

Words Matter: Determining How to Engage the American Public Through the Language of Conservation

Final Report

Balance
Future
generations
Conserve
Resources
Wildlife



Coexist
Preserve
Protecting
species
Natural
Healthy
Habitat

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EXECUTIVE OVERVIEW

Given the fact that some words resonate more than others, the terms and phrases used by fish and wildlife professionals to communicate with the public about conservation must be chosen carefully and deliberately. Whereas many of the terms commonly used in agency messages and communications are likely widely understood by the public, others may have limited impact because they are misunderstood or not understood at all.

Focused communications from the fish and wildlife community that incorporate impactful words and resonant messages will lead to greater conservation relevancy among all Americans and stronger connections to the work of state fish and wildlife agencies. The need for such conservation relevancy is underscored by major trends currently underway in the United States, namely changing demographics, changing funding sources for wildlife conservation, and changing wildlife values.

Today, the overall population of the United States continues to rise, along with the populations of urban residents, older residents, minority residents, and immigrant residents.¹ The overall increasing population drives the need for urbanization throughout the country; urbanization, in turn, contributes to a loss of habitat for fish and wildlife and declining access for hunting, fishing, and other outdoor activities. These trends also mean that the proportion of the population that is most likely to hunt and/or fish is getting smaller: data show that urban people hunt and fish less than rural people; older people hunt and fish less often and less avidly than younger and middle-aged people; and minority and immigrant residents, including those identifying as Hispanic, hunt and fish less than those who identify as white or Caucasian.²

Even before these demographic changes, Americans' participation in hunting was declining (despite a notable uptick during the 2020 Covid-19 pandemic). While participation in fishing has been more stable over the years, far more Americans today participate in non-consumptive nature-related activities like wildlife viewing and hiking.³ The upshot is that, while many Americans still take part in nature-related outdoor recreation, they are less likely to do so in the context of hunting or fishing. Yet these activities remain central to the work of state fish and wildlife agencies, especially because a substantial amount of the agencies' funding is derived from hunters' and anglers' purchases of licenses and taxable equipment. This means that, under the current model, diminishing sales of hunting and fishing licenses and equipment may threaten the financial stability of the agencies; as a result, states may be increasingly obligated to explore funding mechanisms that involve support from non-hunters and non-anglers.

¹ See "Demographic Turning Points for the United States: Population Projections for 2020 to 2060" from the U.S. Census Bureau. Accessed December 21, 2021: <https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf>.

² Duda, M.D.; M.F. Jones; and A. Criscione. 2010. *The Sportsman's Voice: Hunting and Fishing in America*. Venture Publishing, PA.

³ Trends in hunting, fishing, and wildlife viewing participation are documented in the ongoing *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, conducted by the U.S. Fish and Wildlife Service and the U.S. Census Bureau. Accessed December 21, 2021: https://www.fws.gov/wsfrprograms/subpages/nationalsurvey/nat_survey2016.pdf. Regarding the increase in hunting participation during the 2020 Covid-19 pandemic, see "The Pandemic Created New Hunters. States Need to Keep Them," from Pew Charitable Trusts. Accessed December 21, 2021: <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2020/12/14/the-pandemic-created-new-hunters-states-need-to-keep-them>.

A related trend concerns the growing ratio of non-hunting sport shooters to hunters in the United States—under the current system of the Federal Aid in Wildlife Restoration Act, or Pittman-Robertson Act, this means that an increasing proportion of the funding for wildlife conservation is coming from non-hunters. The Pittman-Robertson Act was approved by Congress in 1937 to redirect an existing excise tax on sporting arms and ammunition to state wildlife programs. When Pittman-Robertson was enacted, most of the people purchasing firearms and ammunition were hunters—in other words, the people funding wildlife conservation were stakeholders who were presumably knowledgeable about and invested in wildlife management efforts. Today, as hunting continues to decline, firearms and ammunition are increasingly purchased by non-hunters for target shooting, home protection, and other non-hunting purposes.⁴ This suggests a potentially growing disconnect between wildlife agencies and the groups that are helping to fund them. The trend reinforces the pressing need for agencies to communicate effectively with non-consumptive recreationists and other nontraditional constituents.

Americans' changing wildlife values will also affect the ways in which agencies use effective messaging to connect with audiences. Today, traditionalist views about wildlife (the idea that wildlife species exist primarily for human use) are declining, just as mutualistic views (the idea that humans and wildlife should coexist harmoniously) are becoming more common. A national longitudinal study by Colorado State University and Ohio State University identified modernization, including urbanization and increasing levels of income and education, as the main driver of this shift.⁵ As the United States becomes more urbanized and the average citizen has less interaction with wildlife, Americans as a whole may become more protective in how they perceive wildlife—this trend will undoubtedly affect how agencies communicate with Americans about fish and wildlife and other natural resources.

As emphasized in the Association of Fish and Wildlife Agencies' and Wildlife Management Institute's Fish and Wildlife Relevancy Roadmap, effective conservation of fish and wildlife in the United States depends on broader engagement from *all* Americans, not just those who engage in consumptive activities.⁶ Given current overarching trends in the United States related to demographics, wildlife values, and funding sources, it is essential that fish and wildlife agencies and the broader conservation community learn how to connect with Americans through meaningful terminology and messages that resonate.

⁴ Two sources provide data on the changing composition of the wildlife conservation funding base: Duda, M.D.; T. Beppler; D.J. Austen; and J.F. Organ. 2021. The Precarious Position of Wildlife Conservation Funding in the United States, *Human Dimensions of Wildlife*, DOI: 10.1080/10871209.2021.1904307.

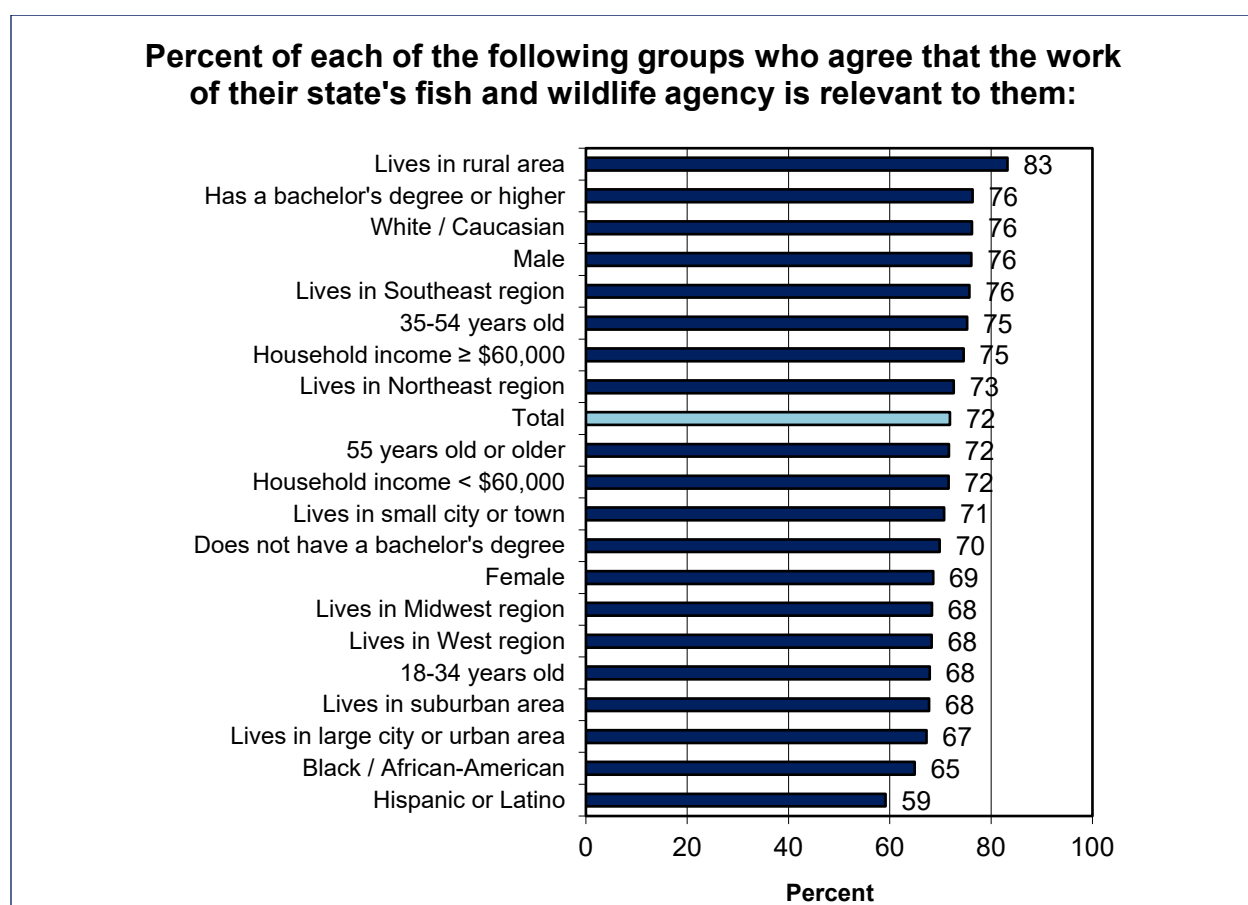
Southwick Associates. 2017. "Proportions of Excise Taxes Generated by Hunting Versus Non-Hunting Activities." Fernandina Beach, FL.

⁵ Manfredo, M.J.; L. Sullivan; A.W. Don Carlos; A.M. Dietsch; T.L. Teel; A.D. Bright; and J. Bruskotter. 2018. "America's Wildlife Values: The Social Context of Wildlife Management in the U.S." National report from the research project titled *America's Wildlife Values*. Fort Collins, CO: Colorado State University, Department of Human Dimension of Natural Resources.

