



ISSUES RELATED TO HUNTING ACCESS IN THE UNITED STATES

HAWAII RESULTS

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

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2009

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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 Hawaii survey only. Specific aspects of the research methodology for the Hawaii 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 Hawaii Department of Land and Natural

Resources. 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 Hawaii (descriptions of the national 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
- Hawaii’s lease agreements to use agricultural lands for public hunting areas
- Hawaii’s Statewide GIS Map Program
- Public hunting area maps in the Game Mammal or Game Bird Hunting Guide

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 October 2009. Responsive Management obtained a total of 447 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

- Hawaii licensed hunters most commonly named one of Hawaii's deer species (31%) as the primary species they hunted in the past 12 months, followed in popularity by wild pig (25%), upland game birds (17%), wild sheep (11%), and wild goat (9%). Note that the question asked respondents to name the *single* species they *primarily* hunt, not all species they hunt.

- The survey asked hunters to indicate how many days they typically hunt in Hawaii annually: the median is 11.5 days.

- Hunters in the survey were asked to indicate how long they have been hunting: the mean is 25.85 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 (72%) are quite avid, having hunted all 5 of the past 5 years.

- Hunters were asked to indicate whether their hunting participation in Hawaii has increased, remained the same, or decreased over the past 5 years: while they most commonly say that it has stayed the same (39%), nearly the same percentage say it has decreased, and the percentage who say it has decreased (38%) exceeds the percentage who say it has increased (21%).

LOCATIONS OF HUNTING ACTIVITIES

- Hunters in Hawaii more often hunt their primary species on public land (52% hunt on public land mostly, and 74% do so at least half the time) than private land (26% hunt on private land mostly, and 48% do so at least half the time).
 - A crosstabulation found that wild sheep hunters have the greatest propensity to hunt mostly on public land, followed by hunters of black-tailed deer, upland game birds, and wild goat. On the other hand, those with the greatest propensity to hunt mostly on private land are axis deer hunters.

- 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 (63%) than say that they hunt it on different lands each year (9%).
- 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 (37.7%), followed by private/same (19.1%).

	Hunts mostly on <i>public</i> land (52.3%)	Hunts public and private lands both about <i>equally</i> (22.0%)	Hunts mostly on <i>private</i> land (25.7%)
Hunts mostly on the <i>same</i> land each year (63.9%)	Public/Same 37.7%	Both/Same 7.0%	Private/Same 19.1%
Hunts same and different lands both about <i>equally</i> (27.3%)	Public/Both 11.1%	Both/Both 10.7%	Private/Both 5.5%
Hunts mostly on <i>different</i> lands each year (8.9%)	Public/Different 3.4%	Both/Different 4.3%	Private/Different 1.1%

- The survey asked hunters to indicate how far they typically travel from home to hunt their primary species: the median distance is 30 miles.
 - Another question explored the modes of transportation that hunters use to access the land on which they hunt: 84% use a car or truck (by far the top mode), distantly followed by walking (27%) and plane (19%). 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 the land is familiar to them (60% say

this is *very* important), that the land is not crowded with other sportsmen (55%), and that the land is public land (53%).

- A couple more factors are shown to be important in looking at the ranking by *very* or *somewhat* important in addition to the factors mentioned above. Those additional factors that are important include that the land is easy to access by car/truck and that the land is easy to access by foot.

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

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 large majority of them (68%) agreed that it had done so. In follow-up in an open-ended question, the top-named access problems were private land being posted, a lack of land on which to hunt, and public land being closed (the three 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 any deer (34% among those who agreed to the above question), closely followed by wild pig (24%) and wild sheep (24%). 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*, *moderate*, or *minor* problem were the cost of gas (58%), less land on which to hunt because the land use has changed (55%), less land on which to hunt due to private land ownership changes (55%), less land on which to hunt due to development (50%), and poor maintenance of roads or trails (50%). All of these had half or more of respondents saying it was a *major*, *moderate*, or *minor* 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 Hawaii Department of Land and Natural Resources 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 lack of maintenance (e.g., downed trees not cut out of the way, gullies), by a posting by a private landowner, or by a berm/dirt pile intentionally placed.

- Most commonly, the road closures were perceived to be seasonal/temporary rather than permanent.
 - Another follow-up question asked for the location/type of the closed road. Most commonly, the closed roads were public—National Forest roads, other public roads, or BLM roads.
- 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 looking at the ranking by the percentage saying the problem was *major*, *moderate*, or *minor*, the top problems are leaving an area because of crowding from other hunters (48%), not going on a hunt or changing locations because of access problems (39%), leaving an area because of a feeling of being unsafe because of other hunters (36%), leaving an area because of crowding from other recreationists (34%), being confused by a state agency map that was hard to follow (32%), and leaving an area because of the irresponsible behavior of other hunters (30%)—all with at least 30% saying it had been a problem. As a whole, the results suggest that access itself is not as great a problem as is access to *uncrowded* lands—four of the top six problems relate to other people being on the land on which the hunter wanted to hunt.

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 Hawaii in general, regardless of whether their own participation is affected by it (shown in Text Box 4 below). 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 looking at the ranking by the percentages saying the factor is a *major*, a *moderate*, or a *minor* problem, 4 of the 10 factors have a majority saying it is a problem: poor management or allocation of uses of public land (59%), private land posted or closed because the landowner is specifically concerned about liability (59%), closures of public land by government agencies (55%), and housing and commercial development (52%).

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 Hawaii, even if those things did not prevent them from actually going, 53% of hunters indicated that something had taken away from their enjoyment. Most commonly, they named an access-related problem (23%), not enough game (10%), and/or a regulation-related answer (7%). Note that the analysis breaks down the “access-related problems” category into specific access problems as subsets of access-related problems overall. Primary among those access problems are no land to hunt on, public land closed, and private land posted.

RATINGS OF ACCESS TO HUNTING LANDS IN HAWAII

- A basic question asked hunters to rate access to hunting land in Hawaii overall for their primary species. They are split: 42% give a rating of excellent or good, but 57% 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 HDLNR’s *management* of access to hunting lands are also split: 43% give an excellent or good rating, and 54% give a fair or poor rating.
- 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 upland game bird hunters (48% give a rating of excellent or good) and wild sheep hunters (47%). They are markedly more negative among hunters of black-tailed deer (only 30% give an excellent or good rating) wild pig (33%), and wild goat (33%). Overall, these differences on this question 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 Hawaii. Excellent and good ratings (51% give one of the two responses) slightly exceed fair and poor ratings (48%).
 - Top reasons for rating public land access as fair or poor are no land on which to hunt, land closed, road closures, and public land being blocked by private land.

- Those who hunted their primary species on private land at least half the time were asked to rate access to private lands in Hawaii. Again, they are split: excellent and good ratings (48% give one of the two responses) exceed fair and poor ratings (42%).
 - Top reasons for rating private land access as fair or poor are land being posted, a lack of land on which to hunt, cost of access, and lack of permission from landowners.

FACTORS THAT MAY POSITIVELY AFFECT ACCESS

- The survey asked 15 questions about things that would make hunting access easier (shown in Text Box 5 on the following page). 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 looking at the ranking by the percentage saying that the items would be *very* effective at making access easier, 8 of the 15 items stand out—each with a majority saying it would be *very* effective: having up-to-date information on a website showing lands where hunting their primary species is allowed (69%), having signs that clearly mark the boundaries of huntable land (67%), having a state agency acquire more land for hunting (67%), having easements or designated public sections of leased/private lands preserved for public hunting (63%), having a list of landowners with telephone numbers to call for asking permission (62%), having easements or public rights-of-way on private land to access adjacent public land (60%), having paper maps of hunting lands for hunting their primary species (58%), and having maps of hunting lands for their primary species on a website (57%).

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
- A Hawaii 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*, two of which relate to misuse of the land: irresponsible behavior by hunters (69% say this is a *very important* reason that landowners close their land), liability concerns (68%), and property damage (64%).

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 (81%) 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 Hawaii.
- The overwhelming majority of hunters (92%) are *not* aware of any laws in Hawaii that reduce the liability of landowners who open their lands to the public for hunting; meanwhile, 3% are aware of such laws (the remainder do not know).
 - In a related question, the large majority of Hawaii hunters (80%) support laws to reduce landowner liability for landowners who open their lands to the public for hunting; only 6% oppose (the remainder give neutral answers).
 - Another related question found that a large majority of hunters (75%) think that legislation reducing landowner liability would be *very* or *somewhat* effective at improving hunter access to private lands in Hawaii; only xx% think it would *not* be at all effective.
 - Finally, the large majority of hunters (75%) 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 nine programs in Hawaii 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 on the following page.
 - A basic line of questioning asked hunters about their awareness of the various programs, and three of the nine programs had awareness levels of a quarter or higher: Hunting Area maps in the Game Mammal or Game Bird Hunting Guide (57% were *very* or *somewhat* aware of this resource), the Conservation Reserve Program (26%), and the U.S. Fish and Wildlife Service's Waterfowl Production Areas (25%). All other programs have awareness levels of 16% or lower.
 - Another series of questions asked hunters about their use of or participation in the nine access programs. The program with the highest rate of use/participation is the public hunting area maps in the Game Mammal or Game Bird Hunting Guide (38%), distantly

followed by Hawaii's lease agreements to use agricultural lands for public hunting areas (7%), Hawaii's Statewide GIS Map Program (6%), the Conservation Reserve Program (5%), and U.S. Fish and Wildlife Service's Waterfowl Production Areas (5%).

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
 Hawaii's lease agreements to use agricultural lands for public hunting areas
 Hawaii's Statewide GIS Map Program
 Public hunting area maps in the Game Mammal or Game Bird Hunting Guide

- For each program of which a hunter was aware, the survey asked him/her to rate it at making hunting access easier. Note that large amounts answered with "don't know" rather than gave a rating.
 - The programs with the highest percentages of hunters giving an *excellent* or *good* rating, each with a third or more, are the hunting area maps in the Game Mammal or Game Bird Hunting Guide (45%), Hawaii's Statewide GIS Map Program (45%), the huntandshoot.org website (41%), the huntinfo.com website (39%), Hawaii's lease agreements to use agricultural lands for public hunting areas (36%), and the Open Fields program (33%).
- The survey included a specific question about use of private lands enrolled in any walk-in access program in Hawaii. Slightly more than a quarter of hunters (27%) hunt their primary species *often* or *sometimes* on such lands. On the other hand, the majority (47%) *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 Hawaii. The most popular source is friends/family/word of mouth (41%), by far the top answer. Other

notable answers include a state agency other than its website (28%) and the Internet in general/search engines (10%).

- The survey asked hunters if they had visited the websites of four agencies (the HDLNR, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management). Nearly a majority of hunters in Hawaii had visited the HDLNR site (46%). Lower amounts (from 7% to 10%) had visited the other sites.
 - 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 positive: each site had a majority of site visitors rating its access information as excellent or good.

- 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 a third or more of hunters *always* or *sometimes* do two things in deciding where to hunt: 59% *always* or *sometimes* ask a friend or family member where to hunt, and 37% *always* or *sometimes* scout or physically look for a place.

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 4 days, among those who scout for land.

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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 Hawaii survey only. Specific aspects of the research methodology for the Hawaii survey are discussed below.

For this survey, telephones were selected as the preferred sampling medium because of the near universality of telephone ownership among Hawaii 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 Hawaii Department of Land and Natural Resources (HDLNR). 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 "screeener" 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 Hawaii (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
- Hawaii's lease agreements to use agricultural lands for public hunting areas
- Hawaii's Statewide GIS Map Program
- Public hunting area maps in the Game Mammal or Game Bird Hunting Guide

The sample was of hunting license holders representative of hunters in Hawaii overall. The sample was obtained from the HDLNR.

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 October 2009. Responsive Management obtained a total of 447 completed interviews with Hawaii 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 Hawaii for hunting black-tailed deer?" for those who primarily hunt black-tailed deer, and it would have been "Overall, how would you rate access to hunting lands in Hawaii 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 Hawaii 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

- Hawaii licensed hunters most commonly named one of Hawaii's deer species (31%) as the primary species they hunted in the past 12 months, followed in popularity by wild pig (25%), upland game birds (17%), wild sheep (11%), and wild goat (9%). Note that the question asked respondents to name the *single* species they *primarily* hunt, not all species they hunt.

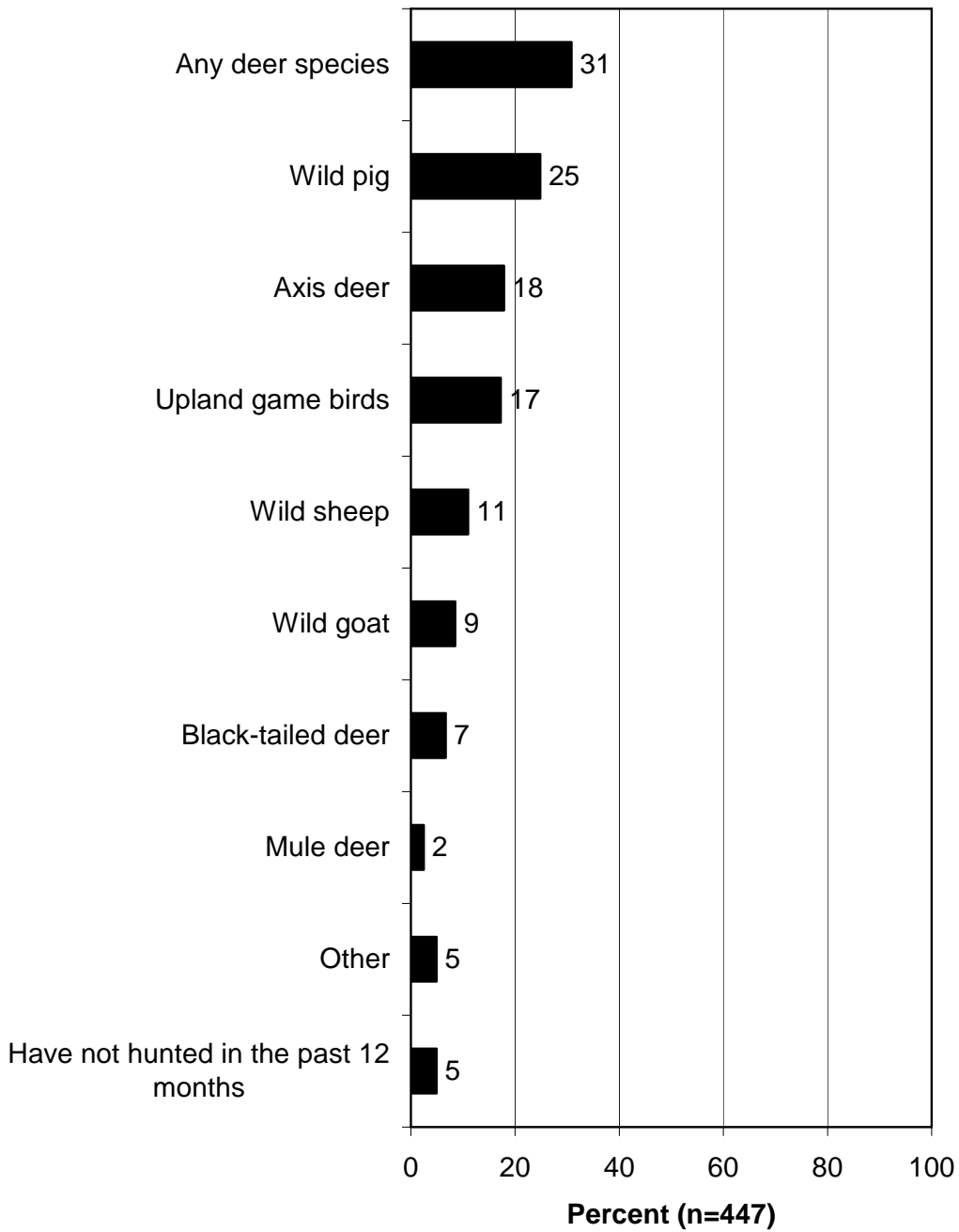
- A graph shows the typical number of days that hunters hunt in Hawaii annually. The median is 11.5 days.

- 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 mean is 25.85 years.

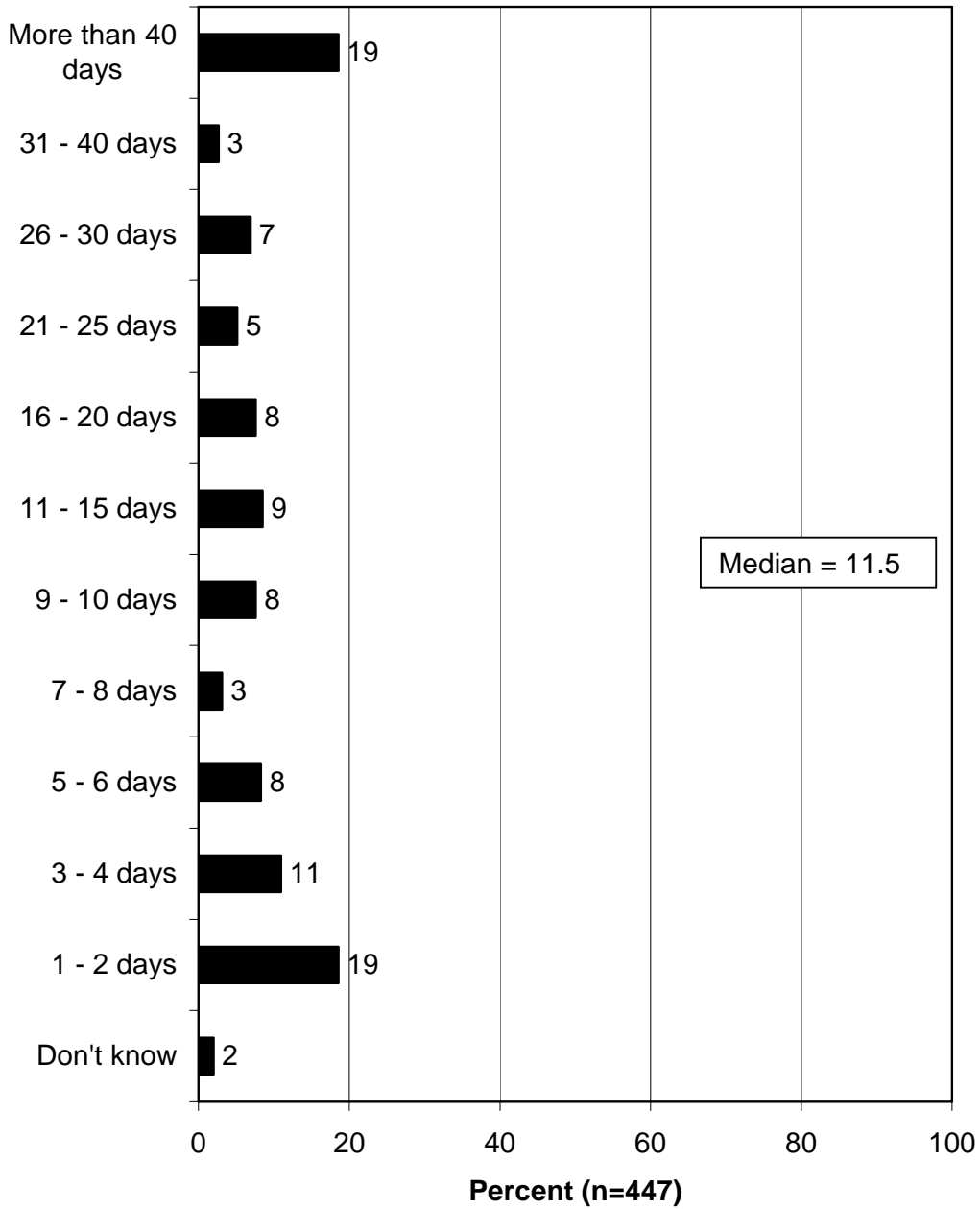
- Hunters in the survey were asked to indicate how many of the past 5 years they had hunted. The large majority of those hunters (72%) are quite avid, having hunted all 5 of the past 5 years.

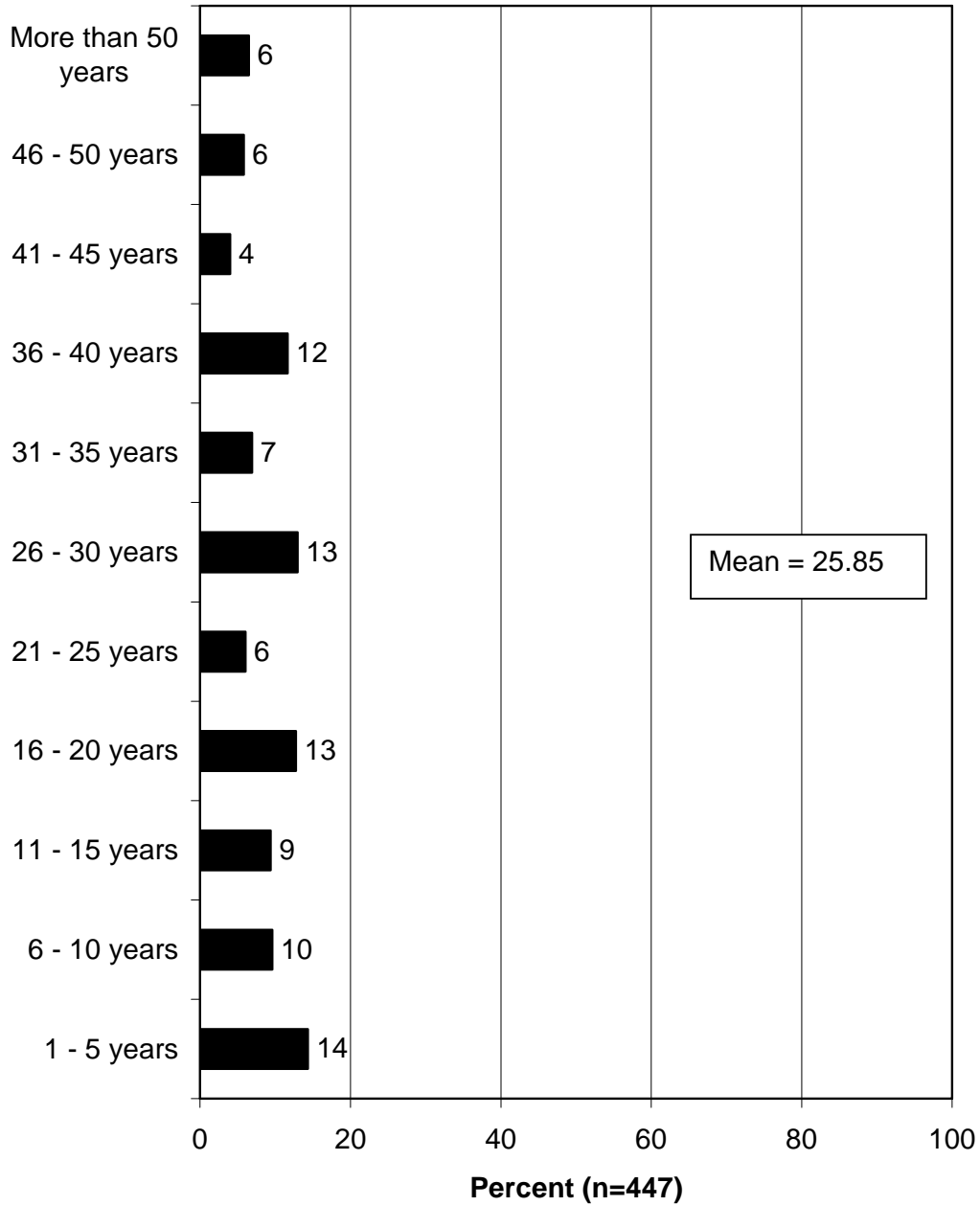
- Hunters were asked to indicate whether their hunting participation in Hawaii has increased, remained the same, or decreased over the past 5 years: while they most commonly say that it has stayed the same (39%), nearly the same percentage say it has decreased, and the percentage who say it has decreased (38%) exceeds the percentage who say it has increased (21%).

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

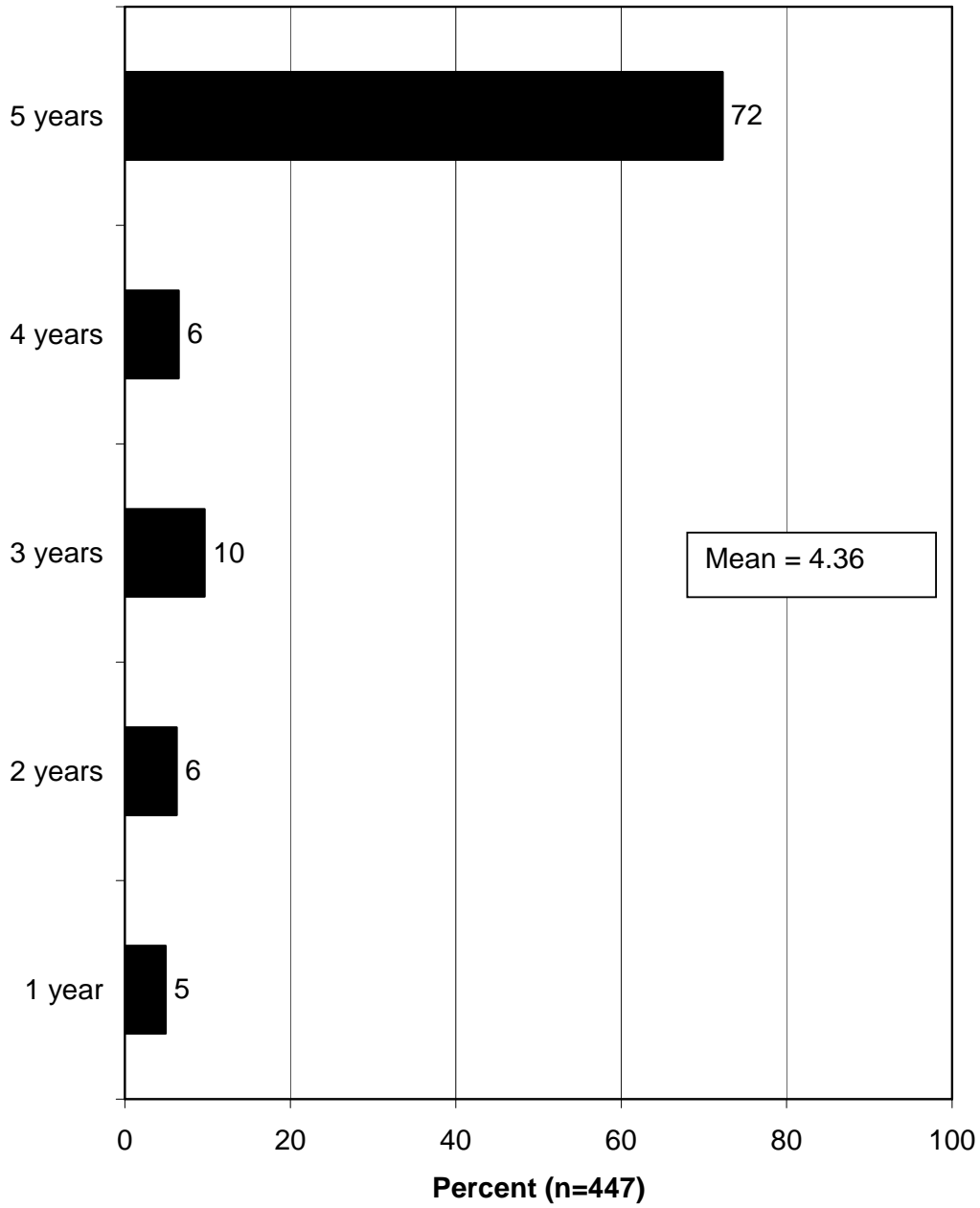


Q26. About how many days do you usually hunt each year in Hawaii?

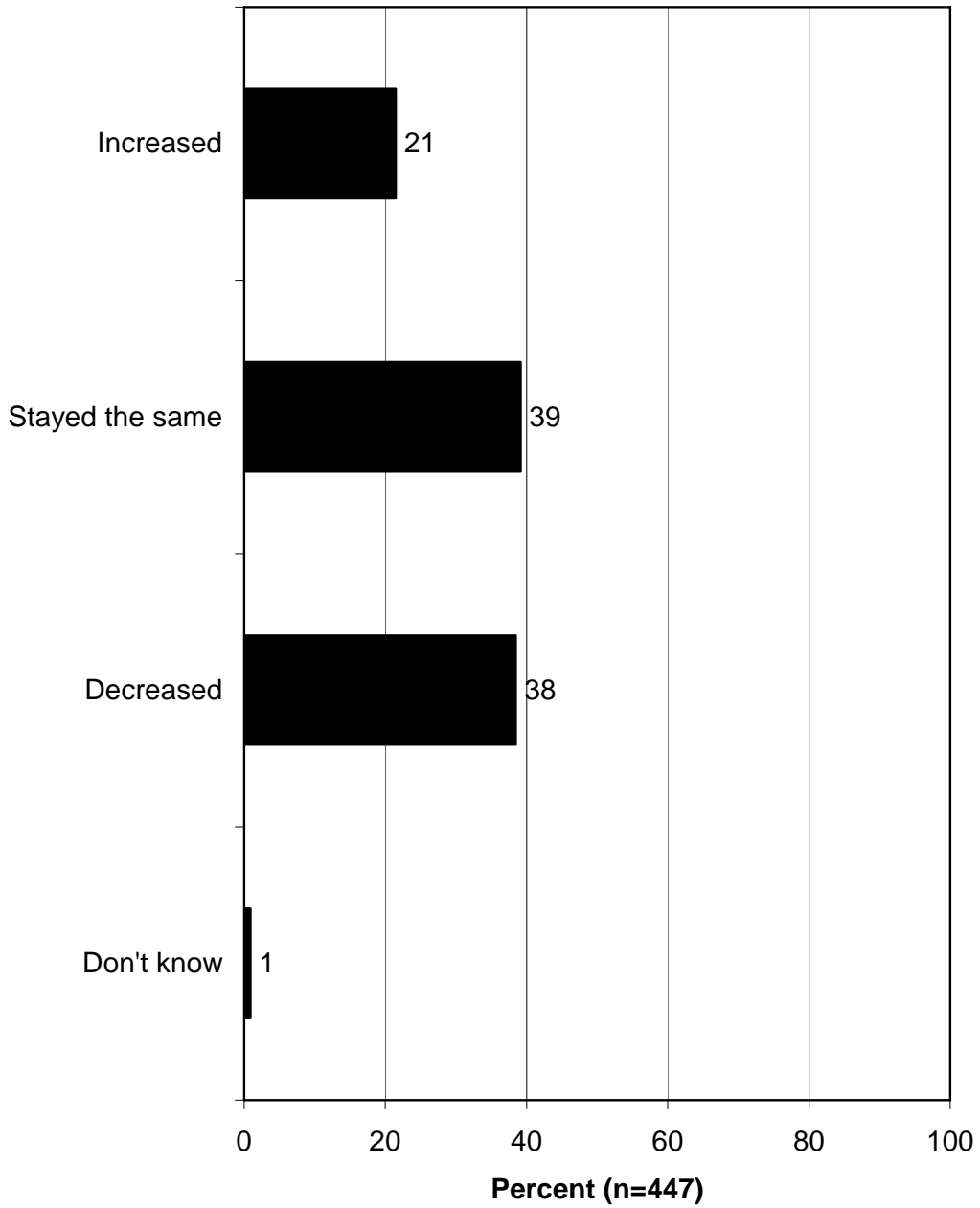


Q15. How many years have you hunted?

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



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



LOCATIONS OF HUNTING ACTIVITIES

- Hunters in Hawaii more often hunt their primary species on public land (52% hunt on public land mostly, and 74% do so at least half the time) than private land (26% hunt on private land mostly, and 48% do so at least half the time).
 - A crosstabulation found that wild sheep hunters have the greatest propensity to hunt mostly on public land, followed by hunters of black-tailed deer, upland game birds, and wild goat. On the other hand, those with the greatest propensity to hunt mostly on private land are axis deer hunters. Overall, these differences on this question are statistically significant.

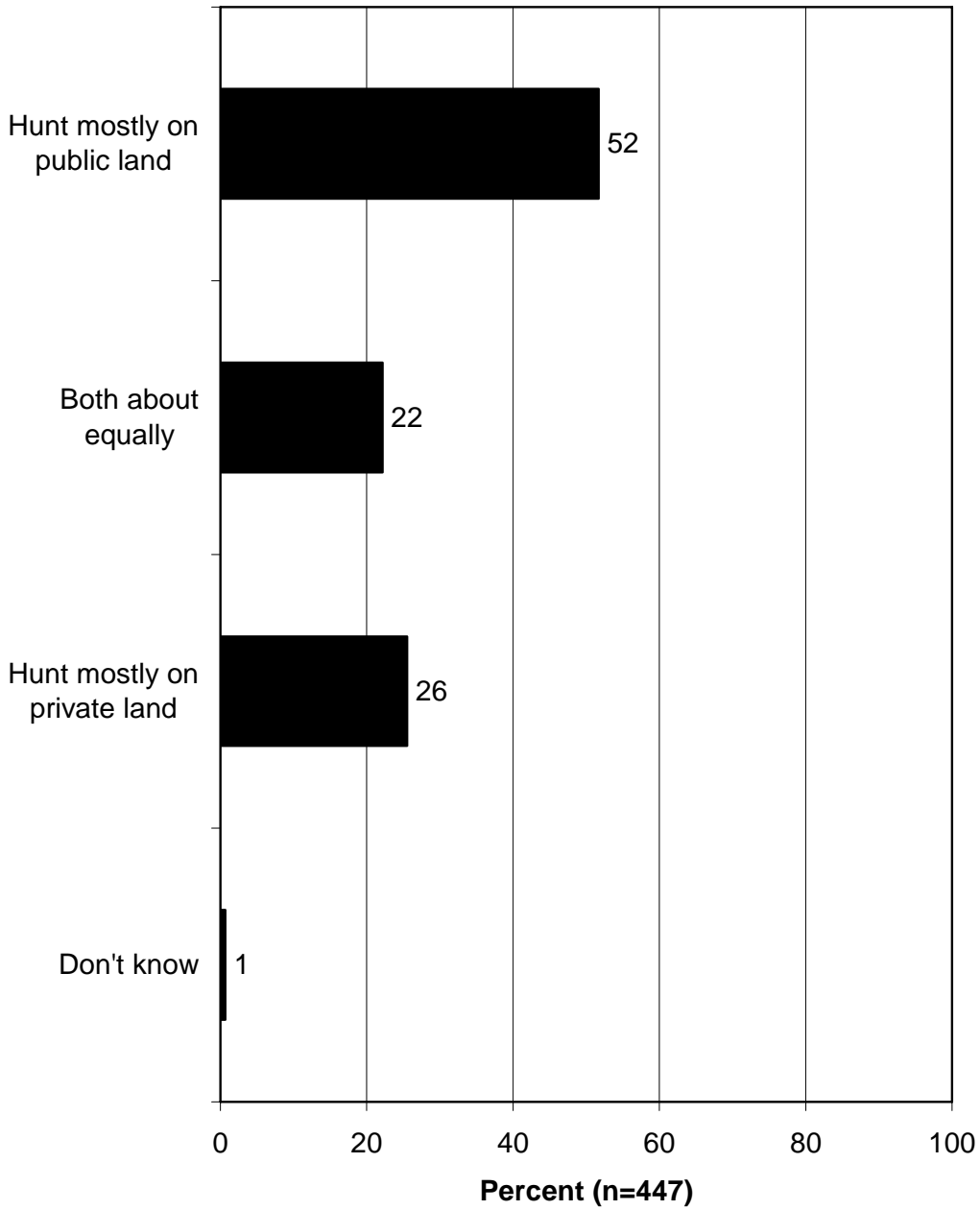
- Another question has implications regarding how much hunters need to find access to hunting lands. Hunters more commonly say that they mostly hunt their primary species on the same land each year (63%) than say that they hunt it on different lands each year (9%).

- 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 (37.7%), followed by private/same (19.1%). (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.)

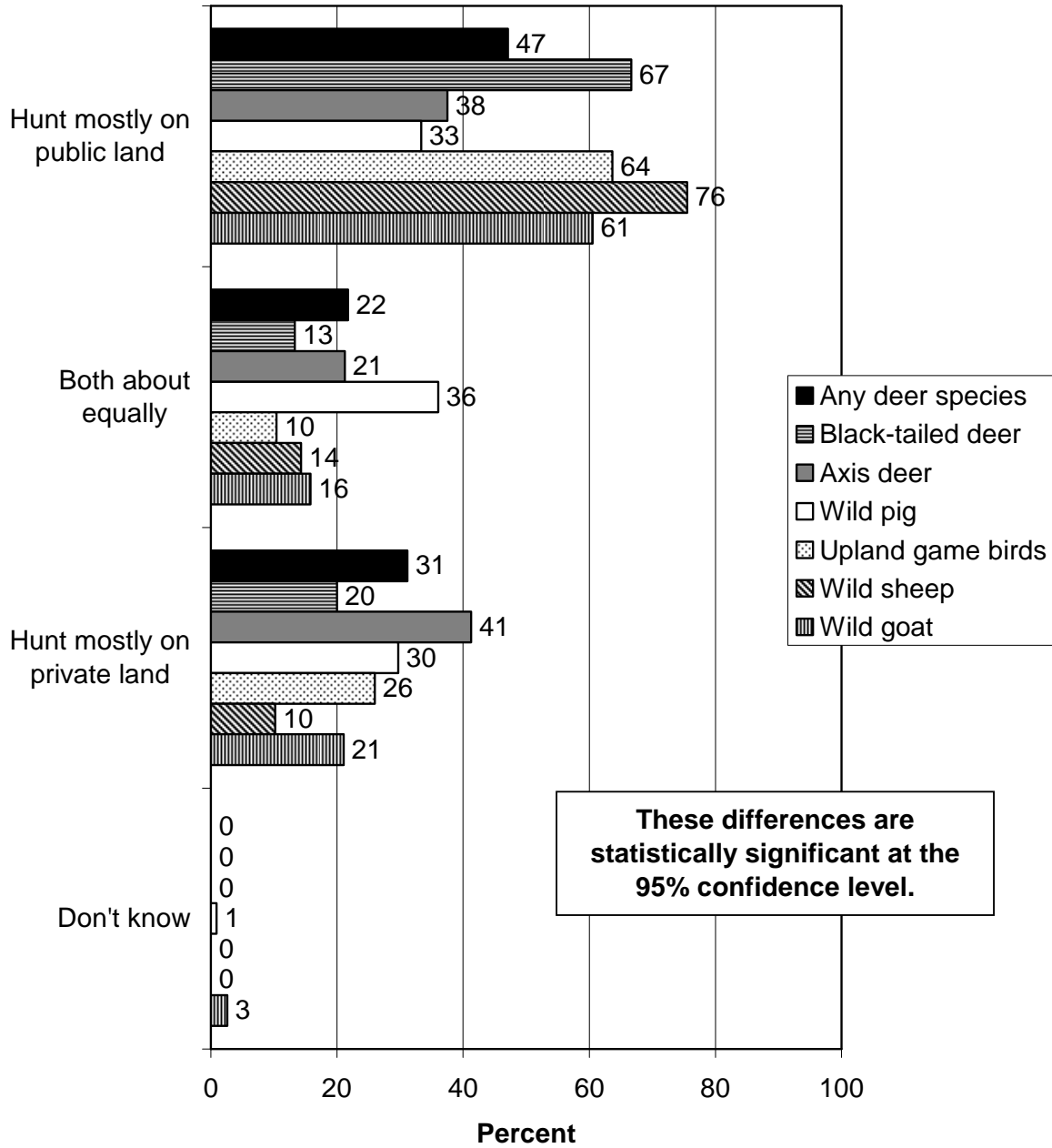
	Hunts mostly on <i>public</i> land (52.3%)	Hunts public and private lands both about <i>equally</i> (22.0%)	Hunts mostly on <i>private</i> land (25.7%)
Hunts mostly on the <i>same</i> land each year (63.9%)	Public/Same 37.7%	Both/Same 7.0%	Private/Same 19.1%
Hunts same and different lands both about <i>equally</i> (27.3%)	Public/Both 11.1%	Both/Both 10.7%	Private/Both 5.5%
Hunts mostly on <i>different</i> lands each year (8.9%)	Public/Different 3.4%	Both/Different 4.3%	Private/Different 1.1%

- The survey asked hunters to indicate how far they typically travel from home to hunt their primary species: 38% travel no more than 20 miles to do so; the median distance is 30 miles.
 - Another question explored the modes of transportation that hunters use to access the land on which they hunt: 84% use a car or truck (by far the top mode), distantly followed by walking (27%) and plane (19%). Note that hunters could name more than one mode.

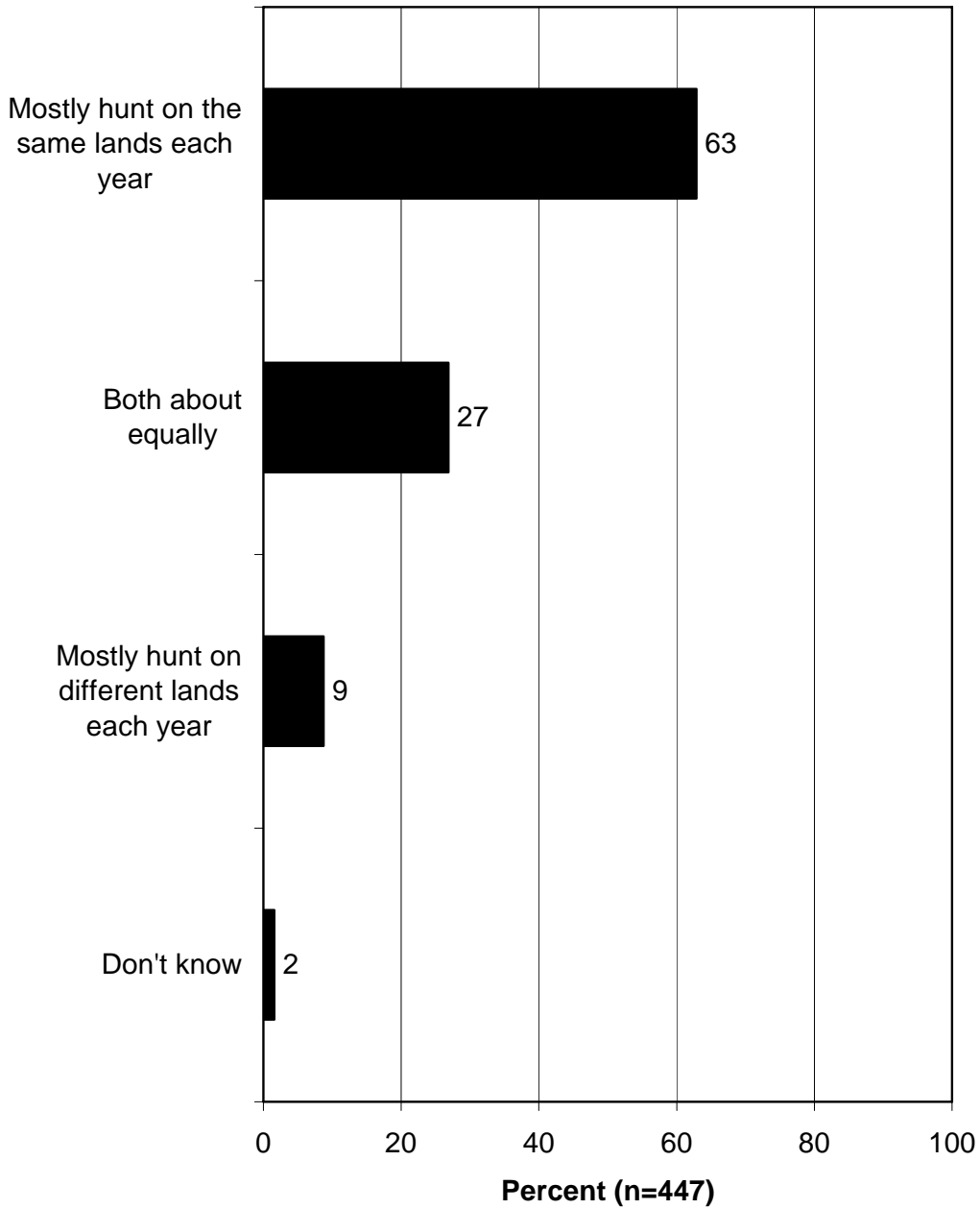
Q58. For (species) hunting, would you say you hunt mostly on public land, mostly on private land, or on both about equally, in Hawaii?



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

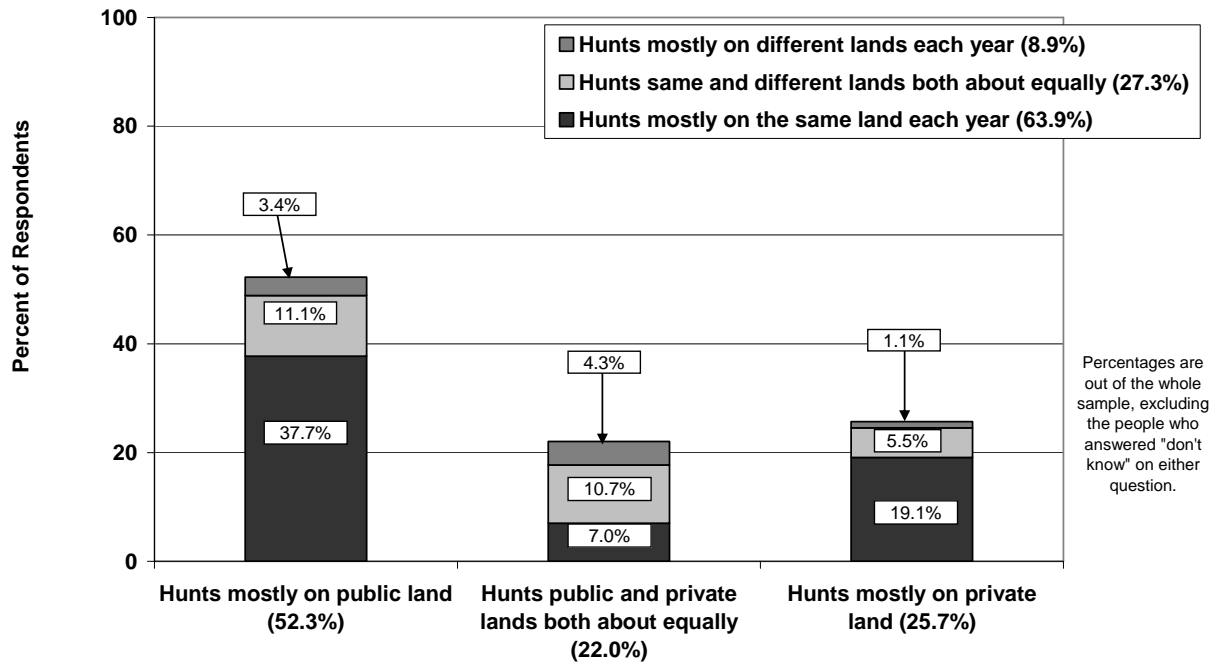


Q57. When hunting in Hawaii for (species), do you mostly hunt on the same lands each year, mostly hunt on different lands each year, or both about equally?

