



ISSUES RELATED TO HUNTING ACCESS IN THE UNITED STATES

ARIZONA RESULTS

**Responsive Management
and the
National Shooting Sports Foundation**

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2009

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The views contained in this report do not necessarily represent the views of the U.S. Fish and Wildlife Service or the Arizona Game and Fish Department.

Although numerous people assisted with this project, any errors, omissions, or typographical mistakes in the report are the sole responsibility of Responsive Management.

EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

The purpose of this study is to better understand issues related to hunting access. Research indicates that difficulty with access to lands for hunting has become a constraint to recruiting and retaining sportsmen. Adequate access to land is one of the fundamental issues affecting the future of hunting today, but it is, fortunately, an issue over which agencies and organizations have some influence.

This project entailed a nationwide survey of hunters that included detailed questions about access to hunting lands. The study identifies and quantifies an array of access issues that hunters face today, and it provides in-depth baseline data with which to compare conditions in the future. The study is based on a nationwide survey and individual state surveys that assessed the effectiveness of access programs and acquired data for future programs, and the results can help guide the future use of funding for access programs.

The overall project entailed analyzing data obtained from a series of focus groups conducted in 2008 (which were also used in developing the survey instrument), a nationwide telephone survey with an oversampling in 16 states where a variety of access programs are currently under way, 16 state reports for those oversampled states, and a final national report of the results with recommendations for implementing effective access programs. This report discusses the Arizona survey only. Specific aspects of the research methodology for the Arizona survey are discussed below.

For the survey, telephones were selected as the preferred sampling medium because of the near universality of telephone ownership. Additionally, telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective. Telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires. The telephone survey questionnaire was developed cooperatively by Responsive Management, the National Shooting Sports Foundation (NSSF), and the Arizona Game and Fish Department. The

survey questionnaire was reviewed by numerous university professors and staff with knowledge of surveying methods, as well as many fish and wildlife agency personnel with knowledge of hunting access issues. The questionnaire included some “screener” questions; those who had *not* hunted at least once in the past 5 years were not interviewed.

The survey instrument included questions about the following hunting programs that are used in Arizona (descriptions of the programs are included as Appendix A):

- The Open Fields Program
- The Conservation Reserve Program
- The U.S. Fish and Wildlife Service’s Waterfowl Production Areas
- The wheretohunt.org website
- The huntinfo.com website
- The huntandshoot.org website
- Arizona’s Heritage Access Program
- Arizona’s Adopt-A-Ranch Program

To ensure that the researchers would know which species were associated with various results, the survey asked respondents to answer most questions about the species they primarily hunt. In these questions, QPL inserted the respondent’s primary species name into the question so that answers would be specific to a particular species. Therefore, keep in mind that many questions, such as ratings of access, are specific to a particular species rather than being about hunting overall.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. The survey was conducted in May and June 2009. Responsive Management obtained a total of 811 completed interviews.

The software used for data collection was Questionnaire Programming Language. The analysis of data was performed using Statistical Package for the Social Sciences (SPSS) as well as proprietary software developed by Responsive Management.

SPECIES HUNTED, HUNTING AVIDITY, AND TRENDS IN HUNTING PARTICIPATION

- About a quarter of Arizona licensed hunters primarily hunted elk (26%) in the past 12 months, followed in popularity by mule deer (18%), white-tailed deer (15%), and upland game birds (10%). Note that the question asked respondents to name the *single* species they *primarily* hunt, not all species they hunt.

- The typical number of days that hunters hunt in Arizona annually is 10 days (the median answer).

- Hunters in the survey were asked to indicate how long they have been hunting: the median is 30 years.

- Hunters in the survey were asked to indicate how many of the past 5 years they had hunted. The large majority (62%) are quite avid, having hunted all 5 of the past 5 years.

- Hunters were asked to indicate whether their hunting participation in Arizona has increased, remained the same, or decreased over the past 5 years: while they most commonly say that it has stayed the same (43%), the percentage who say it has decreased (34%) exceeds the percentage who say it has increased (17%).

LOCATIONS OF HUNTING ACTIVITIES

- Hunters in Arizona overwhelmingly more often hunt their primary species on public land (82% hunt on public land mostly, and 97% do so at least half the time) than private land (3% hunt on private land mostly, and 18% do so at least half the time).

- Another question has implications regarding how much hunters need to find access to hunting lands. Hunters more commonly say that they mostly hunt their primary species on the same land each year (46%) than say that they hunt it on different lands each year (15%).

- In a crosstabulation of hunting on public/private land and hunting on the same/different lands (the questions discussed above), the sample could be divided into 9 groups (as shown in the matrix below), with the largest portion being those who primarily hunt on public/same lands (39.1%). (For readability, the data presented in the matrix below are also shown in a graph, with the size of the bars representing their proportion of the whole sample.)

	Hunts mostly on public land (81.6%)	Hunts public and private lands both about equally (15.7%)	Hunts mostly on private land (2.7%)
Hunts mostly on the same land each year (47.5%)	Public/Same 39.1%	Both/Same 6.9%	Private/Same 1.5%
Hunts same and different lands both about equally (36.8%)	Public/Both 29.3%	Both/Both 6.7%	Private/Both 0.8%
Hunts mostly on different lands each year (15.7%)	Public/Different 13.2%	Both/Different 2.2%	Private/Different 0.4%

- The survey asked hunters to indicate how far they typically travel from home to hunt their primary species: the median distance is 100 miles.
- Another question explored the modes of transportation that hunters use to access the land on which they hunt: 93% use a car or truck (by far the top mode), distantly followed by walking (26%) and ATV (17%). Note that hunters could name more than one mode.

FACTORS CONSIDERED IN CHOOSING LANDS ON WHICH TO HUNT

- The survey asked 11 questions about the importance of various factors in hunters' decisions regarding where to hunt their primary species (shown in Text Box 1 on the following page). For each factor, they were asked if it was *very* important, *somewhat* important, or *not at all* important.
- Three factors stand out markedly more important than the rest in the ranking by the percentage saying the factor is *very* important: that they are familiar with the land (65% say this is *very* important), that the land is not crowded with other sportsmen (60%), and that the land is public land (59%).

- Three more are in a middle tier: that the land is easy to access by foot (44%), that the land is easy to access by car or truck (41%), and that ATVs/off-road vehicles are allowed (33%).

TEXT BOX 1**Factors in hunters' decisions regarding where to hunt that were asked about in the survey:**

- That the land is public land
- That the land is private land
- That the land is owned by someone the respondent knows personally
- That the land is familiar to the respondent
- That the land is close to the respondent's home
- That the land is easy to access by foot
- That the land is easy to access by car or truck
- That the land is not crowded with other sportsmen
- That the land has well-maintained roads
- That the respondent can use ATVs or off-road vehicles
- That the land allows hunting with dogs

- After the series of questions discussed above, the survey asked hunters if there are any other factors that are important in their decision making regarding where to hunt. Two additional factors were commonly mentioned: the amount of game available and the hunter's success at drawing a tag.

CONSTRAINTS TO HUNTING PARTICIPATION

- A direct question asked hunters whether lack of hunting access had caused them *not* to hunt a particular species as much as they would have liked in the past 5 years. A little more than a third of them (37%) agreed that it had done so. In follow-up in an open-ended question, the top-named access problems were land blocked by private land, road closures, private land posted, public land closed, being unable to get tags, and that development had closed the area (the six reasons that were markedly more important than the rest).
- In follow-up, hunters were asked to name the species that they had not hunted as much as they would have liked because of access problems. The top-named species is mule deer (40% among those who agreed to the above question), closely followed by elk (32%) and white-tailed deer (28%), and more distantly followed by upland game birds (15%) and dove (11%). Note that hunters could name more than one species on this question.

- The survey asked a series of 25 questions about possible hunting access constraints (shown in Text Box 2 below). For each possible constraint, the survey asked hunters if it had been, over the past 5 years, a *major* problem, a *moderate* problem, a *minor* problem, or *not at all* a problem.
 - The potential constraints that had the highest percentage of hunters saying that the constraint was a *major* problem were the cost of gas (22%), housing/other development making land not huntable (20%), less land on which to hunt due to private land ownership changes (14%), less land on which to hunt due to development (11%), not being sure of the boundaries of huntable land (11%), and private land blocking access to public land for hunting (11%). All of these had more than a tenth of respondents saying it was a *major* problem.

TEXT BOX 2

Possible constraints to hunting access that were asked about in the survey:

Road closures
 Less land on which to hunt
 Less land on which to hunt because the land use has changed
 Less land on which to hunt due to private land ownership changes
 Not having enough information about where to hunt
 The information about where to hunt being inaccurate
 Not having ATV access in general
 Not being able to retrieve the hunt harvest because of ATV restrictions
 Having maps that show huntable land but being unable to locate that land on the ground
 Being unable to locate a road or other access route to huntable land
 Not being sure of the boundaries of huntable land
 Having to travel too far to hunt
 Being denied permission to hunt on somebody else's land
 Not being able to find the landowner to ask permission
 Finding previously open private land posted or closed by the landowner
 Finding previously open private land sold and posted or closed by the new landowner
 Finding previously open private land closed because a club has now leased it
 Private land blocking access to public land for hunting
 Poor maintenance of roads or trails
 The cost of gas
 Not being able to find a good place to park the vehicle
 Not being able to find a place to launch a boat
 Housing or other development making land not huntable
 Information from the Arizona Game and Fish Department being out of date
 Access or leasing fees being expensive

- A follow-up question to one of the questions within the aforementioned series asked those who indicated that road closures had been a problem to indicate how the road had been

closed. Most commonly, the road was closed by a gate, although a few indicated that the road was closed by a berm or dirt pile, or the road was closed by a “No trespassing” sign posted by a landowner.

- Most commonly, the road closures were perceived to be permanent rather than seasonal/temporary.
 - Another follow-up question asked for the location/type of the closed road. Most commonly, the closed roads were public—National Forest roads or BLM roads.
- Another follow-up question within the above series was asked of those who indicated that not being able to retrieve their harvest because of ATV restrictions had been a problem (14% indicated that this was a problem). The follow-up question asked if they agreed or disagreed that not being able to retrieve game with an ATV had caused them to hunt less than they would otherwise have liked to do, and 44% agreed (6% of hunters overall), while 55% disagreed. This suggests that ATV restrictions are *not* an important problem to the overwhelming majority of hunters, as only 14% indicated that ATV restrictions on retrieving game had been a problem, and, further, only 6% of hunters hunted less than they would otherwise because of ATV restrictions.
- A final follow-up question within the above series was asked of those who indicated that private land blocking access to public land had been a problem. The follow-up question asked how much of a problem was *intentional* blocking of public land by a private landowner, and 69% of those respondents indicated that private landowners *intentionally* blocking access was a problem.
- After the above series of questions, the survey then presented hunters a list of 16 problems with actions hunters may have had to take because of the problem (e.g., leaving a hunt area because of crowding from other recreationists). The list of problems is shown in Text Box 3 on the following page. For each possible problem, the survey asked hunters if it had been,

over the past 5 years, a *major* problem, a *moderate* problem, a *minor* problem, or *not at all* a problem.

- In the ranking by the percentage saying the problem was *major*, *moderate*, or *minor*, the top problem is leaving an area because of crowding from other hunters (67%), more distantly followed by a middle-tier group: leaving an area because of crowding from other recreationists (44%), not being sure whether they are on public or private land (39%), not being sure whose land they were on (39%), leaving an area because they felt unsafe because of other hunters (36%), leaving an area because of irresponsible behavior of other hunters (36%), and not going on a hunt or changing locations because of access problems (33%)—each with at least a third saying it had been a problem.

TEXT BOX 3

Possible problems regarding hunting access that were asked about in the survey:

- Not going on a hunt or changing locations because of access problems
- Not going on a hunt or changing locations because the respondent felt that a leasing fee was too expensive
- Not going on a hunt or changing locations because map information was wrong
- Not going on a hunt or changing locations because access for those with disabilities was not available
- Leaving an area because of crowding from other hunters
- Leaving an area because of crowding from other recreationists
- Leaving an area because respondent felt unsafe because of other hunters
- Leaving an area because of the irresponsible behavior of other hunters
- Not being sure whether he/she was on private or public land
- Not being sure whose land he/she was on
- Not hunting somewhere because of ATV restrictions
- Not hunting somewhere because ATV use is allowed or not restricted
- Being in an area where he/she was not sure which hunting regulations applied
- Being confused by a state agency map that was hard to follow
- Discontinuing a hunting club membership because he/she felt the fees were too expensive
- Trying to join a hunting club that was already full

- The survey asked hunters a series of 10 questions about factors that may or may not influence access to hunting land in Arizona in general, regardless of whether their own participation is affected by it (shown in Text Box 4 on the following page). For each factor, the survey asked hunters if they think it is a *major* problem, a *moderate* problem, a *minor* problem, or *not at all* a problem.
 - In the ranking by the percentages saying the factor is a *major*, *moderate*, or *minor* problem, 3 of the 10 factors have about two-thirds or more saying it is a problem: public or private land tracts being broken up when sold or leased (71%), housing and

commercial development (69%), and closures of public land by government agencies (65%).

- Four more factors make a middle tier—each has a majority saying it is a problem: restrictions, such as ATV use or equipment restrictions, on public land (57%), private land posted or closed because the landowner is specifically concerned about liability (57%), lack of or unclear signs marking public hunting lands (55%), and poor management or allocation of uses of public land (51%).

TEXT BOX 4

Factors that may or may not influence hunting access that were asked about in the survey:

Poor management or allocation of uses of public land
 Lack of or unclear signs marking public hunting lands
 Restrictions on public land
 Closures of public land by government agencies
 Not enough access to public lands for those with disabilities
 Housing and commercial development
 Gas and oil extraction on public lands
 Public or private land tracts being broken up when sold or leased
 Private land posted or closed because the landowner is specifically concerned about liability
 Management of land for purposes other than hunting, such as timber cutting

- When asked in an open-ended question if there were any things that had taken away from their enjoyment of hunting in Arizona, even if those things did not prevent them from actually going, 56% of hunters indicated that there had been. They most commonly named an access-related problem (18%), a regulation-related answer (12%), crowding (7%), and/or the cost of licenses (6%). Note that the graph breaks down the “access-related problems” category into specific access problems as subsets of access-related problems overall. Primary among those access problems is being unable to get tags (8%).

RATINGS OF ACCESS TO HUNTING LANDS IN ARIZONA

- A basic question asked hunters to rate access to hunting land in Arizona overall. The majority (78%) give a rating of excellent or good, while 21% give a rating of fair or poor. The moderate answers (good and fair) exceed the extreme answers (excellent and poor).
- In a related question, ratings of the AGFD’s management of access to hunting lands are highly positive: 76% give an excellent or good rating, while 20% give a fair or poor rating. Again, the moderate answers exceed the extreme answers.

- The ratings of access were crosstabulated by various other questions to see if any differences among respondents emerged. Positive ratings in this context are those in the top half of the scale (excellent or good), and negative ratings are those in the lower half (fair or poor).
 - Access ratings are markedly more positive among elk hunters: 89% give a rating of *excellent* or *good*, compared to a percentage of 80% or less for the other species. They are markedly more negative among hunters of mule deer (only 69% give an excellent or good rating) and dove (69% also). Overall, these differences on this question are statistically significant.
 - Those who travel more than the median travel distance to hunt are slightly more likely to give an *excellent* rating to hunting access, and the differences are statistically significant.

- Those who hunted their primary species on public land at least half the time were asked to rate access to public lands in Arizona. Excellent and good ratings (92% give one of the two responses) far exceed fair and poor ratings (8%).

- Those who hunted their primary species on private land at least half the time were asked to rate access to private lands in Arizona. Excellent and good ratings (60% give one of the two responses) exceed fair and poor ratings (40%).

FACTORS THAT MAY POSITIVELY AFFECT ACCESS

- The survey asked 15 questions about things that would make hunting access easier (shown in Text Box 5 below). For each item, the survey asked hunters if it would be *very* effective, *somewhat* effective, or *not at all* effective at making it easier to access land on which to hunt.
 - In the ranking by the percentage saying that the items would be *very* or *somewhat* effective at making access easier, two tiers stand out: having signs that clearly mark boundaries of huntable land (85%), having timely information about any road closures (85%), having paper maps of hunting lands for hunting their primary species (83%), and having up-to-date information on a website showing lands where hunting their primary species is allowed (80%).
 - The second tier consists of having a list of landowners with telephone numbers for calling to ask permission (68%), having an Arizona state agency acquire more land for hunting

(68%), having maps of hunting lands for their primary species on a website (66%), having easements or public rights-of-way on private land to access adjacent public land (65%).

TEXT BOX 5

Things that might make hunting access easier that were asked about in the survey:

- Having a list of landowners with telephone numbers where the respondent could call to ask to hunt on their land
- Having signs that clearly mark boundaries of huntable land
- Having up-to-date information on a website showing lands where hunting is allowed
- Having paper maps of hunting lands
- Having maps of hunting lands on a website
- Being able to find hunting lands using GPS
- Having timely information about any road closures
- Having more ATV access
- Having more lands with ATV restrictions
- Being able to pay a user fee to hunt restricted public land
- Being able to pay a user fee to hunt private land
- Being able to pay extra to increase the chances of getting a license issued through a lottery
- An Arizona state agency acquiring more land for hunting
- Having easements or public “rights-of-way” on private land to access adjacent public land
- Having easements or designated public sections of leased and private lands preserved for public hunting

POTENTIAL REASONS THAT LANDOWNERS MAY CLOSE THEIR LAND TO HUNTING

- The survey asked eight questions about possible reasons that landowners may close their land to public hunting (shown in Text Box 6 below). For each possible reason, the survey asked hunters if they think it is a *very important* reason, a *somewhat important* reason, or a *not at all* important reason that landowners close their land to the public for hunting.
 - Three items stand out above the rest in the ranking by the percentage saying the reasons are *very important*, all related to misuse of the land: property damage caused by other hunters, excluding litter (75% say this is a *very important* reason that landowners close their land), litter (69%), and irresponsible shooting, drinking, or similar behavior by hunters (67%). In a middle tier are liability concerns (37%), the landowner’s desire to allow only personal or family use of the land (33%), and the land being too crowded (25%).

TEXT BOX 6**Possible reasons that landowners may close their land to public hunting that were asked about in the survey:**

- Liability concerns
- Irresponsible shooting, drinking alcohol, or similar behavior by hunters (excluding property damage or litter)
- Property damage caused by other hunters (excluding litter)
- Litter
- Land being too crowded
- The landowner wanting to allow only personal or family use of the land
- The landowner not making enough money from hunters
- The landowner not receiving enough compensation or incentives from the state

- The large majority of hunters (79%) think that a program that provides landowners with compensation or incentives for opening their lands to the public for hunting would be *very* or *somewhat* effective at improving hunting access in Arizona.
- The overwhelming majority of hunters (93%) are *not* aware of any laws in Arizona that reduce the liability of landowners who open their lands to the public for hunting; meanwhile, 3% are aware of such laws.
 - In a related question, the large majority of Arizona hunters (76%) support laws to reduce landowner liability for landowners who open their lands to the public for hunting; only 10% oppose (the remainder give neutral answers).
 - Another related question found that a large majority of hunters (65%) think that legislation reducing landowner liability would be *very* or *somewhat* effective at improving hunter access to private lands in Arizona; only 16% think it would *not* be at all effective.
 - Finally, the majority of hunters (58%) agree that legislation reducing landowner liability would significantly increase the number of landowners who would open their lands to the public for hunting.

PARTICIPATION IN AND USE OF VARIOUS PROGRAMS AND RESOURCES

- The survey asked about eight programs in Arizona that pertain to hunting access (some state programs and some national programs). The programs about which the survey asked are shown in Text Box 7 below.
- A basic line of questioning asked hunters about their awareness of the various programs, and four of the eight programs have awareness levels of about a third or higher: the U.S. Fish and Wildlife Service's Waterfowl Production Areas (50% were *very* or *somewhat* aware of it), the Conservation Reserve Program, or CRP (40%), Arizona's Heritage Access Program (39%), and Arizona's Adopt-A-Ranch Program (32%). All other programs have awareness levels of 14% or lower. Graphs show *very* aware as well as *not* aware.
 - Another series of questions asked hunters about their use of or participation in the eight access programs. Those programs with the highest rates of use/participation are the Adopt-A-Ranch Program (8%), the wheretohunt.org website (7%), the U.S. Fish and Wildlife Service's Waterfowl Production Areas (6%), and the huntinfo.com website (6%).

TEXT BOX 7

Hunting access programs that were asked about in the survey:

The Open Fields program
The Conservation Reserve Program
The U.S. Fish and Wildlife Service's Waterfowl Production Areas or WPAs
The wheretohunt.org website
The huntinfo.com website
The huntandshoot.org website
Arizona's Heritage Access Program
Arizona's Adopt-A-Ranch Program

- For each program of which a hunter was aware, the survey asked him/her to rate it at making hunting access easier.
- All of the programs have similar ratings. For instance, the percentages giving an *excellent* or *good* rating range from 37% to 47%, while fair/poor ratings combined range from 9% to 13%. The three programs with the highest percentages giving an *excellent* or

good rating are Open Fields Program (47%), the huntinfo.com website (45%), and the Adopt-A-Ranch Program (45%).

- The survey included a specific question about use of private lands enrolled in any walk-in access program or a state-run private land access program in Arizona. More than a quarter of hunters (29%) make some use of such lands, saying that they hunt their primary species *often, sometimes, or rarely* on such lands. On the other hand, the majority (68%) *never* do so.

SOURCES OF INFORMATION USED IN DECIDING WHERE TO HUNT

- In the broadest question about sources of information, hunters were asked in an open-ended question where they got information on places to hunt and hunting access in Arizona. The most popular source is friends/family/word of mouth (58%), by far the top answer. Other notable answers include specific sites on the Internet (14%), a state agency other than on a website (14%), with the license application/hunting regulations (8%), and the Internet in general (7%).
- The survey asked hunters if they had visited the websites of four agencies (the AGFD, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management). The majority of hunters in Arizona had visited the AGFD site (74%), while 42% had visited the U.S. Forest Service site and 31% had visited the Bureau of Land Management (BLM) site.
 - Follow-up questions asked hunters to rate the usefulness of the websites' information on places to hunt and hunting access in planning hunting trips. Ratings are mostly positive: the AGFD site, the Bureau of Land Management site, and the U.S. Fish and Wildlife Service site all had a majority rating its access information as excellent or good. The U.S. Forest Service site had nearly half of respondents rating it excellent or good, more than rated it fair or poor (indeed, none rated it poor; the remainder consisted of "Don't know" answers).

- The survey asked six questions about actions that hunters may take in deciding where to hunt (shown in Text Box 8 below). For each action, the survey asked hunters if they always, sometimes, rarely, or never do it when deciding where to hunt.
 - About three-fourths or more of hunters *always* or *sometimes* do three things in deciding where to hunt: 88% scout or physically look for a place, 75% ask a friend or family member where to hunt, and 75% use paper maps to find a place to hunt.

TEXT BOX 8**Actions hunters may take in deciding where to hunt that were asked about in the survey:**

- Ask a friend or family member where to hunt
- Knock on a landowner's door to ask permission to hunt
- Use paper maps to find a place to hunt
- Use GPS to locate hunting land
- Find available hunting lands on the Internet
- Scout or physically look for land on which to hunt

- Within the above series of questions was a question asking how often hunters scout or physically look for land on which to hunt. In follow-up, they were asked how many days they typically spend scouting for hunting locations. The median number of days they typically spend annually scouting for hunting land is 5 days, among those who scout for land.

TABLE OF CONTENTS

Introduction and Methodology	1
Species Hunted, Hunting Avidity, and Trends in Hunting Participation.....	7
Locations of Hunting Activities.....	13
Factors Considered in Choosing Lands on Which to Hunt.....	21
Constraints to Hunting Participation.....	26
Ratings of Access to Hunting Lands in Arizona.....	52
Factors That May Positively Affect Access.....	64
Potential Reasons That Landowners May Close Their Land to Hunting	68
Participation in and Use of Various Programs and Resources	78
Sources of Information Used in Deciding Where to Hunt.....	89
Demographic Data	102
Appendix A: Descriptions of Hunting Access Programs Used in Arizona	108
About Responsive Management	110

INTRODUCTION AND METHODOLOGY

The purpose of this study is to better understand issues related to hunting access. Research indicates that difficulty with access to lands for hunting has become not just a point of frustration, but a very real barrier to recruiting and retaining sportsmen. Adequate access to land is one of the most fundamental issues affecting the future of hunting today. Indeed, access is the *most* important factor associated with hunting participation that is not a time-related or demographic factor¹—in other words, the most important factor over which agencies and organizations can have an important influence.

While hunting is an important historic, social, and cultural activity in the United States, it is also important to the economy and to conservation. Hunters are avid conservationists who donate more money to wildlife conservation, per capita, than do non-hunters or the general population as a whole in the United States.² Their hunting license fees and the excise taxes they pay on sporting goods and ammunition fund state fish and wildlife agency activities and provide Federal Aid monies. Hunters also contribute large amounts of money to the economy through the pursuit of their sport. In fact, hunters spend several billion dollars on their sport annually.³

However, participation in hunting is declining. Research shows that there has been a general decline in hunting participation for the past two decades.⁴ Consequently, much research has been devoted to assessing the decline in hunting participation and hunting dissatisfaction. One reason that hunters increasingly report as a cause of dissatisfaction is poor hunting access. Access problems negatively affect hunters by taking away from their enjoyment of hunting and/or causing them to hunt less often. Previous research has shown that access is a leading reason for hunter dissatisfaction, and that not enough available hunting access is a significant factor that influences hunters' decisions to stop hunting.⁵

¹ Responsive Management/National Shooting Sports Foundation. 2008. *The Future of Hunting and the Shooting Sports: Research-Based Recruitment and Retention Strategies*. Produced for the U.S. Fish and Wildlife Service under Grant Agreement CT-M-6-0. Harrisonburg, Virginia.

² *ibid.*

³ U.S. Fish and Wildlife Service/U.S. Census Bureau. 2007. *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*. Washington, D.C.

⁴ *ibid.*

⁵ *ibid.*

In addition to an in-depth look at hunting access issues at the national and regional levels to obtain baseline data, this project assesses the success of many initiatives and programs related to access that have already been implemented. This assessment identifies which programs and program elements are most effective, and which are not, by assessing a sample of states (in addition to the nationwide survey). This includes the following 16 states: Alabama, Arizona, California, Hawaii, Idaho, Kansas, Michigan, Nebraska, Nevada, Ohio, Pennsylvania, South Dakota, Virginia, Washington, Wisconsin, and Wyoming.

By acquiring baseline data on access issues and assessing the effectiveness of programs designed to improve hunting access, this project provides research-based information to assist in efforts to reduce hunting access conflicts and improve and increase access to lands for hunting. This research also helps to more effectively utilize the millions of dollars of future funding for implementing access programs by indicating which programs and program elements are having the greatest impact and by providing data to guide and increase the success of the efforts of new and current programs.

There is an important need for this project because 1) access to lands for hunting has become a very real barrier to hunter recruitment and retention; 2) previous studies have shown that access is a leading reason for hunter dissatisfaction and that not enough available hunting access is a significant factor that influences hunters' decision to stop hunting; 3) most previous studies were conducted on a state-by-state basis rather than a regional or national basis and are not comparable across states; 4) the effectiveness of numerous initiatives and programs related to access that have already been implemented on the ground needs to be evaluated; and 5) the results will help to ensure the most effective utilization of funding for access programs in the future. In short, there is a strong need for information and strategies upon which to build hunting programs that create, improve, and facilitate access to lands for hunting, which will ultimately positively affect hunting participation as well.

This project entailed a nationwide survey of hunters to accomplish several major objectives. The study identified and quantified the full array of access issues that hunters face today, and it provided in-depth baseline data with which to compare conditions in the future at a national

level. In addition, the study included individual state surveys to assess the effectiveness of access programs currently in place in 16 states and acquired data for future programs, and the results can help guide the future use of funding for access programs.

The overall project entailed analyzing data obtained from a series of focus groups conducted in 2008 (which were also used in developing the survey instrument), a nationwide telephone survey with an oversampling in 16 states where access programs are currently under way, 16 state reports for those oversampled states, and a final national report of the results with recommendations for implementing effective access programs. This report discusses the Arizona survey only. Specific aspects of the research methodology for the Arizona survey are discussed below.

For this survey, telephones were selected as the preferred sampling medium because of the near universality of telephone ownership among Arizona hunters. Additionally, telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective. Telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires. 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 natural resources and outdoor recreation.

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 project briefings 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 instrument, reading of the

survey instrument, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data.

The telephone survey questionnaire was developed cooperatively by Responsive Management, the National Shooting Sports Foundation (NSSF), and the participating state agencies and organizations represented in the listing on the acknowledgments page, including the Arizona Game and Fish Department (AGFD). The survey questionnaire was reviewed by numerous university professors and staff with knowledge of surveying methods, as well as many fish and wildlife agency personnel with knowledge of hunting access issues. Responsive Management conducted a pre-test of the questionnaire to ensure proper wording, flow, and logic in the survey. The questionnaire included some "screener" questions; those who had *not* hunted at least once in the past 5 years were not interviewed.

The survey instrument included questions about the following hunting access programs that are used in Arizona (descriptions of the programs are included as Appendix A):

- The Open Fields program
- The Conservation Reserve Program
- The U.S. Fish and Wildlife Service's Waterfowl Production Areas
- The wheretohunt.org website
- The huntinfo.com website
- The huntandshoot.org website
- Arizona's Heritage Access Program
- Arizona's Adopt-A-Ranch Program

The sample was of hunting license holders representative of hunters in Arizona overall. The sample was obtained from the AGFD.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week

and at different times of the day. The survey was conducted in May and June 2009. Responsive Management obtained a total of 811 completed interviews with Arizona licensed hunters.

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

Because the survey contained a large number of questions, and no single respondent could feasibly go through all the questions that would apply to him/her, some questions were asked only of a randomized portion of the sample. In other places, only certain respondents received some questions because the questions applied only to specific respondents (e.g., only those who were aware of a given program were asked to rate its effectiveness).

After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. The analysis of data was performed using Statistical Package for the Social Sciences (SPSS) as well as proprietary software developed by Responsive Management.

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.
- 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."
- Many closed-ended questions (but not all) are in a scale, such as excellent-good-fair-poor.
- 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).

The research team sought to learn about access problems of hunters, but conjectured that hunting access problems could vary from species to species. To ensure that the researchers would know which species were associated with various results, the survey asked respondents to answer most questions about the species they *primarily* hunt. For applicable questions, QPL inserted the respondent's primary species name into the question. For instance, Question 55 would have been "Overall, how would you rate access to hunting lands in Arizona for hunting white-tailed deer?" for those who primarily hunt white-tailed deer, and it would have been "Overall, how would you rate access to hunting lands in Arizona for hunting waterfowl?" for those who primarily hunt waterfowl. In the graphs, the questions show where the species name would be automatically inserted into the question by the QPL program. For instance, the graph for Question 55 is shown as "Overall, how would you rate access to hunting lands in Arizona for hunting (species)?"

Occasionally, results may not sum to exactly 100% because of rounding. Additionally, rounding on the graphs 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).

SPECIES HUNTED, HUNTING AVIDITY, AND TRENDS IN HUNTING PARTICIPATION

- About a quarter of Arizona licensed hunters primarily hunted elk (26%) in the past 12 months, followed in popularity by mule deer (18%), white-tailed deer (15%), and upland game birds (10%). Note that the question asked respondents to name the *single* species they *primarily* hunt, not all species they hunt.

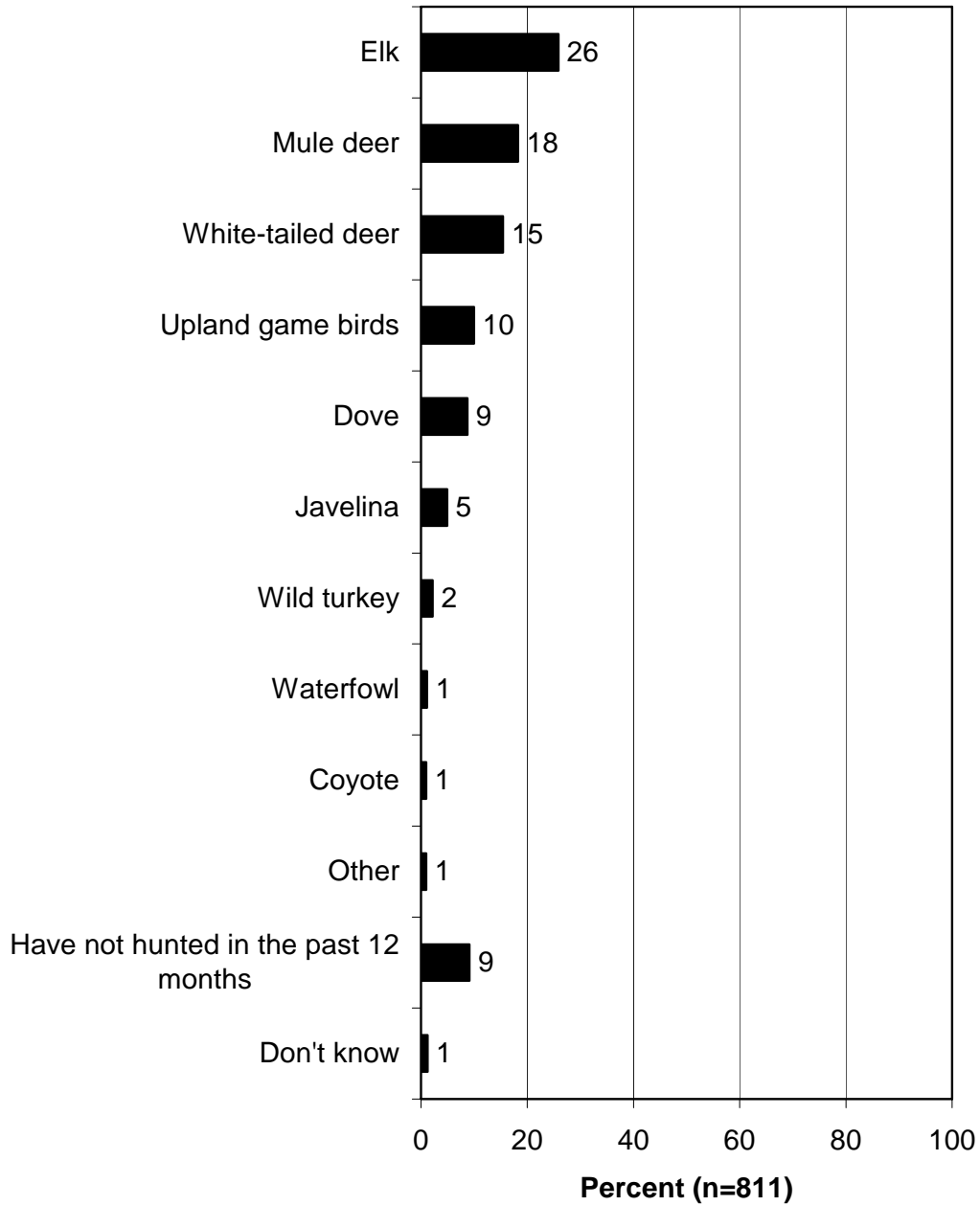
- A graph shows the typical number of days that hunters hunt in Arizona annually. The median is 10 days.

- Hunters in the survey were asked to indicate how long they have been hunting. Responses are well-distributed among the number of years, as shown in the graph; the median is 30 years.

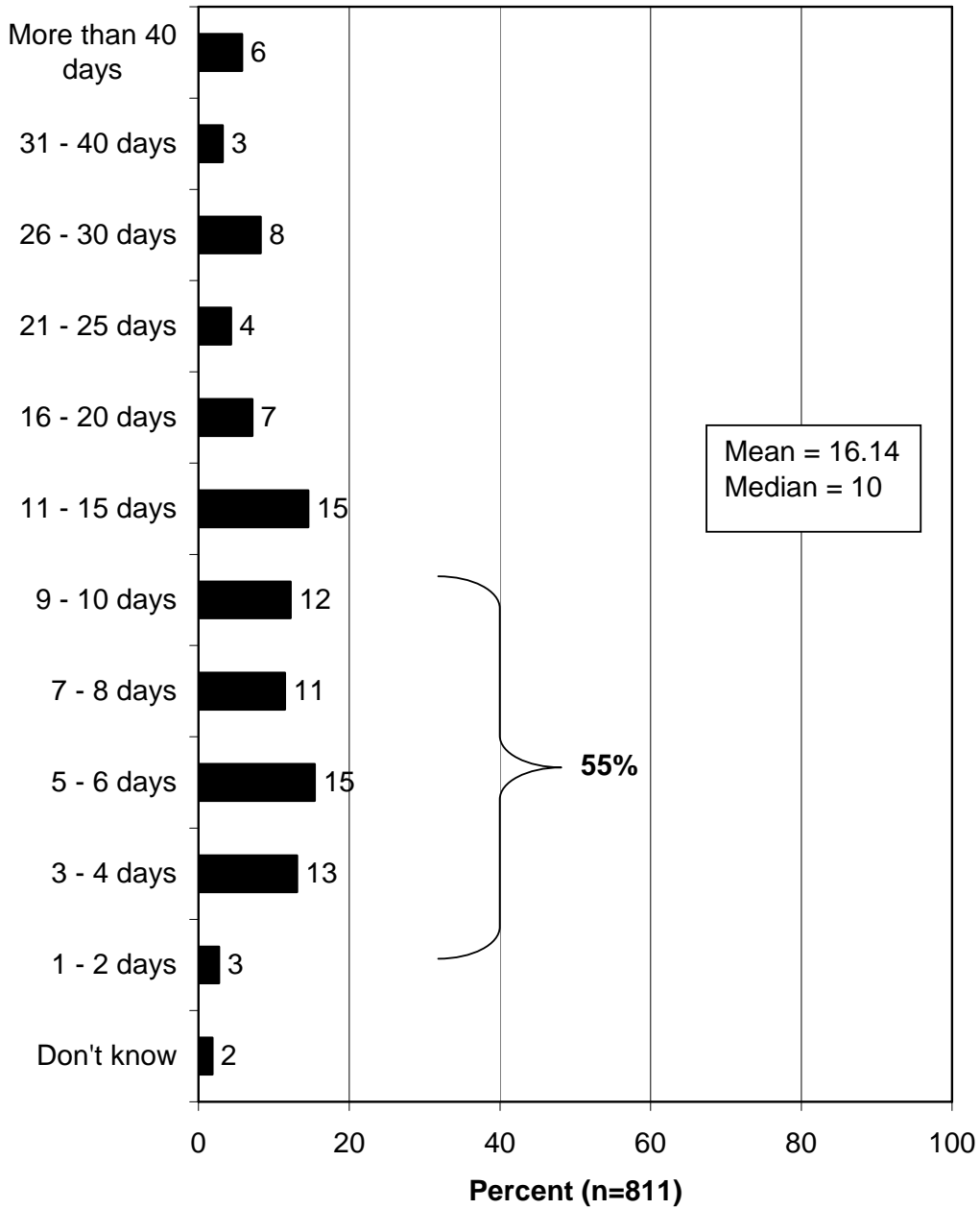
- Hunters in the survey were asked to indicate how many of the past 5 years they had hunted. The large majority of those hunters (62%) are quite avid, having hunted all 5 of the past 5 years.

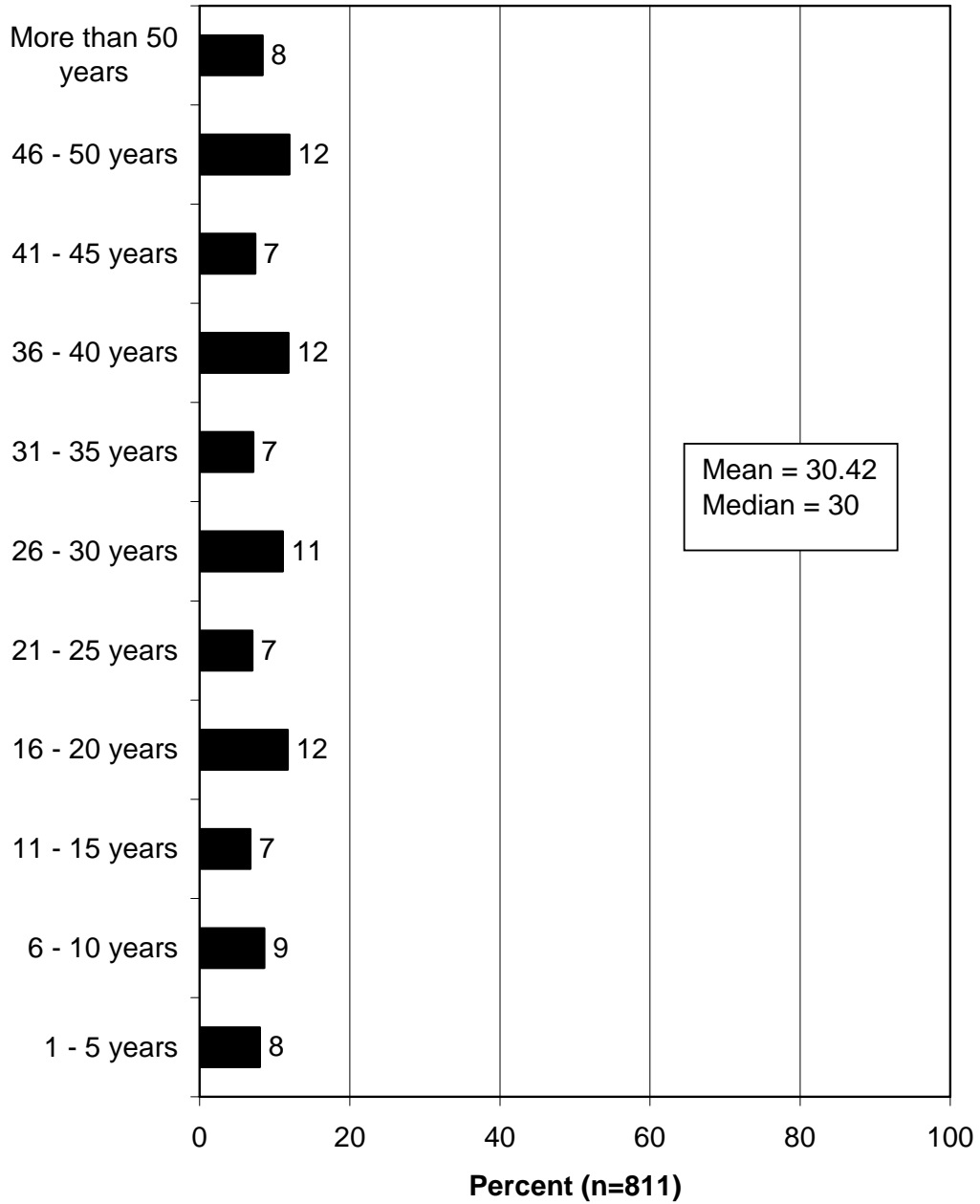
- Hunters were asked to indicate whether their hunting participation in Arizona has increased, remained the same, or decreased over the past 5 years: while they most commonly say that it has stayed the same (43%), the percentage who say it has decreased (34%) exceeds the percentage who say it has increased (17%).

Q23. What single species did you primarily hunt in Arizona in the past 12 months?

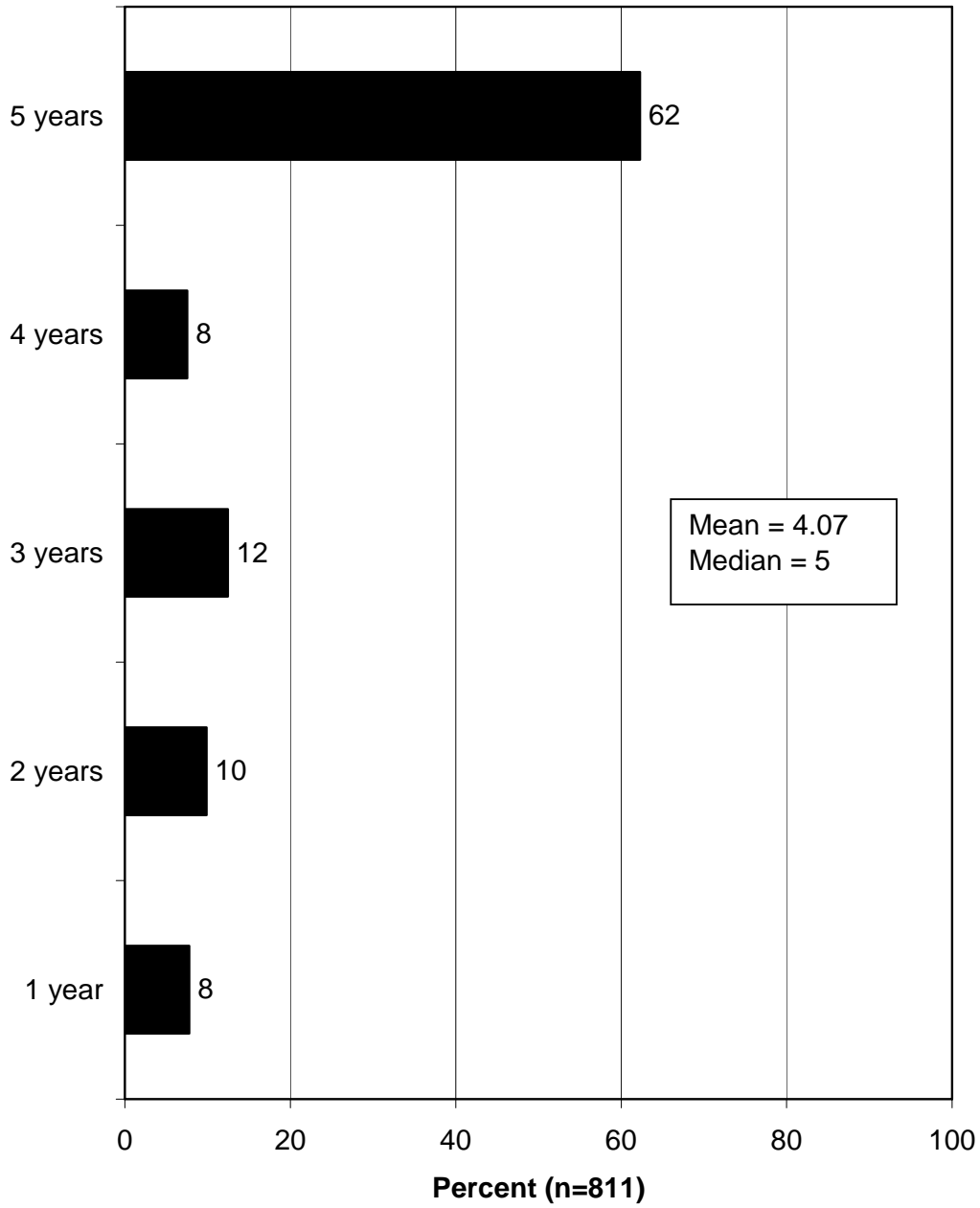


Q26. About how many days do you usually hunt each year in Arizona?