⁶ Association of Fish and Wildlife Agencies and the Wildlife Management Institute. 2019. "Fish and Wildlife Relevancy Roadmap: Enhanced Conservation Through Broader Engagement (v1.0)." M. Dunfee, A. Forstchen, E. Haubold, M. Humpert, J. Newmark, J. Summers, and C. Smith. Washington, D.C. Accessed December 19, 2021: https://www.fishwildlife.org/application/files/2515/7547/9977/Fish_Wildlife_Relevancy_Roadmap_Final_12-04-19-lowres.pdf.

Fortunately, Americans' concern for wildlife, the environment, and conservation can be seen in their voting habits: as a recent example, the Trust for Public Land reports that, in the 2020 election, voters in 11 states approved nearly \$3.7 billion in new funding for land conservation, parks, climate resiliency, and habitat.⁷ Previous elections have shown similarly strong support from voters for conservation-related ballot measures.

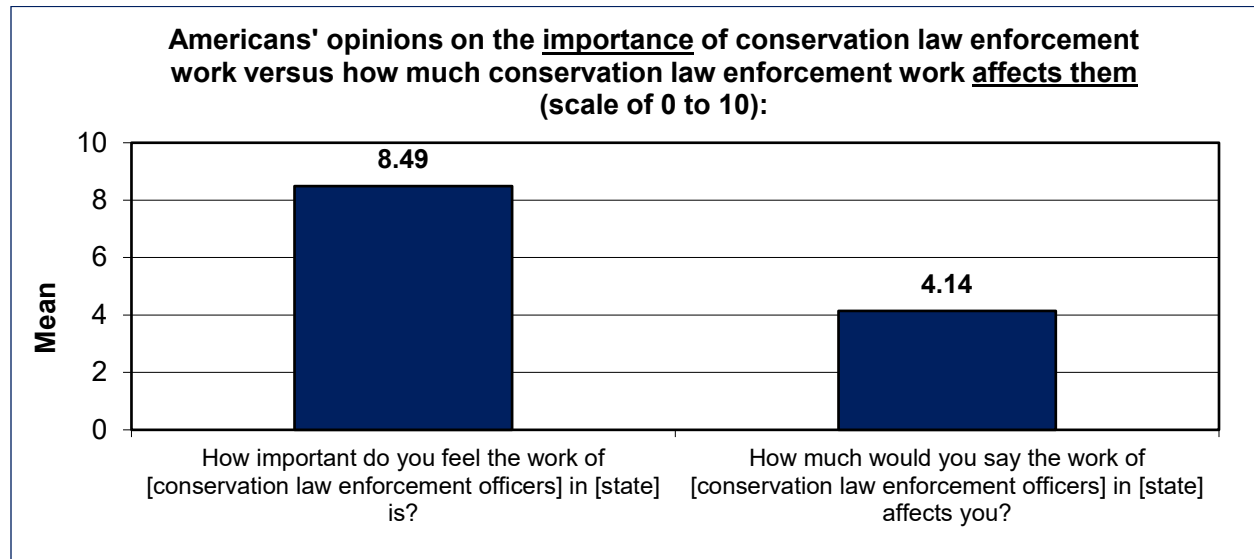
Research also demonstrates that Americans care about the work of fish and wildlife agencies. A 2018 survey⁸ conducted by Responsive Management in partnership with the Recreational Boating and Fishing Foundation found that 3 out of 4 American adults agreed that the work of their state's fish and wildlife agency was relevant to them. Yet demographic analyses indicated that fish and wildlife agencies were more relevant to some groups than others. As shown in the graph below, rural residents, those with a bachelor's degree or higher, white/Caucasian residents, males, and those residing in the Southeast Region of the country were the most likely to agree that the work of their state's fish and wildlife agency was relevant to them. By contrast, the groups *least* likely to agree included Hispanic or Latino residents, Black/African-American residents, and those living in a large city or urban area.



⁷ The Trust for Public Land. Overview of 2020 Ballot Measures. Accessed December 19, 2021: <https://www.tpl.org/2020-conservation-ballot-measures>.

⁸ Responsive Management / Recreational Boating and Fishing Foundation. 2018. *Actionable Strategies for Angler Recruitment, Retention, and Reactivation*. Produced for the U.S. Fish and Wildlife Service under Grant Agreement F18AP00165. Harrisonburg, VA.

It is also sometimes the case that Americans separate the *importance* of the work of fish and wildlife agencies from how much that work *affects* them. A 2020 survey⁹ conducted by Responsive Management in partnership with the National Association of Conservation Law Enforcement Chiefs found that the mean rating among Americans for the *importance* of conservation law enforcement work was 8.49; yet when asked how much conservation law enforcement work affects them, the mean rating fell to 4.14 (see the graph below).



Increasing Americans' conservation relevancy and breaking through to hard-to-reach audiences means using the right words and phrases to make people care. Apart from the public's basic comprehension of conservation terminology, specific terms can be used to frame and define concepts in ways that affect perceptions of the concepts themselves. For example, in the recent book *How to Talk About Hunting: Research-Based Communications Strategies*, Responsive Management presented several examples of such competing terms:

- "Illegal alien" versus "undocumented worker": These examples show how carefully chosen adjectives can be used to emphasize certain traits or details.
- "Death tax" versus "estate tax": In these examples, the concept in question is alternately framed as applying to everyone versus only a subset of people.
- "Gun control laws" versus "gun safety laws": Here, the alternating framing of the concept suggests that the matter is one of either restriction or societal imperative.
- "Assault rifle" versus "modern sporting rifle": The first of the two terms here shows the deliberate choice to include a word evocative of violent conflict ("assault").
- "Trophy hunting" versus "hunting for meat": As research has shown that Americans are far more likely to approve of hunting for meat than hunting for a trophy, opponents of hunting will often try to define all hunting as trophy hunting specifically, precisely because of the polarizing nature of the word "trophy."

⁹ Responsive Management / National Association of Conservation Law Enforcement Chiefs / University of Wisconsin–Stevens Point. 2021. *Planning for the Future of Conservation Law Enforcement in the United States*. Produced for the U.S. Fish and Wildlife Service under Grant Agreement F19AP00113. Harrisonburg, VA.

As another example, pollster Frank Luntz has published an entire book, *Words That Work*, on why some words resonate more than others.¹⁰ Among the terms Luntz discusses are “lifestyle” (useful to marketers as a “self-defined, aspirational” concept), “investment” (which may imply a wise use of resources), “efficient” (the idea of getting more with less), and “independent” (the state of being without restriction, a term applicable to many different contexts).

Other instructive examples come from an ongoing environmental communications project sponsored by The Nature Conservancy.¹¹ This study highlights the importance of evoking residents’ “pride of place” by focusing on conservation work at the local or state level. The researchers also note the importance of presenting conservation work as a matter of “urgency” but not “doom and gloom,” as well as using “concrete and specific” language that nonetheless avoids getting mired in unnecessary detail. Finally, the study offers a rundown of “bad words to avoid” and “good words to use” in order to reach the widest possible audience:

Bad Words to Avoid	Good Words to Use
Environment	Land, air, and water
Ecosystems	Natural areas
Biodiversity / endangered species	Fish and wildlife
Regulations	Safeguards / protections
Riparian	Land along lakes, rivers and streams
Aquifer	Groundwater
Watershed	Land around rivers, lakes and streams
Environmental groups	Conservation groups / organizations protecting land, air, and water
Agricultural land	Working farms and ranches
Urban sprawl	Poorly planned growth / development
Green jobs	Clean energy jobs / jobs protecting water quality / etc.
Ecosystem services	Nature’s benefits
Landscape-scale conservation	Large, connected natural areas
Landscape	Lands / mountains / etc.
Resilience	Creating prepared communities (for flood, fire, etc.)
Nutrient loading	Harmful levels of nutrients like nitrogen and phosphorous

To determine how to effectively engage the American public through the language of conservation, the Association of Fish and Wildlife Agencies (AFWA) has awarded this Multistate Conservation Grant to the Wildlife Management Institute, in a partnership with Wildlife Conservation Partners and Responsive Management. The overarching goal of this project is to determine which specific terms, themes, and concepts are most understood by the public and generate the greatest return on investment in terms of building support for the work of fish and wildlife agencies.

¹⁰ Luntz, F. 2006. *Words That Work: It’s Not What You Say, It’s What People Hear*. Hachette Book Group, New York, NY.

¹¹ The Nature Conservancy. 2018. *The Language of Conservation: Updated Recommendations on How to Communicate Effectively to Build Support for Conservation*. Study conducted by Lori Weigel (Public Opinion Strategies) and Dave Metz (Fairbank, Maslin, Maulin, Metz & Associates). Accessed December 16, 2021: https://www.fishwildlife.org/application/files/9315/4082/5043/2018_Language_of_Conversation_Memo.pdf.

PROJECT METHODS

This project consisted of the following phases:

- **An inventory of the language currently used to communicate with the public about conservation:** The initial language inventory was implemented to identify recurring words and phrases used in public communication and outreach material. The research team analyzed the wording in state fish and wildlife agency mission statements, supplemental materials from the agencies (e.g., annual reports, news items, educational items, social media posts), and material from prominent nongovernmental conservation organizations (e.g., Ducks Unlimited, the Rocky Mountain Elk Foundation, Trout Unlimited, the Recreational Boating and Fishing Foundation, the National Wild Turkey Federation). The language inventory resulted in a comprehensive list of conservation terms and phrases.
- **Qualitative research with U.S. residents:** To explore reactions to and opinions on the various conservation terms and phrases in an open-ended manner, the research team conducted a series of focus groups with U.S. general population residents from each of the four major AFWA regions (one group per region); a fifth group was conducted solely with hunters and anglers from across the four regions. The focus groups were conducted online and entailed in-depth, structured discussions with small groups of individuals about their opinions on the conservation terminology identified through the language inventory, as well as related fish and wildlife management topics.
- **Quantitative research with U.S. residents:** Using the insights gained through the focus groups, the study partners designed and administered a multi-modal survey of the adult general U.S. population. This survey was conducted with a scientific, probability-based telephone survey component and an online component, with a total sample size of 2,127 completed interviews (including at least 500 completed interviews in each of the four major AFWA regions). The results of this nationwide survey are presented in this report (results from the focus groups were presented in a separate earlier report, which is included in Appendix B).