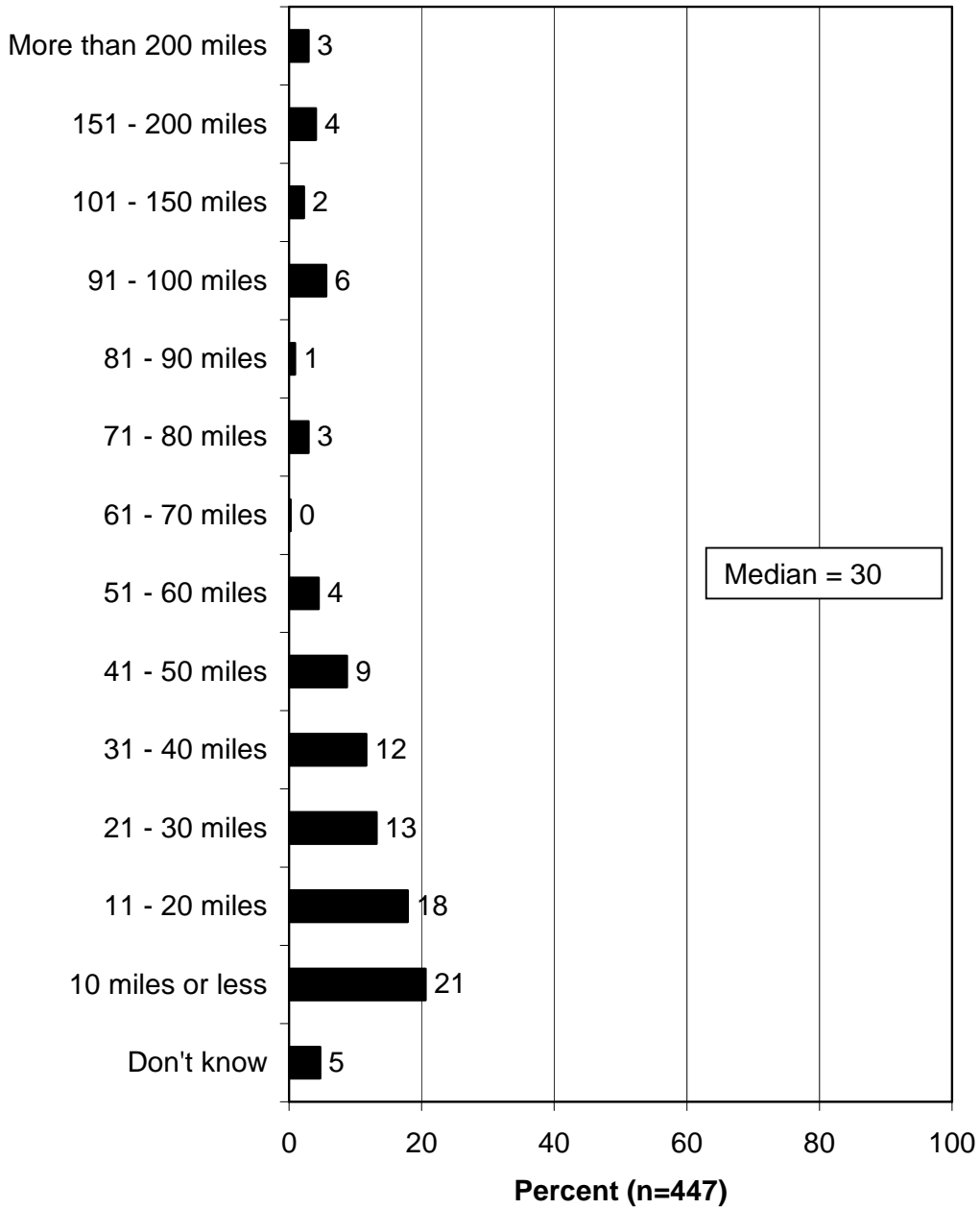


- The graph below shows a combination of Question 57 (hunts on same or different lands) and Question 58 (hunts on public or private lands).

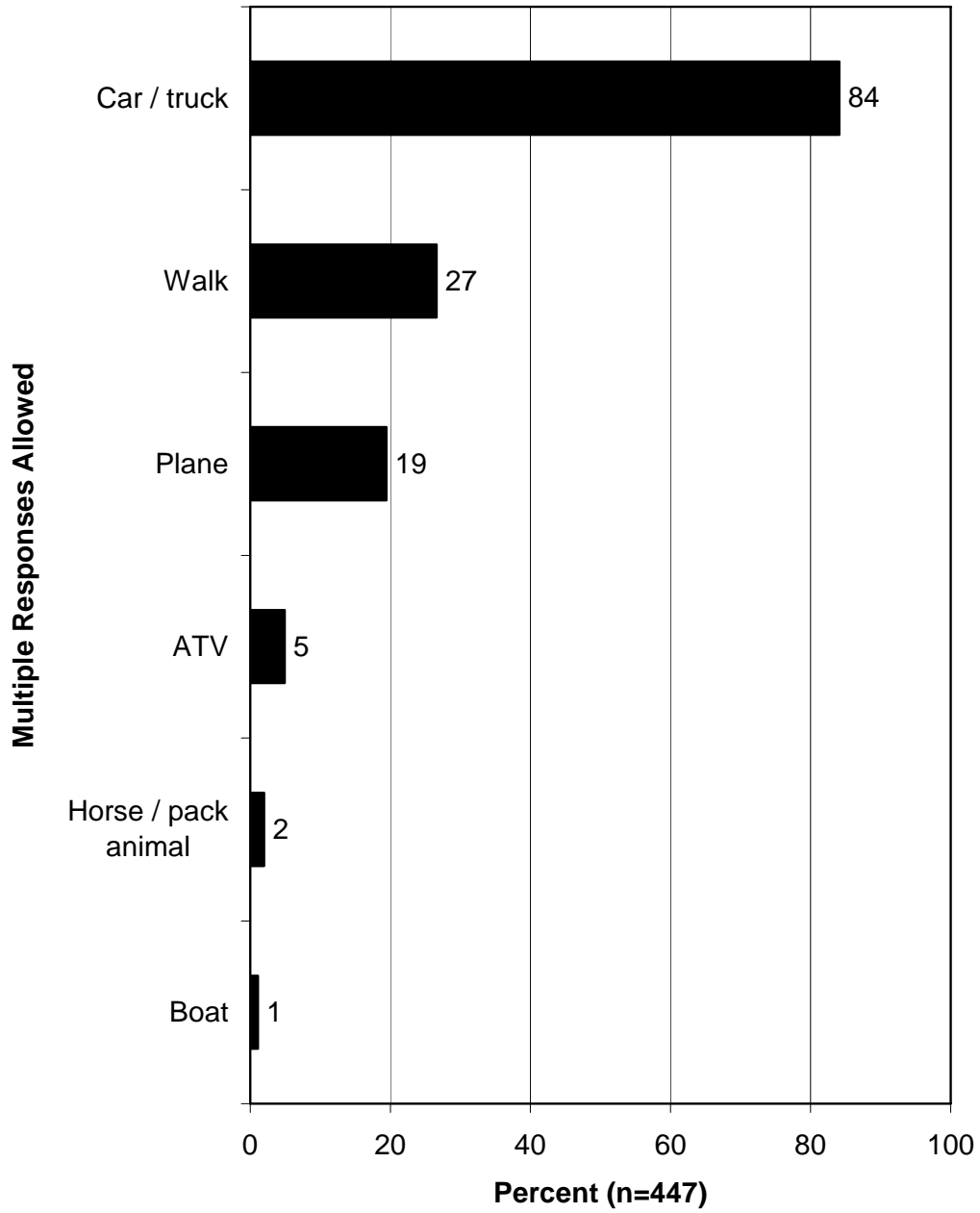
Q57/58. Hunting on public versus private lands and hunting on same versus different lands.



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



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 the land is familiar to them (60% say this is *very* important), that the land is not crowded with other sportsmen (55%), and that the land is public land (53%).
 - A couple more factors are shown to be important in looking at the ranking by *very* or *somewhat* important in addition to the factors mentioned above. Those additional factors that are important include that the land is easy to access by car/truck and that the land is easy to access by foot.
 - A final graph shows the ranking by the percentage saying the factors are not at all important.

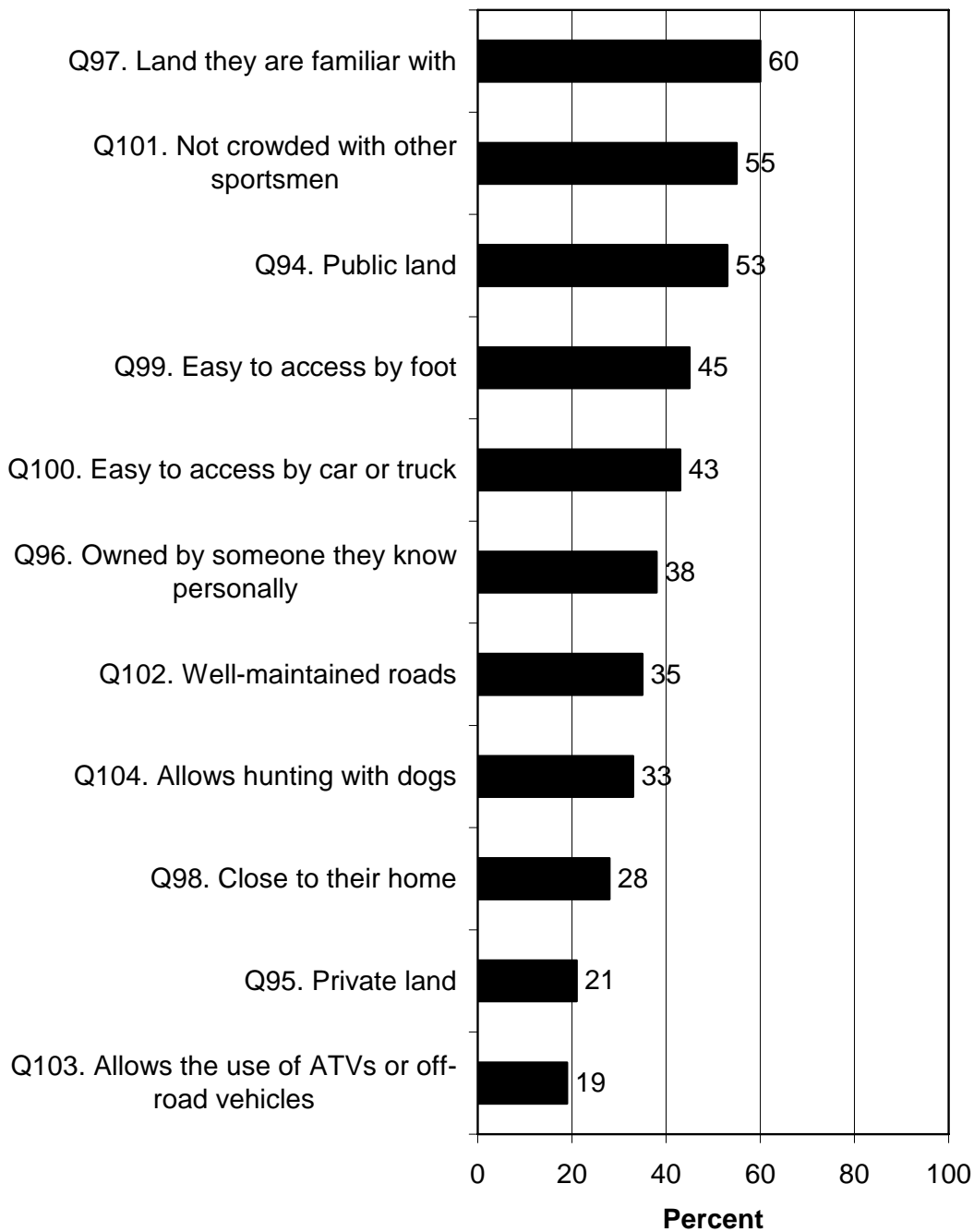
TEXT BOX 1

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

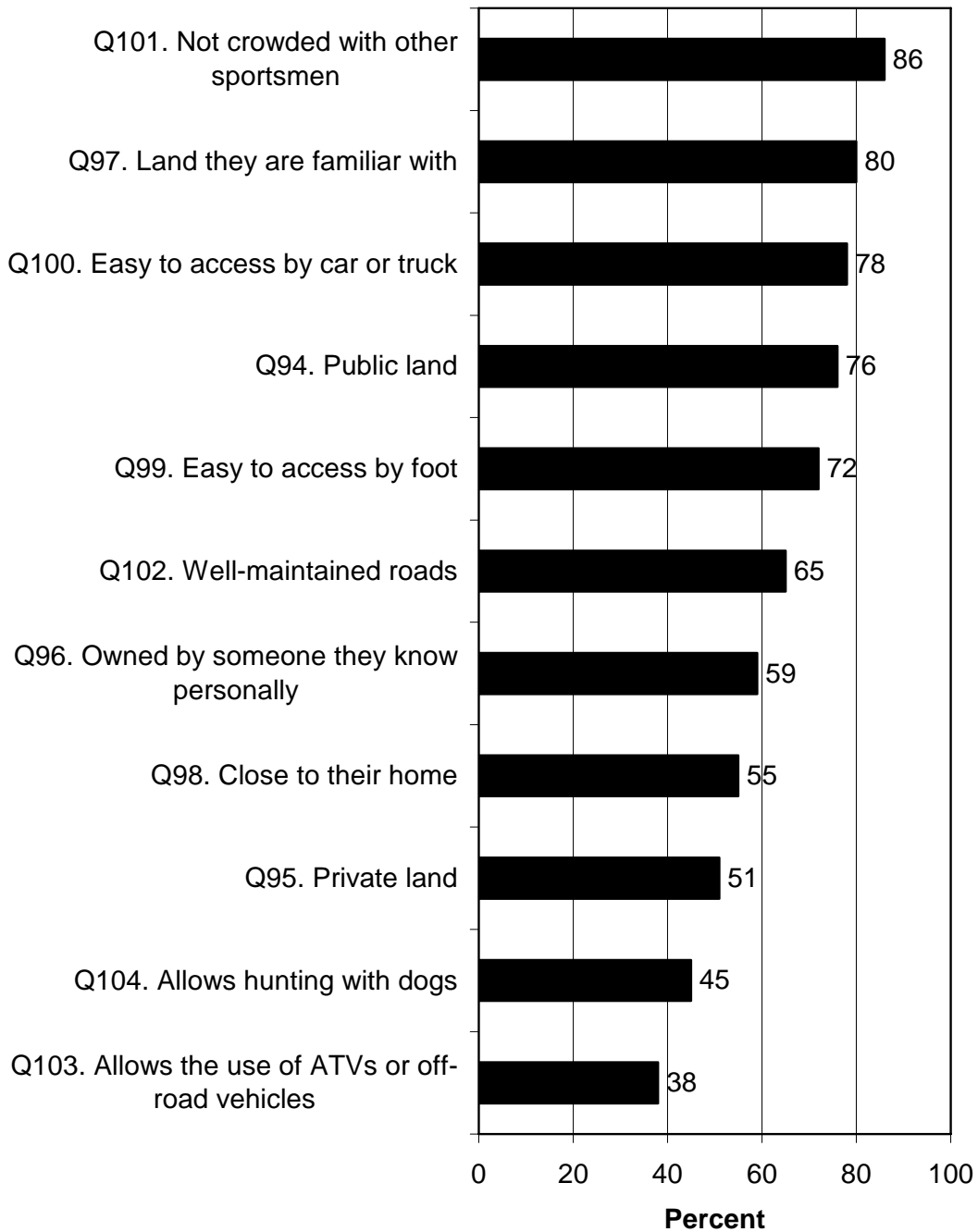
- That the land is public land
- That the land is private land
- That the land is owned by someone the respondent knows personally
- That the land is familiar to the respondent
- That the land is close to the respondent's home
- That the land is easy to access by foot
- That the land is easy to access 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. Several additional factors were commonly mentioned: the amount of game, access, safety, and crowding.

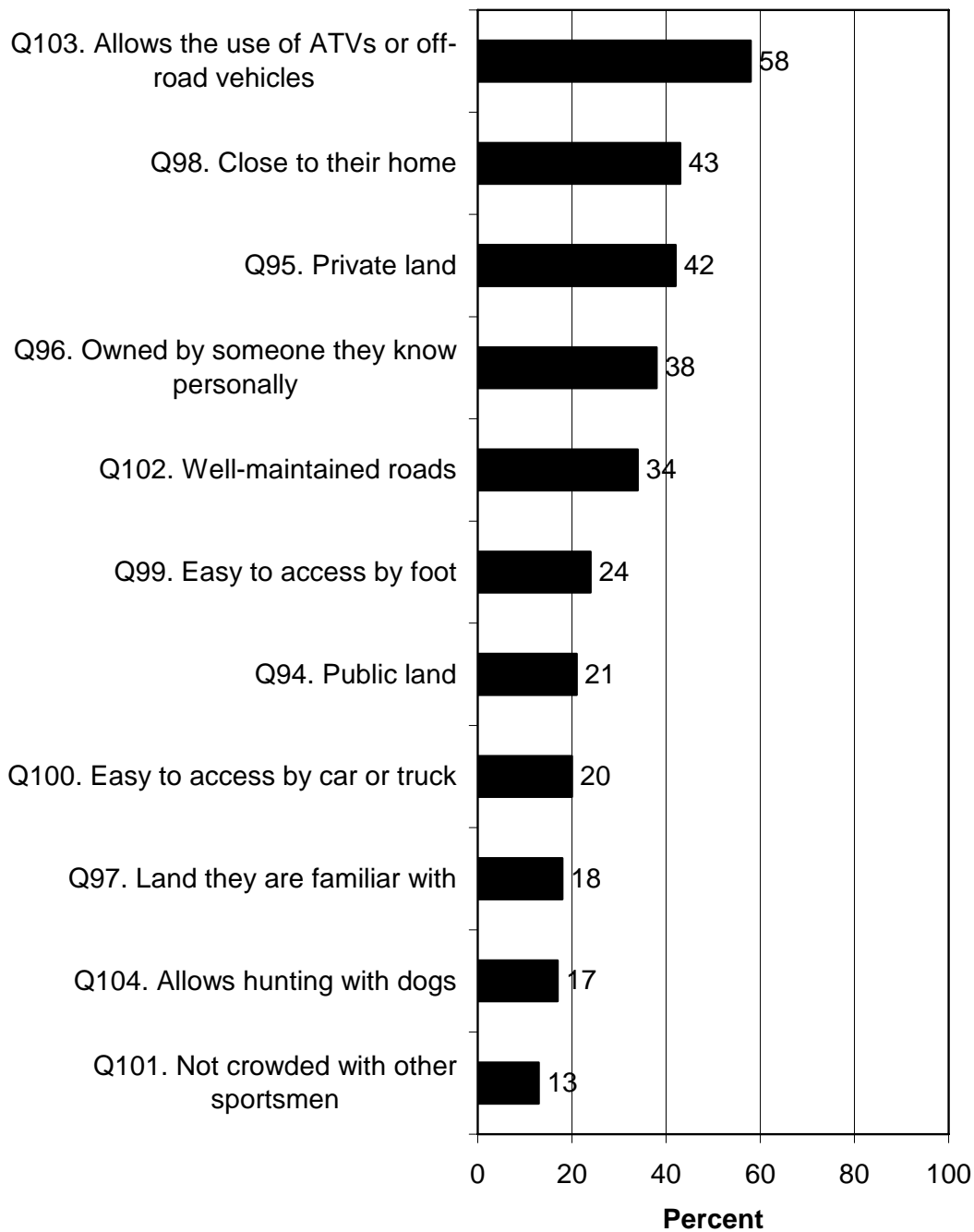
Percent who indicated that the following are very important when deciding where to hunt (species) in the past 12 months in Hawaii.



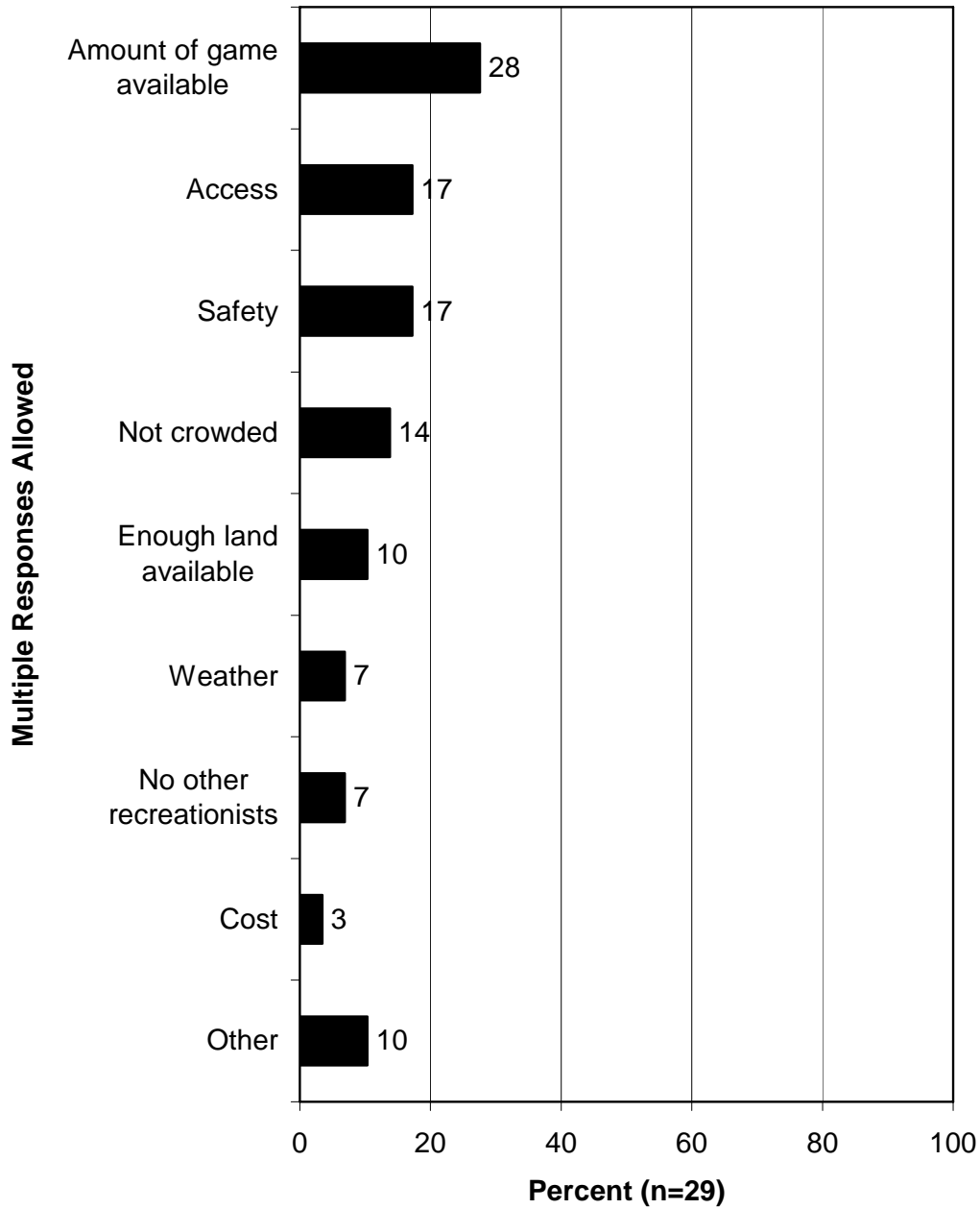
Percent who indicated that the following are very or somewhat important when deciding where to hunt (species) in the past 12 months in Hawaii.



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



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 large majority of them (68%) agreed that it had done so. In follow-up in an open-ended question, the top-named access problems were private land being posted, a lack of land on which to hunt, and public land being closed (the three 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 any deer (34% among those who agreed to the above question), closely followed by wild pig (24%) and wild sheep (24%). 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 to eliminate order bias. 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*, *moderate*, or *minor* problem were the cost of gas (58%), less land on which to hunt because the land use has changed (55%), less land on which to hunt due to private land ownership changes (55%), less land on which to hunt due to development (50%), and poor maintenance of roads or trails (50%). All of these had half or more of respondents saying it was a *major*, *moderate*, or *minor* problem.
 - A ranking was also produced of the percentage giving a rating of *major* problem. Also shown is the ranking by the percentage saying the constraint was not a problem at all.

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 Hawaii Department of Land and Natural Resources 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 lack of maintenance (e.g., downed trees not cut out of the way, gullies), by a posting by a private landowner, or by a berm/dirt pile intentionally placed.
 - Most commonly, the road closures were perceived to be seasonal/temporary rather than permanent.
 - Another follow-up question asked for the location/type of the closed road. Most commonly, the closed roads were public—National Forest roads, other public roads, or BLM roads.

- Another 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 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 percentage saying the problem was *major*, *moderate*, or *minor*, the top problems are leaving an area because of crowding from other hunters (48%), not going on a hunt or changing locations because of access problems (39%), leaving an area because of a feeling of being unsafe because of other hunters (36%), leaving an area because of crowding from other recreationists (34%), being confused by a state agency map that was hard to follow (32%), and leaving an area because of the irresponsible behavior of other hunters (30%)—all with at least 30% saying it had been a problem. As a whole, the results suggest that access itself is not as great a problem as is access to *uncrowded* lands—four of the top six problems relate to other people being on the land on which the hunter wanted to hunt.
 - 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

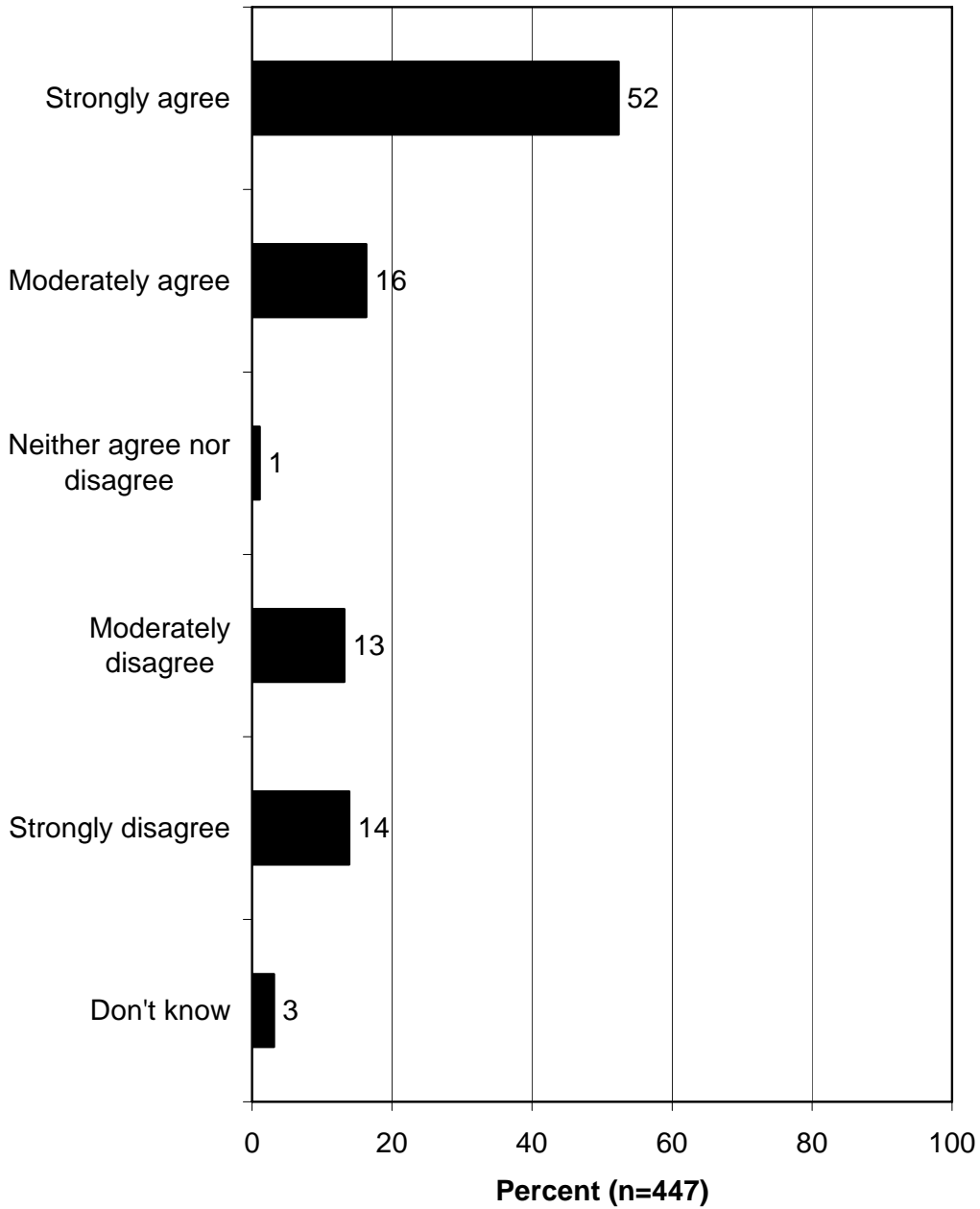
- The survey asked hunters a series of 10 questions about factors that may or may not influence access to hunting land in Hawaii in general, regardless of whether their own participation is affected by it (shown in Text Box 4 on the following page). For each factor, the survey asked hunters if they think 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*, a *moderate*, or a *minor* problem, 4 of the 10 factors have a majority saying it is a problem: poor management or allocation of uses of public land (59%), private land posted or closed because the landowner is specifically concerned about liability (59%), closures of public land by government agencies (55%), and housing and commercial development (52%).
 - 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:**

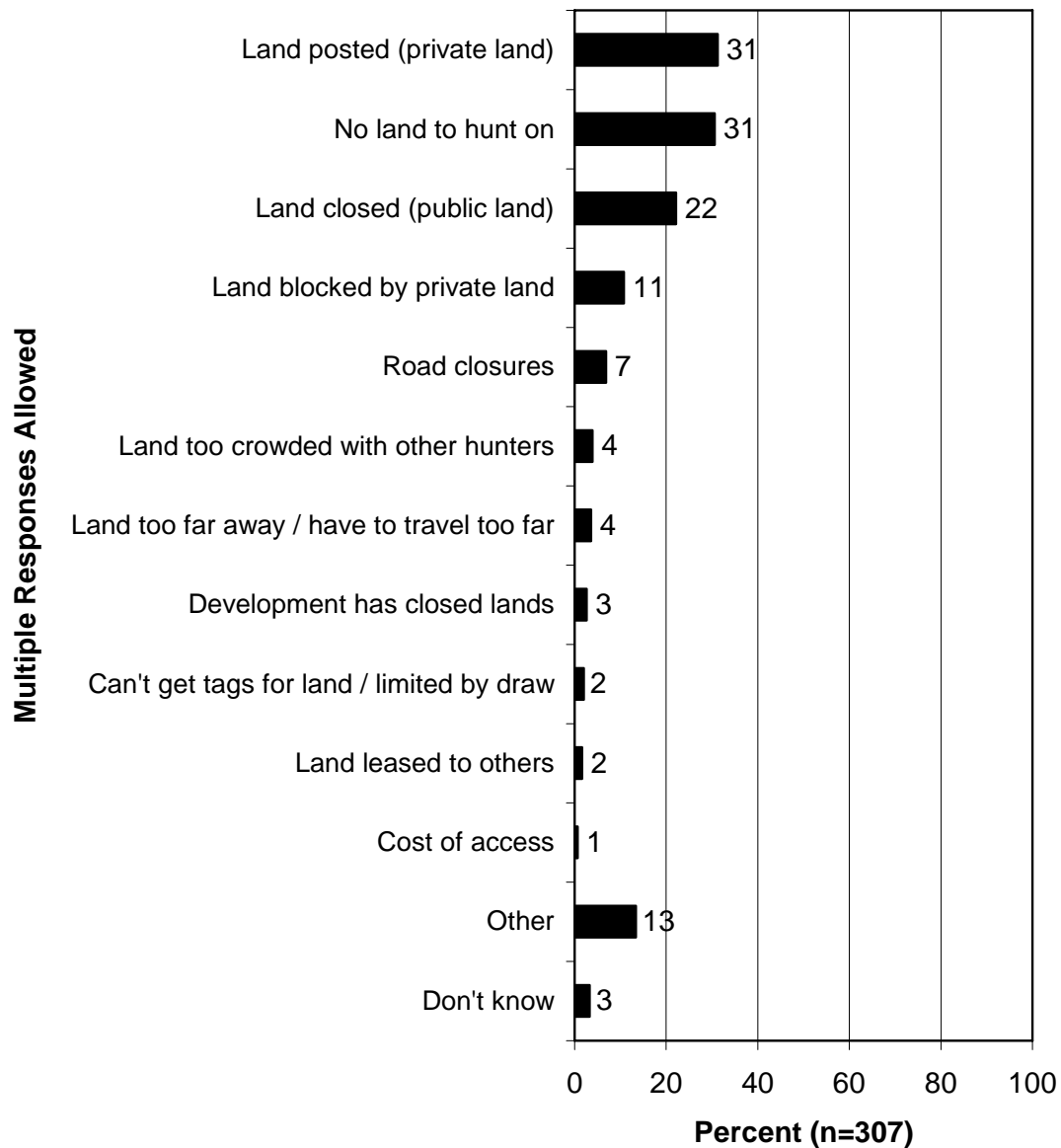
- Poor management or allocation of uses of public land
- Lack of or unclear signs marking public hunting lands
- Restrictions on public land
- Closures of public land by government agencies
- Not enough access to public lands for those with disabilities
- Housing and commercial development
- Gas and 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 Hawaii, even if those things did not prevent them from actually going, 53% of hunters indicated that something had taken away from their enjoyment. Most commonly, they named an access-related problem (23%), not enough game (10%), and/or a regulation-related answer (7%). 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 are no land to hunt on, public land closed, and private land posted.

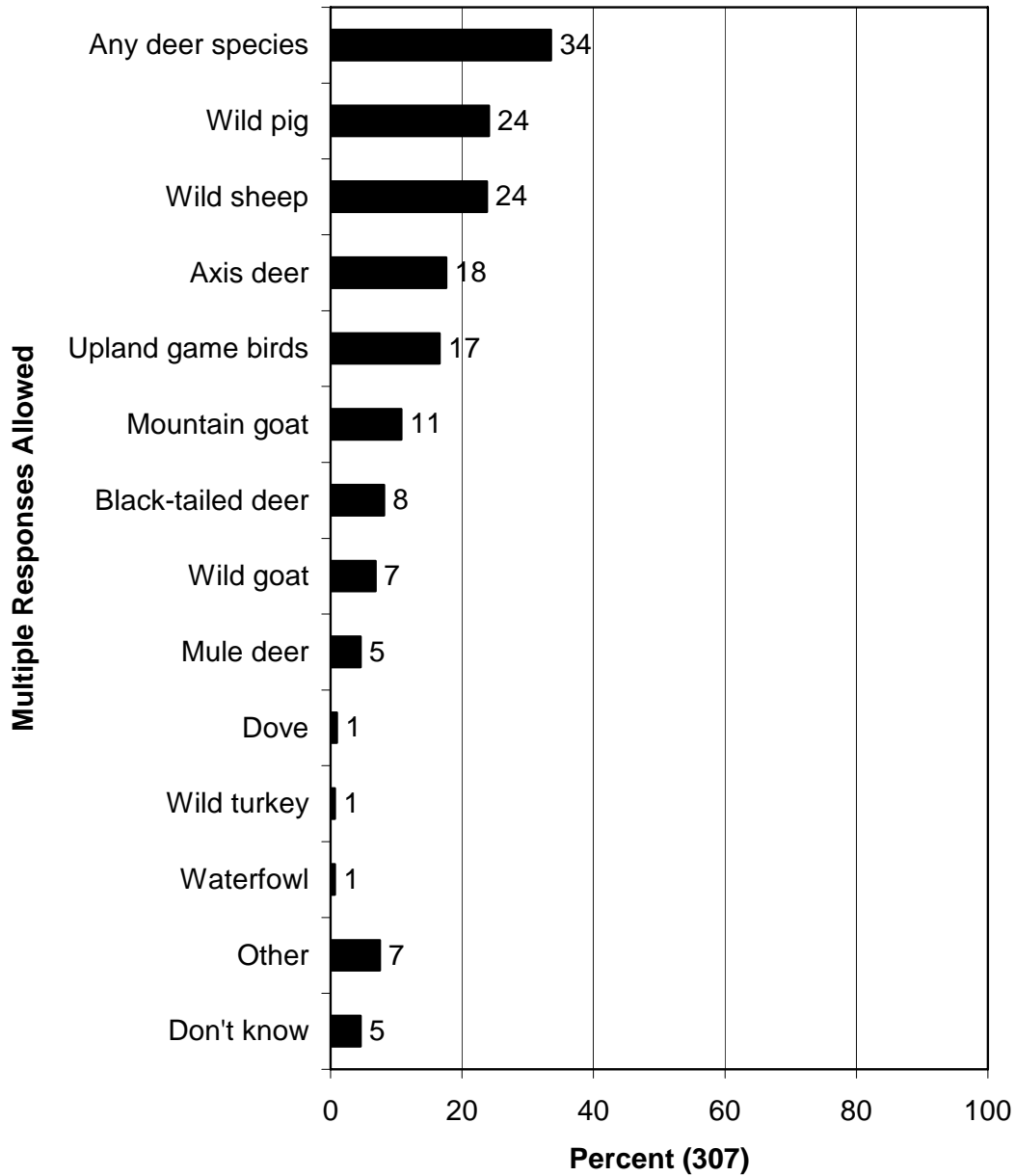
Q40. Do you agree or disagree that a lack of access to hunting lands in Hawaii has caused you to not hunt any species as much as you would have liked in the past 5 years?



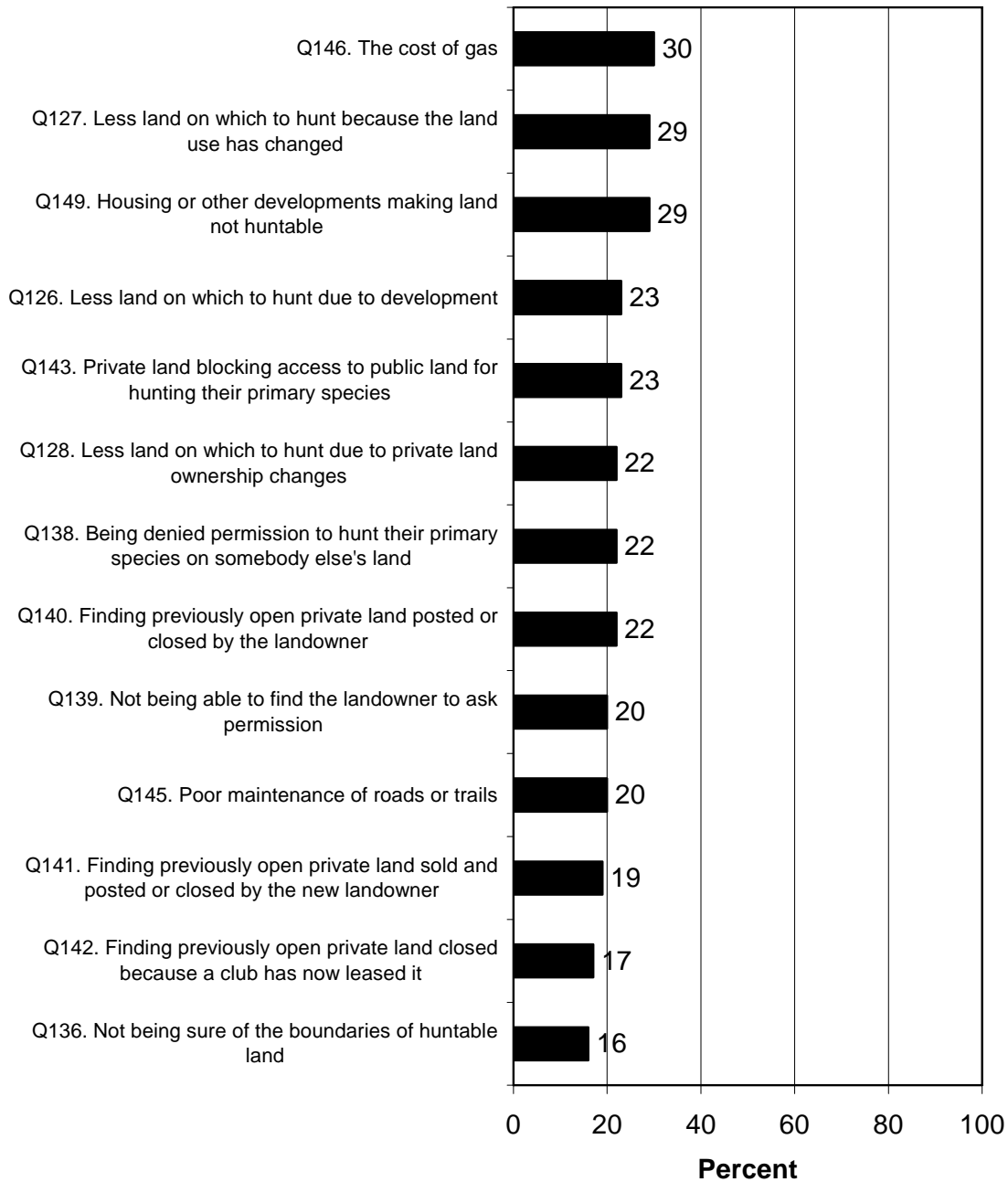
Q48. What are the specific access problems that have caused you not to hunt this/these species as much as you would have liked? (Asked of those who agree that lack of access to hunting lands in Hawaii has caused them not to hunt a species as much as they would have liked in the past 5 years.)



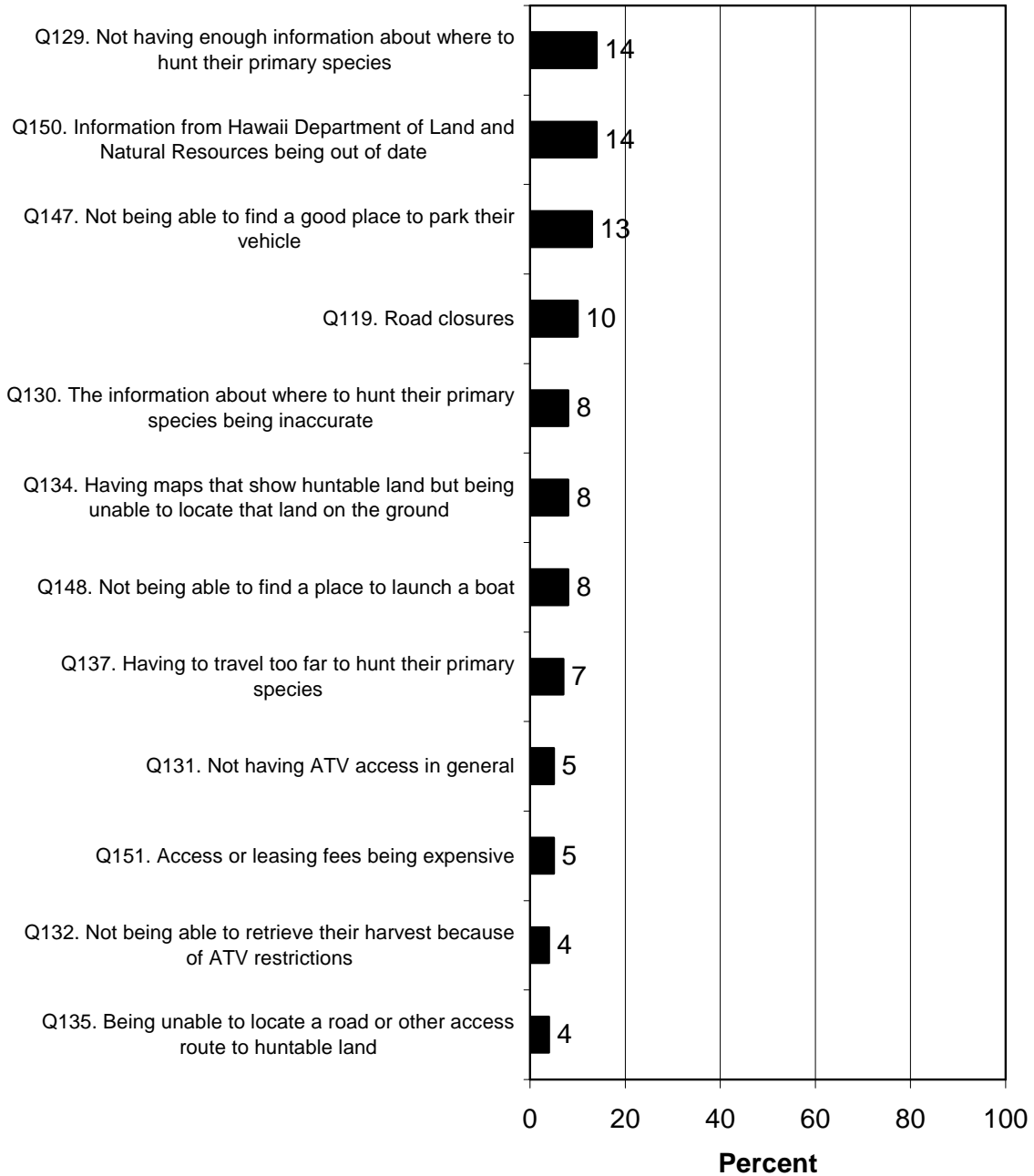
Q43. What species have you not hunted as much as you would have liked as a result of access problems? (Asked of those who agree that lack of access to hunting lands in Hawaii has caused them not to hunt a species as much as they would have liked in the past 5 years.)



