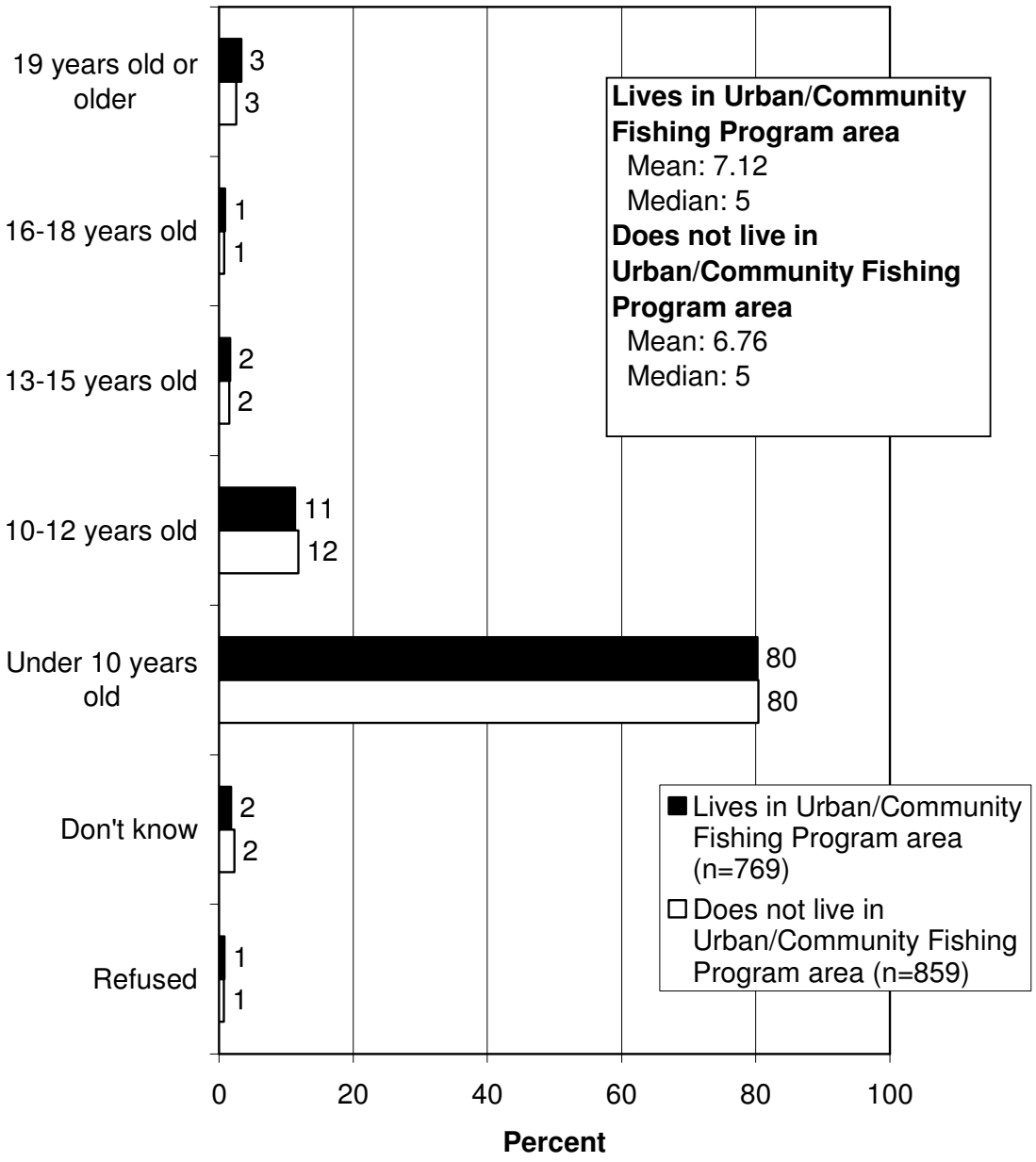
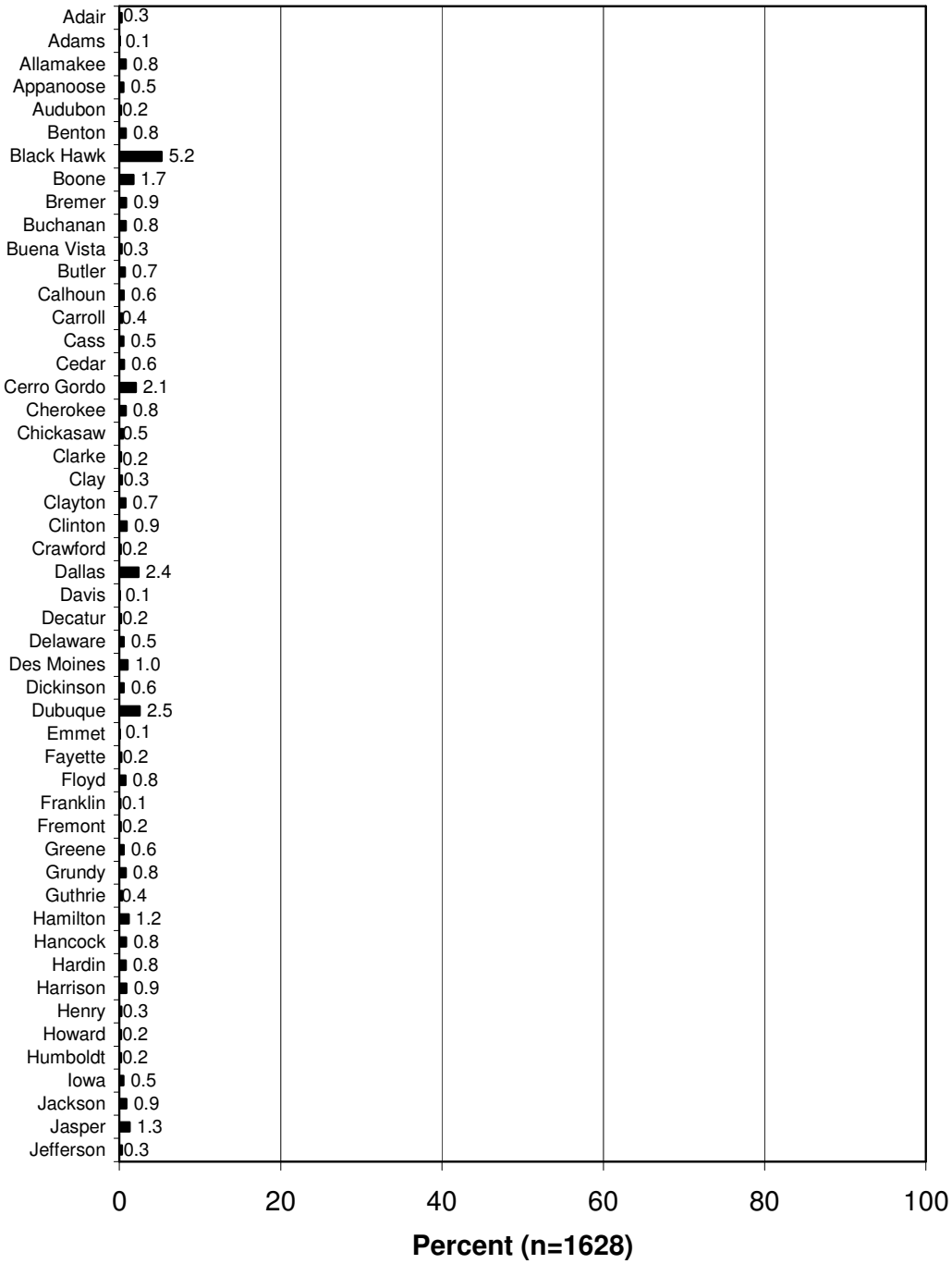