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. For the general population survey, results were weighted by age, gender, race/ethnicity, and region to ensure that the sample was representative of adult residents within each region and nationwide. Similarly, results of the oversamples of Black/African American residents and Hispanic/Latino residents were weighted by age, gender, and region to ensure that these populations were represented within each region and nationwide in their proper proportions.

Survey results were examined at the national and regional levels and by various demographic and participatory characteristics. Additionally, the results were analyzed by the wildlife values orientations of respondents—the latter analysis used a typology developed by researchers at Colorado State University,¹² in which Americans are categorized into one of four orientations based on their beliefs about fish and wildlife management:

- **Traditionalists** believe wildlife should be used and managed for human benefit.
- **Mutualists** believe wildlife share a social network with humans and that humans and wildlife should live in harmony.
- **Pluralists** prioritize these values differently depending on the specific context.
- **Distanced** typically believe that wildlife-related issues are less salient to them.

KEY TAKEAWAYS

Fish and wildlife agencies should communicate how their conservation work relates to and affects water quality and the health of rivers, lakes, and streams. Whenever possible, the work of fish and wildlife agencies should be linked to water quality and the health of water resources. Ample research by Responsive Management over the years has identified water quality and water resource protection to be among the top environmental issues of concern to Americans. For instance, in a Responsive Management survey¹³ of residents in the southeastern United States, 92% of respondents rated protecting water resources as very important. Similarly, the Nature Conservancy’s ongoing “Language of Conservation” study¹⁴ emphasizes that water should always be communicated as the primary element or impact of a conservation project. In a 2020 survey,¹⁵ the Pew Research Center found that two-thirds of Americans believe the federal government is doing too little to protect the water quality of lakes, rivers, and streams.

Results from the nationwide survey of U.S. residents conducted for this research study provide the latest evidence of the importance of water quality issues to Americans. In the survey, respondents were asked to rate the importance of 55 items that used various combinations of words and phrases to describe the work of fish and wildlife agencies. For example, some items referred to the word “habitat” while others used the phrasing “the places where wild animals, birds, and fish live.” In the overall ranking of the most important agency efforts, the top three items all relate to water quality: making sure waters are clean (mean rating of 9.0 among Americans overall on a 0 to 10 scale), helping protect the sources of our drinking water (mean

¹² Manfredo, M.J.; L. Sullivan; A.W. Don Carlos; A.M. Dietsch; T.L. Teel; A.D. Bright; and J. Bruskotter. 2018. “America’s Wildlife Values: The Social Context of Wildlife Management in the U.S.” National report from the research project titled *America’s Wildlife Values*. Fort Collins, CO: Colorado State University, Department of Human Dimension of Natural Resources.

¹³ Responsive Management. 2005. *Public Opinion on Fish and Wildlife Management Issues and the Reputation and Credibility of Fish and Wildlife Agencies in the Southeastern United States: Southeastern Region Report*. Study conducted for the Southeastern Association of Fish and Wildlife Agencies. Harrisonburg, VA.

¹⁴ The Nature Conservancy. 2018. *The Language of Conservation: Updated Recommendations on How to Communicate Effectively to Build Support for Conservation*. Study conducted by Lori Weigel (Public Opinion Strategies) and Dave Metz (Fairbank, Maslin, Maulin, Metz & Associates). Accessed December 16, 2021: https://www.fishwildlife.org/application/files/9315/4082/5043/2018_Language_of_Conversation_Memo.pdf.

¹⁵ Pew Research Center. 2020. “Two-thirds of Americans think government should do more on climate.” Accessed December 16, 2021: <https://www.pewresearch.org/science/2020/06/23/two-thirds-of-americans-think-government-should-do-more-on-climate/>.

rating of 9.0), and protecting lakes, rivers, and streams (mean rating of 8.9). These water quality-related items were seen as more important than efforts relating to habitat protection, wildlife disease, public education, enforcement of recreationists, and numerous other agency activities.

It should also be noted that water *quantity* issues do not appear to be as important as water *quality* issues: in the survey, “lack of water quantity” and “not enough water” had lower ratings than “water pollution,” “bad water quality in the oceans,” and “bad water quality in streams and rivers” in terms of potential issues affecting fish and wildlife in the United States.

Even though many water quality programs in the United States are administered at the federal level rather than by state agencies, state fish and wildlife agencies should still endeavor to reinforce the link between water resources and the health of both fish and wildlife and people—doing so will help to build awareness of and support for state conservation efforts in general.

Key conservation messages should be phrased as simply and unambiguously as possible.

According to the U.S. Department of Education,¹⁶ one in five American adults (about 43 million individuals) have low literacy skills. With this in mind, it is interesting to consider that many of the agency activities that received the highest importance ratings in the survey were phrased using relatively simple words (for example, “making sure waters are clean,” “making sure wildlife is healthy,” and “protecting the places where wild animals, birds, and fish live”). By contrast, the activity “perpetuating species” was ranked much lower among U.S. residents (“perpetuating” being a potentially unfamiliar or vague word to some people). Messages that employ simple, plain language are the most likely to resonate with a wide audience.

Fish and wildlife agencies should embrace the word “protect” when communicating about fish and wildlife and conservation. In the importance ranking of 55 different phrases denoting various agency actions and activities, 5 of the top 10 highest ranked items use the word “protect”: “helping protect the sources of our drinking water”; “protecting lakes, rivers, and streams”; “protecting natural resources”; “protecting the places where wild animals, birds, and fish live”; and “protecting species.”

Additionally, when people are asked to describe in their own words what they see as the most important duties or functions of their state fish and wildlife agency, they use the word “protect” far more often than words like “conserve,” “manage,” or other terms routinely used by agencies and conservation organizations. Another question in the survey asked respondents whether it is more important for fish and wildlife in the United States to be “protected” or “managed”; while most people say both are equally important, they are otherwise about twice as likely to say “protecting” fish and wildlife is more important than “managing” them.

The groups most likely to think that fish and wildlife should be “protected” rather than “managed” include Mutualists (i.e., those believing that humans and wildlife should coexist

¹⁶ U.S. Department of Education. 2019. “Adult Literacy in the United States.” Accessed December 16, 2021: <https://nces.ed.gov/pubs2019/2019179.pdf>.

harmoniously), Hispanic or Latino residents, younger residents (i.e., those between the ages of 18 and 34 years old), and Democrats or left-leaning Independents.

Conversely, the groups most likely to think that fish and wildlife should be “managed” rather than “protected” include hunters, Traditionalists (i.e., those believing that wildlife should be used and managed for human benefit), motorboaters, those holding the Distanced wildlife value (i.e., people without a strong connection to wildlife issues), and males.

Some fish and wildlife professionals may feel that the term “protect” has a restrictive connotation (for example, “protected” species that cannot be hunted or “protected” areas that cannot be accessed). There may also be a perception in the conservation community that agencies “manage” and/or “conserve” fish and wildlife more than they “protect” them (the concept of “protection” of wildlife is perhaps more often associated with animal rights interests). However, the truth is that fish and wildlife agencies are substantially involved in various protective efforts, such as the protection of habitat, the protection of fish and wildlife populations, and protection of people in terms of the public safety efforts of conservation law enforcement officers. Agencies should not shy away from the word “protection,” as the results of this study make clear that Americans see “protection” (in its various forms) as a key function of state fish and wildlife agencies.

Certain terms and phrases may give the impression of an overly controlling approach to fish and wildlife management, which may alienate some audiences. The qualitative research for this study suggests that a certain segment of the population is resistant to the idea of humans “meddling” in the natural world or exerting an undue amount of control over fish and wildlife populations. The effect of this belief may also be evident in the survey results: for example, the agency activity “controlling species populations” had a lower importance rating than items like “protecting wild animals” and “conserving fish and wildlife” (the term “control” perhaps suggesting a dominionistic or forceful approach to fish and wildlife management). In other cases, survey items that had similar meanings sometimes resulted in varying importance ratings, possibly due to the different implications created by the alternative phrasings: for example, the item “working on behalf of endangered species” received a higher importance rating than “reintroducing species that are locally extinct”—this may be because the latter phrase implies (for some people) a greater degree of human control over wildlife.

The term “healthy” resonates well in conservation messages. Previous Responsive Management research¹⁷ has suggested the effectiveness of the term “healthy” when used in the context of the major benefits provided by fish and wildlife agencies (for example, “healthy habitat,” “healthy wildlife,” and “healthy people”). In this study, the item “making sure wildlife is healthy” ranked highly in importance as an agency activity, and “that fish and wildlife species in your state are healthy” ranked highly as a general conservation value.

¹⁷ Responsive Management and Mile Creek Communications. 2016. *Marketing, Communications, and Public Relations Plan for the Maine Department of Inland Fisheries and Wildlife, Division of Information & Education*. Produced for the Maine Department of Inland Fisheries and Wildlife. Harrisonburg, VA.

The adjectives “safe” and “clean” are often used by Americans when describing the benefits provided by state fish and wildlife agencies. “Safe” and “clean” are two more examples of simple words with wide-ranging applications. In describing what they see as the most important duties or functions of their state fish and wildlife agency, Americans commonly say that the agency provides “safe outdoor recreation,” “clean waterways,” “clean parks and trails,” and other variations using these two key terms. Notably, many of the adjectives identified in the initial language inventory as being commonly used by the agencies (e.g., “abundant,” “sustainable”) were rarely used by residents in their comments on agency work.