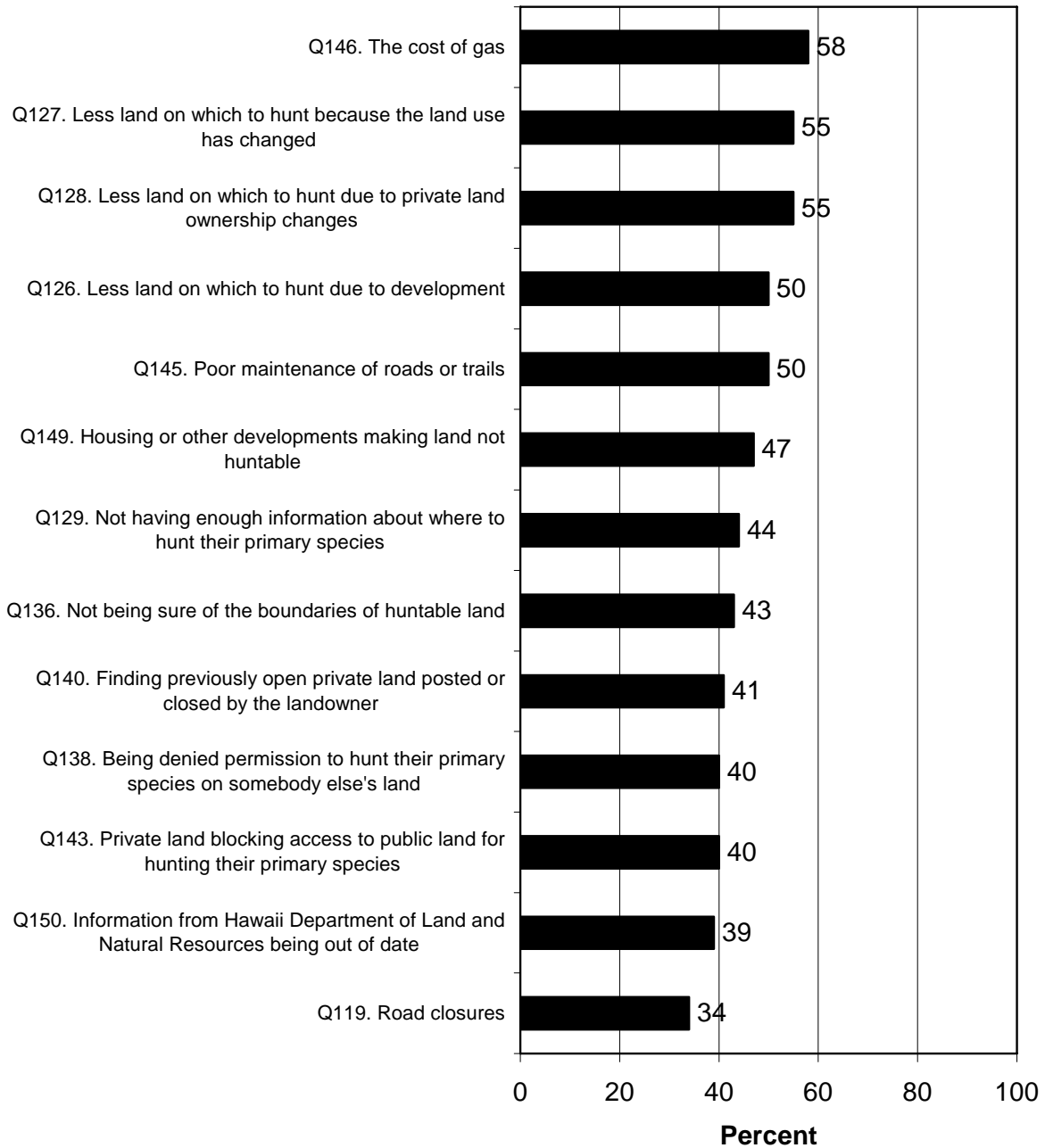
**Percent who indicated that the following have been
major hunting access problems in the past 5 years
when hunting (species).
(Part 1)**



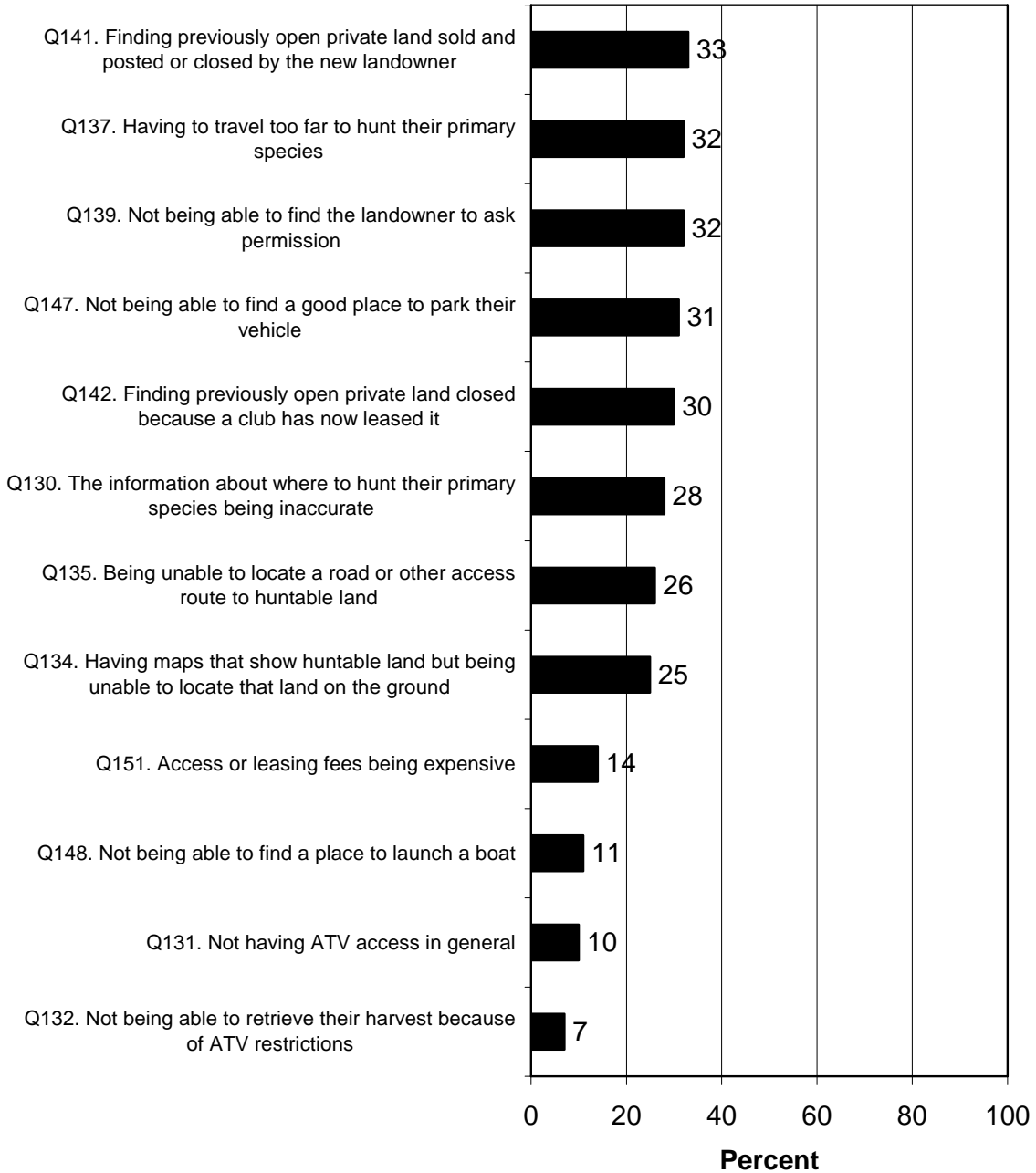
**Percent who indicated that the following have been major hunting access problems in the past 5 years when hunting (species).
(Part 2)**



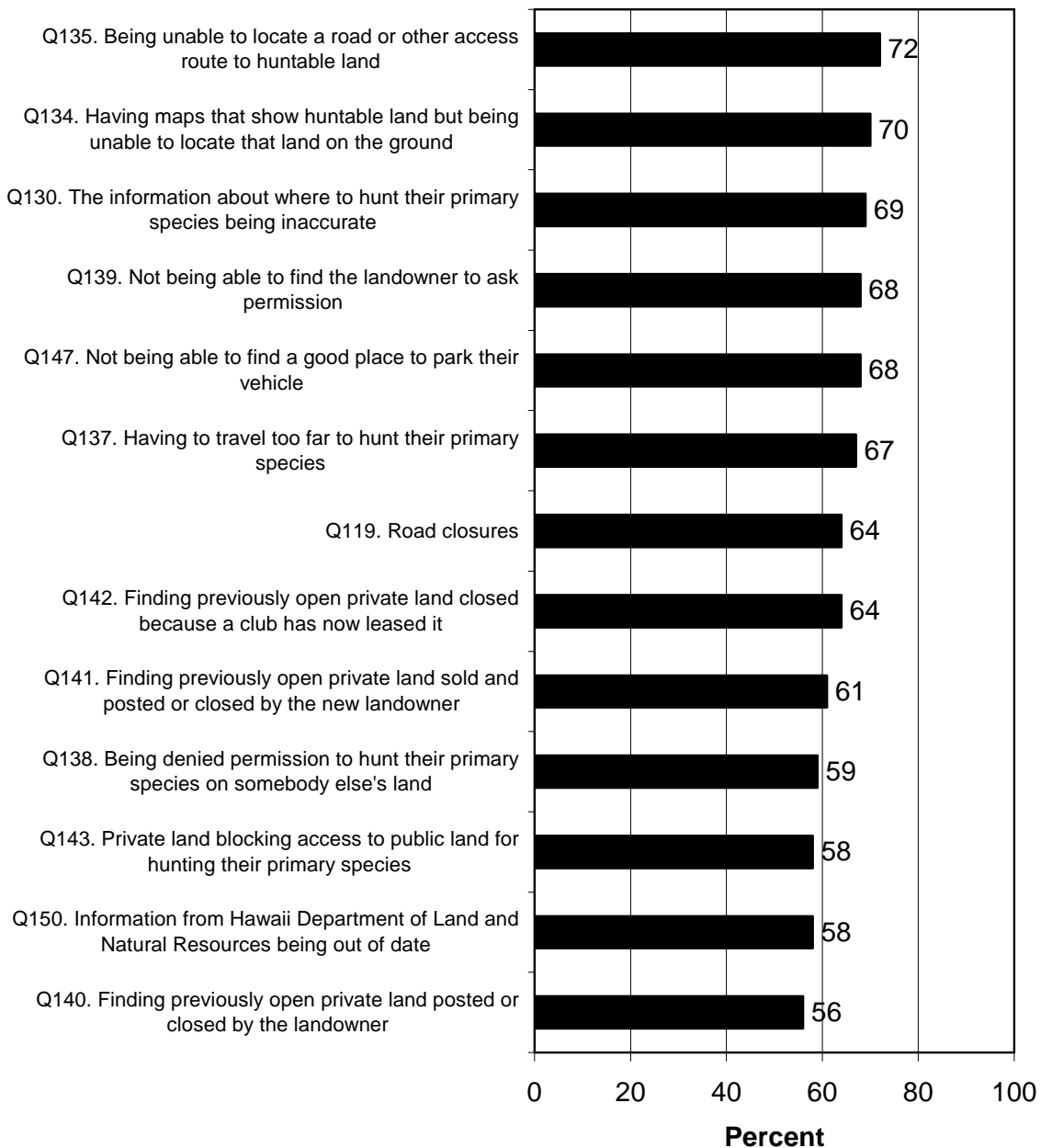
**Percent who indicated that the following hunting access problems have been major, moderate, or minor in the past 5 years when hunting (species).
(Part 1)**



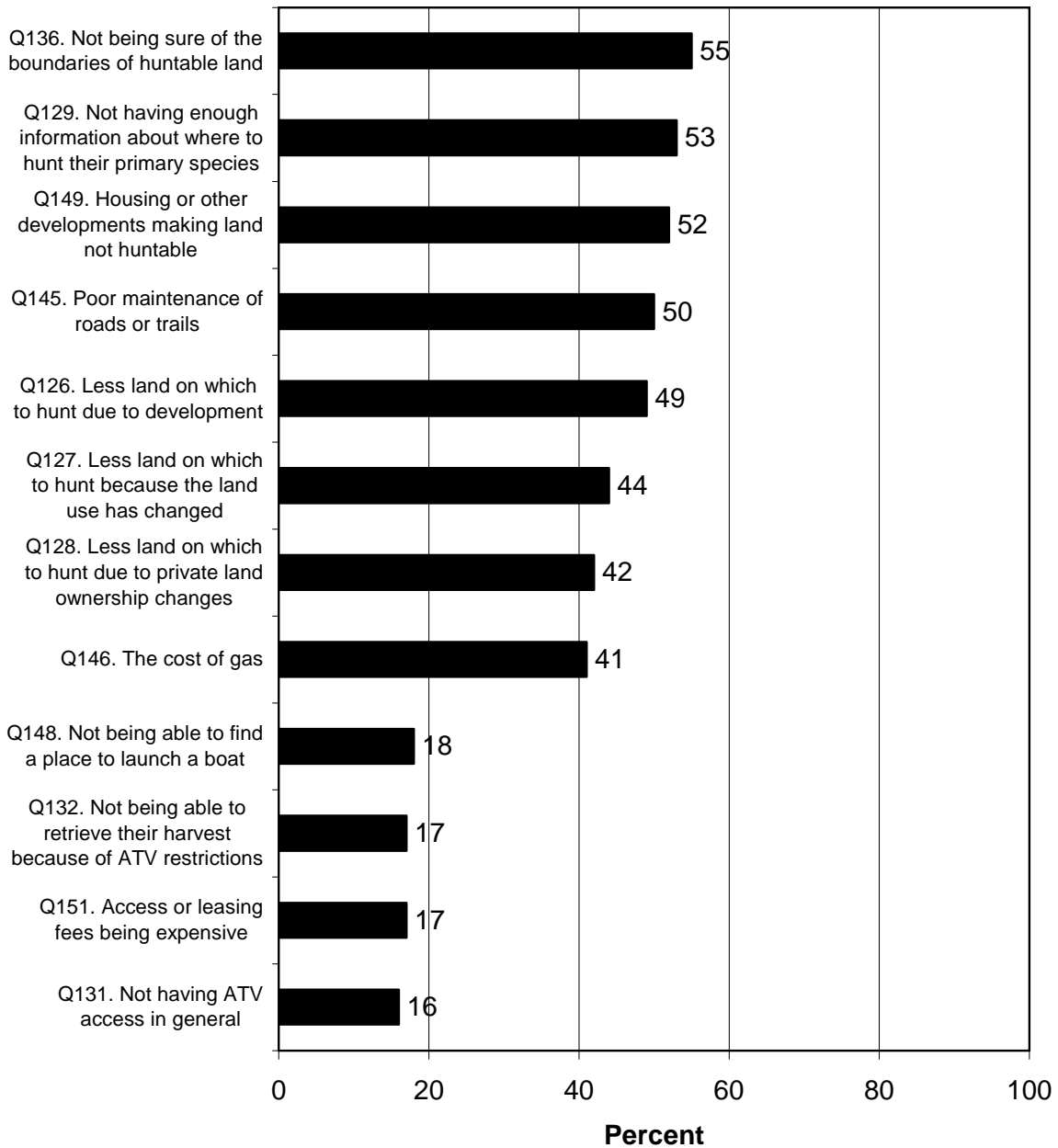
**Percent who indicated that the following hunting access problems have been major, moderate, or minor in the past 5 years when hunting (species).
(Part 2)**



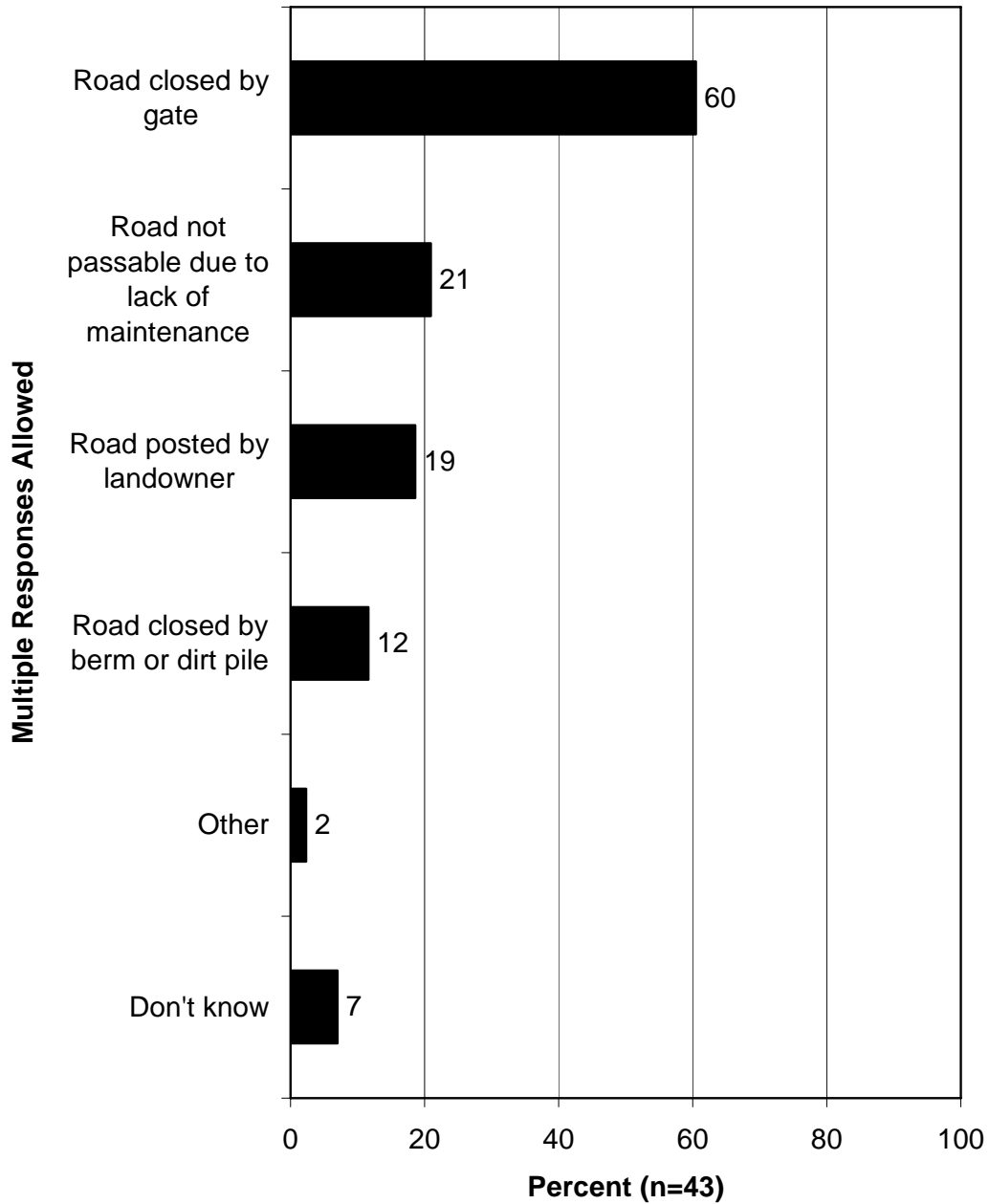
**Percent who indicated that the following potential
hunting access problems have not been
problematic at all in the past 5 years when hunting
(species).
(Part 1)**



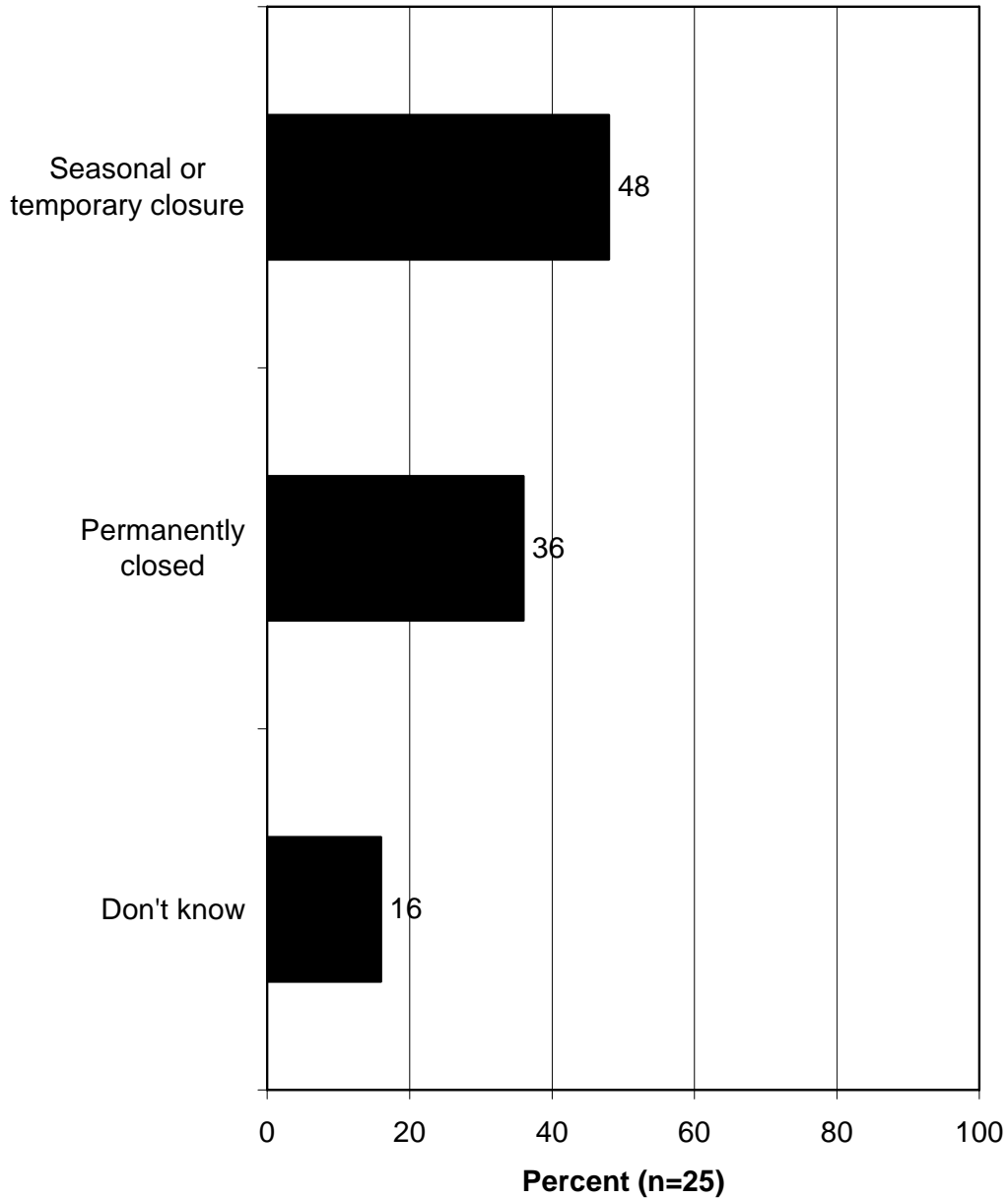
**Percent who indicated that the following potential hunting access problems have not been problematic at all in the past 5 years when hunting (species).
(Part 2)**



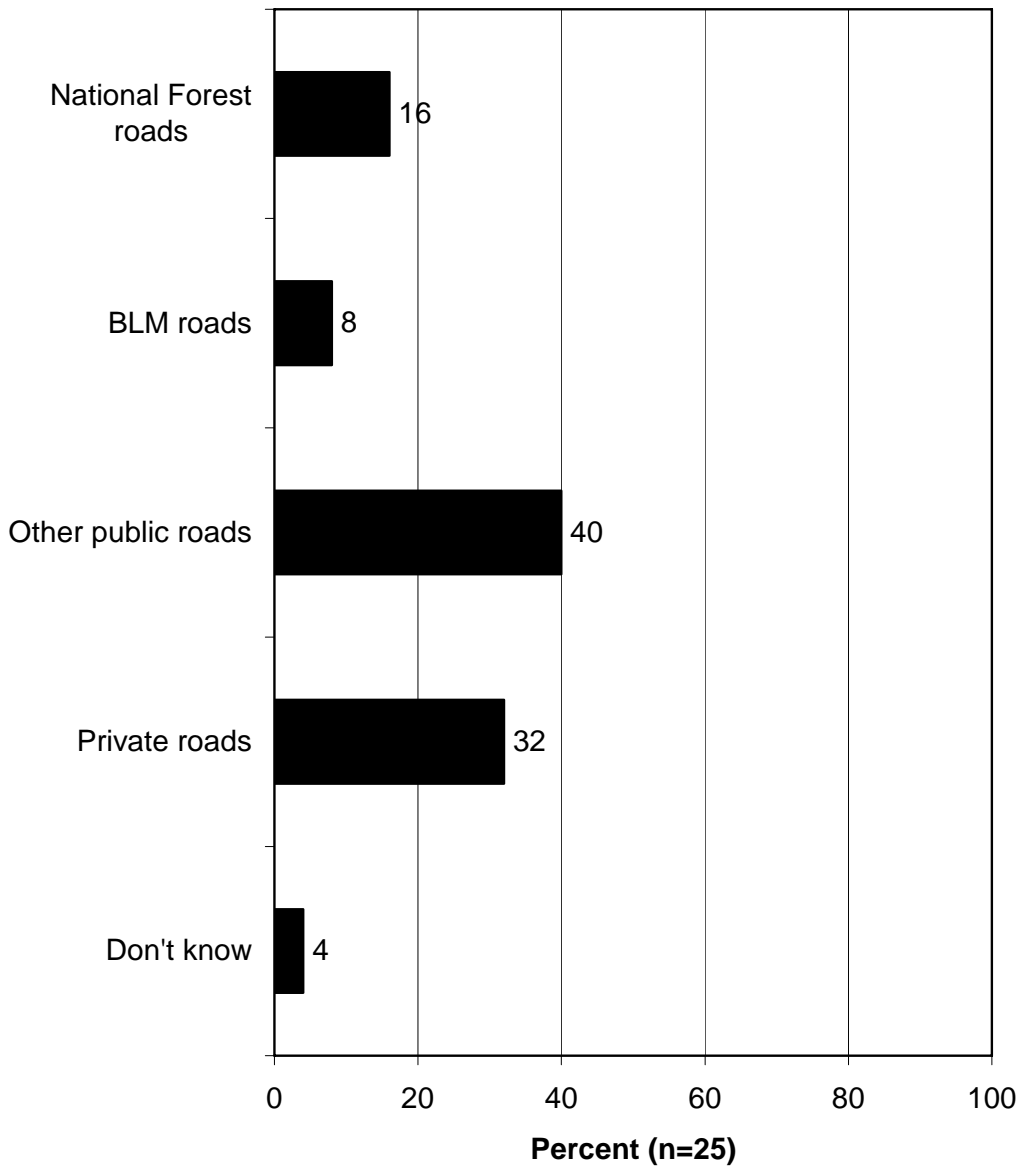
Q122. How were the roads closed? (Asked of those who said road closures have been a problem when they were hunting their primary species.)



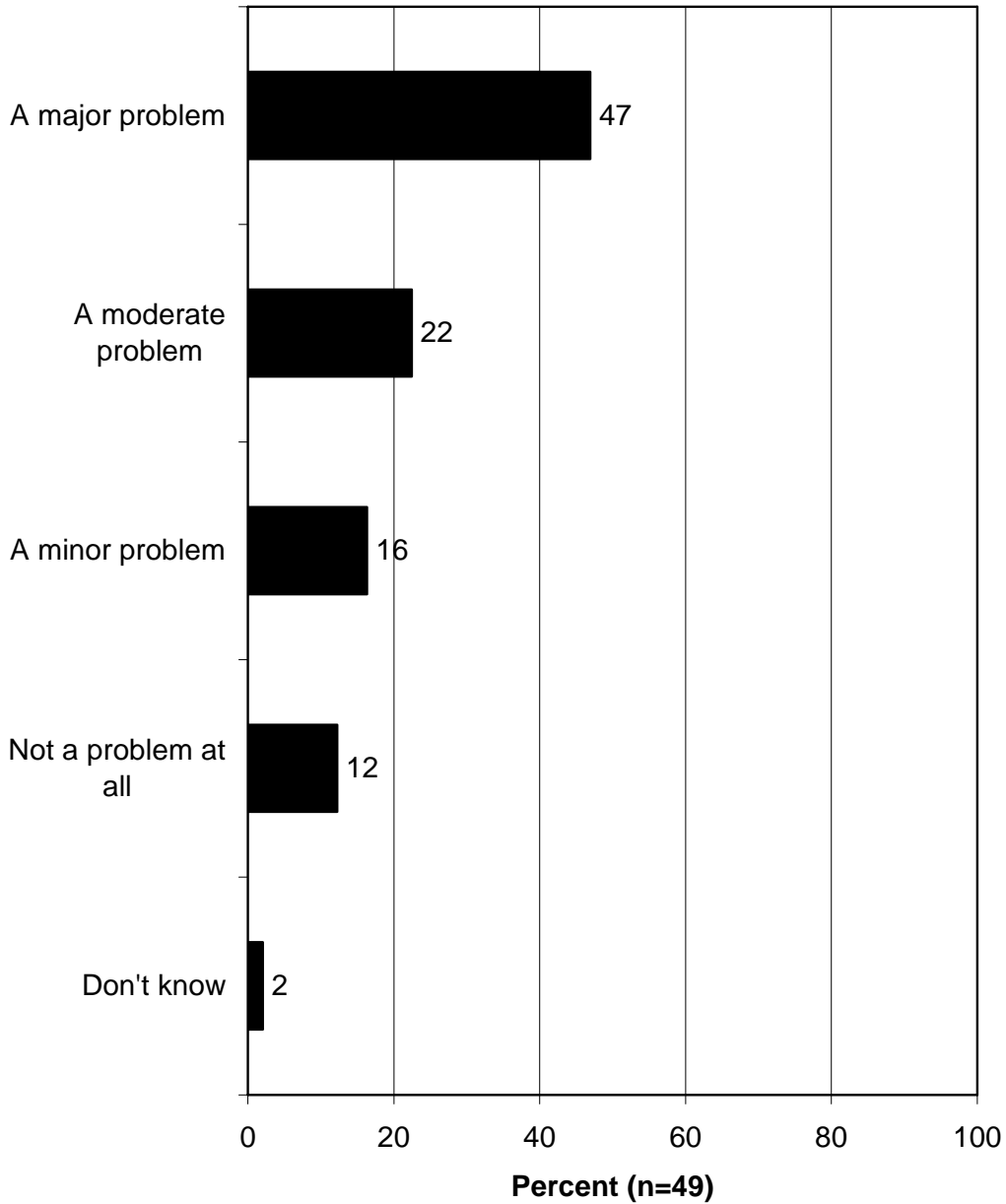
Q124. Was this a seasonal or temporary closure, or was it permanently closed? (Asked of those who said road closures have been a problem when they were hunting their primary species and who said the road was closed by a gate.)



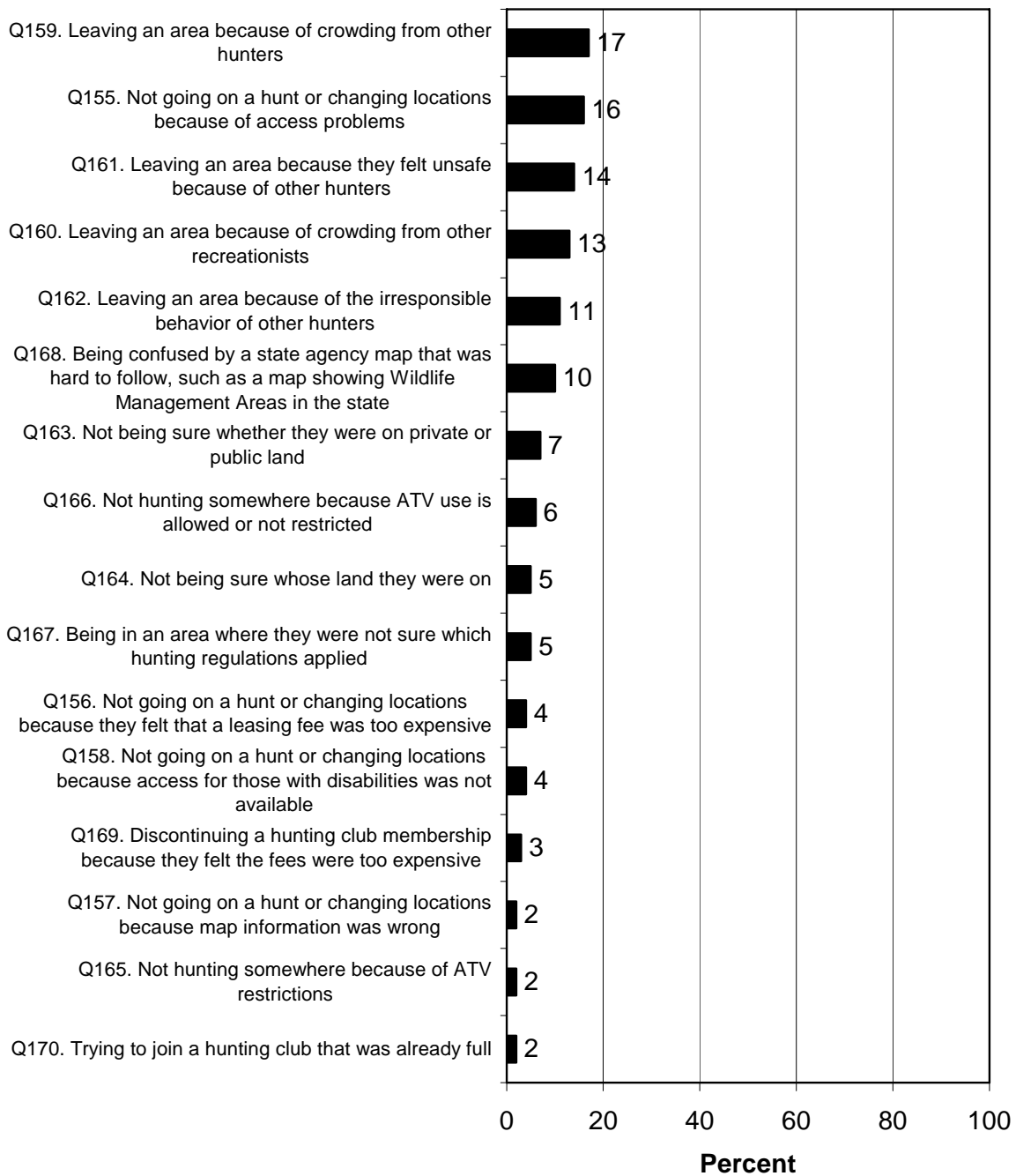
Q125. Were the closed roads National Forest roads, BLM roads, other public roads, or private roads? (Asked of those who said road closures have been a problem when they were hunting their primary species and who said the road was closed by a gate.)



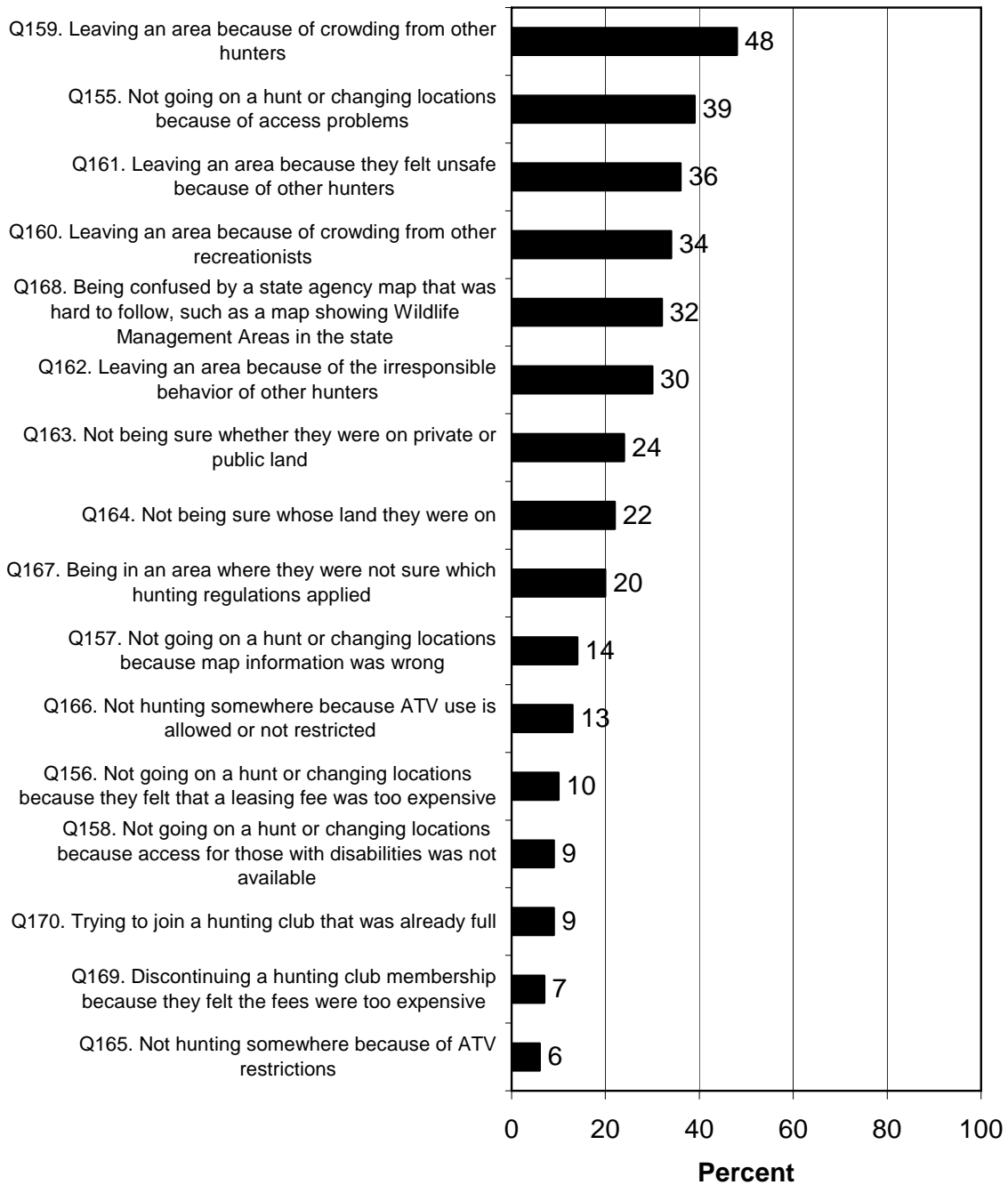
Q144. How much of a problem were landowners intentionally blocking or making it difficult to physically access public land? (Asked of those who said that private land blocking access to public land has been a problem when they were hunting their primary species.)



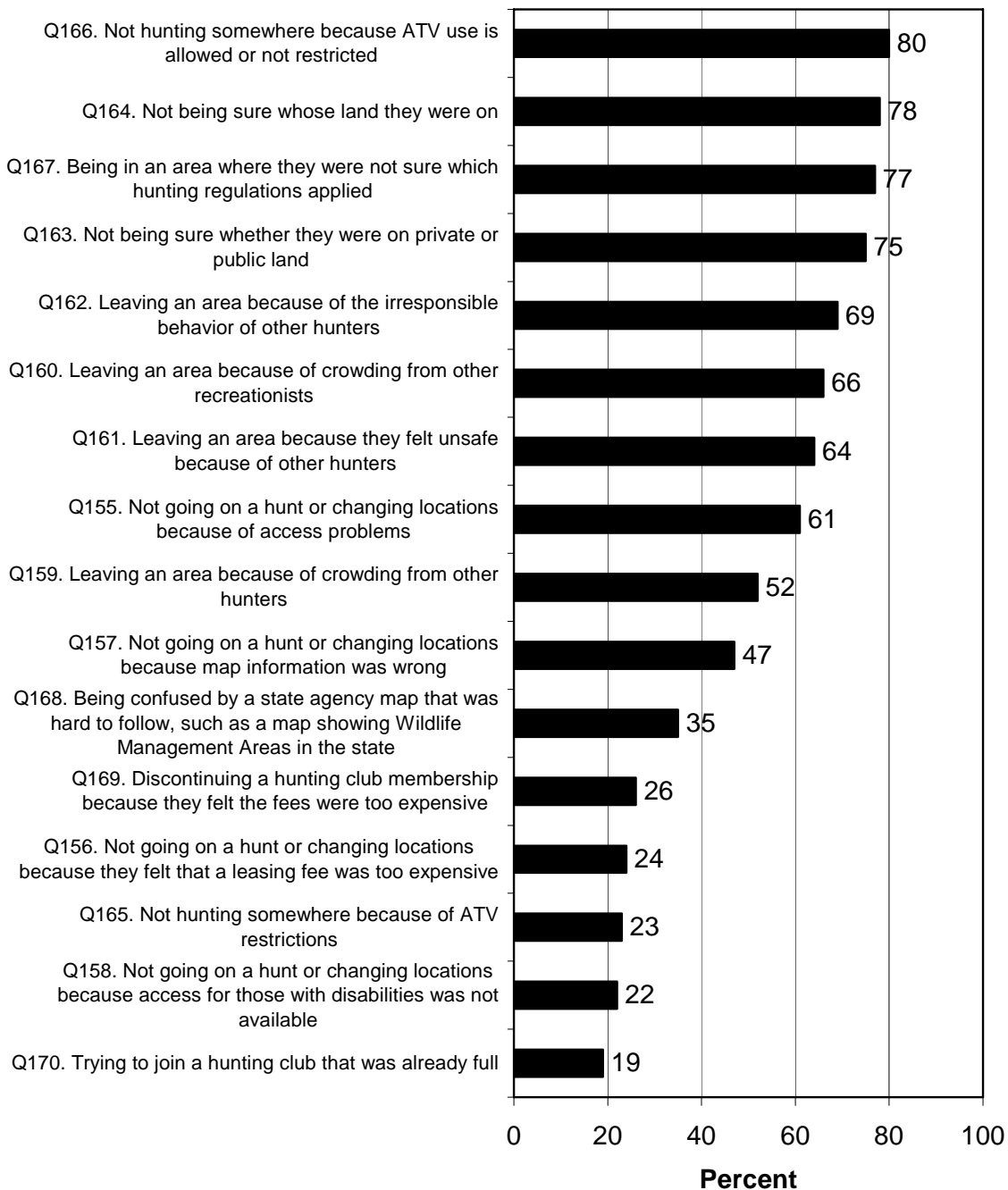
**Percent who indicated that the following have been
a major problem in the past 5 years when hunting
(species).**



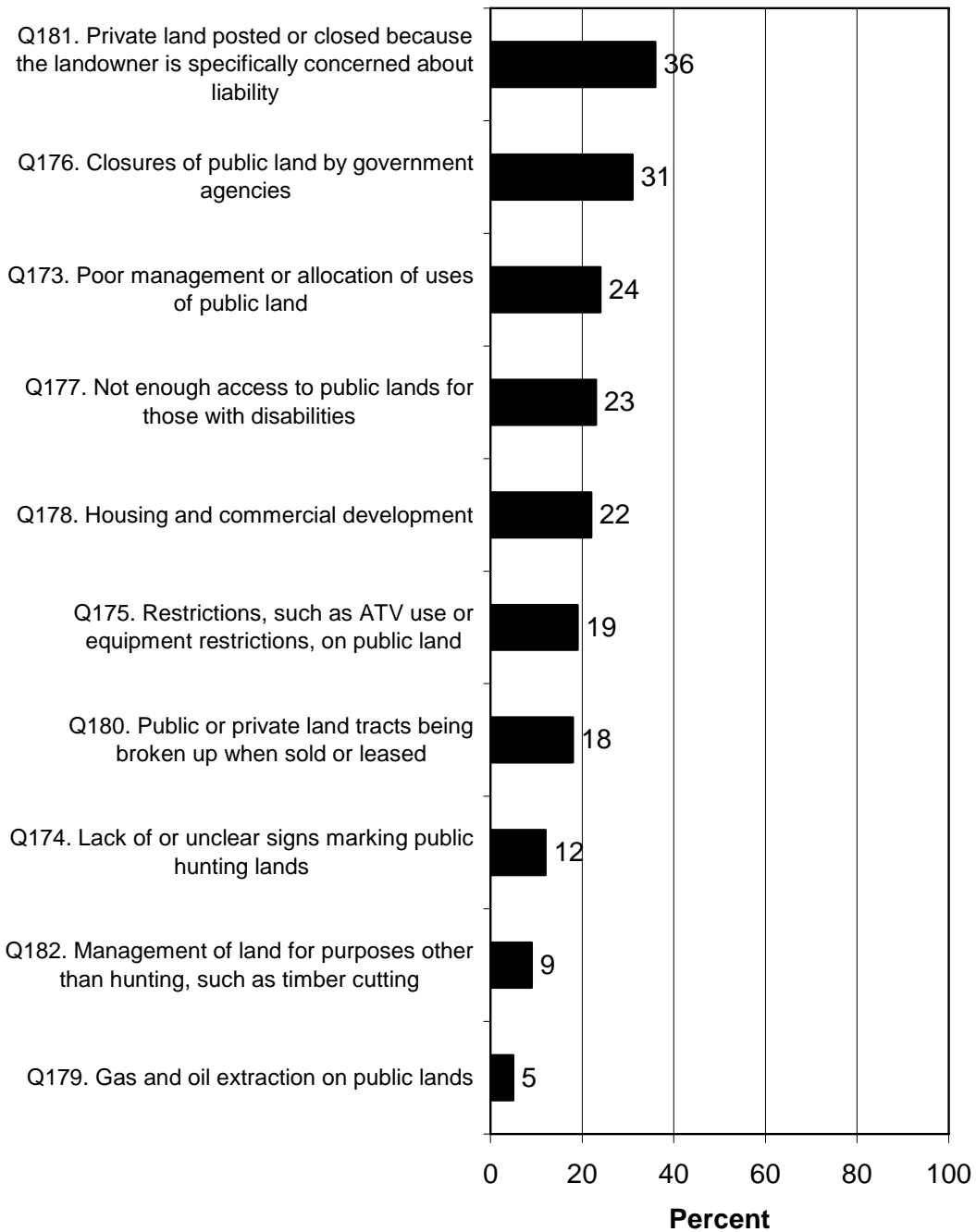
Percent who indicated that the following have been a major, moderate, or minor problem in the past 5 years when hunting (species).