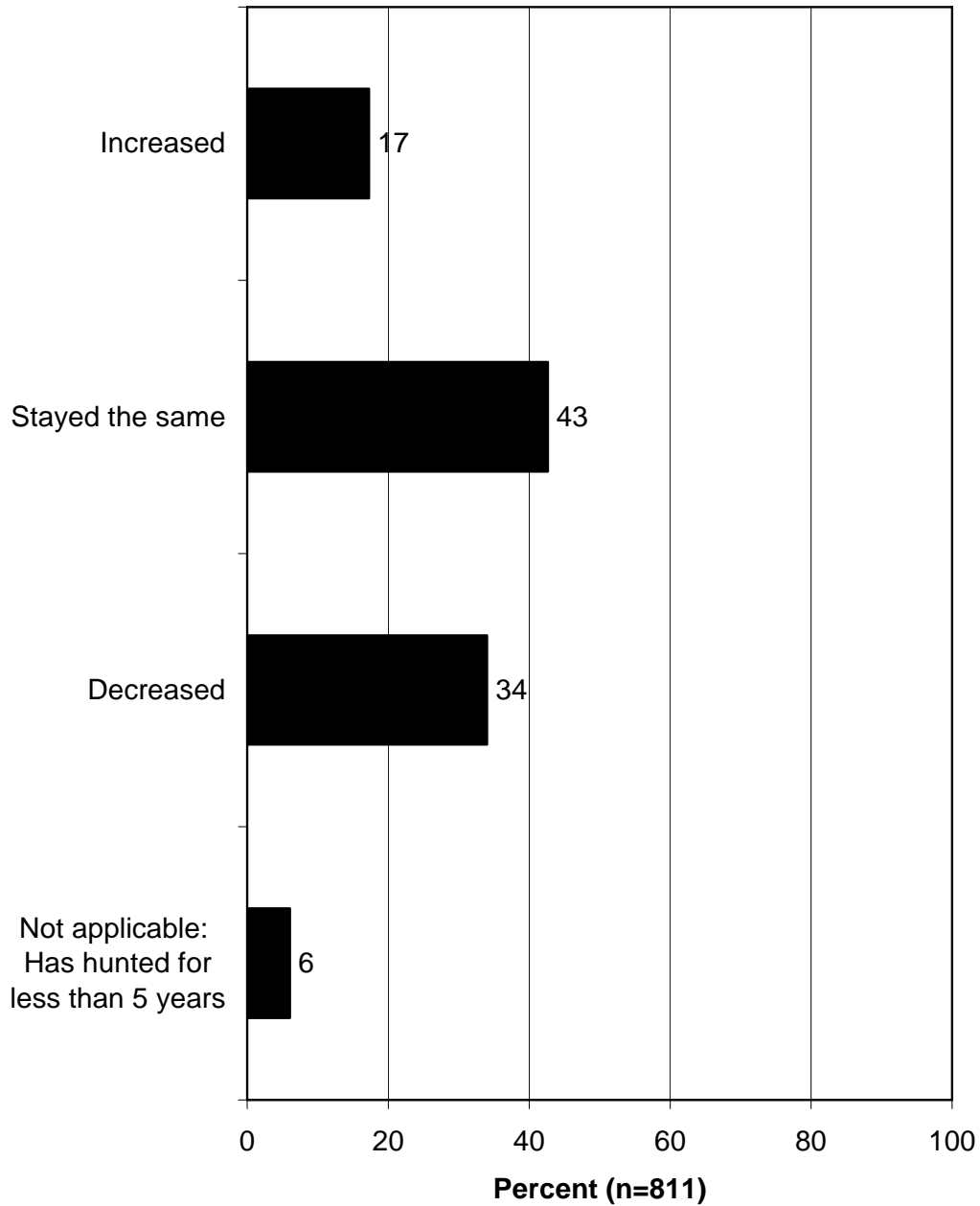


Q15. How many years have you hunted?

Q19. How many of the past 5 years have you hunted in Arizona?



Q30. Would you say your hunting participation in Arizona has increased, stayed the same, or decreased over the past 5 years?



LOCATIONS OF HUNTING ACTIVITIES

- Hunters in Arizona overwhelmingly more often hunt their primary species on public land (82% hunt on public land mostly, and 97% do so at least half the time) than private land (3% hunt on private land mostly, and 18% do so at least half the time).
 - A crosstabulation found that dove hunters have the greatest propensity to hunt mostly on private land. Overall, these differences on this question are statistically significant.

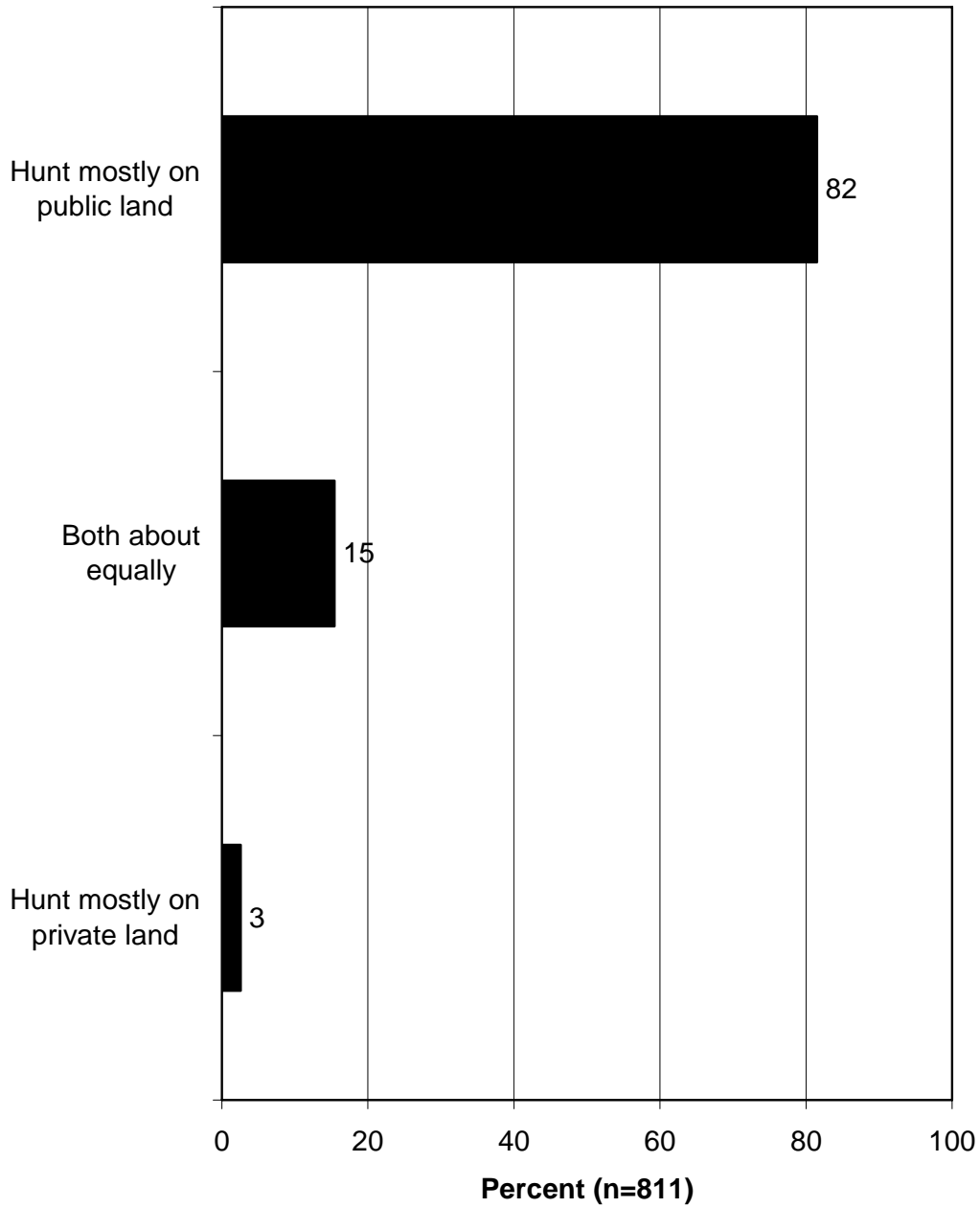
- Another question has implications regarding how much hunters need to find access to hunting lands. Hunters more commonly say that they mostly hunt their primary species on the same land each year (46%) than say that they hunt it on different lands each year (15%).

- In a crosstabulation of hunting on public/private land and hunting on the same/different lands (the questions discussed above), the sample could be divided into 9 groups (as shown in the matrix below), with the largest portion being those who primarily hunt on public/same lands (39.1%). (For readability, the data presented in the matrix below are also shown in a graph, with the size of the bars representing their proportion of the whole sample.)

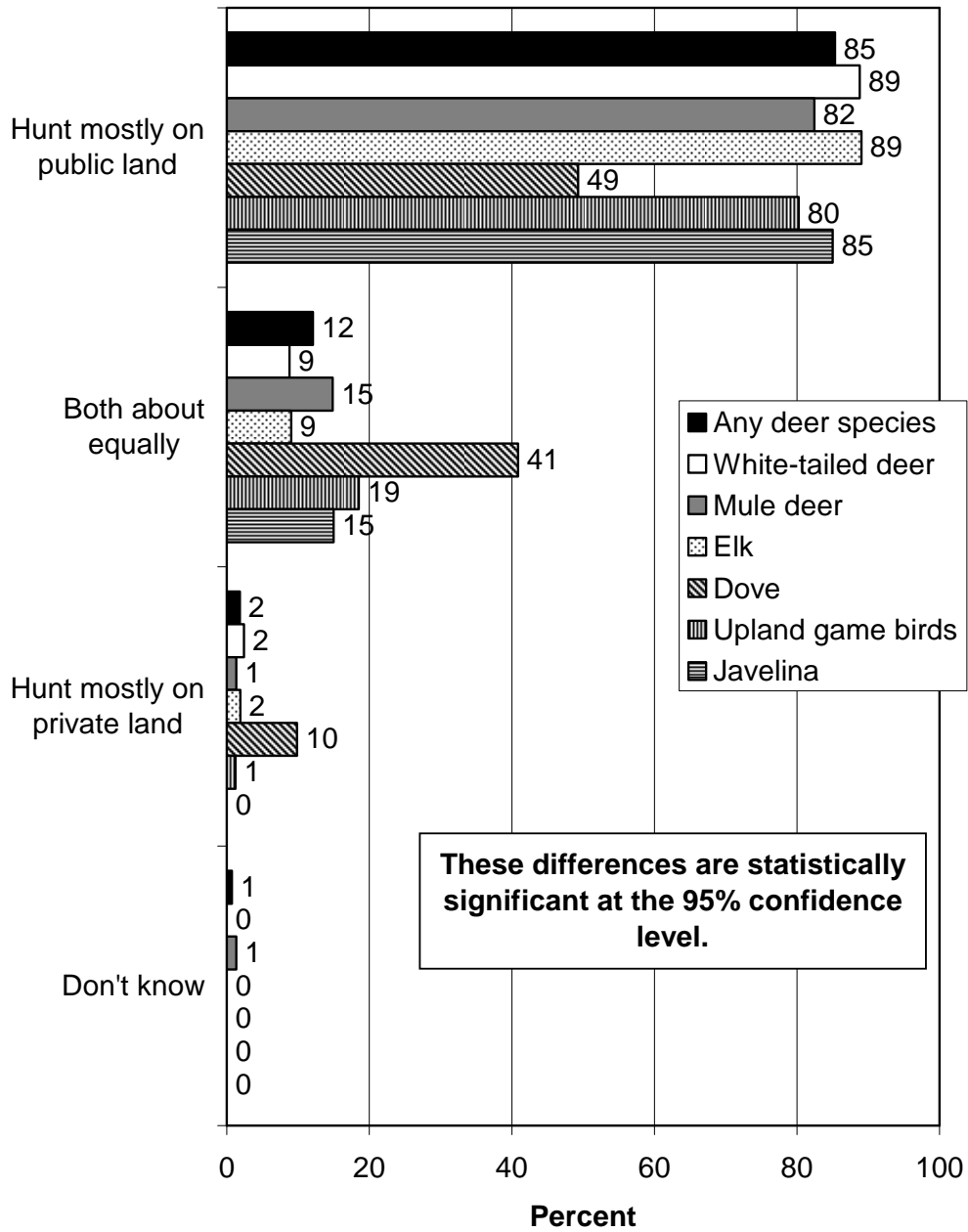
	Hunts mostly on <i>public</i> land (81.6%)	Hunts public and private lands both about <i>equally</i> (15.7%)	Hunts mostly on <i>private</i> land (2.7%)
Hunts mostly on the <i>same</i> land each year (47.5%)	Public/Same 39.1%	Both/Same 6.9%	Private/Same 1.5%
Hunts same and different lands both about <i>equally</i> (36.8%)	Public/Both 29.3%	Both/Both 6.7%	Private/Both 0.8%
Hunts mostly on <i>different</i> lands each year (15.7%)	Public/Different 13.2%	Both/Different 2.2%	Private/Different 0.4%

- The survey asked hunters to indicate how far they typically travel from home to hunt their primary species, with a wide spread of answers: about a third (32%) travel no more than 50 miles to do so; however, about 1 in 5 (20%) travel more than 150 miles. The median distance is 100 miles.
 - Another question explored the modes of transportation that hunters use to access the land on which they hunt: 93% use a car or truck (by far the top mode), distantly followed by walking (26%) and ATV (17%). Note that hunters could name more than one mode.

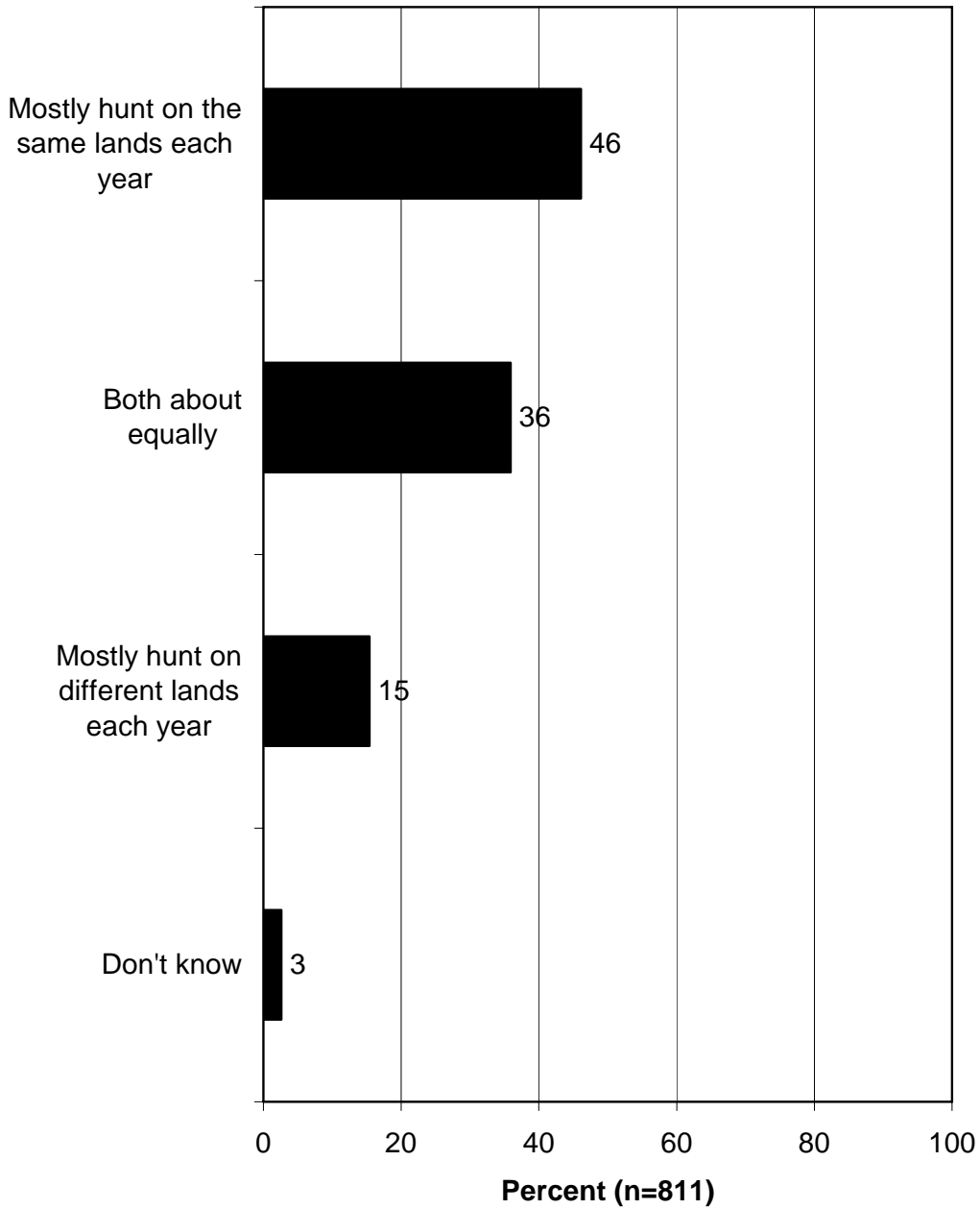
Q58. For (species) hunting, would you say you hunt mostly on public land, mostly on private land, or on both about equally, in Arizona?



Q58. For (species) hunting, would you say you hunt mostly on public land, mostly on private land, or on both about equally, in Arizona?

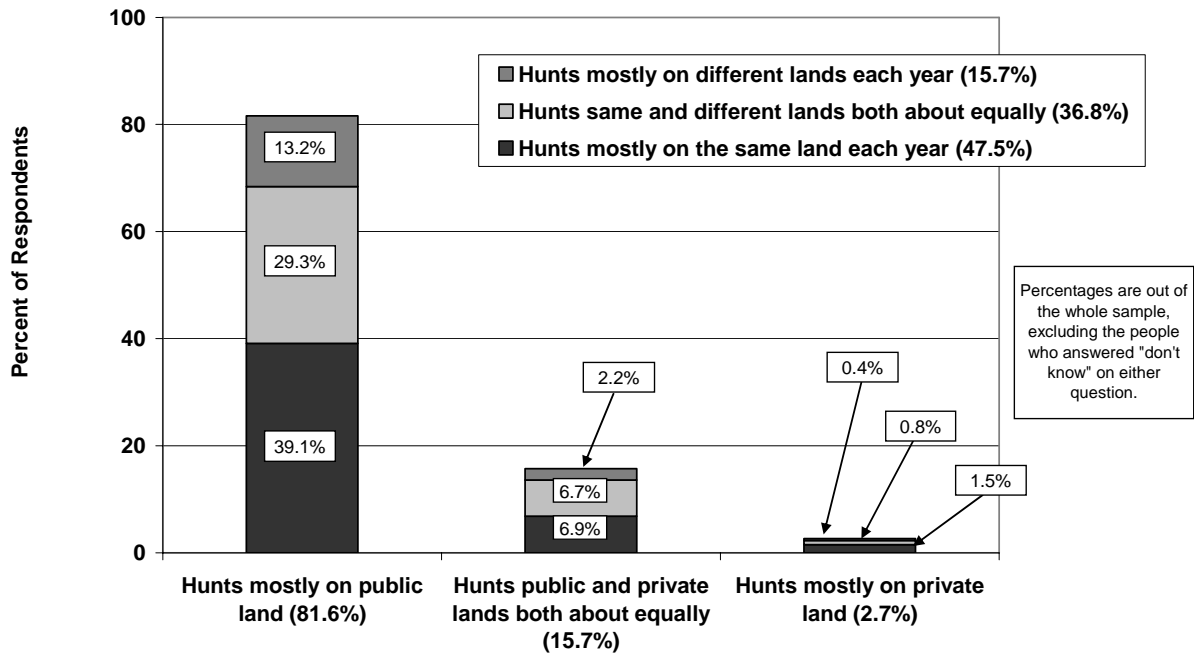


Q57. When hunting in Arizona for (species), do you mostly hunt on the same lands each year, mostly hunt on different lands each year, or both about equally?

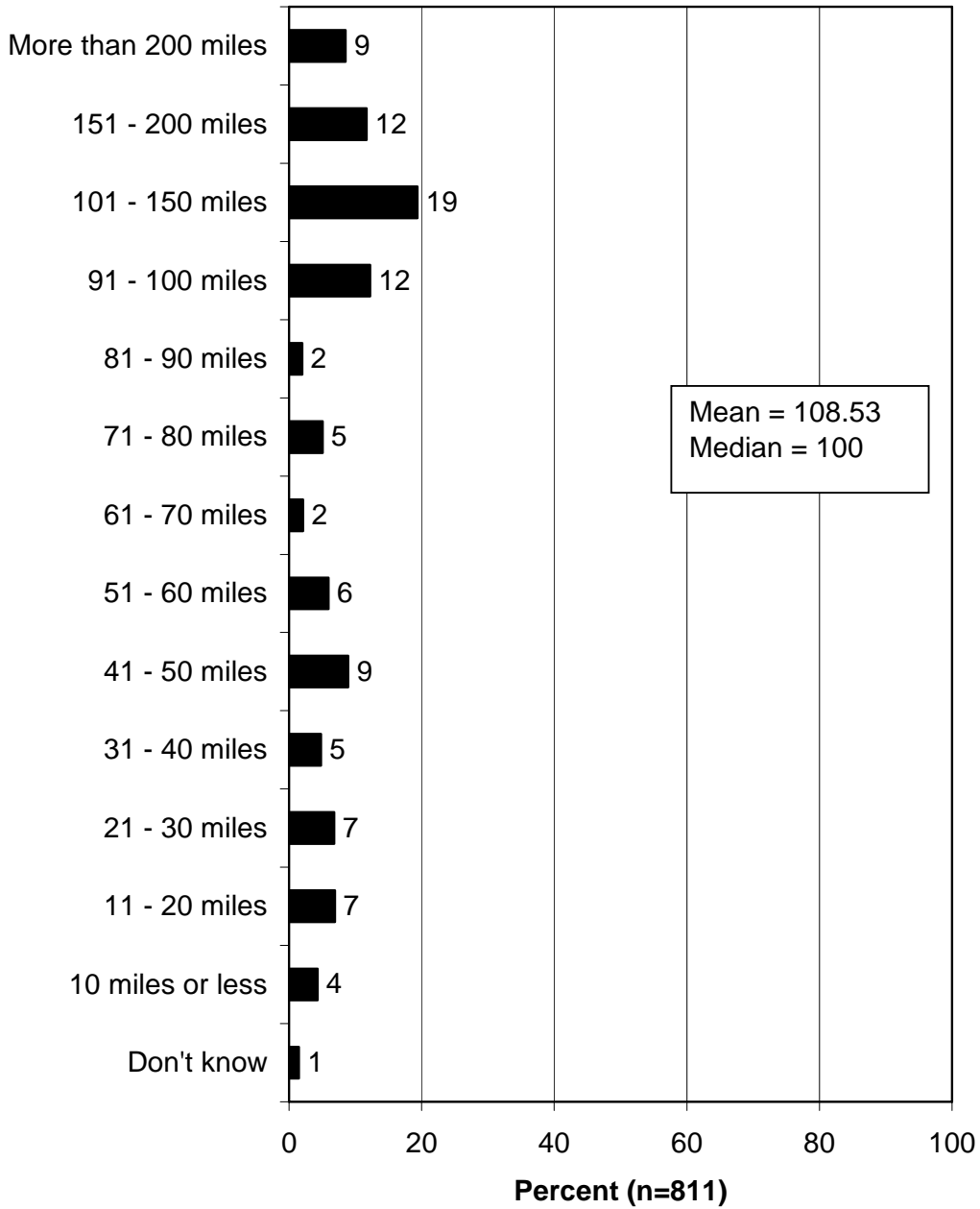


- The graph below shows a combination of Question 57 (hunts on same or different lands) and Question 58 (hunts on public or private lands).

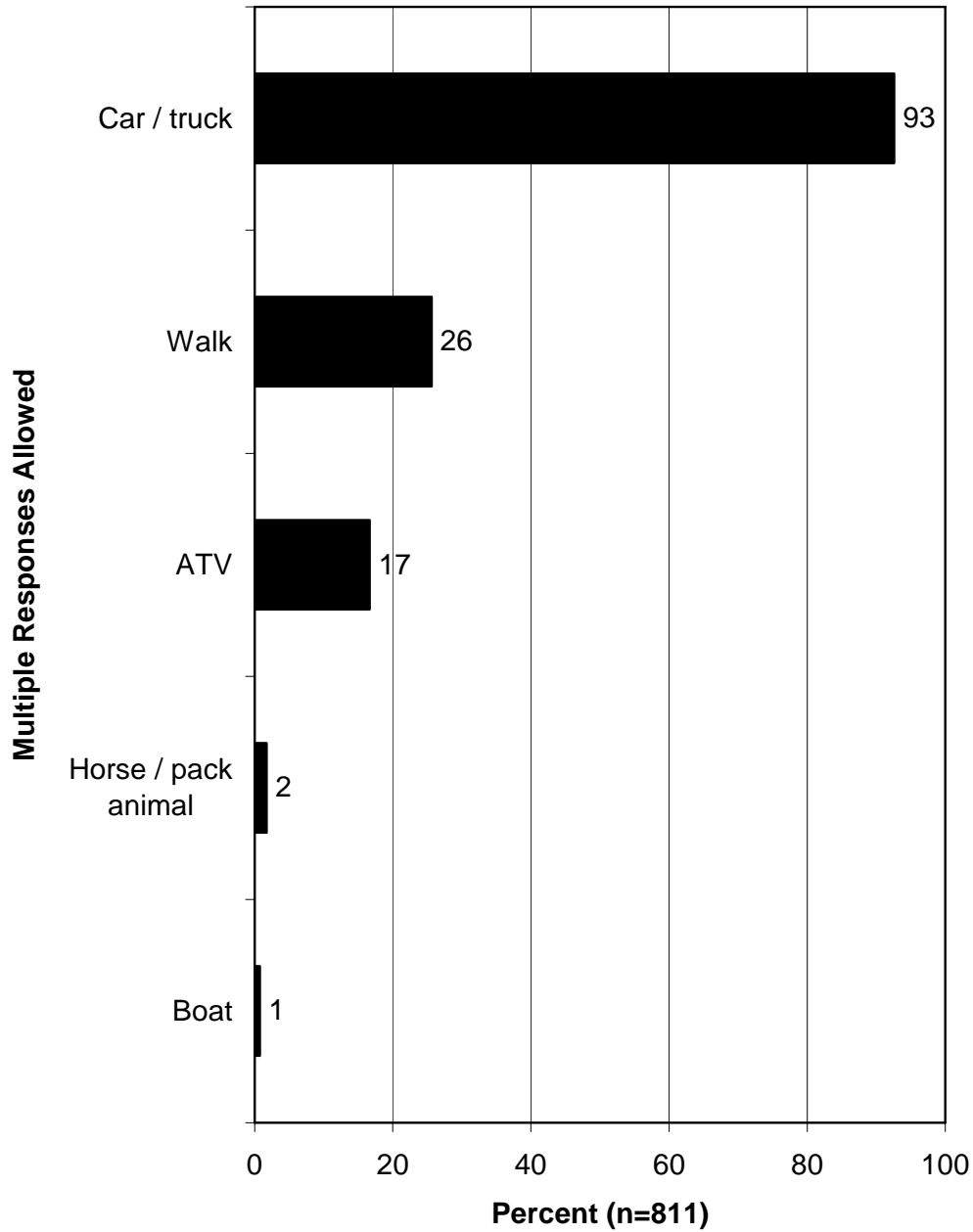
Q57/58. Hunting on public versus private lands and hunting on same versus different lands.



Q85. How far do you usually travel from home, one way, in miles, to hunt in Arizona?



Q89. Which modes of transportation do you use to access the land you hunt on?



FACTORS CONSIDERED IN CHOOSING LANDS ON WHICH TO HUNT

- The survey asked 11 questions about the importance of various factors in hunters' decisions regarding where to hunt their primary species (shown in Text Box 1 below). For each factor, they were asked if it was *very* important, *somewhat* important, or *not at all* important. Note that the starting point in going through the list in each interview was randomized to eliminate order bias. The results of the series of questions were then ranked.
 - Three factors stand out markedly more important than the rest in the ranking by the percentage saying the factor is *very* important: that they are familiar with the land (65% say this is *very* important), that the land is not crowded with other sportsmen (60%), and that the land is public land (59%).
 - Three more are in a middle tier: that the land is easy to access by foot (44%), that the land is easy to access by car or truck (41%), and that ATVs/off-road vehicles are allowed (33%).
 - Other graphs show the ranking by the percentage saying the factors are *very* or *somewhat* important, as well as *not at all* important.

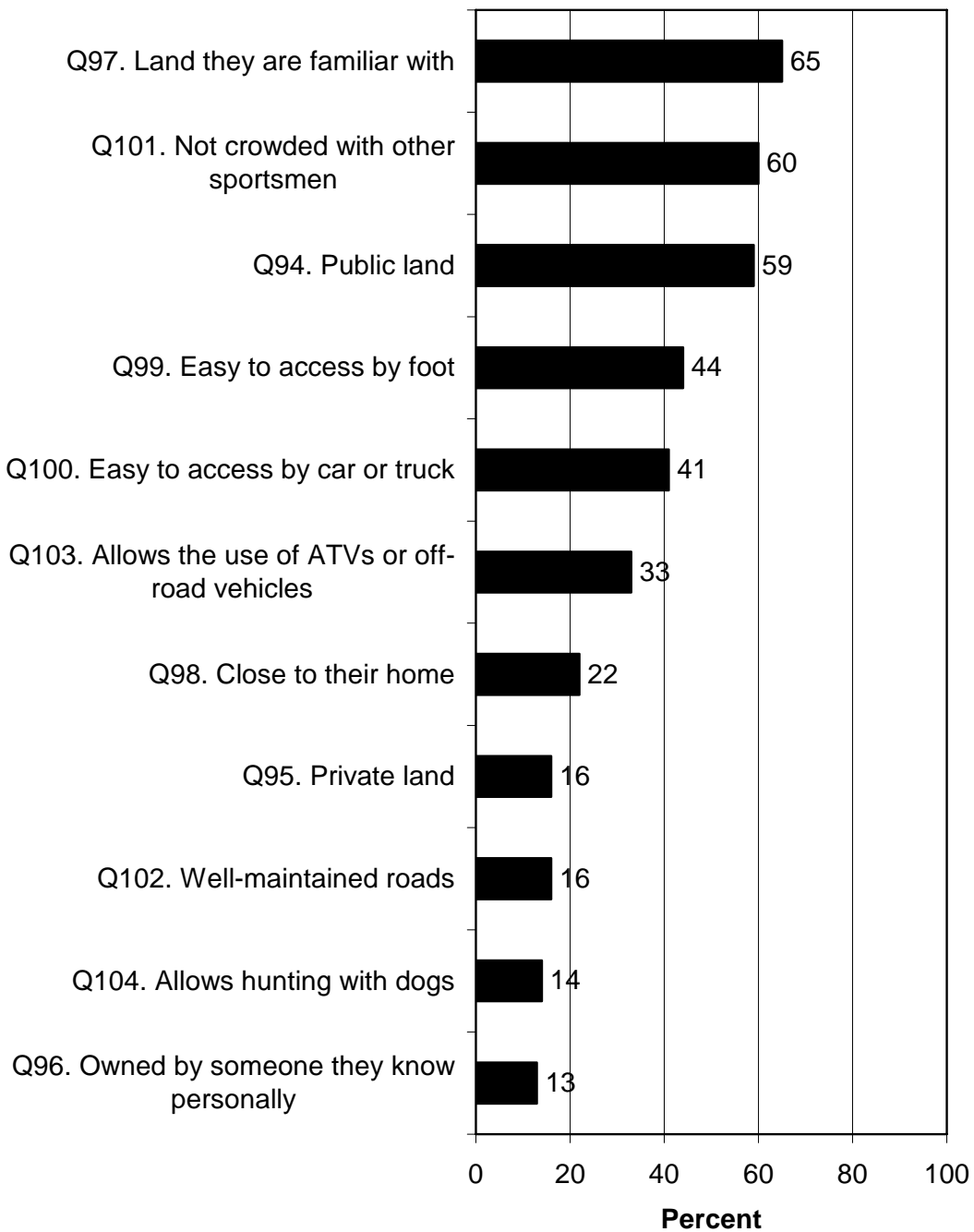
TEXT BOX 1

Factors in hunters' decisions regarding where to hunt that were asked about in the survey:

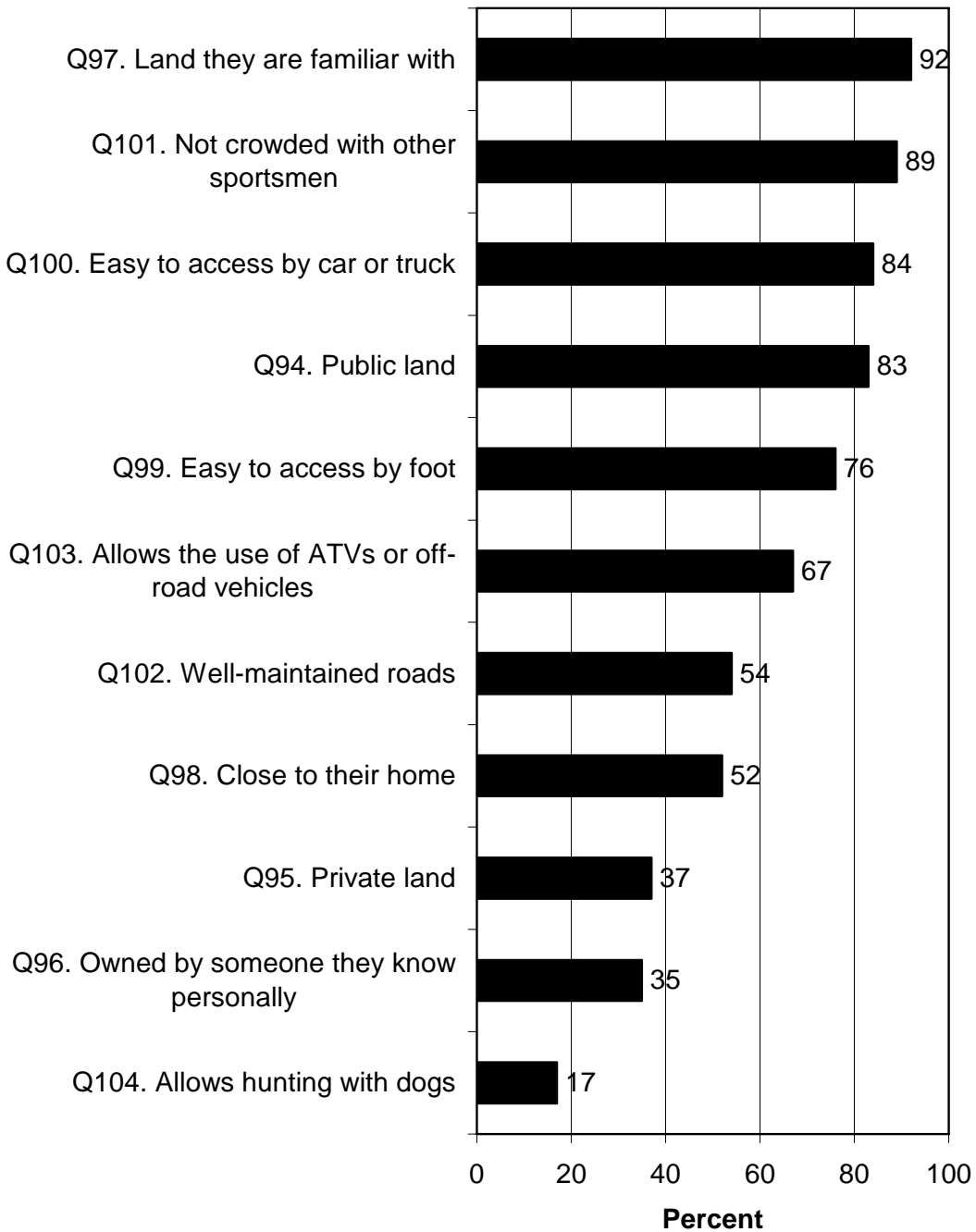
- That the land is public land
- That the land is private land
- That the land is owned by someone the respondent knows personally
- That the land is familiar to the respondent
- That the land is close to the respondent's home
- That the land is easy to access by foot
- That the land is easy to access by car or truck
- That the land is not crowded with other sportsmen
- That the land has well-maintained roads
- That the respondent can use ATVs or off-road vehicles
- That the land allows hunting with dogs

- After the series of questions discussed above, the survey asked hunters if there are any other factors that are important in their decision making regarding where to hunt. Two additional factors were commonly mentioned: the amount of game available and the hunter's success at drawing a tag.

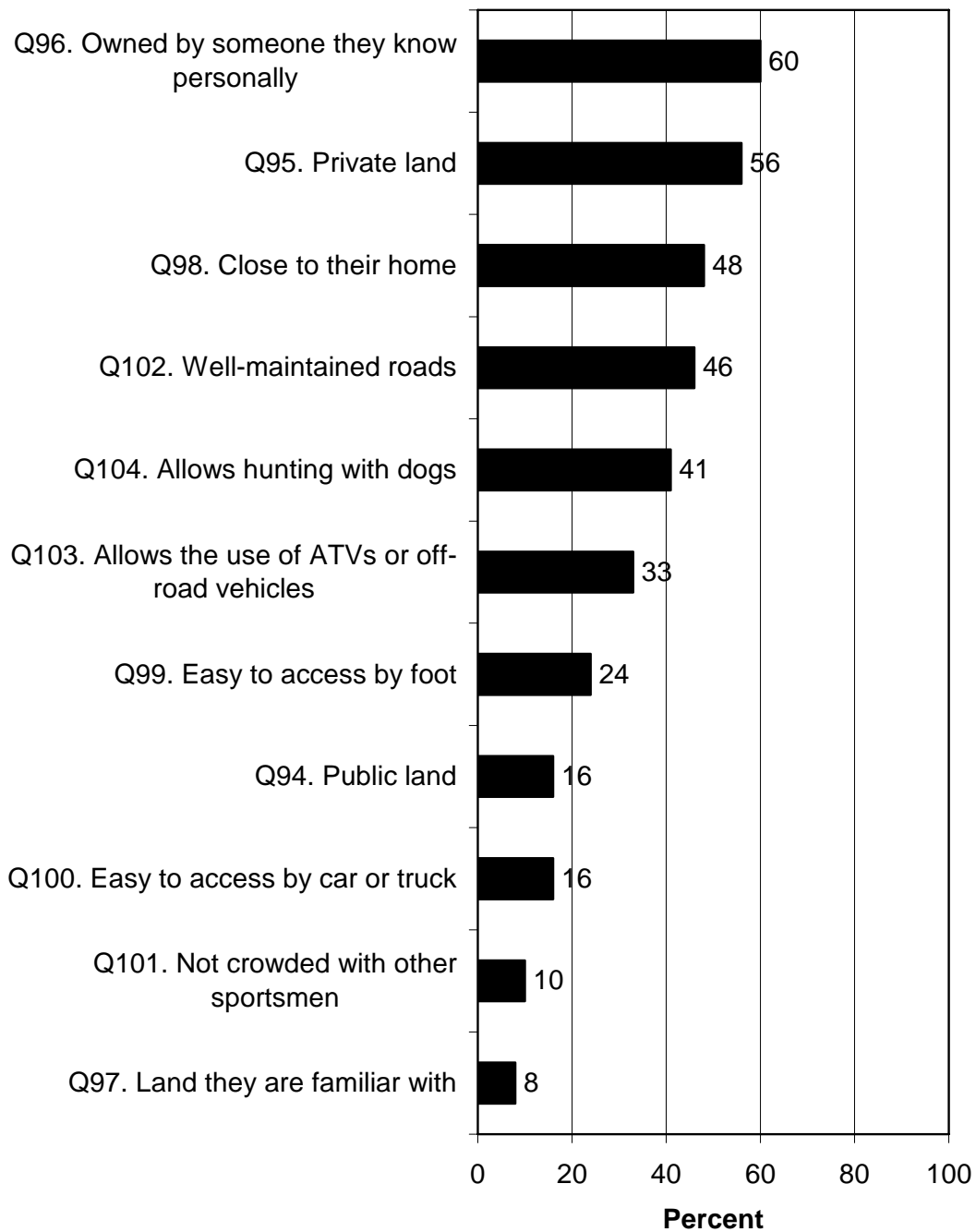
Percent who indicated that the following are very important when deciding where to hunt (species) in the past 12 months in Arizona.



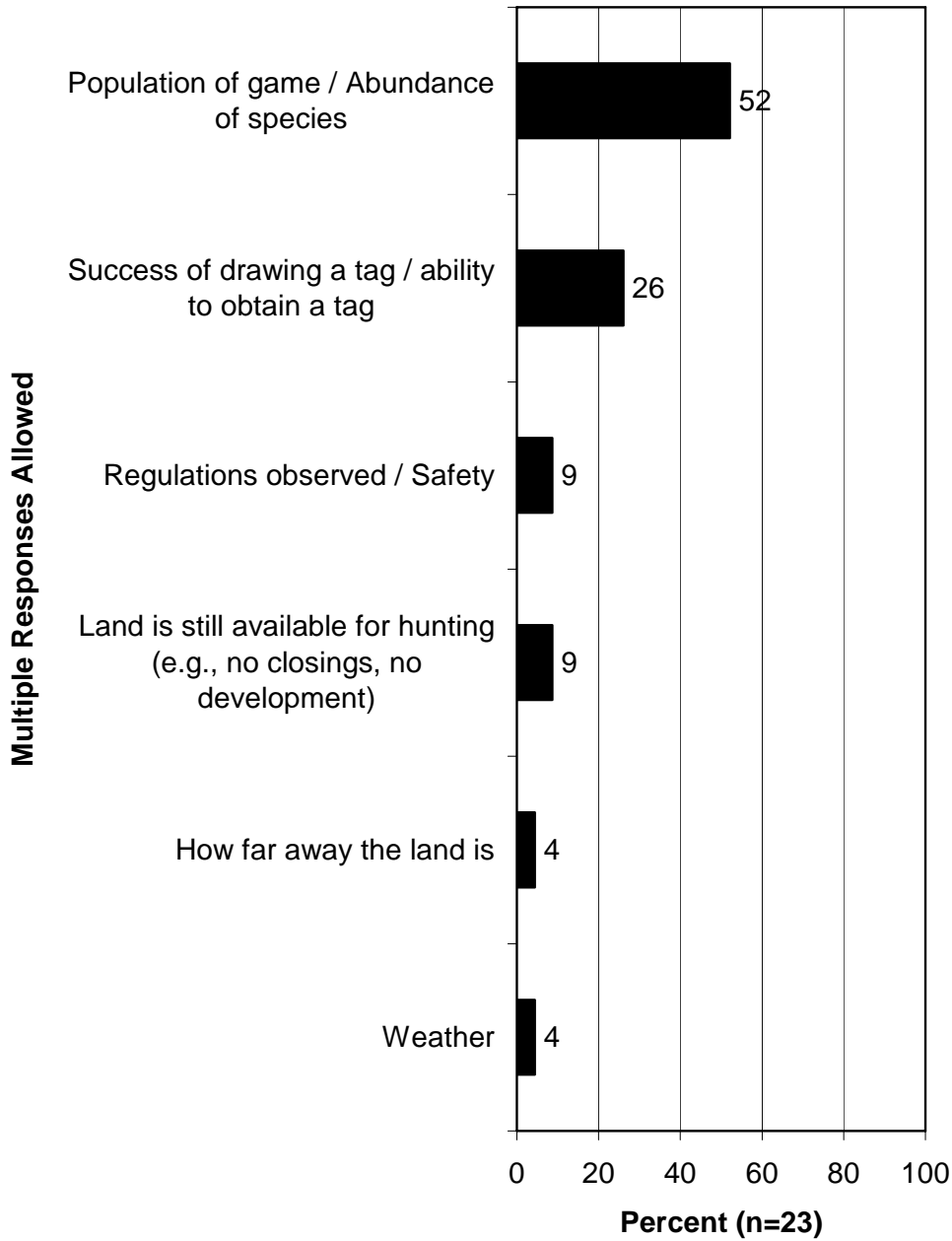
Percent who indicated that the following are very or somewhat important when deciding where to hunt (species) in the past 12 months in Arizona.



Percent who indicated that the following are not important at all when deciding where to hunt (species) in the past 12 months in Arizona.



Q106. What other factors are important to you when deciding where to hunt? (Asked of those who said that there are other factors that are important to them when deciding where to hunt.)



CONSTRAINTS TO HUNTING PARTICIPATION

- A direct question asked hunters whether lack of hunting access had caused them *not* to hunt a particular species as much as they would have liked in the past 5 years. A little more than a third of them (37%) agreed that it had done so. In follow-up in an open-ended question, the top-named access problems were land blocked by private land, road closures, private land posted, public land closed, being unable to get tags, and that development had closed the area (the six reasons that were markedly more important than the rest).
 - In follow-up, hunters were asked to name the species that they had not hunted as much as they would have liked because of access problems. The top-named species is mule deer (40% among those who agreed to the above question), closely followed by elk (32%) and white-tailed deer (28%), and more distantly followed by upland game birds (15%) and dove (11%). Note that hunters could name more than one species on this question.

- The survey asked a series of 25 questions about possible hunting access constraints (shown in Text Box 2 on the following page). For each possible constraint, the survey asked hunters if it had been, over the past 5 years, a *major* problem, a *moderate* problem, a *minor* problem, or *not at all* a problem. The starting point in going through the list in each interview was randomized. The results of the series of questions were then ranked.
 - The potential constraints that had the highest percentage of hunters saying that the constraint was a *major* problem were the cost of gas (22%), housing/other development making land not huntable (20%), less land on which to hunt due to private land ownership changes (14%), less land on which to hunt due to development (11%), not being sure of the boundaries of huntable land (11%), and private land blocking access to public land for hunting (11%). All of these had more than a tenth of respondents saying it was a *major* problem.
 - A graph shows the ranking by the percentage giving a rating of *major*, *moderate*, or *minor* problem. The six problems above were again at or near the top.
 - Graphs in this series also show the ranking by the percentage saying the constraint was *not* a problem.