To build support for solutions to conservation problems, focus on what may be “lost.” “Loss” is another example of a simple, widely understood word with the ability to immediately connect with audiences. The survey for this project asked respondents to rate 22 different potential problems affecting fish and wildlife on a scale of 0 to 10, where 0 meant not a problem at all and 10 meant an extreme problem. The top half of the ranking based on the mean ratings is dominated by items using the word “loss”: “loss of habitat from development,” “loss of forest lands,” “loss of wetlands,” “loss of land from development,” “loss of pollinators,” and “loss of grasslands.” The term “loss” evokes the idea of irrevocability or the possibility that something may never return or exist again, perhaps creating a sense of urgency that is not felt with terms like “decrease” or “diminish.” In this sense, agency efforts should be framed in terms of their ability to prevent the “loss” of natural resources or opportunities.

Conservation messages will be more effective when focused on key outcomes rather than the process of “scientific management.” Fish and wildlife agencies routinely stress the fact that their work is guided by science. However, communications aimed at the general public may be most impactful when they focus on the actual benefits and results of agencies’ work. A series of questions in the survey that asked respondents to rate the importance of various conservation and recreational values found that the highest ratings were for items that described clear outcomes: “that wilderness areas exist,” “that fish and wildlife in your state are healthy,” and “having public lands for recreation.” By contrast, “that the agency uses scientific practices” and “that the agency practices scientific fish and wildlife management” had lower ratings. It may be the case that terms like “scientific practices” and “scientific management” have ambiguous meanings or implications depending on the audience, whereas clearly described benefits or outcomes reduce the risk of misinterpretation (as well, the impact of the terms “science” and “scientific” may have been diluted in recent years due to overuse and/or misuse). This finding also relates to the difference between the *means* and the *ends* of fish and wildlife management: consider that the average person may more easily relate to the results of the agency’s efforts (e.g., a healthy environment, open spaces for recreation, stable wildlife populations) than the specific processes used to achieve those results.

Agencies should use the phrase “responsible recreation” when communicating about hunting, fishing, and other activities. In the survey, the phrase with the greatest positive reaction from a large majority of Americans was “responsible recreation.” One of the major benefits of this phrase is that it is encompassing of many different nature-related activities, from hunting, fishing, and sport shooting to activities on the water (such as boating, canoeing, and kayaking) to more general activities like hiking, camping, and wildlife viewing.

The inclusion of the word “responsible” serves to enjoin all types of recreationists as equal stakeholders of state natural resources and thus encourages ethical behavior, no matter the activity. It is also important to note that many phrases relating explicitly to hunting and consumptive activities (“hunters harvesting game,” “sportsmen,” “hunting heritage,” etc.) had the greatest *negative* reactions in the survey (although many people had neutral reactions to these as well). The implication is that agency messages that address the full range of potential recreationists may be better received than those that place too much emphasis on hunting and hunters.

Terms that evoke shared resources, such as “future generations,” “coexist,” and “balance,” appear to resonate well with general audiences. Each of these three terms had positive reactions from a majority of Americans in the survey, and each would be adaptable to messages conveying the key functions of state fish and wildlife agencies.

Most Americans feel it is equally important that fish and wildlife in the United States be “conserved” and “preserved.” While these two terms have different meanings and implications, the important takeaway is that a majority of Americans perceive conservation and preservation as being equally important. (The percentages saying that one or the other term is more important are comparable, with 16% saying it is more important that fish and wildlife be *conserved* and 13% saying it is more important that they be *preserved*). Even though agencies may use the two terms differently to refer to separate concepts, it is worth keeping in mind that the differences may be lost on many people.

Among the least important things for agencies to communicate with the public about are the economic benefits associated with fish and wildlife. At the very bottom of the importance ranking of 55 different fish and wildlife agency activities are two items pertaining to economic benefits: “helping the state get economic benefits from outdoor recreationists” and “helping the state get economic benefits from tourism related to fish and wildlife.” While the economic benefits of fish and wildlife and related outdoor recreation may be highly important to certain target markets, such as state legislators, this topic does not appear to be highly compelling to the general public as a key focus of the work of the agencies.

In general, there do not appear to be any conservation words or phrases that a significant percentage of Americans feel are overused. More than 4 out of 5 Americans say they cannot think of any words or phrases related to fish and wildlife conservation that are used too much.

Most Americans believe that, in order to thrive, fish and wildlife need some management but should otherwise be left alone. On the other hand, 1 in 4 Americans think that fish and wildlife need to be *actively managed*, whereas 1 in 10 think that, in order to thrive, fish and wildlife simply need to be left alone. The latter belief is most common among Mutualists, Hispanic/Latinos, and 18-34-year-olds (note that prior research¹⁸ indicates that the proportions of both Mutualists and Hispanic/Latino residents are on the rise in the United States).

¹⁸ Manfredo, M.J.; L. Sullivan; A.W. Don Carlos; A.M. Dietsch; T.L. Teel; A.D. Bright; and J. Bruskotter. 2018. “America’s Wildlife Values: The Social Context of Wildlife Management in the U.S.” National report from the research project titled *America’s Wildlife Values*. Fort Collins, CO: Colorado State University, Department of Human Dimension of Natural Resources.

The key takeaway here is that, in some cases, fish and wildlife professionals may be obligated to explain the need for active management of fish and wildlife (or, at least, a level of management by humans that goes beyond simply leaving fish and wildlife alone altogether). Again, it is useful to keep in mind the strong impulse for “protecting” wildlife that many Americans seem to have—an effective communications strategy may be to link the concept of protection with management (i.e., by actively managing fish and wildlife, the agencies are helping to protect the species as a whole).

Many people do not know the difference between “game” and “nongame” wildlife; in fact, more people *think* they know the meanings of the two terms than actually do. Fish and wildlife agency communications and publications are often full of references to “game” and “nongame” wildlife, but agencies should not assume that general audiences know the meanings of the two terms. The survey for this project found that more than half of all Americans think they know the difference between “game” and “nongame” wildlife but, when tested on the definitions, only about a third actually do. The most common misperceptions regarding “game” and “nongame” wildlife are that the terms refer to whether animals can be eaten or not, or whether animals are domesticated or not.

The groups least likely to know the definitions of “game” and “nongame” wildlife include those holding the Distanced wildlife value orientation, those who do not participate in wildlife-related outdoor recreation, Black or African-American residents, Hispanic or Latino residents, females, and people between the ages of 18 and 34 years old. Fish and wildlife agency personnel should be mindful of the need to clarify the difference between “game” and “nongame” wildlife when communicating with general audiences.

Conservation messages that include the words “we” and “our” will be more effective with some audiences than others. Three variations on a basic conservation message were examined in the research: one variation presented the message in a general sense (“Fish and wildlife resources in the United States must be safeguarded for future generations”), another incorporated the use of “we” and “our” in the message framing (“We must safeguard *our* fish and wildlife resources for future generations”), and the third used “we” and “our” while also specifying “our kids and grandkids” as the beneficiaries instead of “future generations” (“We must safeguard *our* fish and wildlife resources for *our kids and grandkids*”). Among Americans as a whole, all three messages were highly rated, with little differences between the overall ratings. However, some groups show a clear preference for one of the three messages:

The message, “Fish and wildlife resources in the United States must be safeguarded for future generations,” was preferred by females, those between the ages of 35 and 54 years old, Hispanic/Latino residents, those with an education level of less than a bachelor’s degree, those identifying as politically independent or in the middle, Mutualists, Northeast Region residents, West Region residents, campers, and residents of small cities/towns.

The message, “We must safeguard our fish and wildlife resources for future generations,” was preferred by those 55 years old and older, those holding the Distanced wildlife value orientation, and hikers.

Finally, the message, “We must safeguard our fish and wildlife resources for our kids and grandkids,” was preferred by residents of the Midwest Region, anglers, motorboaters, canoeists/kayakers/rafters, and residents of rural areas.

Specificity with population numbers will help to increase concern about imperiled species. A recent study¹⁹ by researchers at Cornell University found that terms like “critically endangered,” “endangered,” and “vulnerable” are less effective in generating concern from the public than messages that specify the number of individual animals of a species remaining—in other words, messages that eschew potentially unclear scientific descriptors in favor of a key indicator of population status.

The recommendation from the Cornell study was tested in the survey of Americans conducted for this project in two different series of questions that measured concern about the Florida panther and the black-footed ferret. Respondents randomly received one of two variations on the questions: in one variation, respondents were told that the species were currently listed as endangered; in the other variation, respondents were informed of the specific number of animals estimated to be remaining in the populations of each species (between 120 and 230 remaining adult Florida panthers, and between 200 and 300 remaining black-footed ferrets). In both scenarios, the information regarding the specific number of animals remaining correlated with an increase in the percentage of respondents who indicated being *extremely* concerned (as opposed to *very*, *somewhat*, or *not at all* concerned). (Note, however, that there was essentially no difference in the percentage of respondents in each scenario who indicated being *not at all* concerned.)

Residents may be more likely to approve of controversial activities like trapping if they know that such activities are sanctioned by their state fish and wildlife agency. Previous Responsive Management research²⁰ has highlighted the importance of framing regulated trapping as a *sanctioned, scientific solution* to wildlife management: trapping is sanctioned in that it is supported by the agency, scientific in that it is based on population estimates set by scientists, and a solution to a wildlife management problem. The effect of this wording on approval of regulated trapping was tested in the survey conducted for this project, with respondents randomly receiving one of two questions below:

- In general, do you approve or disapprove of regulated trapping?
- Regulated trapping is sanctioned by fish and wildlife agencies as a scientific solution to help control wildlife populations in certain areas. Do you approve or disapprove of regulated trapping?

¹⁹ Cornell University. 2016. “In communicating wildlife conservation, focus on the right message.” ScienceDaily. Accessed December 16, 2021: www.sciencedaily.com/releases/2016/10/161031133844.htm.

²⁰ Responsive Management. 2001. *Attitudes Toward and Awareness of Trapping Issues in Connecticut, Indiana and Wisconsin*. Study conducted for the International Association of Fish and Wildlife Agencies and the Furbearer Resources Technical Work Group. Harrisonburg, VA.