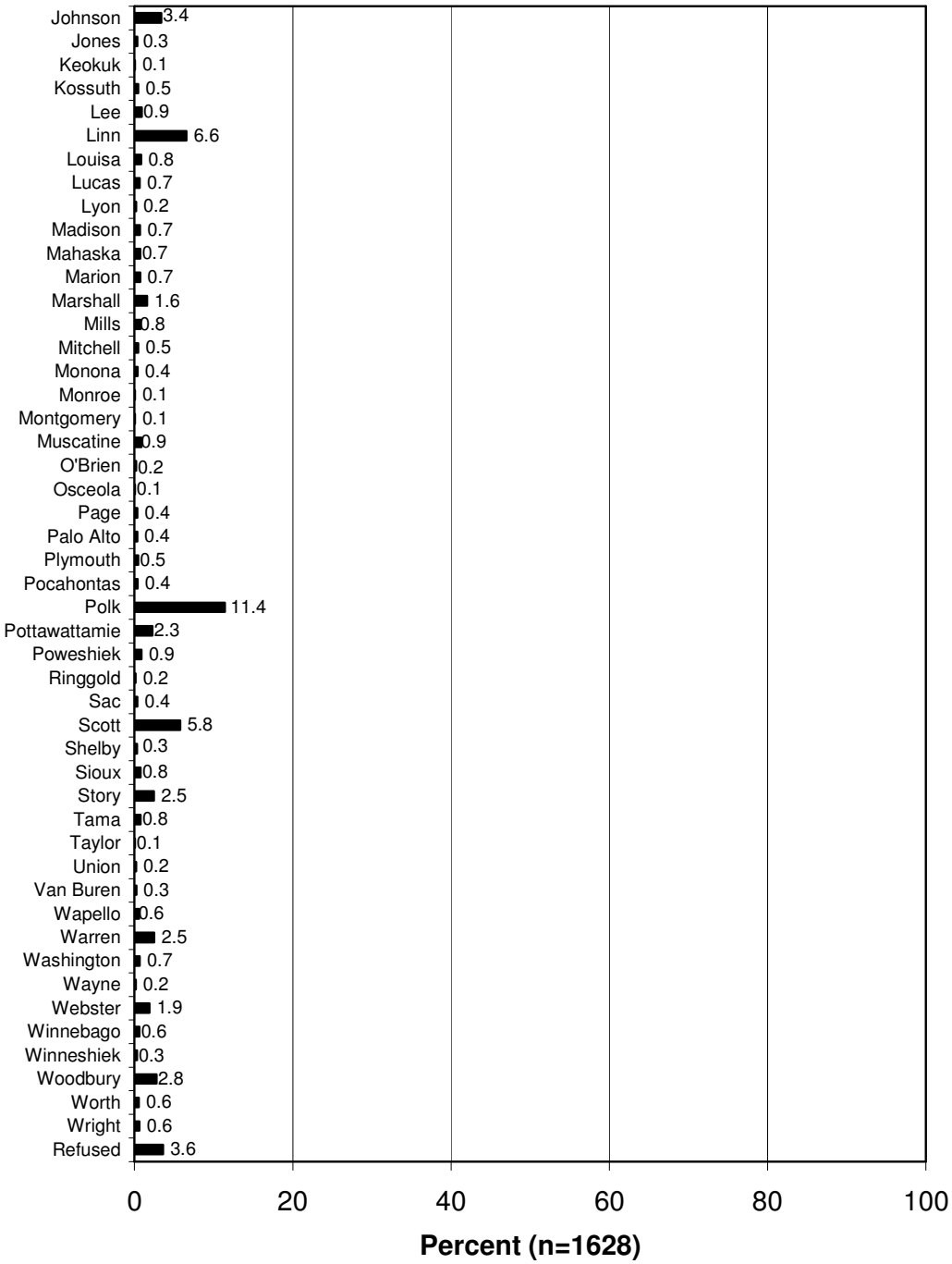
Q173. How old were you when you first went fishing?



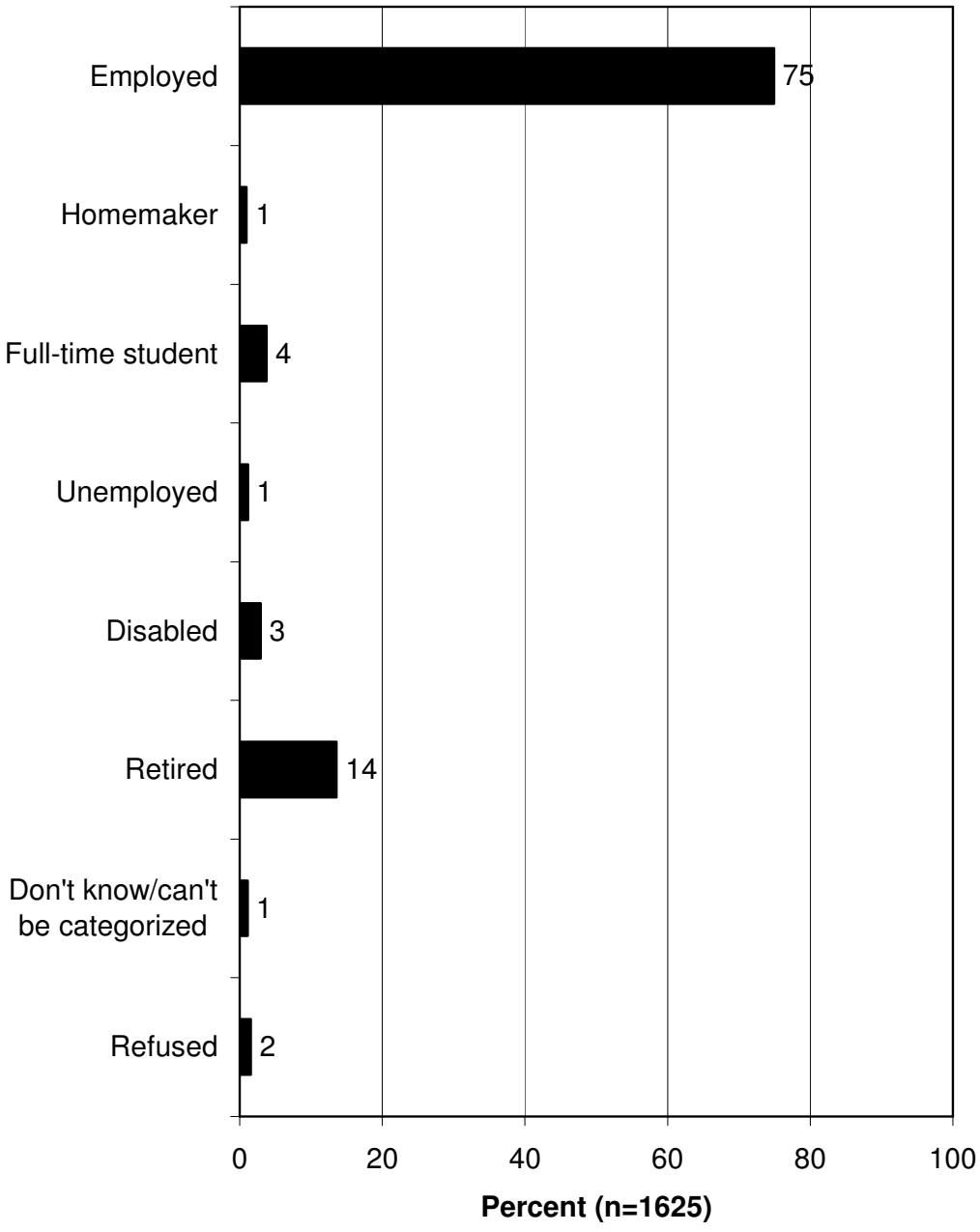
Q176. In what county do you currently live? (Part 1)