TEXT BOX 2**Possible constraints to hunting access that were asked about in the survey:**

Road closures
Less land on which to hunt
Less land on which to hunt because the land use has changed
Less land on which to hunt due to private land ownership changes
Not having enough information about where to hunt
The information about where to hunt being inaccurate
Not having ATV access in general
Not being able to retrieve the hunt harvest because of ATV restrictions
Having maps that show huntable land but being unable to locate that land on the ground
Being unable to locate a road or other access route to huntable land
Not being sure of the boundaries of huntable land
Having to travel too far to hunt
Being denied permission to hunt on somebody else's land
Not being able to find the landowner to ask permission
Finding previously open private land posted or closed by the landowner
Finding previously open private land sold and posted or closed by the new landowner
Finding previously open private land closed because a club has now leased it
Private land blocking access to public land for hunting
Poor maintenance of roads or trails
The cost of gas
Not being able to find a good place to park the vehicle
Not being able to find a place to launch a boat
Housing or other development making land not huntable
Information from the Arizona Game and Fish Department being out of date
Access or leasing fees being expensive

- A follow-up question to one of the questions within the aforementioned series asked those who indicated that road closures had been a problem to indicate how the road had been closed. Most commonly, the road was closed by a gate, although a few indicated that the road was closed by a berm or dirt pile, or the road was closed by a “No trespassing” sign posted by a landowner.
 - Most commonly, the road closures were perceived to be permanent rather than seasonal/temporary.
 - Another follow-up question asked for the location/type of the closed road. Most commonly, the closed roads were public—National Forest roads or BLM roads.

- Another follow-up question within the above series was asked of those who indicated that not being able to retrieve their harvest because of ATV restrictions had been a problem (14% indicated that this was a problem). The follow-up question asked if they agreed or disagreed

that not being able to retrieve game with an ATV had caused them to hunt less than they would otherwise have liked to do, and 44% agreed (6% of hunters overall), while 55% disagreed. This suggests that ATV restrictions are *not* an important problem to the overwhelming majority of hunters, as only 14% indicated that ATV restrictions on retrieving game had been a problem, and, further, only 6% of hunters hunted less than they would otherwise because of ATV restrictions.

- A final follow-up question within the above series was asked of those who indicated that private land blocking access to public land had been a problem. The follow-up question asked how much of a problem was *intentional* blocking of public land by a private landowner, and 69% of those respondents indicated that private landowners *intentionally* blocking access was a problem.

- After the above series of questions, the survey then presented hunters a list of 16 problems with actions hunters may have had to take because of the problem (e.g., leaving a hunt area because of crowding from other recreationists). The list of problems is shown in Text Box 3 on the following page. For each possible problem, the survey asked hunters if it had been, over the past 5 years, a *major* problem, a *moderate* problem, a *minor* problem, or *not at all* a problem. The results of the series of questions were then ranked.
 - In looking at the ranking by the percentage saying the problem was *major*, *moderate*, or *minor*, the top problem is leaving an area because of crowding from other hunters (67%), more distantly followed by a middle-tier group: leaving an area because of crowding from other recreationists (44%), not being sure whether they are on public or private land (39%), not being sure whose land they were on (39%), leaving an area because they felt unsafe because of other hunters (36%), leaving an area because of irresponsible behavior of other hunters (36%), and not going on a hunt or changing locations because of access problems (33%)—each with at least a third saying it had been a problem.
 - Also shown is the graph in this series showing the ranking by the percentage saying the given item had been a *major* problem, as well as the ranking by the percentage saying the given item had been *not* a problem at all.

TEXT BOX 3**Possible problems regarding hunting access that were asked about in the survey:**

Not going on a hunt or changing locations because of access problems
Not going on a hunt or changing locations because the respondent felt that a leasing fee was too expensive
Not going on a hunt or changing locations because map information was wrong
Not going on a hunt or changing locations because access for those with disabilities was not available
Leaving an area because of crowding from other hunters
Leaving an area because of crowding from other recreationists
Leaving an area because respondent felt unsafe because of other hunters
Leaving an area because of the irresponsible behavior of other hunters
Not being sure whether he/she was on private or public land
Not being sure whose land he/she was on
Not hunting somewhere because of ATV restrictions
Not hunting somewhere because ATV use is allowed or not restricted
Being in an area where he/she was not sure which hunting regulations applied
Being confused by a state agency map that was hard to follow
Discontinuing a hunting club membership because he/she felt the fees were too expensive
Trying to join a hunting club that was already full

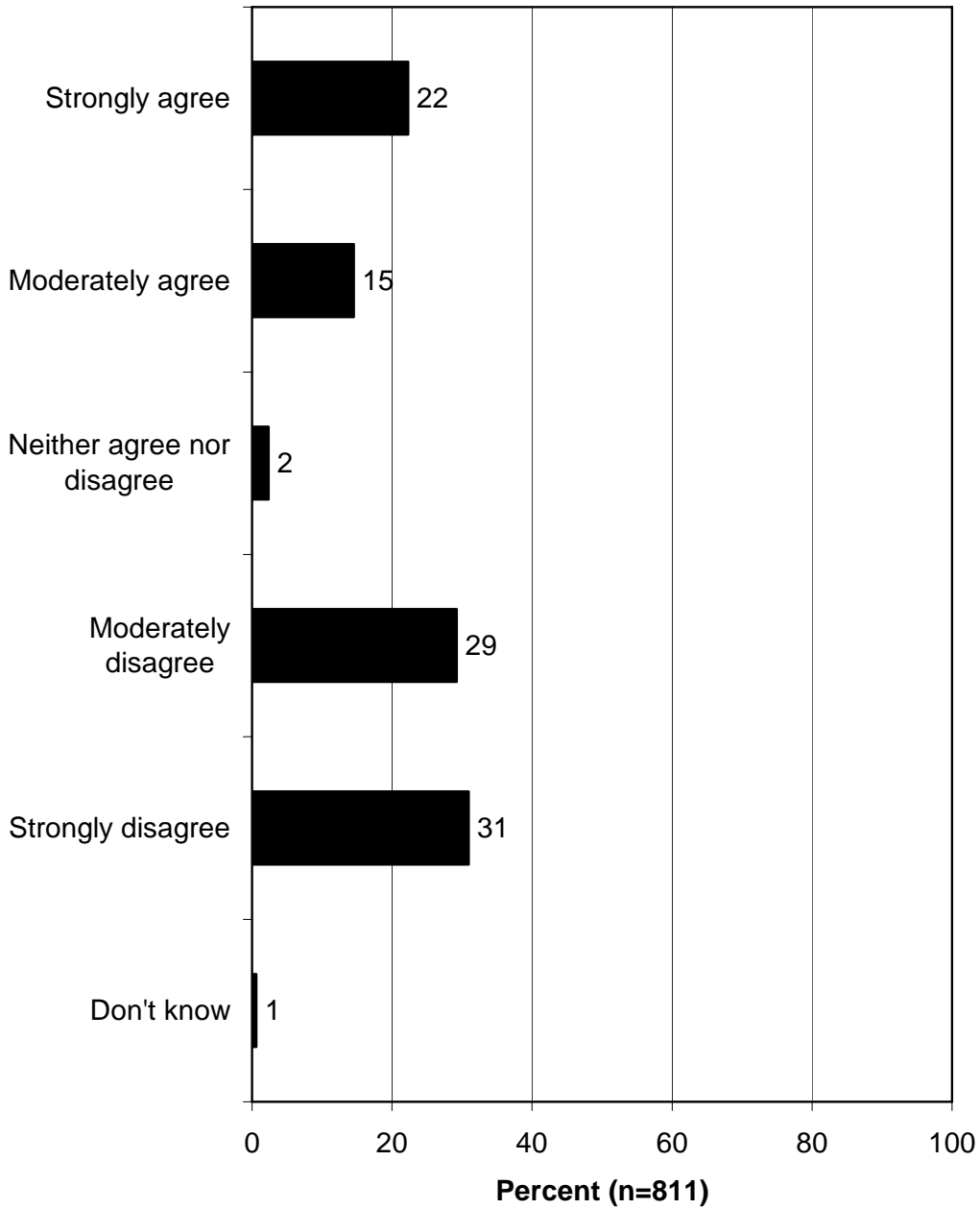
- The survey asked hunters a series of 10 questions about factors that may or may not influence access to hunting land in Arizona in general, regardless of whether their own participation is affected by it (shown in Text Box 4 on the following page). For each factor, the survey asked hunters if they think it is a *major* problem, a *moderate* problem, a *minor* problem, or *not at all* a problem. The starting point in going through the list in each interview was randomized to eliminate order bias. The results of the series of questions were then ranked.
- In looking at the ranking by the percentages saying the factor is a *major*, *moderate*, or *minor* problem, 3 of the 10 factors have about two-thirds or more saying it is a problem: public or private land tracts being broken up when sold or leased (71%), housing and commercial development (69%), and closures of public land by government agencies (65%).
 - Four more factors make a middle tier—each has a majority saying it is a problem: restrictions, such as ATV use or equipment restrictions, on public land (57%), private land posted or closed because the landowner is specifically concerned about liability (57%), lack of or unclear signs marking public hunting lands (55%), and poor management or allocation of uses of public land (51%).
 - Also shown is the graph in this series showing the ranking by the percentage saying the given factor is a *major* problem, as well as the ranking by the percentage saying the given factor is *not* a problem at all.

TEXT BOX 4**Factors that may or may not influence hunting access that were asked about in the survey:**

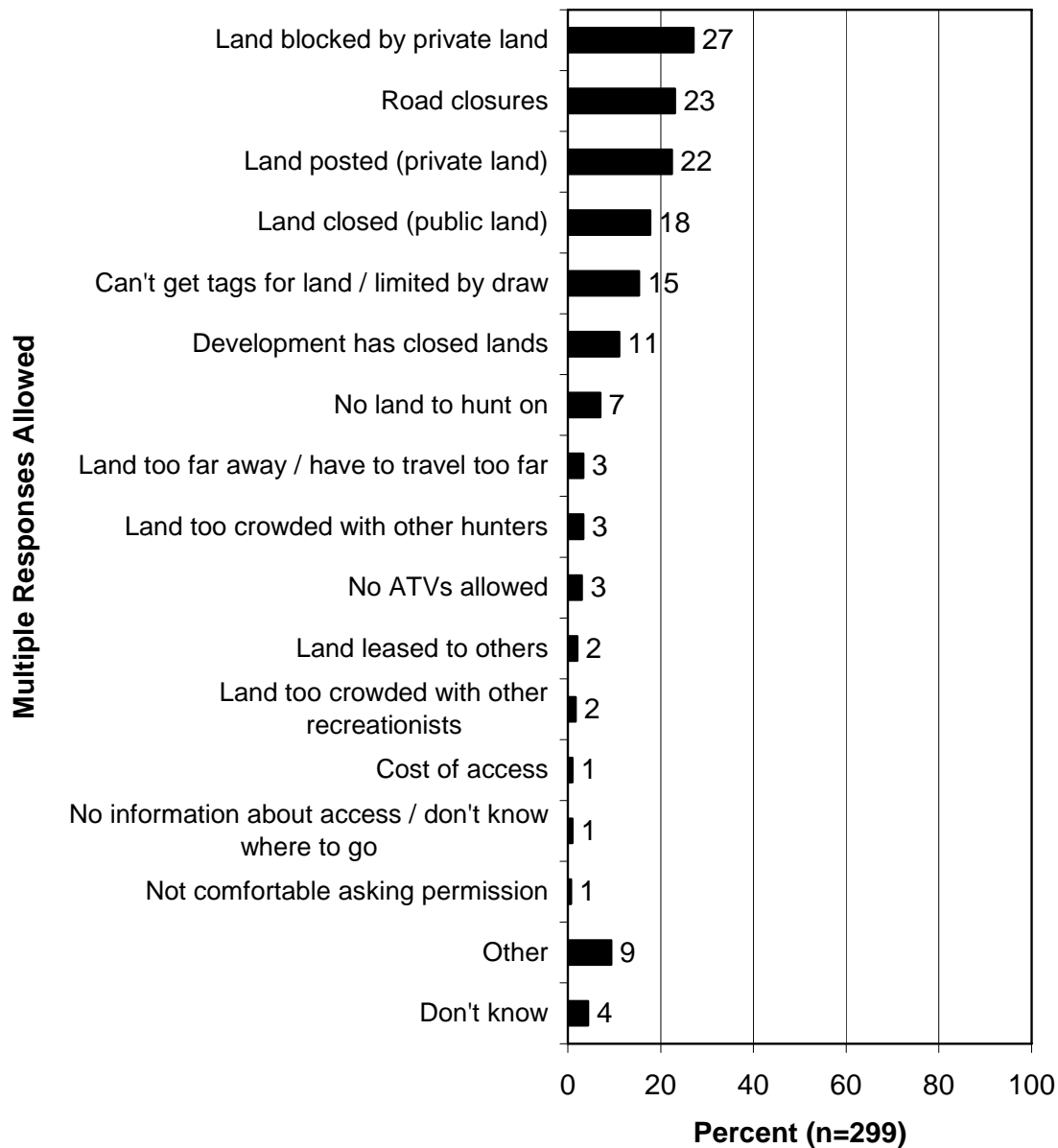
- Poor management or allocation of uses of public land
- Lack of or unclear signs marking public hunting lands
- Restrictions on public land
- Closures of public land by government agencies
- Not enough access to public lands for those with disabilities
- Housing and commercial development
- Gas and oil extraction on public lands
- Public or private land tracts being broken up when sold or leased
- Private land posted or closed because the landowner is specifically concerned about liability
- Management of land for purposes other than hunting, such as timber cutting

- When asked in an open-ended question if there were any things that had taken away from their enjoyment of hunting in Arizona, even if those things did not prevent them from actually going, 56% of hunters indicated that there had been. They most commonly named an access-related problem (18%), a regulation-related answer (12%), crowding (7%), and/or the cost of licenses (6%). Note that the graph breaks down the “access-related problems” category into specific access problems as subsets of access-related problems overall. Primary among those access problems is being unable to get tags (8%).

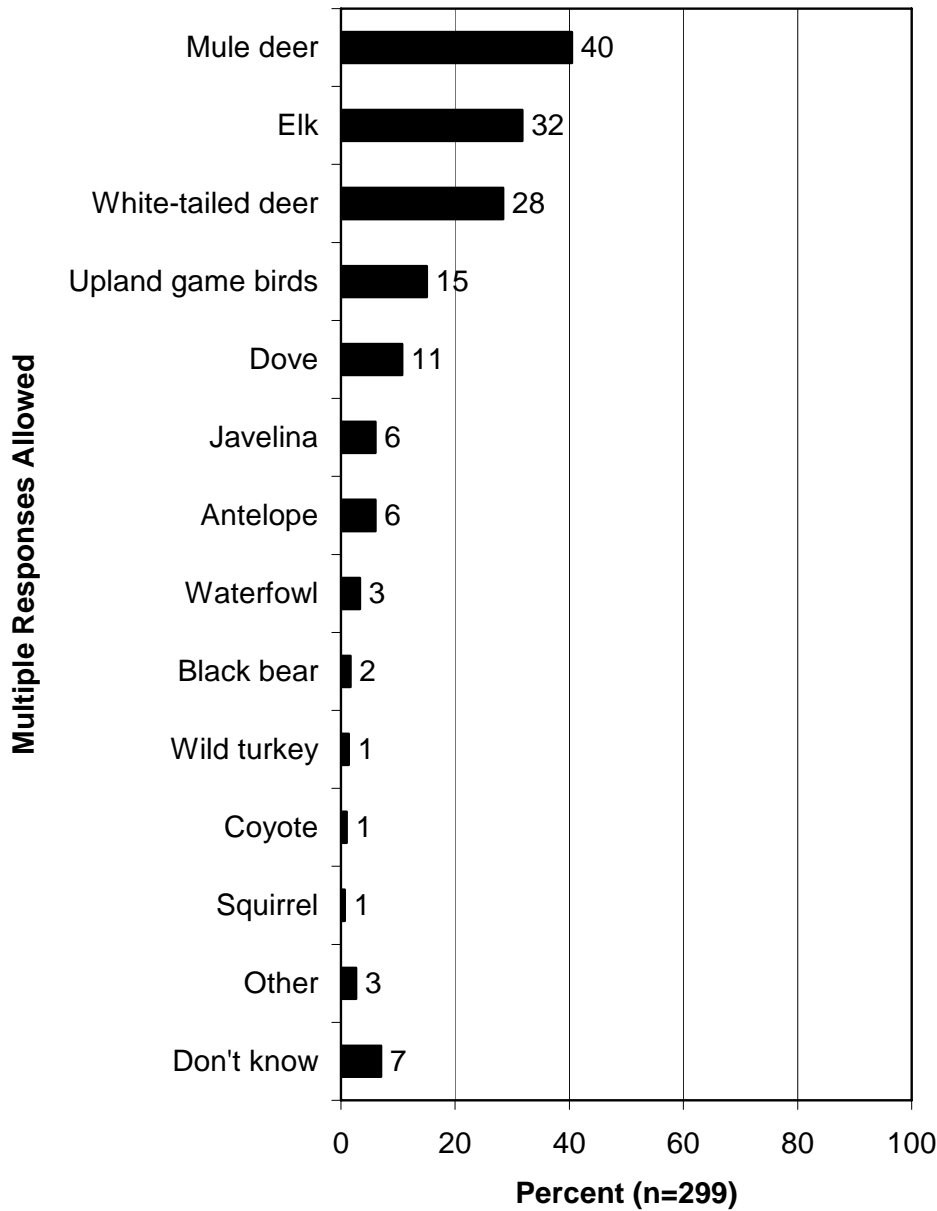
Q40. Do you agree or disagree that a lack of access to hunting lands in Arizona has caused you to not hunt any species as much as you would have liked in the past 5 years?



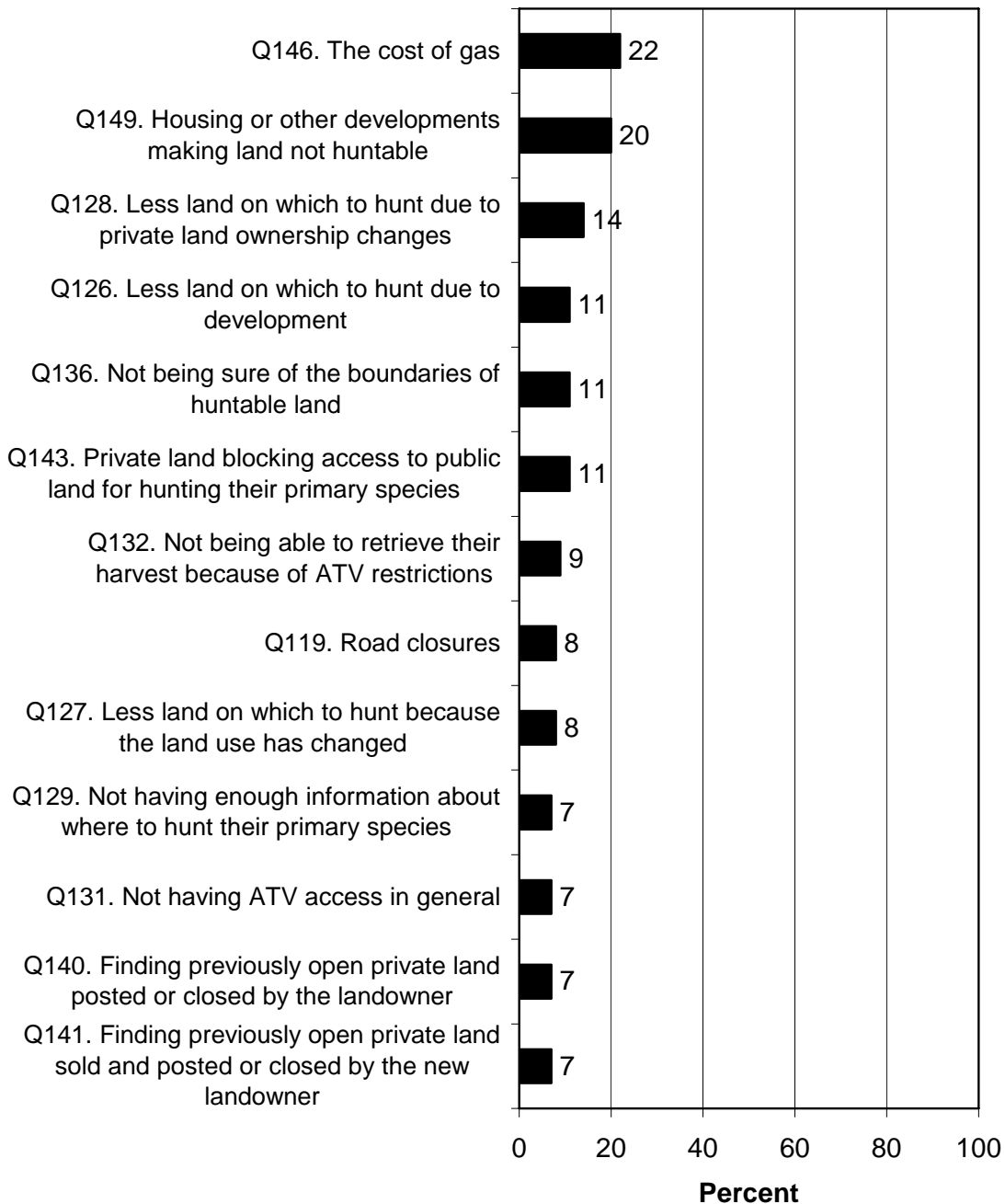
Q48. What are the specific access problems that have caused you not to hunt this/these species as much as you would have liked? (Asked of those who agree that lack of access to hunting lands in Arizona has caused them not to hunt a species as much as they would have liked in the past 5 years.)



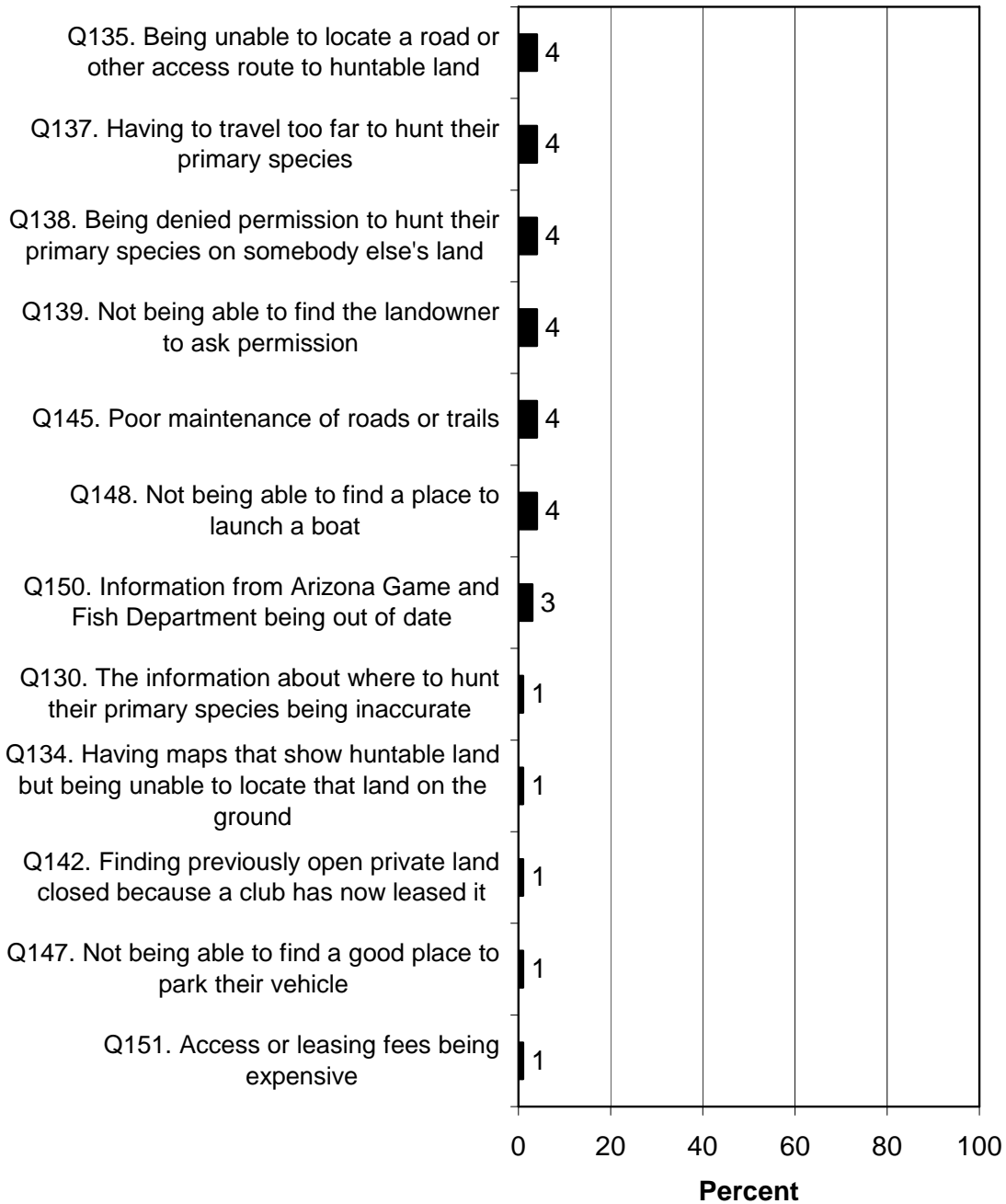
Q43. What species have you not hunted as much as you would have liked as a result of access problems? (Asked of those who agree that lack of access to hunting lands in Arizona has caused them not to hunt a species as much as they would have liked in the past 5 years.)



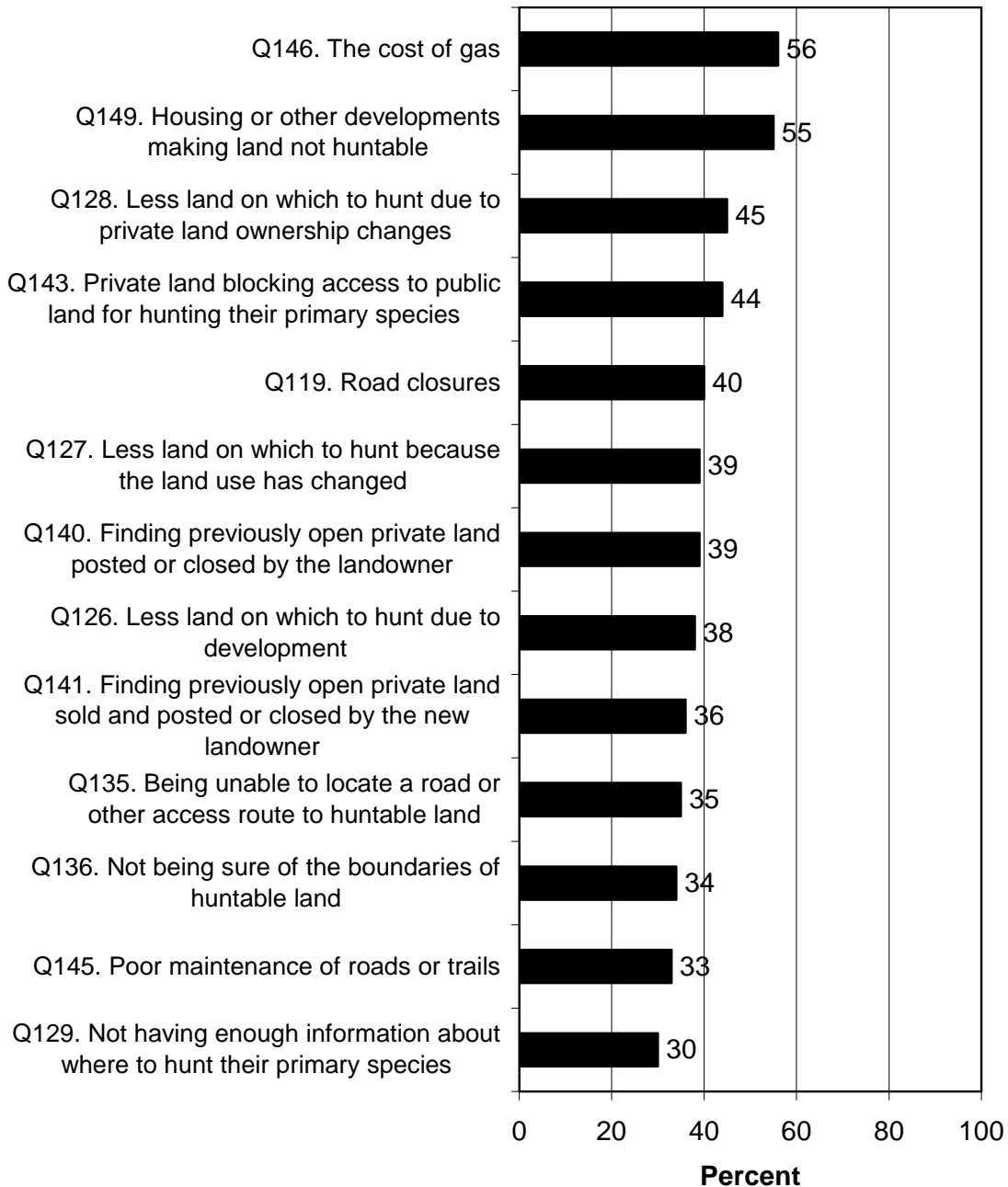
**Percent who indicated that the following hunting
access problems have been major in the past 5
years when hunting (species).
(Part 1)**



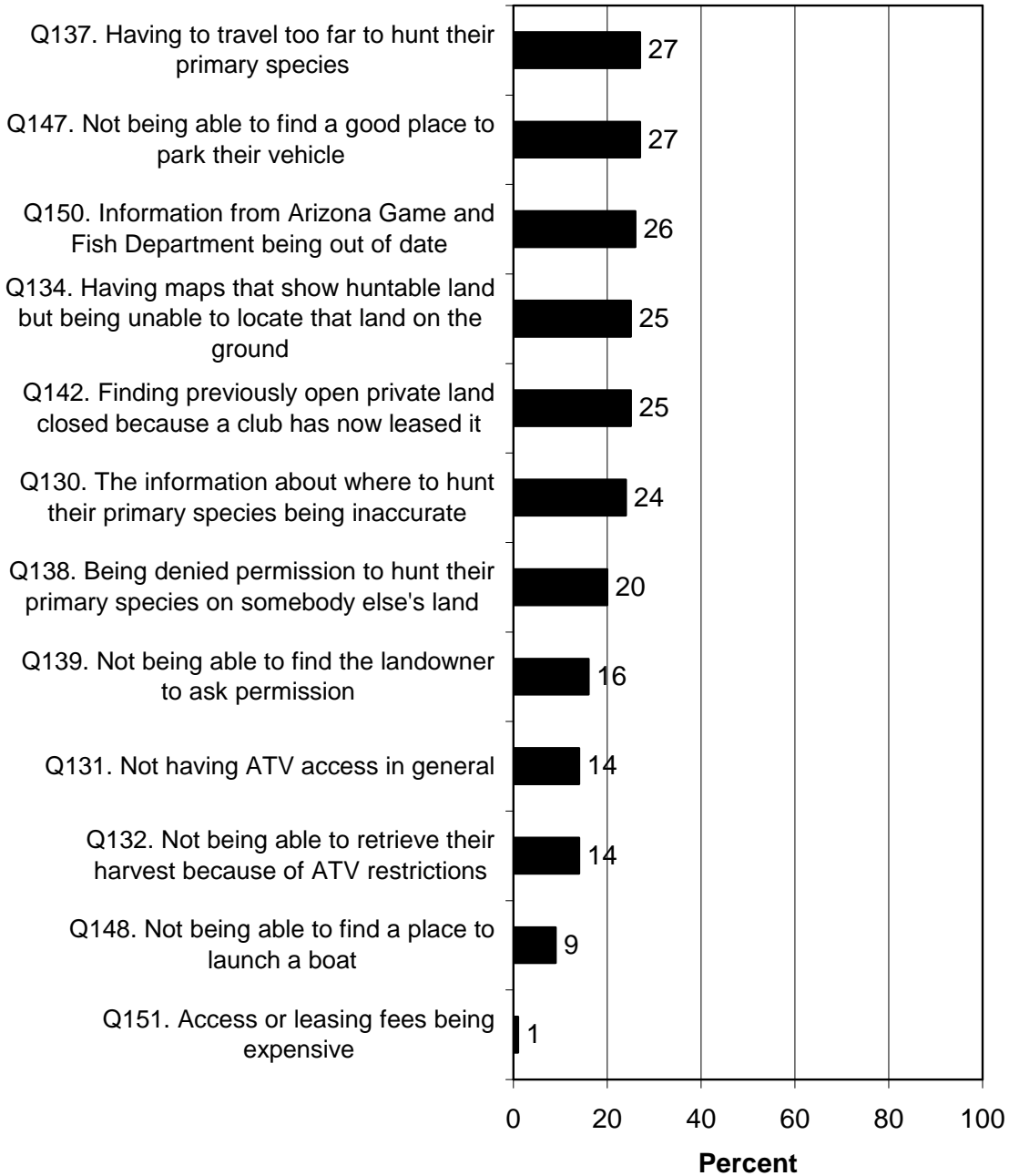
**Percent who indicated that the following hunting access problems have been major in the past 5 years when hunting (species).
(Part 2)**



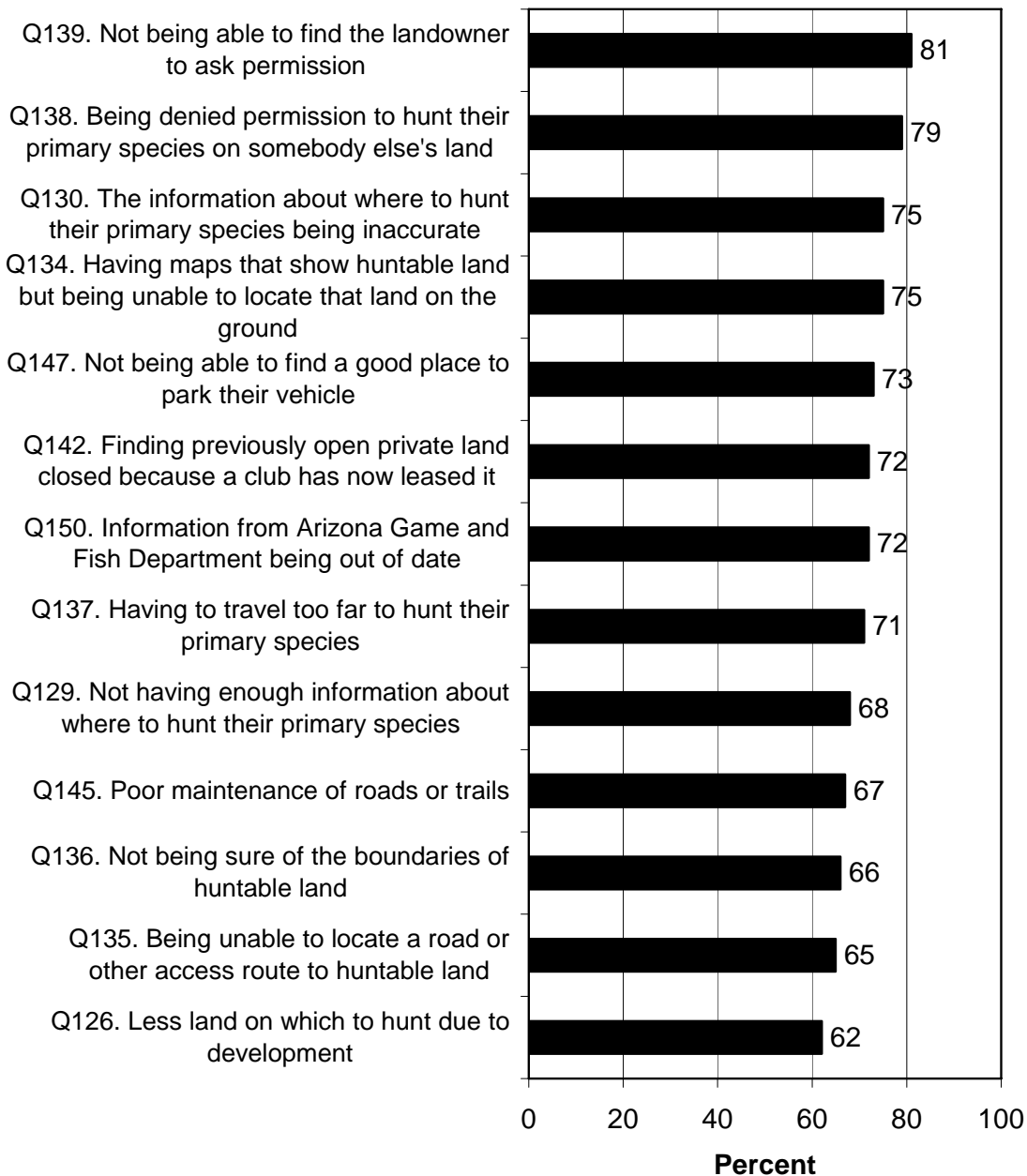
**Percent who indicated that the following hunting access problems have been major, moderate, or minor in the past 5 years when hunting (species).
(Part 1)**



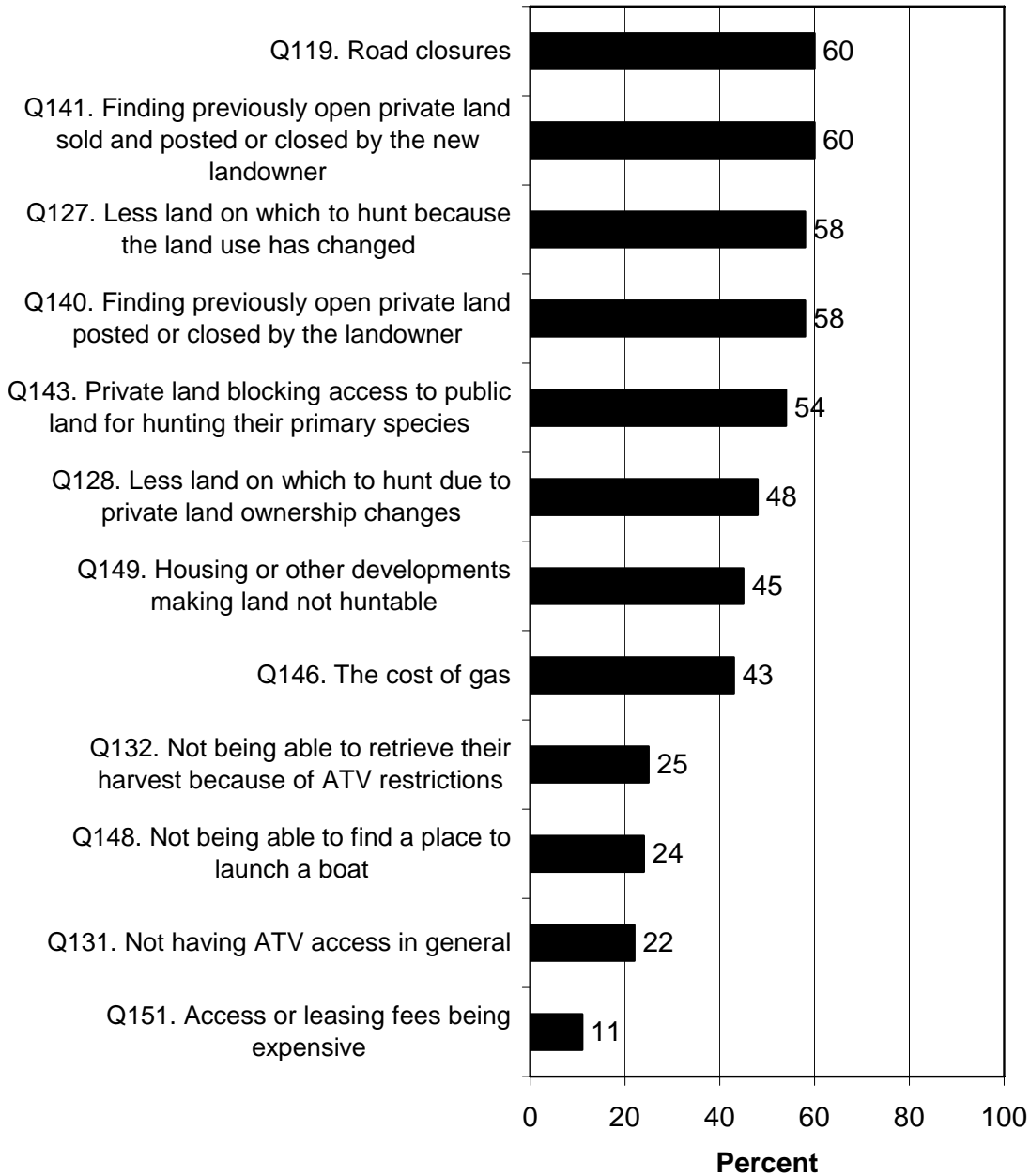
**Percent who indicated that the following hunting access problems have been major, moderate, or minor in the past 5 years when hunting (species).
(Part 2)**



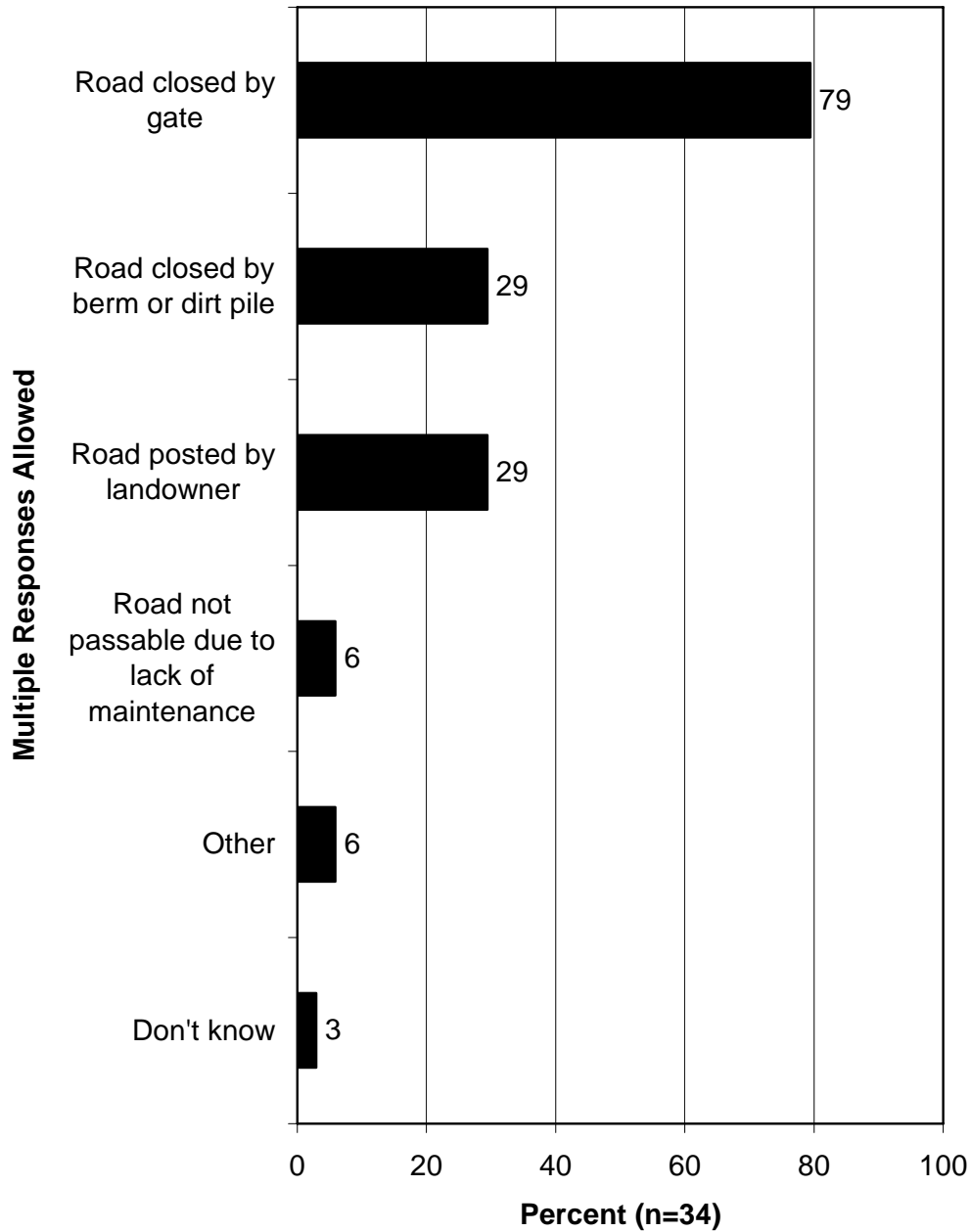
**Percent who indicated that the following potential
hunting access problems have not been
problematic at all in the past 5 years when hunting
(species).
(Part 1)**



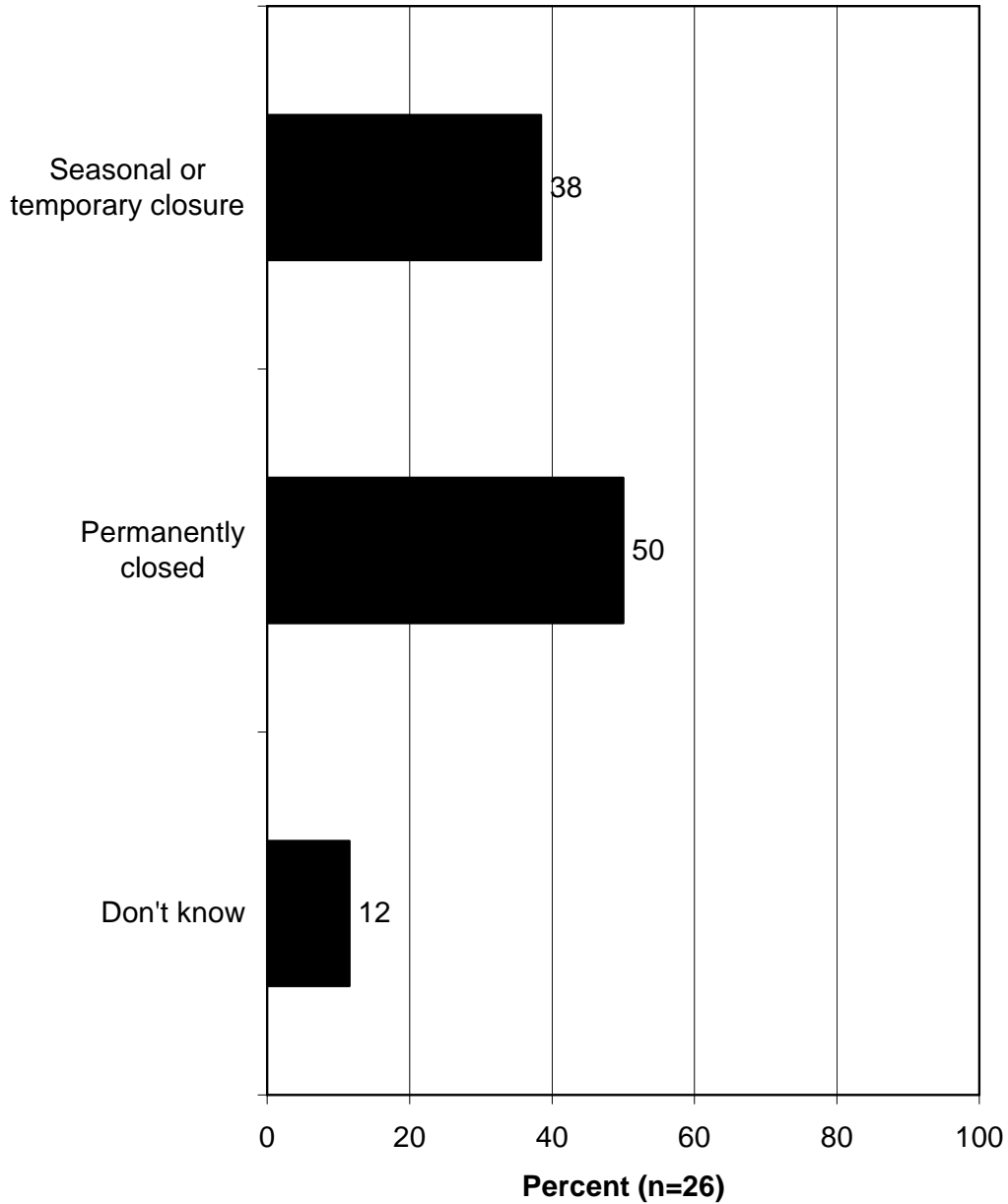
**Percent who indicated that the following potential hunting access problems have not been problematic at all in the past 5 years when hunting (species).
(Part 2)**



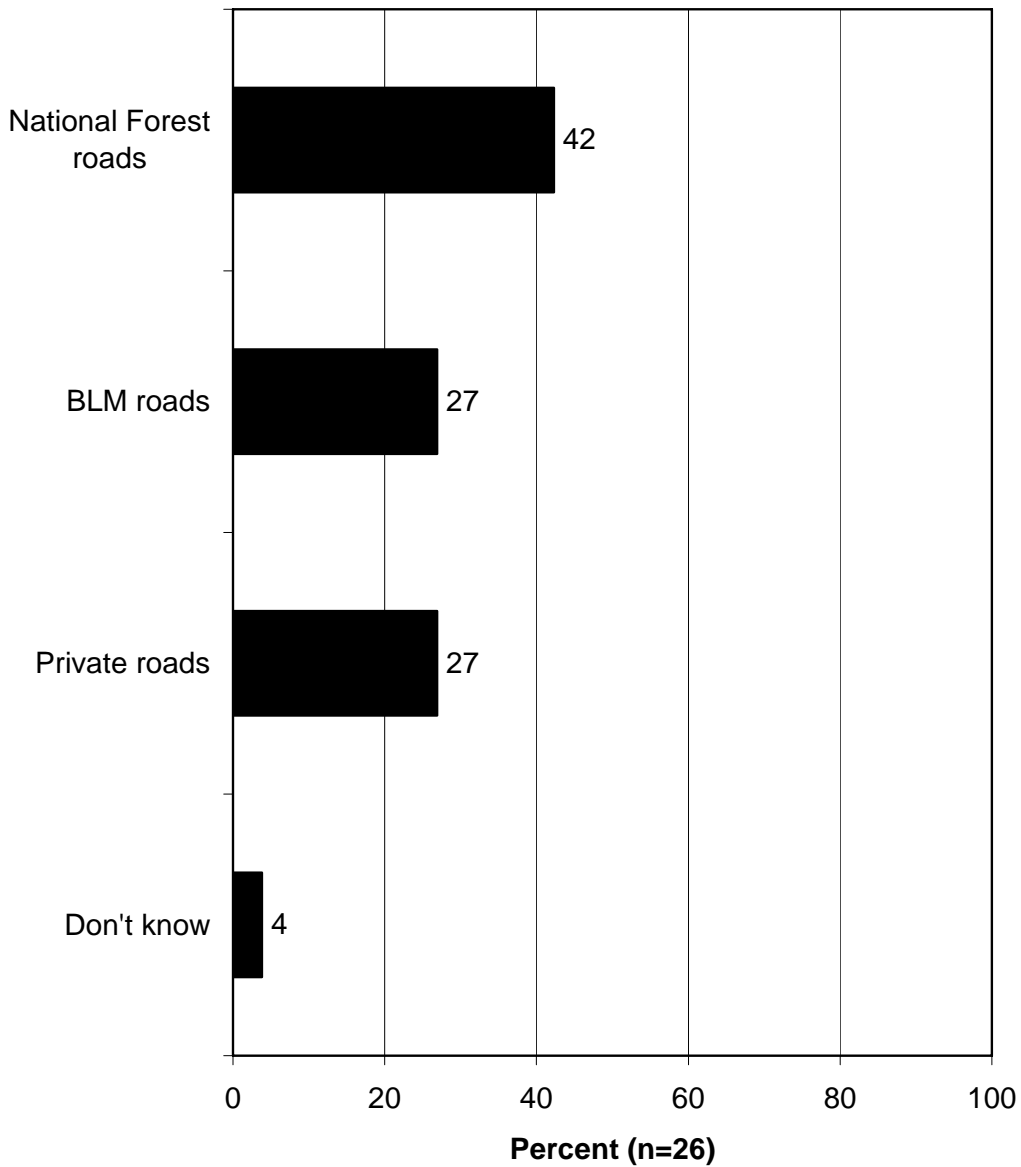
Q122. How were the roads closed? (Asked of those who said road closures have been a problem when they were hunting their primary species.)