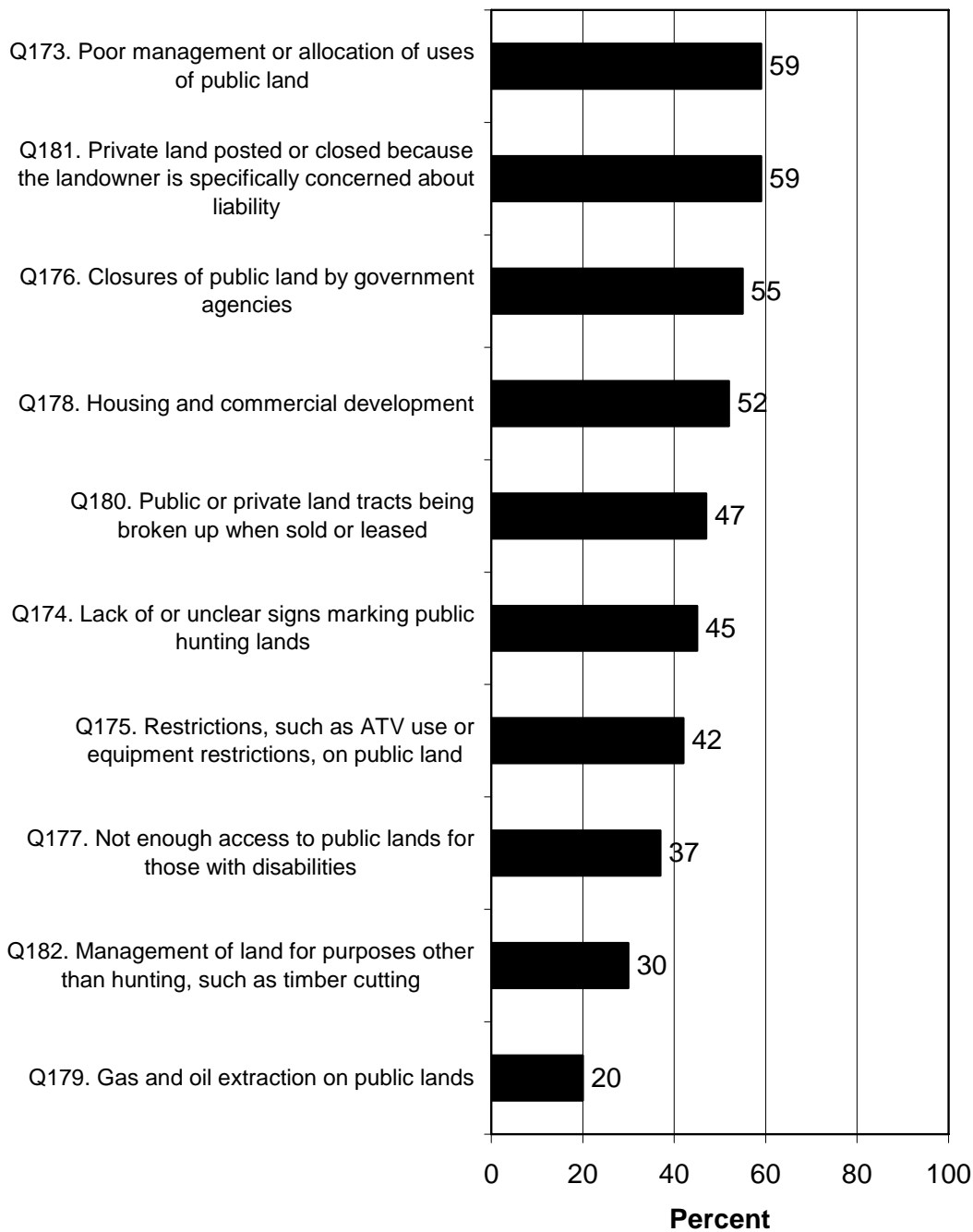
Percent who indicated that the following have not been a problem at all in the past 5 years when hunting (species).



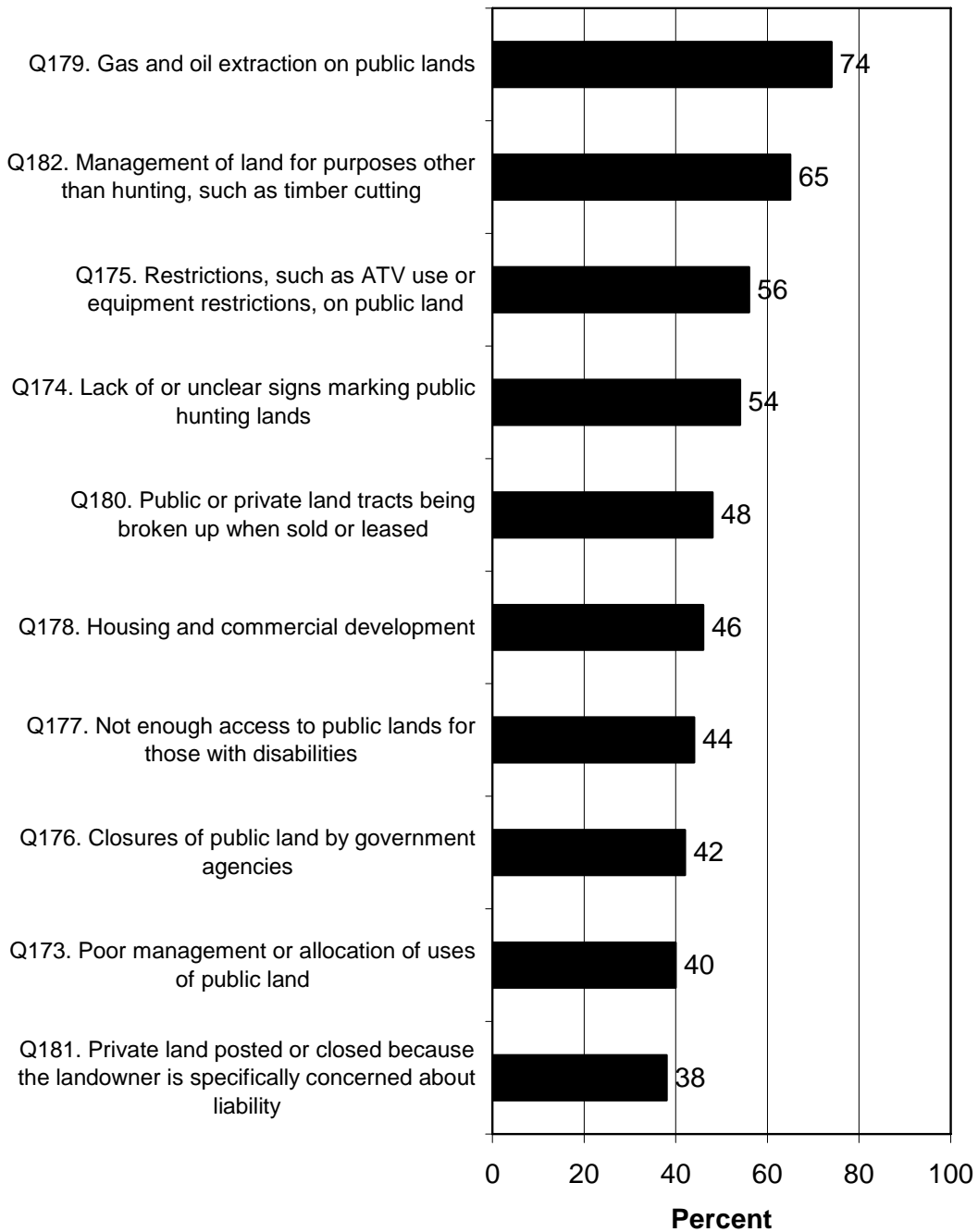
Percent who indicated that the following factors have been a major problem in accessing hunting land in Hawaii in general.



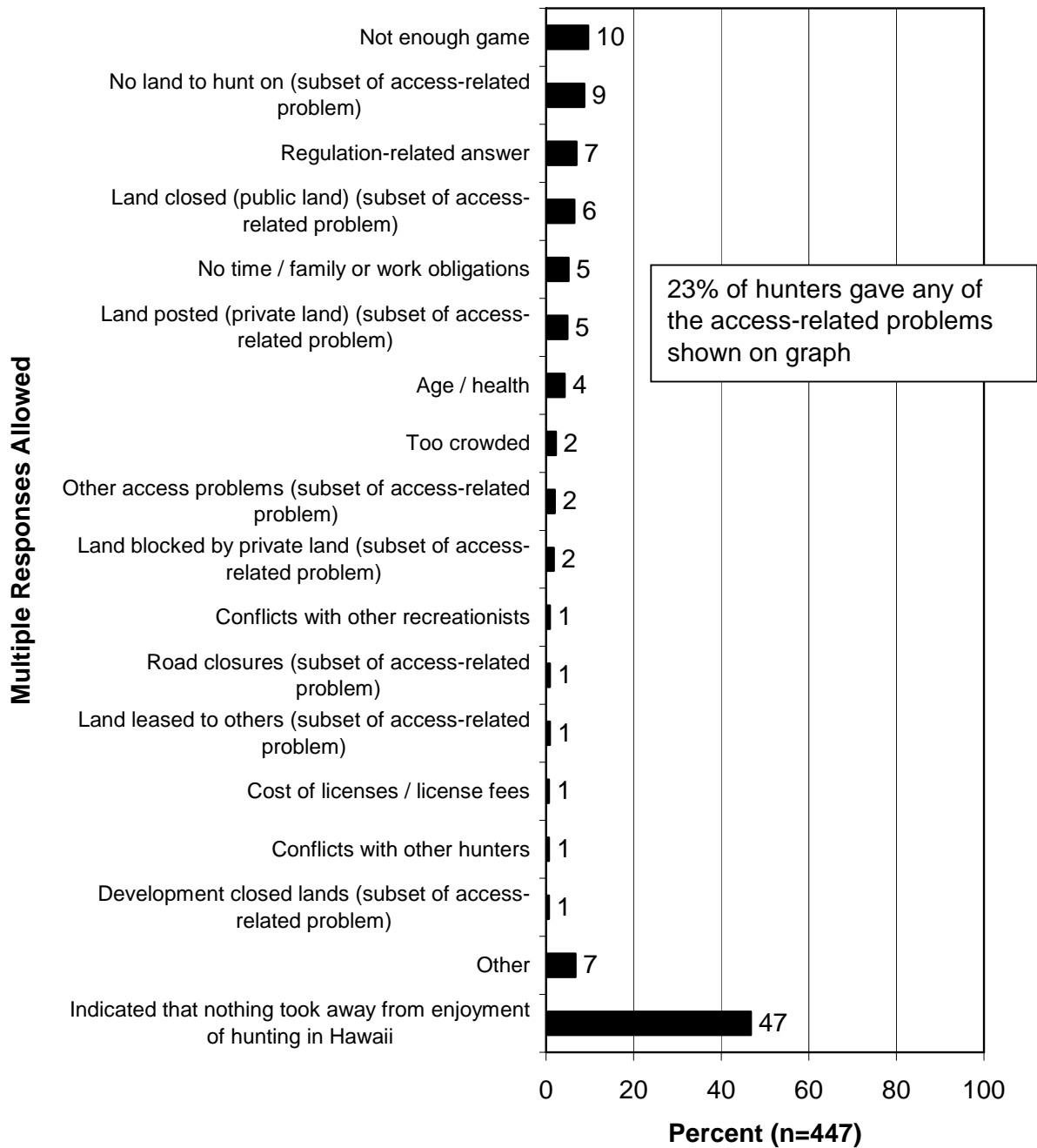
Percent who indicated that the following have been a major, moderate, or minor problem in accessing hunting land in Hawaii in general.



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



Q31/Q34/Q38. What takes away from your enjoyment of hunting in Hawaii?



RATINGS OF ACCESS TO HUNTING LANDS IN HAWAII

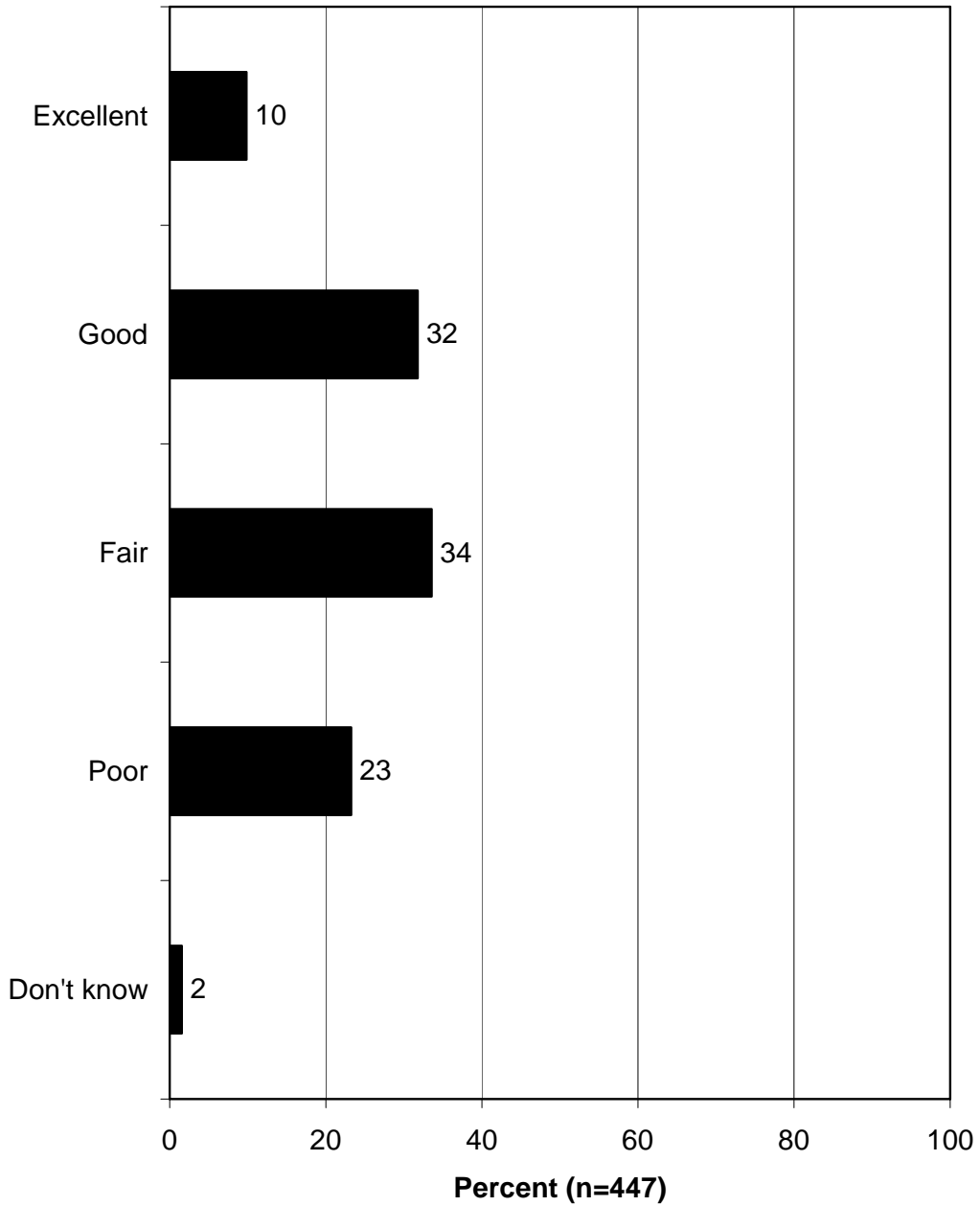
- A basic question asked hunters to rate access to hunting land in Hawaii overall for their primary species. They are split: 42% give a rating of excellent or good, but 57% give a rating of fair or poor. Note that the moderate answers (good and fair) exceed the extreme answers (excellent and poor).
 - In a related question, ratings of the HDLNR's *management* of access to hunting lands are also split: 43% give an excellent or good rating, and 54% give a fair or poor rating.

- 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 by number of years of hunting experience, ratings are about the same, and the slight differences are *not* statistically significant.
 - Access ratings are markedly more positive among upland game bird hunters (48% give a rating of excellent or good) and wild sheep hunters (47%). They are markedly more negative among hunters of black-tailed deer (only 30% give an excellent or good rating) wild pig (33%), and wild goat (33%). Overall, these differences on this question are statistically significant.
 - The question about ratings of the HDLNR's *management* of access to hunting lands was also crosstabulated by primary species hunted; however, these differences on this question are *not* statistically significant.
 - The crosstabulation of rating of access by hunting on different or the same lands each year found little marked difference, despite the fact that the slight differences that appear are statistically significant.
 - Access ratings are not greatly different when crosstabulated by hunting mostly on public or private land. The slight differences that exist, however, are statistically significant.
 - There was no statistically significant correlation to usually driving a certain distance to hunt and giving positive or negative ratings of access.

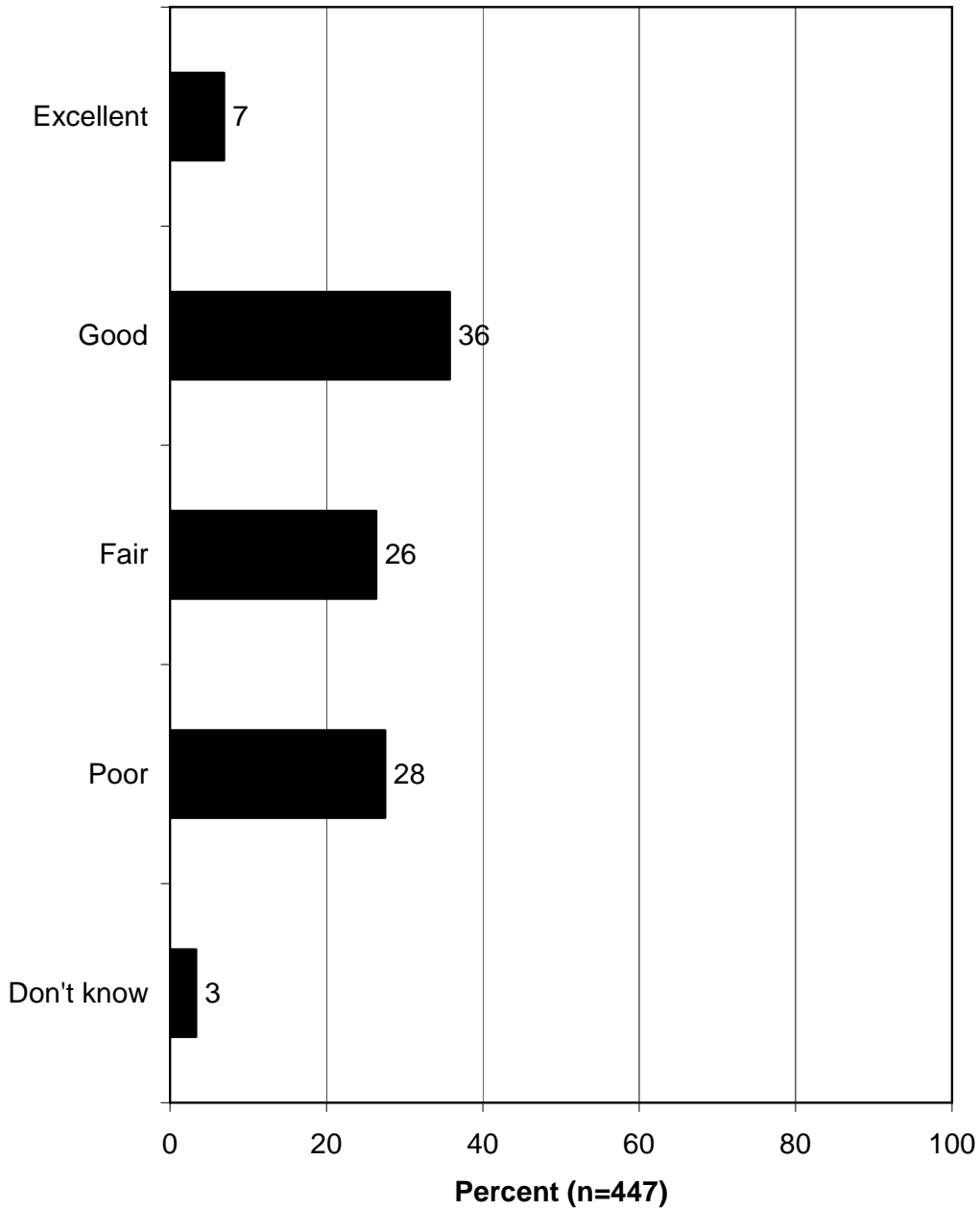
- Those who hunted their primary species on public land at least half the time were asked to rate access to public lands in Hawaii. Excellent and good ratings (51% give one of the two responses) slightly exceed fair and poor ratings (48%).
 - Top reasons for rating public land access as fair or poor are no land on which to hunt, land closed, road closures, and public land being blocked by private land.

- Those who hunted their primary species on private land at least half the time were asked to rate access to private lands in Hawaii. Again, they are split: excellent and good ratings (48% give one of the two responses) exceed fair and poor ratings (42%).
 - Top reasons for rating private land access as fair or poor are land being posted, a lack of land on which to hunt, cost of access, and lack of permission from landowners.

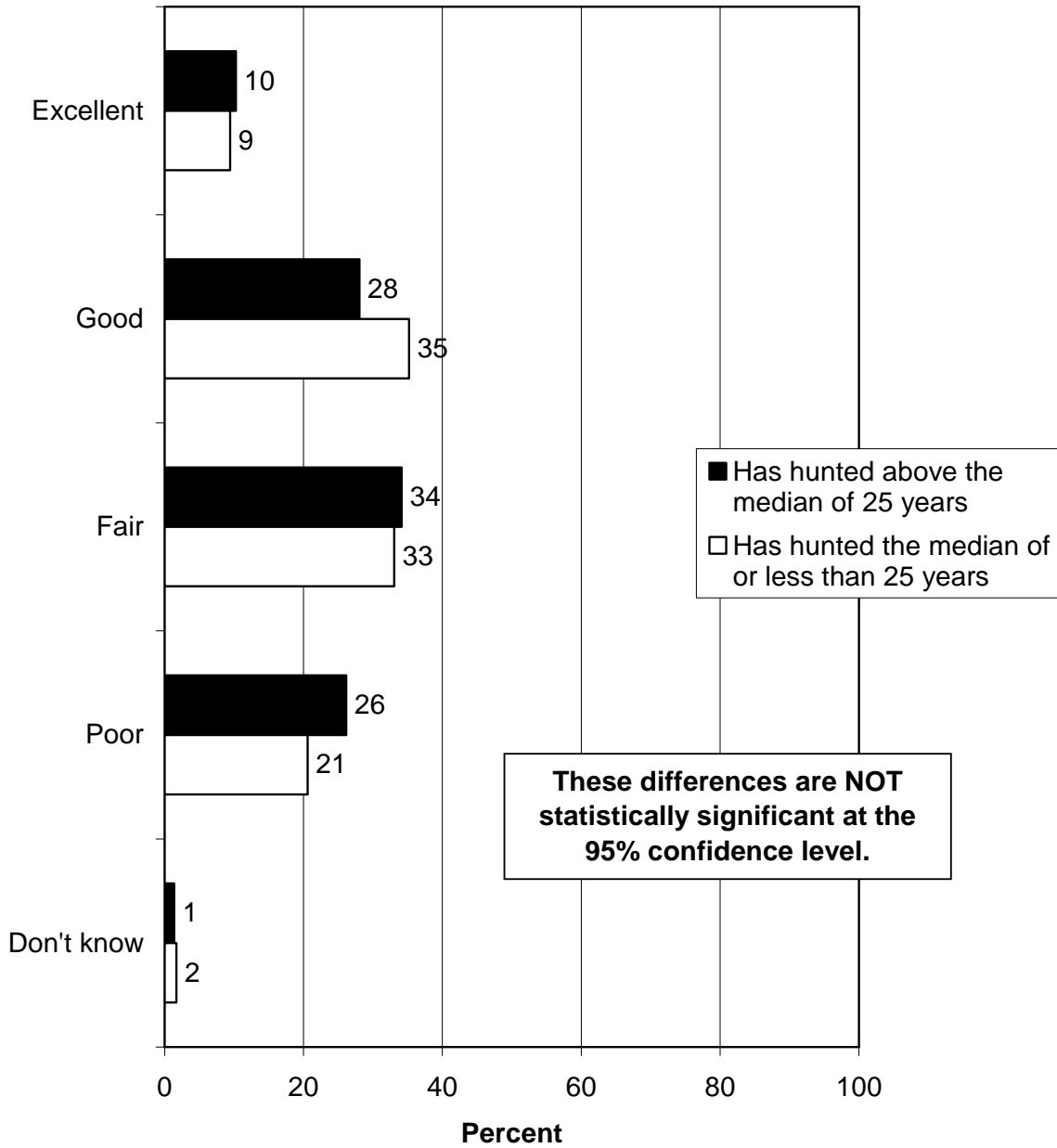
Q55. Overall, how would you rate access to hunting lands in Hawaii for hunting (species)?



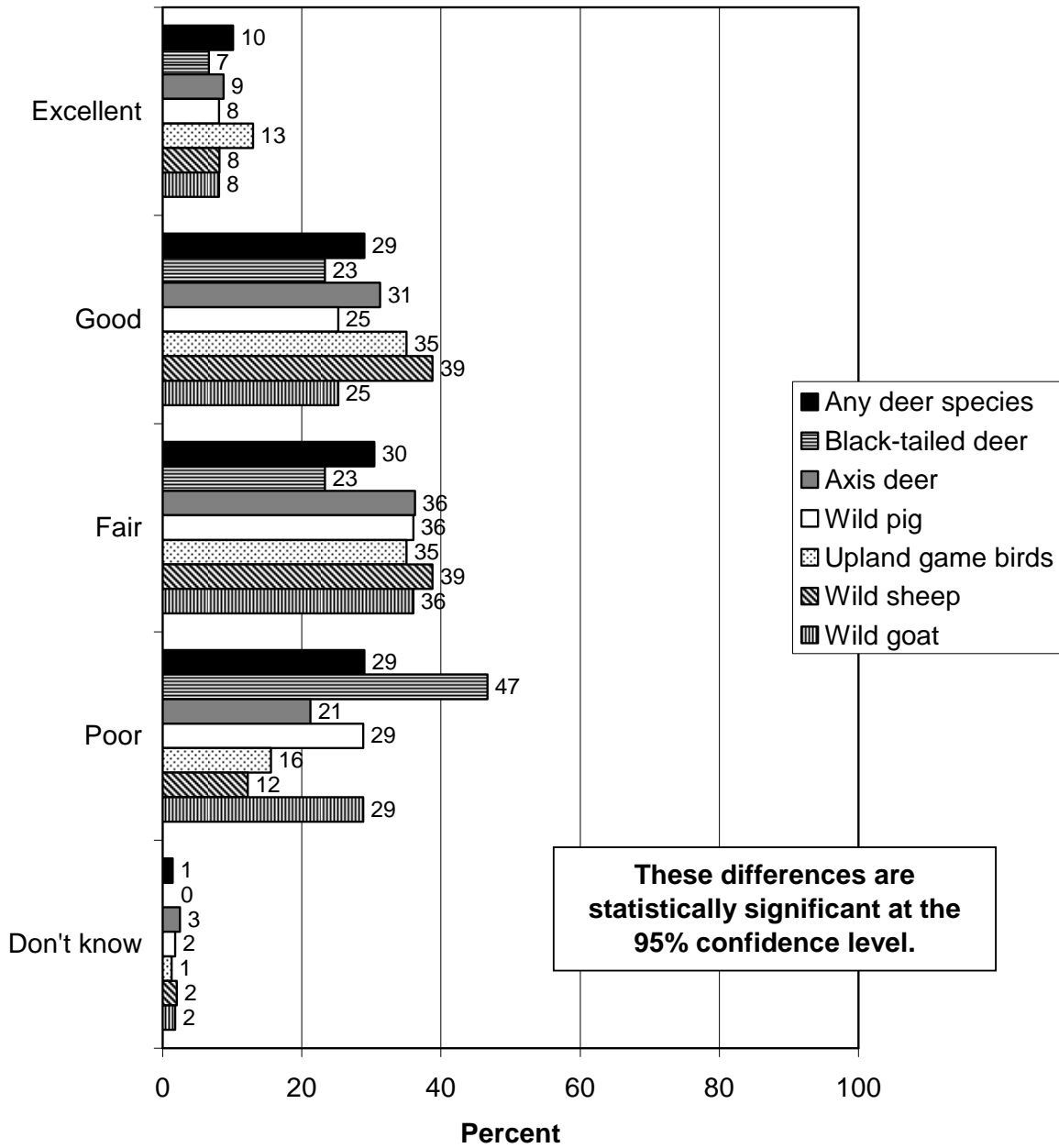
Q56. How would you rate the Hawaii Department of Land and Natural Resources' management of access to hunting lands in Hawaii for hunting (species)?



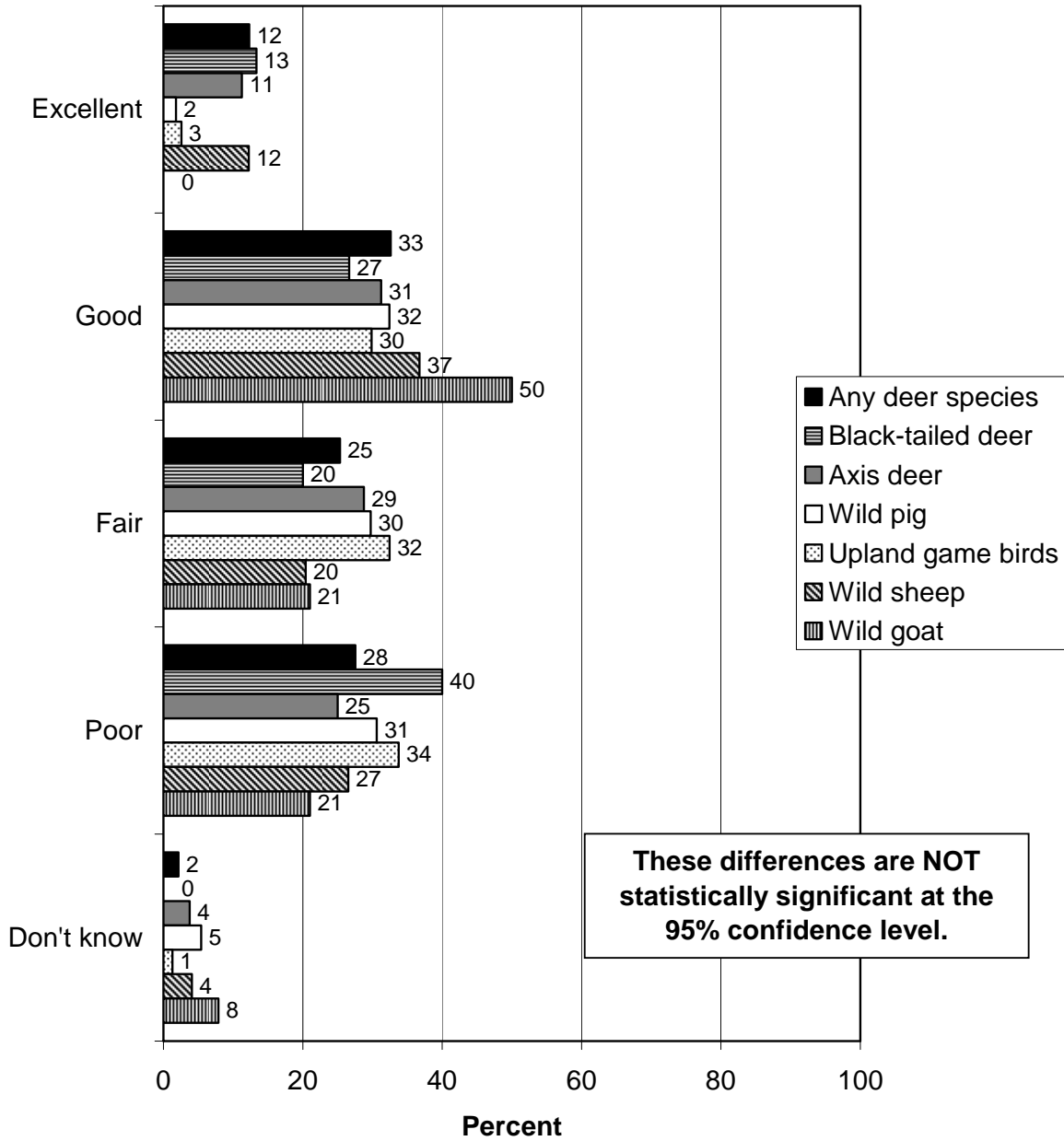
Q55. Overall, how would you rate access to hunting lands in Hawaii for hunting (species)?



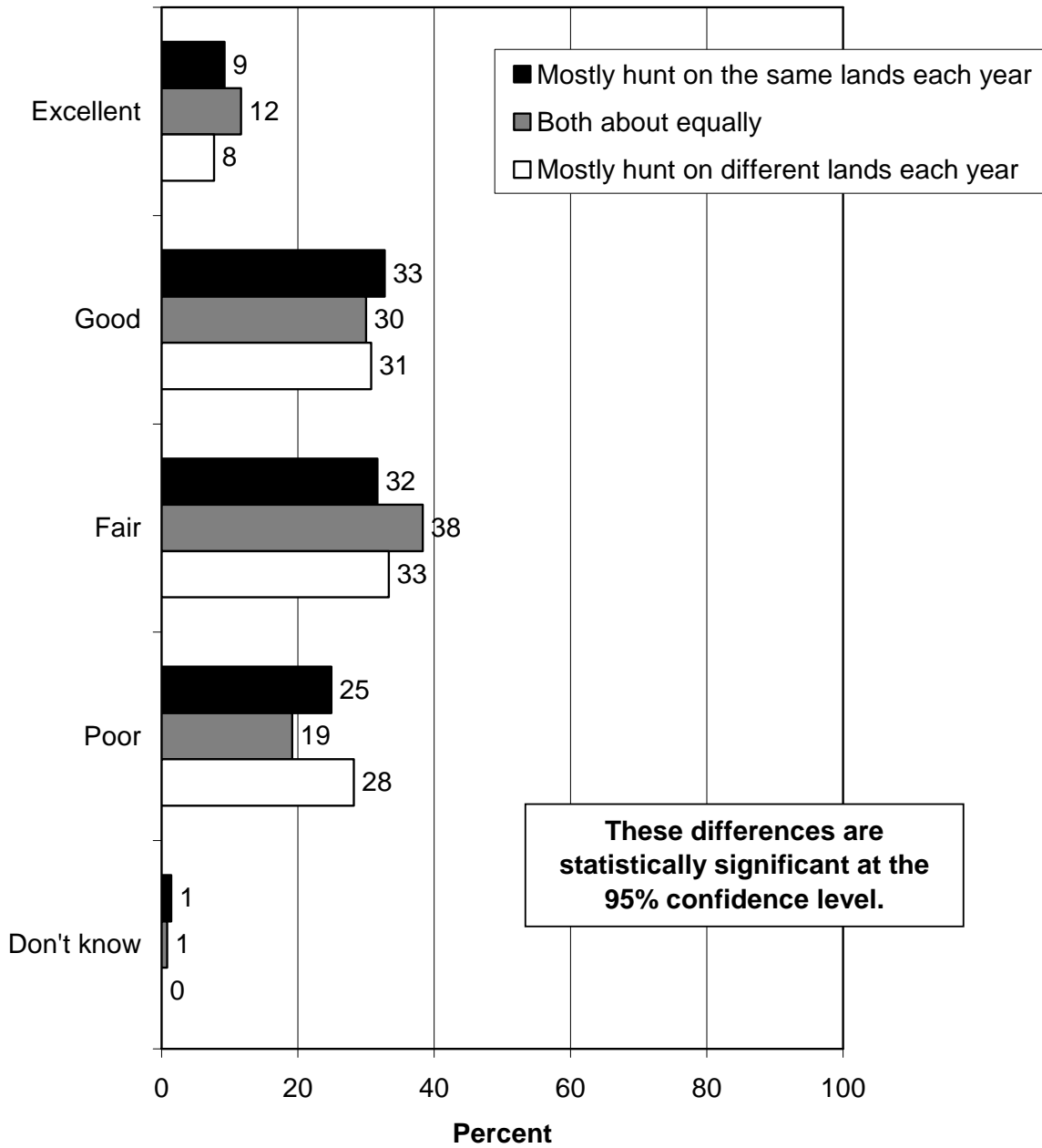
Q55. Overall, how would you rate access to hunting lands in Hawaii for hunting (species)?



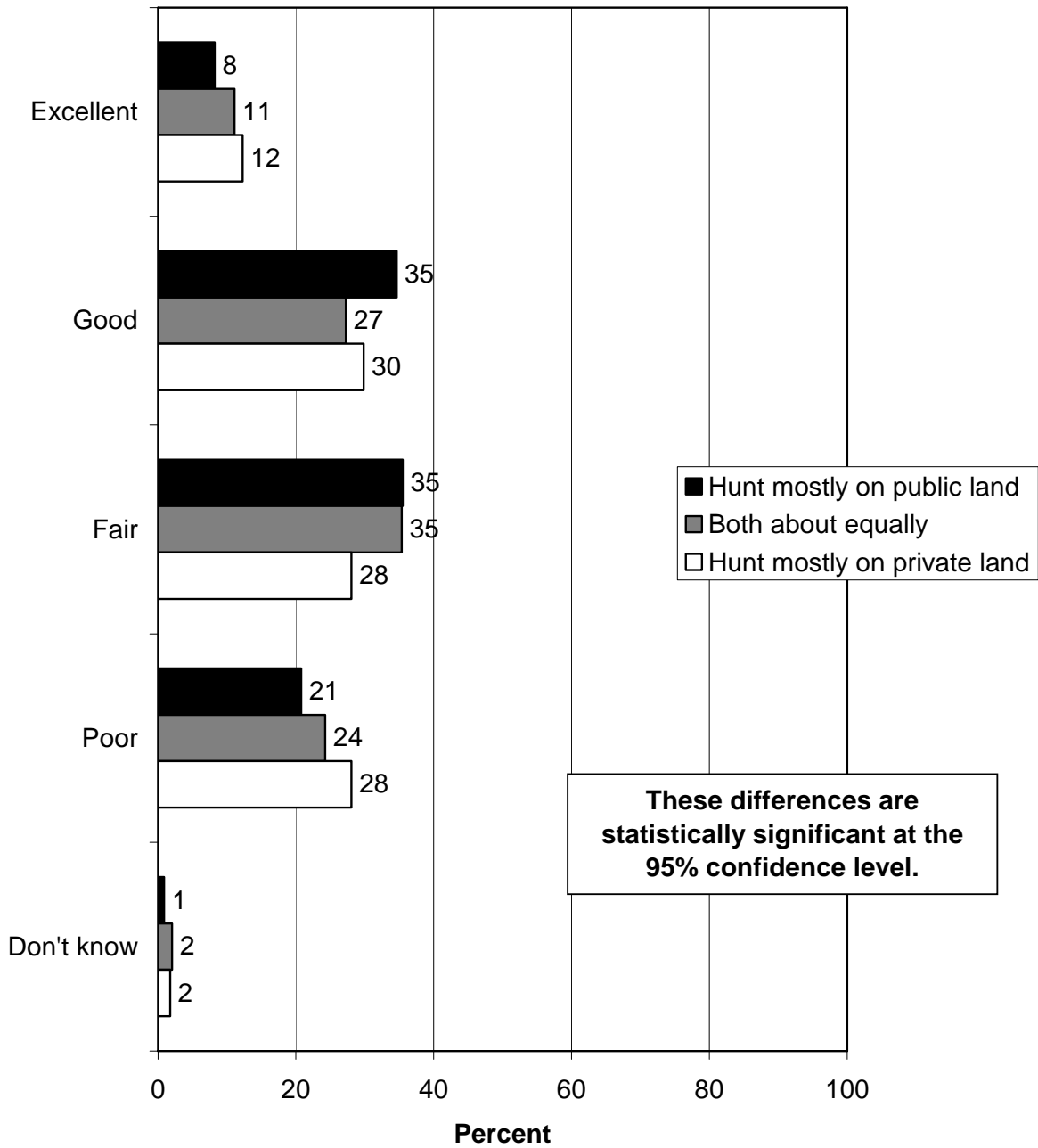
Q56. How would you rate the Hawaii Department of Land and Natural Resources' management of access to hunting lands in Hawaii for hunting (species)?



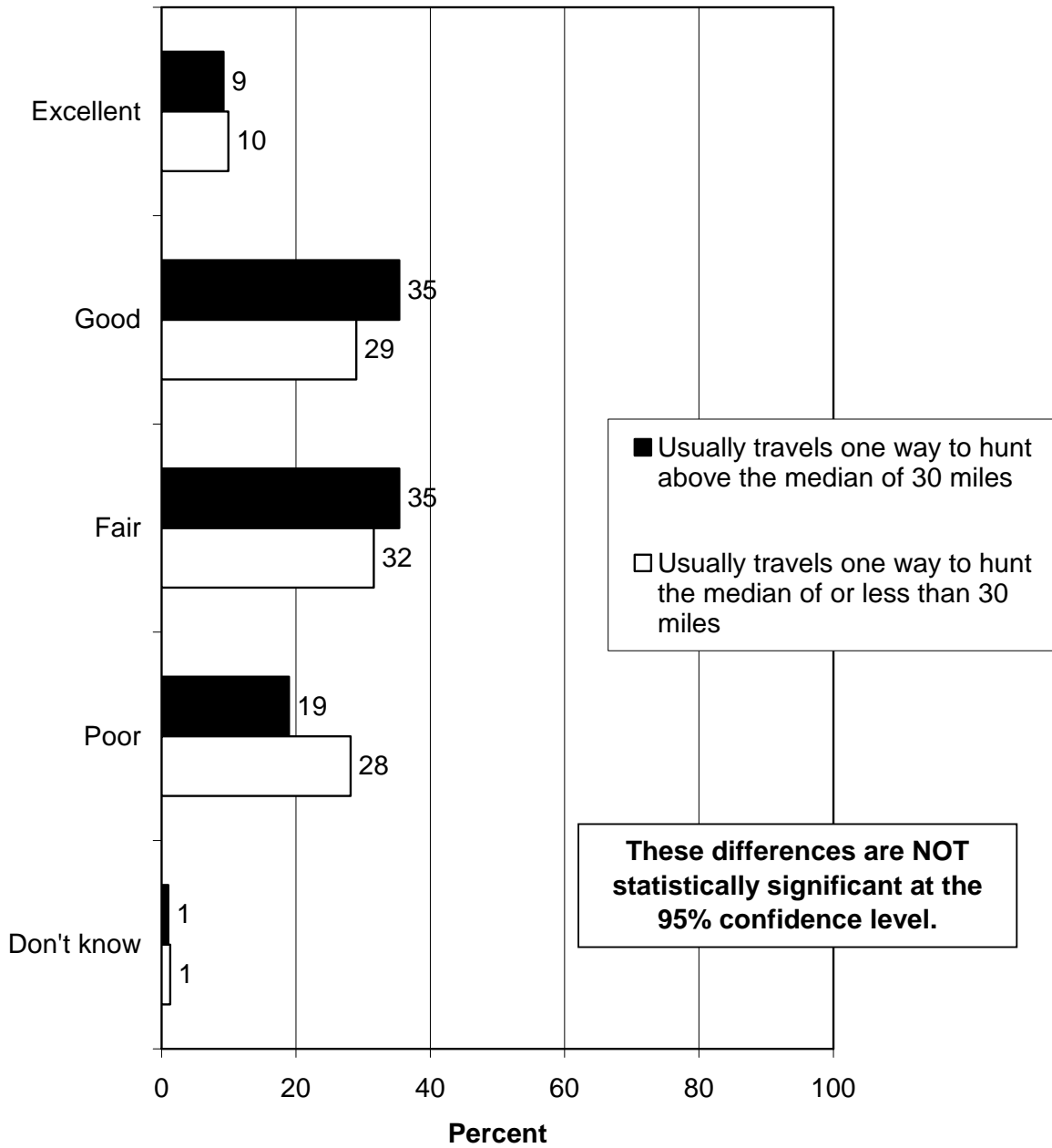
Q55. Overall, how would you rate access to hunting lands in Hawaii for hunting (species)?