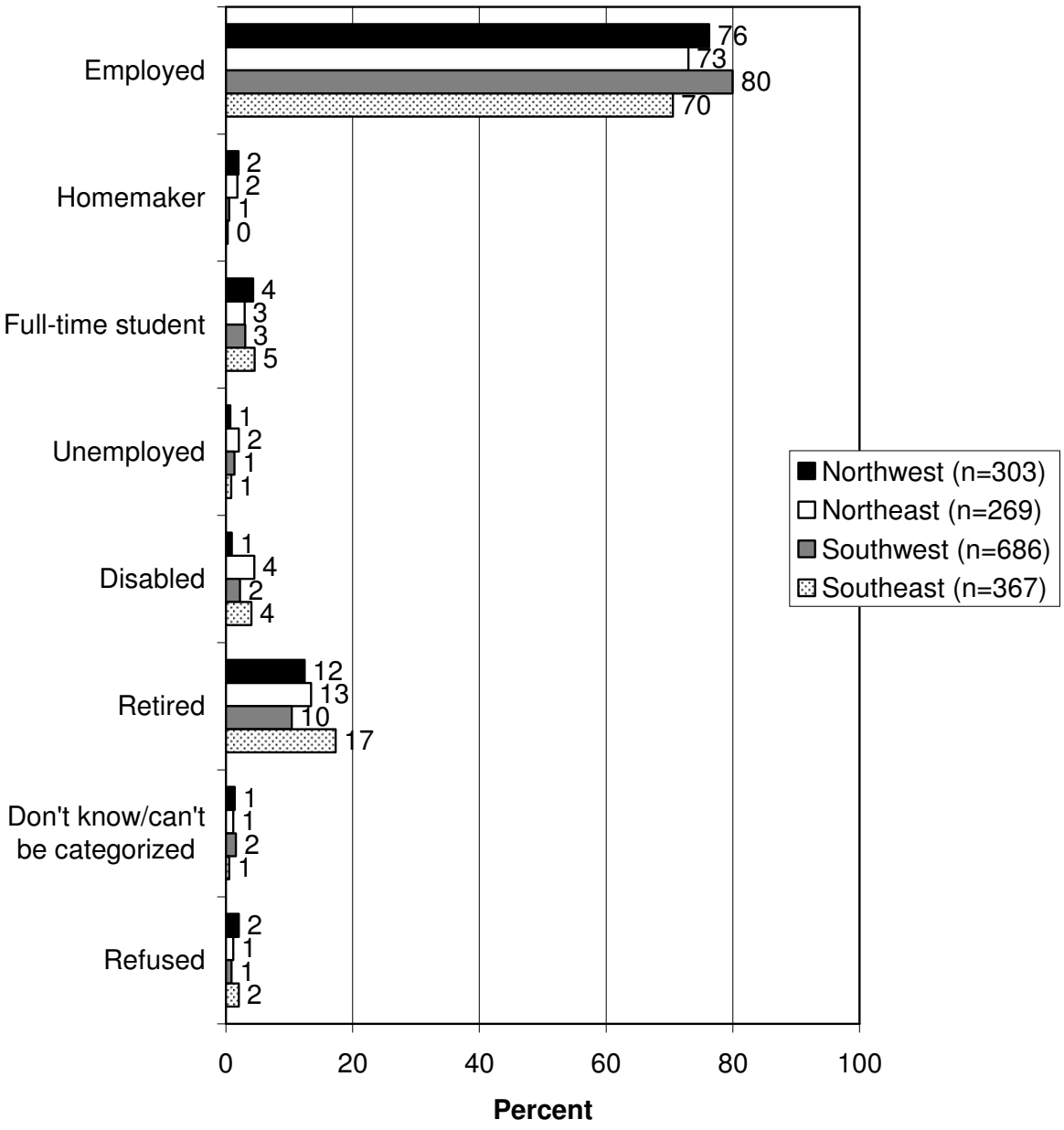
Q176. In what county do you currently live? (Part 2)