In response to the first question above, less than half of Americans indicated approving of regulated trapping. By contrast, the second question with the added context resulted in more than half of all Americans expressing approval of regulated trapping.

Note that using the term “scientific” alone to describe potentially controversial activities is not likely to increase public acceptance (recall that a previous finding from the research recommended emphasizing the *outcomes* of agency activities rather than the *processes* used to achieve them); the additional qualifiers “sanctioned” and “solution” are equally important because they communicate that the activity is an agency-approved way to resolve a biological management issue. Again, the term “solution,” in combination with the other words, emphasizes the *outcome* over the *process*.

Also consider that this finding may have implications beyond just approval of trapping: public acceptance of other potentially controversial activities, such as the hunting of certain species, may increase if residents are assured that there are valid biological reasons for the activity that have been endorsed by their state fish and wildlife agency.

TABLE OF CONTENTS

Introduction	1
Relevancy of the Agency	5
Attitudes Toward and Opinions on the Work of the Agency	6
Attitudes Toward Management of Wildlife.....	15
Perceived Problems for Fish and Wildlife	21
Attitudes Toward and Opinions on Wording.....	22
Summary Tables.....	33
Methodology.....	68
Appendix A: Initial Inventory of Conservation Terms.....	71
Appendix B: Focus Group Report.....	74
About the Wildlife Management Institute	141
About Responsive Management.....	142

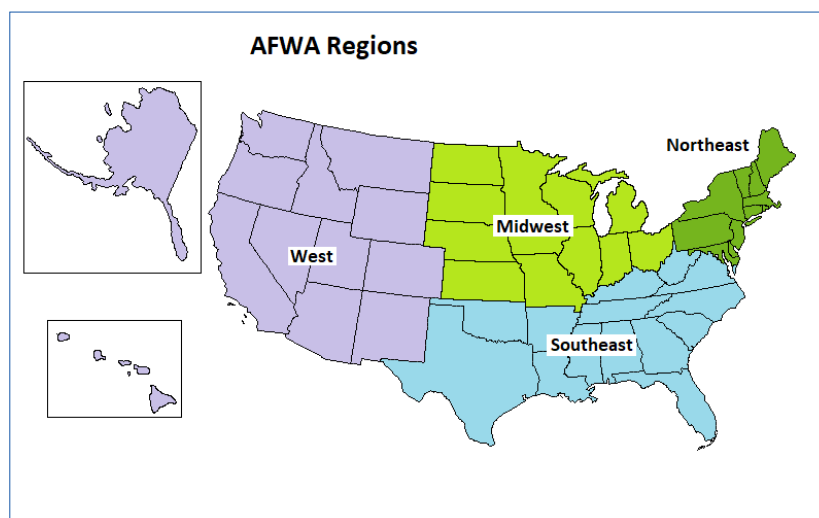
INTRODUCTION

One of the key recommendations of the Blue Ribbon Panel on Sustaining America's Diverse Fish and Wildlife Resources is to reinforce the relevancy of fish and wildlife conservation to Americans, especially by keeping people of all ages and walks of life connected with nature. The implication is that public understanding of the work of fish and wildlife agencies is essential to the well-being of our nation's natural resources. However, broad ongoing cultural and demographic shifts in America mean that the conservation community is not communicating with a single constituency of stakeholders; nor is it known if the language being used resonates. America's conservation story must be skillfully conveyed based on the terminology and concepts that connect with different audiences.

In short, words matter—even when the core meaning of terms are the same, the language used to express the meaning matters very much to the listener/reader. The conservation community cannot afford to rest on assumptions about the public's comprehension of the work of agencies. What matters is not what the community *says* about conservation—it is what people *hear* that will make the difference in broadening America's conservation constituency.

This project determined how to translate the work of fish and wildlife agencies using the most effective *conservation language*. The research partners (the Wildlife Management Institute, Wildlife Conservation Partners, and Responsive Management) inventoried the language that is currently used by conservation professionals in public outreach and education. The researchers identified the key conservation issues and language currently used to engage Americans and encourage their support for the work of fish and wildlife agencies. The project also gathered new data with a scientific sample of American residents to obtain critical feedback on the conservation language that is used (and potentially taken for granted) by fish and wildlife professionals daily ("habitat," "nongame," "stewardship," etc.)—this phase determined which specific terms, themes, and concepts are most understood by the public and generate the greatest return on investment in terms of building support for the work of fish and wildlife agencies.

To this end, the researchers also conducted focus groups in each Association of Fish and Wildlife Agencies (AFWA) region (shown in the accompanying map) and a probability-based survey of Americans to determine how reception toward specific terms varies by audience and region.



The full methodology is presented in the final section of this report, but a summary here will help the reader understand the results. The project entailed three phases:

1. An inventory of the language and messages currently used to communicate with the public about conservation. This was already completed at the time of the writing of this report; it is included as Appendix A.
2. Qualitative research through focus groups to initially test and refine current language and messages regarding conservation. These focus groups were completed at the time of the writing of this report; these focus group findings are presented as Appendix B.
3. Quantitative research through a survey of the general public. The results of this research are presented in this report. Note that this report also uses the results of the other phases of the project to inform the survey results, and the survey itself was written using the results of the previous two phases of the project.

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

- Open-ended questions are those in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Single or multiple response questions: Some questions allow only a single response, while other questions allow respondents to give more than one response or choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Scaled questions: Many closed-ended questions (but not all) are in a scale, such as a 0 to 10 scale.
- Series questions: Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

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

Some of the results presented are crosstabulated by respondents' wildlife value orientations. A full discussion of these is in the report by Teel, Dayer, Manfredo, and Bright.²¹ This study that looked at typologies of people as they relate to wildlife was conducted by the Human Dimensions in Natural Resources Unit at Colorado State University. The study used four types to define the public's attitudes toward wildlife based on a series of questions about the way that they relate to wildlife and their opinions on wildlife. The types are defined in a matrix created from two scales, as shown in the accompanying graphic. In this study of western U.S. residents, respondents were assigned a score on the two wildlife value scales, the Utilitarian scale and the Mutualism scale, based on their responses to a series of questions.

Colorado State University Wildlife Typologies

		Utilitarian	
		Low	High
Mutualism	Low	Distanced	Utilitarian or Traditionalist
	High	Mutualist	Pluralist

In this typology, Utilitarians (also called Traditionalists) support the use and management of wildlife for the benefit of humans, are more likely to prioritize human well-being over wildlife in their attitudes and behaviors, and are more likely to rate actions that result in death or harm to wildlife as acceptable. The report speculates that this

orientation, once the predominant orientation in American society, is one from which society may be moving away.

Pluralists score high on both of the scales, indicating that their views regarding wildlife are often situational and may sometimes appear to be contradictory. For example, a person may approve of hunting but may not personally feel capable of killing an animal. The researchers suggest that the existence of this type may be indicative of the societal shift from a Utilitarian/Traditionalist to a Mutualist orientation regarding wildlife.

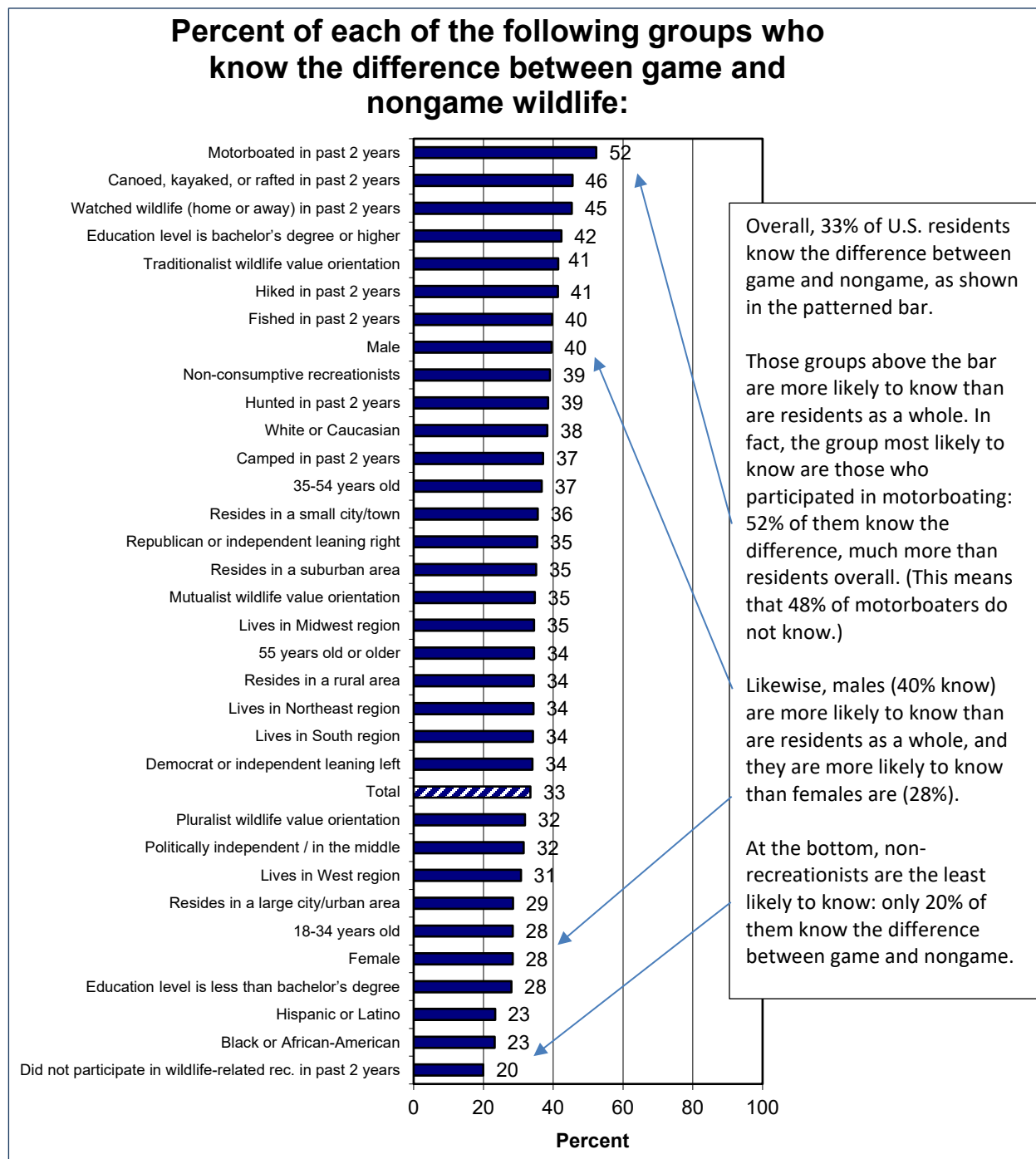
Mutualists view wildlife as capable of living in relationships of trust with humans and as deserving of rights and caring. They are less likely to support actions, such as hunting, that result in death or harm to wildlife.