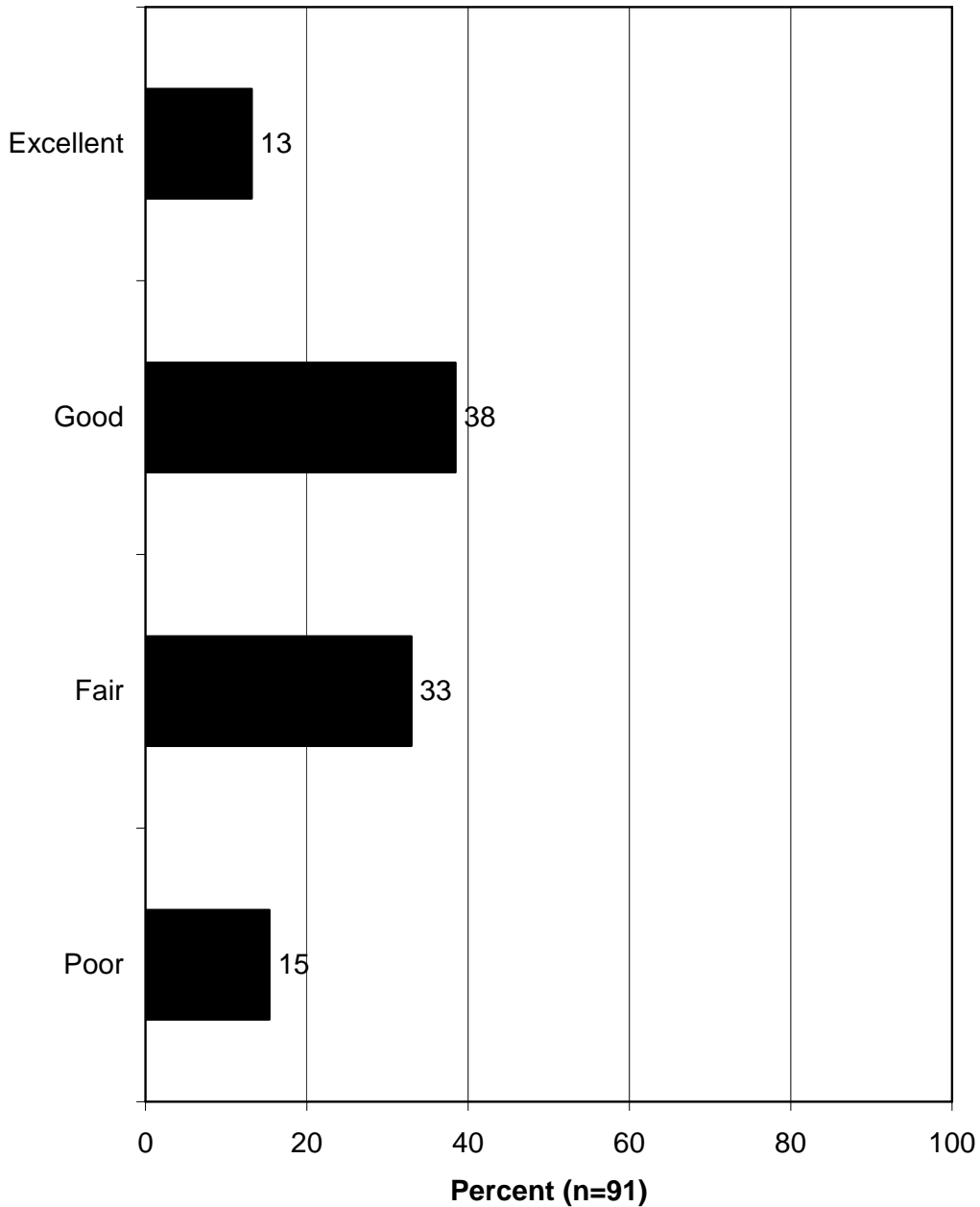
Q55. Overall, how would you rate access to hunting lands in Hawaii for hunting (species)?



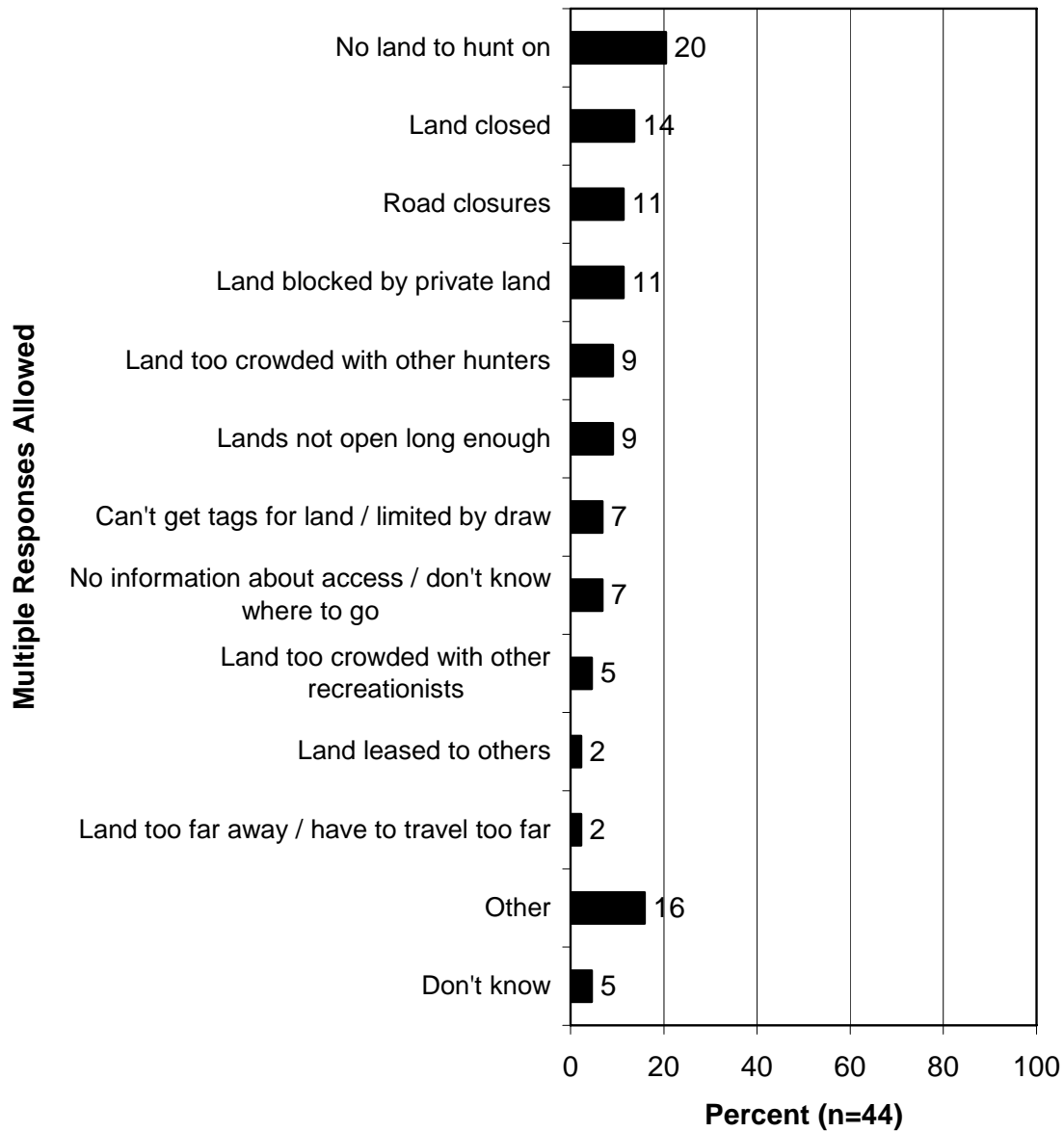
Q55. Overall, how would you rate access to hunting lands in Hawaii for hunting (species)?



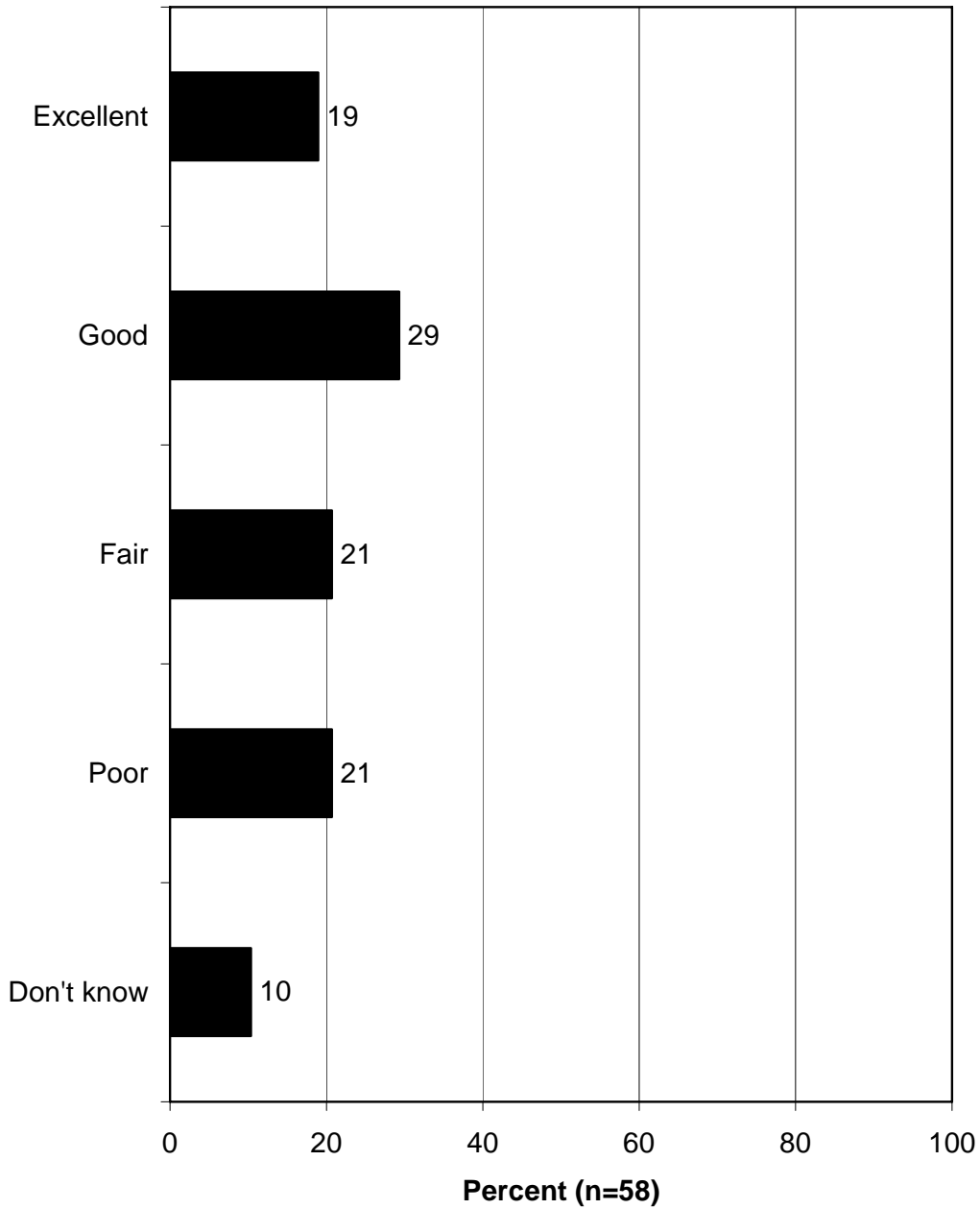
Q63. How would you rate access to public lands for hunting (species) in Hawaii? (Asked of those who hunted their primary species on public lands at least half the time.)



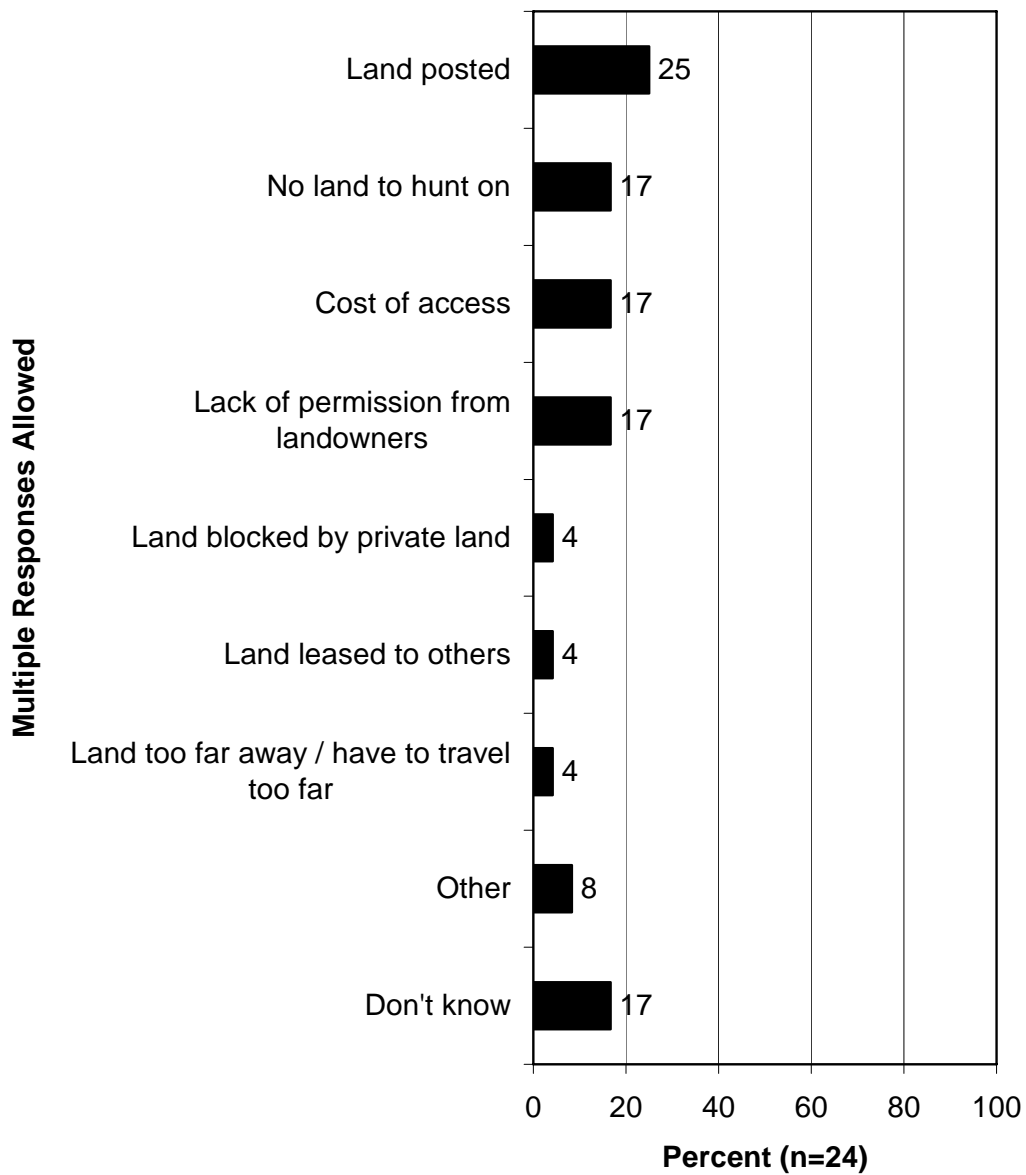
Q66. What are the specific reasons you rate access to public land to hunt on in Hawaii as (fair/poor)? (Asked of those who hunted their primary species on public lands at least half the time and rated the access to public land as fair or poor.)



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



Q72. What are the specific reasons you rate access to private land to hunt on in Hawaii as (fair/poor)? (Asked of those who hunted their primary species on private lands at least half the time and rated the access to private land as fair or poor.)



FACTORS THAT MAY POSITIVELY AFFECT ACCESS

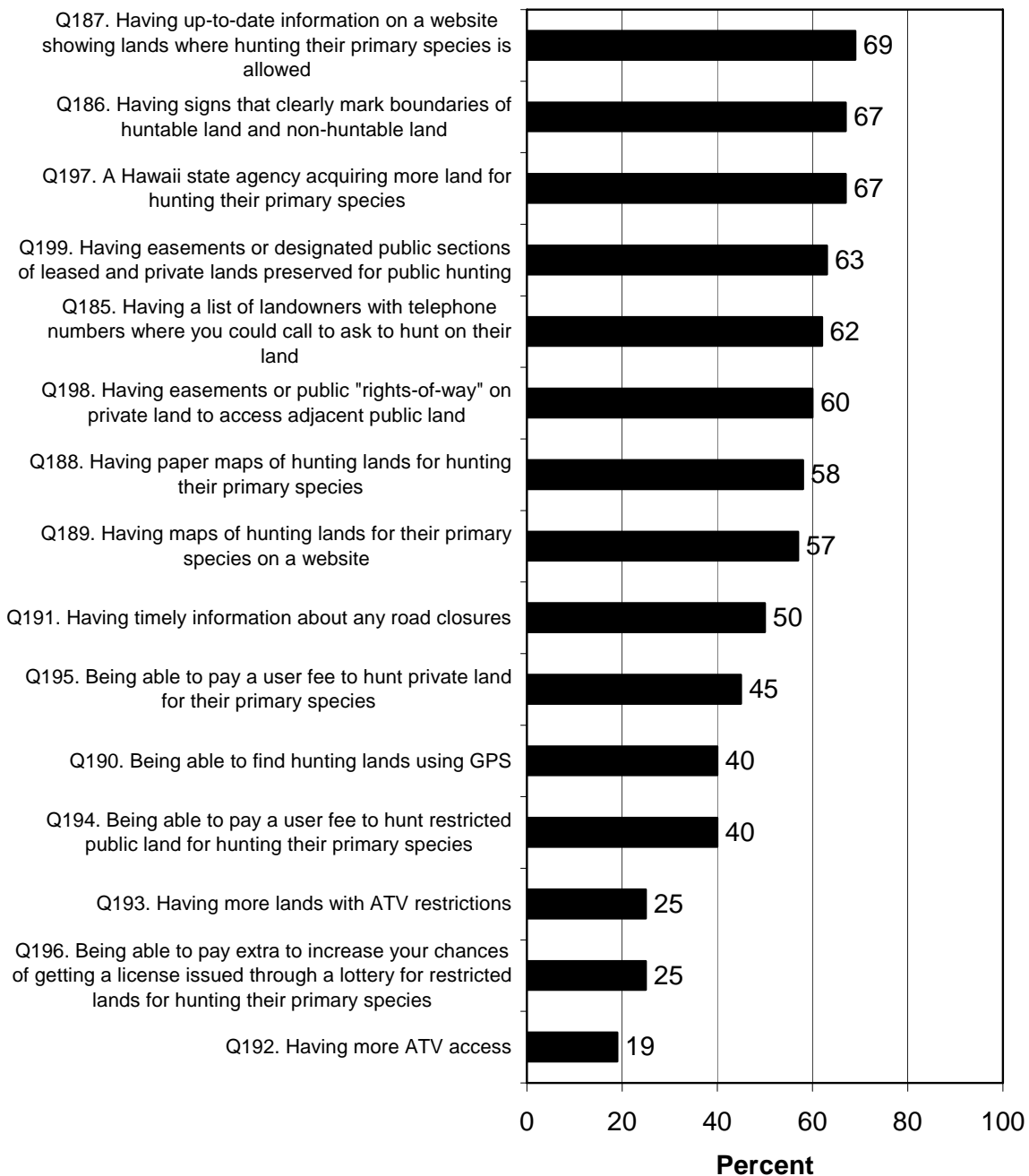
- The survey asked 15 questions about things that would make hunting access easier (shown in Text Box 5 below). For each item, the survey asked hunters if it would be *very* effective, *somewhat* effective, or *not at all* effective at making it easier to access land on which to hunt. The starting point 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* effective at making access easier, 8 of the 15 items stand out—each with a majority saying it would be *very* effective: having up-to-date information on a website showing lands where hunting their primary species is allowed (69%), having signs that clearly mark the boundaries of huntable land (67%), having a state agency acquire more land for hunting (67%), having easements or designated public sections of leased/private lands preserved for public hunting (63%), having a list of landowners with telephone numbers to call for asking permission (62%), having easements or public rights-of-way on private land to access adjacent public land (60%), having paper maps of hunting lands for hunting their primary species (58%), and having maps of hunting lands for their primary species on a website (57%).
 - Other graphs in this series are shown consisting of the ranking by the percentage saying the item would be *very* or *somewhat* effective and then the ranking by *not at all* effective at making access easier.

TEXT BOX 5

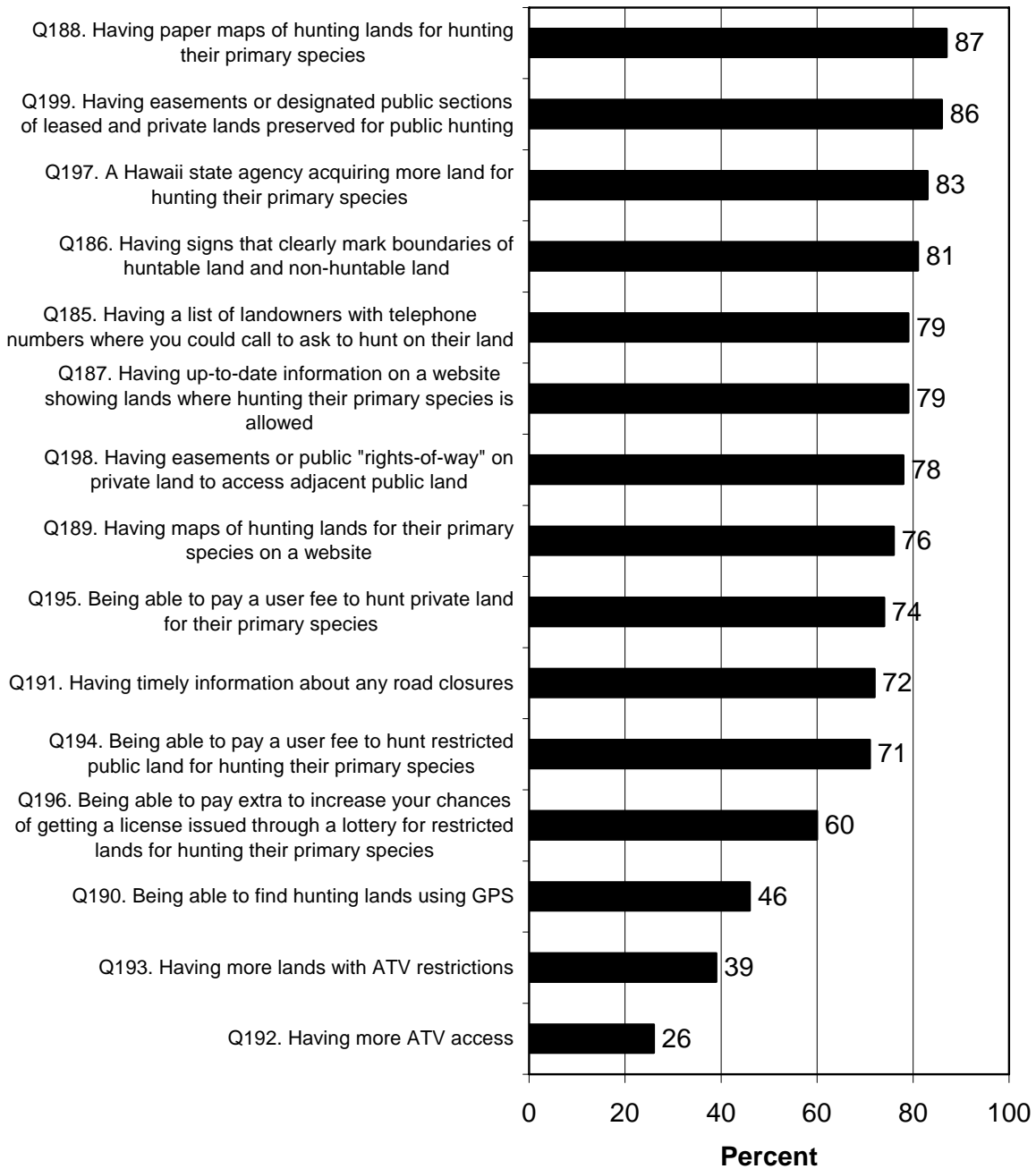
Things that might make hunting access easier that were asked about in the survey:

- 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
- A Hawaii 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

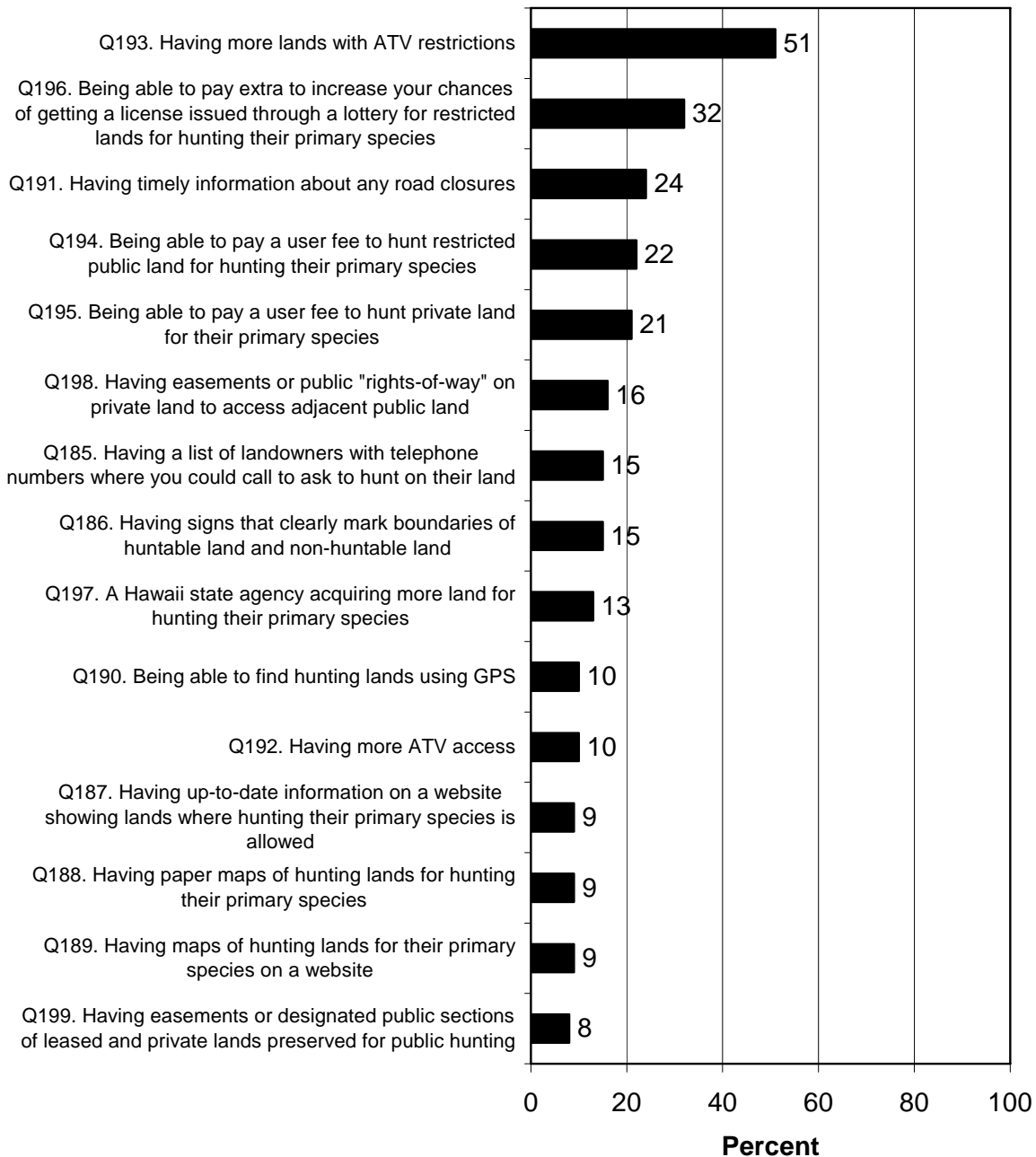
Percent who indicated that the following would be very effective at making it easier for them to access land to hunt (species), including lands they don't currently hunt.



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*, two of which relate to misuse of the land: irresponsible behavior by hunters (69% say this is a *very important* reason that landowners close their land), liability concerns (68%), and property damage (64%).
 - Other graphs in this series are shown consisting of the ranking by the percentage saying the reason is *very* or *somewhat* important and the ranking by 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

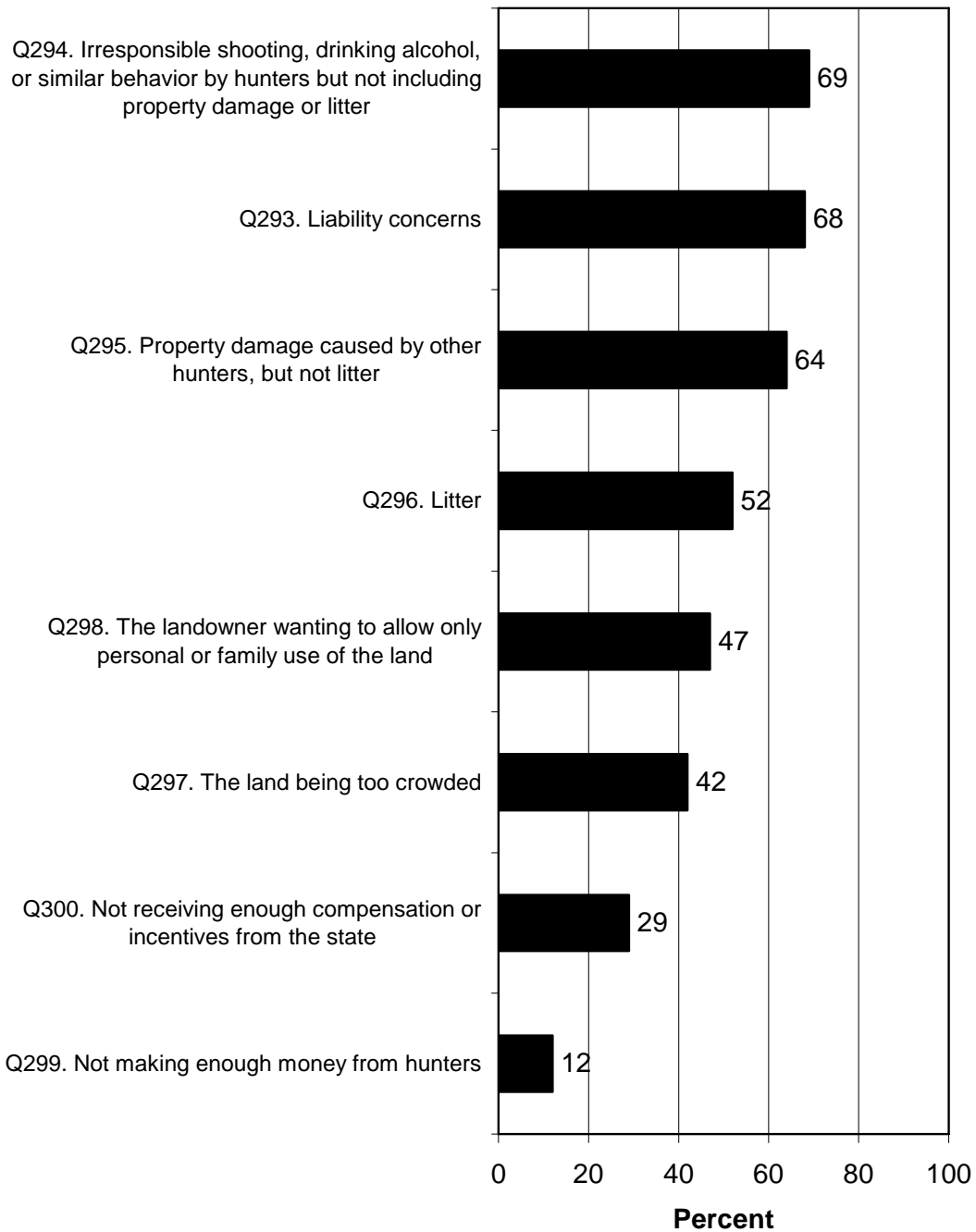
The landowner not making enough money from hunters

The landowner not receiving enough compensation or incentives from the state

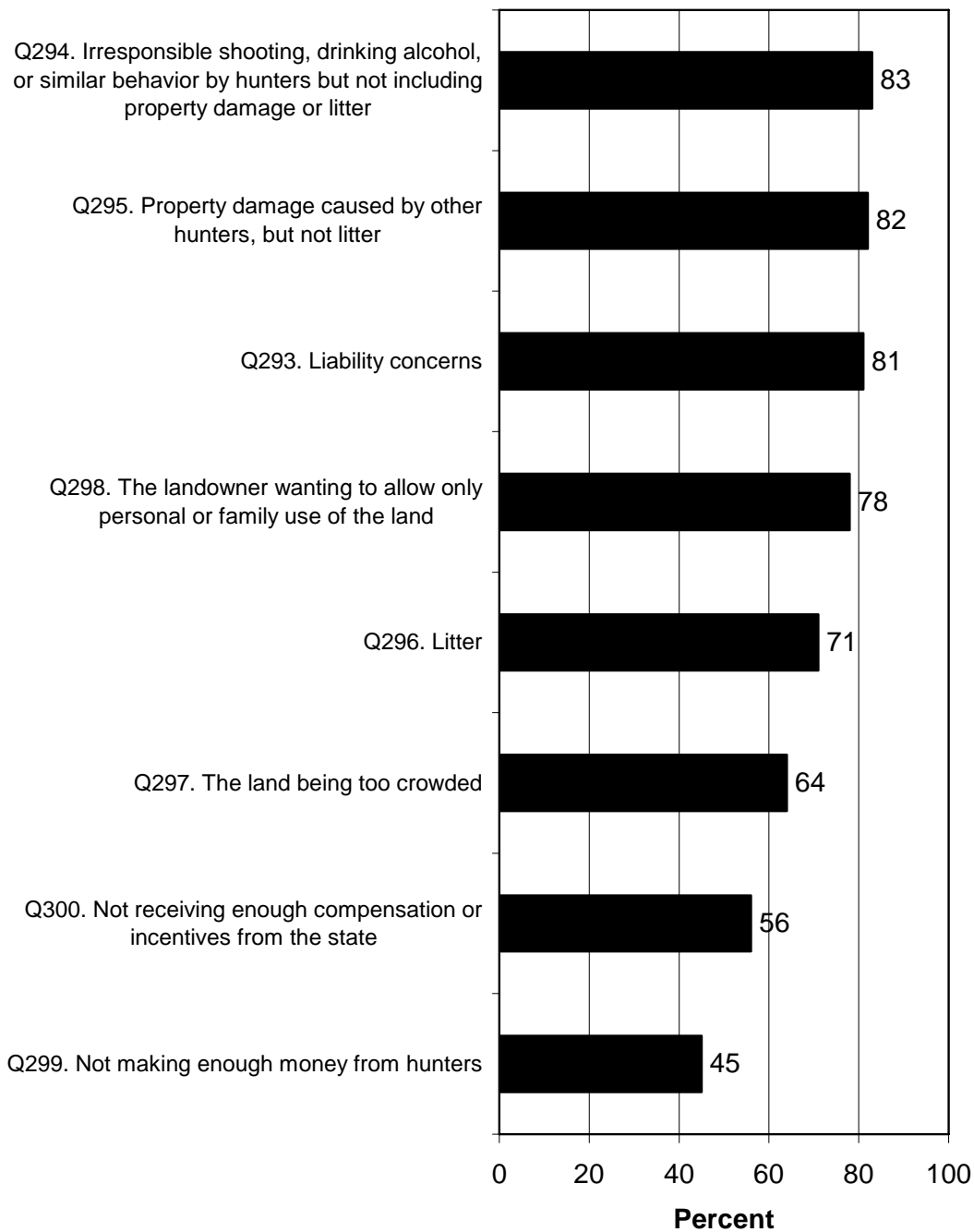
- The large majority of hunters (81%) think that a program that provides landowners with compensation or incentives for opening their lands to the public for hunting would be *very* or *somewhat* effective at improving hunting access in Hawaii.

-
- The overwhelming majority of hunters (92%) are *not* aware of any laws in Hawaii that reduce the liability of landowners who open their lands to the public for hunting; meanwhile, 3% are aware of such laws (the remainder do not know).
 - In a related question, the large majority of Hawaii hunters (80%) support laws to reduce landowner liability for landowners who open their lands to the public for hunting; only 6% oppose (the remainder give neutral answers).
 - Another related question found that a large majority of hunters (75%) think that legislation reducing landowner liability would be *very* or *somewhat* effective at improving hunter access to private lands in Hawaii; only xx% think it would *not* be at all effective.
 - Finally, the large majority of hunters (75%) agree that legislation reducing landowner liability would significantly increase the number of landowners who would open their lands to the public for hunting.

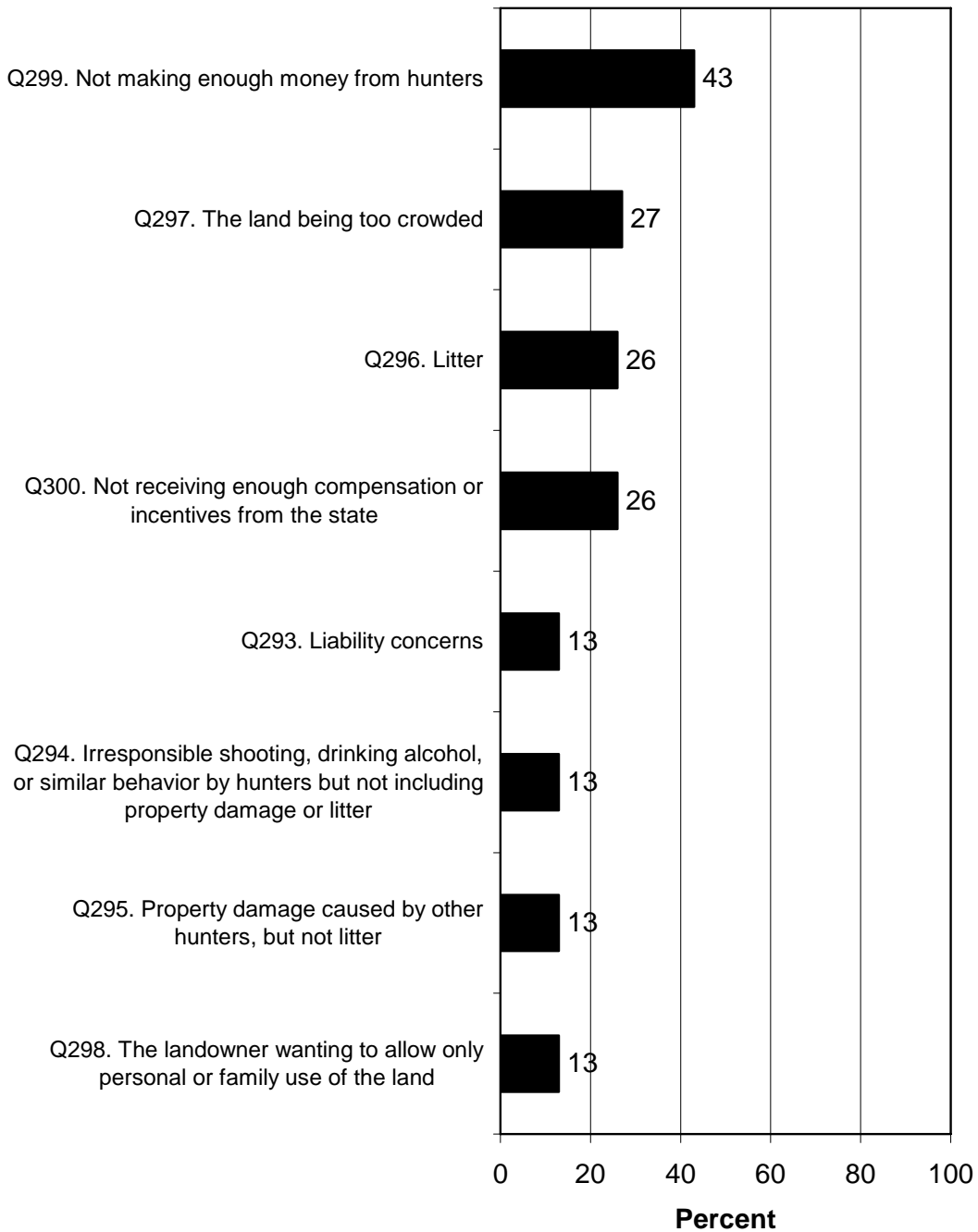
Percent who think the following reasons are very important to landowners in Hawaii who close their lands to the public for hunting.



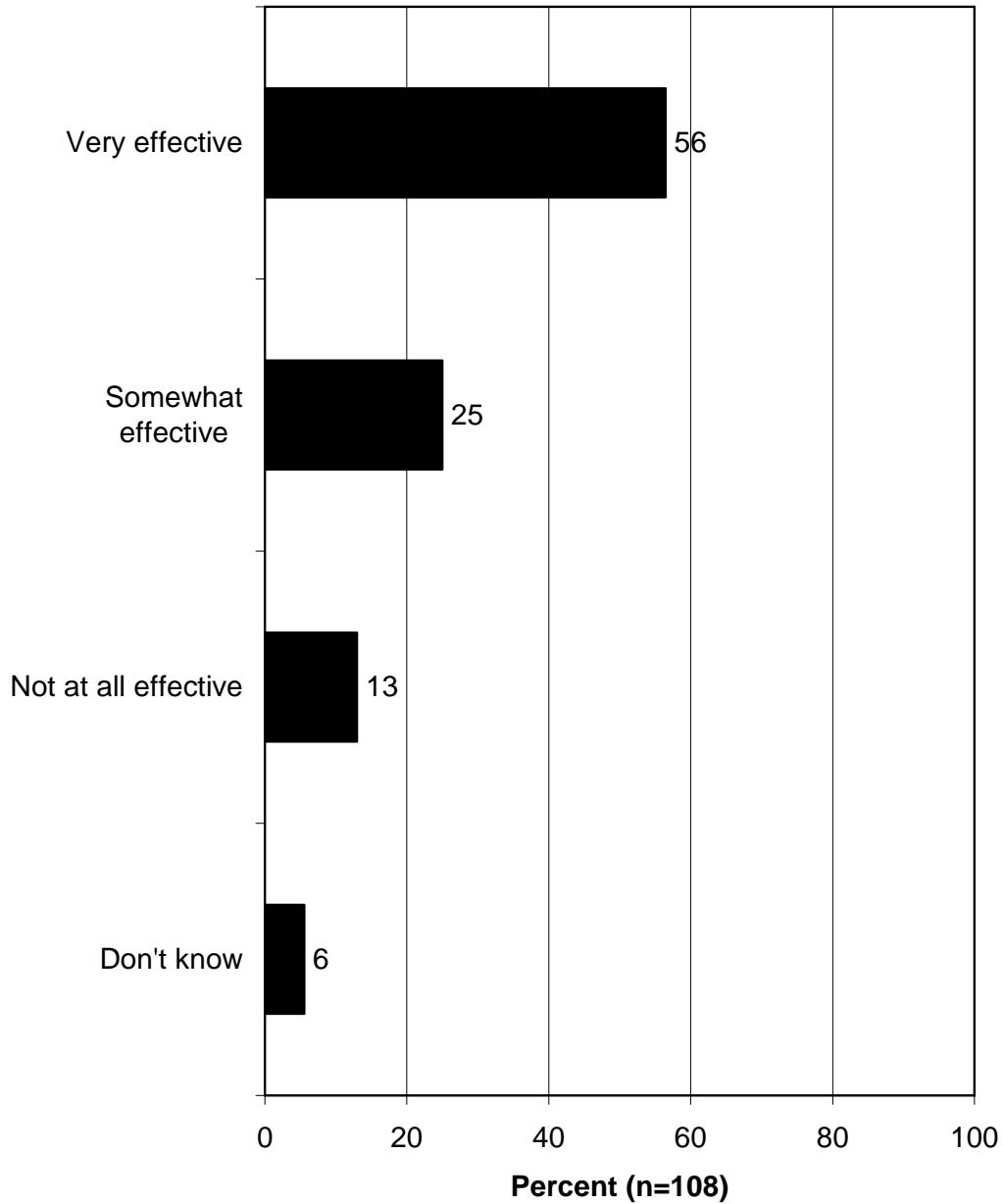
Percent who think the following reasons are very or somewhat important to landowners in Hawaii who close their lands to the public for hunting.