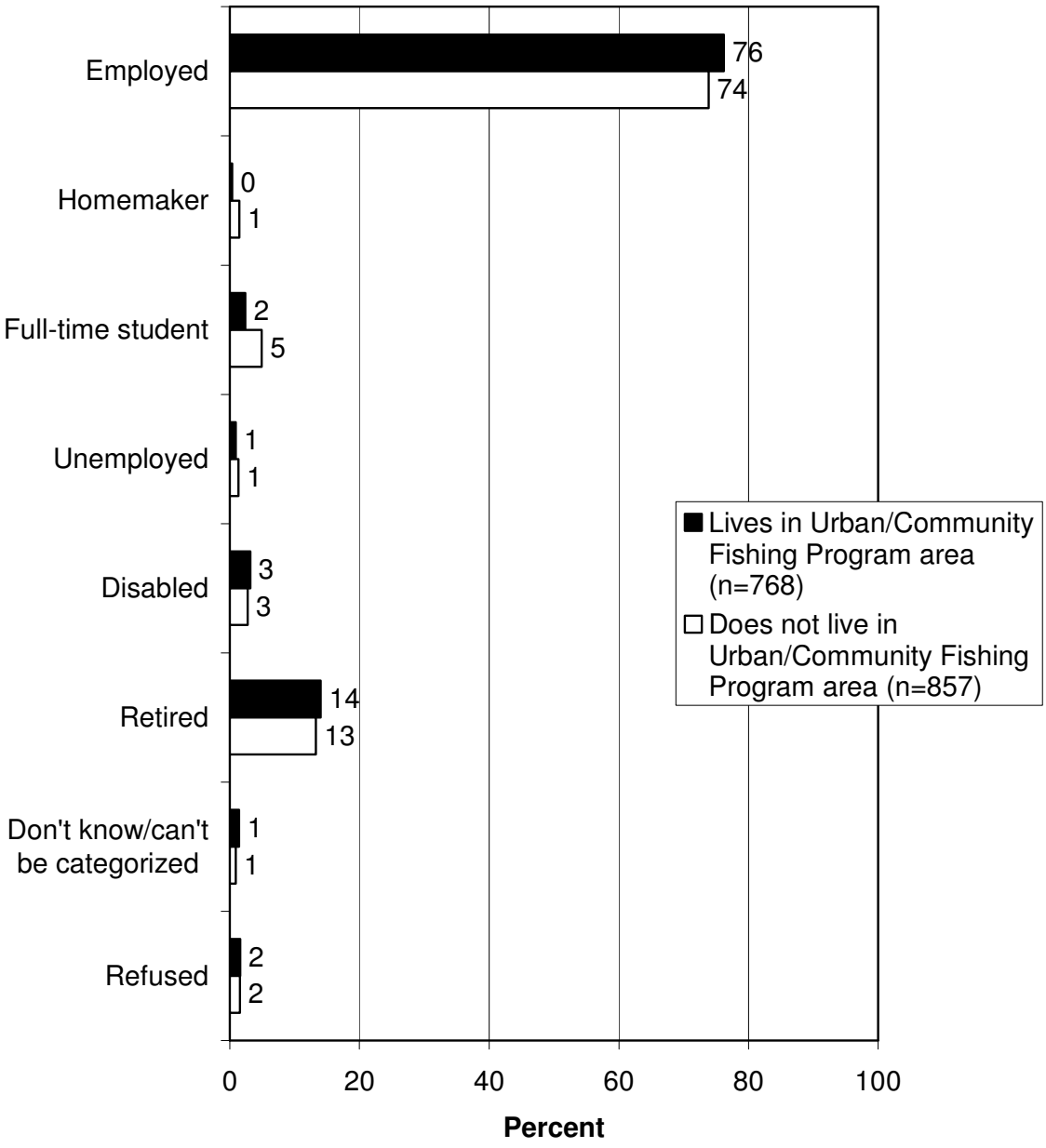
Q178. Are you presently employed, or are you a homemaker, full-time student, unemployed, disabled, or retired?



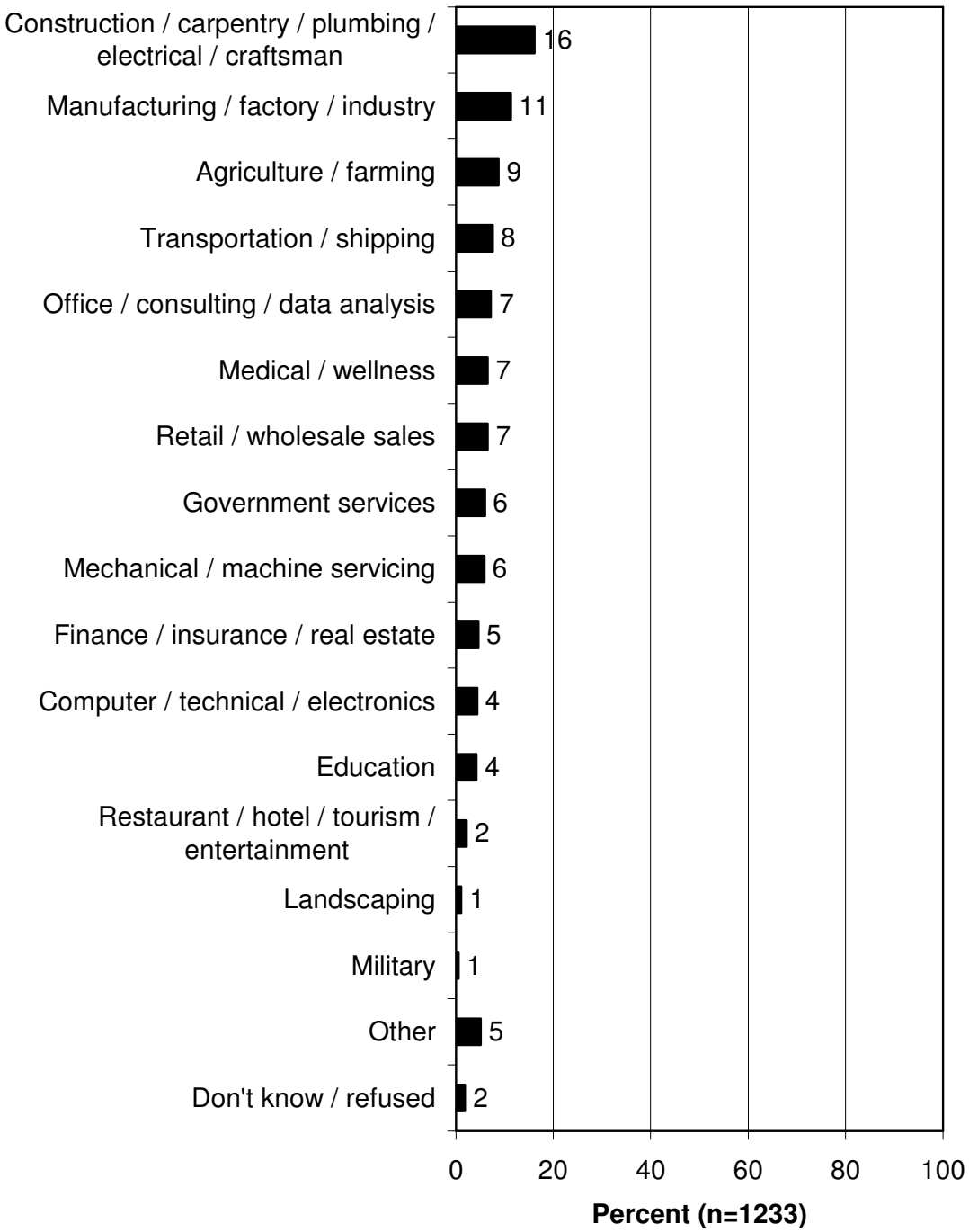
Q178. Are you presently employed, or are you a homemaker, full-time student, unemployed, disabled, or retired?



Q178. Are you presently employed, or are you a homemaker, full-time student, unemployed, disabled, or retired?