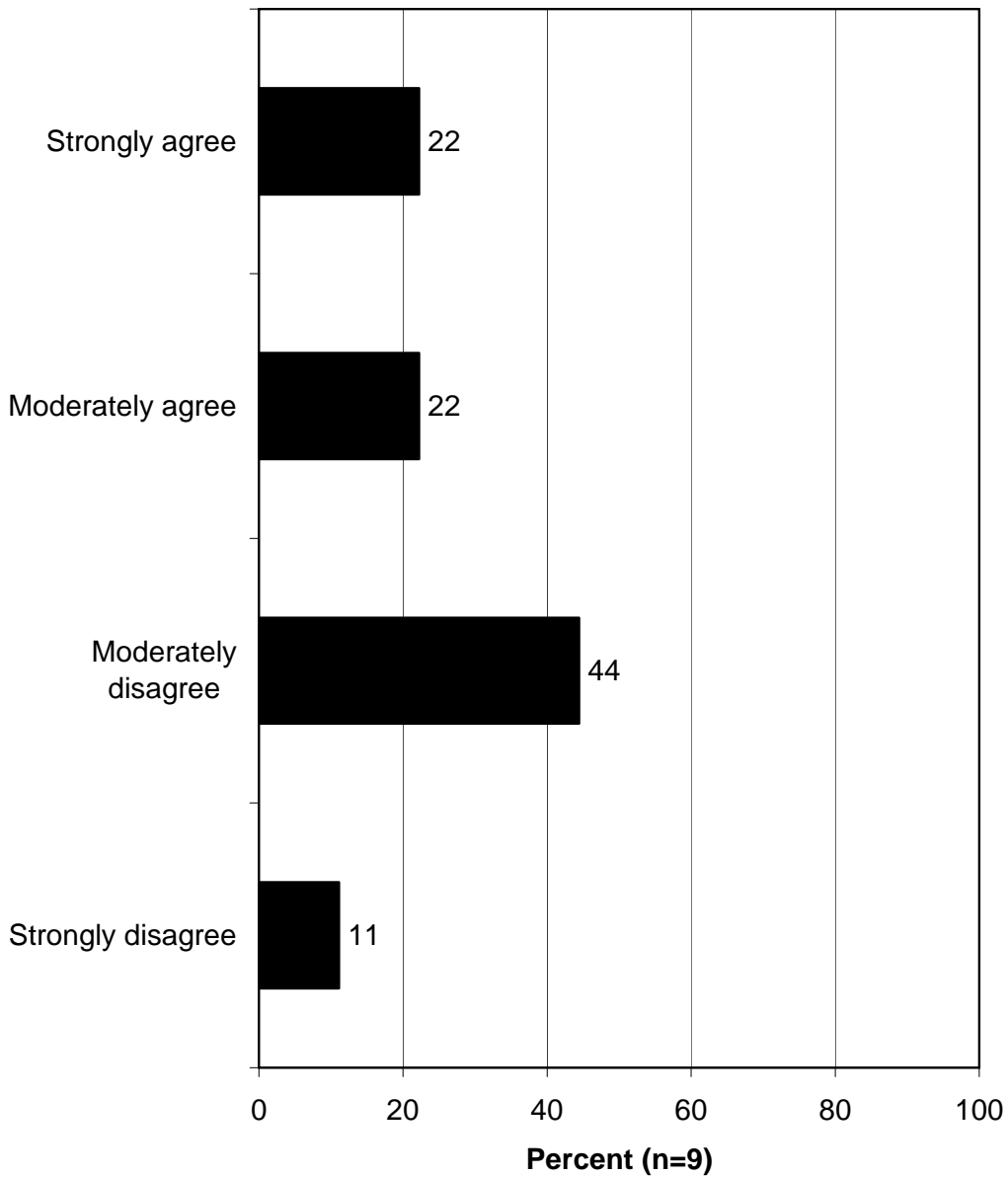
Q124. Was this a seasonal or temporary closure, or was it permanently closed? (Asked of those who said road closures have been a problem when they were hunting their primary species and who said the road was closed by a gate.)



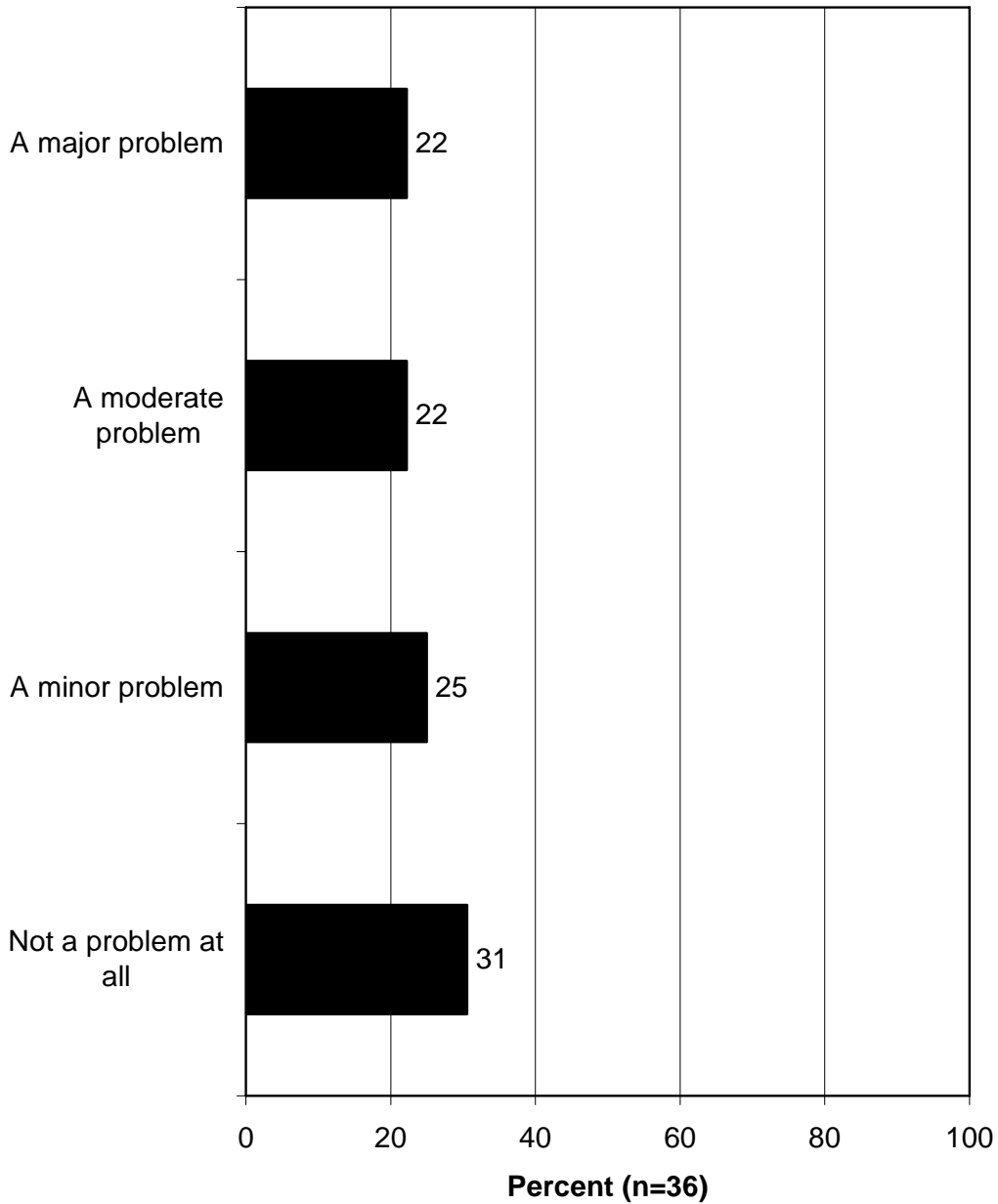
Q125. Were the closed roads National Forest roads, BLM roads, other public roads, or private roads? (Asked of those who said road closures have been a problem when they were hunting their primary species and who said the road was closed by a gate.)



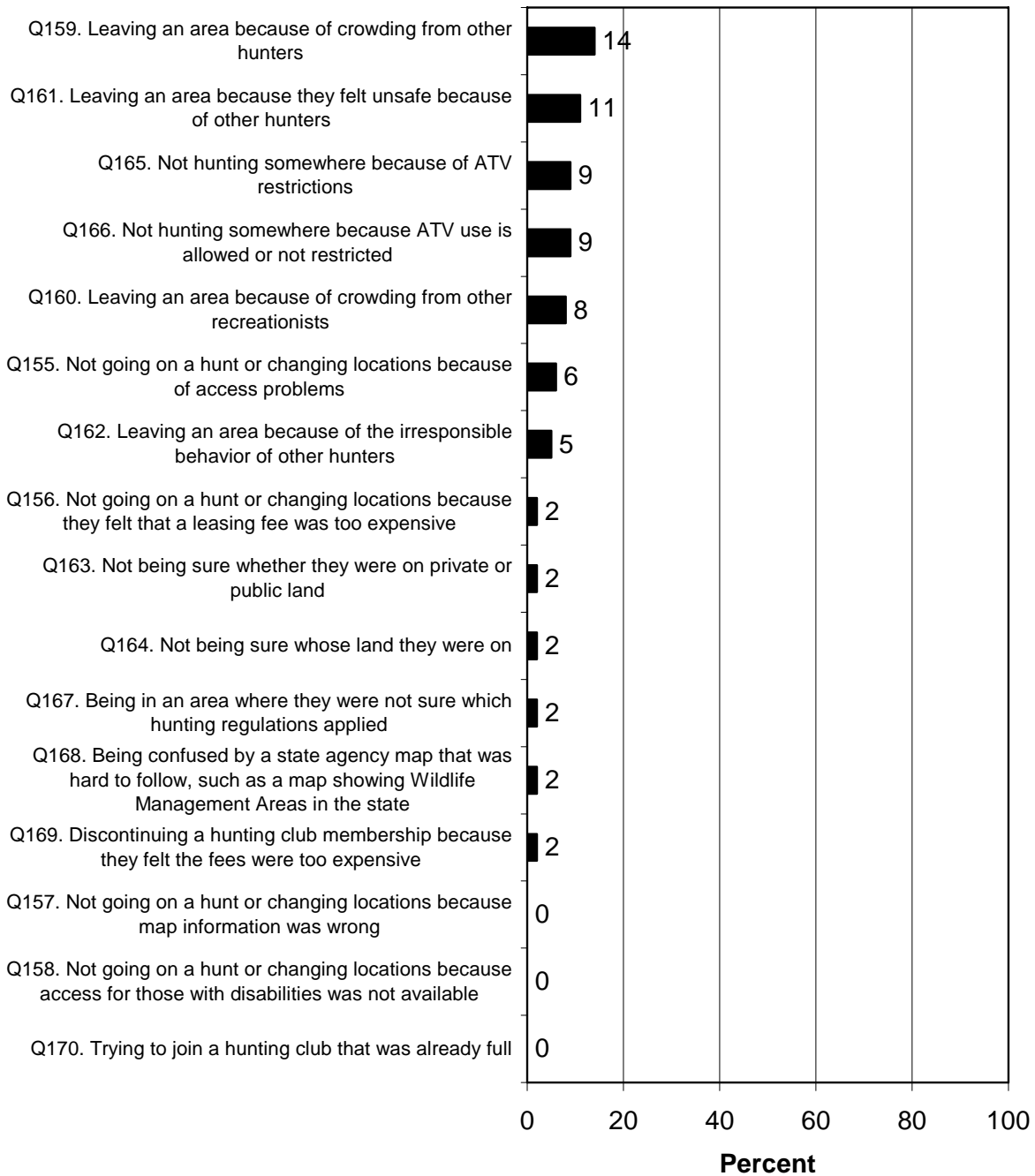
Q133. Do you agree or disagree that not being able to retrieve your harvest with an ATV has caused you to hunt less in the past 5 years? (Asked of those who said that not being able to retrieve their harvest because of ATV restrictions has been a problem when they were hunting their primary species.)



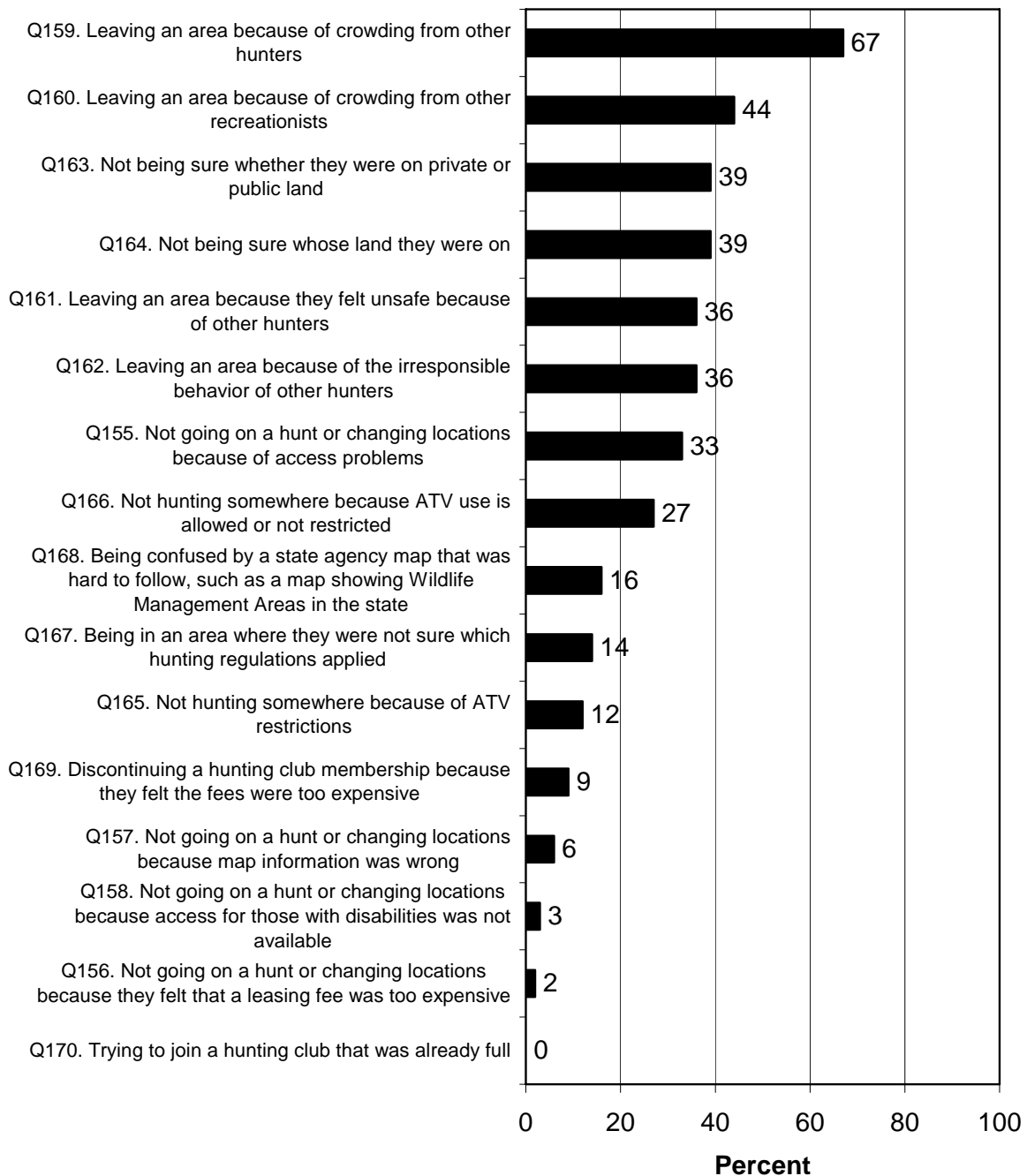
Q144. How much of a problem were landowners intentionally blocking or making it difficult to physically access public land? (Asked of those who said that private land blocking access to public land has been a problem when they were hunting their primary species.)



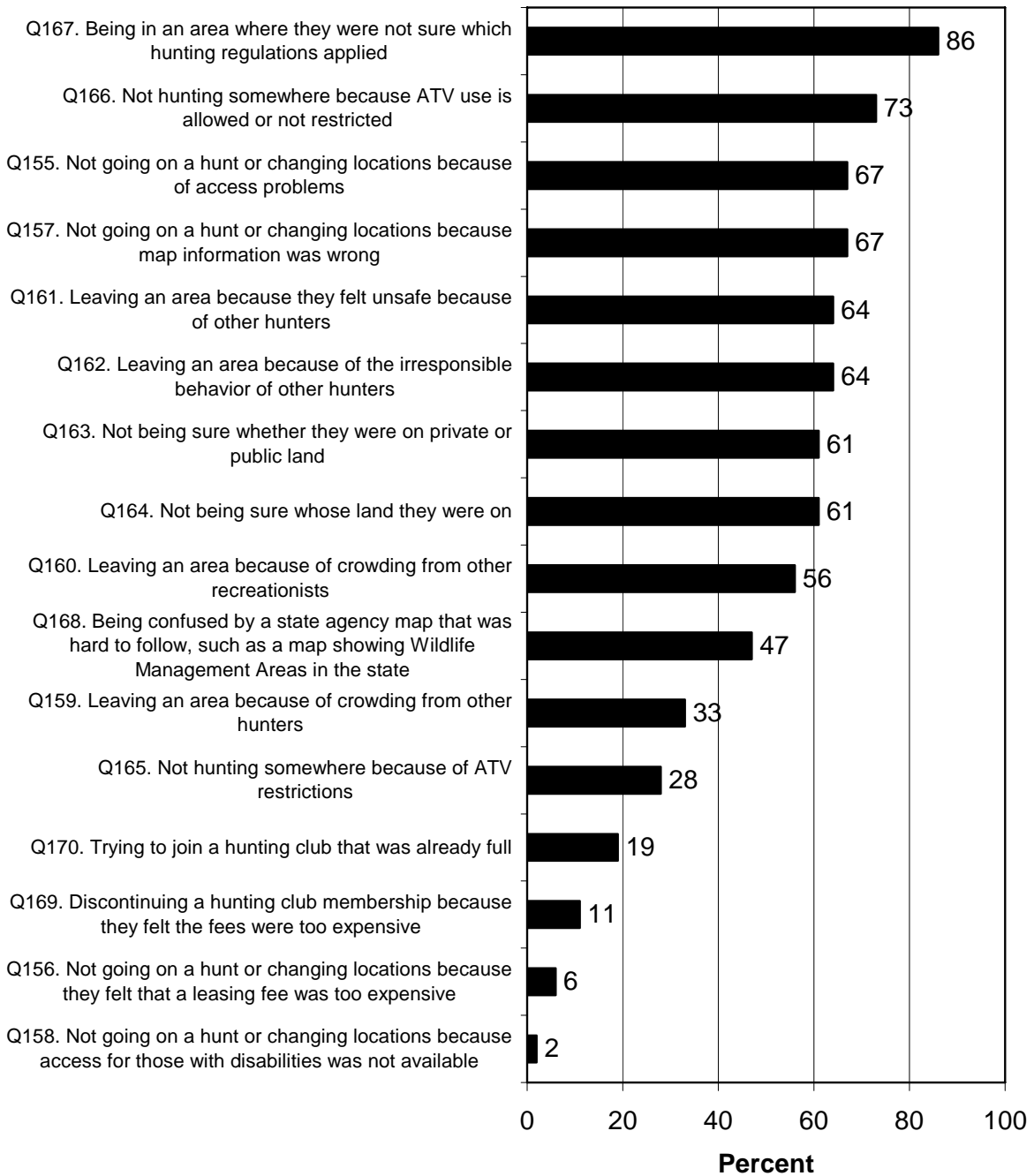
Percent who indicated that the following have been a major problem in the past 5 years when hunting (species).



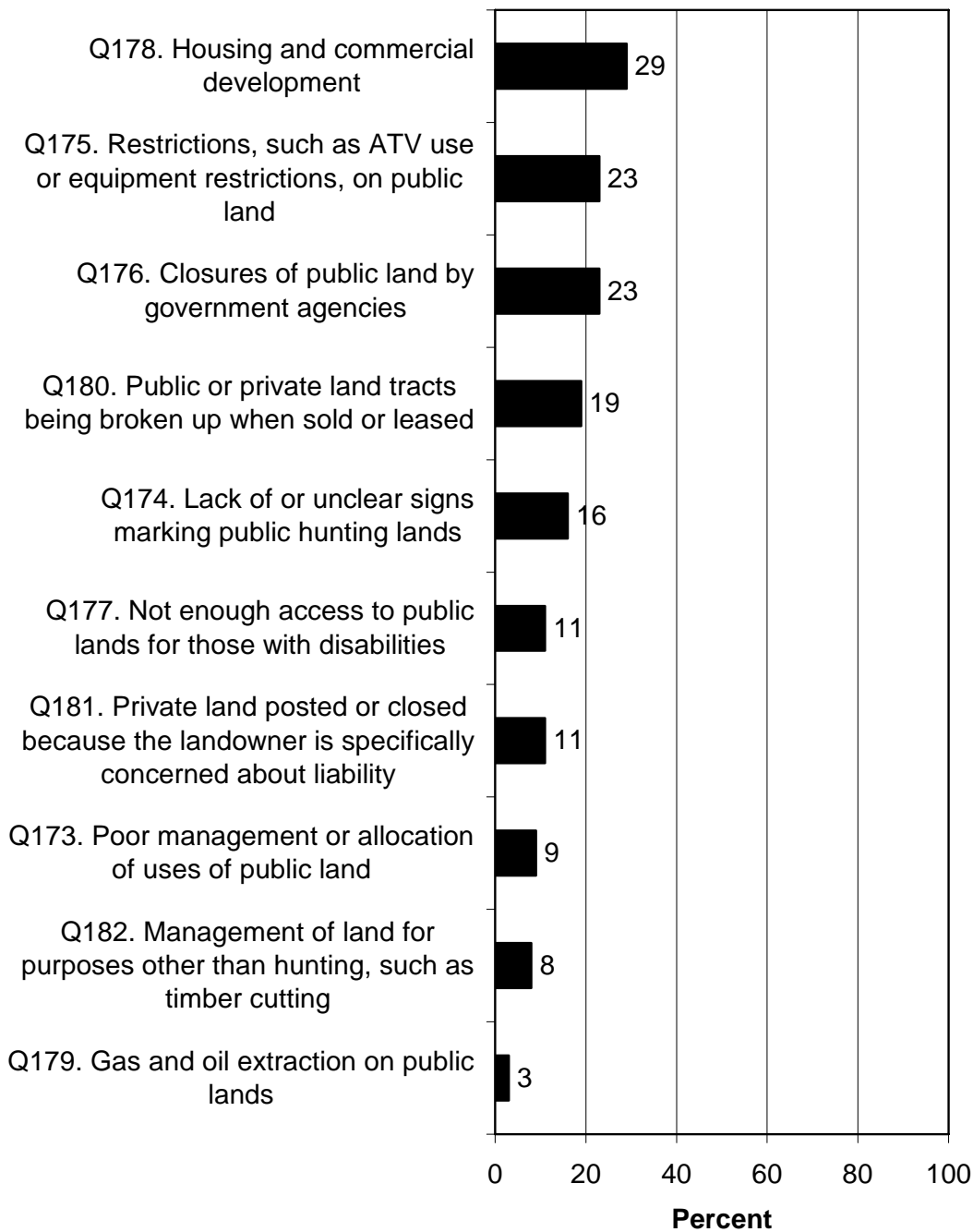
Percent who indicated that the following have been a major, moderate, or minor problem in the past 5 years when hunting (species).



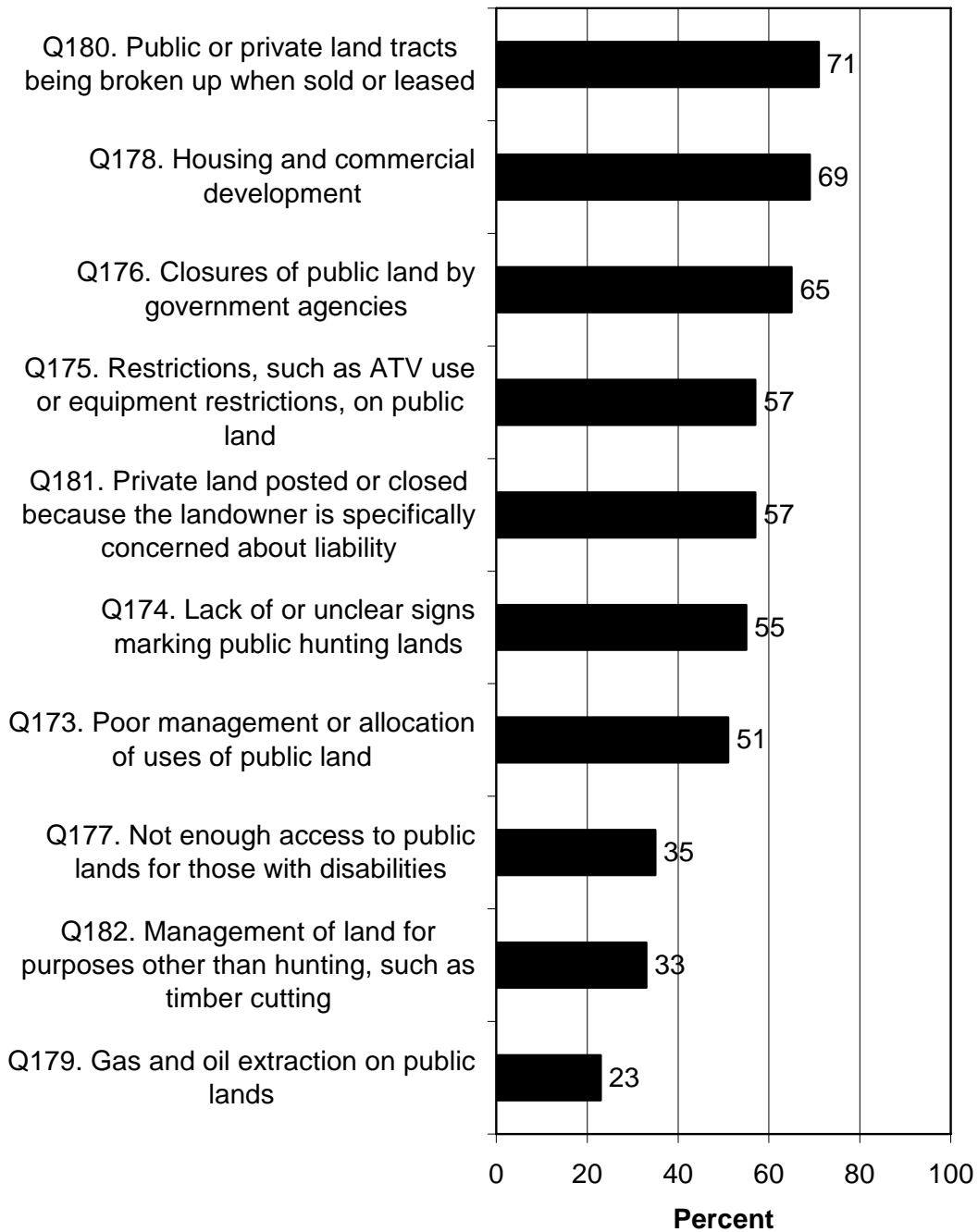
Percent who indicated that the following have not been a problem at all in the past 5 years when hunting (species).



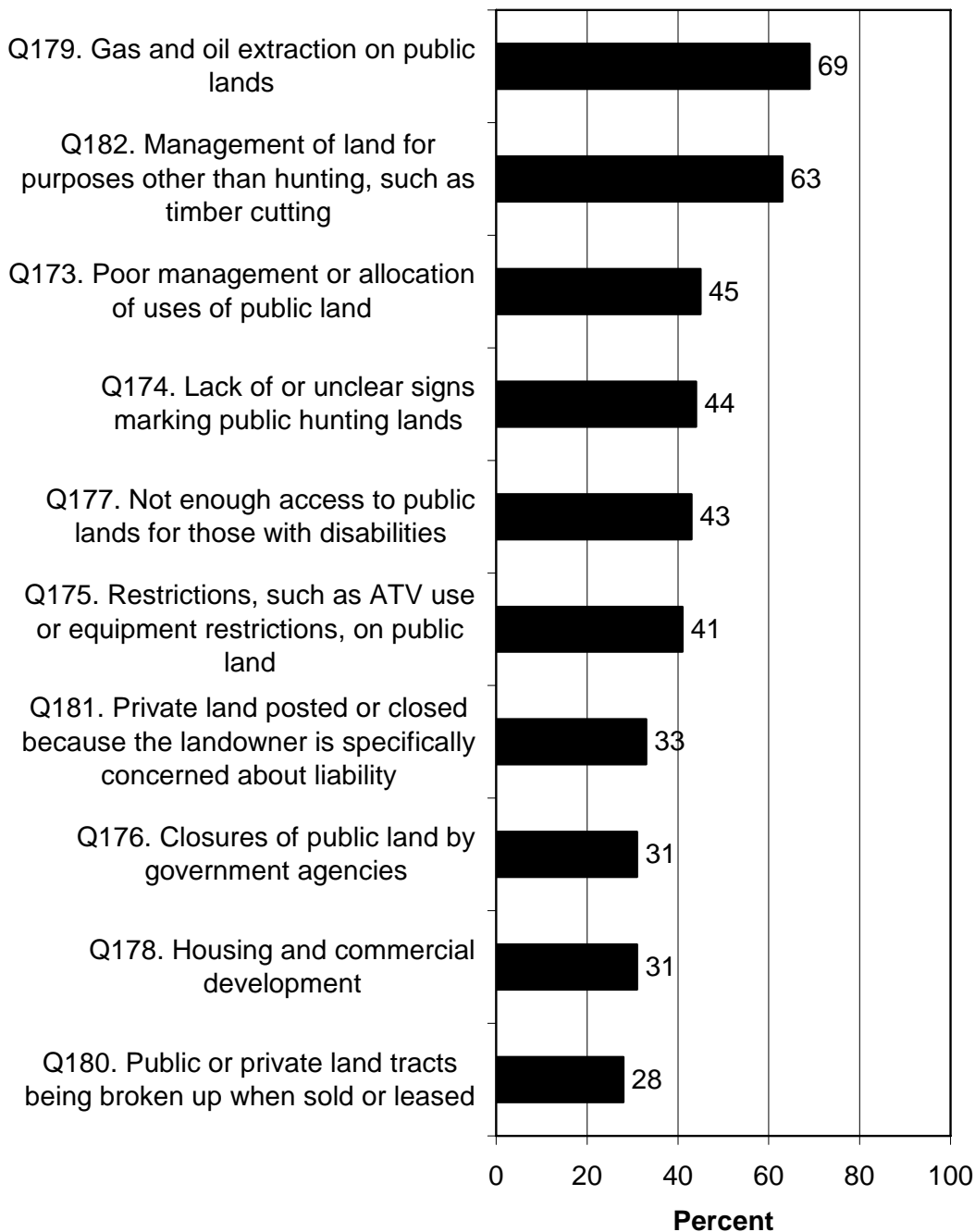
Percent who indicated that the following factors have been a major problem in accessing hunting land in Arizona in general.



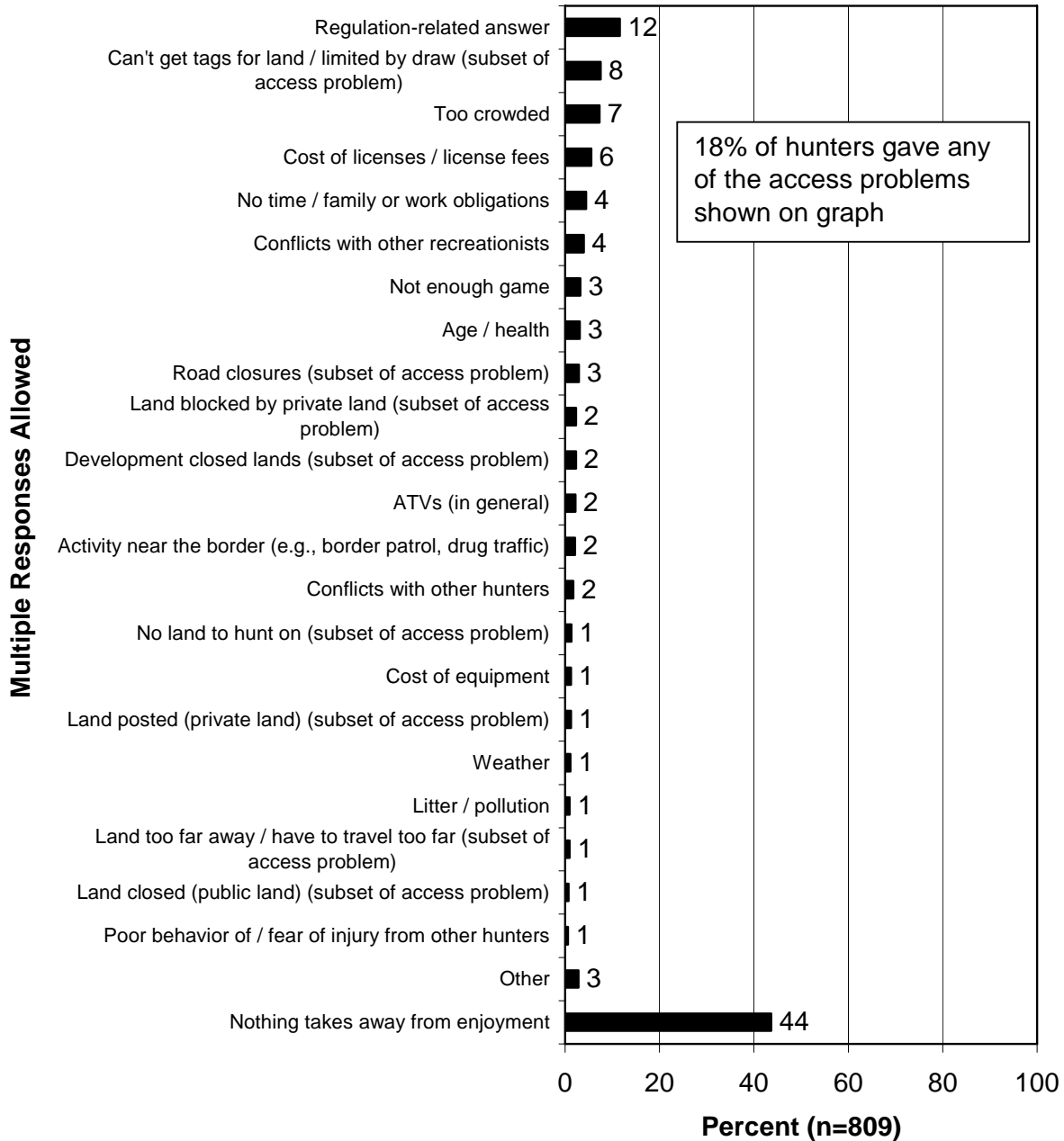
Percent who indicated that the following have been a major, moderate, or minor problem in accessing hunting land in Arizona in general.



Percent who indicated that the following factors have not been a problem at all in accessing hunting land in Arizona in general.



Q31/Q34/Q38. Are there any things that have taken away from your enjoyment of hunting in Arizona, even if they didn't prevent you from actually going? If yes, what?



RATINGS OF ACCESS TO HUNTING LANDS IN ARIZONA

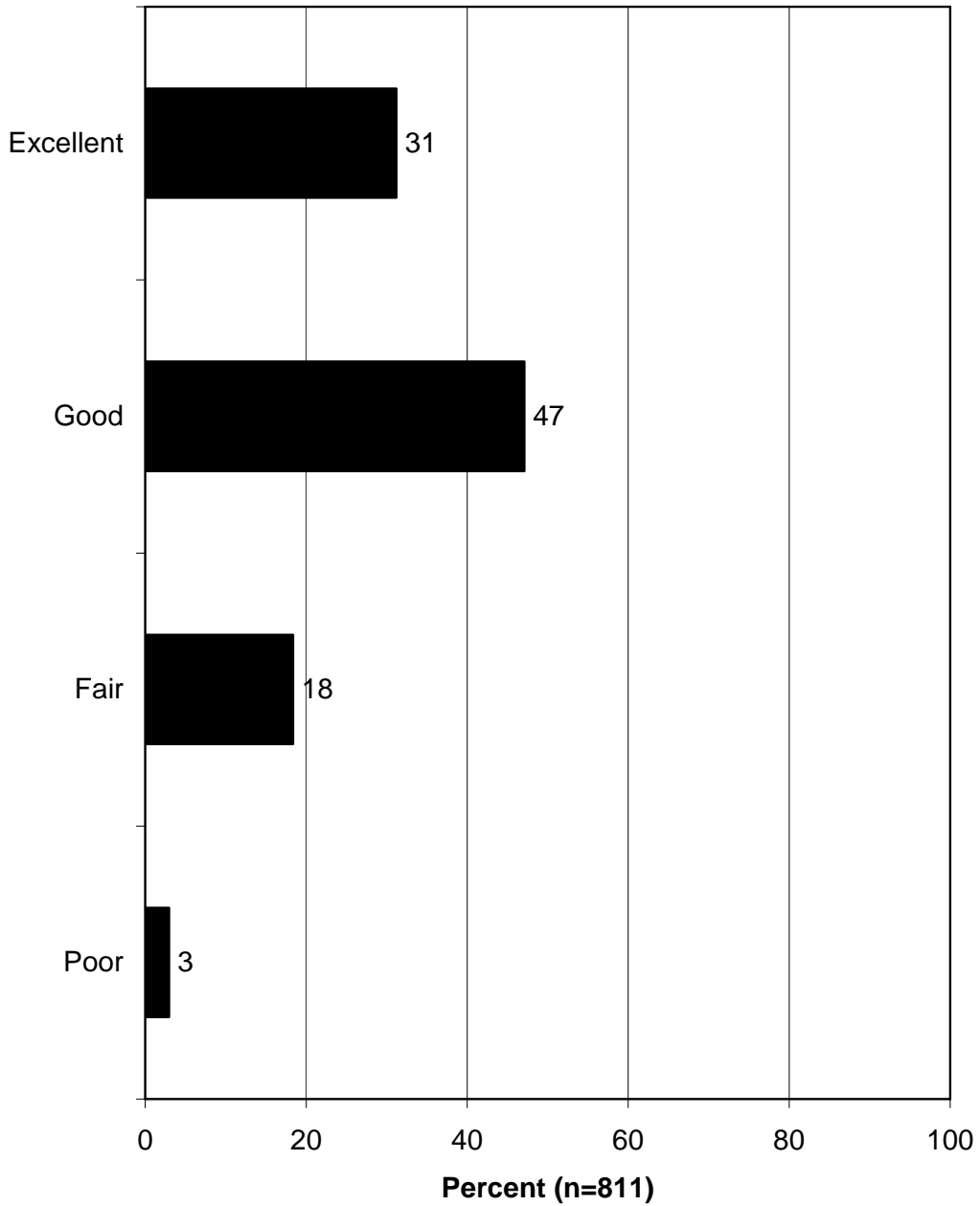
- A basic question asked hunters to rate access to hunting land in Arizona overall. The majority (78%) give a rating of excellent or good, while 21% give a rating of fair or poor. Note that the moderate answers (good and fair) exceed the extreme answers (excellent and poor).
 - In a related question, ratings of the AGFD's management of access to hunting lands are highly positive: 76% give an excellent or good rating, while 20% give a fair or poor rating. Again, the moderate answers exceed the extreme answers.

- The ratings of access were crosstabulated by various other questions to see if any differences among respondents emerged. Positive ratings in this context are those in the top half of the scale (excellent or good), and negative ratings are those in the lower half (fair or poor).
 - In the crosstabulation of access ratings by number of years of hunting experience, there are no statistically significant differences.
 - Access ratings are markedly more positive among elk hunters: 89% give a rating of *excellent* or *good*, compared to a percentage of 80% or less for the other species. They are markedly more negative among hunters of mule deer (only 69% give an excellent or good rating) and dove (69% also). Overall, these differences on this question are statistically significant.
 - The question about ratings of the AGFD's *management* of access to hunting lands was also crosstabulated by primary species hunted. There were no statistically significant differences.
 - There were no statistically significant differences in access ratings when crosstabulated by whether the hunters hunt on the same or different lands each year.
 - Access ratings are not significantly different when crosstabulated by hunting mostly on public versus private land.
 - Those who travel more than the median travel distance to hunt are slightly more likely to give an *excellent* rating to hunting access, and the differences are statistically significant.