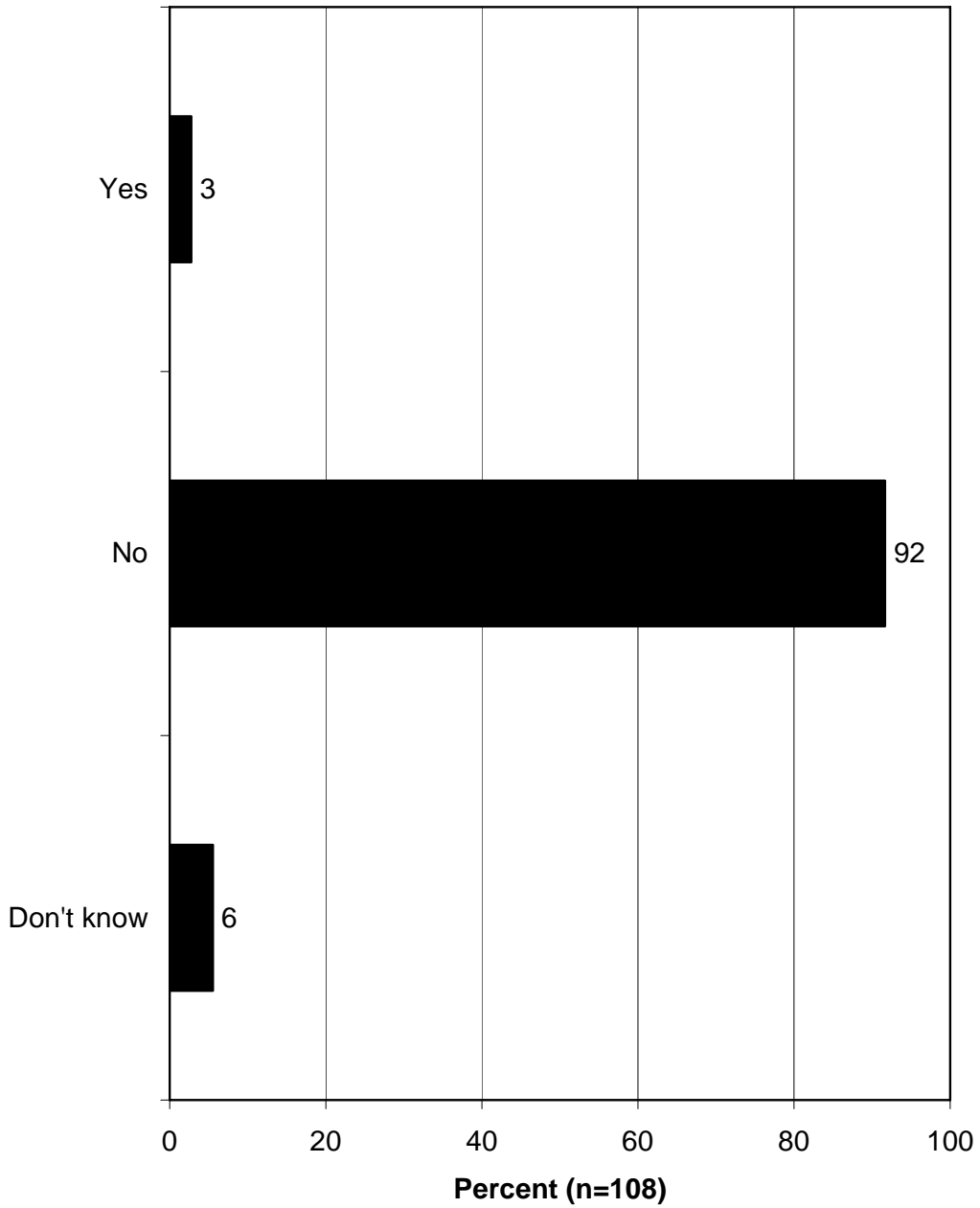
Percent who think the following reasons are not important at all to landowners in Hawaii who close their lands to the public for hunting.



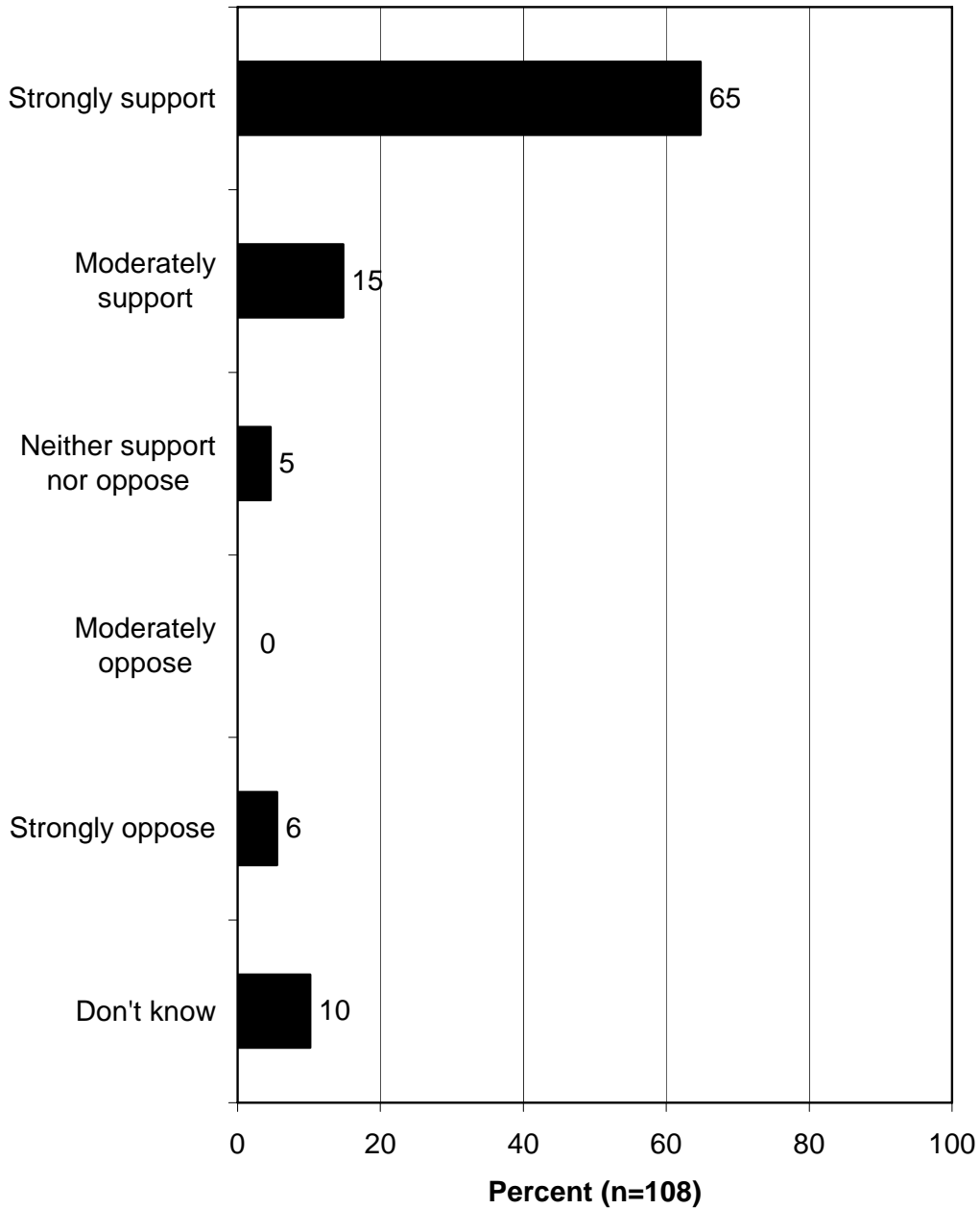
Q217. In your opinion, how effective do you think a program providing landowners compensation or incentives for opening their lands to the public for hunting would be at improving hunting access to private lands in Hawaii?



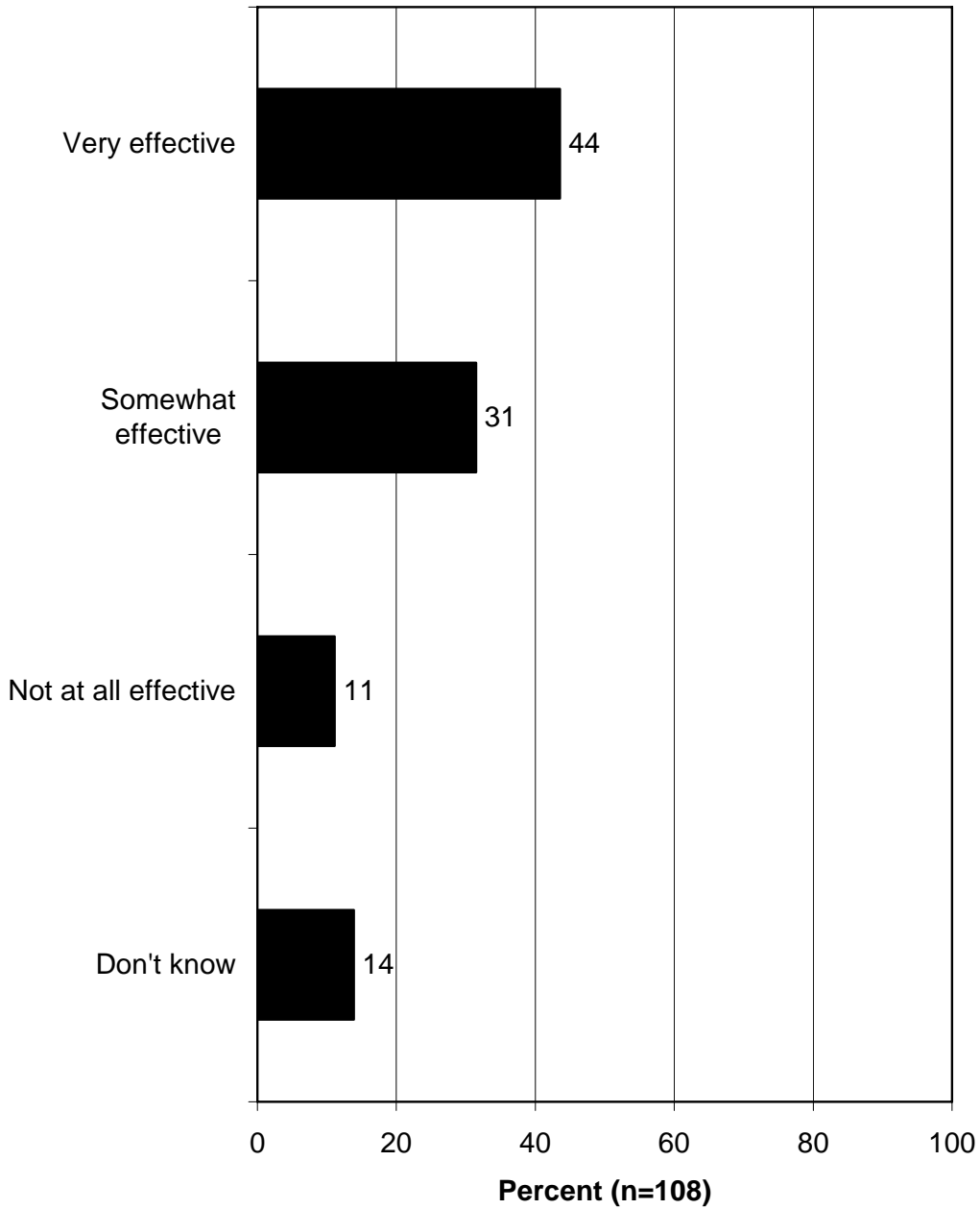
Q218. Are you aware of any laws in Hawaii that reduce landowner liability for landowners who open their lands to the public for hunting?



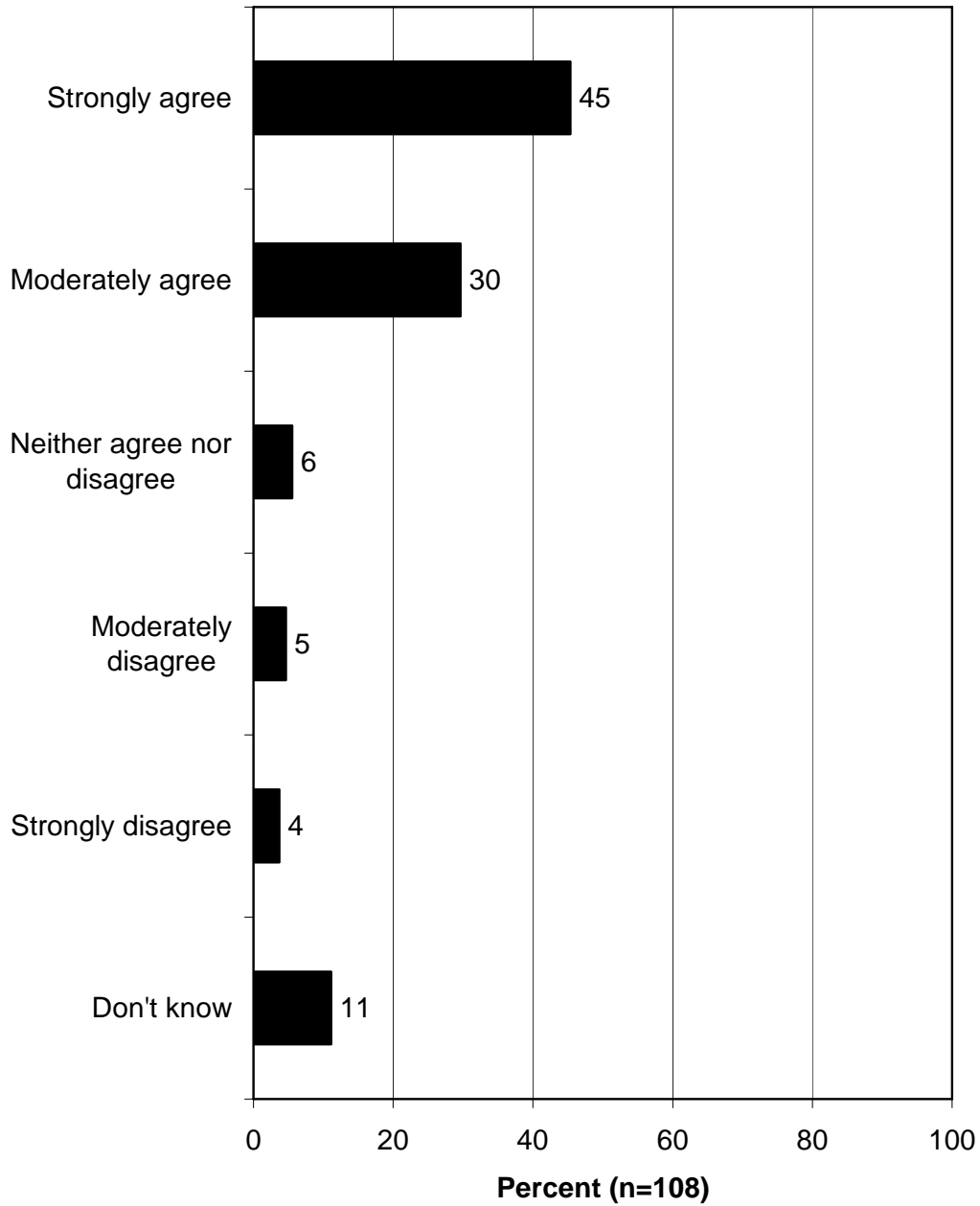
Q219. Do you support or oppose Hawaii laws to reduce landowner liability for landowners who open their lands to the public for hunting?



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 Hawaii?



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 nine programs in Hawaii 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 three of the nine programs had awareness levels of a quarter or higher: Hunting Area maps in the Game Mammal or Game Bird Hunting Guide (57% were *very* or *somewhat* aware of this resource), the Conservation Reserve Program (26%), and the U.S. Fish and Wildlife Service's Waterfowl Production Areas (25%). All other programs have awareness levels of 16% or lower.
 - Another series of questions asked hunters about their use of or participation in the nine access programs. The program with the highest rate of use/participation is the public hunting area maps in the Game Mammal or Game Bird Hunting Guide (38%), distantly followed by Hawaii's lease agreements to use agricultural lands for public hunting areas (7%), Hawaii's Statewide GIS Map Program (6%), the Conservation Reserve Program (5%), and U.S. Fish and Wildlife Service's Waterfowl Production Areas (5%).

TEXT BOX 7

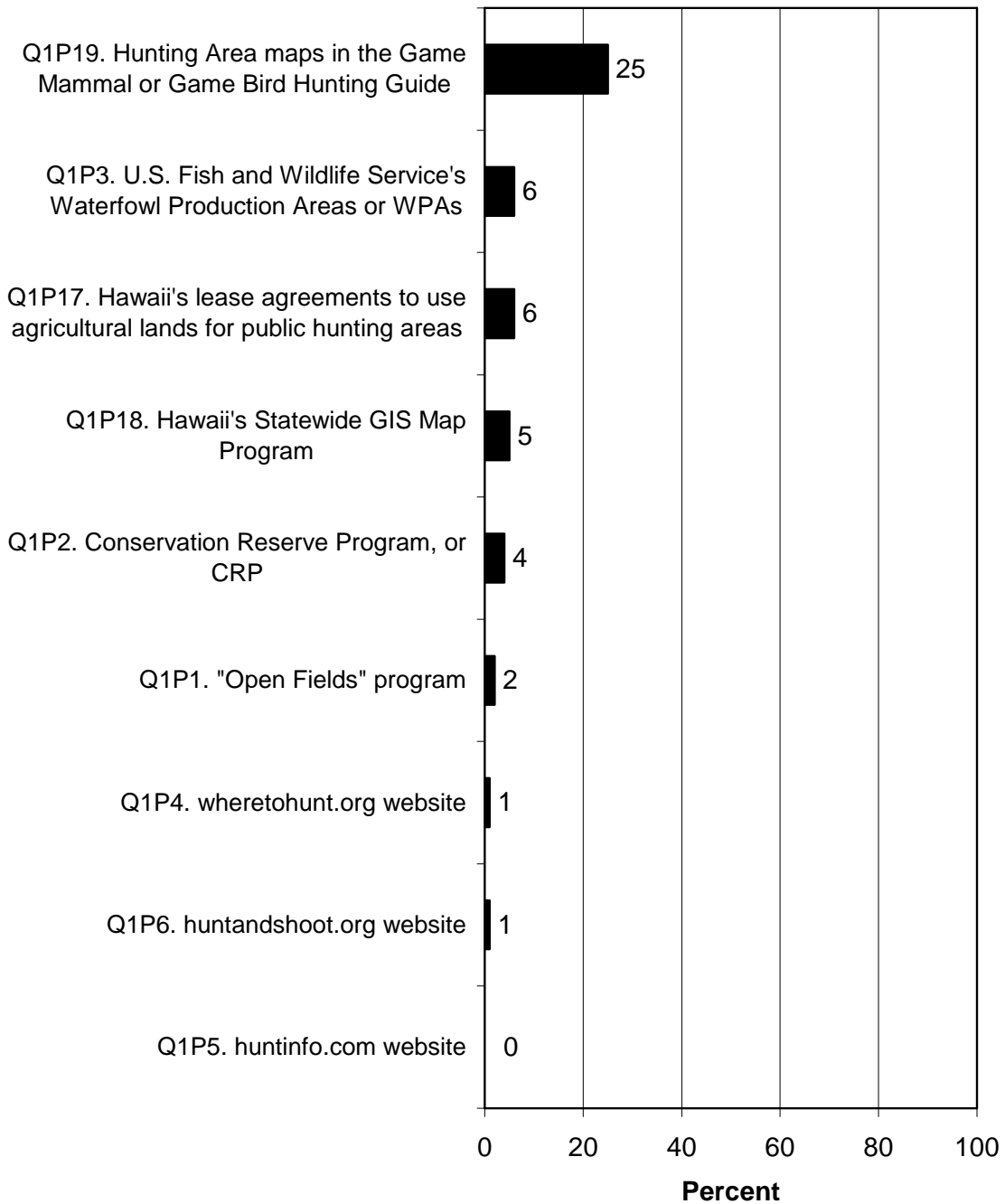
Hunting access programs that were asked about in the survey:

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
Hawaii's lease agreements to use agricultural lands for public hunting areas
Hawaii's Statewide GIS Map Program
Public hunting area maps in the Game Mammal or Game Bird Hunting Guide

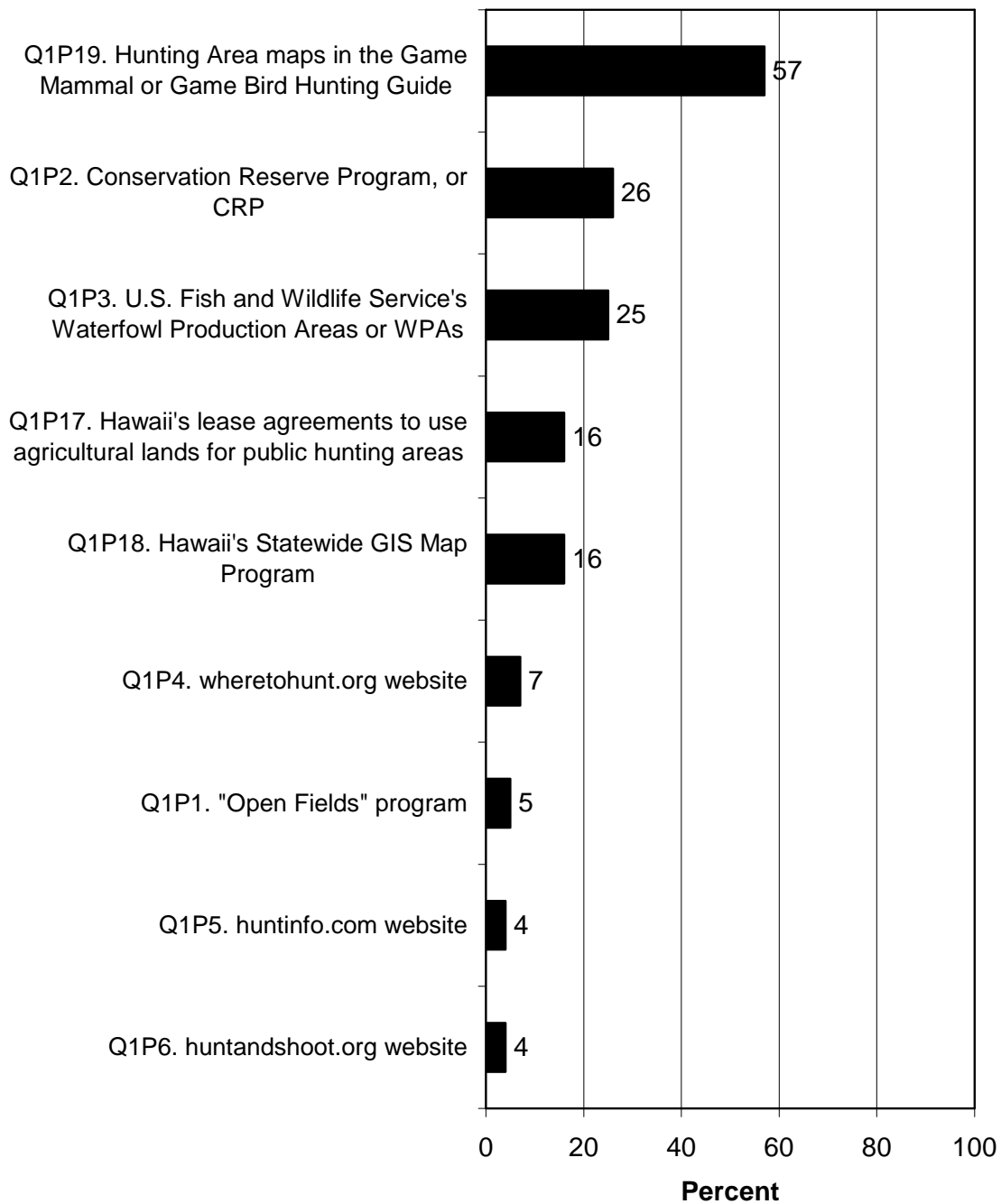
-
- For each program of which a hunter was aware, the survey asked him/her to rate it at making hunting access easier. Note that large amounts answered with “don’t know” rather than gave a rating.
 - The programs with the highest percentages of hunters giving an *excellent* or *good* rating, each with a third or more, are the hunting area maps in the Game Mammal or Game Bird Hunting Guide (45%), Hawaii’s Statewide GIS Map Program (45%), the huntandshoot.org website (41%), the huntinfo.com website (39%), Hawaii’s lease agreements to use agricultural lands for public hunting areas (36%), and the Open Fields program (33%).
 - The graphs for this series of questions also include the percentages giving a rating of *excellent*, giving a rating of *fair* or *poor* combined, and giving a rating of *poor*.
 - Follow-up questions asked hunters to indicate why they did not rate it higher (for those they rated as good, fair, or poor). These graphs are shown.

 - The survey included a specific question about use of private lands enrolled in any walk-in access program in Hawaii. Slightly more than a quarter of hunters (27%) hunt their primary species *often* or *sometimes* on such lands. On the other hand, the majority (47%) *never* do so.

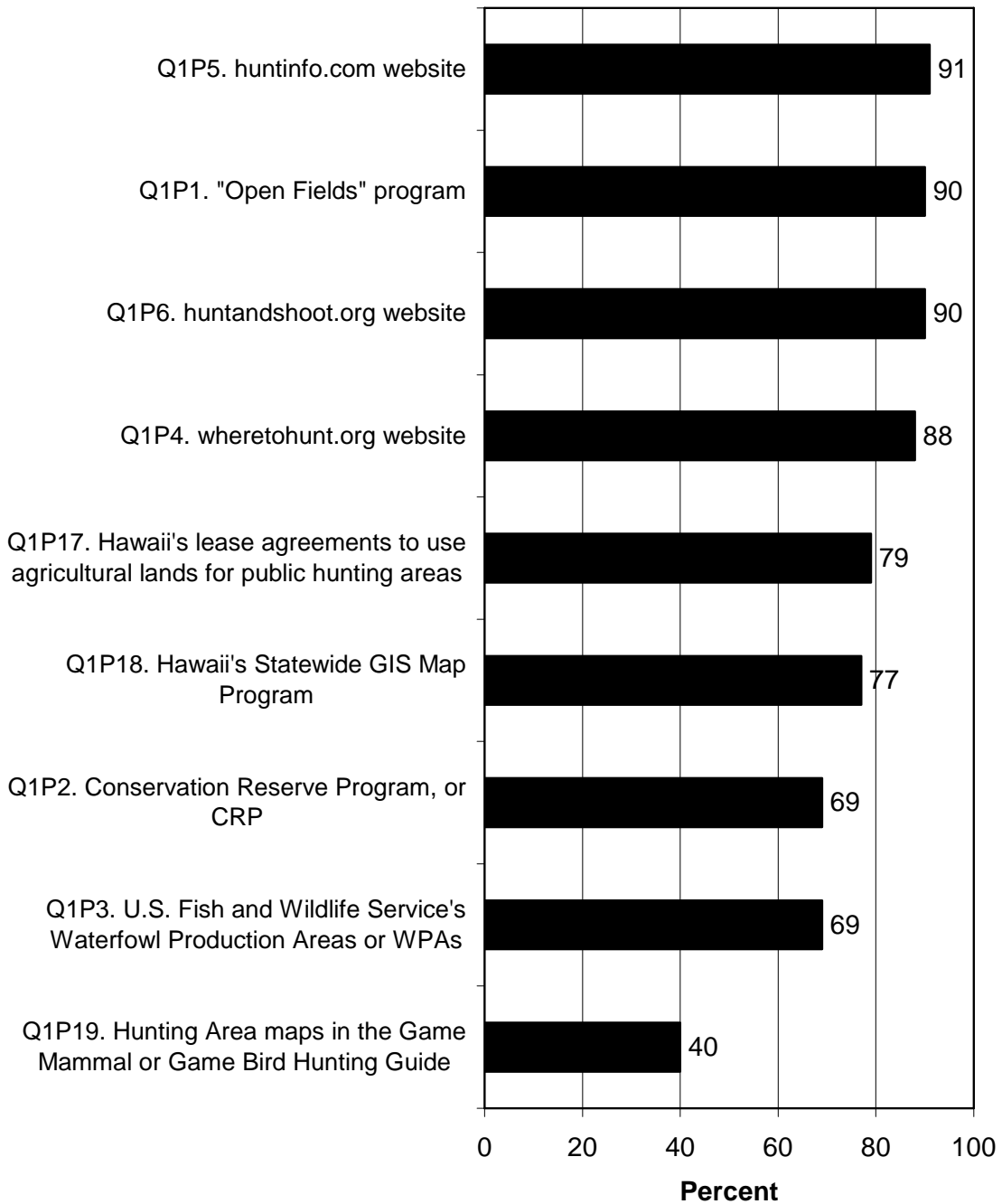
Percent who are very aware of the following hunting-related programs and resources.



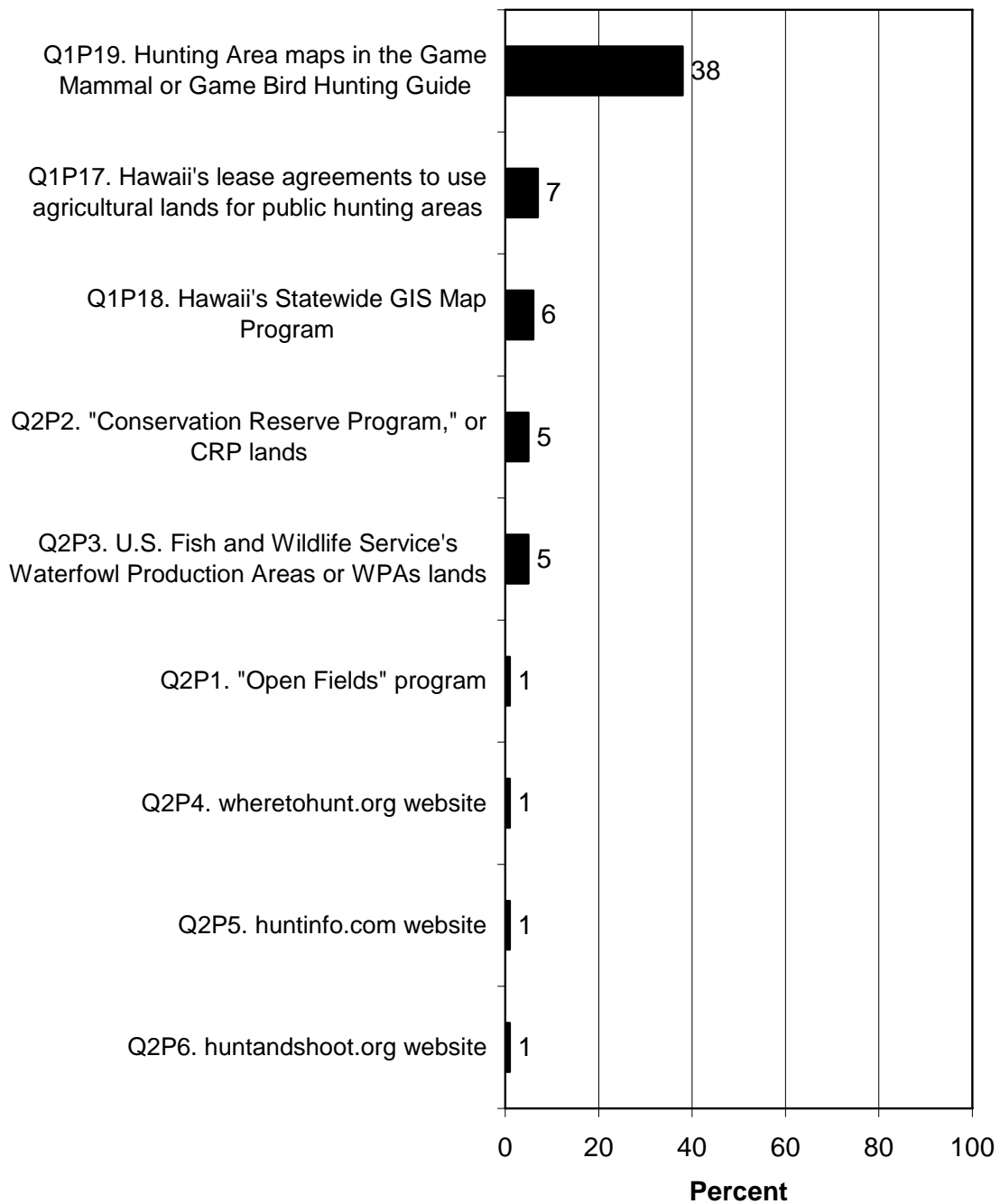
Percent who are very or somewhat aware of the following hunting-related programs and resources.



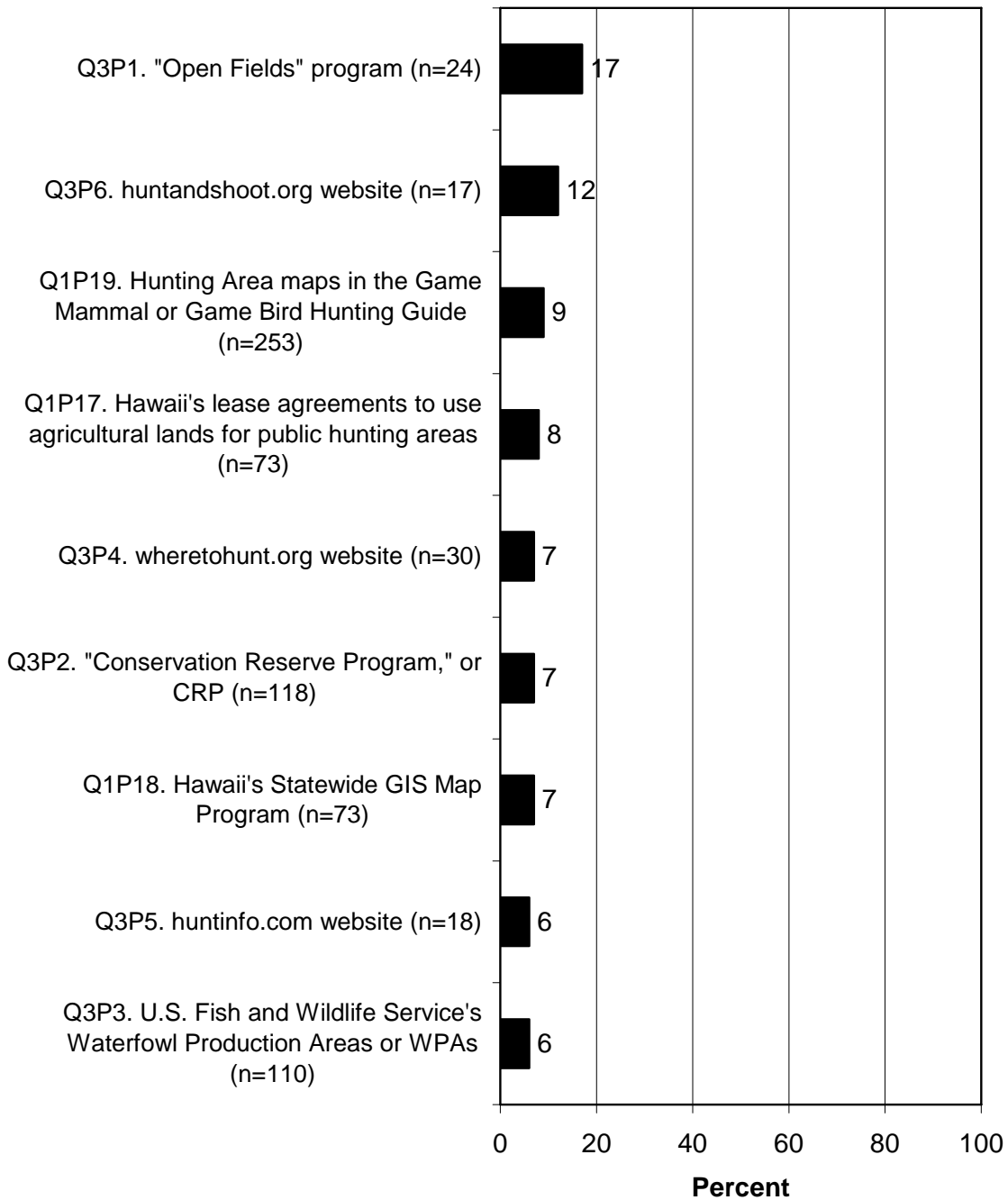
Percent who are not at all aware of the following hunting-related programs and resources.



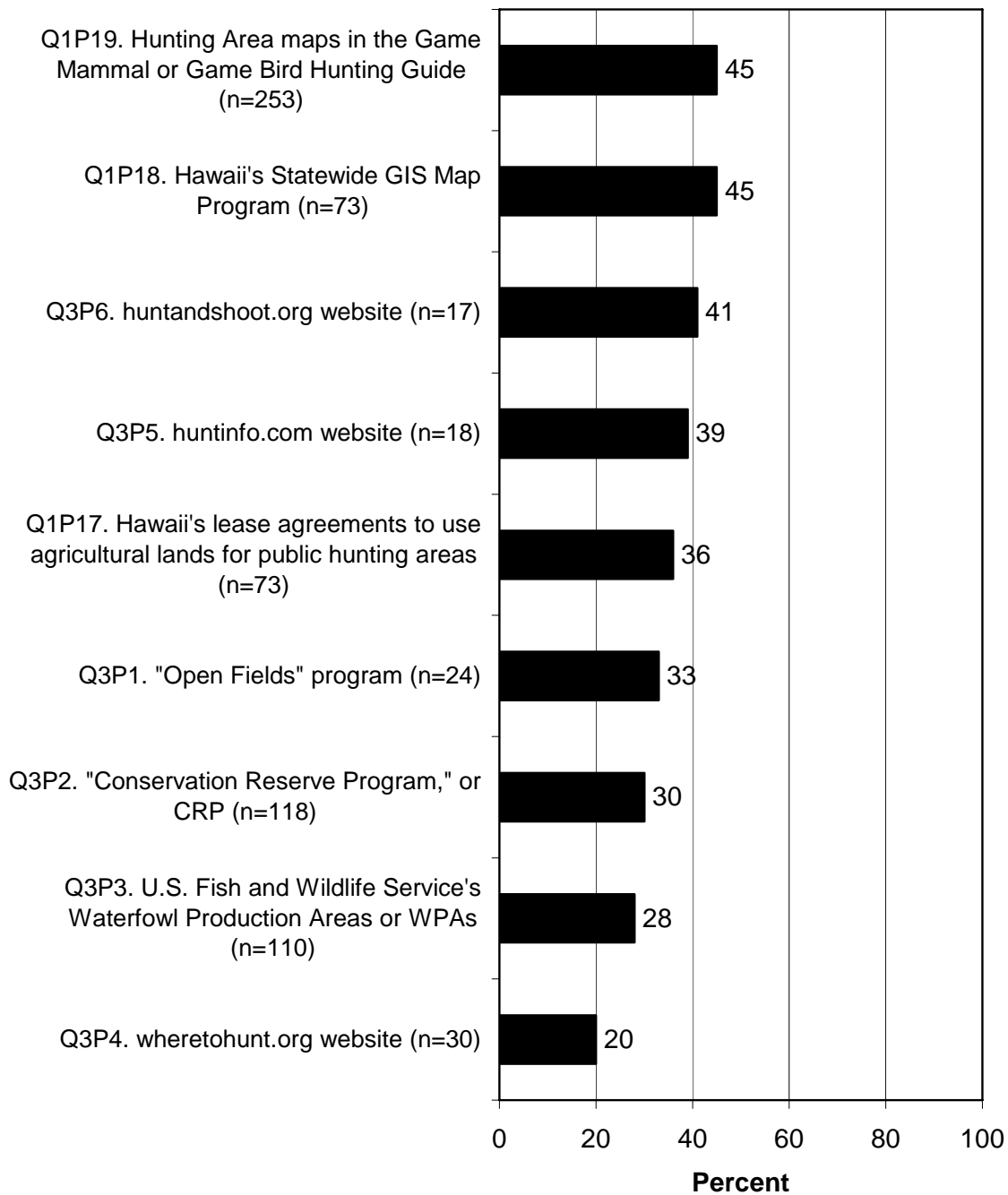
Percent who have used or participated in the following programs in the past 5 years.



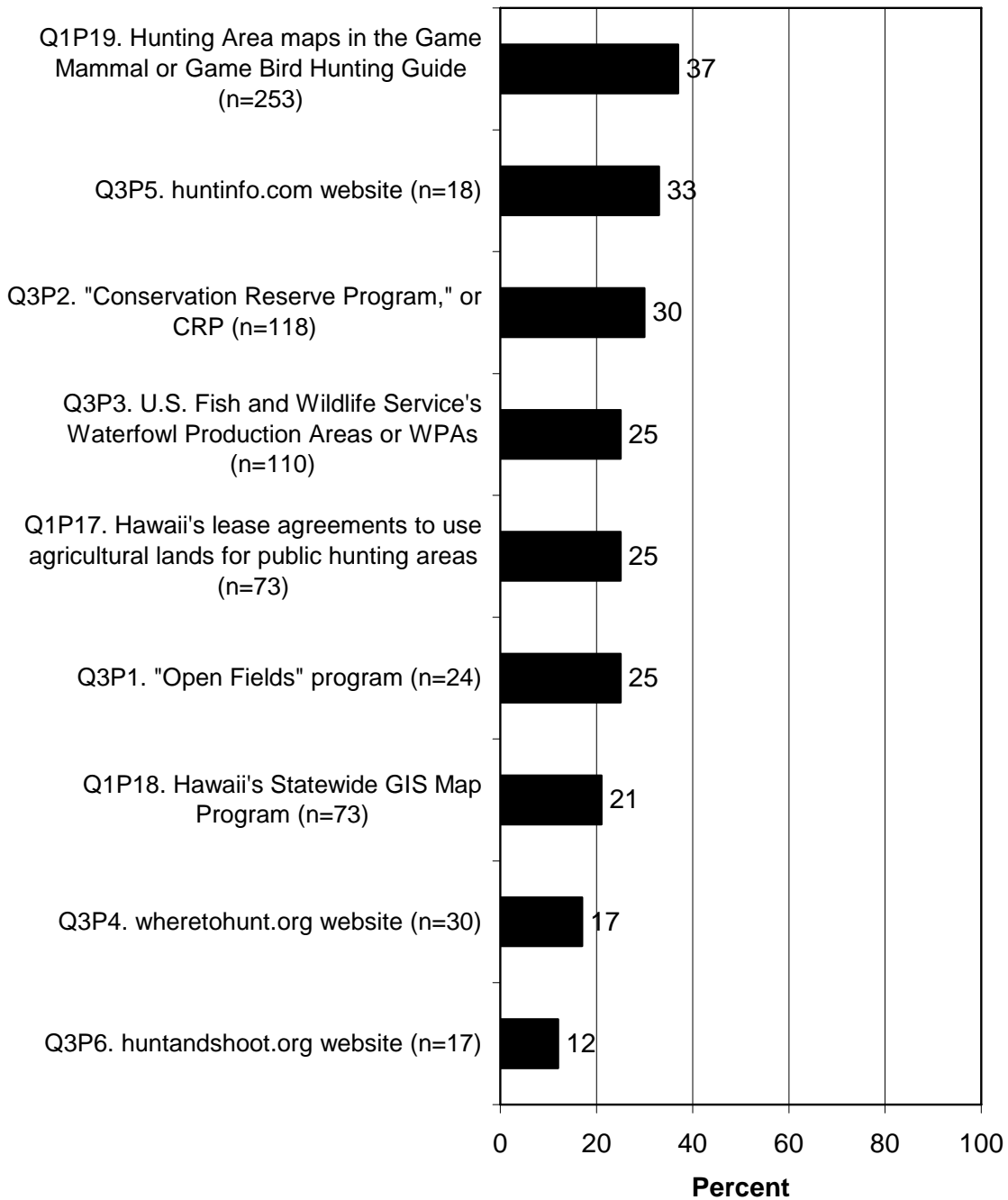
Percent who rate the following programs / resources for making hunting access easier as excellent.