Distanced types do not identify with either Utilitarian or Mutualist views, indicating that they may be less interested in wildlife-related issues or that their values in general are simply less wildlife-oriented.

²¹ Teel, T.; A. Dayer; M. Manfredo; and A. Bright. 2005. *Regional Results From the Research Project Entitled, "Wildlife Values in the West."* Project Report No. 58 submitted to the Western Association of Fish and Wildlife Agencies. Human Dimensions in Natural Resources Unit, Colorado State University, Fort Collins, CO.

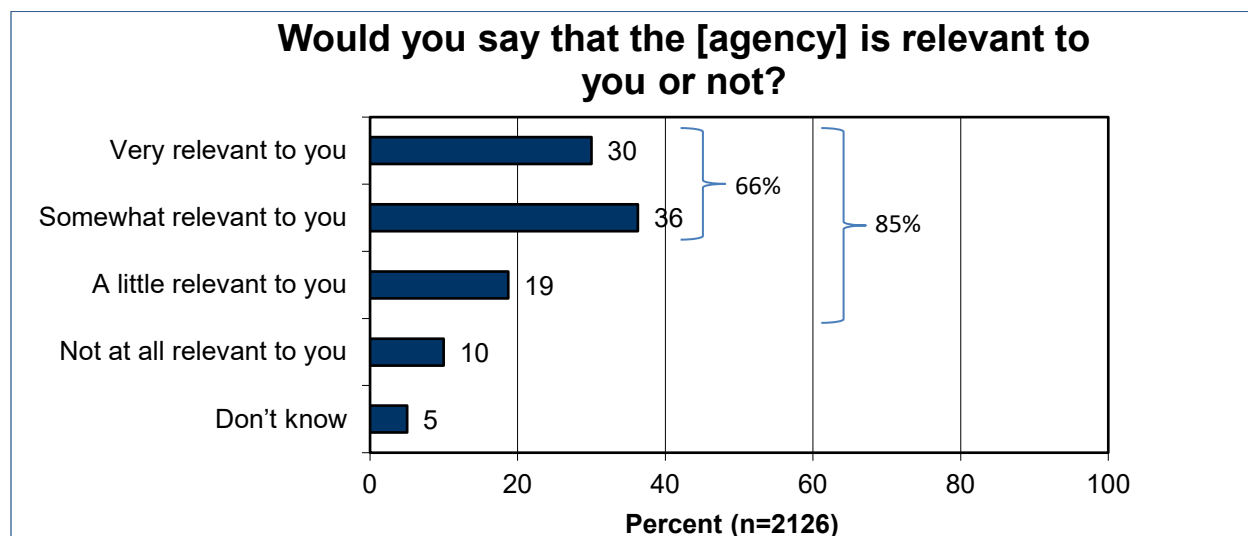
One type of graph that appears in the report is a demographic-participatory analysis graph where many demographic and participatory variables are shown together as they relate to a question response. An example is provided below, showing the variables associated with knowing the difference between game and nongame. In the question, 33% of U.S. residents overall knew the difference (as shown by the patterned bar).

Those groups above the bar are more likely to know the difference, while those groups below the bar are less likely to know. As a rule of thumb, only those differences of about 5 percentage points or more should be considered notably different.



RELEVANCY OF THE AGENCY

About a third of U.S. residents say that their state agency is very relevant to them, and another approximate third say it is somewhat relevant (a sum of 66%). Meanwhile, about 10% say it is not at all relevant. Of more interest, however, is the interaction of the opinion revealed by this question with people's thoughts about the role that the agency has in their life.

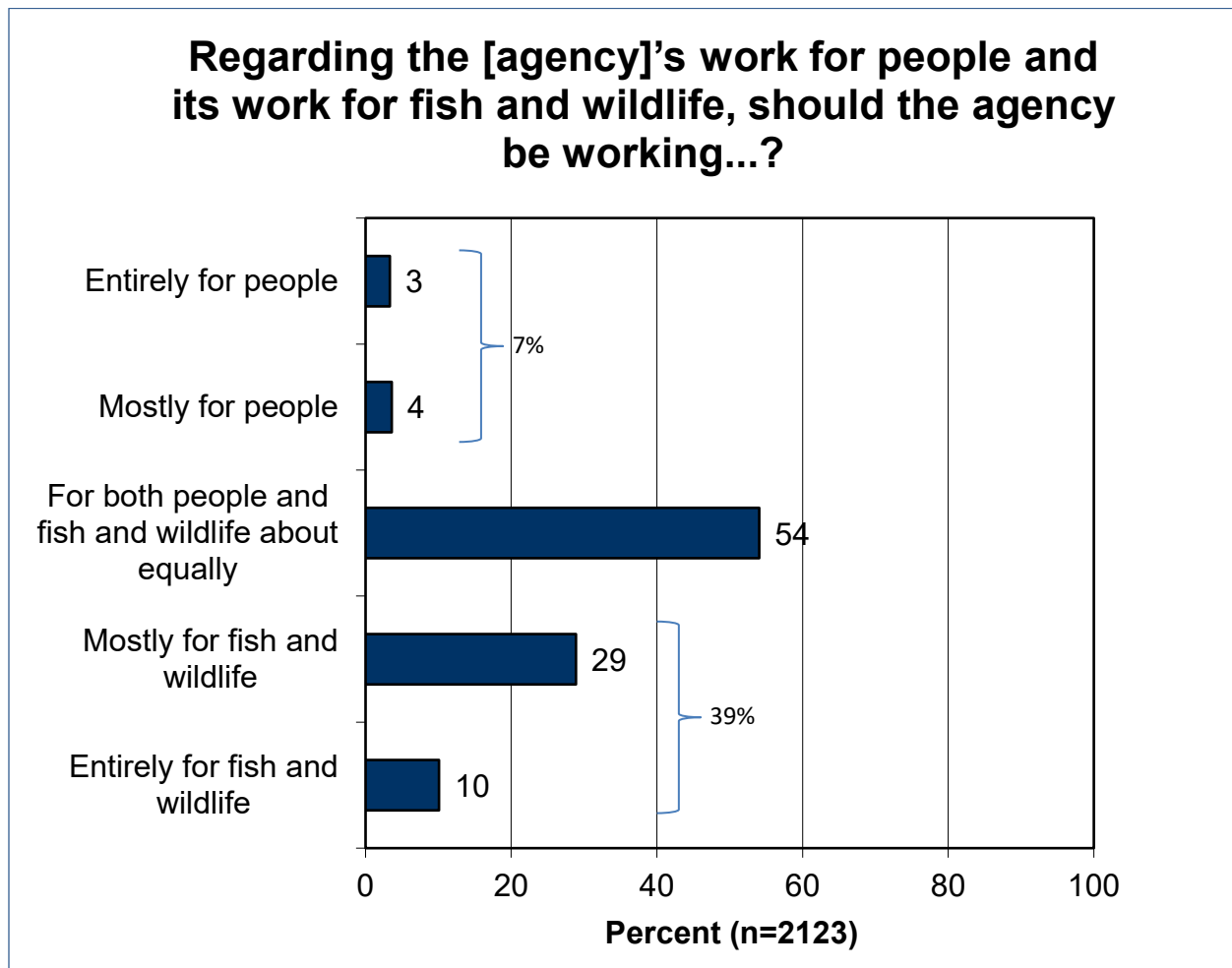


Three questions (more fully covered in subsequent sections of this report) were asked wherein residents rated the importance of agency efforts and fish and wildlife problems, which were crosstabulated by the above question. Of interest is how those who do not think that the agency is relevant to them respond (the bottom row in the accompanying table). They give quite high ratings, with a mean rating of 8.20 (shaded cell), to “that fish and wildlife species in your state are healthy”—one of the primary responsibilities of state fish and wildlife agencies. This is an obvious disconnect that outreach could address. The agency should be relevant to those people, yet it is not.