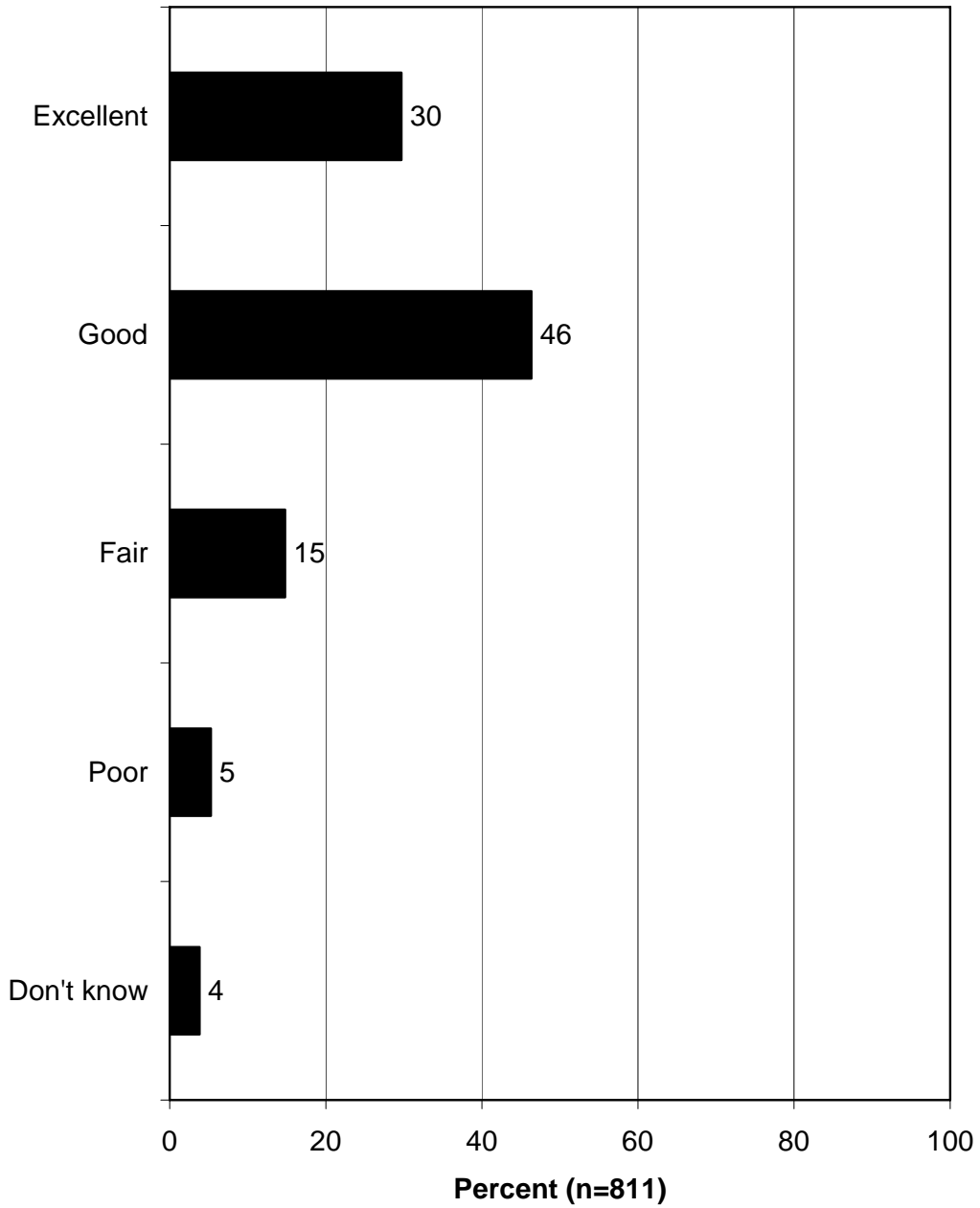
- Those who hunted their primary species on public land at least half the time were asked to rate access to public lands in Arizona. Excellent and good ratings (92% give one of the two responses) far exceed fair and poor ratings (8%).

- Those who hunted their primary species on private land at least half the time were asked to rate access to private lands in Arizona. Excellent and good ratings (60% give one of the two responses) exceed fair and poor ratings (40%). Note that “good” ratings (50%) exceed “excellent” ratings (only 10%), and “poor” ratings (30%) exceed “fair” ratings (10%).

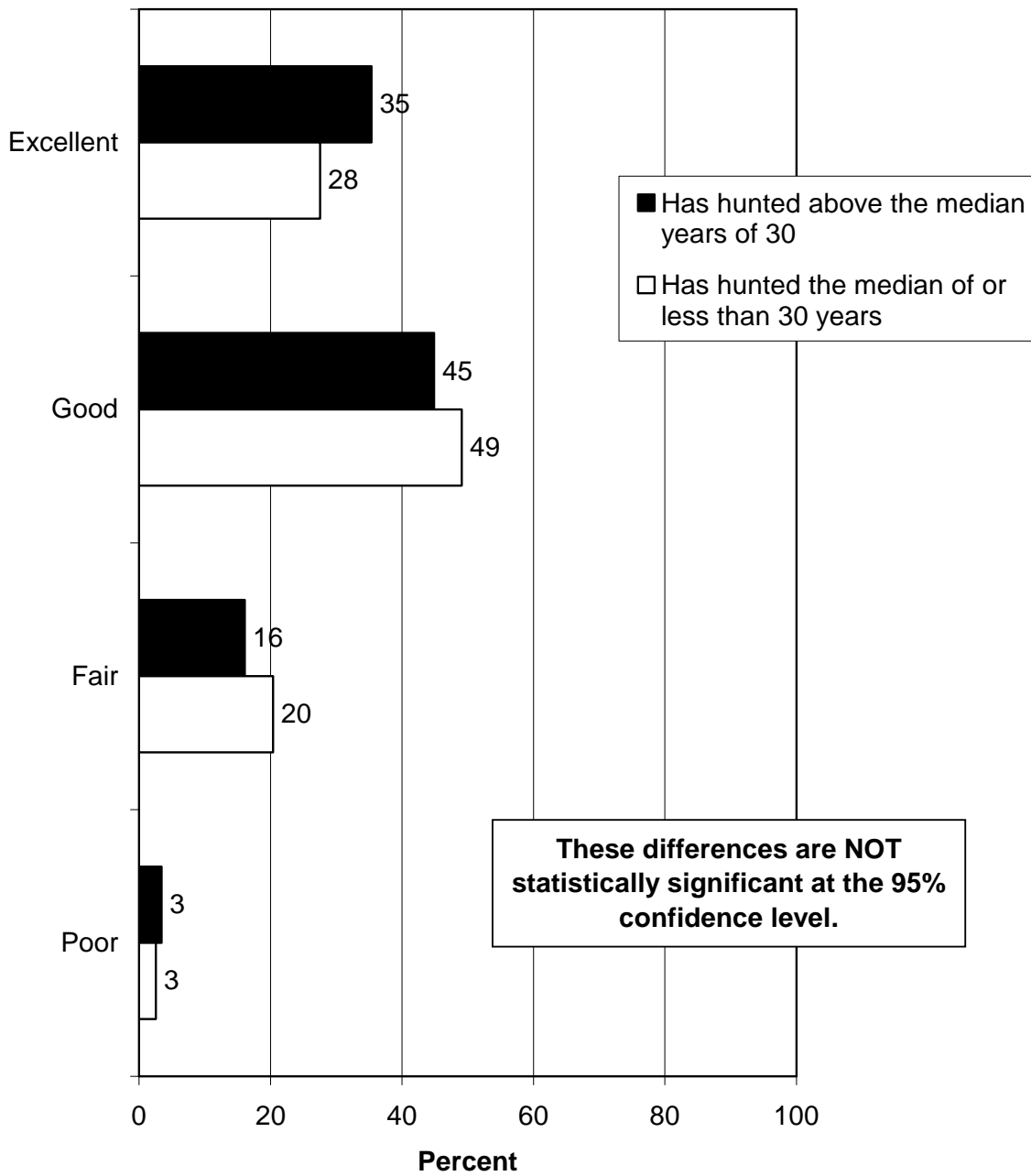
Q55. Overall, how would you rate access to hunting lands in Arizona for hunting (species)?



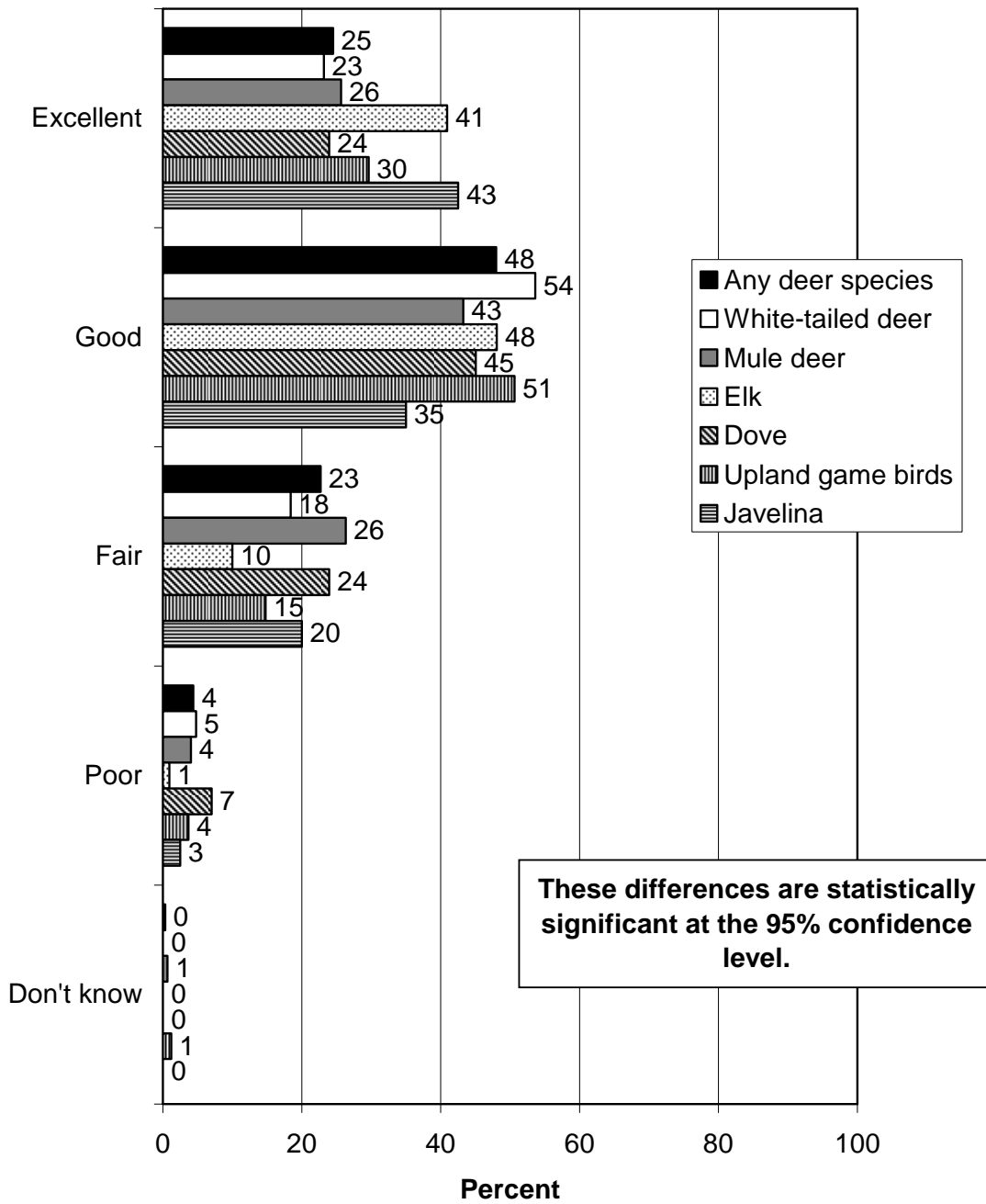
Q56. How would you rate the Arizona Game and Fish Department's management of access to hunting lands in Arizona for hunting (species)?



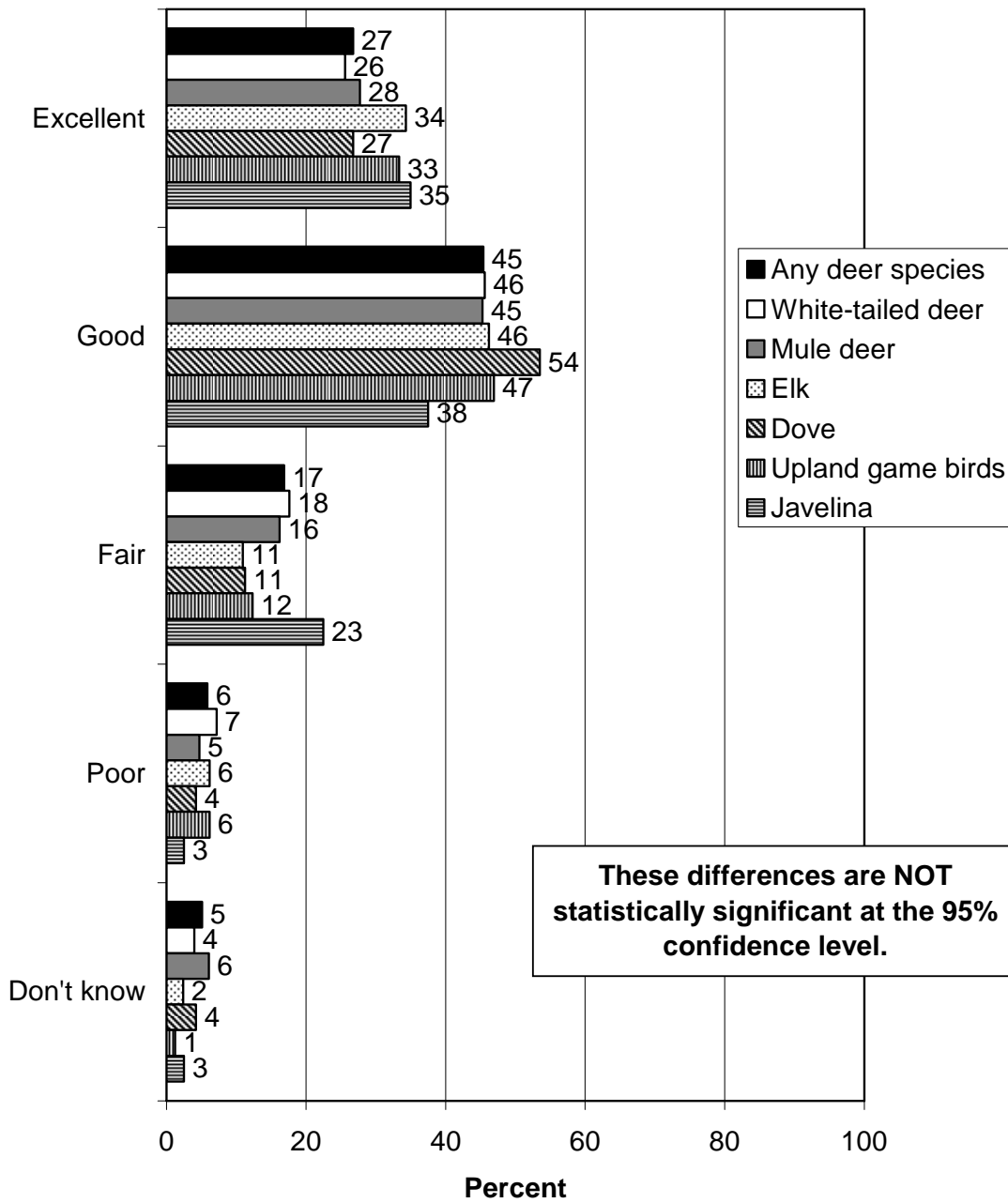
Q55. Overall, how would you rate access to hunting lands in Arizona for hunting (species)?



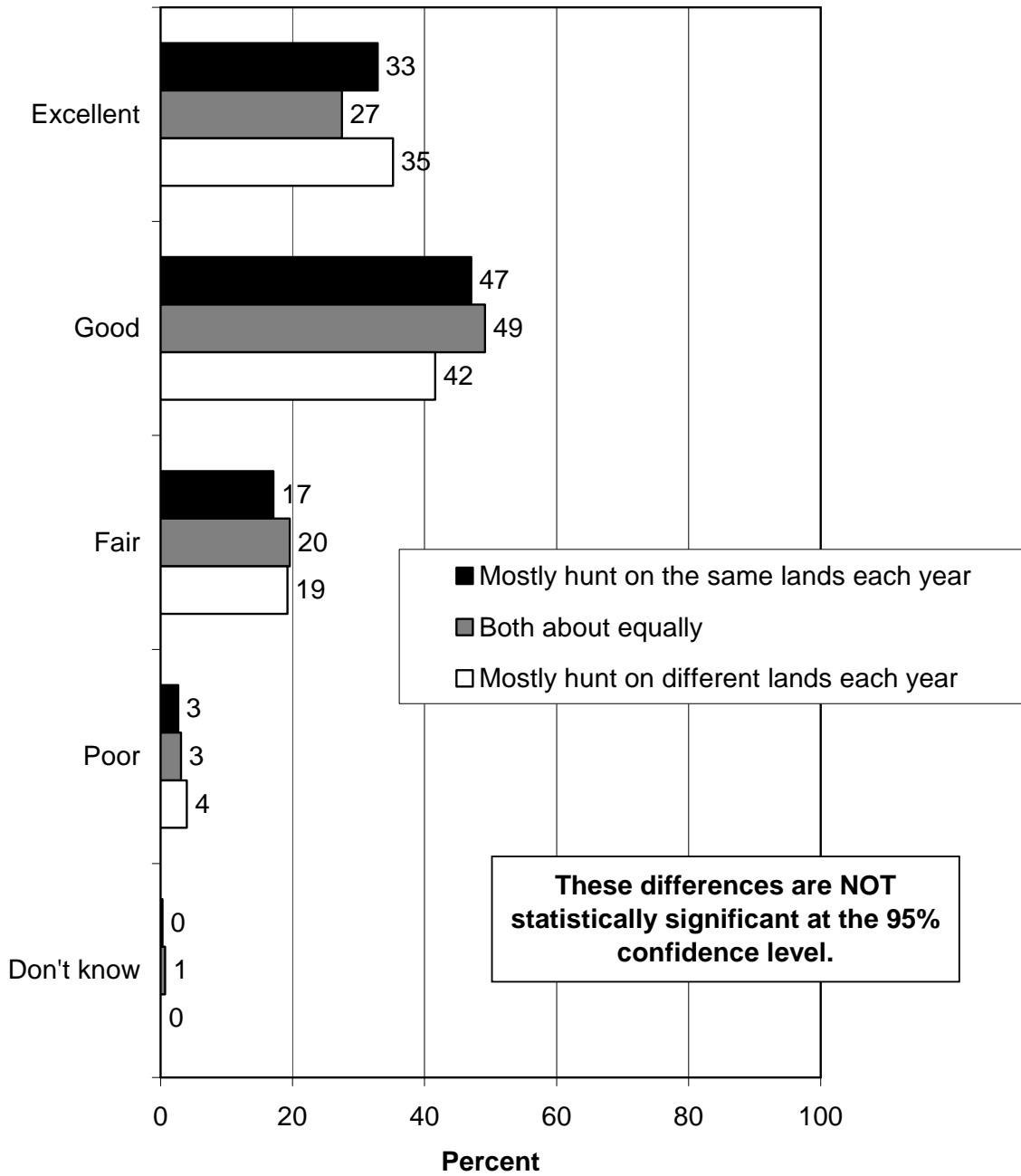
Q55. Overall, how would you rate access to hunting lands in Arizona for hunting (species)?



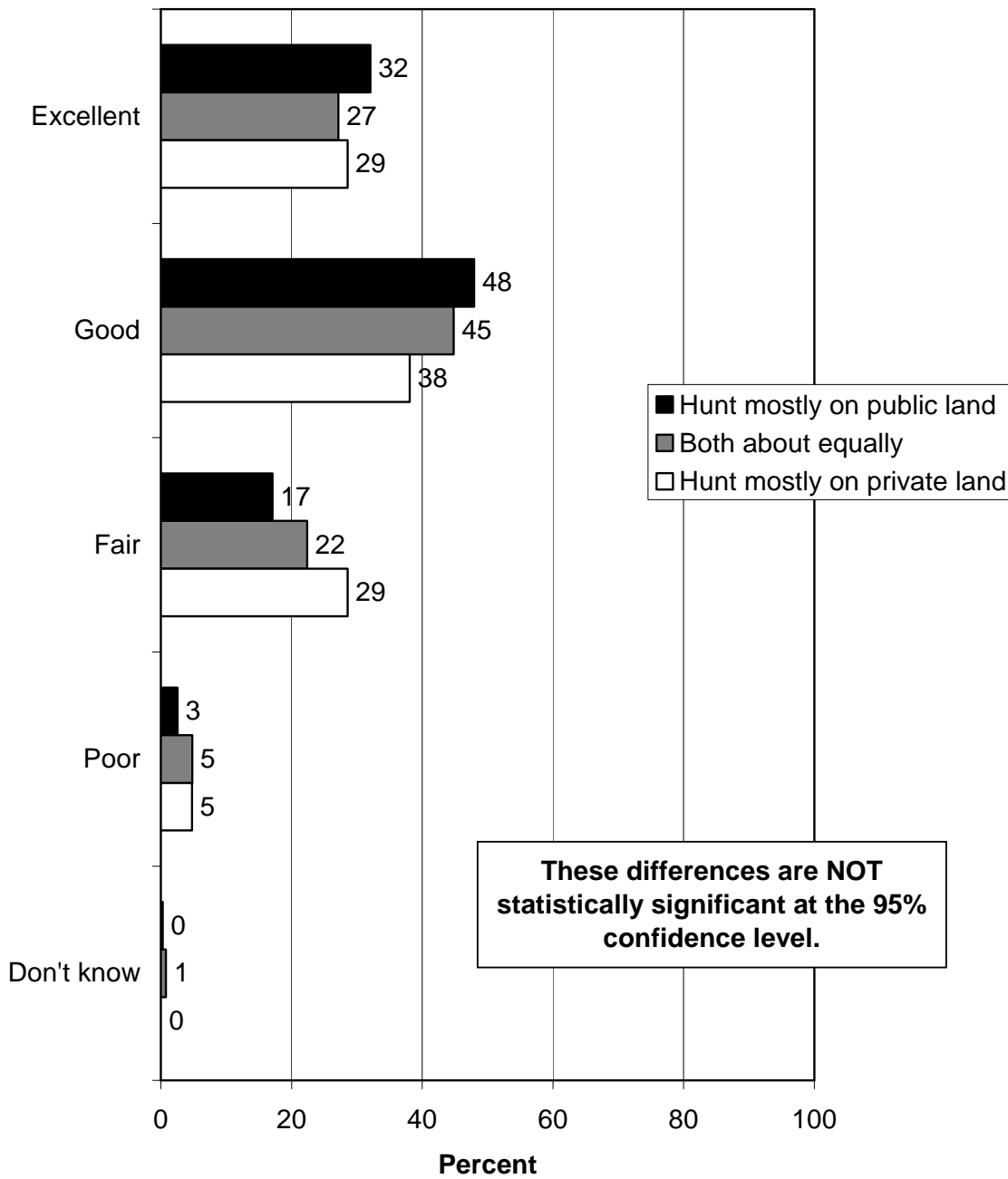
Q56. How would you rate the Arizona Game and Fish Department's management of access to hunting lands in Arizona for hunting (species)?



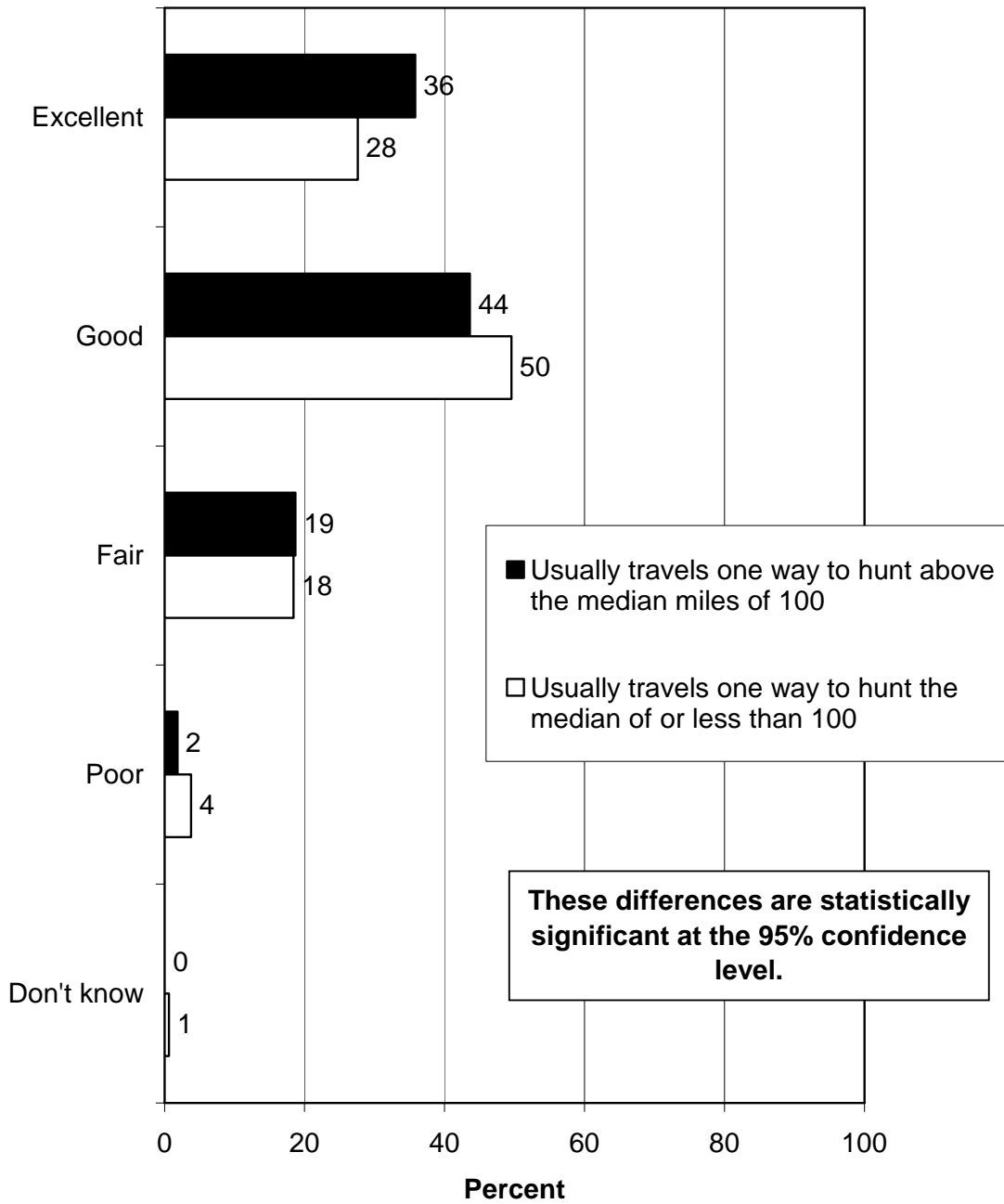
Q55. Overall, how would you rate access to hunting lands in Arizona for hunting (species)?



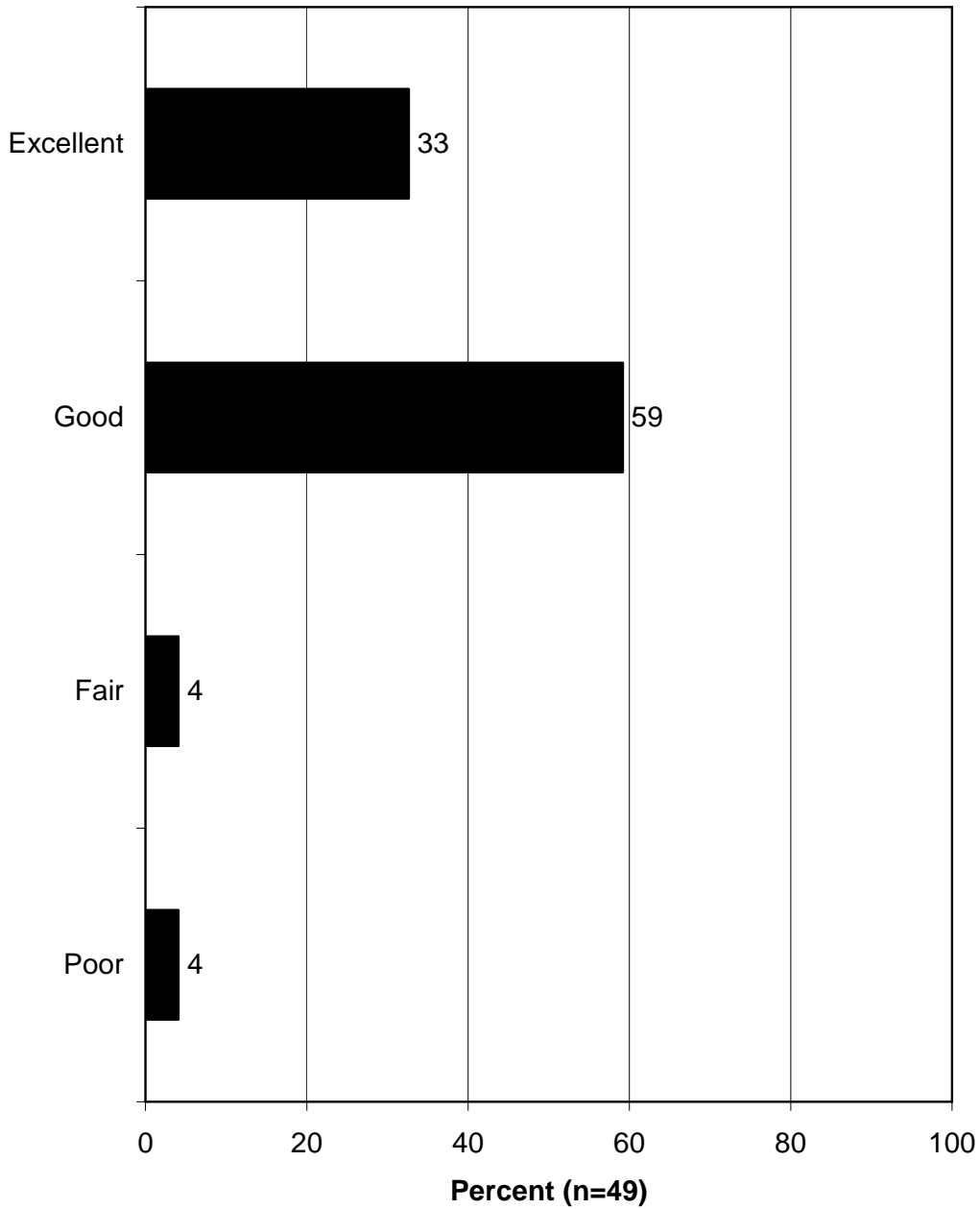
Q55. Overall, how would you rate access to hunting lands in Arizona for hunting (species)?



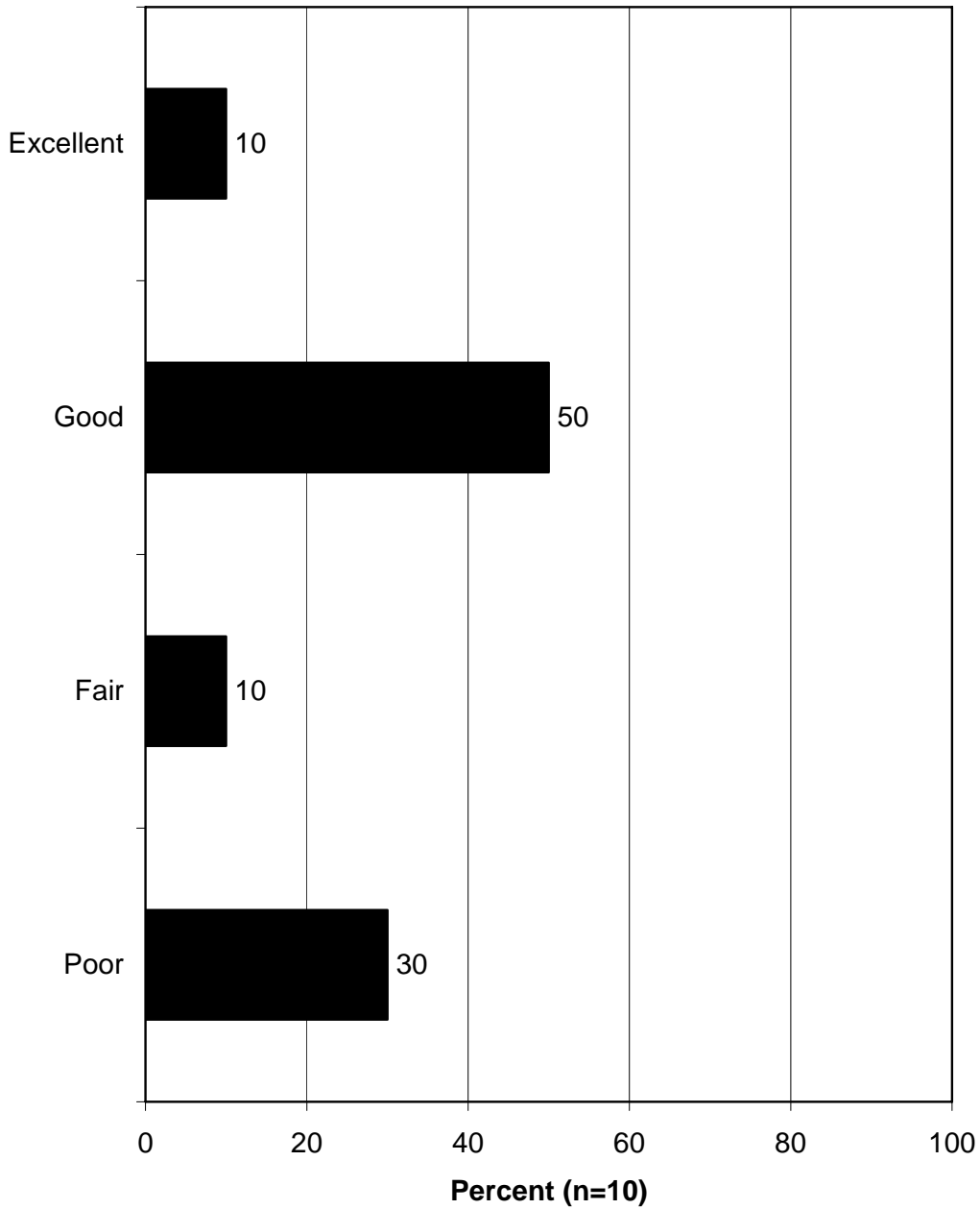
Q55. Overall, how would you rate access to hunting lands in Arizona for hunting (species)?



Q63. How would you rate access to public lands for hunting (species) in Arizona? (Asked of those who hunted their primary species on public lands at least half the time.)



Q69. How would you rate access to private lands for hunting (species) in Arizona? (Asked of those who hunted their primary species on private lands at least half the time.)



FACTORS THAT MAY POSITIVELY AFFECT ACCESS

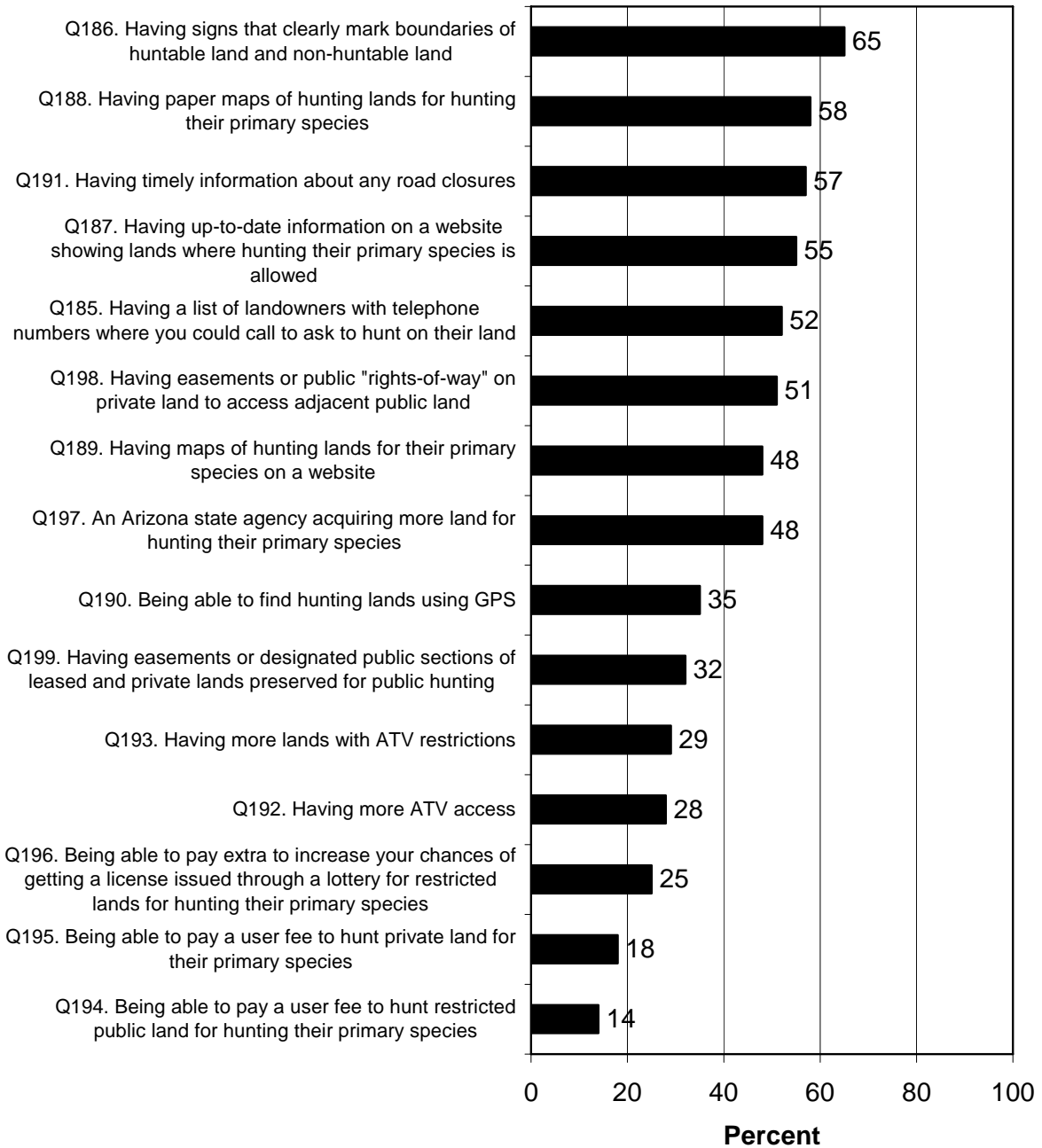
- The survey asked 15 questions about things that would make hunting access easier (shown in Text Box 5 below). For each item, the survey asked hunters if it would be *very* effective, *somewhat* effective, or *not at all* effective at making it easier to access land on which to hunt. The starting point in going through the list in each interview was randomized. The results of the series of questions were then ranked.
- In looking at the ranking by the percentage saying that the items would be *very* or *somewhat* effective at making access easier, two tiers stand out: having signs that clearly mark boundaries of huntable land (85%), having timely information about any road closures (85%), having paper maps of hunting lands for hunting their primary species (83%), and having up-to-date information on a website showing lands where hunting their primary species is allowed (80%).
 - The second tier consists of having a list of landowners with telephone numbers for calling to ask permission (68%), having an Arizona state agency acquire more land for hunting (68%), having maps of hunting lands for their primary species on a website (66%), having easements or public rights-of-way on private land to access adjacent public land (65%).
 - Other graphs in this series show the ranking by the percentage saying the item would be *very* effective as well as *not at all* effective at making access easier.

TEXT BOX 5

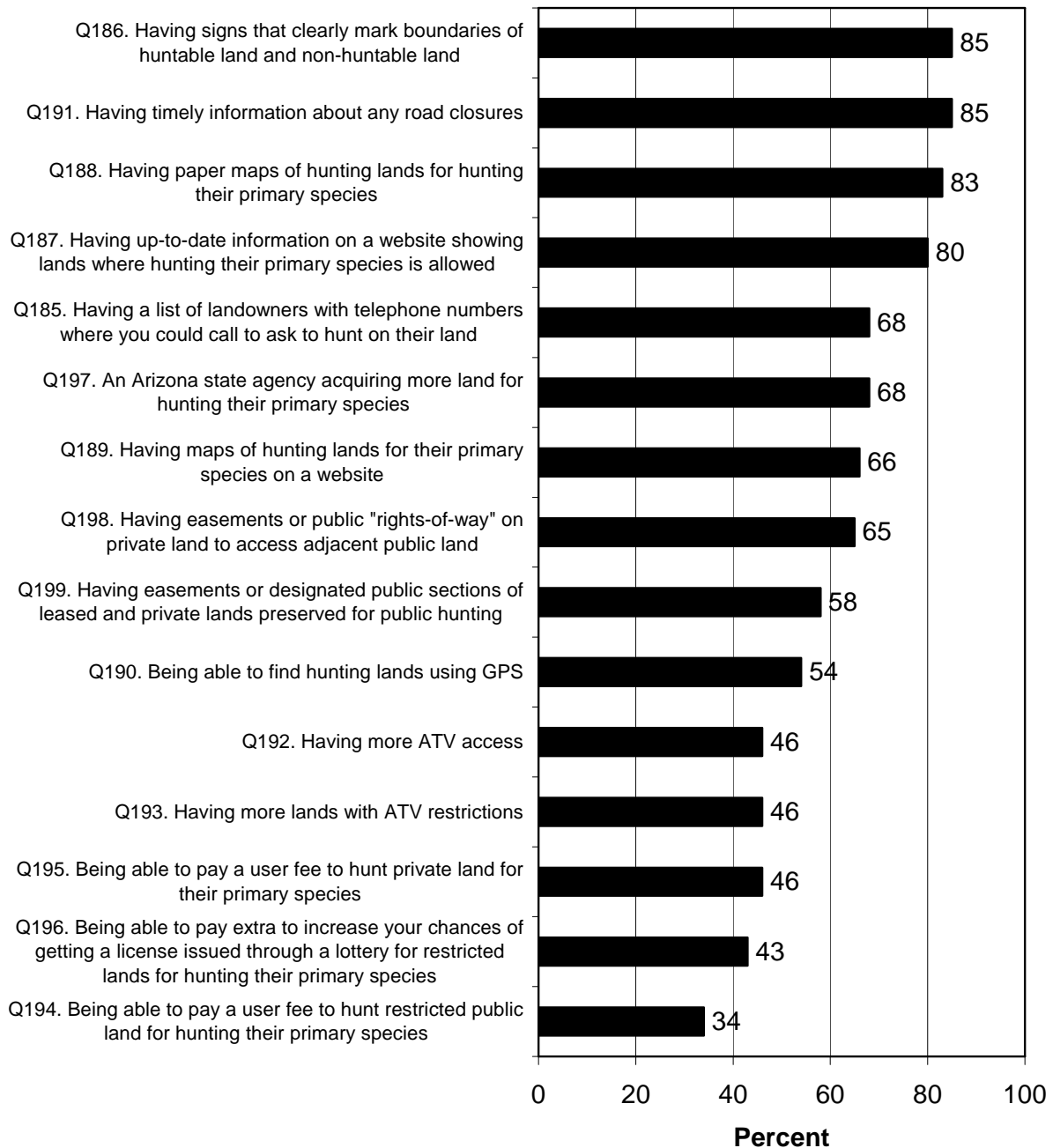
Things that might make hunting access easier that were asked about in the survey:

- Having a list of landowners with telephone numbers where the respondent could call to ask to hunt on their land
- Having signs that clearly mark boundaries of huntable land
- Having up-to-date information on a website showing lands where hunting is allowed
- Having paper maps of hunting lands
- Having maps of hunting lands on a website
- Being able to find hunting lands using GPS
- Having timely information about any road closures
- Having more ATV access
- Having more lands with ATV restrictions
- Being able to pay a user fee to hunt restricted public land
- Being able to pay a user fee to hunt private land
- Being able to pay extra to increase the chances of getting a license issued through a lottery
- An Arizona state agency acquiring more land for hunting
- Having easements or public “rights-of-way” on private land to access adjacent public land
- Having easements or designated public sections of leased and private lands preserved for public hunting

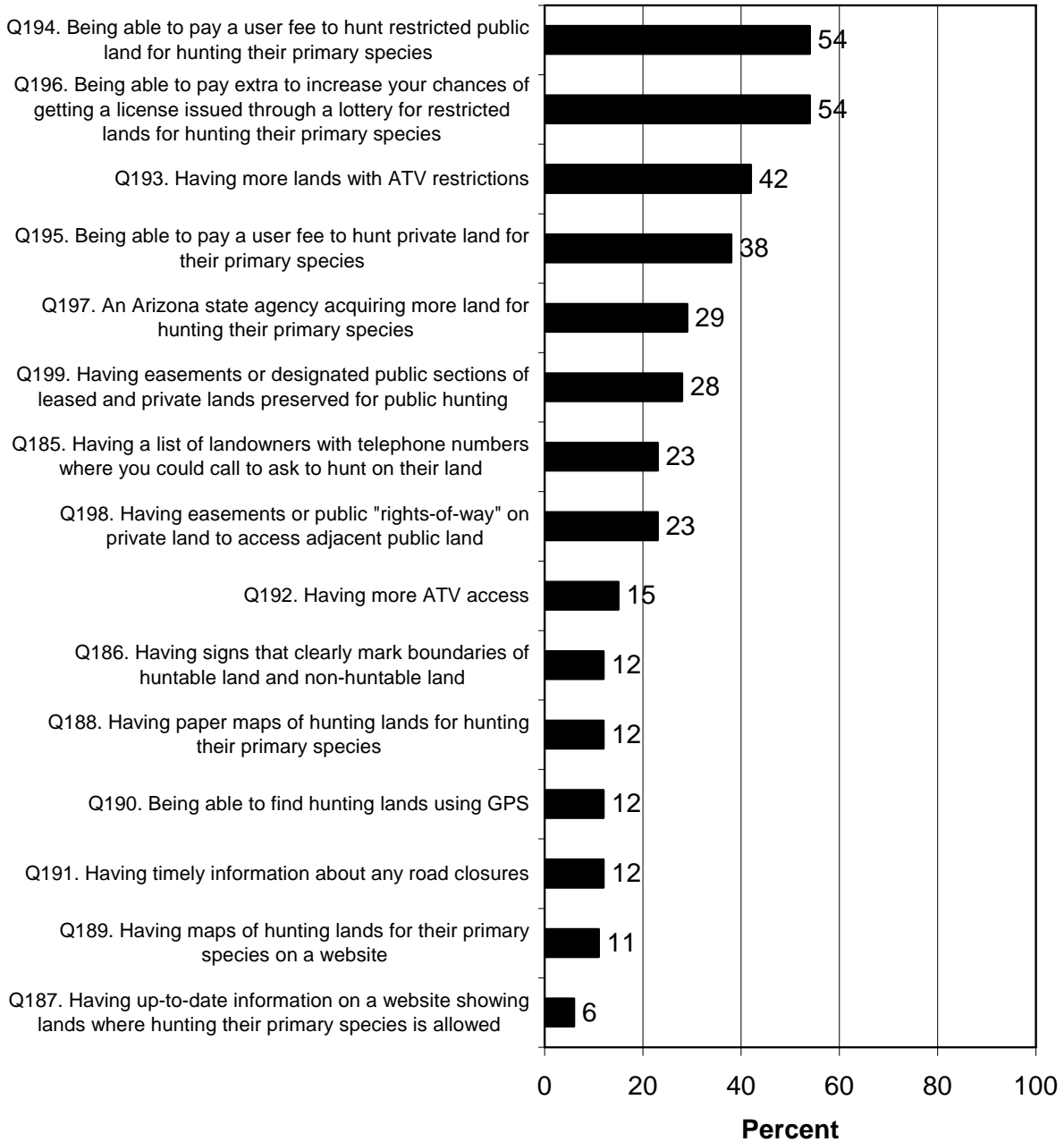
Percent who indicated that the following would be very effective at making it easier for them to access land to hunt (species), including lands they don't currently hunt.