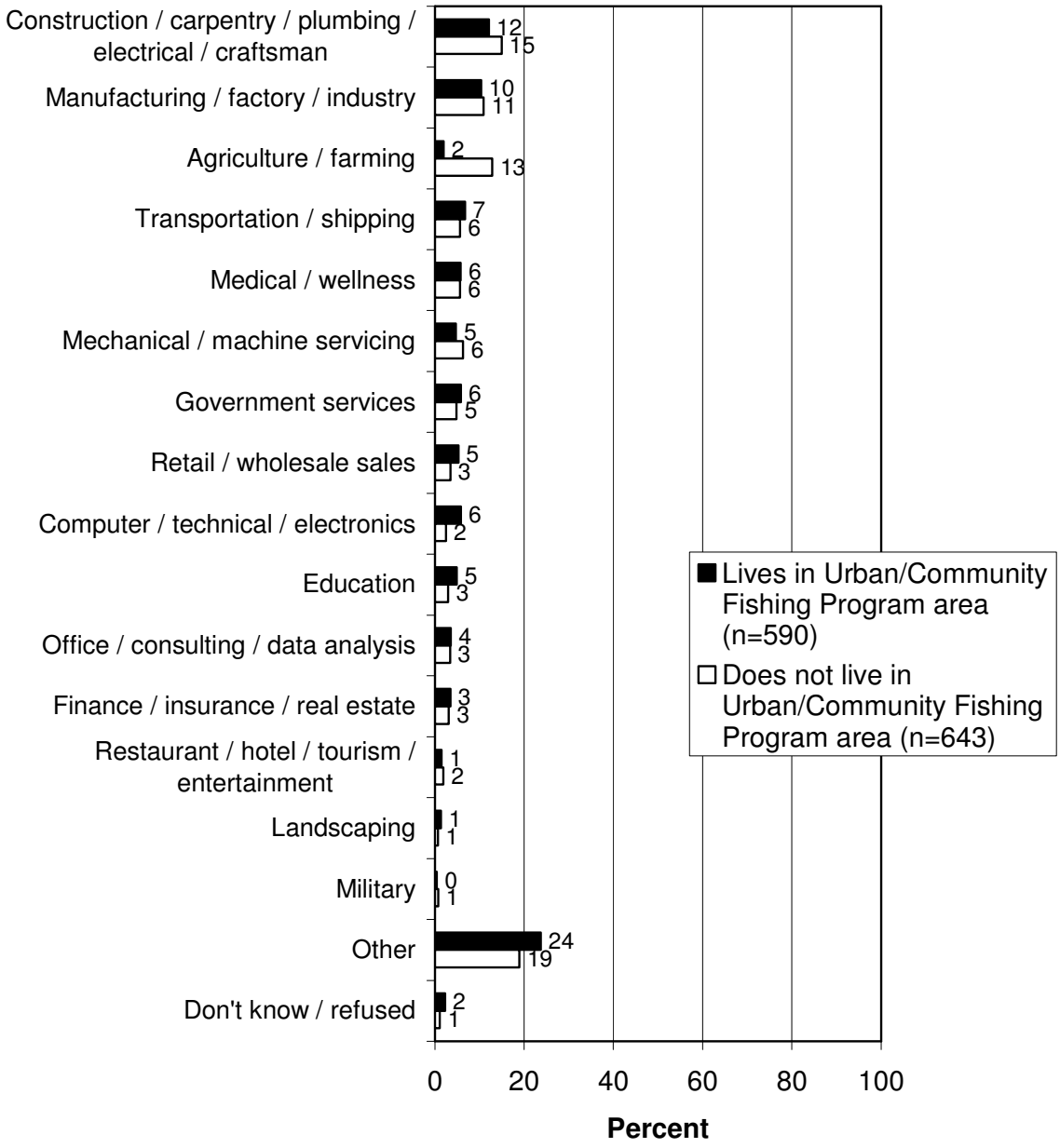


Q179. What's your current occupation? (Asked of those who are employed.)

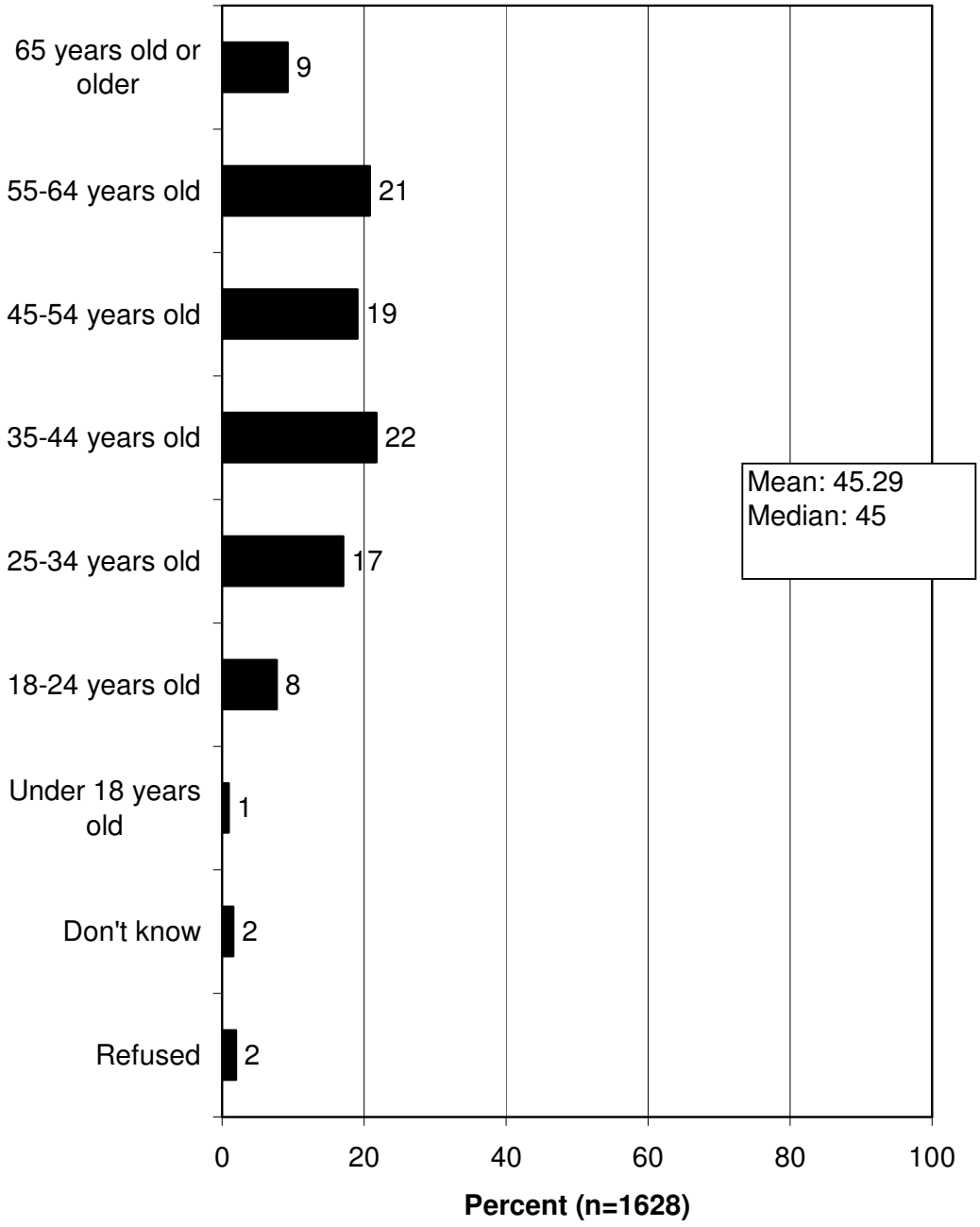


Q179. What's your current occupation? (Asked of those who are employed.)