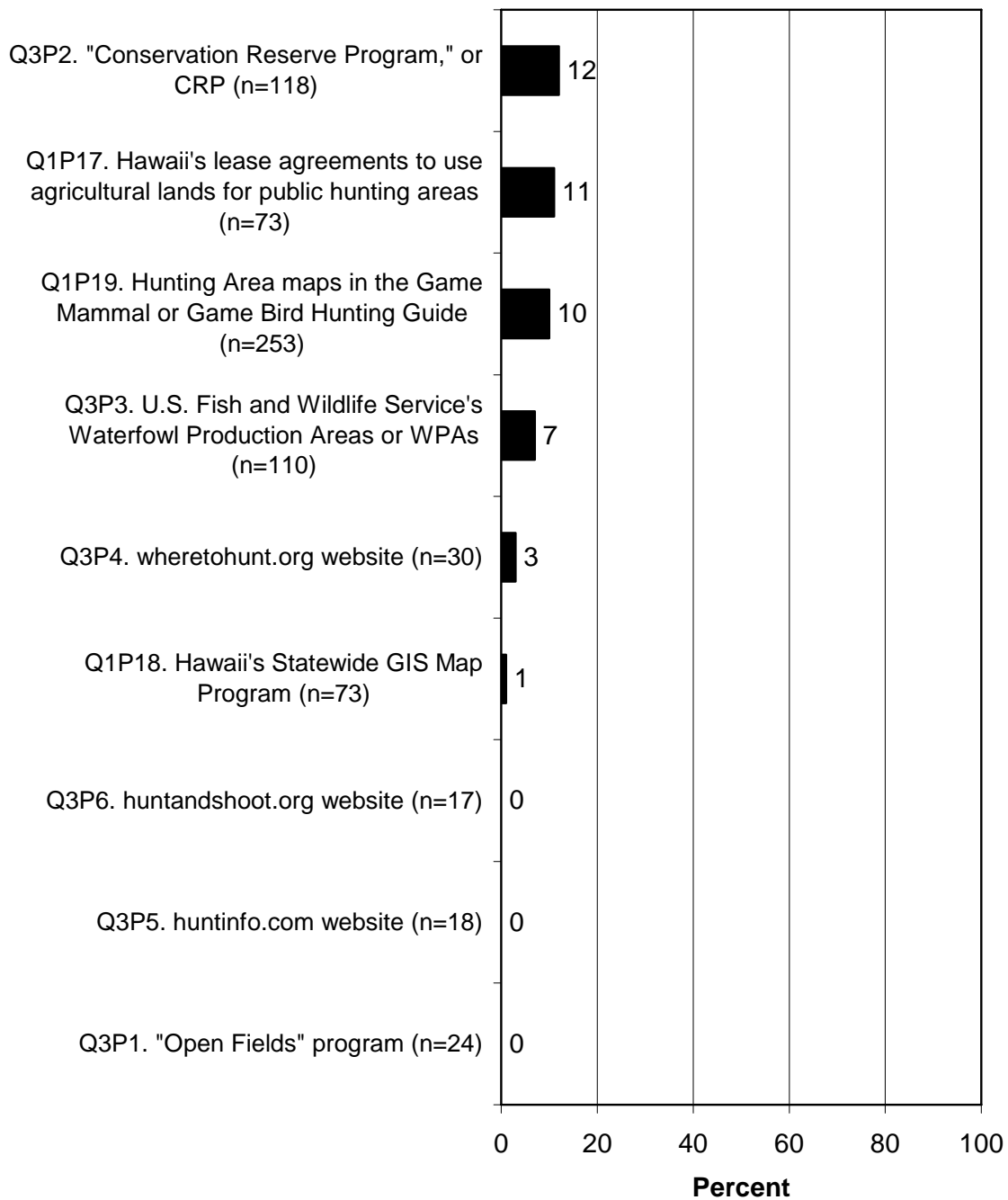
**Percent who rate the following programs /
resources for making hunting access easier as
excellent or good.**



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

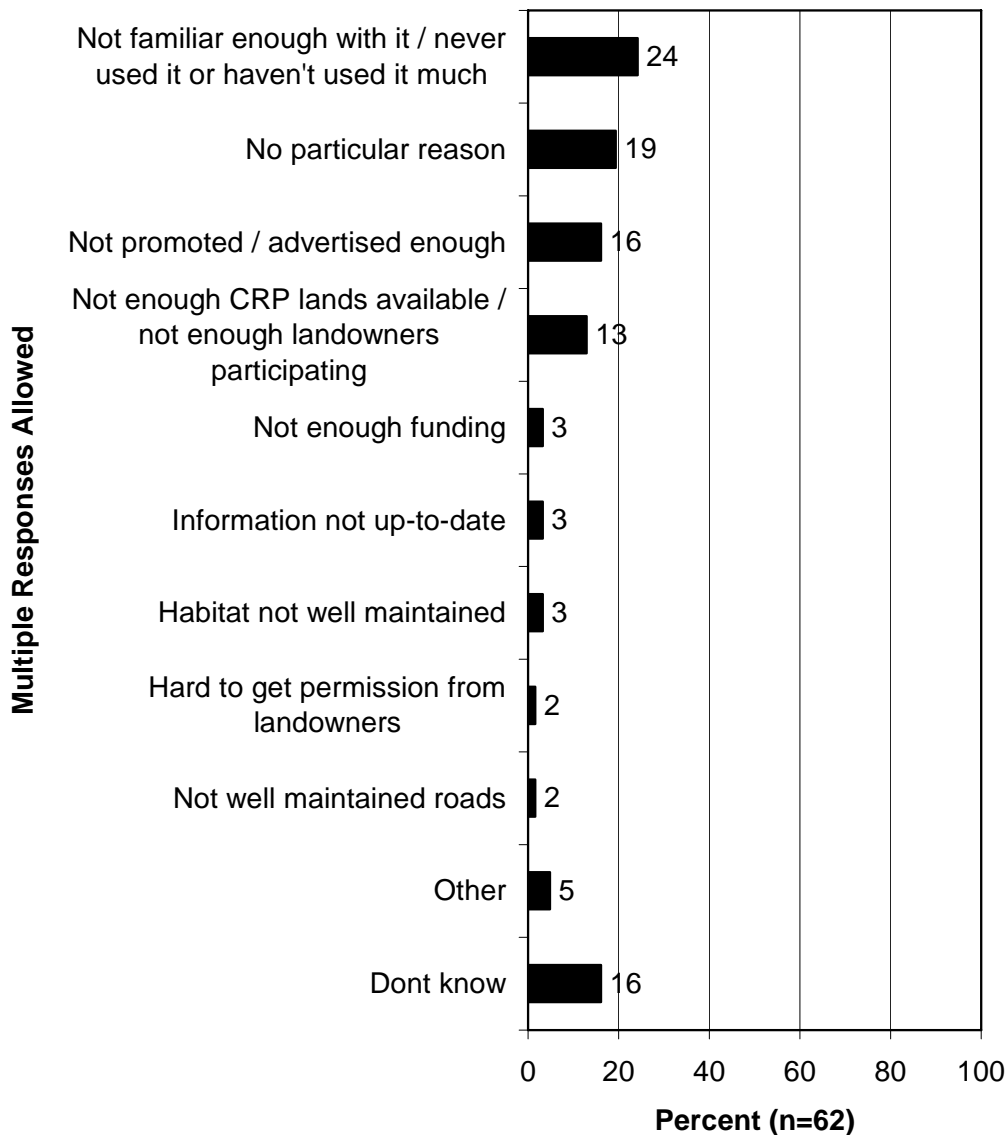


**Percent who rate the following programs /
resources for making hunting access easier as
poor.**

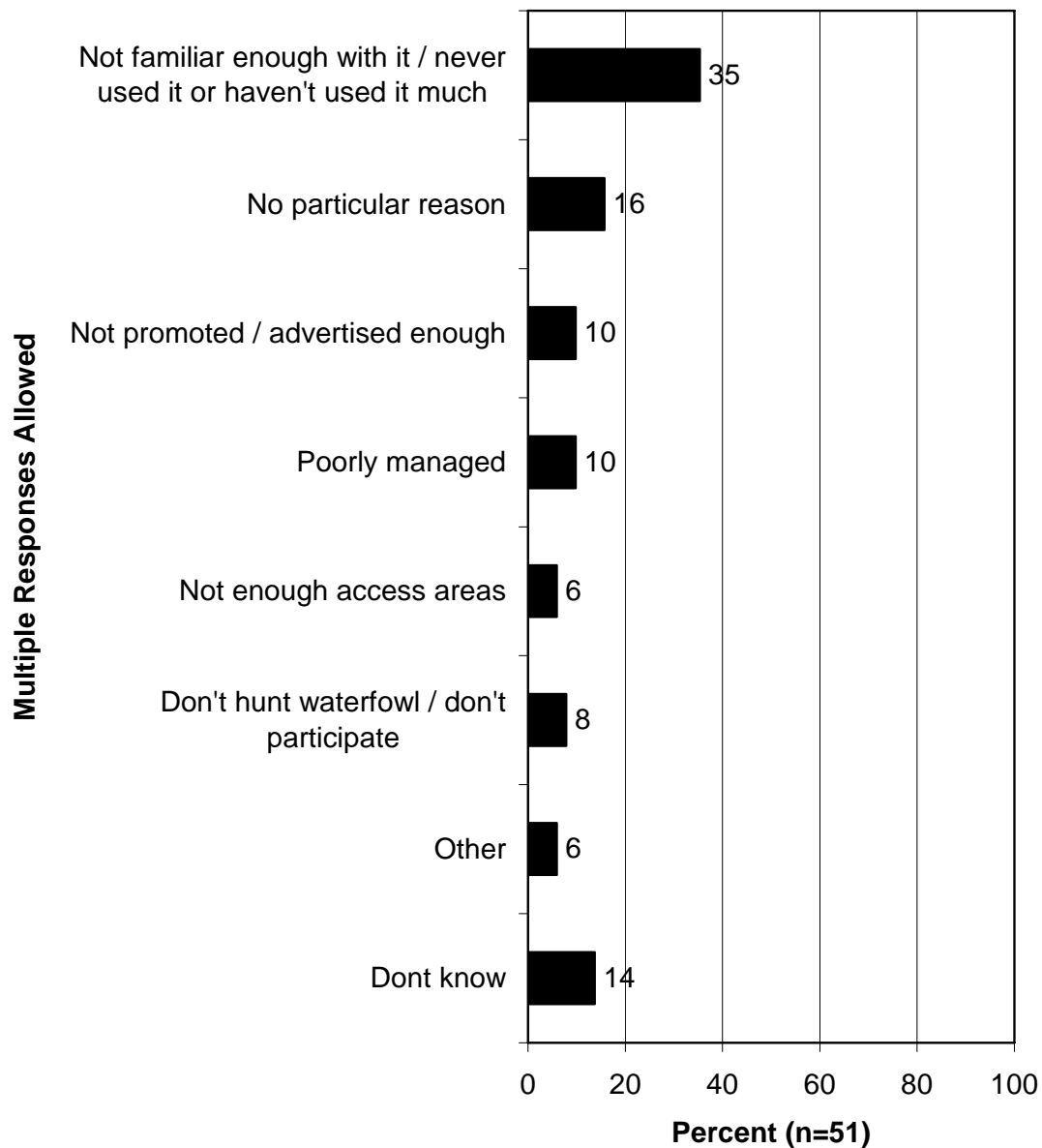


Note: Too few rated Open Fields as good, fair, or poor for the graph to be shown of reasons that the program/resource did not deserve a higher rating.

Q4P2. You rated the Conservation Reserve Program as good, fair, or poor at making hunting access easier. In your opinion, what makes the program not deserve a higher rating? (Asked of those who are aware of the program and rated it good, fair, or poor.)

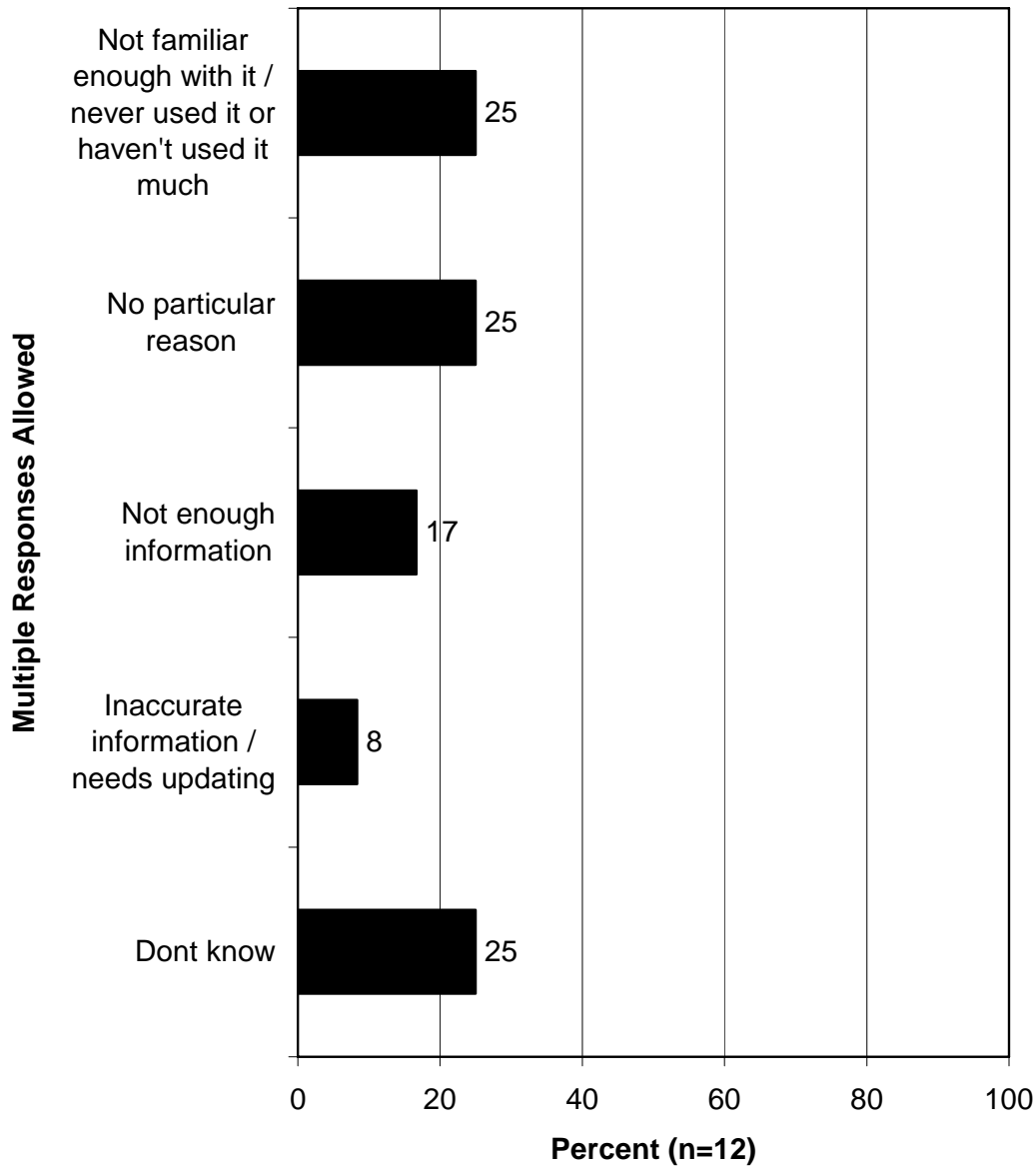


Q4P3. You rated the U.S. Fish and Wildlife Service's Waterfowl Production Areas program as good, fair, or poor at making hunting access easier. In your opinion, what makes the program not deserve a higher rating? (Asked of those who are aware of WPAs and rated them good, fair, or poor.)



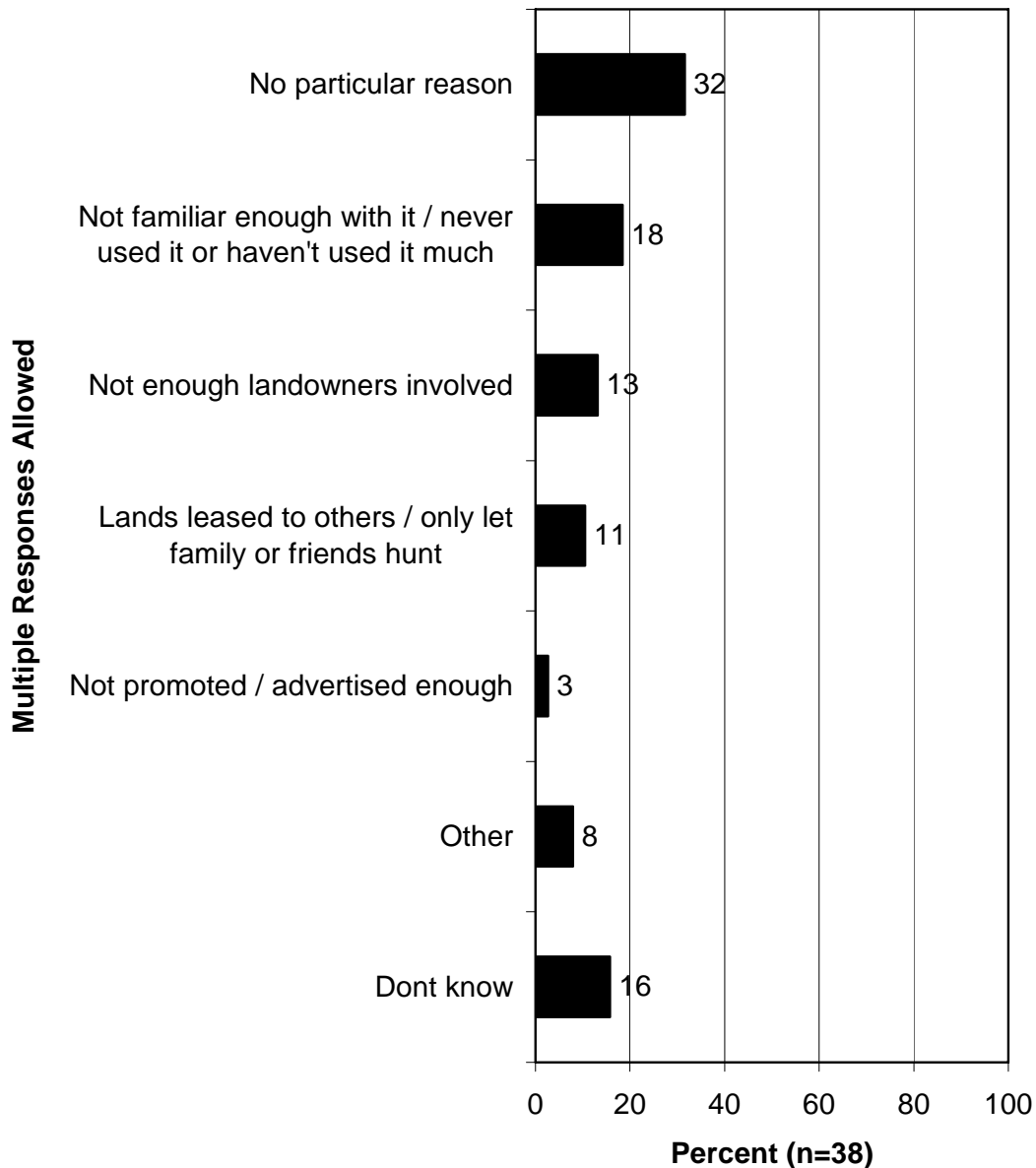
Too few rated the wheretohunt.org website as good, fair, or poor for the graph to be shown of reasons that the program/resource did not deserve a higher rating.

Q4P5. You rated the huntinfo.com website as good, fair, or poor at making hunting access easier. In your opinion, what makes the resource not deserve a higher rating? (Asked of those who are aware of the website and rated it good, fair, or poor.)

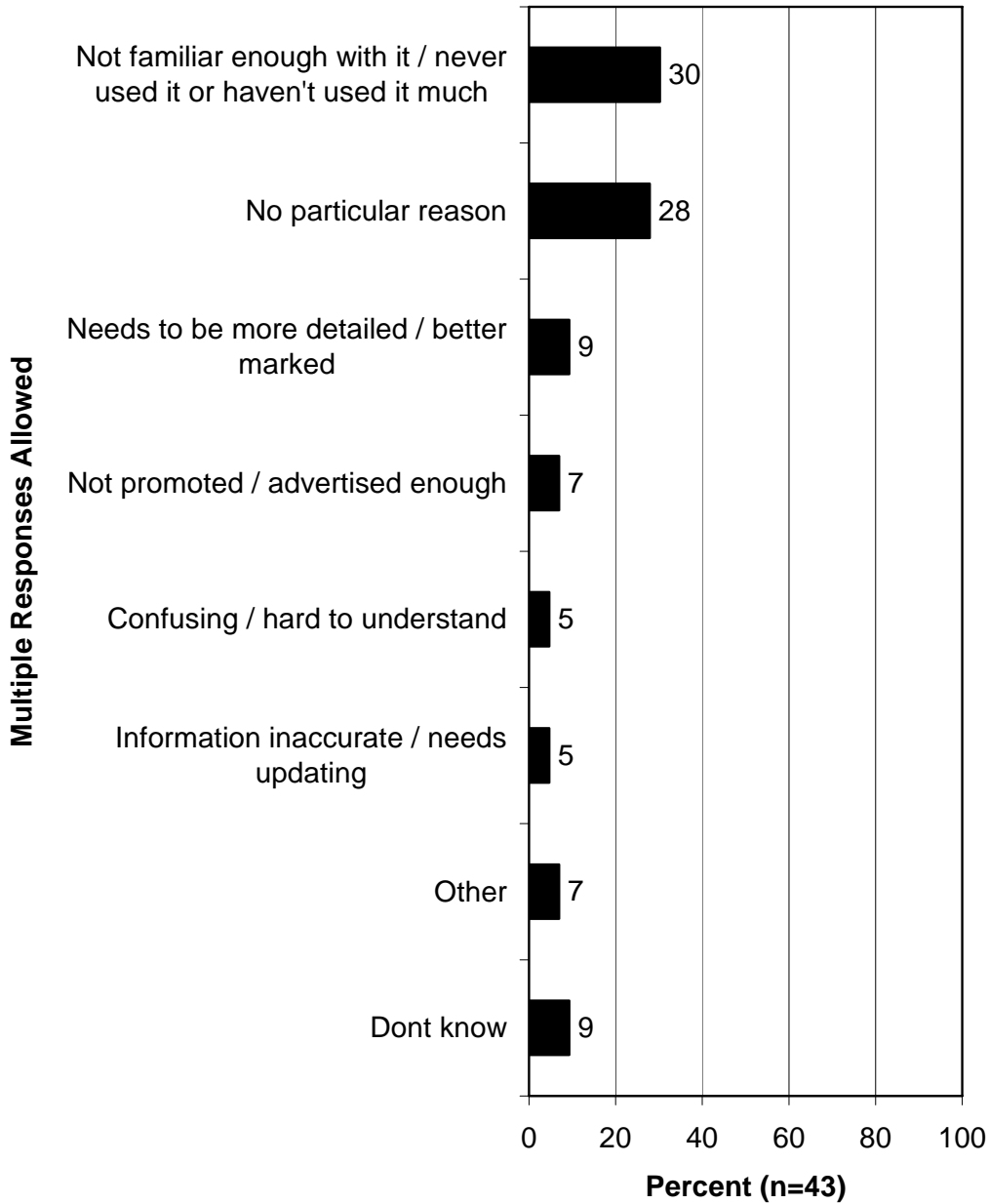


Too few rated the huntandshoot.org website as good, fair, or poor for the graph to be shown of reasons that the program/resource did not deserve a higher rating.

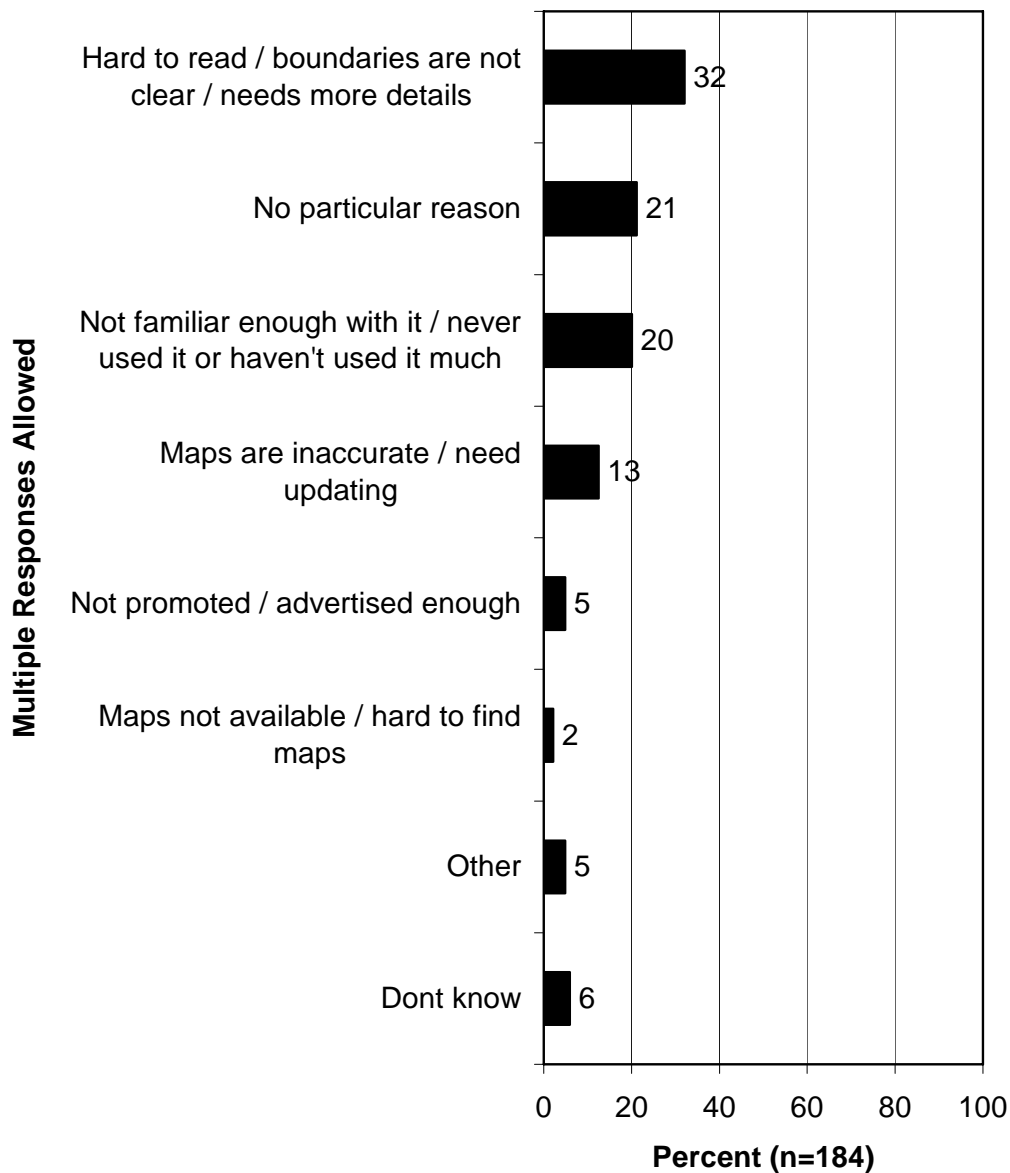
Q4P17. You rated Hawaii's lease agreements to use agricultural lands for public hunting areas as good, fair, or poor at making hunting access easier. In your opinion, what makes the resource not deserve a higher rating? (Asked of those who are aware of the program and rated it good, fair, or poor.)



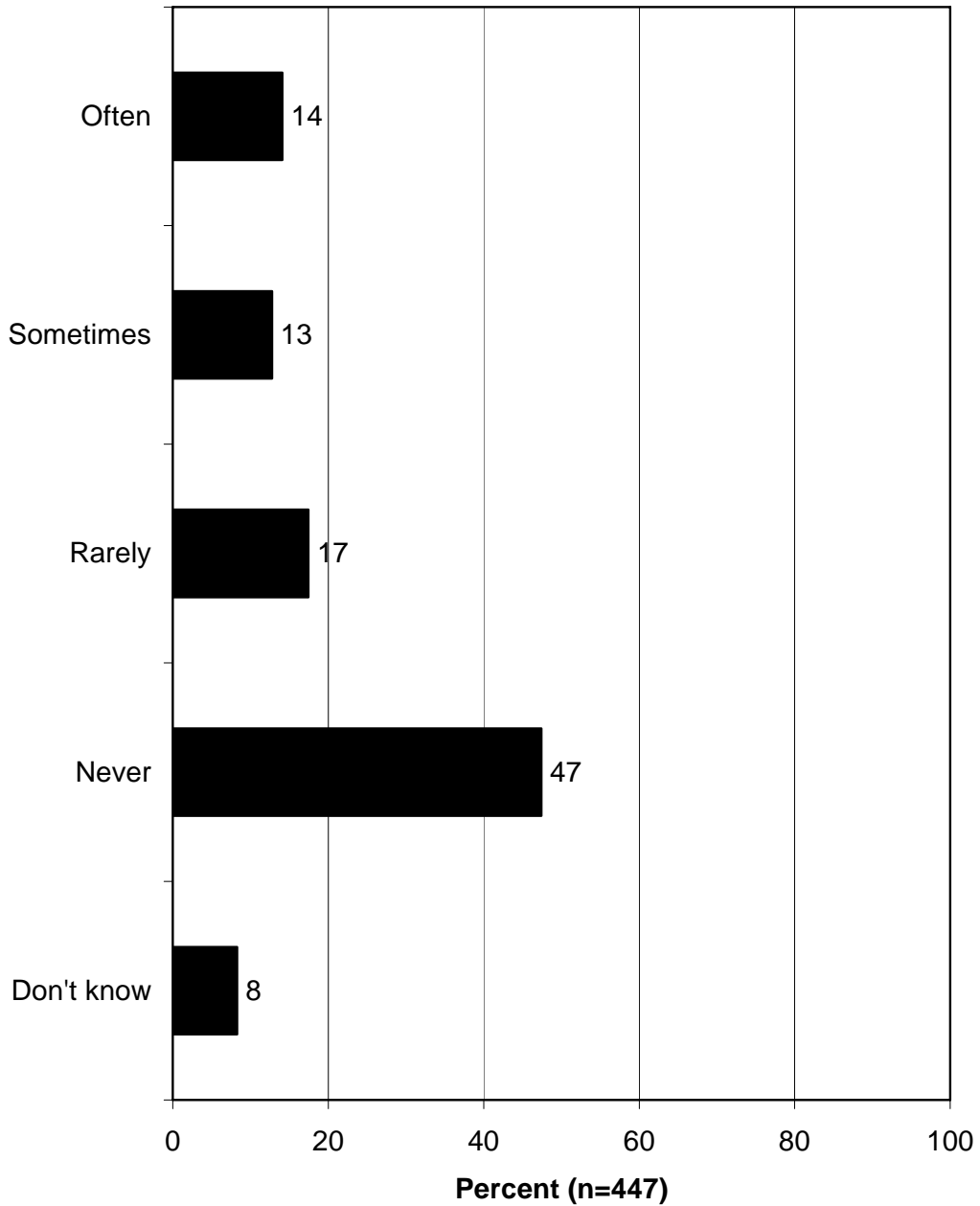
Q4P18. You rated Hawaii's Statewide GIS Map Program as good, fair, or poor at making hunting access easier. In your opinion, what makes the resource not deserve a higher rating? (Asked of those who are aware of the program and rated it good, fair, or poor.)



Q4P19. You rated public hunting area maps in the Game Mammal or Game Bird Hunting Guide as good, fair, or poor at making hunting access easier. In your opinion, what makes the resource not deserve a higher rating? (Asked of those who are aware of the maps and rated it good, fair, or 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 Hawaii?



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 Hawaii. The most popular source is friends/family/word of mouth (41%), by far the top answer. Other notable answers include a state agency other than its website (28%) and the Internet in general/search engines (10%).
 - In follow-up, hunters are somewhat split in rating the accuracy of the information they receive: while 60% say it is *very* accurate, 38% say it is only *somewhat* accurate or *not at all* 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 HDLNR, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management). Nearly a majority of hunters in Hawaii had visited the HDLNR site (46%). Lower amounts (from 7% to 10%) had visited the other sites.
 - 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 positive: each site had a majority of site visitors rating its access information as excellent or good.

- The survey asked six questions about actions that hunters may take in deciding where to hunt (shown in Text Box 8 on the following page). 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 a third or more of hunters *always* or *sometimes* do two things in deciding where to hunt: 59% *always* or *sometimes* ask a friend or family member where to hunt, and 37% *always* or *sometimes* scout or physically look for a place.

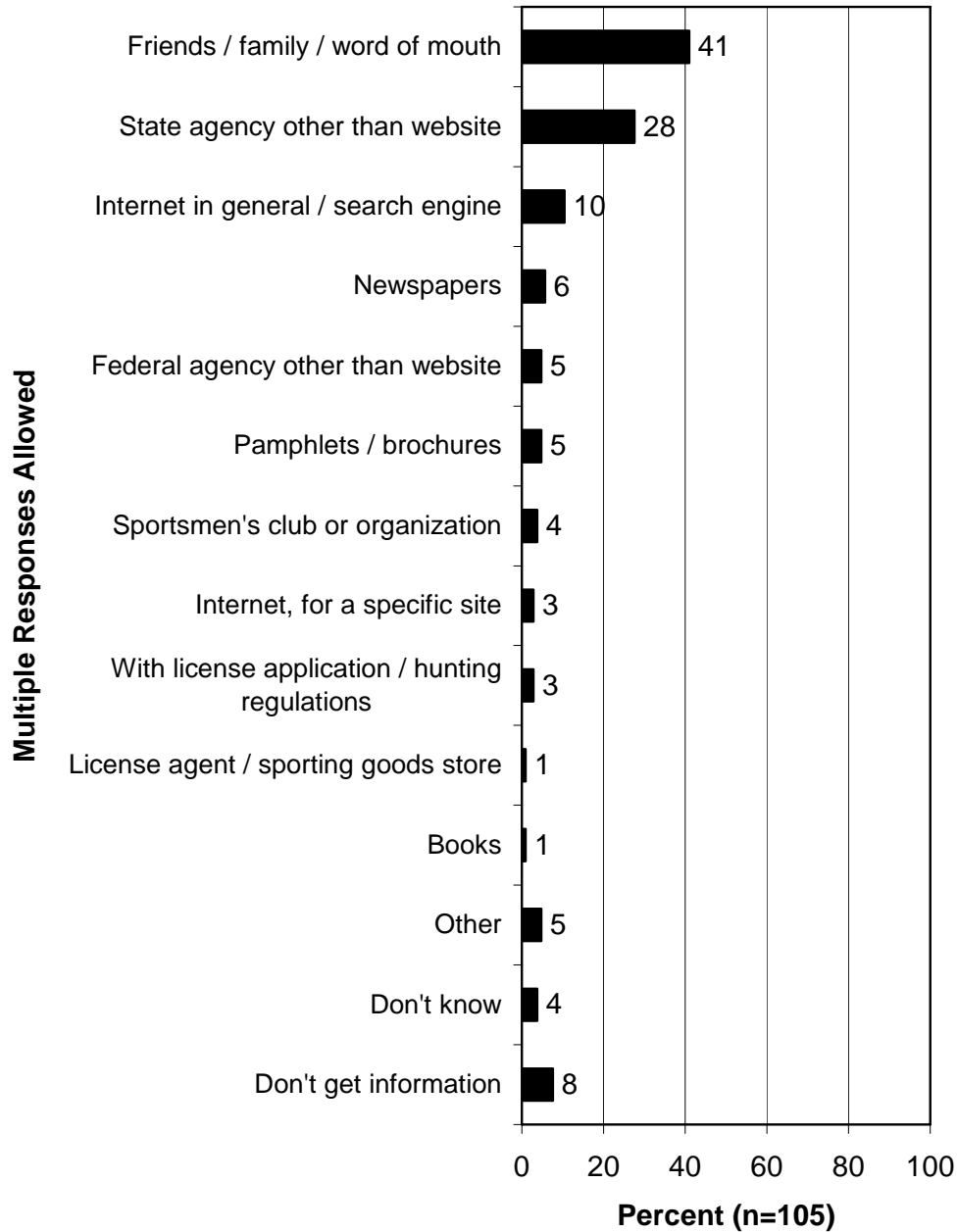
TEXT BOX 8

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

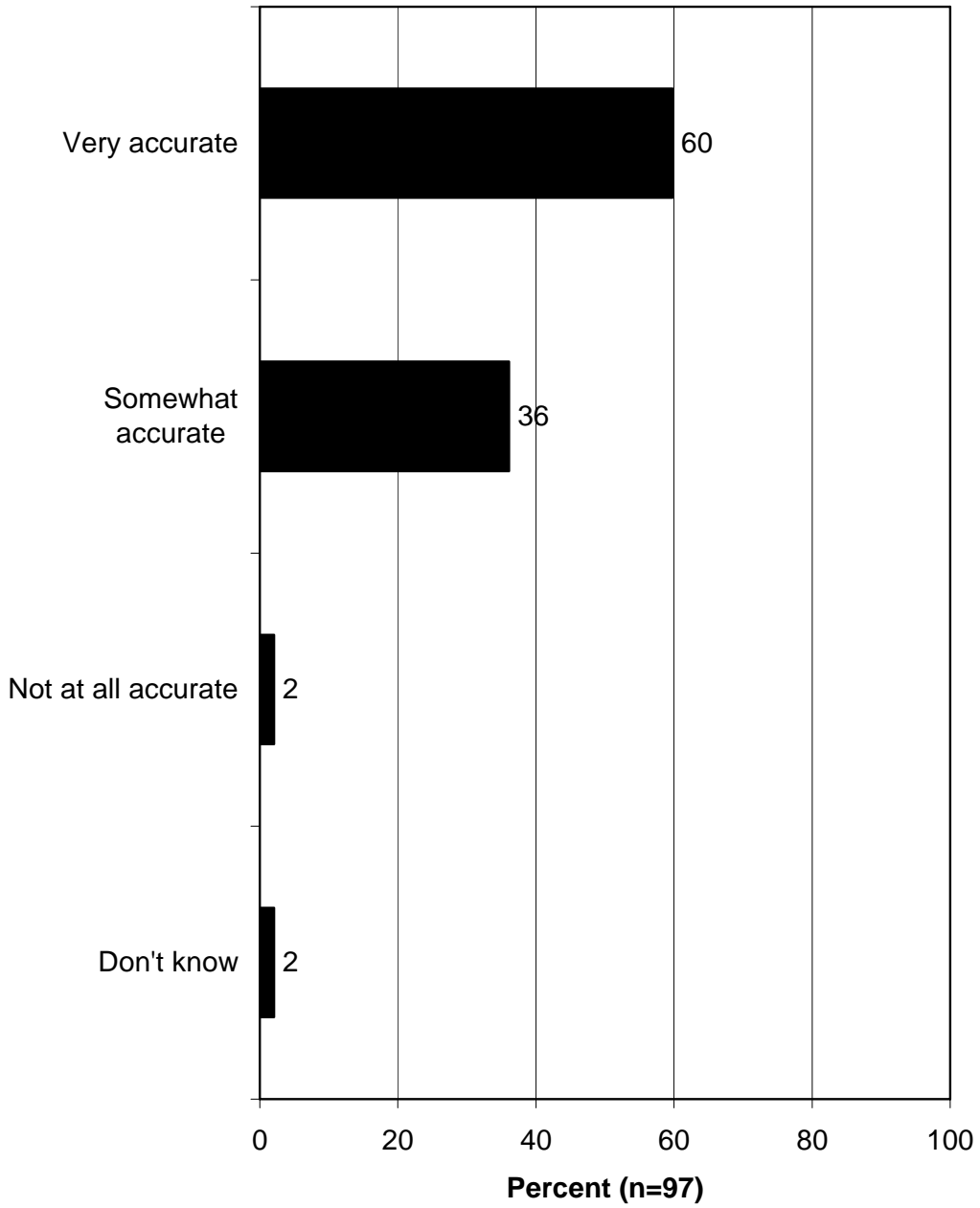
- Ask a friend or family member where to hunt
- Knock on a landowner's door to ask permission to hunt
- Use paper maps to find a place to hunt
- Use GPS to locate hunting land
- Find available hunting lands on the Internet
- Scout or physically look for land on which to hunt

- 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 4 days, among those who scout for land.

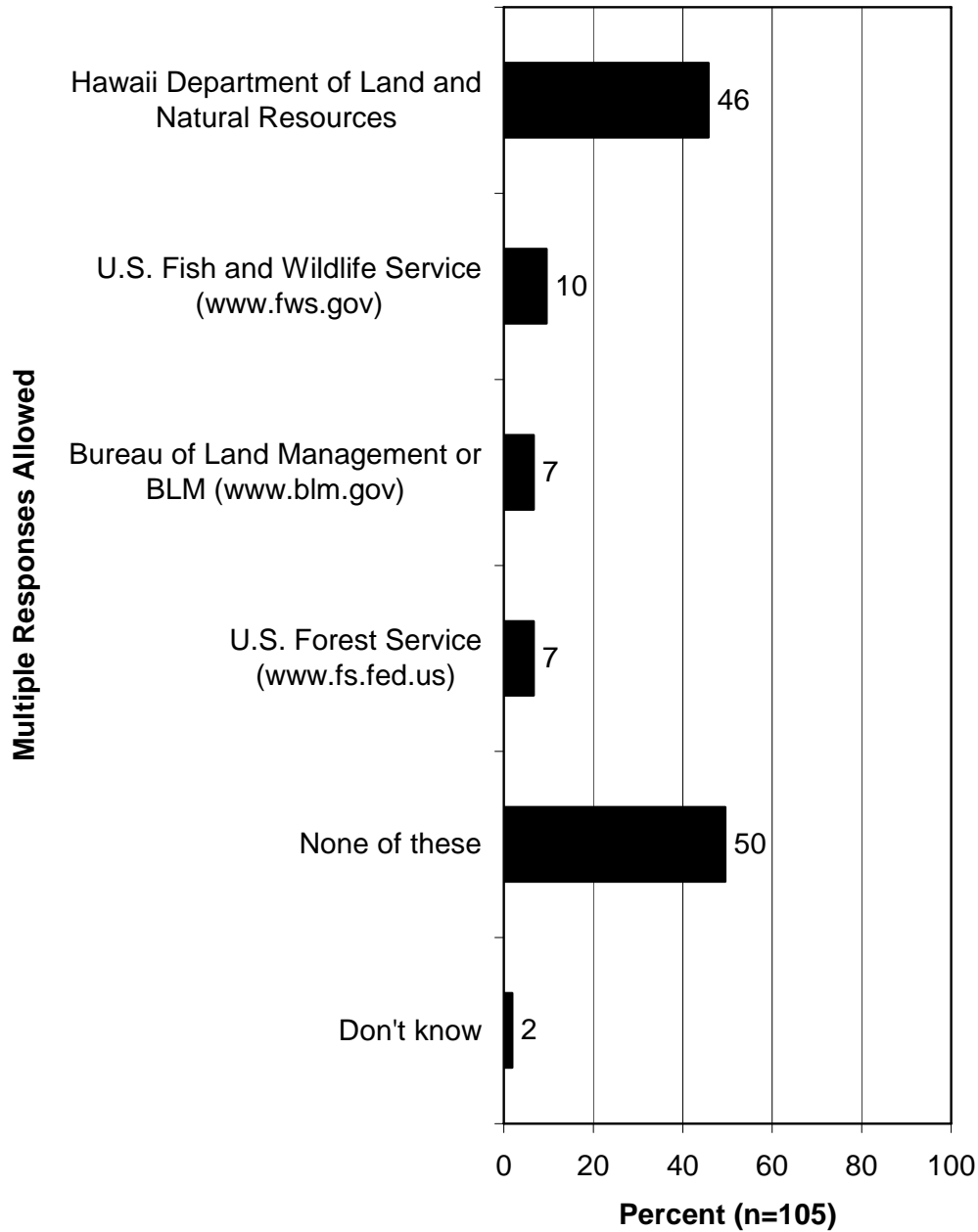
Q227. Where do you get information on places to hunt and hunting access in Hawaii?



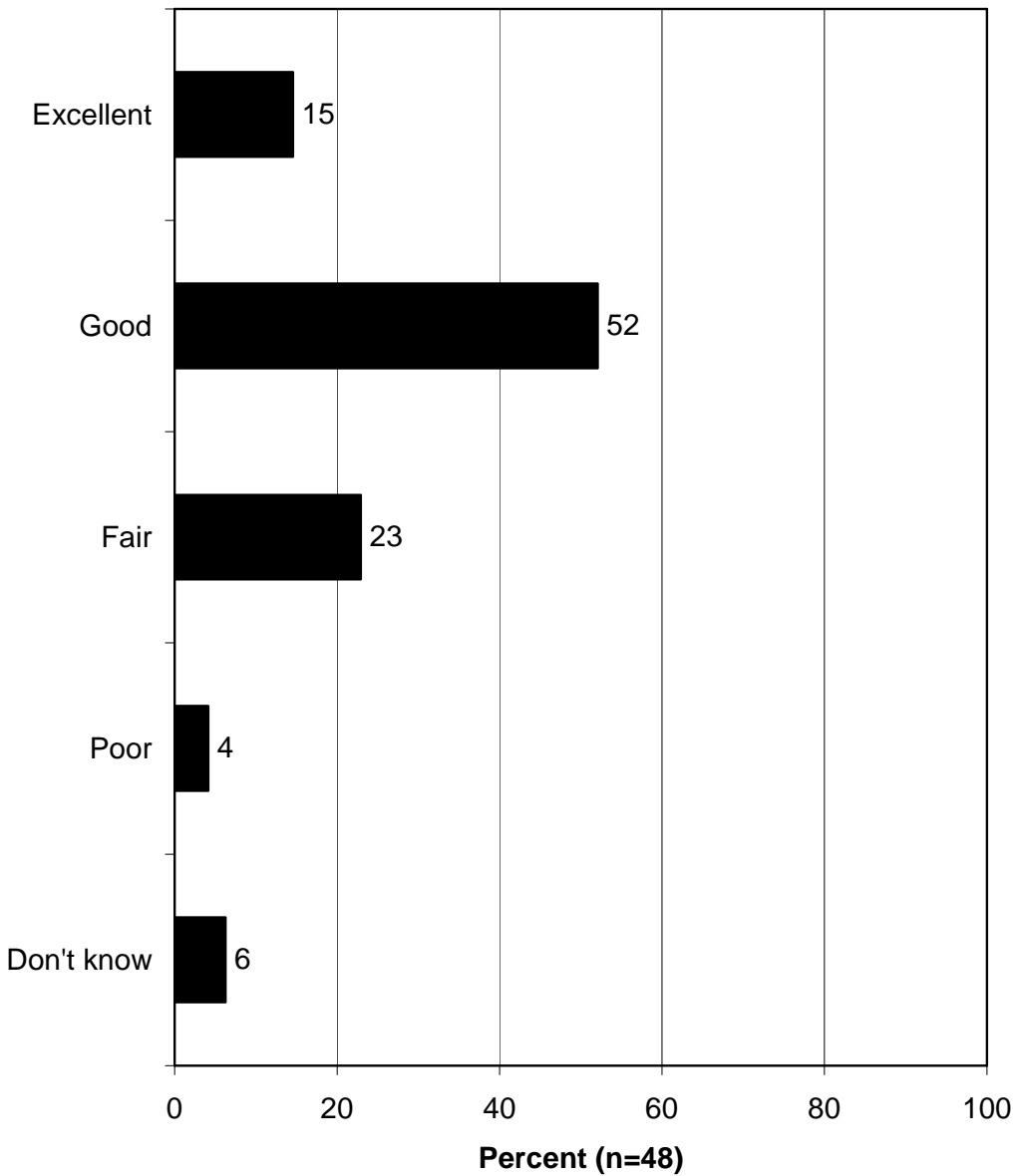
Q229. In general, how accurate is the information you typically receive?