Percent who indicated that the following would be very or somewhat effective at making it easier for them to access land to hunt (species), including lands they don't currently hunt.



Percent who indicated that the following would not be effective at all at making it easier for them to access land to hunt (species), including lands they don't currently hunt.



POTENTIAL REASONS THAT LANDOWNERS MAY CLOSE THEIR LAND TO HUNTING

- The survey asked eight questions about possible reasons that landowners may close their land to public hunting (shown in Text Box 6 below). For each possible reason, the survey asked hunters if they think it is a *very important* reason, a *somewhat important* reason, or a *not at all* important reason that landowners close their land to the public for hunting. The starting point in going through the list in each interview was randomized. The results of the series of questions were then ranked.
 - Three items stand out above the rest in the ranking by the percentage saying the reasons are *very important*, all related to misuse of the land: property damage caused by other hunters, excluding litter (75% say this is a *very important* reason that landowners close their land), litter (69%), and irresponsible shooting, drinking, or similar behavior by hunters (67%). In a middle tier are liability concerns (37%), the landowner's desire to allow only personal or family use of the land (33%), and the land being too crowded (25%).
 - The results of the ranking by *very* or *somewhat* important are similar to the above ranking.
 - A third graph in this series is shown consisting of the ranking by the percentage saying the reason is not at all important.

TEXT BOX 6

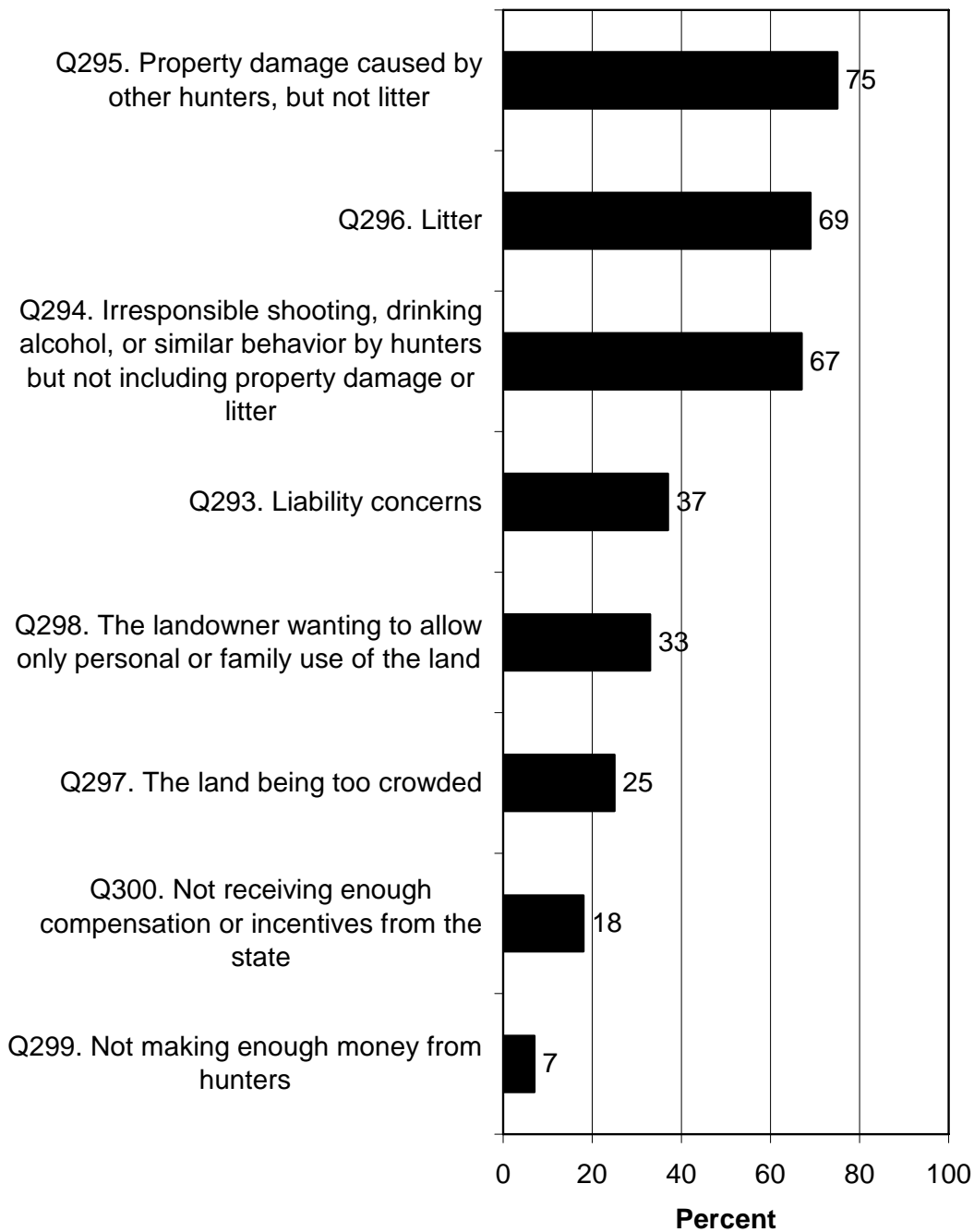
Possible reasons that landowners may close their land to public hunting that were asked about in the survey:

- Liability concerns
- Irresponsible shooting, drinking alcohol, or similar behavior by hunters (excluding property damage or litter)
- Property damage caused by other hunters (excluding litter)
- Litter
- Land being too crowded
- The landowner wanting to allow only personal or family use of the land
- The landowner not making enough money from hunters
- The landowner not receiving enough compensation or incentives from the state

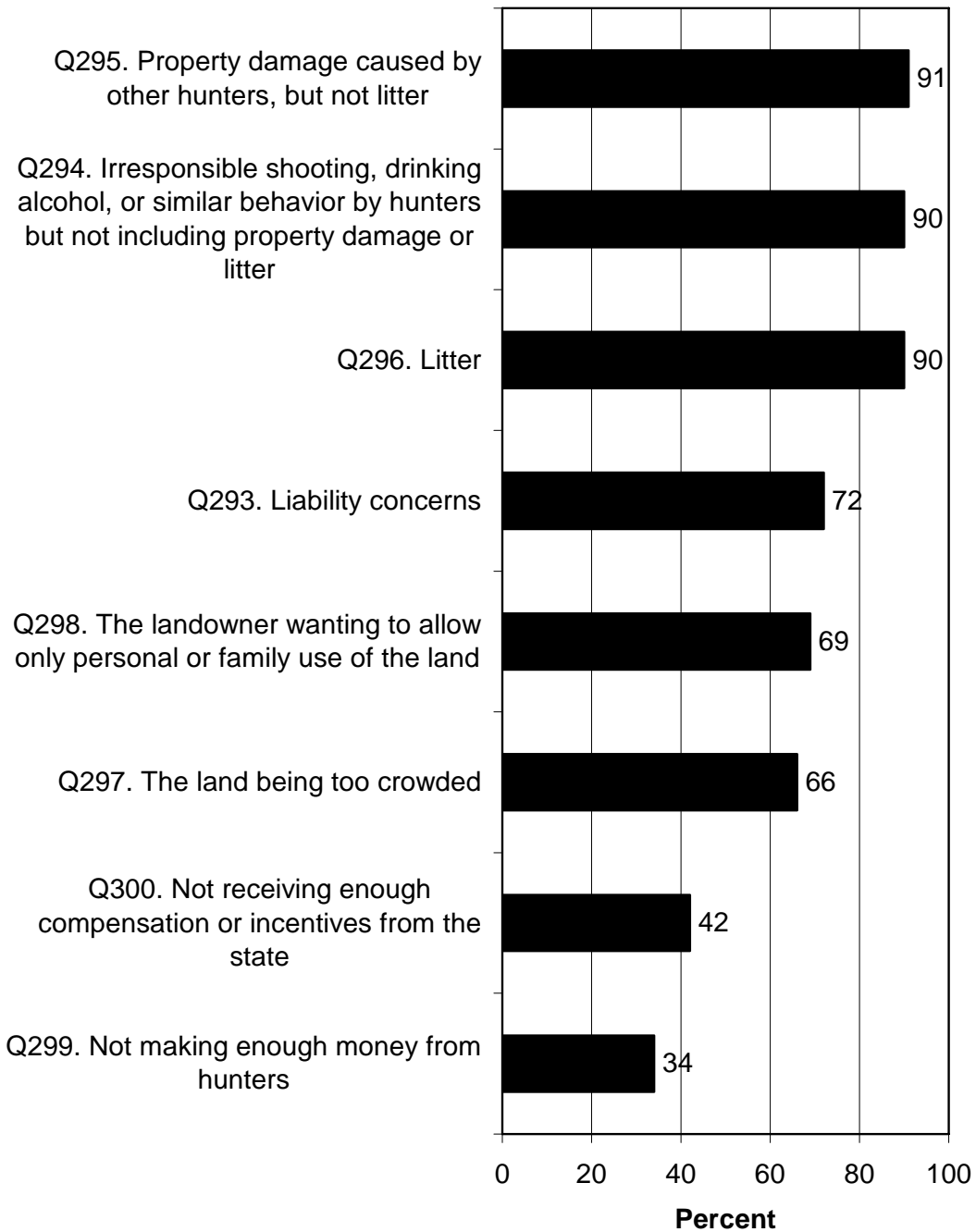
- The large majority of hunters (79%) think that a program that provides landowners with compensation or incentives for opening their lands to the public for hunting would be *very* or *somewhat* effective at improving hunting access in Arizona.

- The overwhelming majority of hunters (93%) are *not* aware of any laws in Arizona that reduce the liability of landowners who open their lands to the public for hunting; meanwhile, 3% are aware of such laws.
 - In a related question, the large majority of Arizona hunters (76%) support laws to reduce landowner liability for landowners who open their lands to the public for hunting; only 10% oppose (the remainder give neutral answers).
 - Another related question found that a large majority of hunters (65%) think that legislation reducing landowner liability would be *very* or *somewhat* effective at improving hunter access to private lands in Arizona; only 16% think it would *not* be at all effective.
 - Finally, the majority of hunters (58%) agree that legislation reducing landowner liability would significantly increase the number of landowners who would open their lands to the public for hunting.

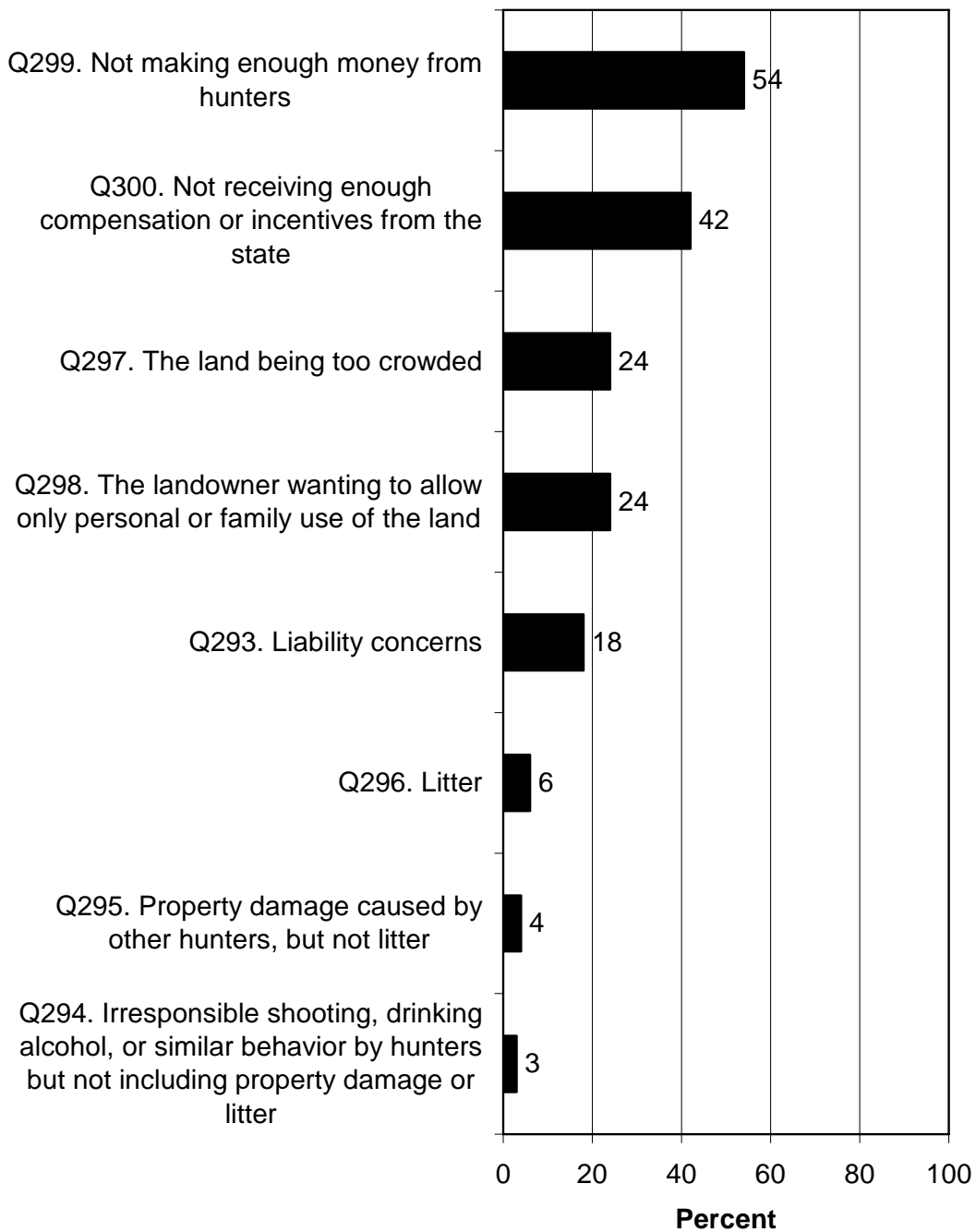
Percent who think the following reasons are very important to landowners in Arizona who close their lands to the public for hunting.



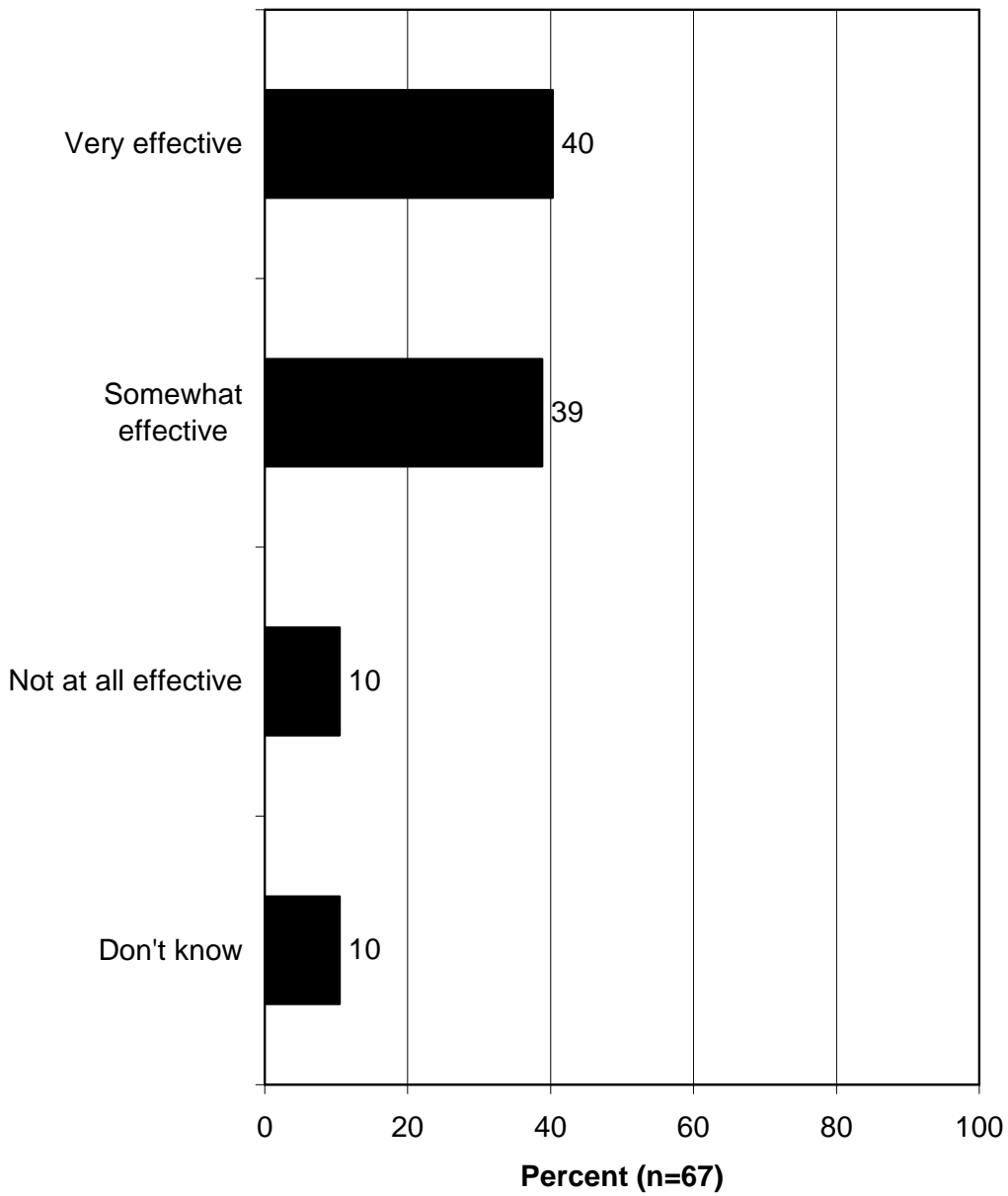
Percent who think the following reasons are very or somewhat important to landowners in Arizona who close their lands to the public for hunting.



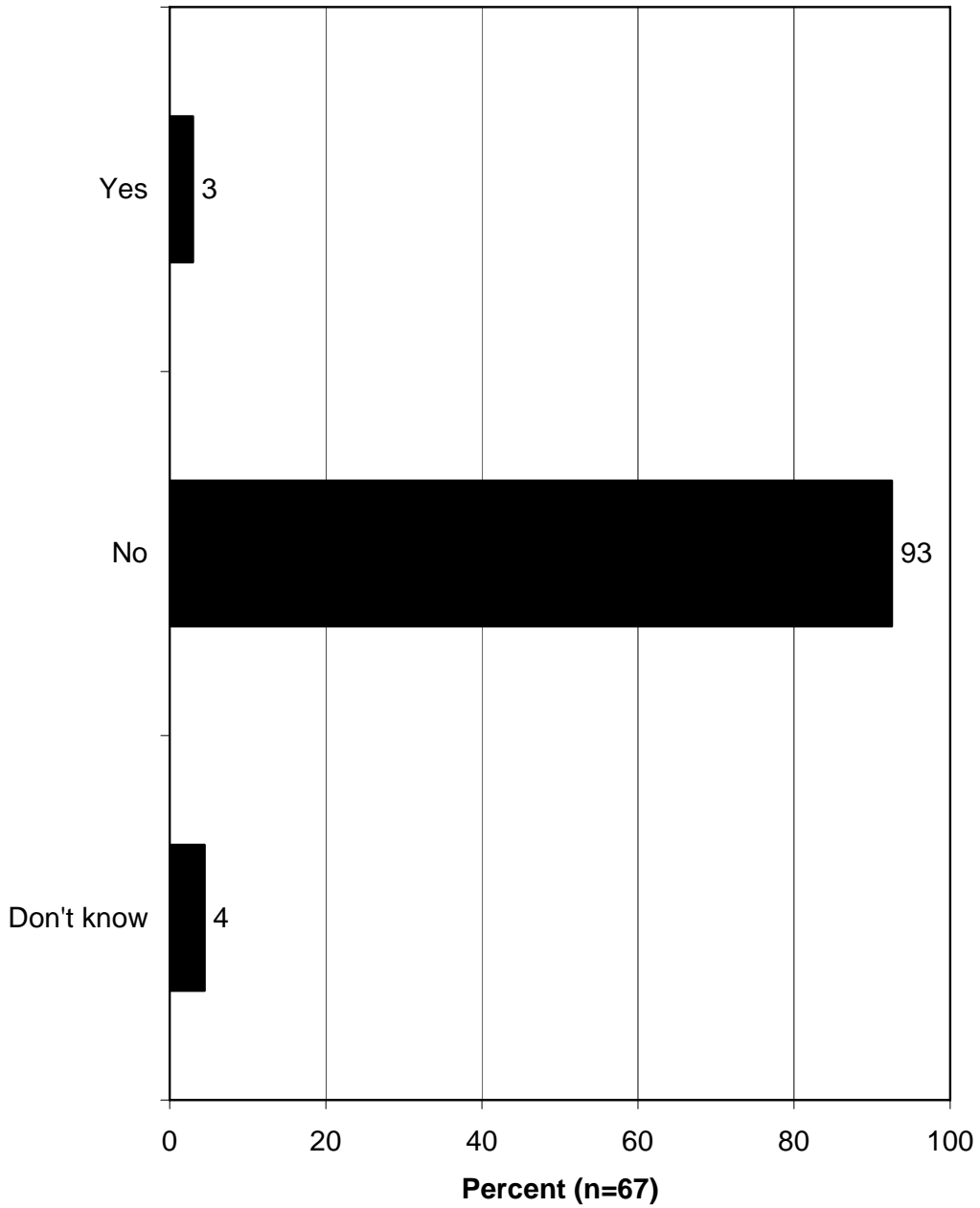
Percent who think the following reasons are not important at all to landowners in Arizona who close their lands to the public for hunting.



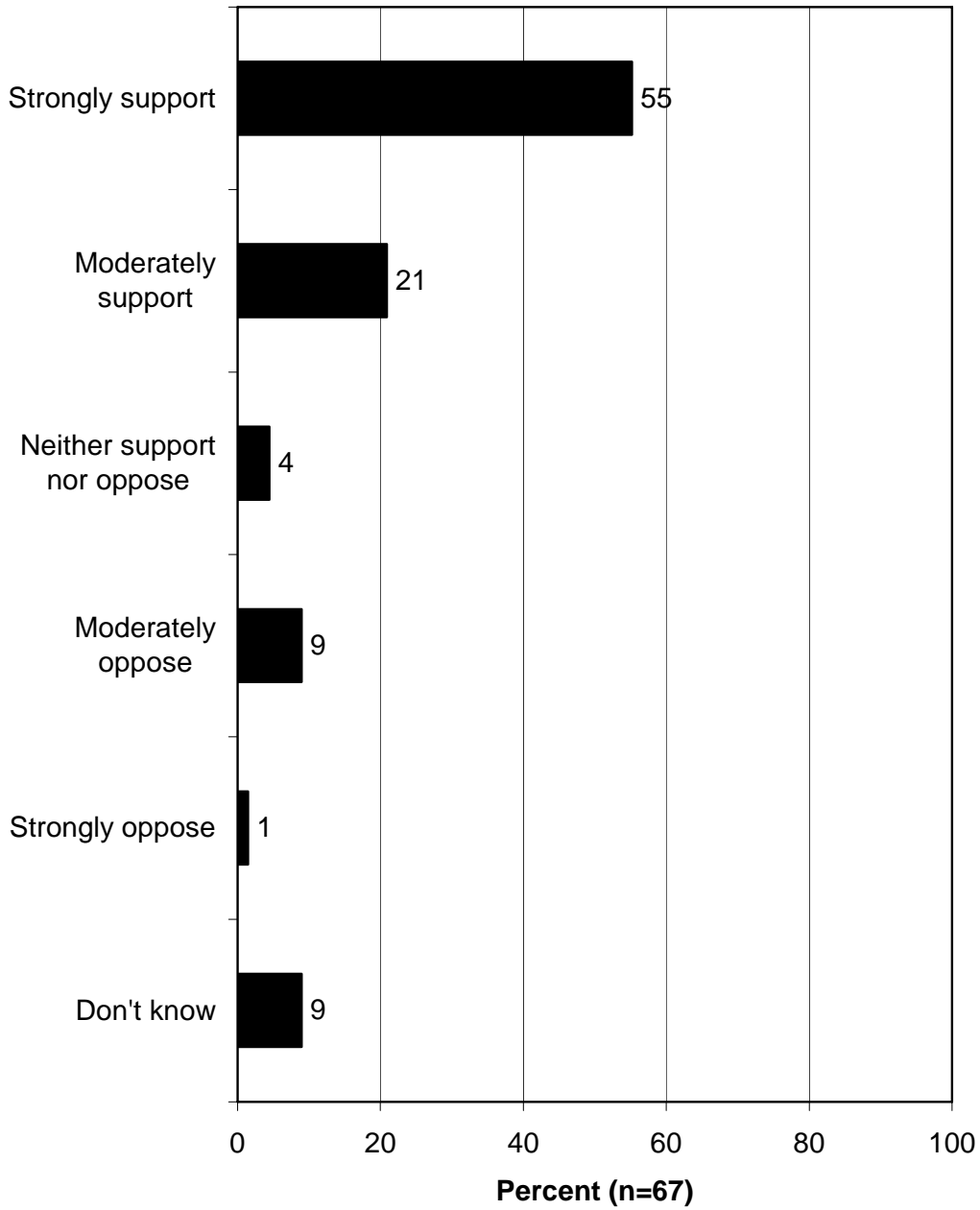
Q217. In your opinion, how effective do you think a program providing landowners compensation or incentives for opening their lands to the public for hunting would be at improving hunting access to private lands in Arizona?



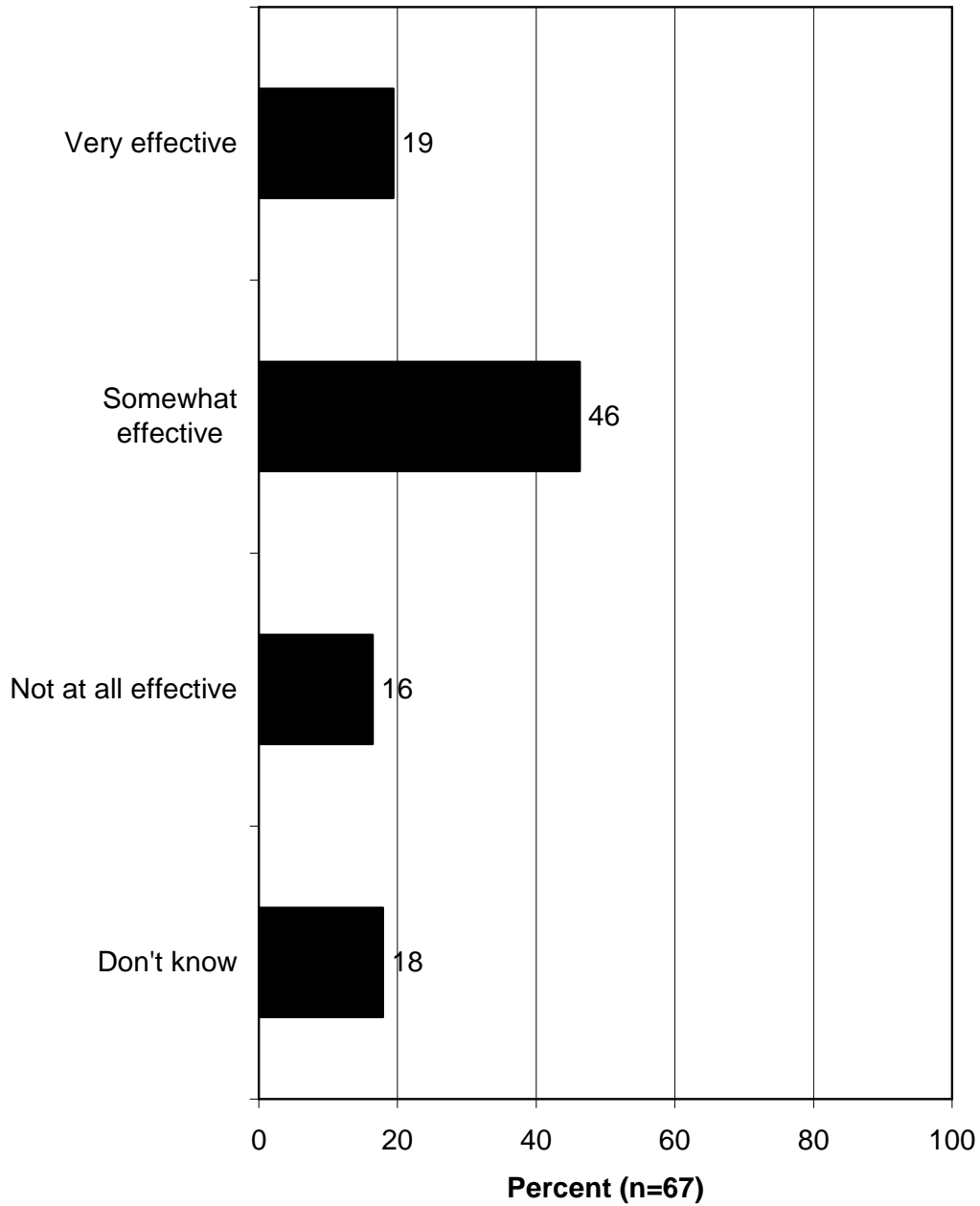
Q218. Are you aware of any laws in Arizona that reduce landowner liability for landowners who open their lands to the public for hunting?



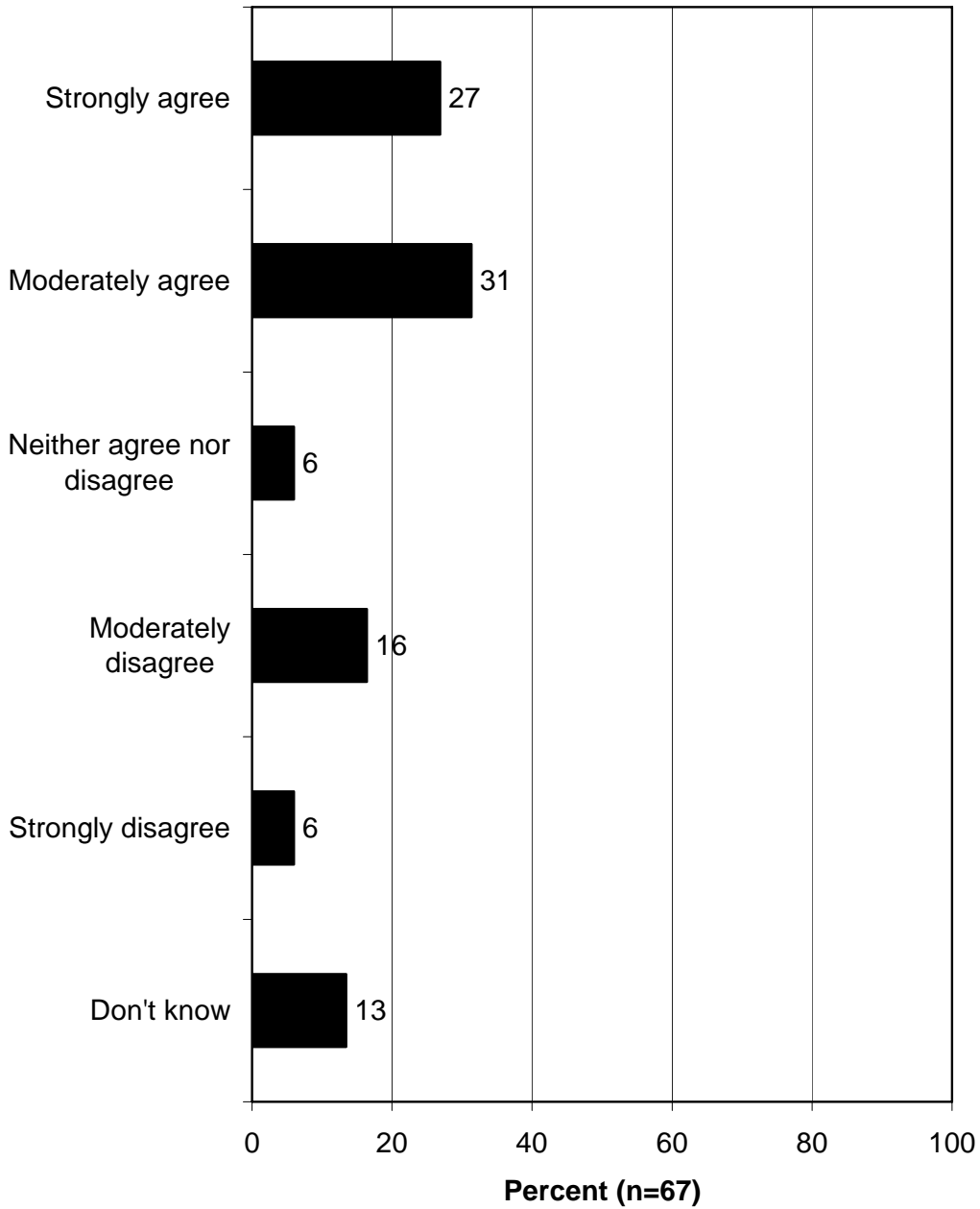
Q219. Do you support or oppose Arizona laws to reduce landowner liability for landowners who open their lands to the public for hunting?



Q220. In your opinion, how effective do you think legislation reducing landowner liability is or would be at improving hunting access to private lands in Arizona?



Q224. Do you agree or disagree that legislation reducing landowner liability would significantly increase the number of landowners who open their lands to the public for hunting?



PARTICIPATION IN AND USE OF VARIOUS PROGRAMS AND RESOURCES

- The survey asked about eight programs in Arizona that pertain to hunting access (some state programs and some national programs). The programs about which the survey asked are shown in Text Box 7 below.
 - A basic line of questioning asked hunters about their awareness of the various programs, and four of the eight programs have awareness levels of about a third or higher: the U.S. Fish and Wildlife Service's Waterfowl Production Areas (50% were *very* or *somewhat* aware of it), the Conservation Reserve Program, or CRP (40%), Arizona's Heritage Access Program (39%), and Arizona's Adopt-A-Ranch Program (32%). All other programs have awareness levels of 14% or lower. Graphs show *very* aware as well as *not* aware.
 - Another series of questions asked hunters about their use of or participation in the eight access programs. Those programs with the highest rates of use/participation are the Adopt-A-Ranch Program (8%), the wheretohunt.org website (7%), the U.S. Fish and Wildlife Service's Waterfowl Production Areas (6%), and the huntinfo.com website (6%).

TEXT BOX 7

Hunting access programs that were asked about in the survey:

The Open Fields program
 The Conservation Reserve Program
 The U.S. Fish and Wildlife Service's Waterfowl Production Areas or WPAs
 The wheretohunt.org website
 The huntinfo.com website
 The huntandshoot.org website
 Arizona's Heritage Access Program
 Arizona's Adopt-A-Ranch Program

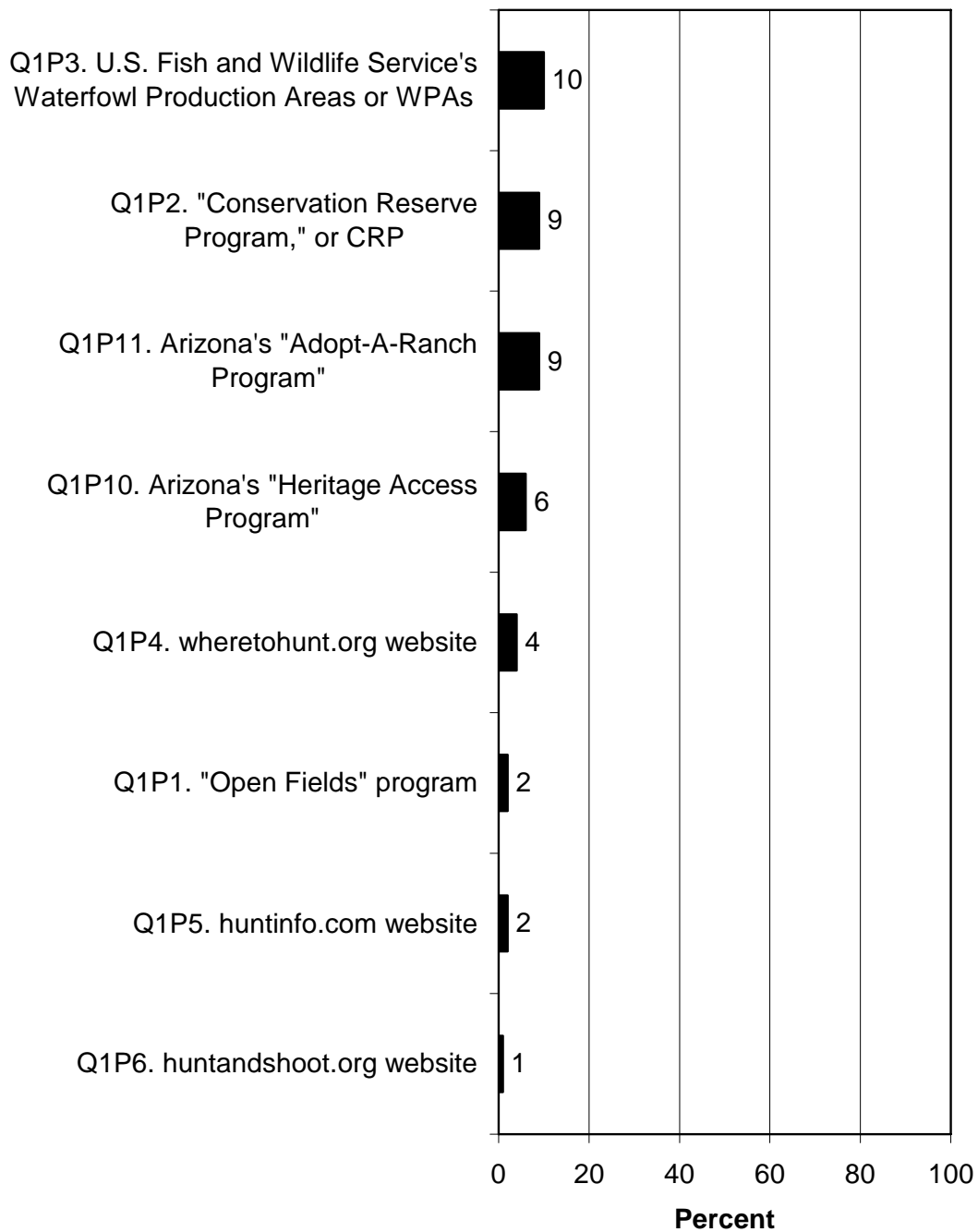
- For each program of which a hunter was aware, the survey asked him/her to rate it at making hunting access easier.
 - All of the programs have similar ratings. For instance, the percentages giving an *excellent* or *good* rating range from 37% to 47%, while fair/poor ratings combined range from 9% to 13%. The three programs with the highest percentages giving an *excellent* or

good rating are Open Fields Program (47%), the huntinfo.com website (45%), and the Adopt-A-Ranch Program (45%).

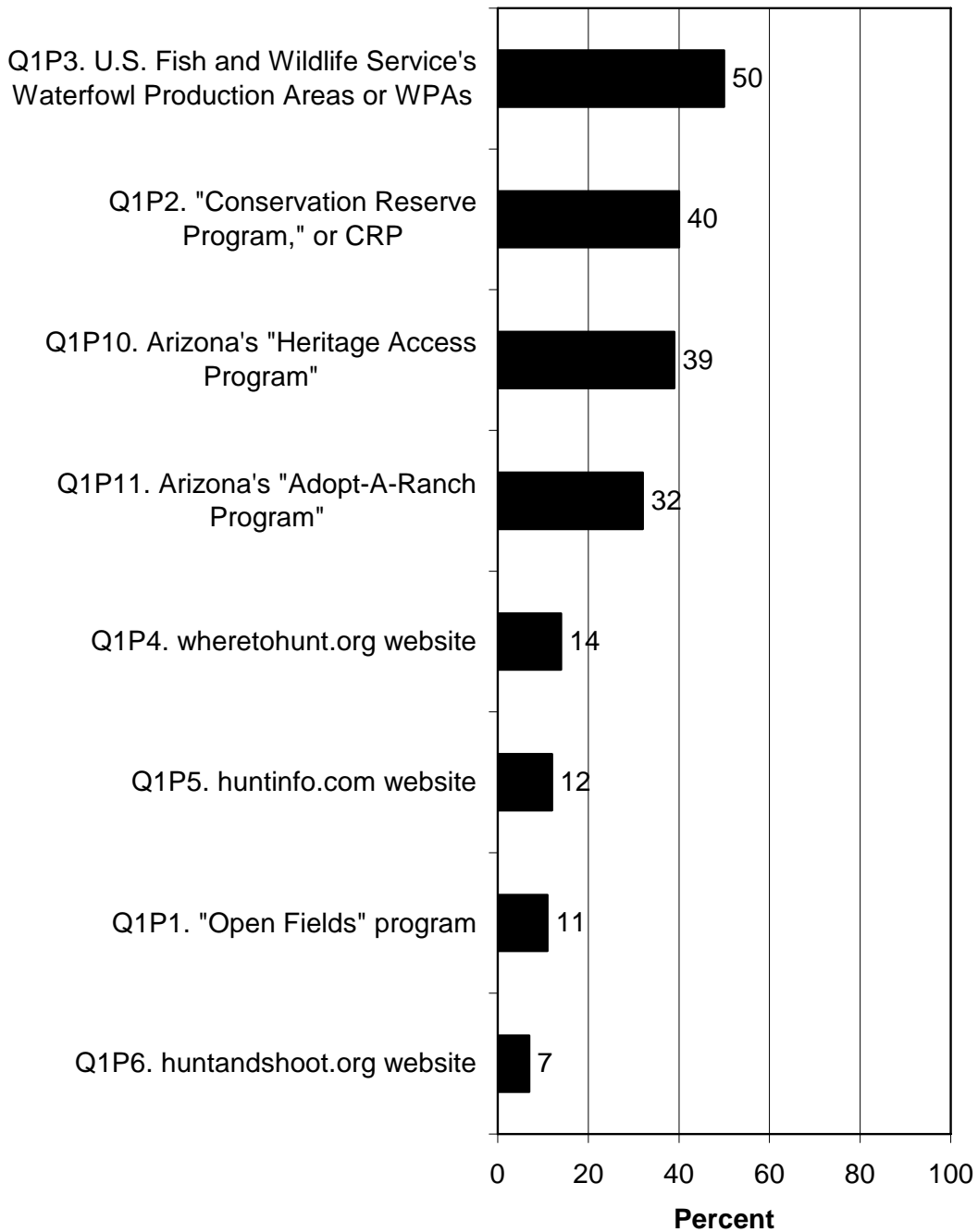
- The graphs for this series of questions include the percentages giving a rating of *excellent*, giving a rating of *excellent* and *good* combined, giving a rating of *fair* or *poor* combined, and giving a rating of *poor*.

- The survey included a specific question about use of private lands enrolled in any walk-in access program or a state-run private land access program in Arizona. More than a quarter of hunters (29%) make some use of such lands, saying that they hunt their primary species *often*, *sometimes*, or *rarely* on such lands. On the other hand, the majority (68%) *never* do so.