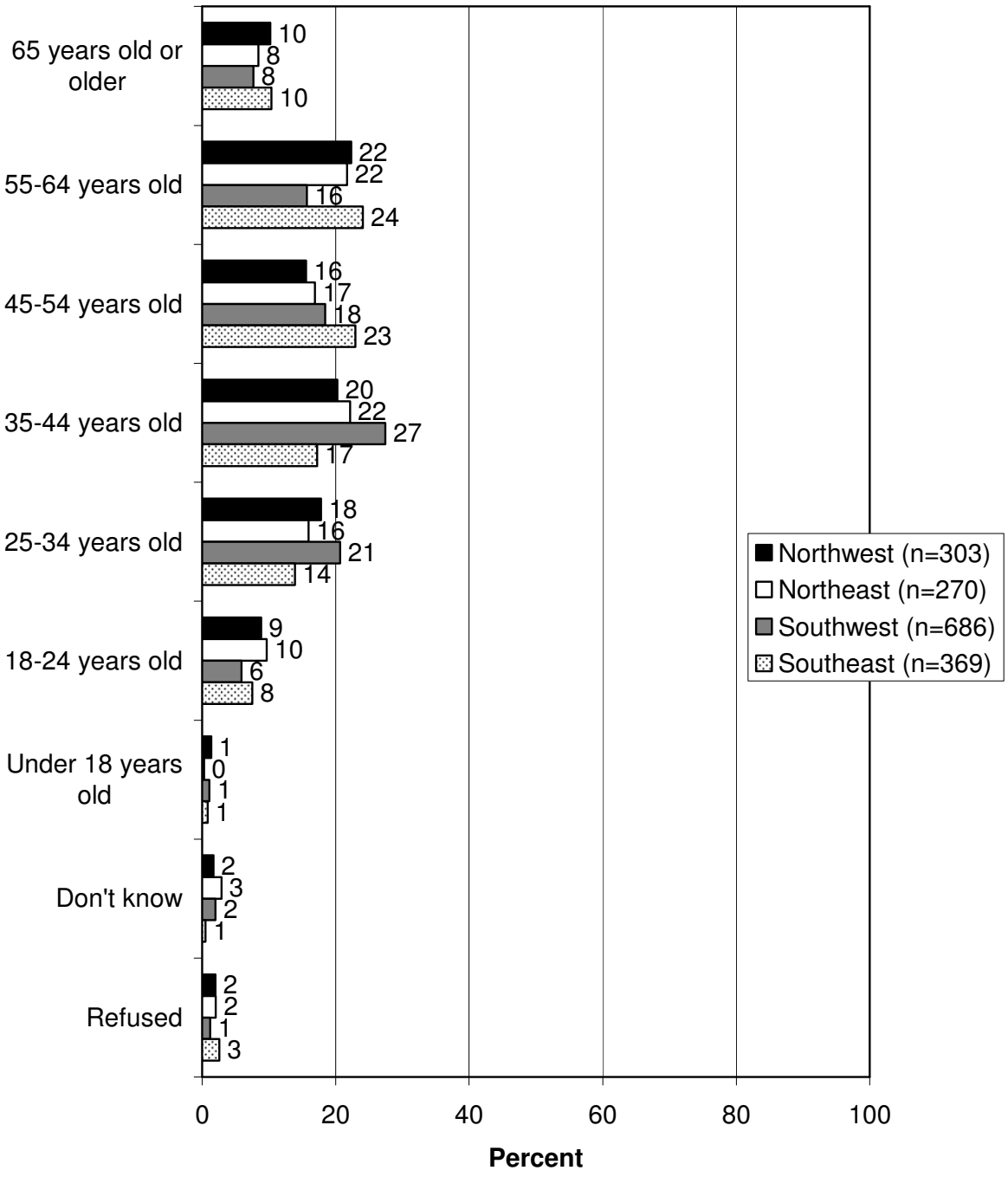
Q179. What's your current occupation? (Asked of those who are employed.)



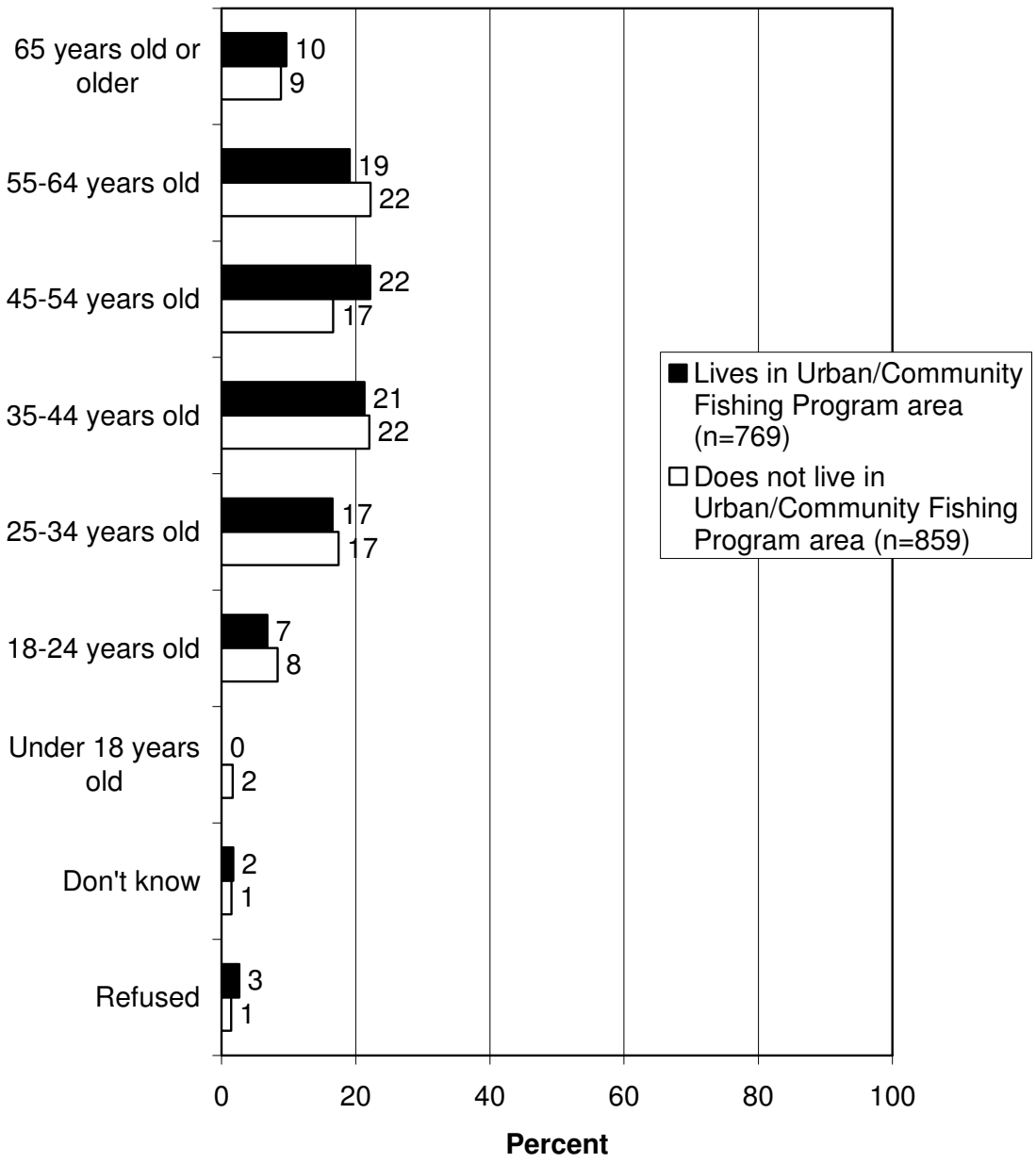
Q181. May I ask your age?