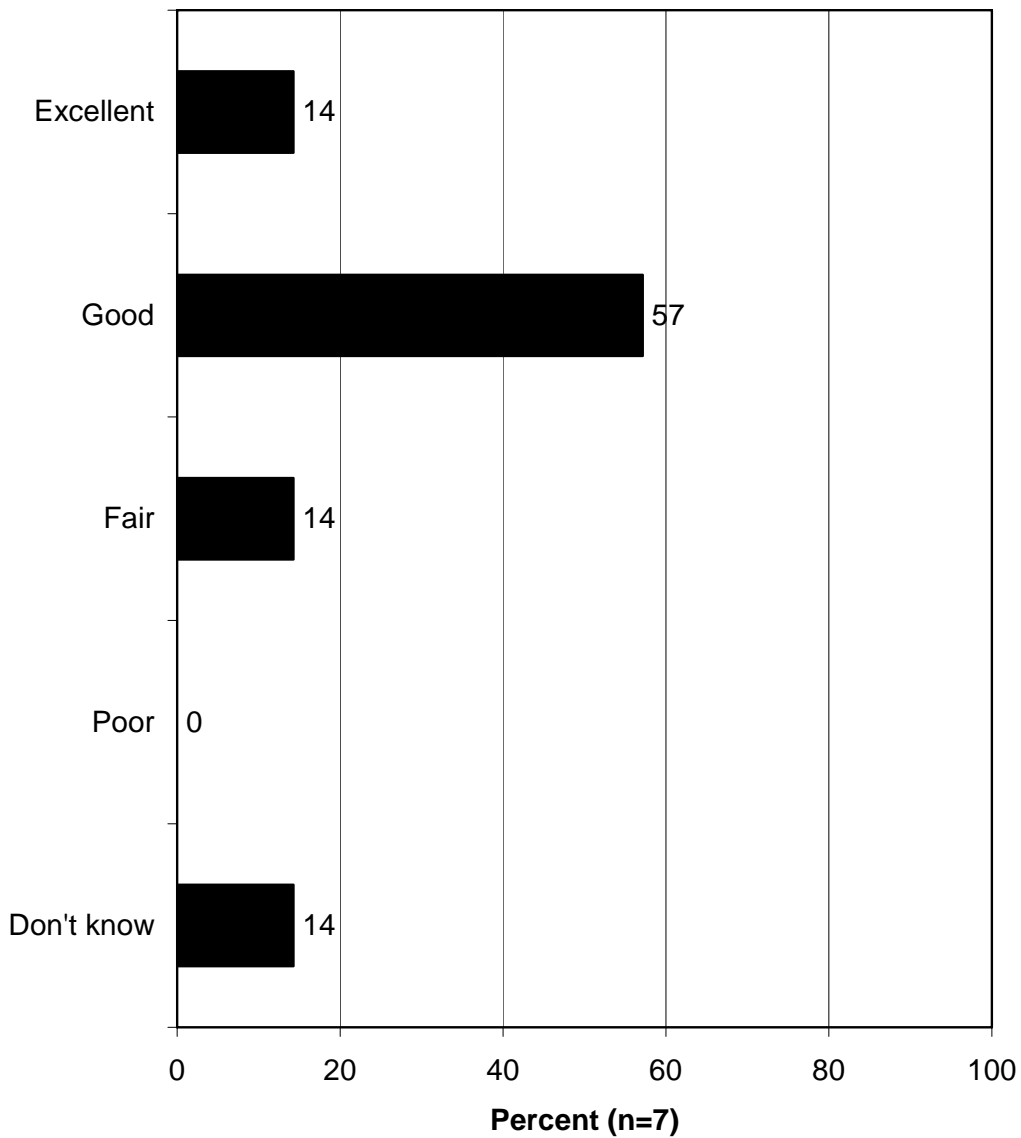
Q232. Please tell me if you have visited any of the following websites to look for information on places to hunt and hunting access?



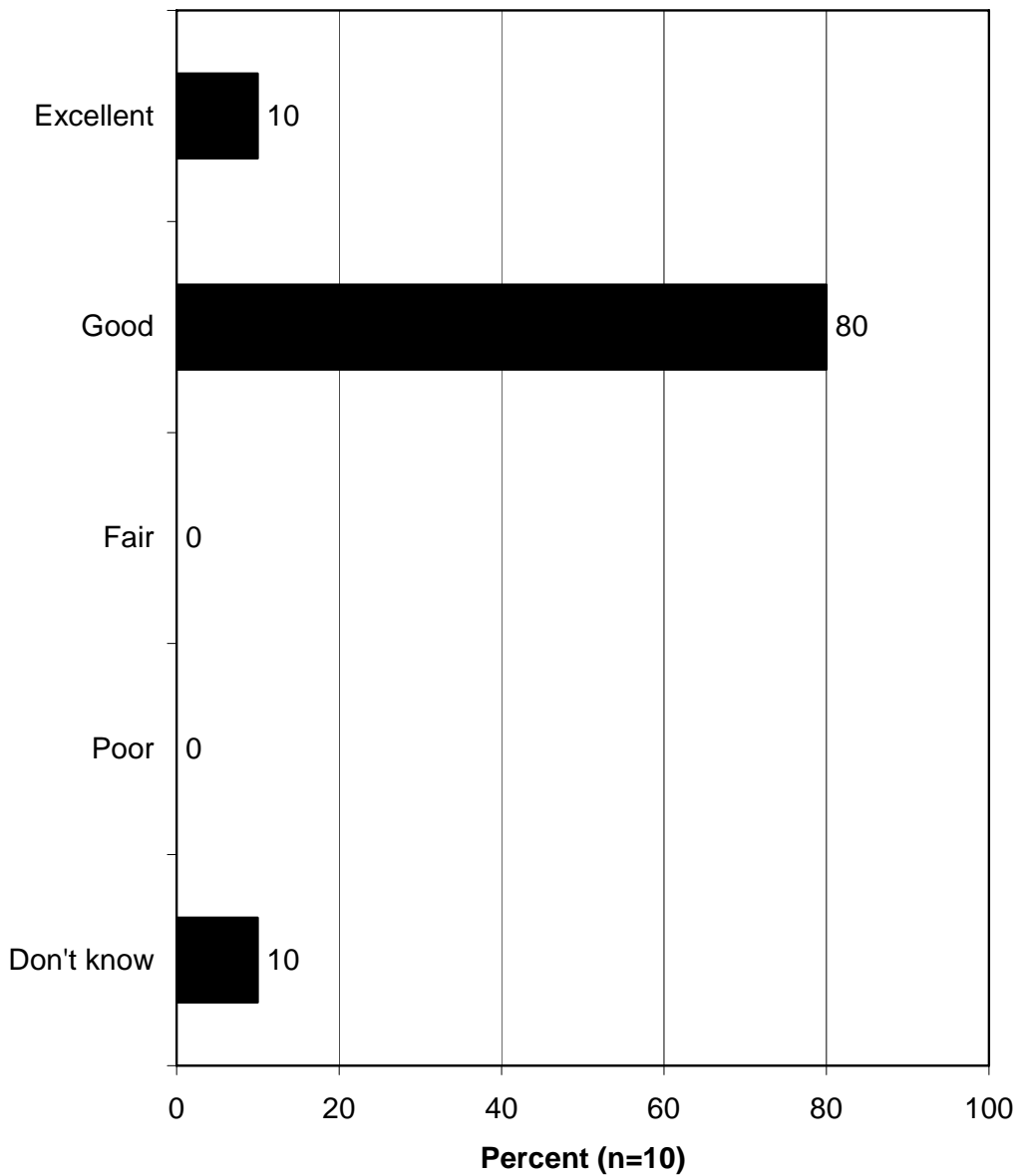
Q233. How would you rate the usefulness of the information on places to hunt and hunting access on Hawaii Department of Land and Natural Resources' website to you personally in planning your hunting trips in Hawaii? (Asked of those who used the website to look for information on places to hunt and hunting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



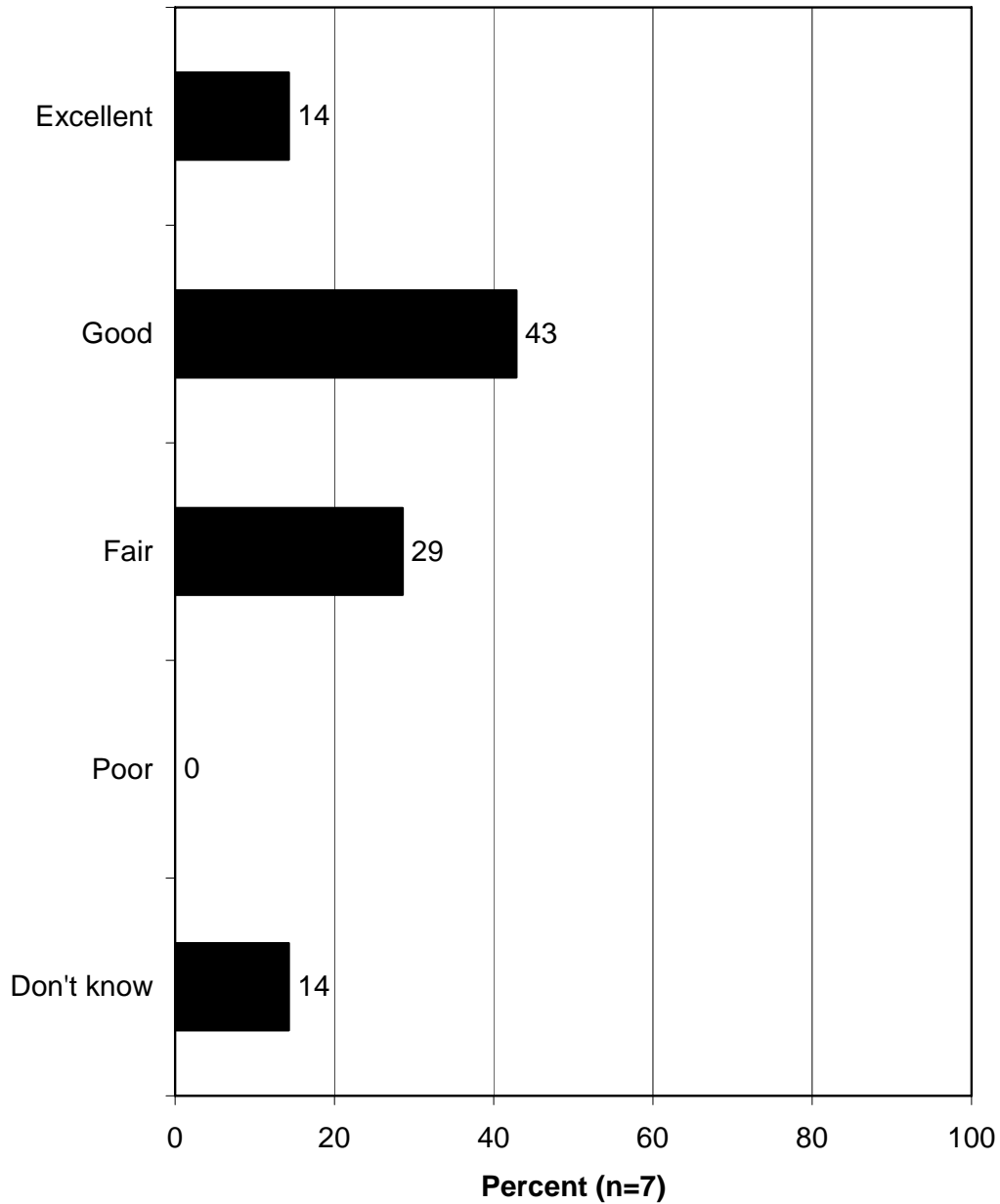
Q234. How would you rate the usefulness of the information on places to hunt and hunting access on the Bureau of Land Management or BLM website (www.blm.gov) to you personally in planning your hunting trips in Hawaii? (Asked of those who used the website to look for information on places to hunt and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



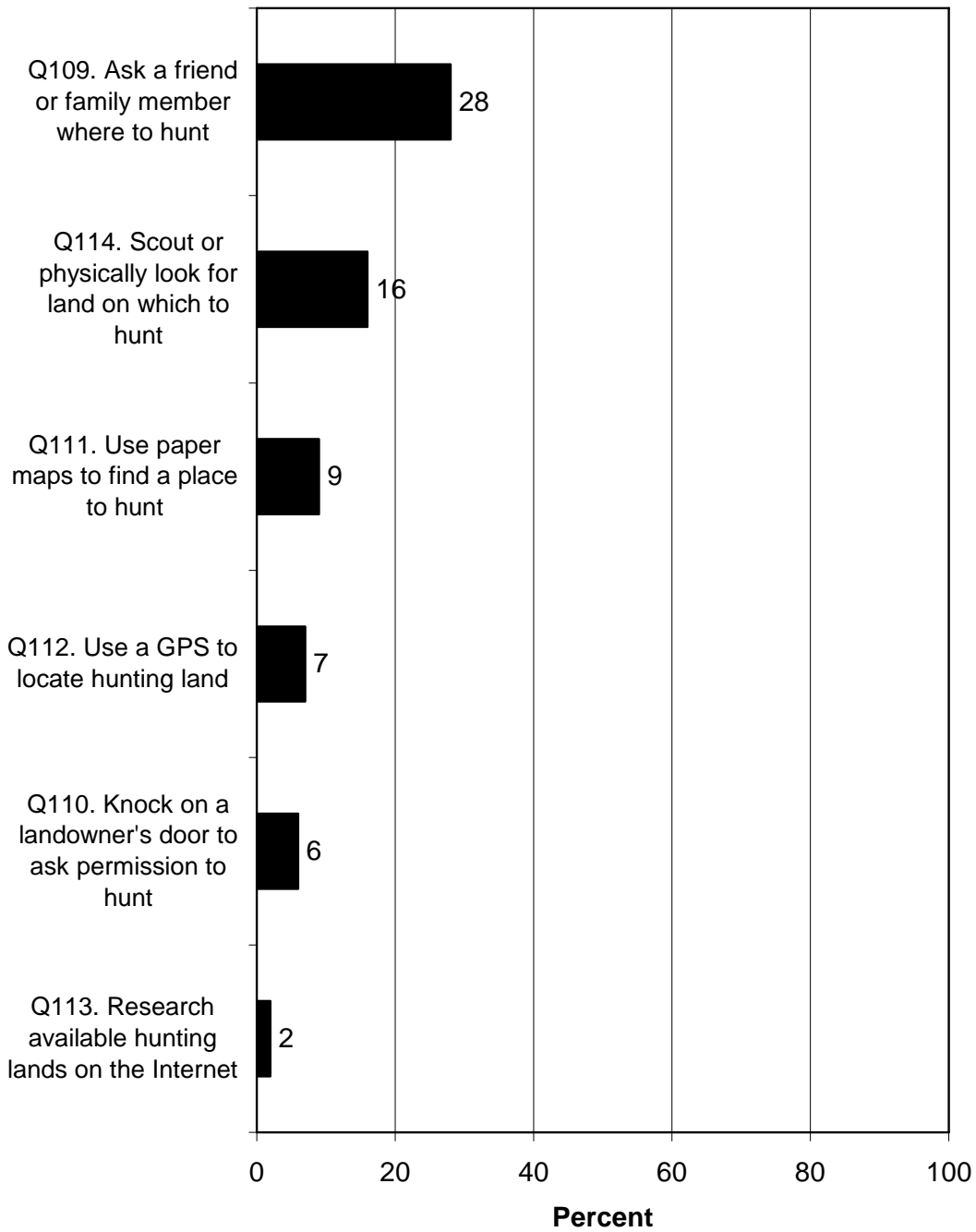
Q235. How would you rate the usefulness of the information on places to hunt and hunting access on the U.S. Fish and Wildlife Service website (www.fws.gov) to you personally in planning your hunting trips in Hawaii? (Asked of those who used the website to look for information on places to hunt and hunting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



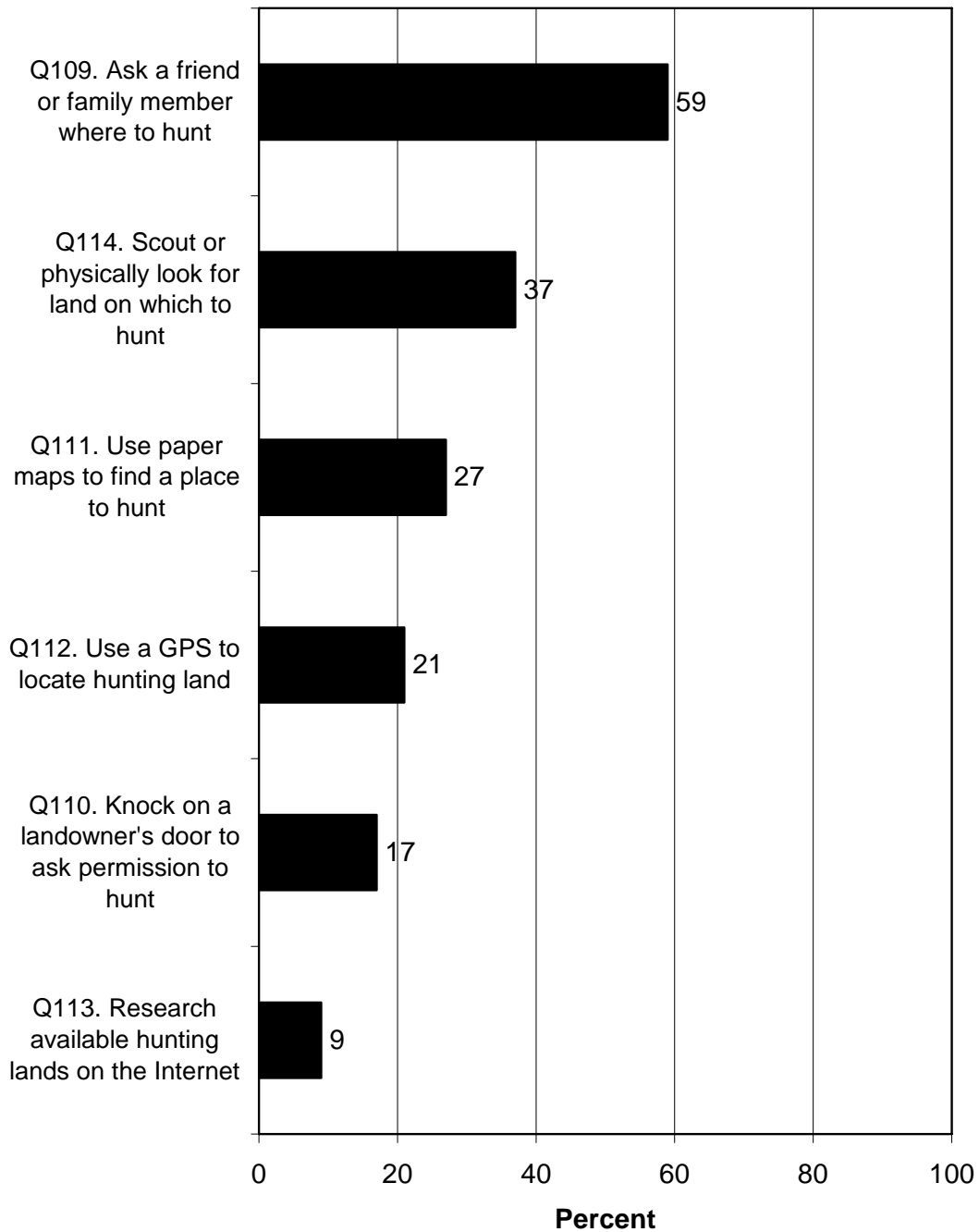
Q236. How would you rate the usefulness of the information on places to hunt and hunting access on the U.S. Forest Service website to you personally in planning your hunting trips in Hawaii? (Asked of those who used the website to look for information on places to hunt and hunting access.)



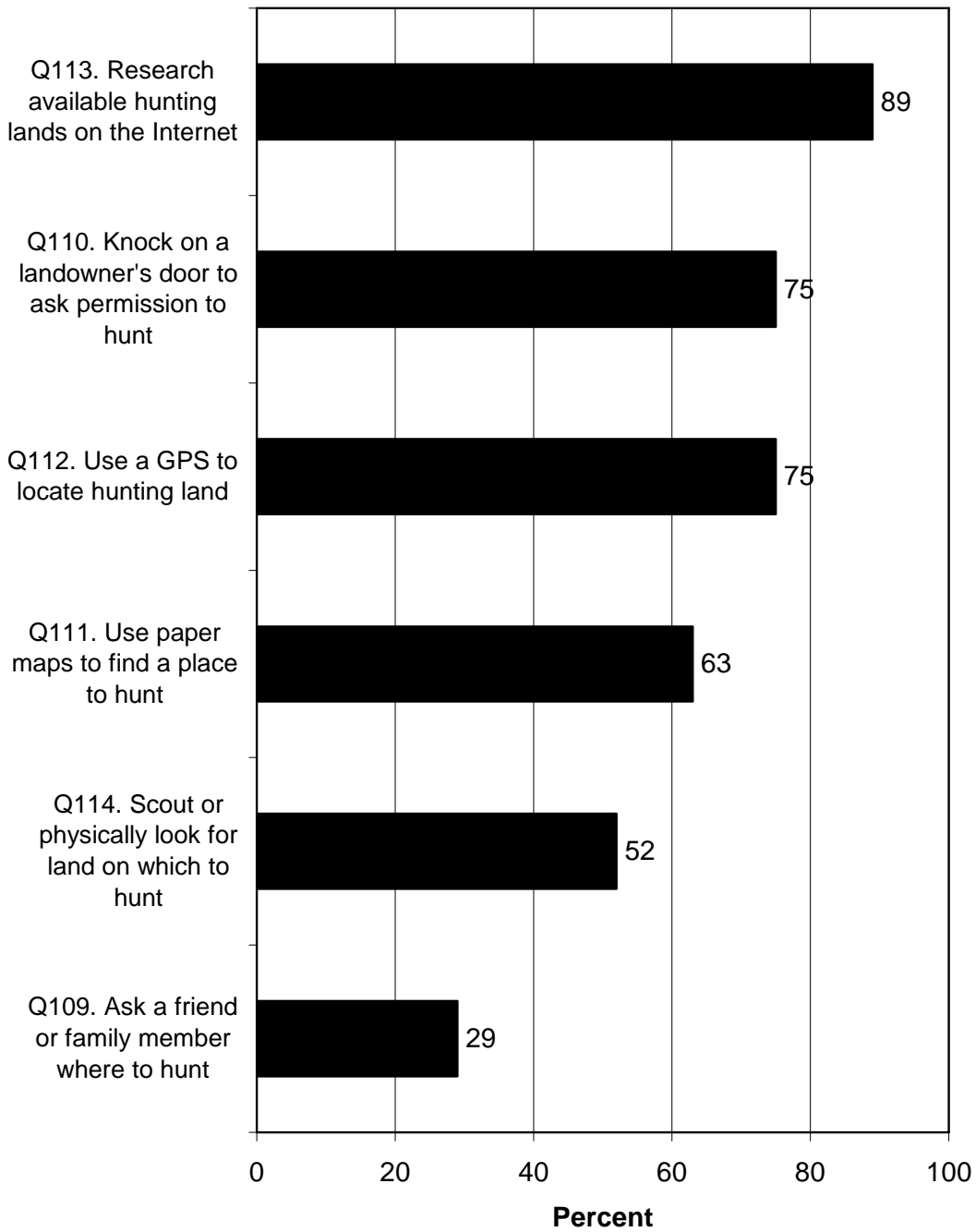
Percent who always do the following when deciding where to hunt (species) in Hawaii.



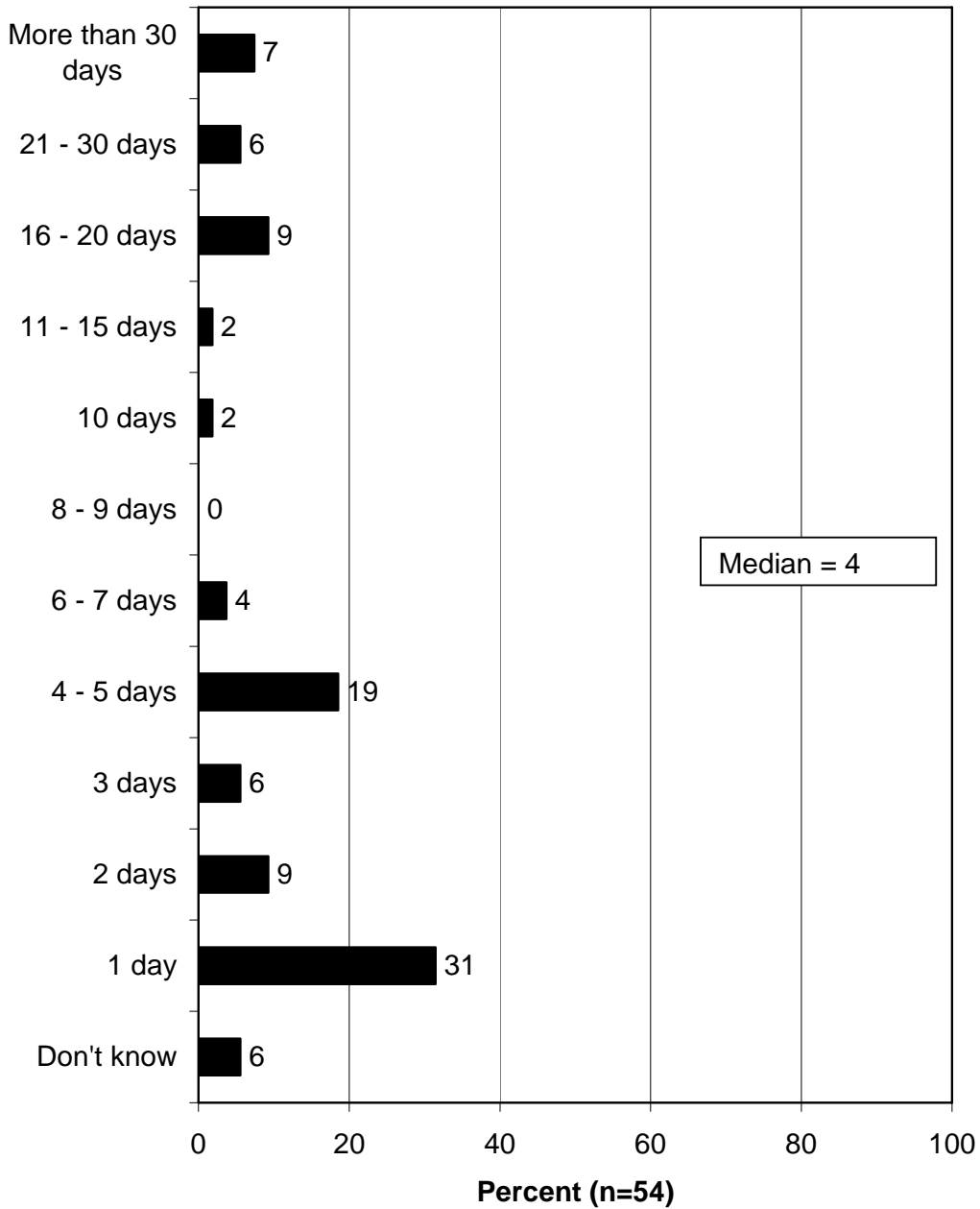
Percent who always or sometimes do the following when deciding where to hunt (species) in Hawaii.



Percent who never do the following when deciding where to hunt (species) in Hawaii.



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



DEMOGRAPHIC DATA

- Most Hawaii hunters in the survey are male (95%).

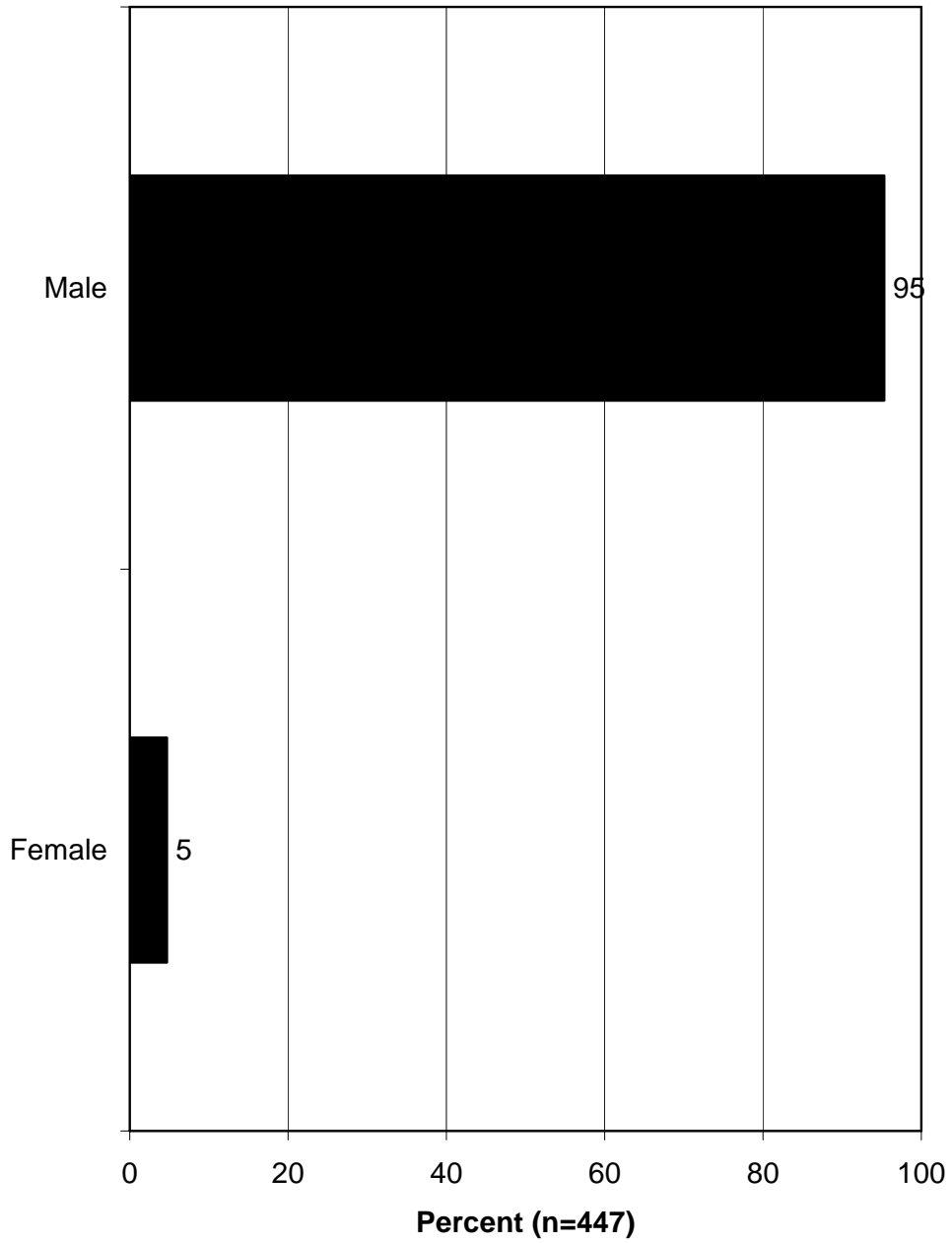
- The ages of Hawaii hunters are shown, which follow a bell-curve skewed to the older age groups. The mean age is 49.8 years old.

- The number of years of residency in Hawaii is shown, with the answers well-distributed. The mean is 43.8 years.

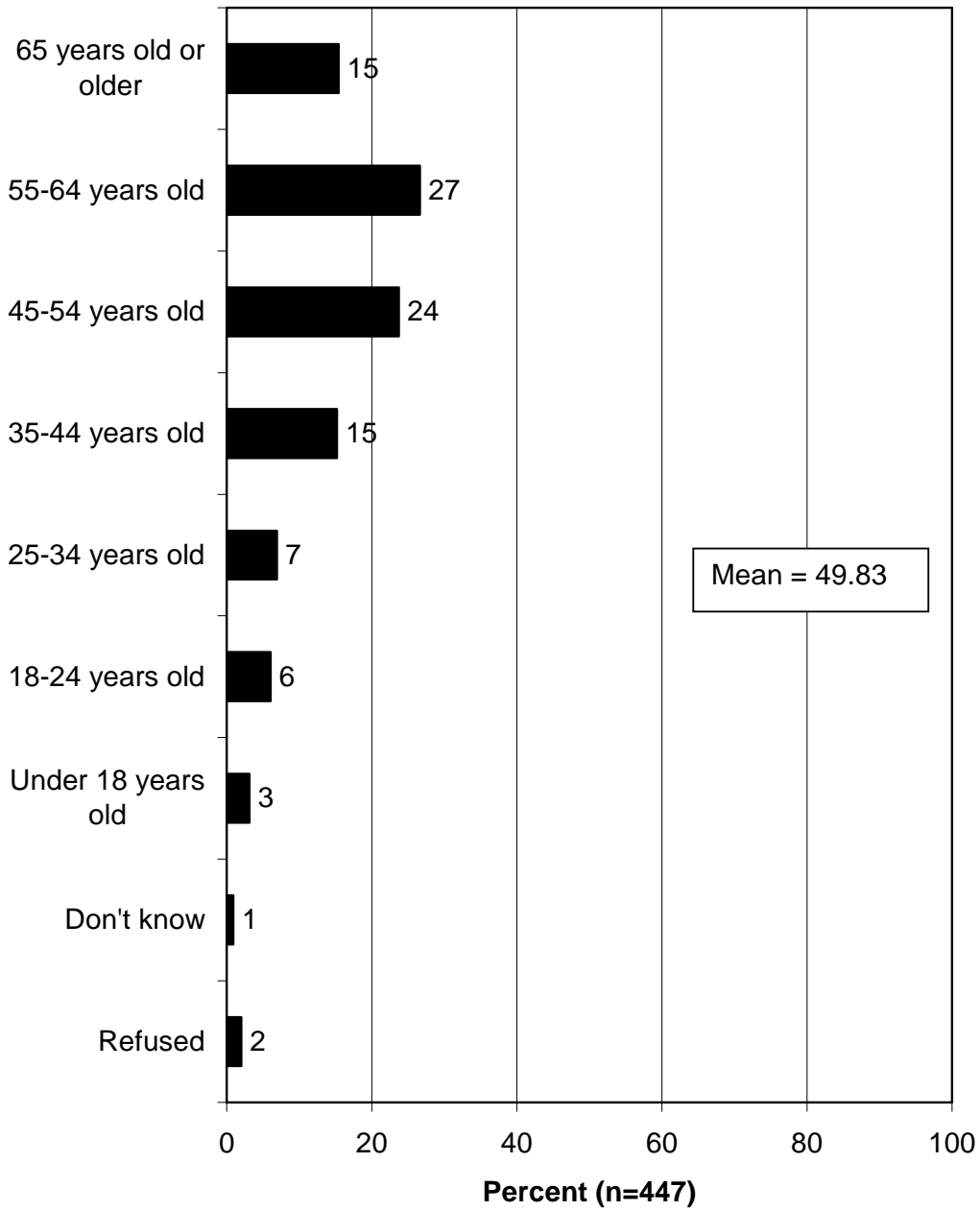
- Hunters in the survey are evenly distributed in thirds: 33% live in a rural area, 33% live in a small city/town, and 32% live in a large city/urban area or a suburban area.

- Educational levels are shown: 65% of Hawaii hunters have some college or trade school coursework (with or without a degree), and 43% have at least an Associate's or trade school degree, with or without a higher degree.

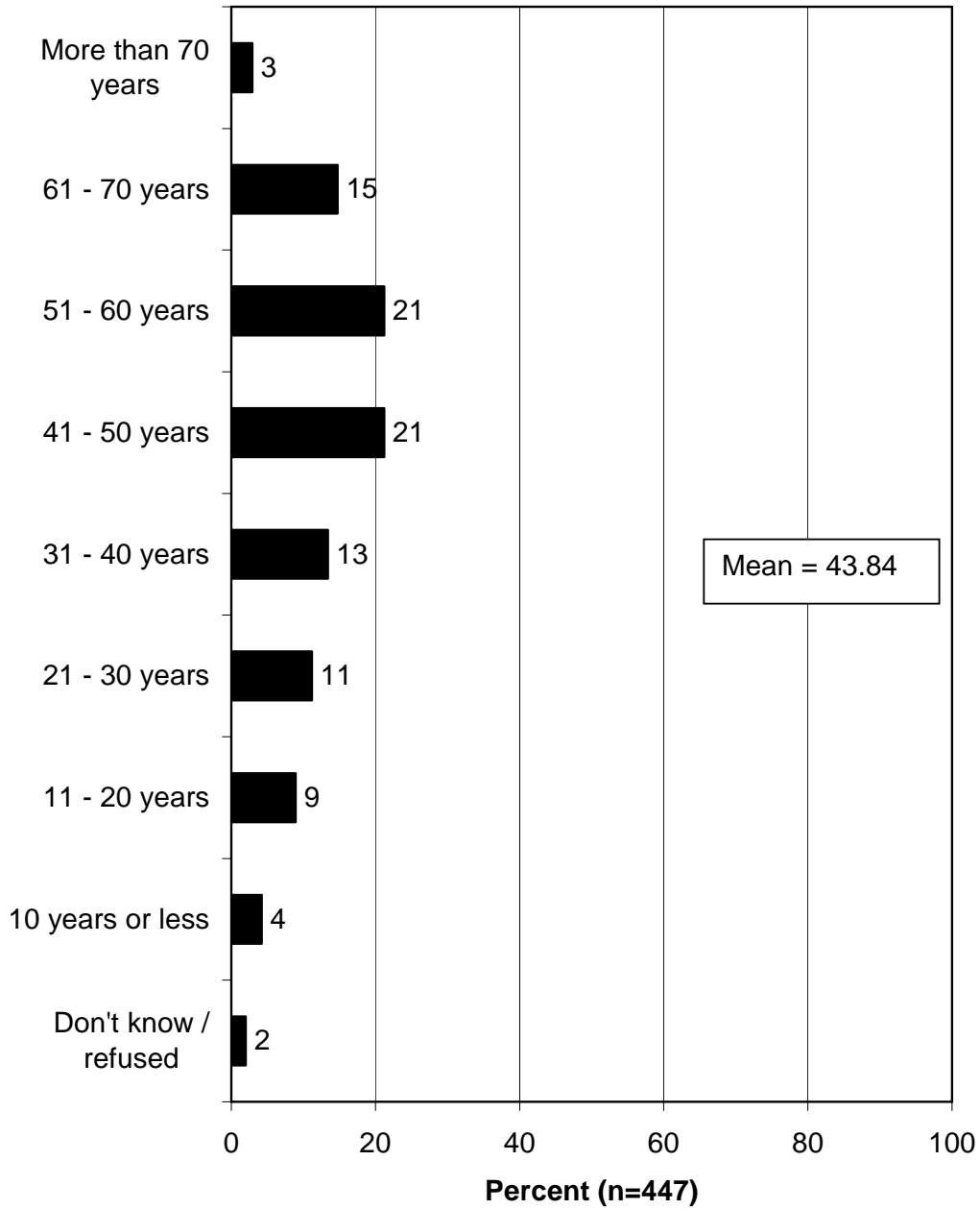
Q248. Respondent's gender (observed, not asked, by interviewer).



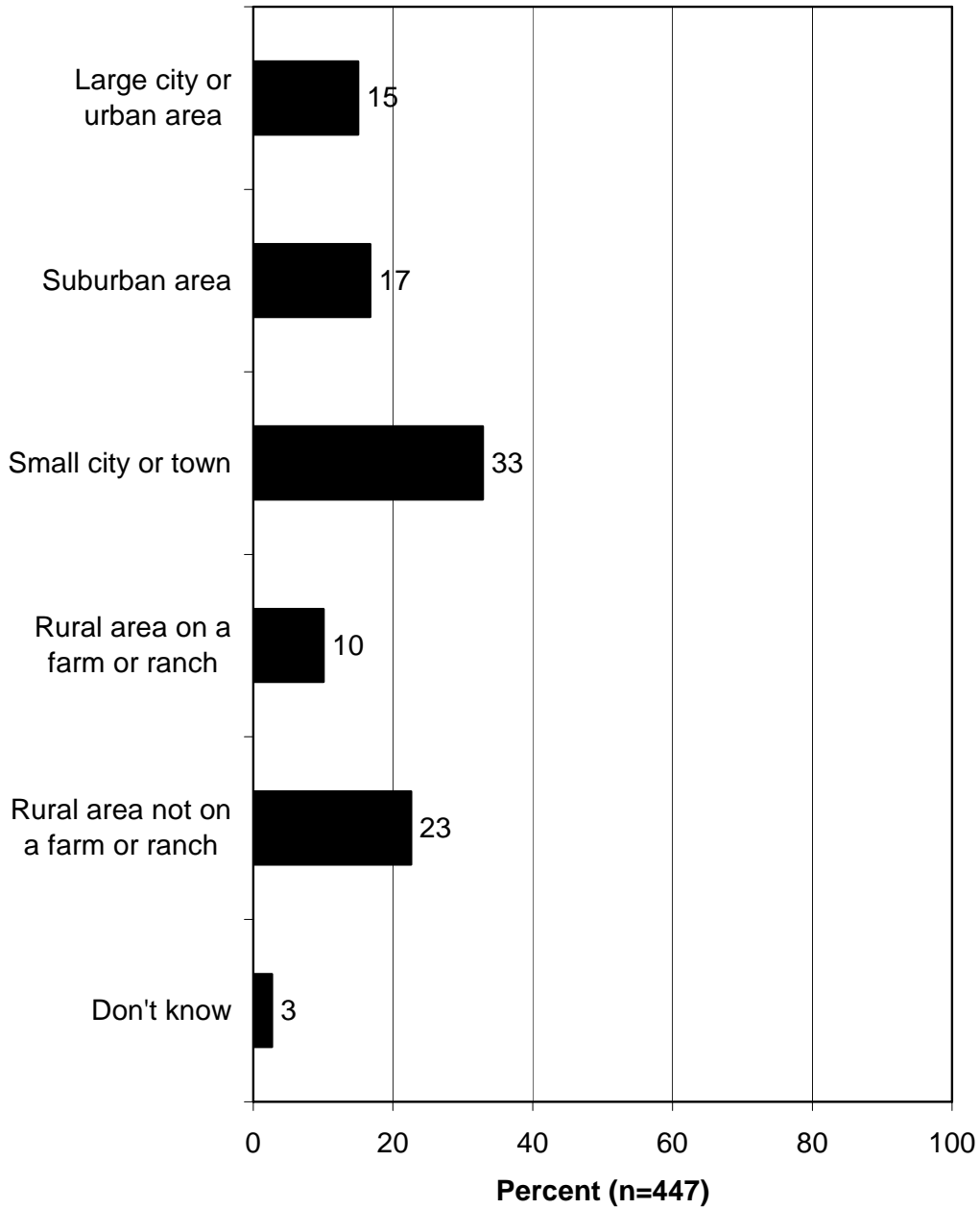
Q242. Respondent's age.



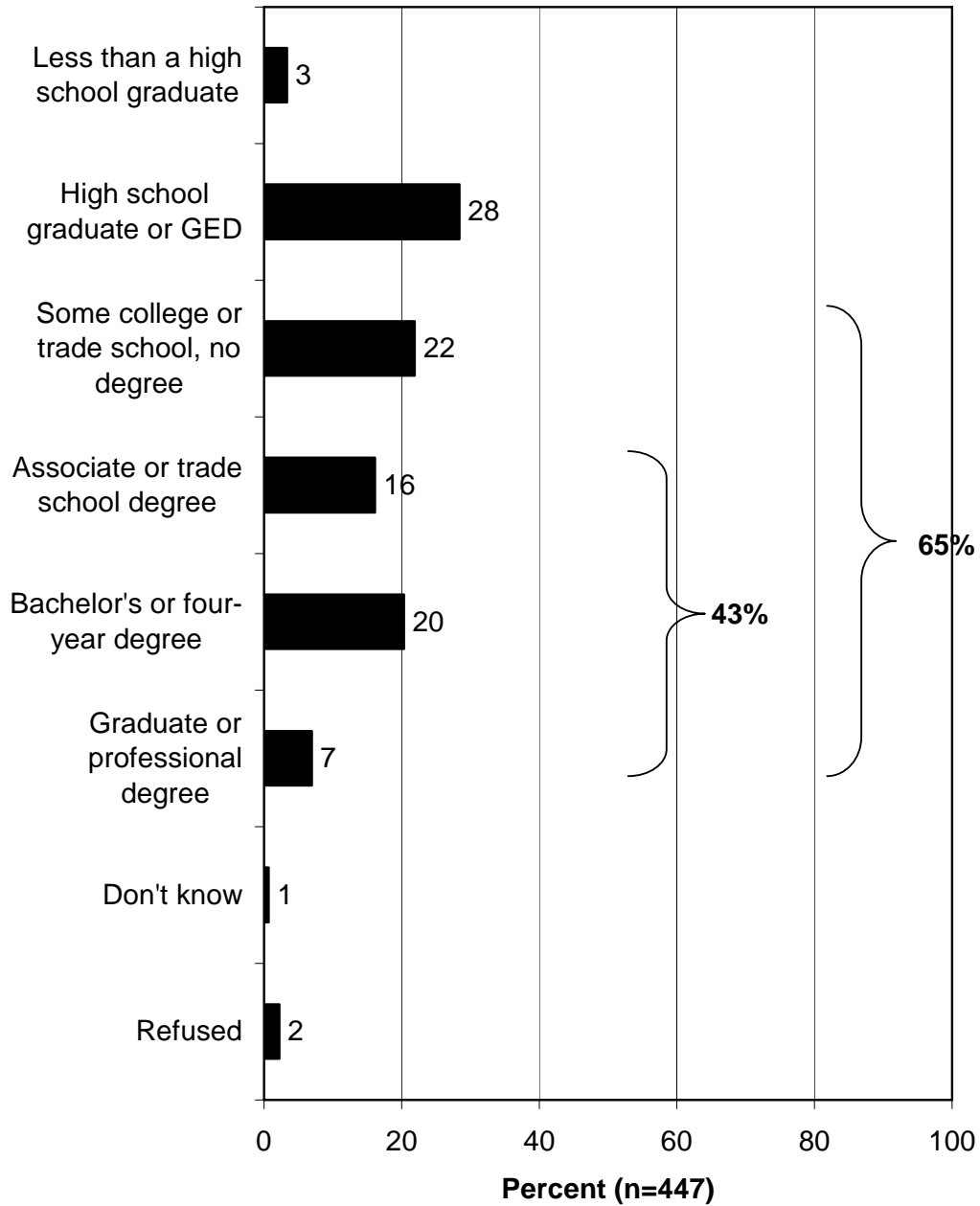
Q238. How many years have you been a resident of Hawaii?



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 NATIONAL HUNTING ACCESS PROGRAMS USED IN HAWAII

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.

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:

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