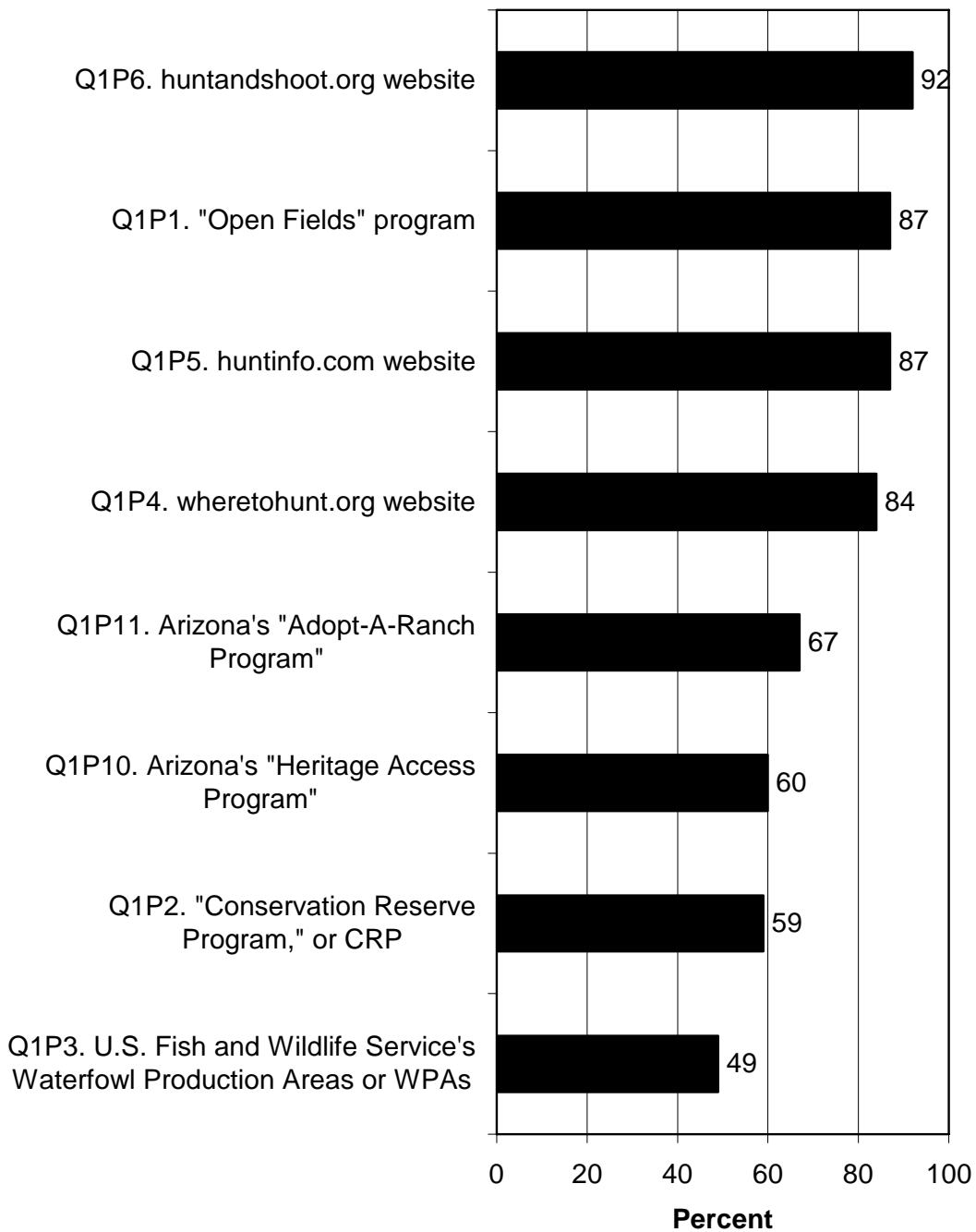
Percent who are very aware of the following hunting-related programs and resources.



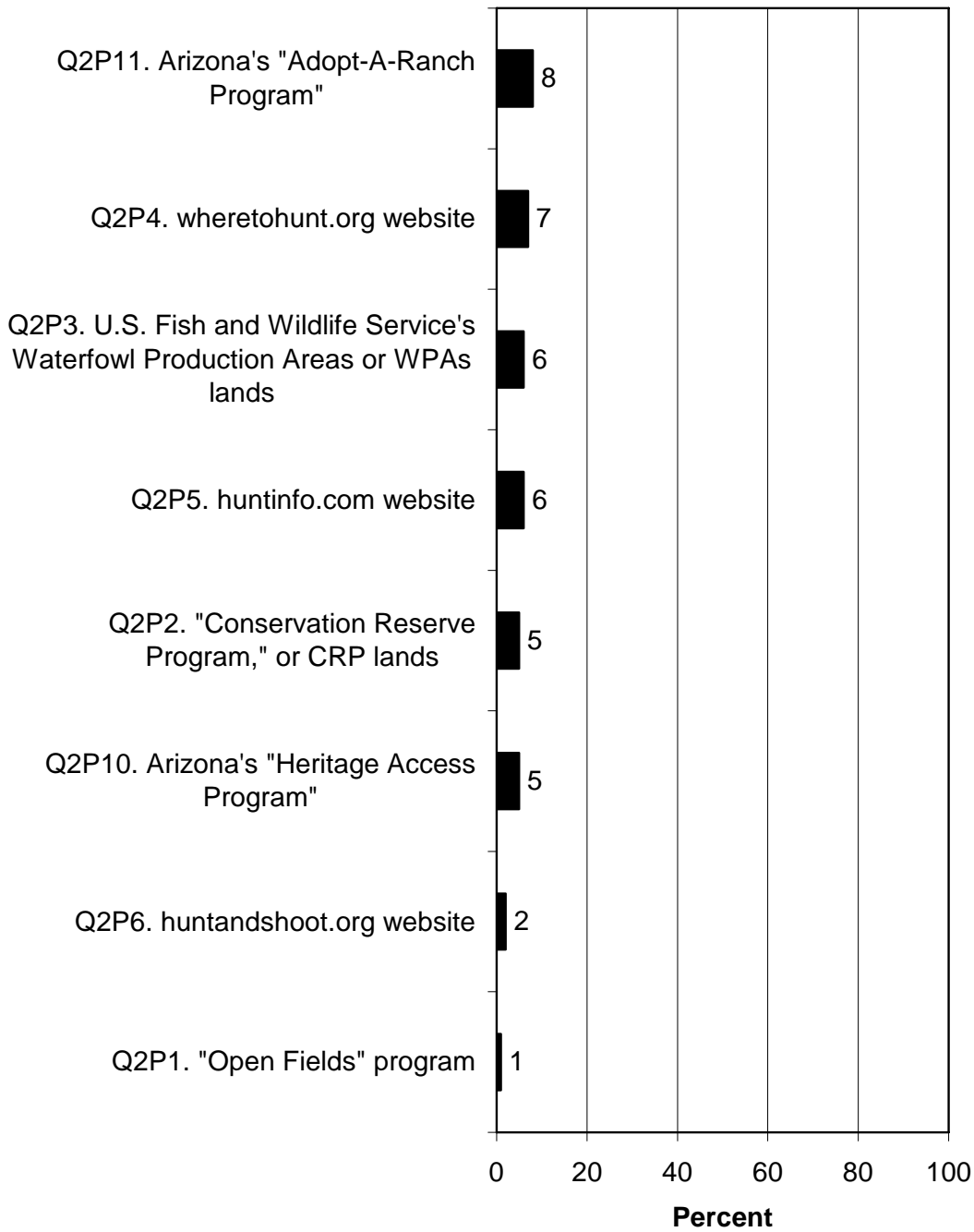
Percent who are very or somewhat aware of the following hunting-related programs and resources.



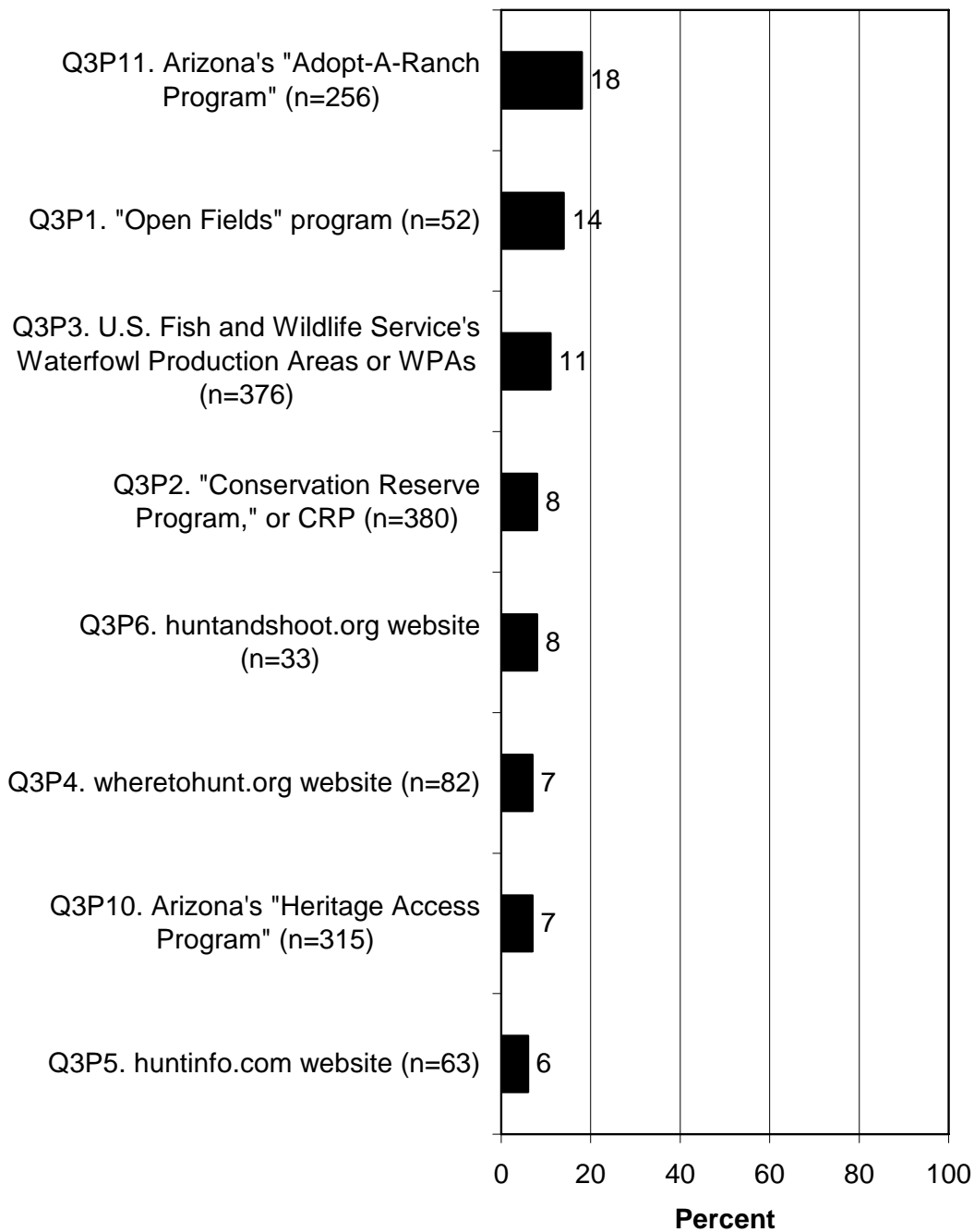
Percent who are not at all aware of the following hunting-related programs and resources.



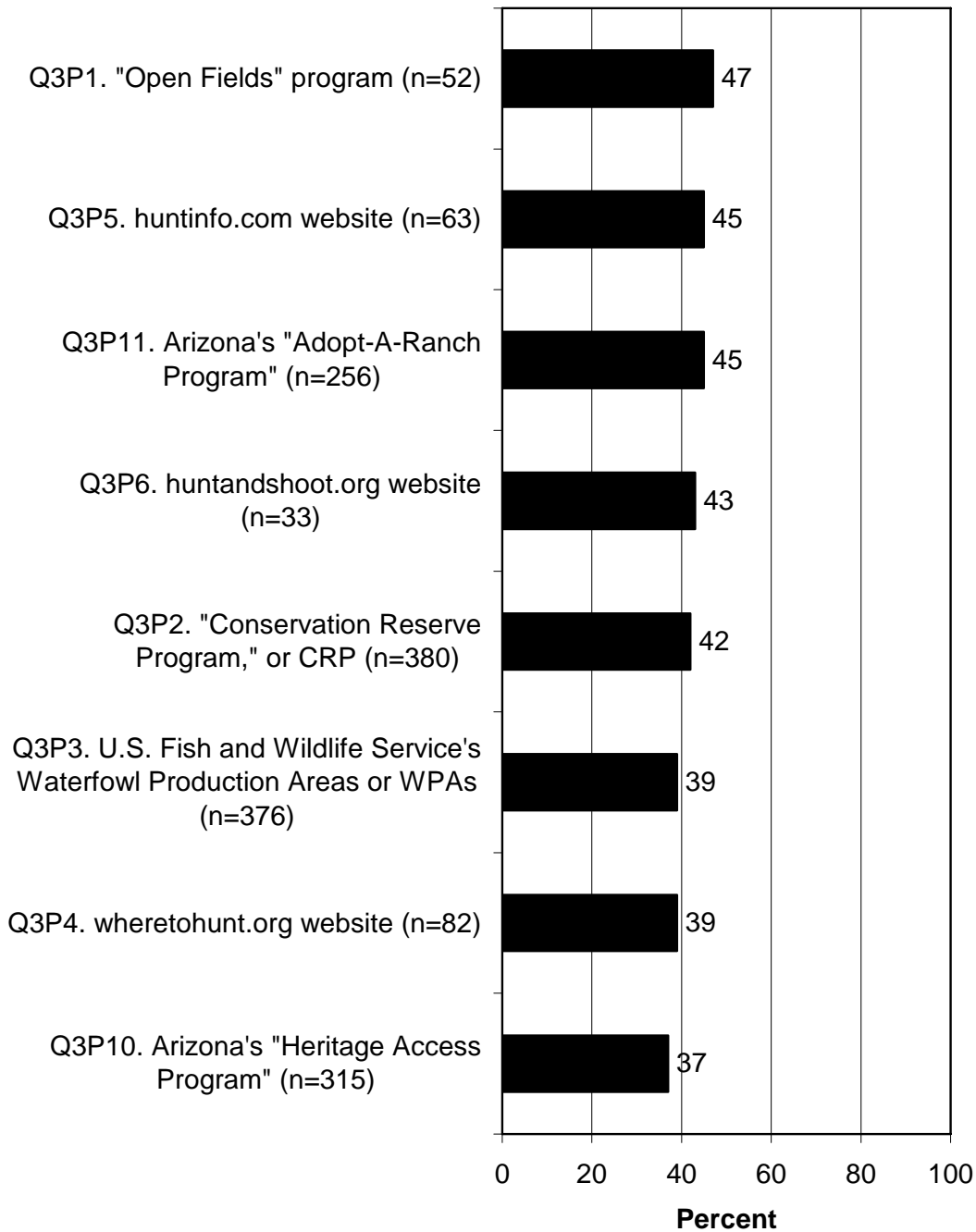
Percent who have used or participated in the following programs in the past 5 years.



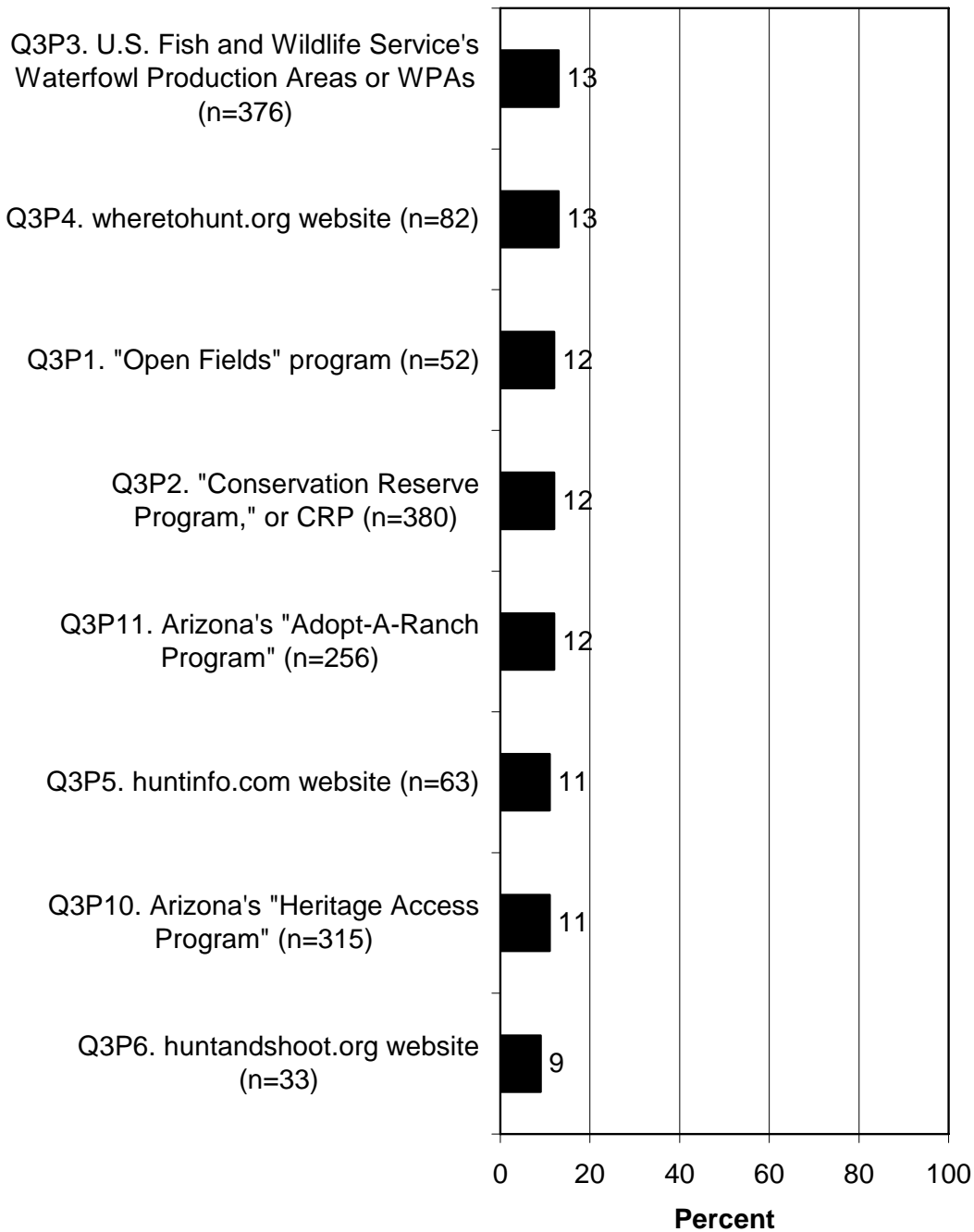
**Percent who rate the following programs/resources
for making hunting access easier as excellent.**



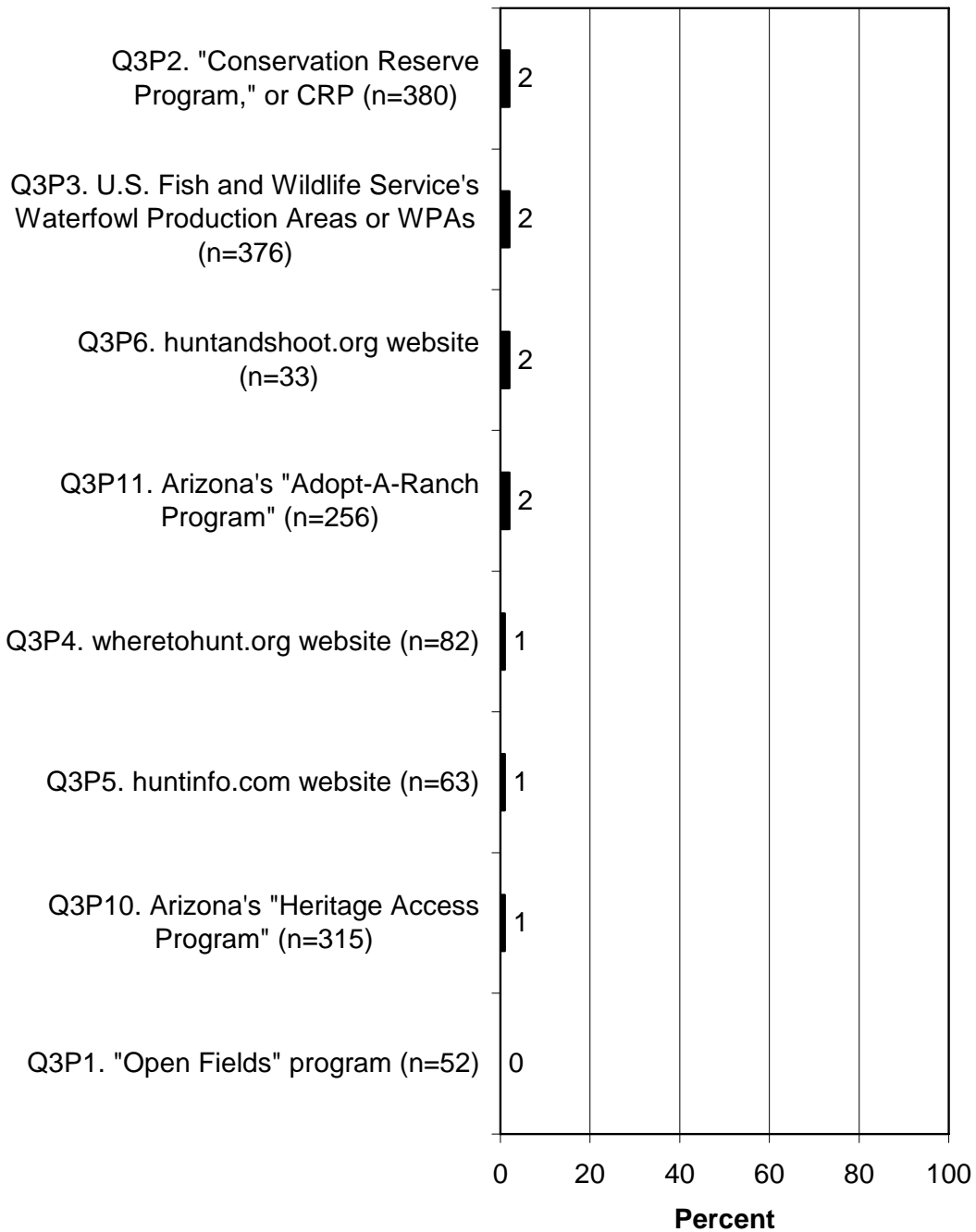
Percent who rate the following programs/resources for making hunting access easier as excellent or good.



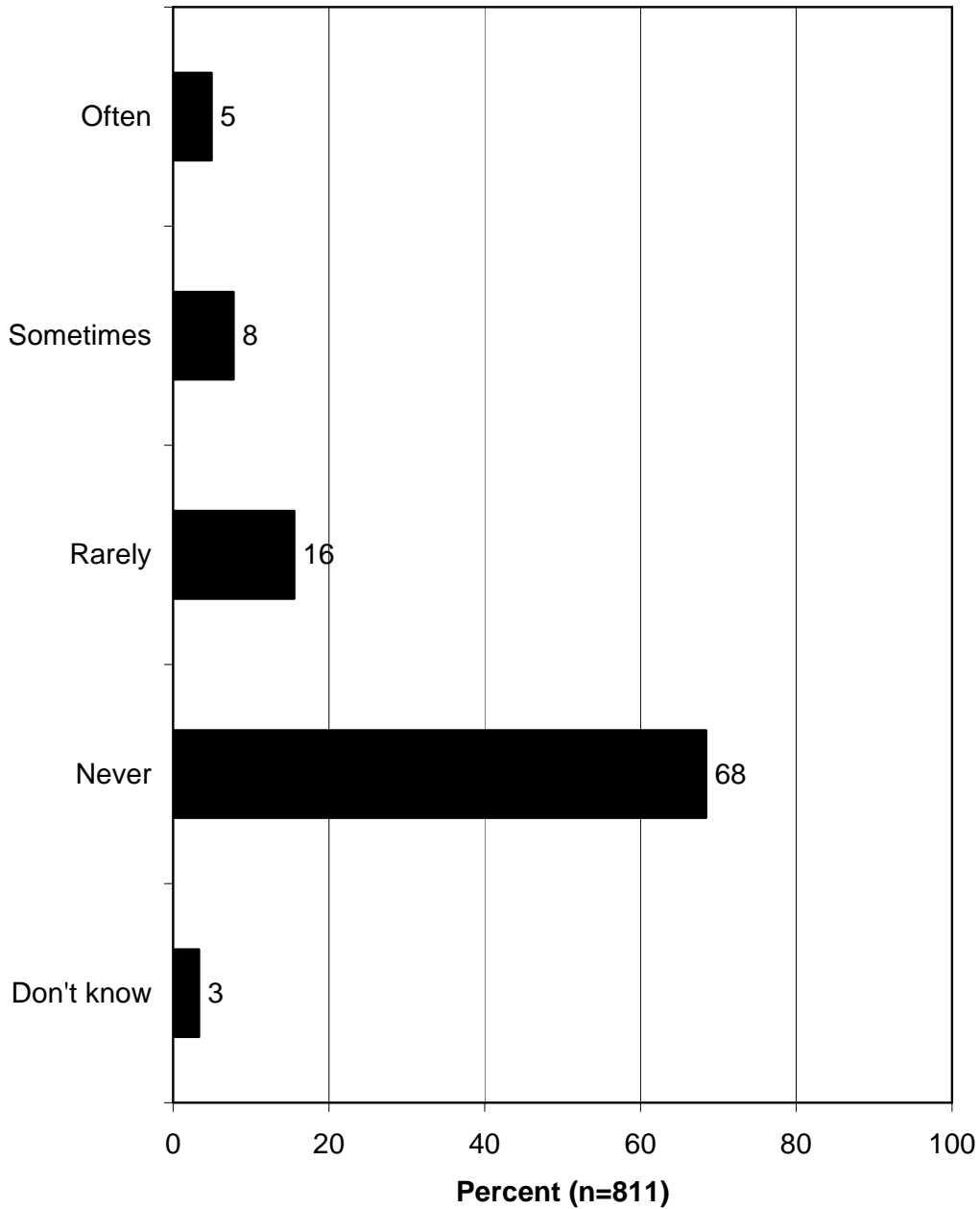
**Percent who rate the following programs/resources
for making hunting access easier as fair or poor.**



Percent who rate the following programs/resources for making hunting access easier as poor.



Q59. How often do you hunt for (species) on private lands enrolled in a Walk-In Access program or a state-run private land access program in Arizona?



SOURCES OF INFORMATION USED IN DECIDING WHERE TO HUNT

- In the broadest question about sources of information, hunters were asked in an open-ended question where they got information on places to hunt and hunting access in Arizona. The most popular source is friends/family/word of mouth (58%), by far the top answer. Other notable answers include specific sites on the Internet (14%), a state agency other than on a website (14%), with the license application/hunting regulations (8%), and the Internet in general (7%).
 - In follow-up, hunters are split in rating the accuracy of the information they receive: while 56% say it is *very* accurate, 40% say it is only *somewhat* accurate. Obviously, this latter group has found enough inaccuracies to *not* rate it *very* accurate.

- The survey asked hunters if they had visited the websites of four agencies (the AGFD, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management). The majority of hunters in Arizona had visited the AGFD site (74%), while 42% had visited the U.S. Forest Service site, 31% had visited the Bureau of Land Management (BLM) site, and 19% had visited the U.S. Fish and Wildlife Service site.
 - Follow-up questions asked hunters to rate the usefulness of the websites' information on places to hunt and hunting access in planning hunting trips. Ratings are mostly positive: the AGFD site, the Bureau of Land Management site, and the U.S. Fish and Wildlife Service site all had a majority rating its access information as excellent or good. The U.S. Forest Service site had nearly half of respondents rating it excellent or good, more than rated it fair or poor (indeed, none rated it poor; the remainder consisted of "Don't know" answers).

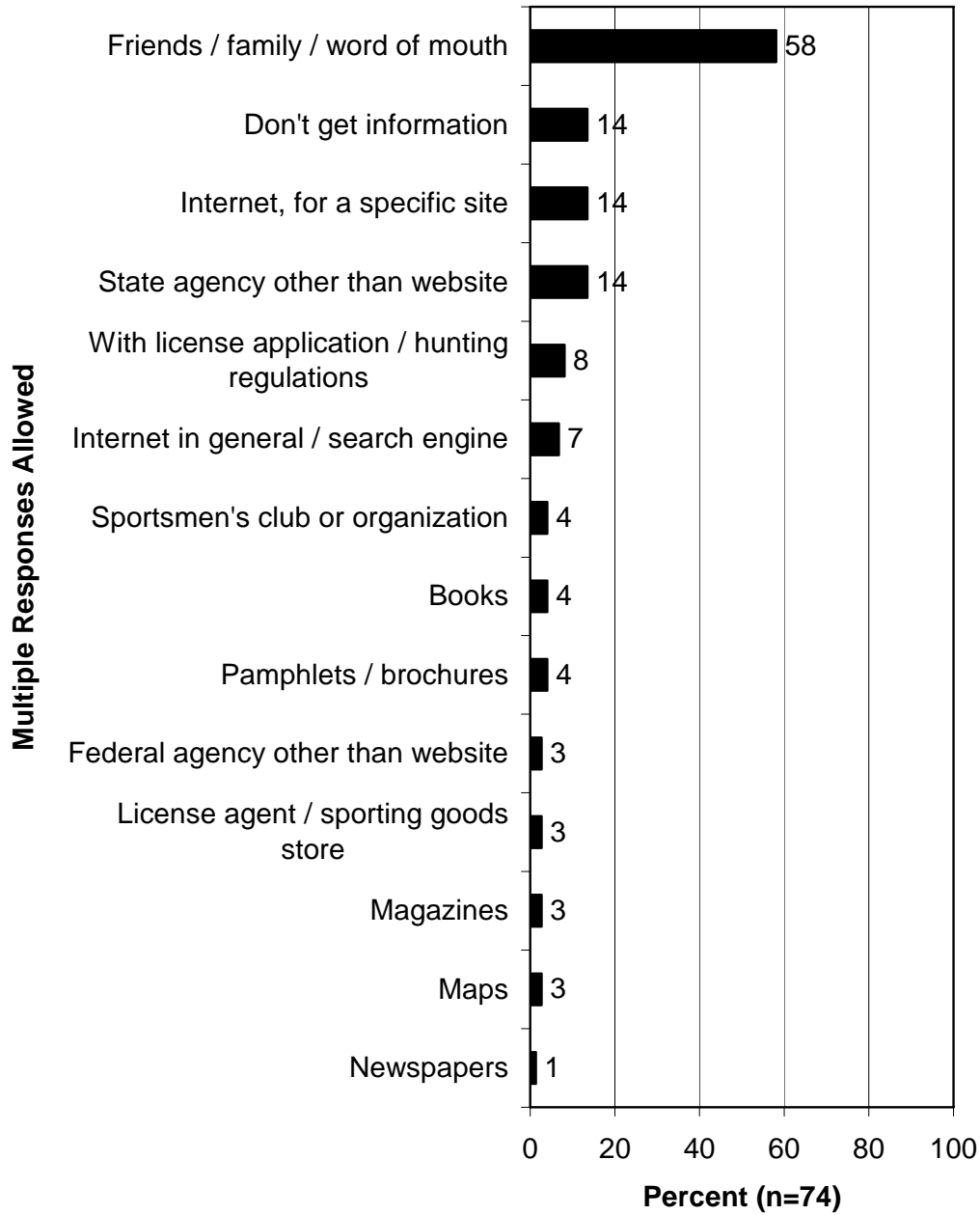
- The survey asked six questions about actions that hunters may take in deciding where to hunt (shown in Text Box 8 below). For each action, the survey asked hunters if they always, sometimes, rarely, or never do it when deciding where to hunt. The starting point in going through the list in each interview was randomized. The results of the series of questions were then ranked.
- About three-fourths or more of hunters *always* or *sometimes* do three things in deciding where to hunt: 88% scout or physically look for a place, 75% ask a friend or family member where to hunt, and 75% use paper maps to find a place to hunt.

TEXT BOX 8**Actions hunters may take in deciding where to hunt that were asked about in the survey:**

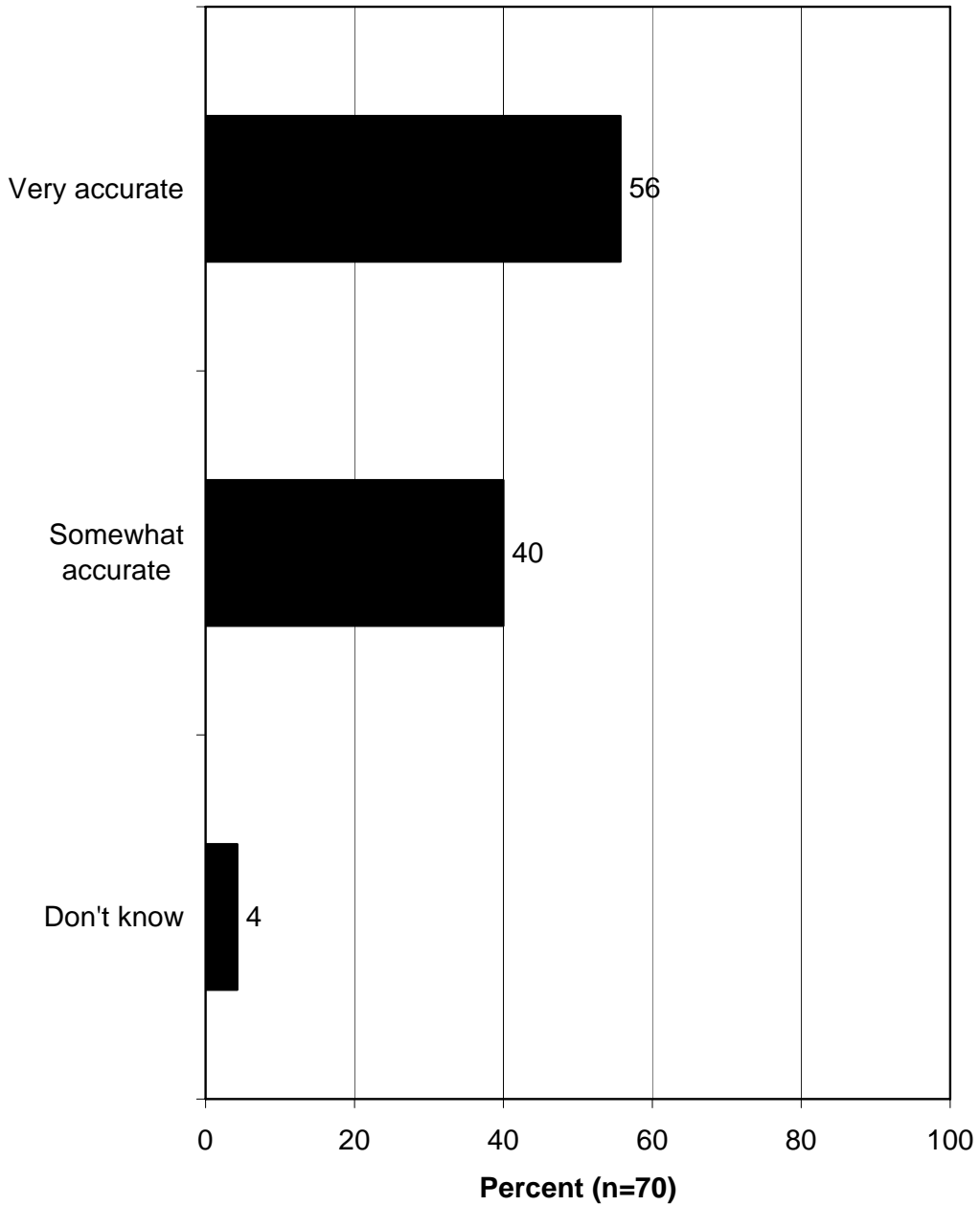
- Ask a friend or family member where to hunt
- Knock on a landowner's door to ask permission to hunt
- Use paper maps to find a place to hunt
- Use GPS to locate hunting land
- Find available hunting lands on the Internet
- Scout or physically look for land on which to hunt

- Within the above series of questions was a question asking how often hunters scout or physically look for land on which to hunt. In follow-up, they were asked how many days they typically spend scouting for hunting locations. The median number of days they typically spend annually scouting for hunting land is 5 days, among those who scout for land.

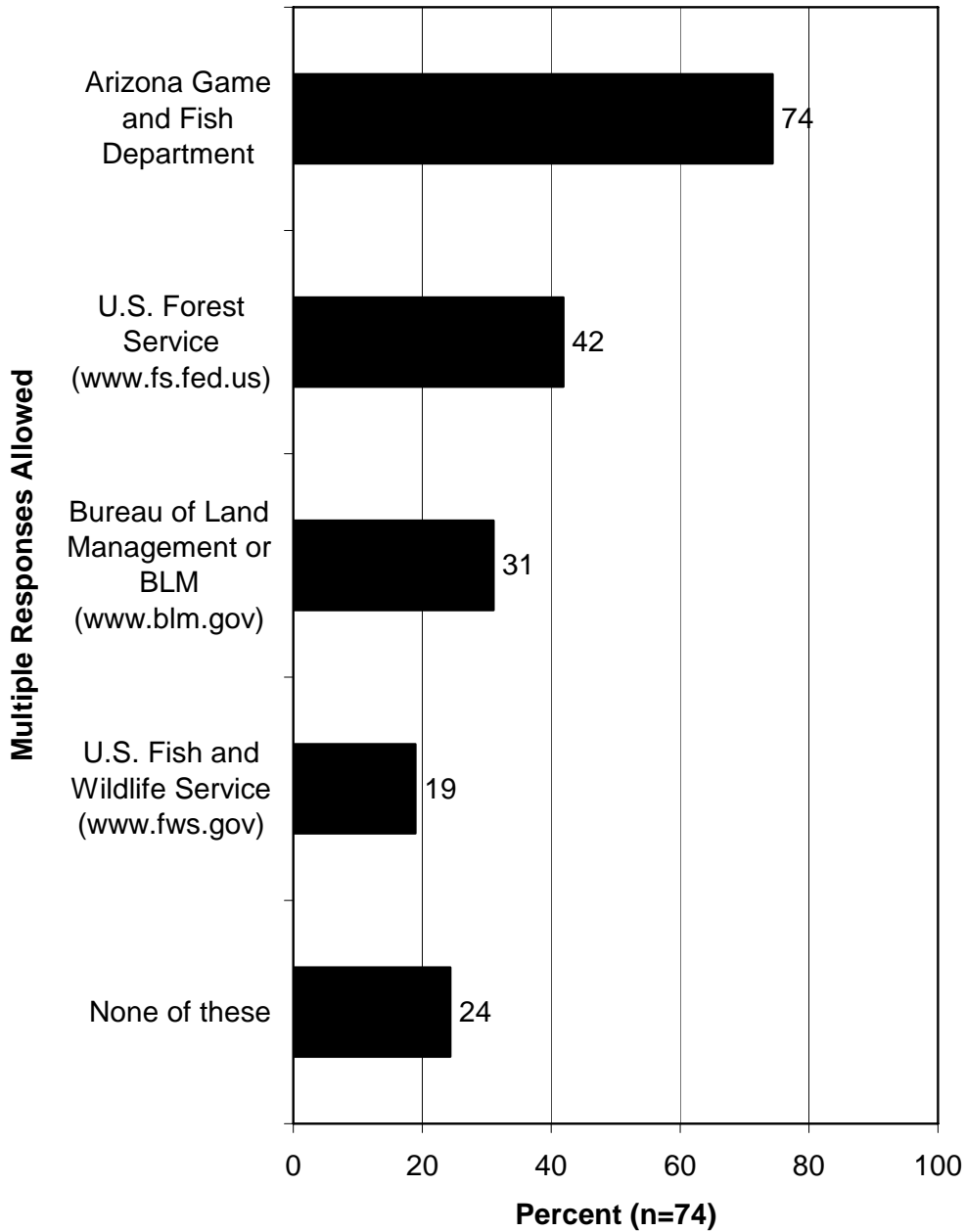
Q227. Where do you get information on places to hunt and hunting access in Arizona?



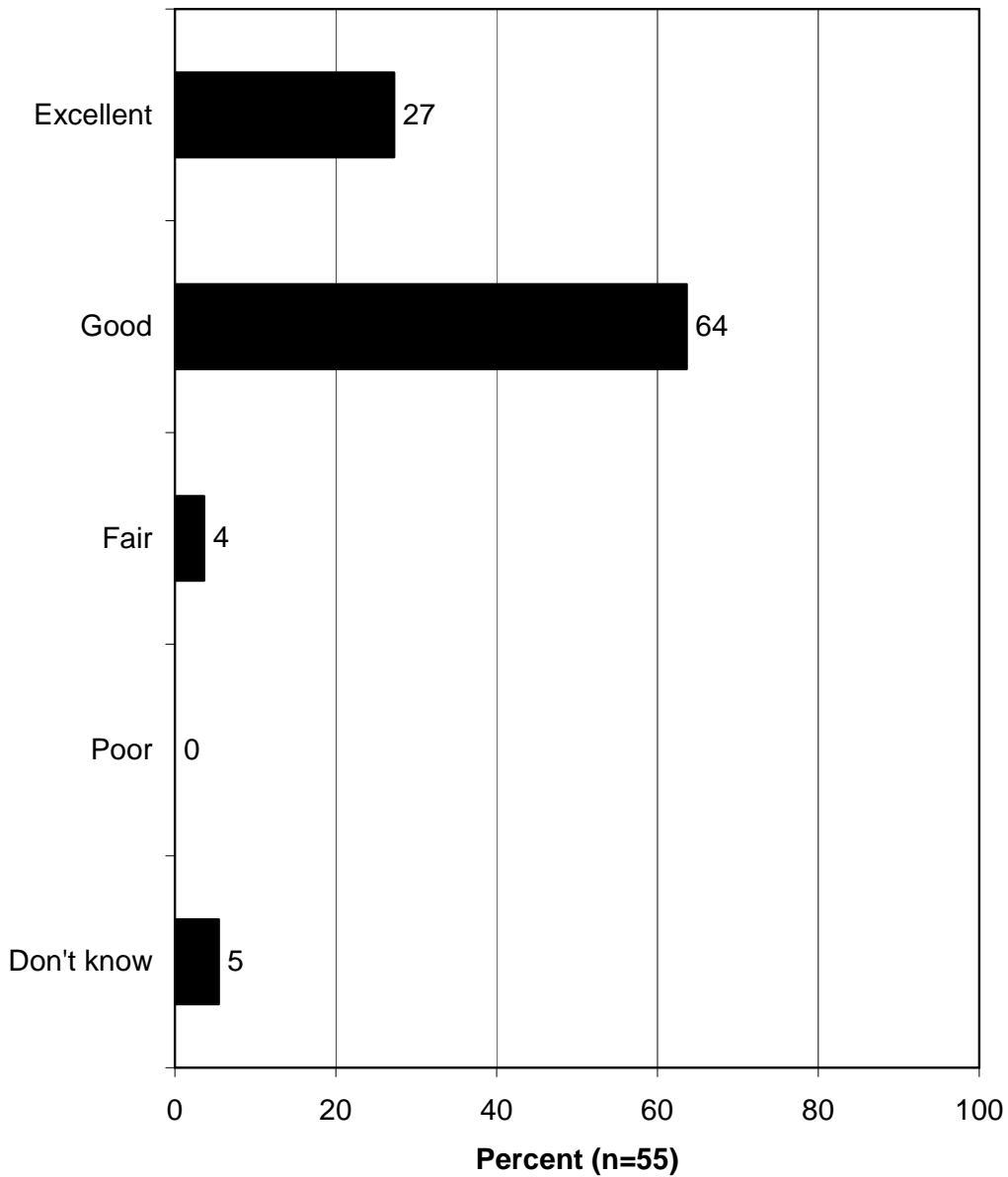
Q229. In general, how accurate is the information you typically receive?



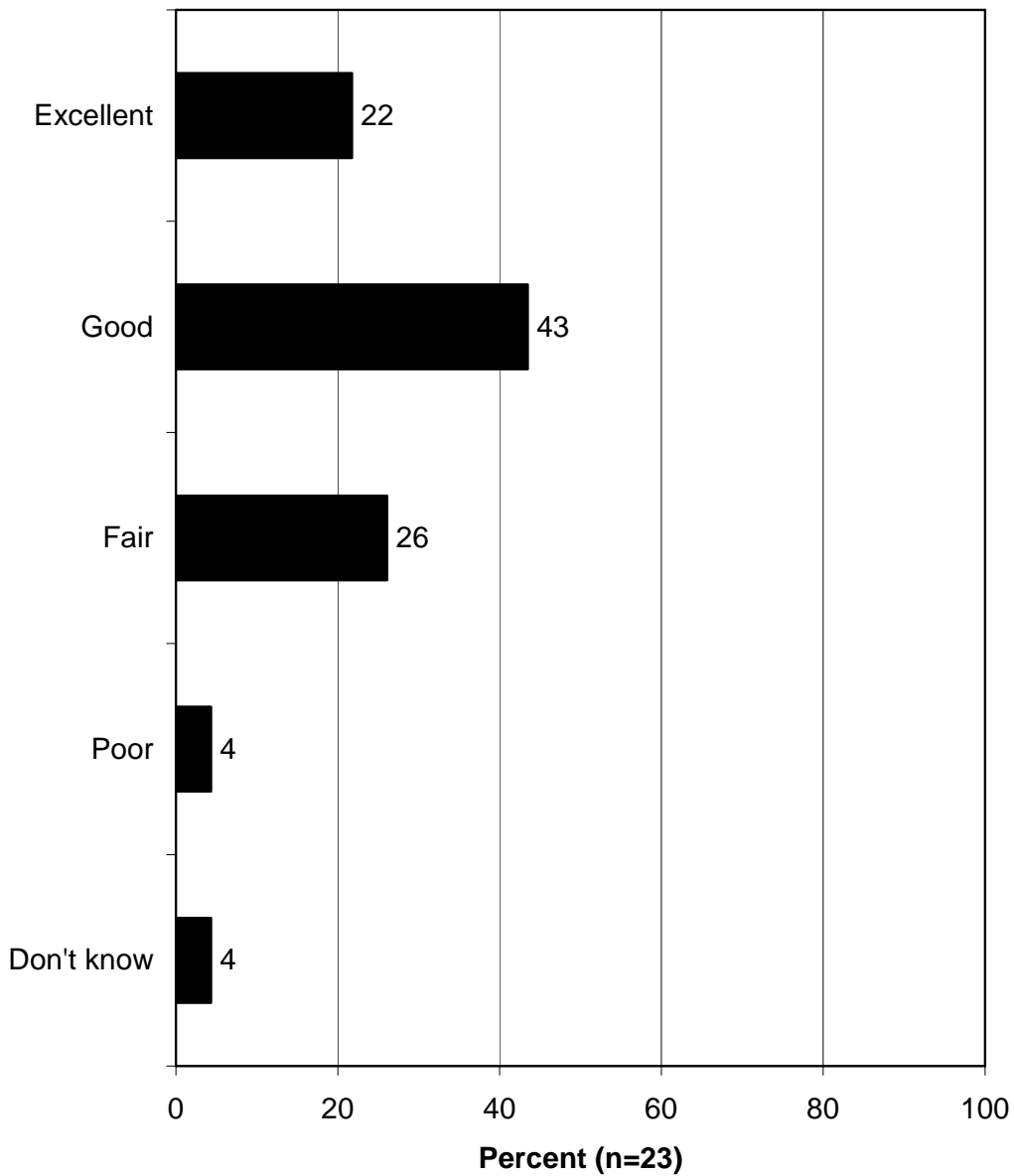
Q232. Please tell me if you have visited any of the following websites to look for information on places to hunt and hunting access?