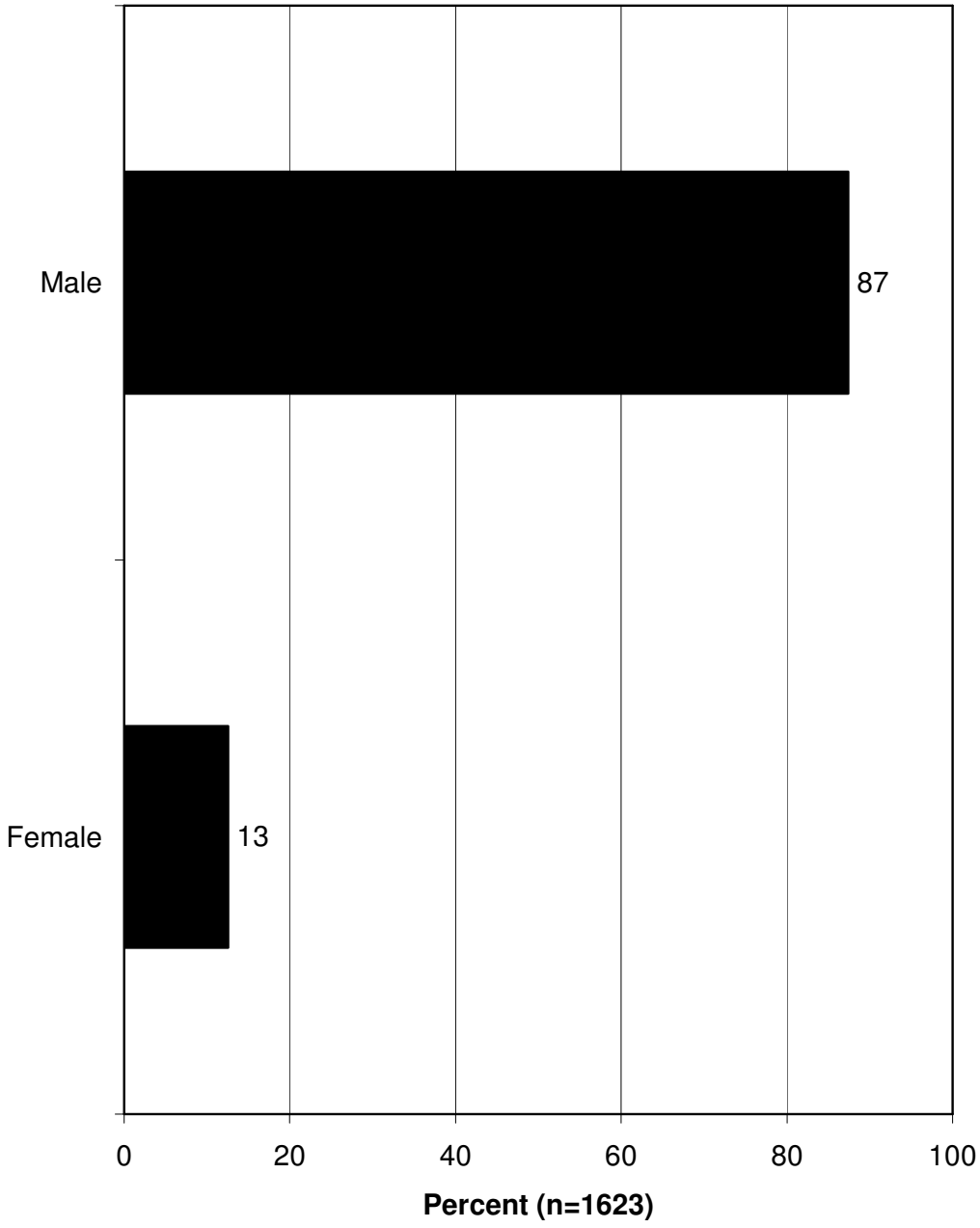
Q181. May I ask your age?



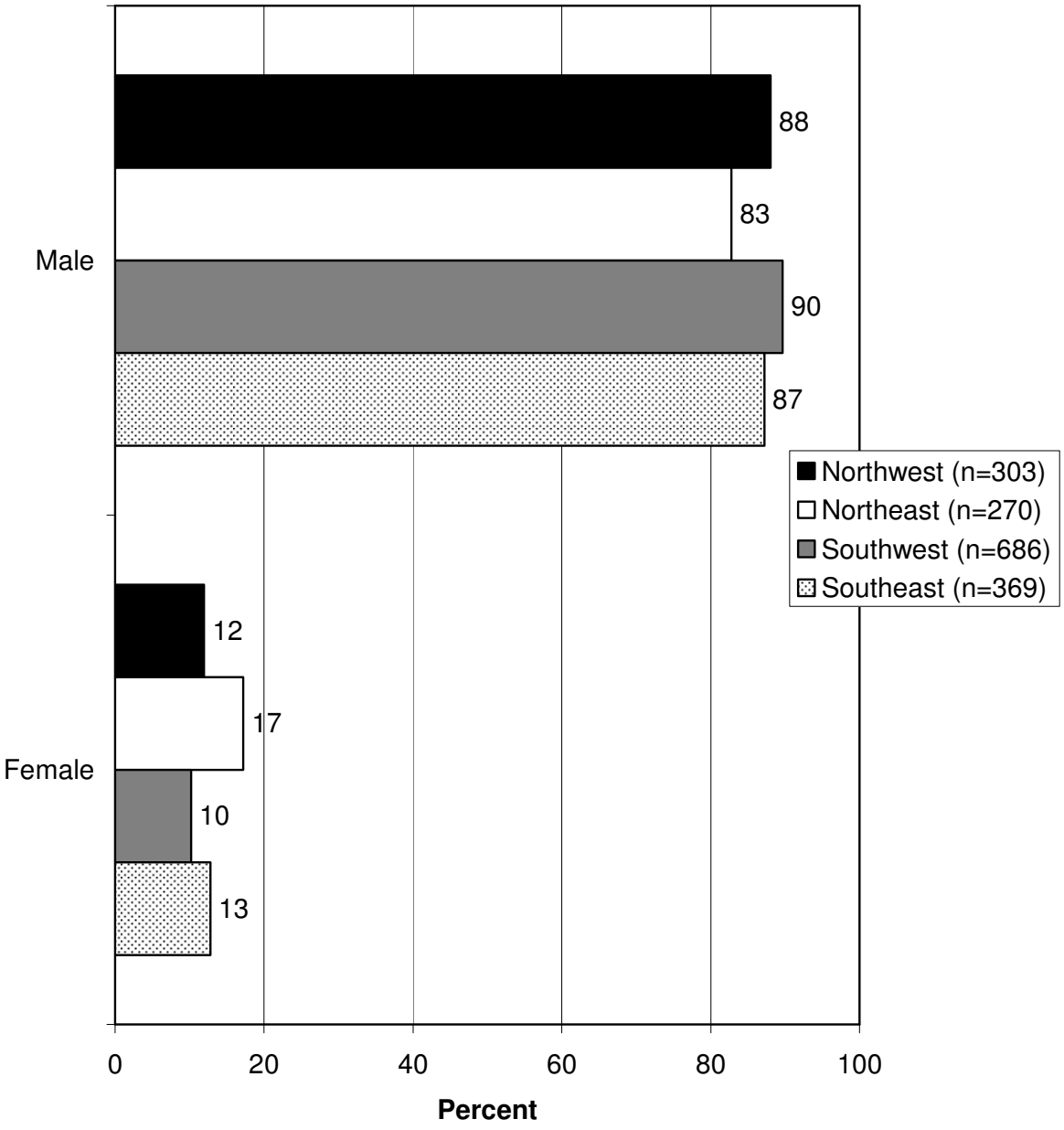
Q181. May I ask your age?



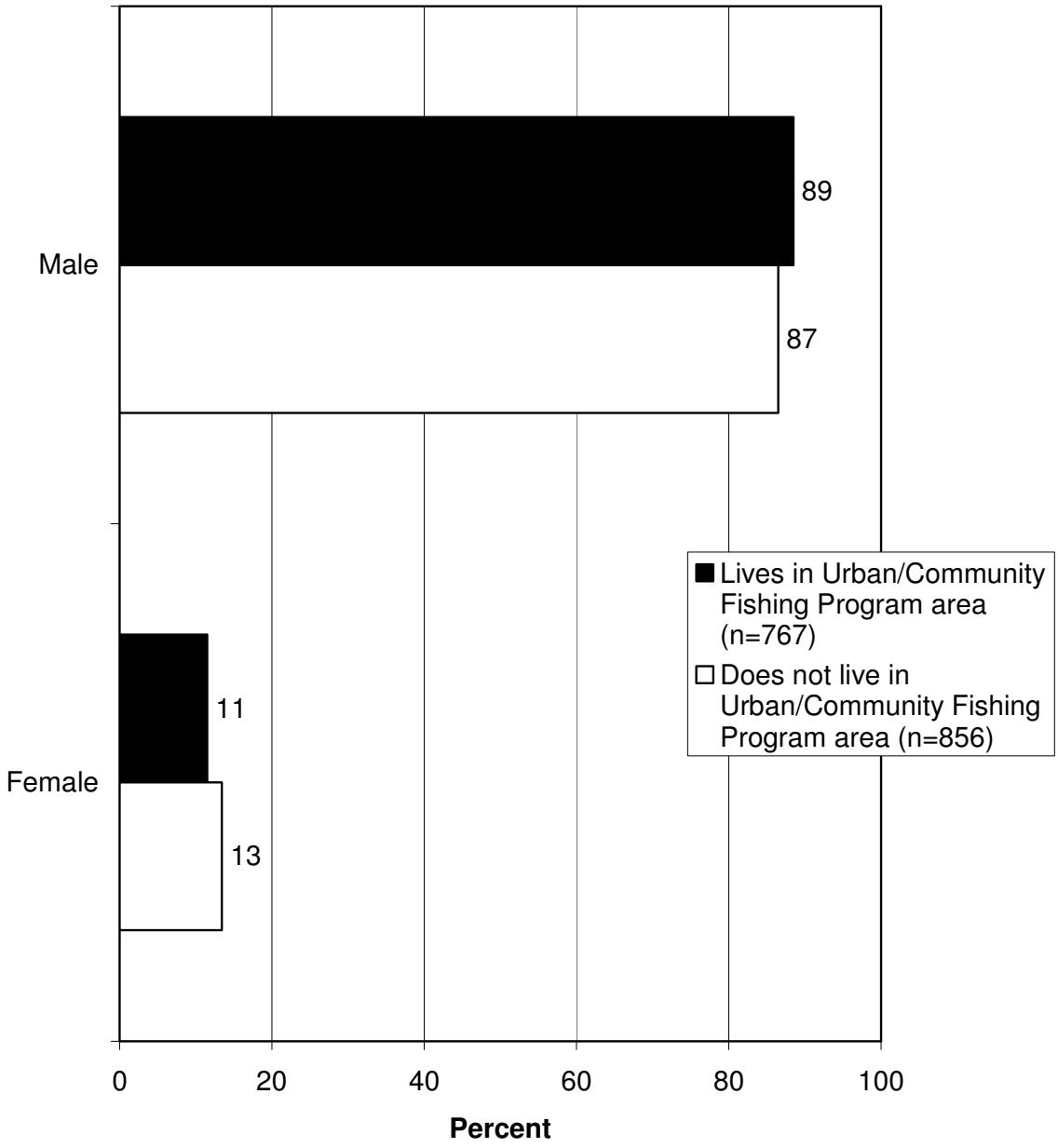
Q187. Respondent's gender (observed; not asked in the telephone survey).



Q187. Respondent's gender (observed; not asked in the telephone survey).



Q187. Respondent's gender (observed; not asked in the telephone survey).



ABOUT RESPONSIVE MANAGEMENT

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

Since 1985, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of research measuring public opinions and attitudes. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 projects and almost $60 million in research.

Responsive Management has conducted research for every state fish and wildlife agency and most of the federal resource agencies, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, the Bureau of Land Management, the U.S. Coast Guard, and the National Marine Fisheries Service.

We have also provided research for many nonprofit and nongovernmental organizations, including the National Wildlife Federation, the National Shooting Sports Foundation, the National Rifle Association, the Archery Trade Association, the Izaak Walton League, the Rocky Mountain Elk Foundation, Ducks Unlimited, SCI, and Dallas Safari Club. Other nonprofit and NGO clients include Trout Unlimited, the Sierra Club, the American Museum of Natural History, the Ocean Conservancy, the National Association of State Boating Law Administrators, and the BoatUS Foundation.

Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others.

Responsive Management also provides data collection for the nation's top universities, including Auburn University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University of California-Davis, University of Florida, University of Montana, University of New Hampshire, University of Southern California, Virginia Tech, West Virginia University, and many more.

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

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