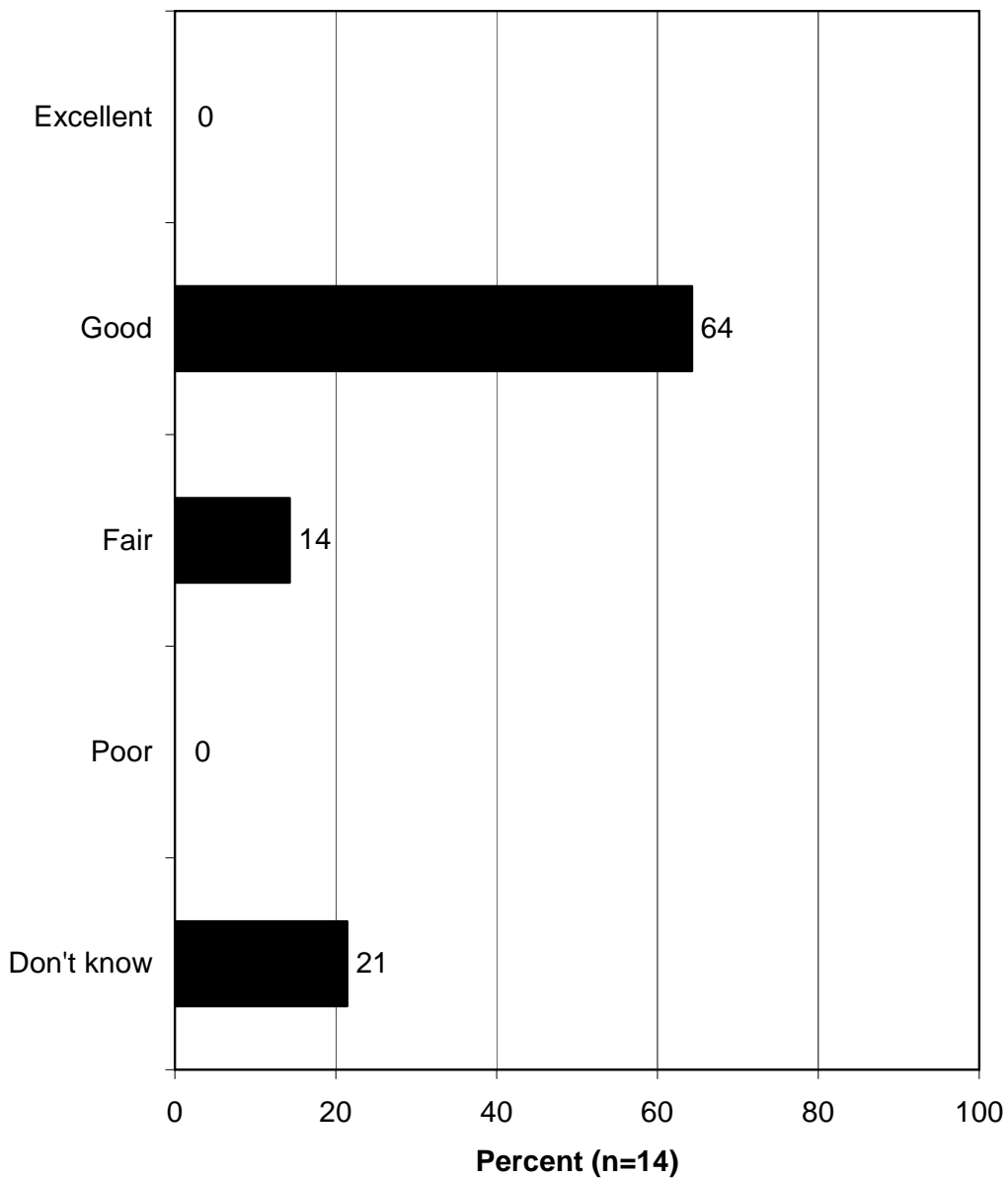
Q233. How would you rate the usefulness of the information on places to hunt and hunting access on Arizona Game and Fish Department's website to you personally in planning your hunting trips in Arizona? (Asked of those who used the website to look for information on places to hunt and hunting access.)



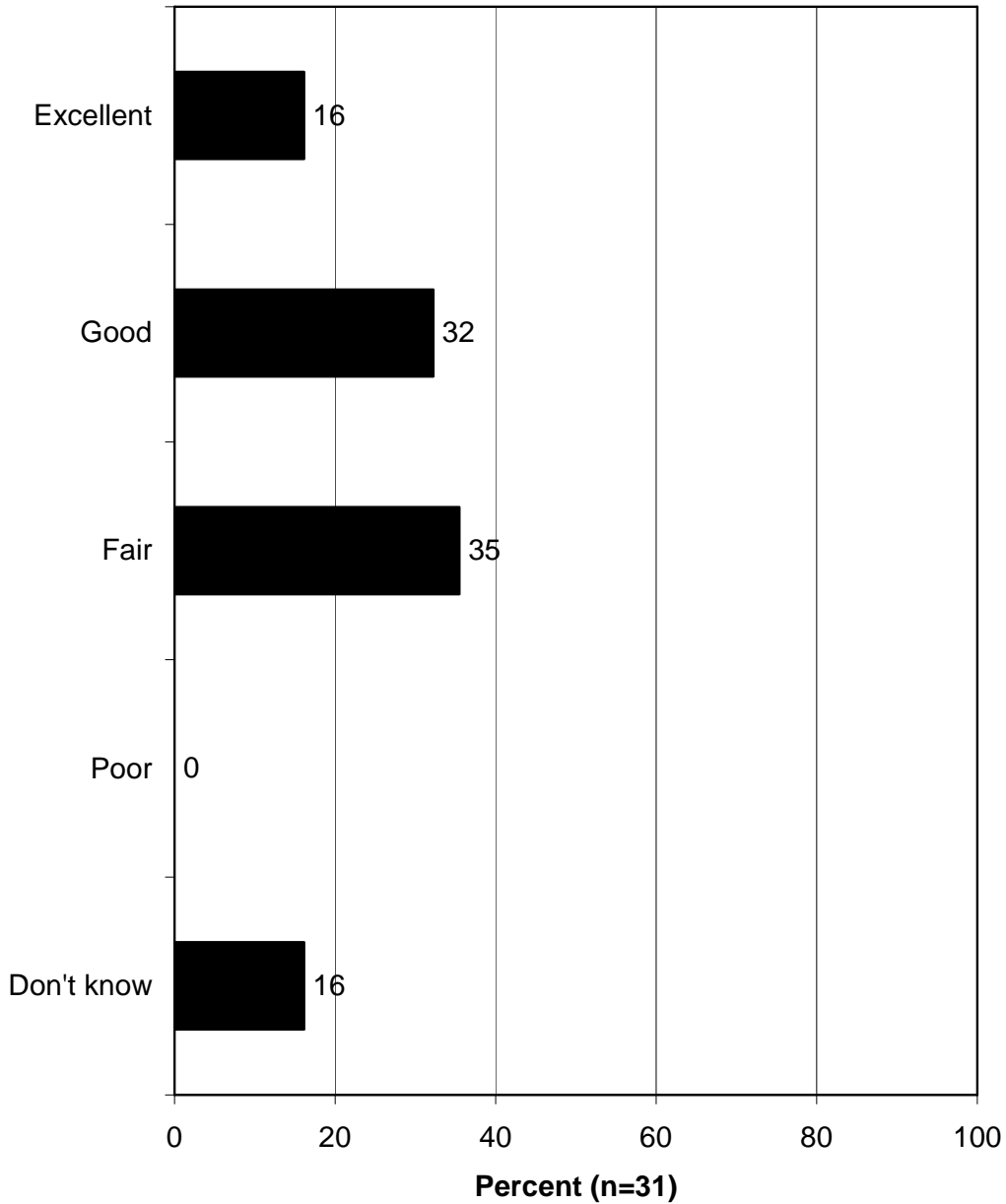
Q234. How would you rate the usefulness of the information on places to hunt and hunting access on the Bureau of Land Management or BLM website (www.blm.gov) to you personally in planning your hunting trips in Arizona? (Asked of those who used the website to look for information on places to hunt and hunting access.)



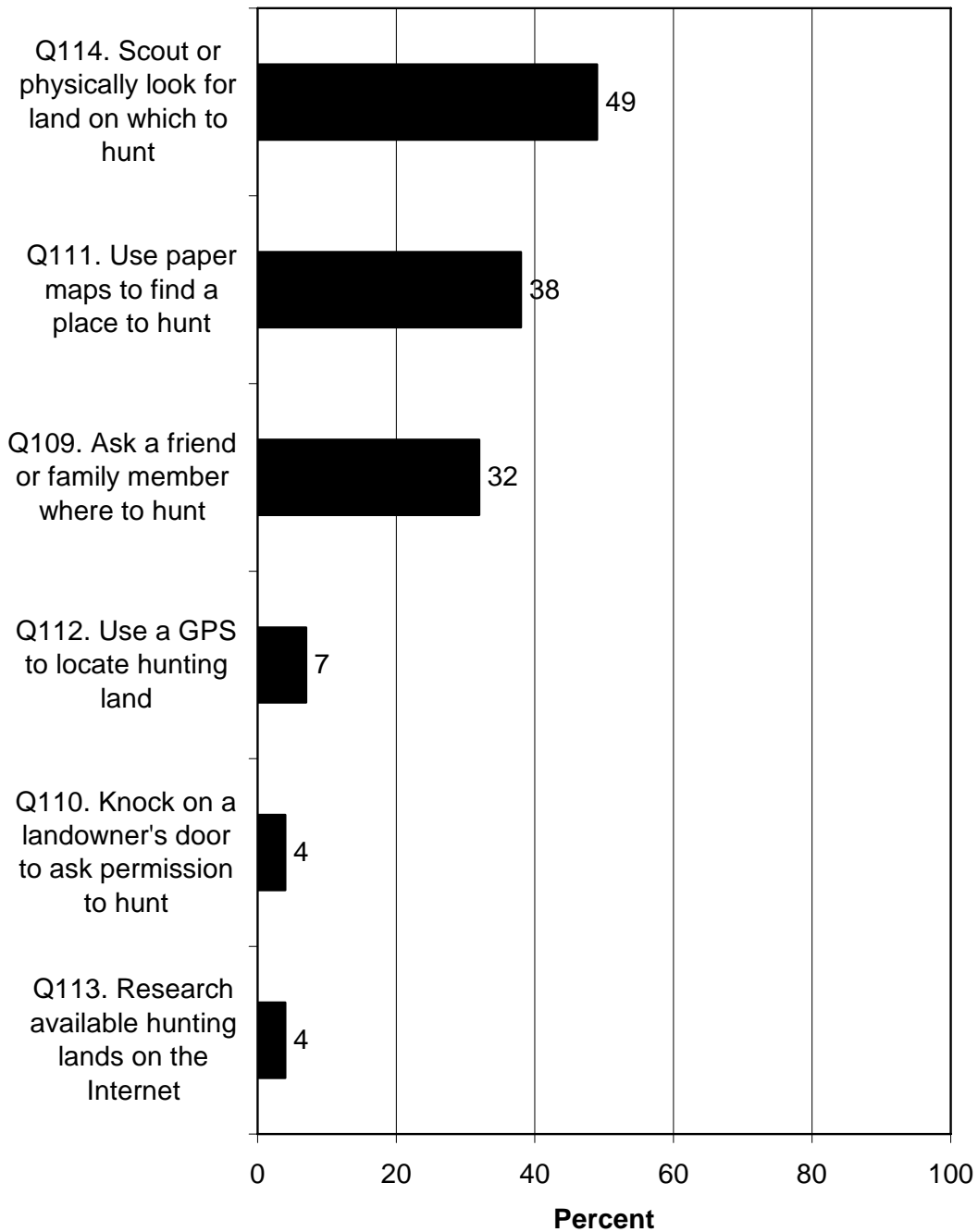
Q235. How would you rate the usefulness of the information on places to hunt and hunting access on the U.S. Fish and Wildlife Service website (www.fws.gov) to you personally in planning your hunting trips in Arizona? (Asked of those who used the website to look for information on places to hunt and hunting access.)



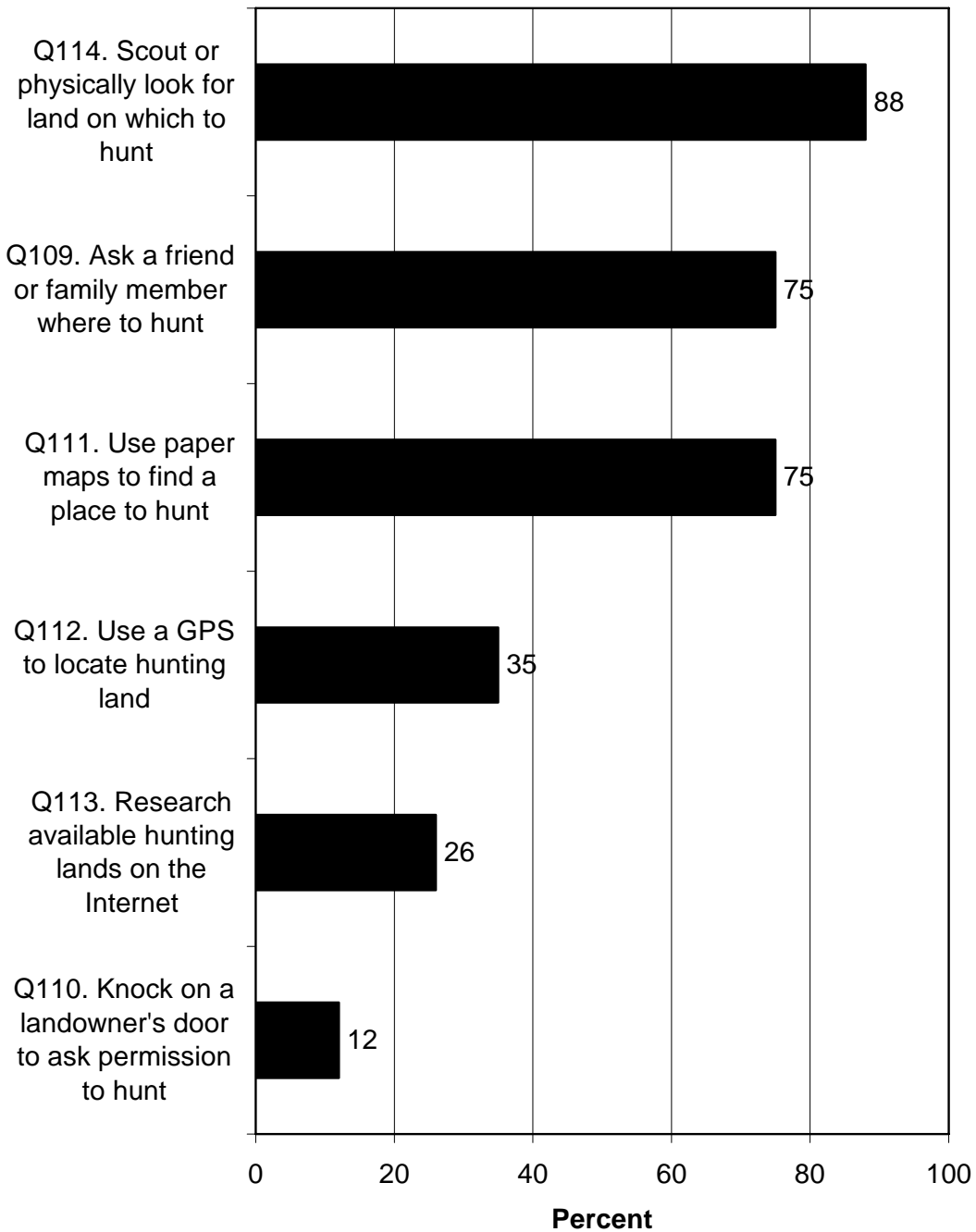
Q236. How would you rate the usefulness of the information on places to hunt and hunting access on the U.S. Forest Service website to you personally in planning your hunting trips in Arizona? (Asked of those who used the website to look for information on places to hunt and hunting access.)



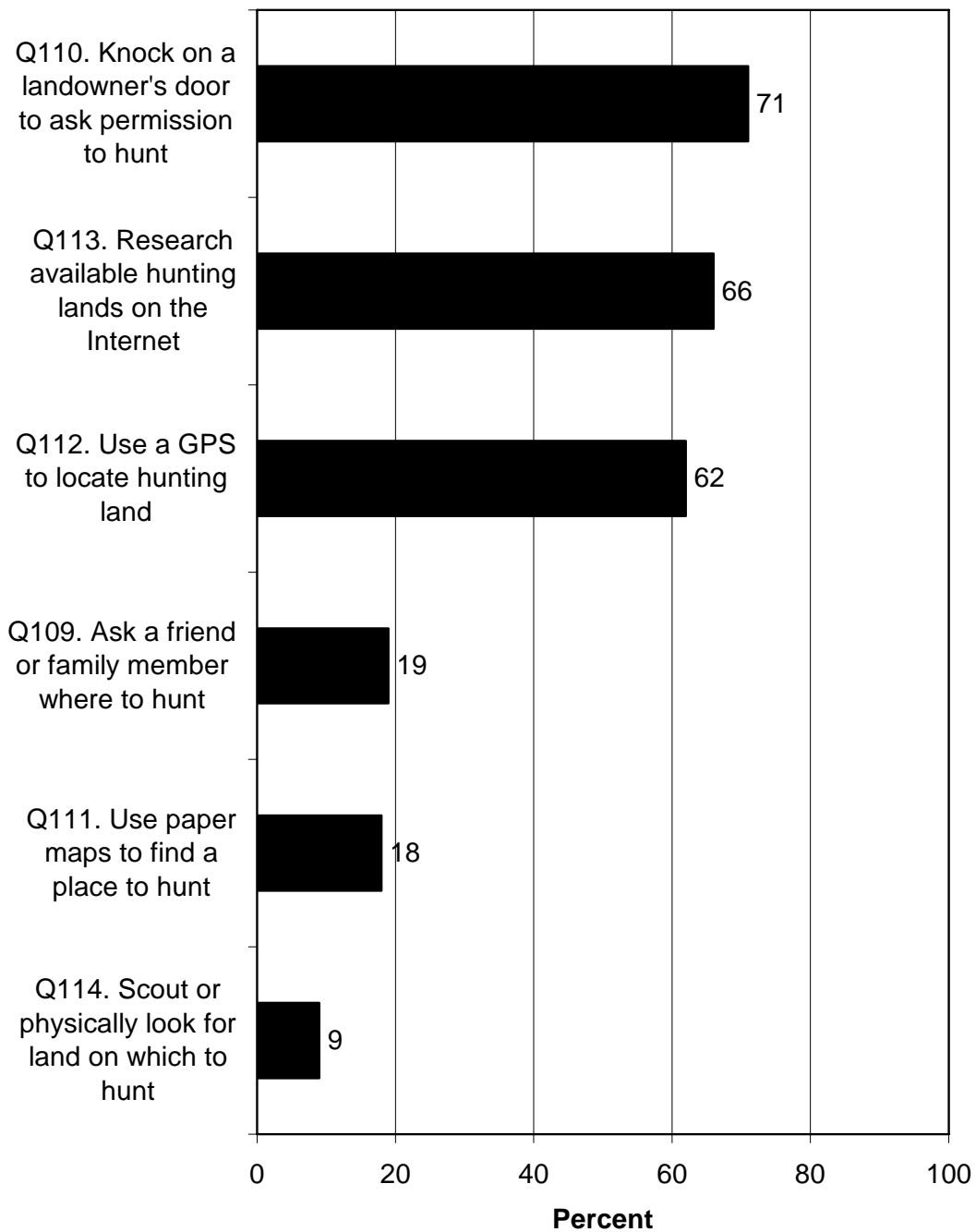
Percent who always do the following when deciding where to hunt (species) in the past 12 months in Arizona.



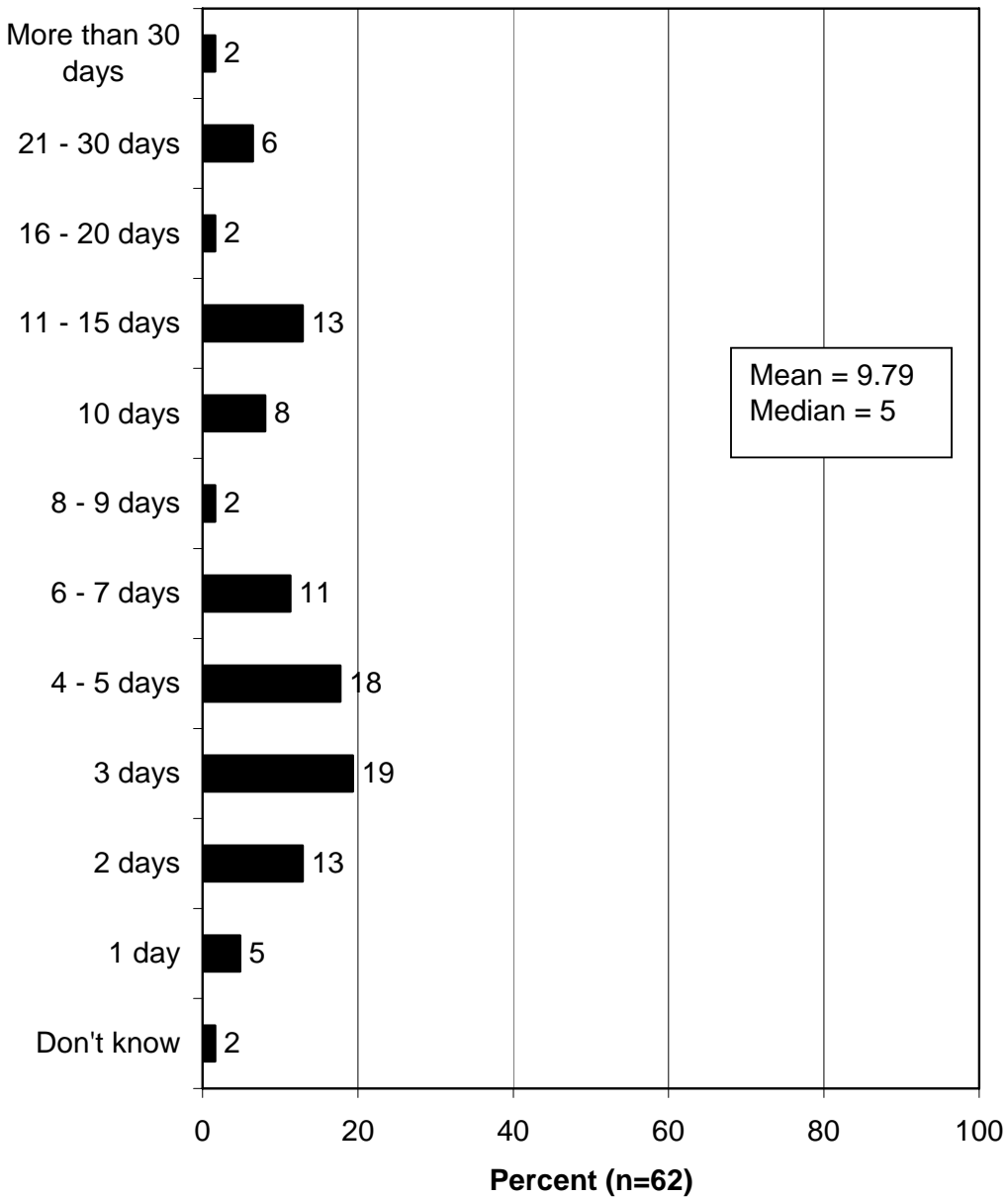
Percent who always or sometimes do the following when deciding where to hunt (species) in the past 12 months in Arizona.



Percent who never do the following when deciding where to hunt (species) in the past 12 months in Arizona.



Q115. About how many days do you usually scout for land on which to hunt (species) each year in Arizona? (Asked of those who scout or physically look for land on which to hunt when deciding where to hunt their primary species.)



DEMOGRAPHIC DATA

- Most Arizona hunters in the survey are male (92%).

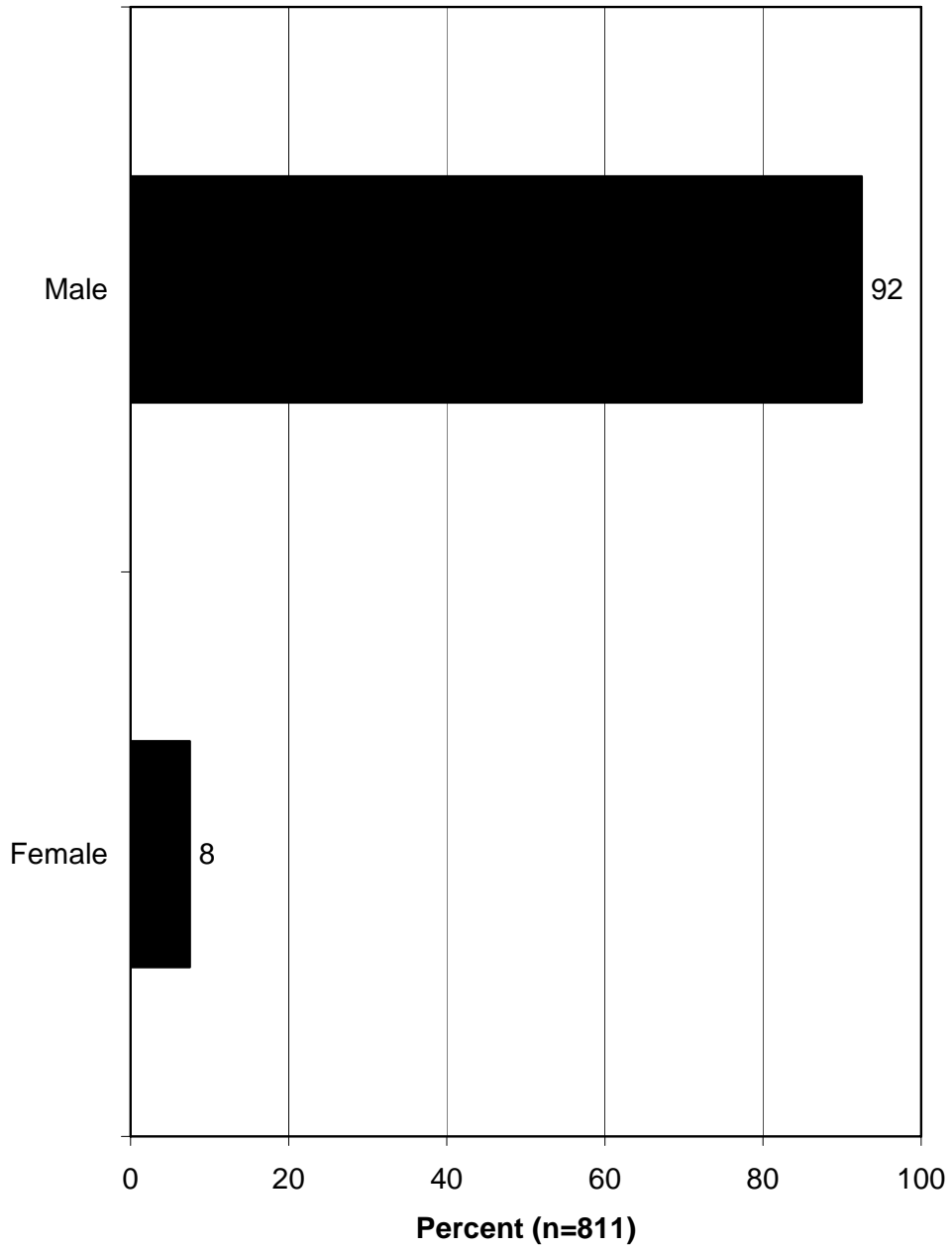
- The ages of Arizona hunters are shown, which follow a bell-curve skewed to the older age groups. The mean age is 51.1 years old.

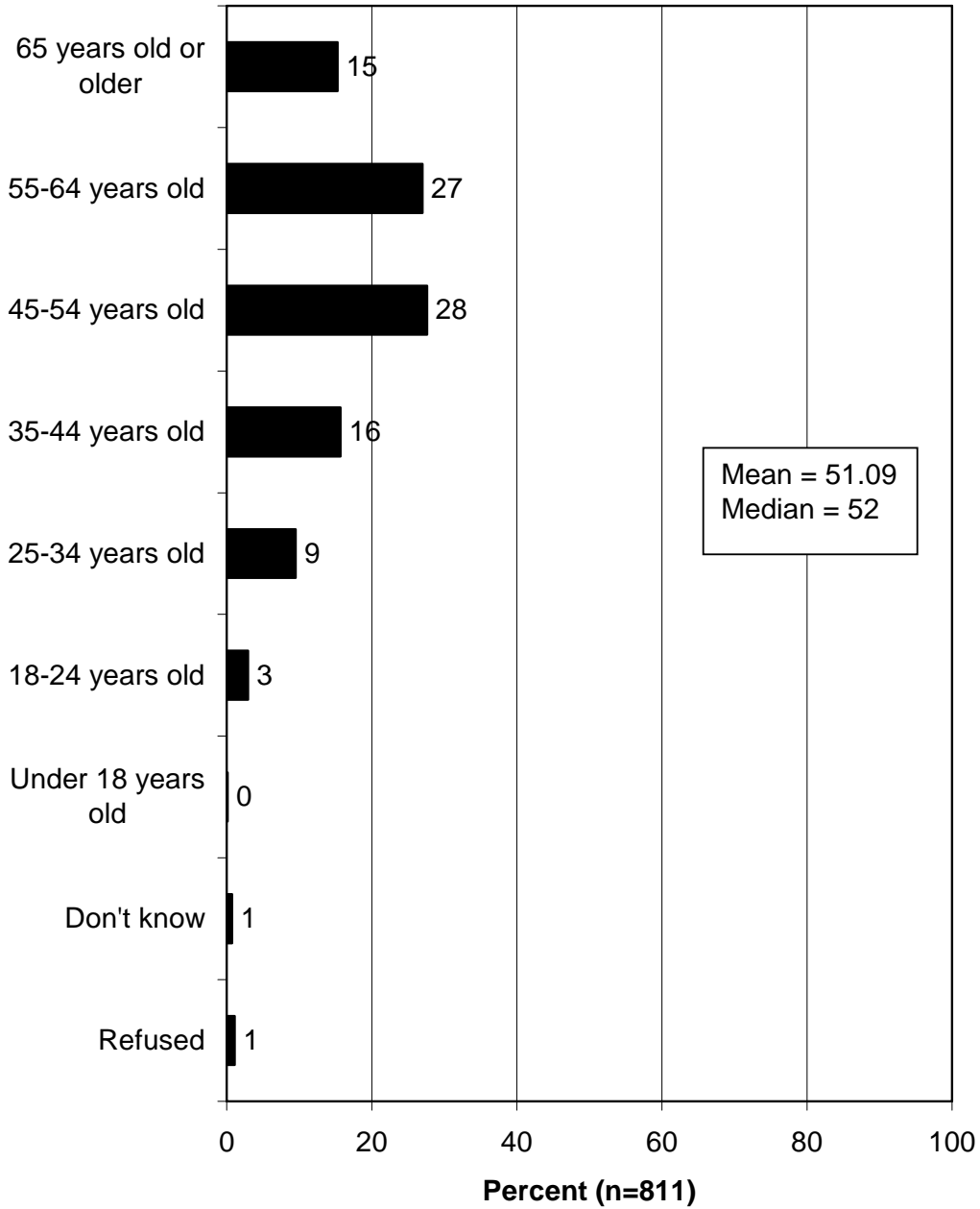
- The number of years of residency in Arizona is shown, with the answers well-distributed. While 41% have lived in Arizona for 30 years or less, at the other end 36% have lived in Arizona for more than 40 years.

- Hunters in Arizona are predominantly from a large city/urban area or a suburban area (59%). Nonetheless, 40% are from a rural area or a small city/town.

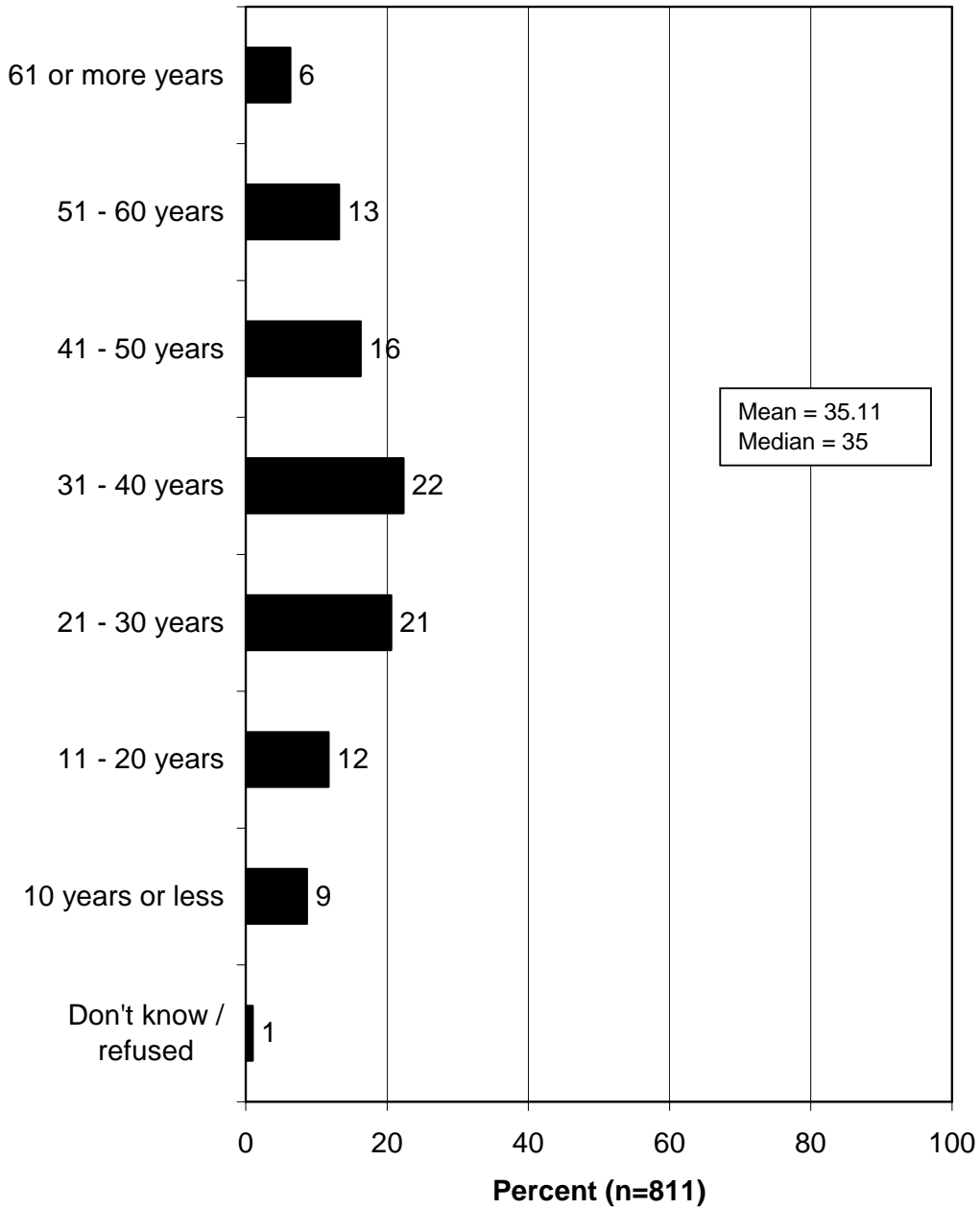
- Educational levels are shown: 74% of Arizona hunters have some college or trade school coursework (with or without a degree), and 44% have at least an Associate's or trade school degree, with or without a higher degree.

Q248. Respondent's gender (observed, not asked, by interviewer).

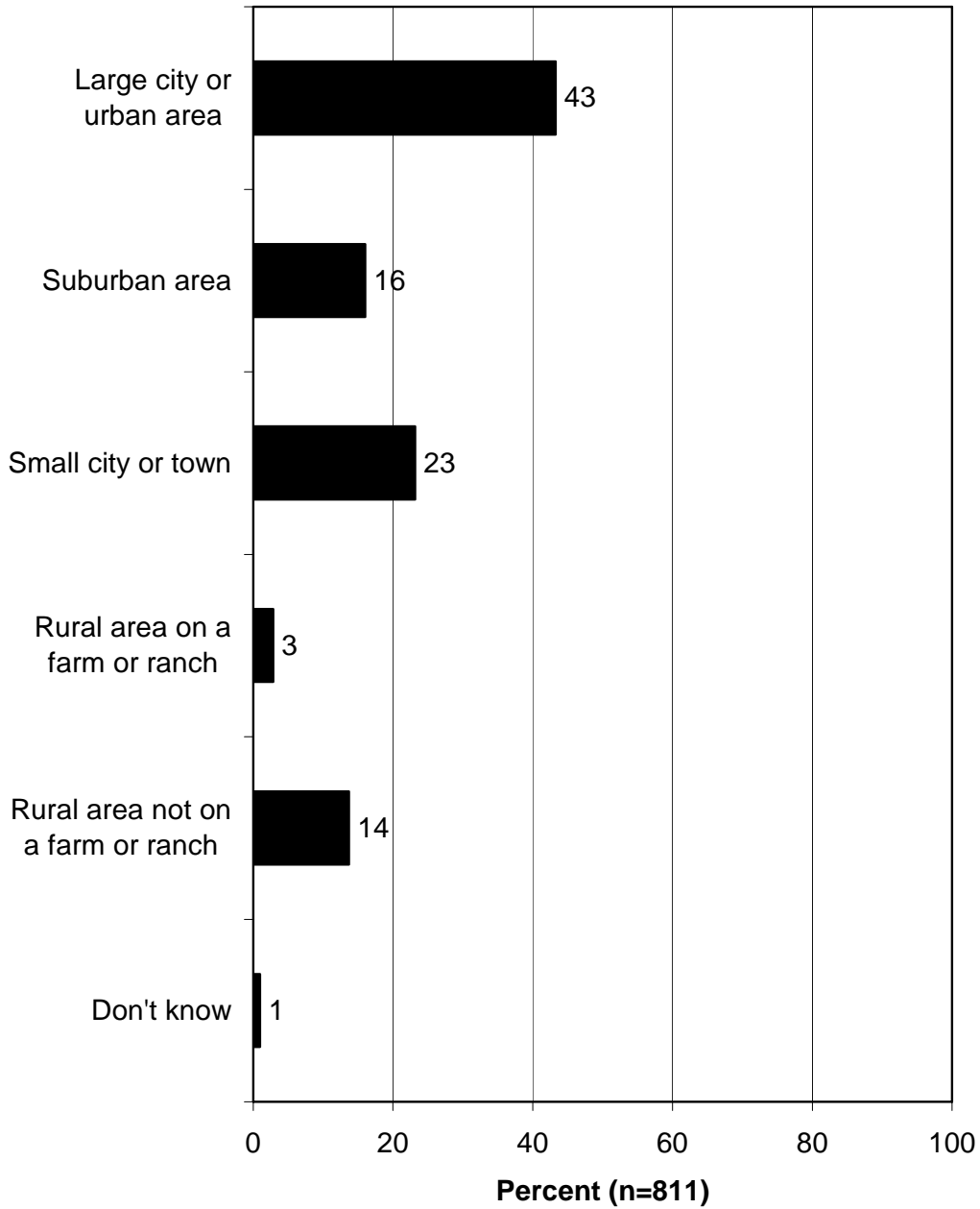


Q242. Respondent's age.

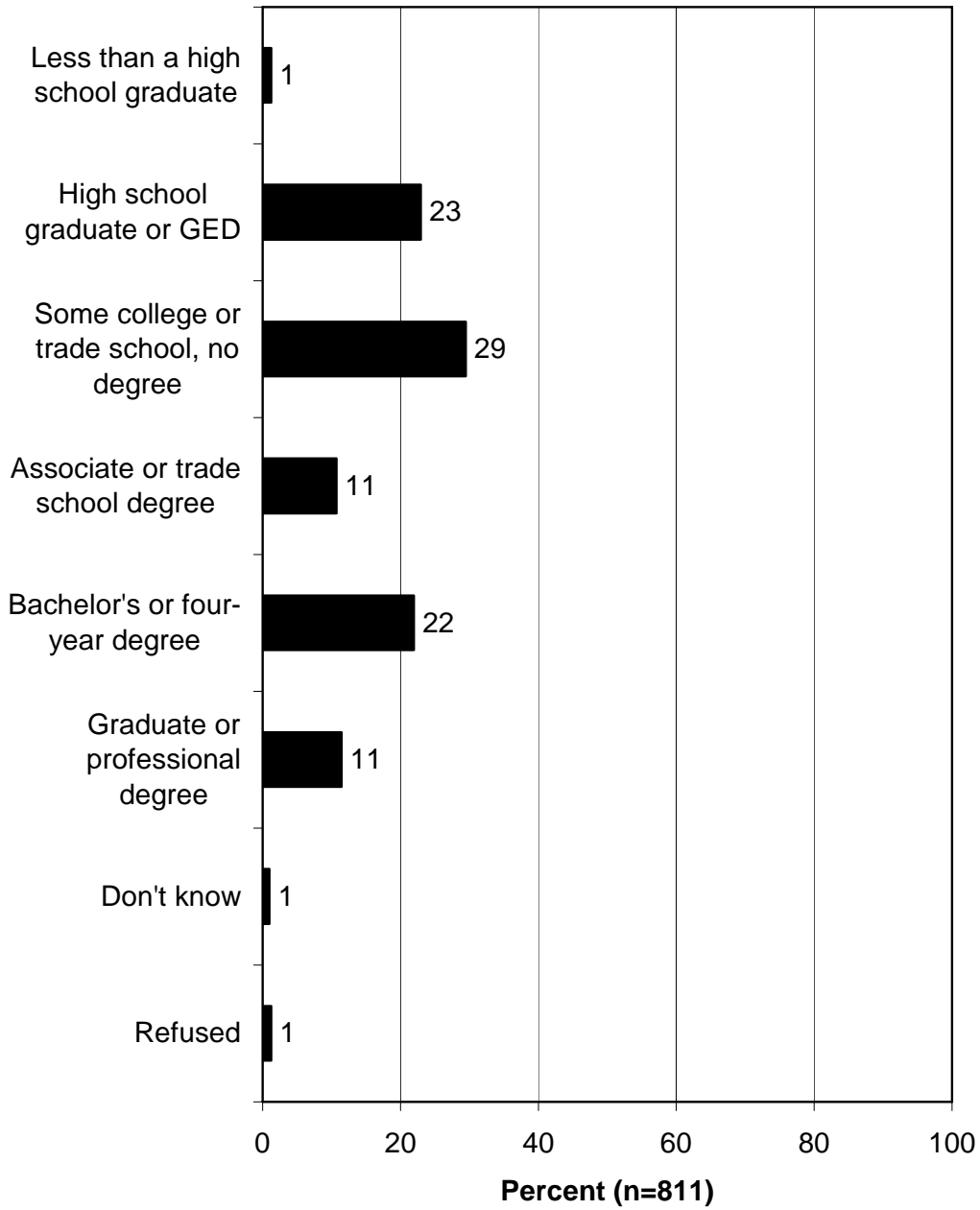
Q238. How many years have you been a resident of Arizona?



Q240. Which of the following statements best describes where you currently live?



Q241. Which of the following statements best describes the highest level of formal education you have completed?



APPENDIX A: DESCRIPTIONS OF HUNTING ACCESS PROGRAMS USED IN ARIZONA

Open Fields

This national program provides incentives to landowners to allow public access for hunting. It is essentially a funding source to help states implement existing programs and/or develop new ones. In exchange for opening their lands for hunting, the state pays landowners a modest fee.

Conservation Reserve Program

The CRP, which is a Federal program, pays farmers to take agricultural lands out of production to achieve conservation objectives, including reduced soil erosion and provision of wildlife habitat. This program is purely a habitat enhancement program rather than an access program—there are no requirements that landowners provide access; nevertheless, hunters may use these lands subject to landowners' permission.

U.S. Fish and Wildlife Service's Waterfowl Production Areas (WPAs)

WPAs, which are a subset of the lands in the National Wildlife Refuge System, are public lands purchased by the Federal Government for the purpose of increasing the production of migratory birds, particularly waterfowl. These areas preserve wetlands and grasslands critical to migratory birds including waterfowl. Funding for the acquisition of these areas comes from sales of the Federal Migratory Bird Hunting and Conservation Stamps (colloquially called "Duck Stamps"). WPAs are open to hunting and fishing.

Wheretohunt.org website / Huntinfo.org website

Both of these addresses are for the same site. This website is maintained by the National Shooting Sports Foundation (NSSF). The site provides links to all state hunting agencies.

Huntandshoot.org website

This site, also maintained by the NSSF, has links to the above sites. This site also includes a listing, state by state, of various hunting (and shooting) programs available in that state.

Arizona's Heritage Access Program

This program is a cost-share program funded through Heritage Funds (which are supported by the state lottery and are used to help conserve and protect the state's wildlife and natural areas and to provide recreation opportunities) with the main objective of working cooperatively with private landowners across the state to create and maintain public access. The Landowner Relation Program utilizes funds provided through the access program to perform various projects with private landowners in exchange for short-term or perpetual access agreements. These projects vary in scale depending on the importance of the access point as well as the length of the access agreement. Access funds can also be utilized to purchase perpetual public access easements on privately owned roads that can provide public access to federal lands. The projects that can be accomplished vary greatly, depending on the landowner's and wildlife habitat needs.

Arizona's Adopt-A-Ranch Program

Under the Adopt-A-Ranch Program, interested public groups (e.g., sportsmen's groups, Boy Scouts, 4-wheeling clubs) "adopt" a ranch with the idea of working directly with the landowners and the AGFD to mitigate problems associated with public recreational access. The volunteer

group visits the ranch one or two times a year to perform regular maintenance, such as rebuilding fences, hanging gates, picking up litter, or helping with various ranch improvement projects. In the Adopt-A-Ranch Program, there are two lists: one list of ranchers and landowners who are interested in allowing their ranches to be adopted, and the other list of organized groups desiring to adopt a ranch. Through the Adopt-A-Ranch Program, the AGFD links the landowner/lessee with a sportsman group(s), thereby establishing a mutually beneficial relationship.

ABOUT RESPONSIVE MANAGEMENT

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

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

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

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

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

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

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

Visit the Responsive Management website at:

www.responsivemanagement.com