In the question: Would you say that the [agency] is relevant to you or not? ↓	Mean rating of the importance of agency efforts: 0=not at all important 10=extremely important		Mean rating of the severity of problems for fish and wildlife in the United States: 0=not a problem at all 10=extreme problem
	That fish and wildlife species in your state are abundant	That fish and wildlife species in your state are healthy	Loss of habitat from development
Those responding with “Very relevant”	8.39	8.98	8.42
Those responding with “Somewhat relevant”	8.03	8.42	8.19
Those responding with “A little relevant”	7.37	8.17	7.74
Those responding with “Not at all relevant”	6.21	8.20	7.35

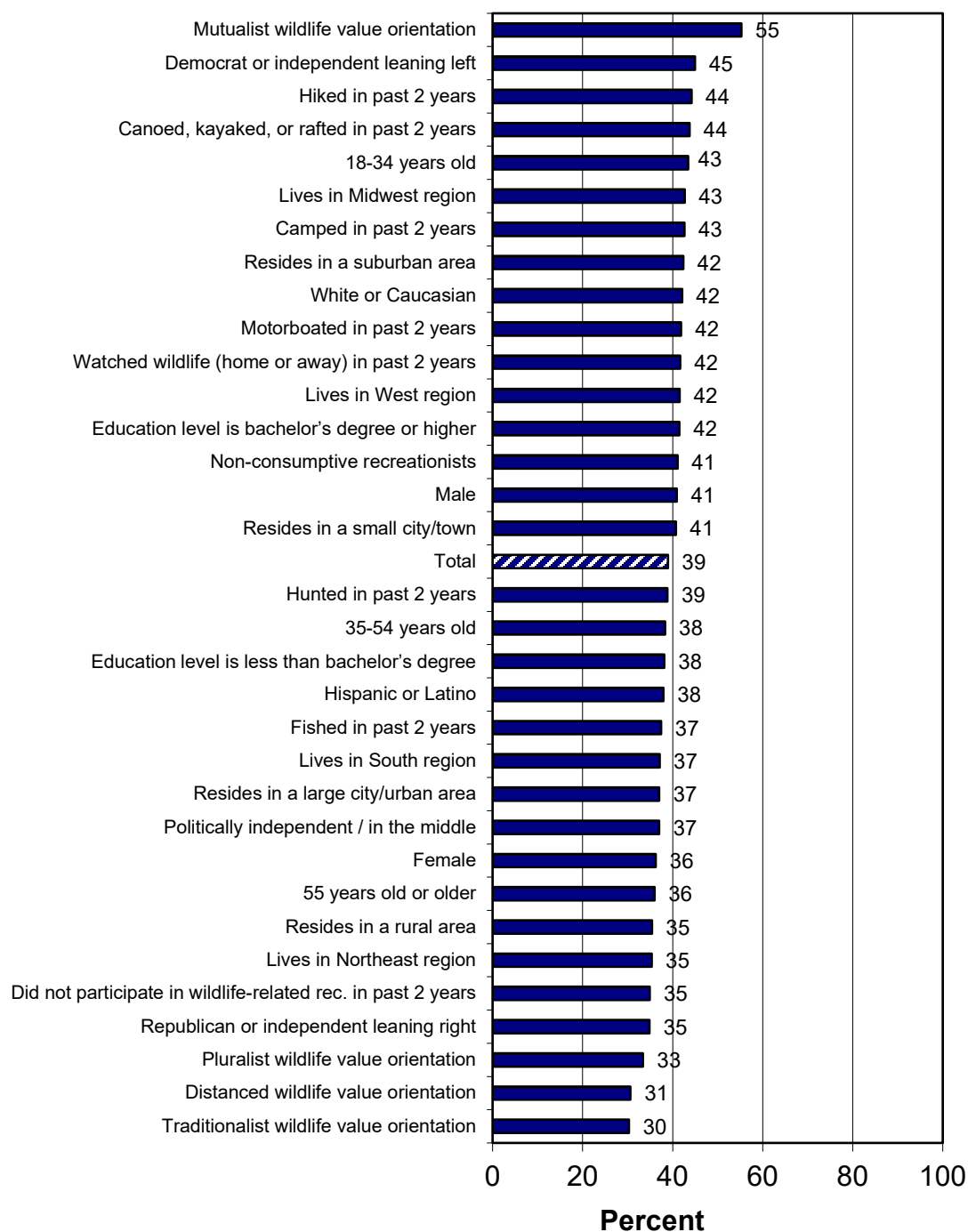
ATTITUDES TOWARD AND OPINIONS ON THE WORK OF THE AGENCY

This topic was explored in several ways. The first way was in a question asking if the agency should work for people or fish/wildlife (or both about equally). Most commonly, people chose the middle ground: 54% say the agency should work for both people and fish/wildlife about equally. Otherwise, a much greater percentage want their state agency to work mostly or entirely for fish/wildlife (39%) rather than for people (7%).



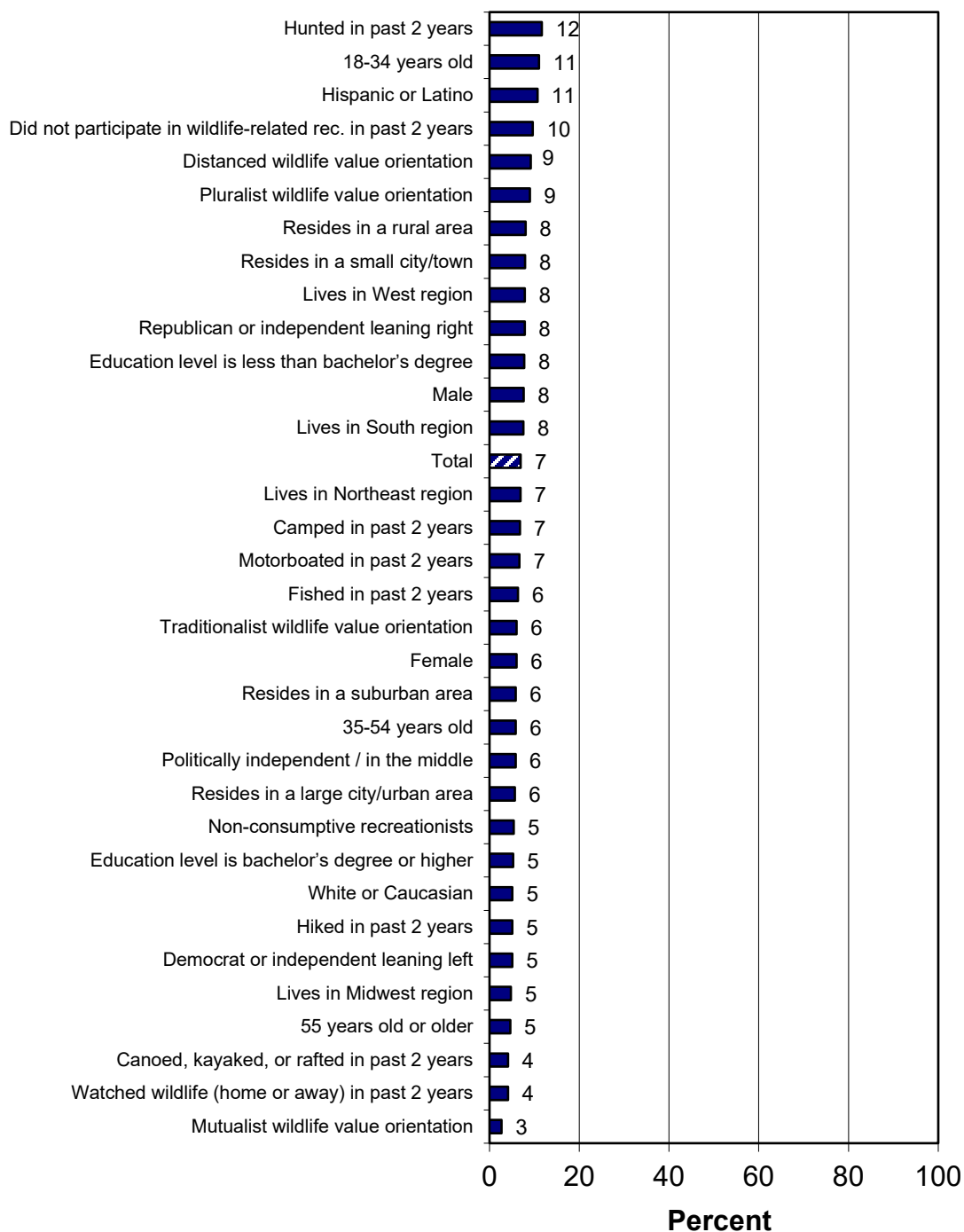
The overall results were examined in more detail. Those most likely to say that the agency should work mostly or entirely for people are hunters, young people, and Latinos. Meanwhile, those most likely to say that the agency should work mostly or entirely for fish/wildlife are Mutualists, Democrats or those leaning left, and hikers. These graphs start on the next page.

Percent of each of the following groups who think the agency should be working mostly or entirely for fish and wildlife:



An explanation of how to interpret these types of graphs is presented on page 4.

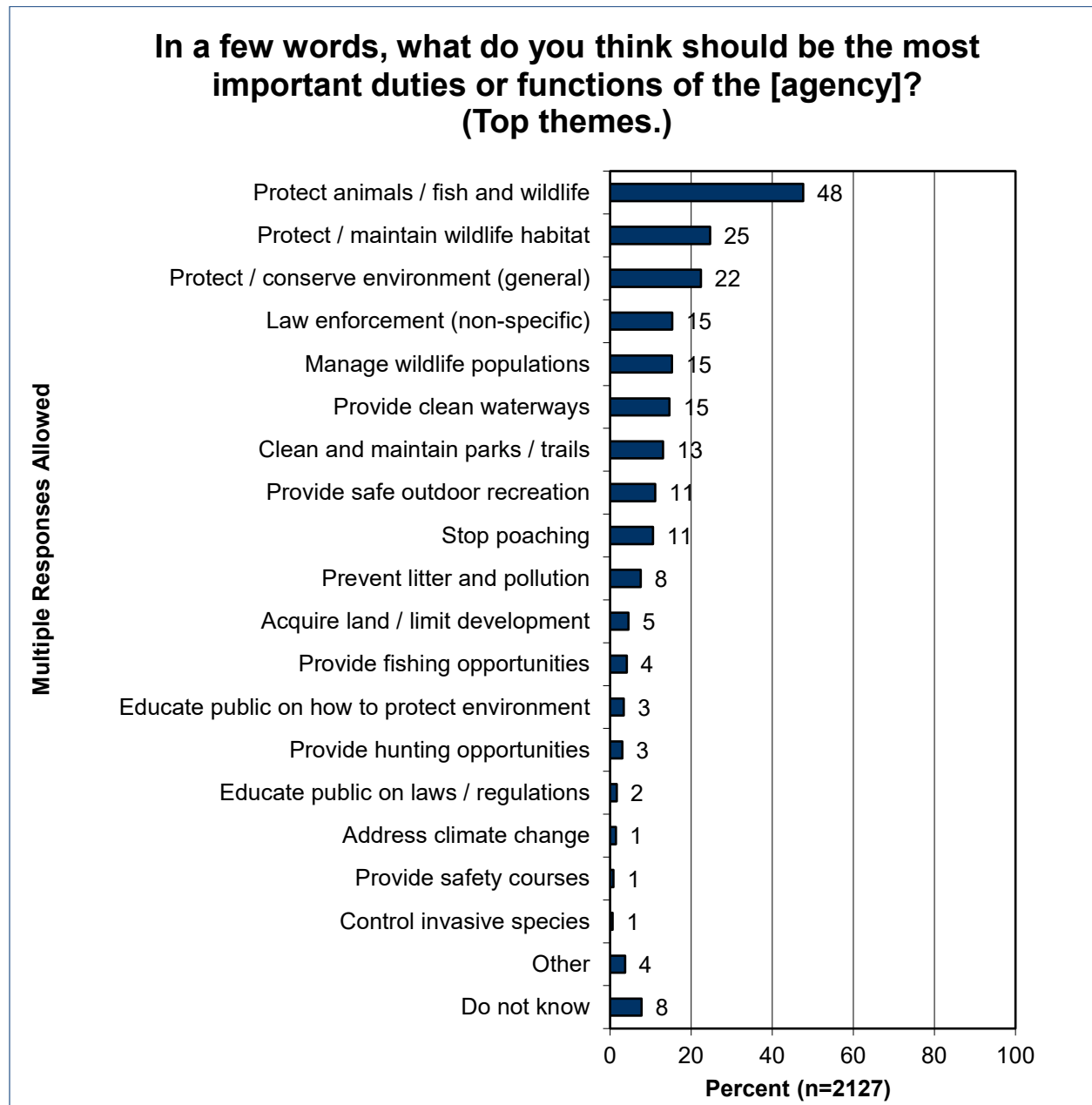
Percent of each of the following groups who think the agency should be working mostly or entirely for people:



An explanation of how to interpret these types of graphs is presented on page 4.

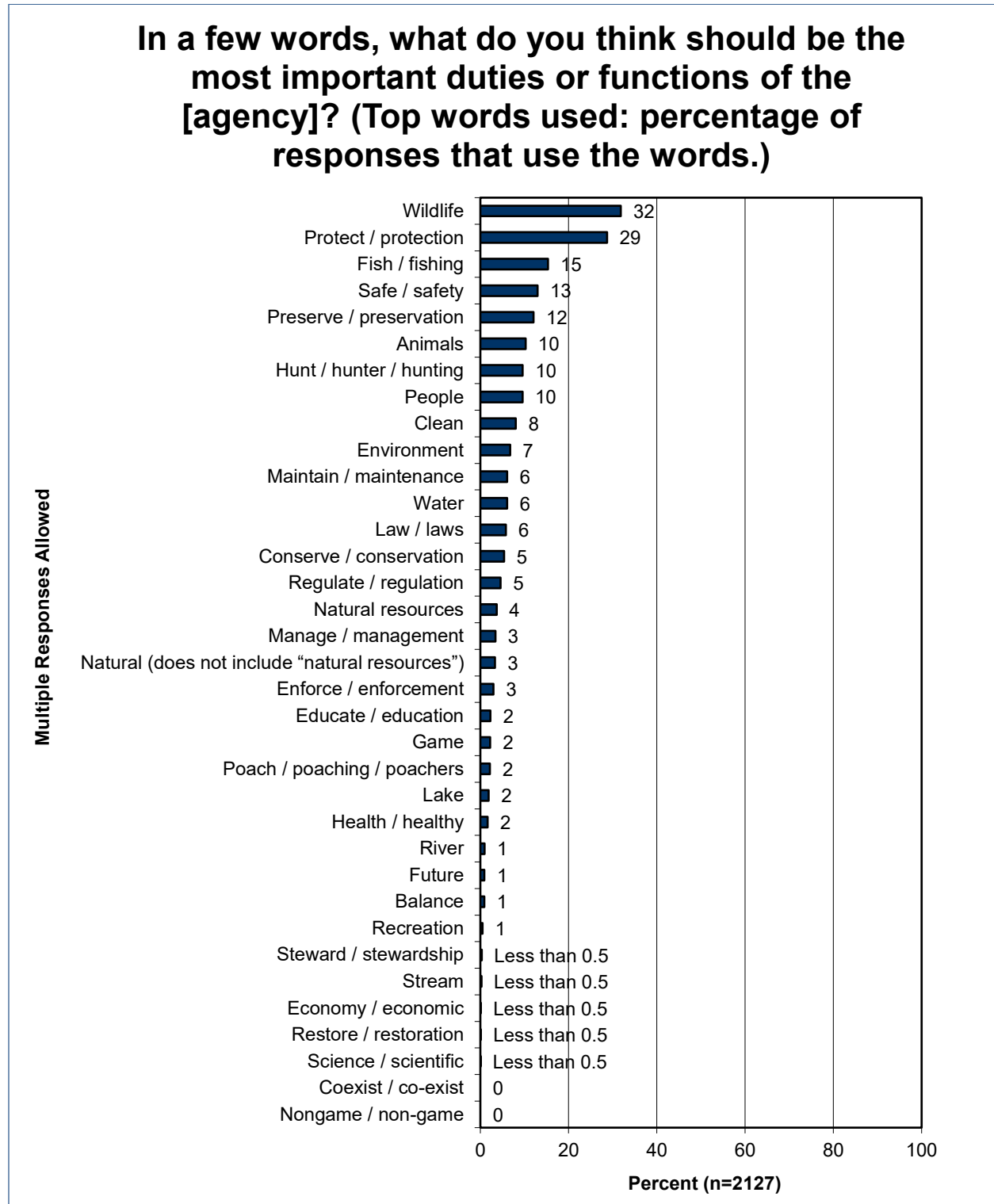
The second way to explore the topic of the work the agency does was through an open-ended question about the perceptions of the most important duties or function of the state fish and wildlife agency, which was analyzed using two different methods: one method was by the most common themes, and the second analysis method looked at the most common words used.

Thematically, the most important duties are to protect fish and wildlife, protect habitat, and protect the environment in general. These themes emerged markedly above all others.



A second method of analysis looks at the frequency of certain words. To start, a list of 35 commonly used words and phrases was developed based on an inventory of terms that was conducted as one of the tasks of the overall project. This inventory looked at the wording of state fish and wildlife agency mission statements as well as online materials from the agencies (e.g. annual reports, news items, educational items, social media posts). The resulting overall

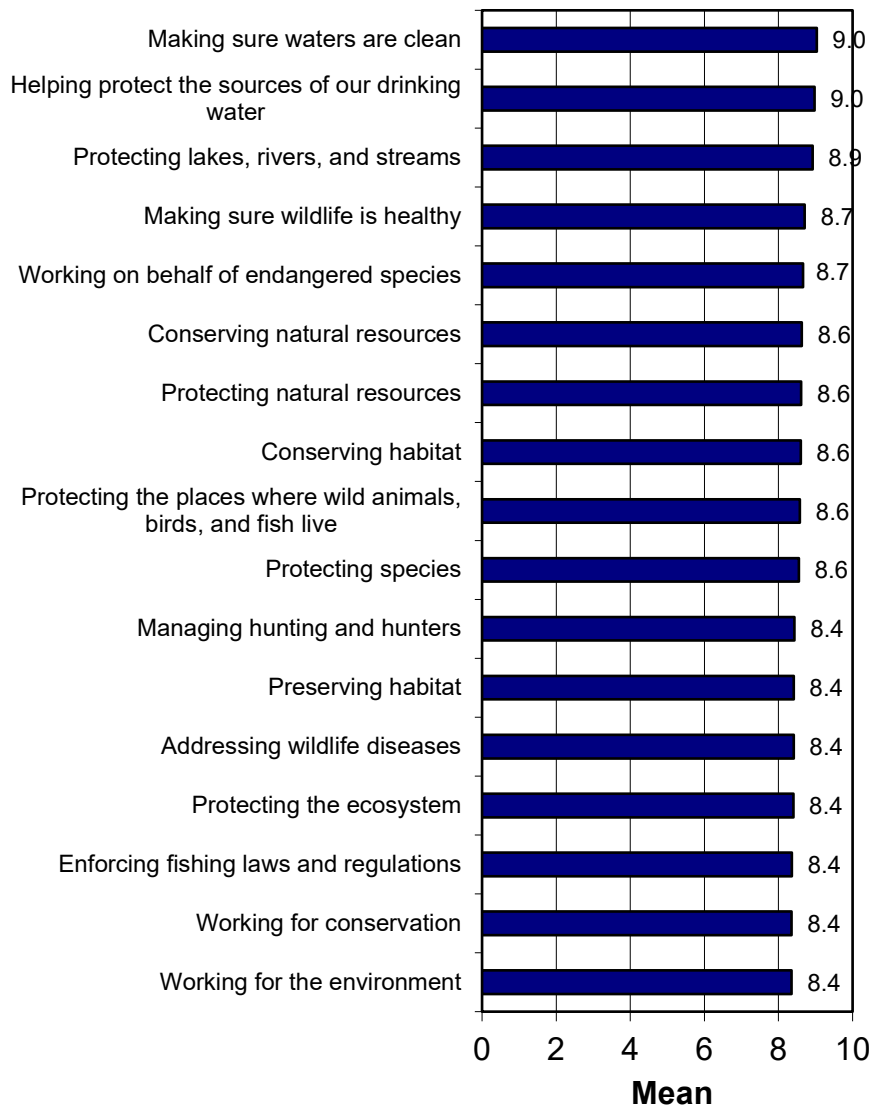
list was then de-duplicated to produce an inventory of unique terms, and 35 of them were chosen for the analysis because these terms had come up in the open-ended responses to the survey questions. All of the 35 words are included in the graph below (some at 0%). Two terms came up much more frequently than the rest: wildlife and protect/protection.



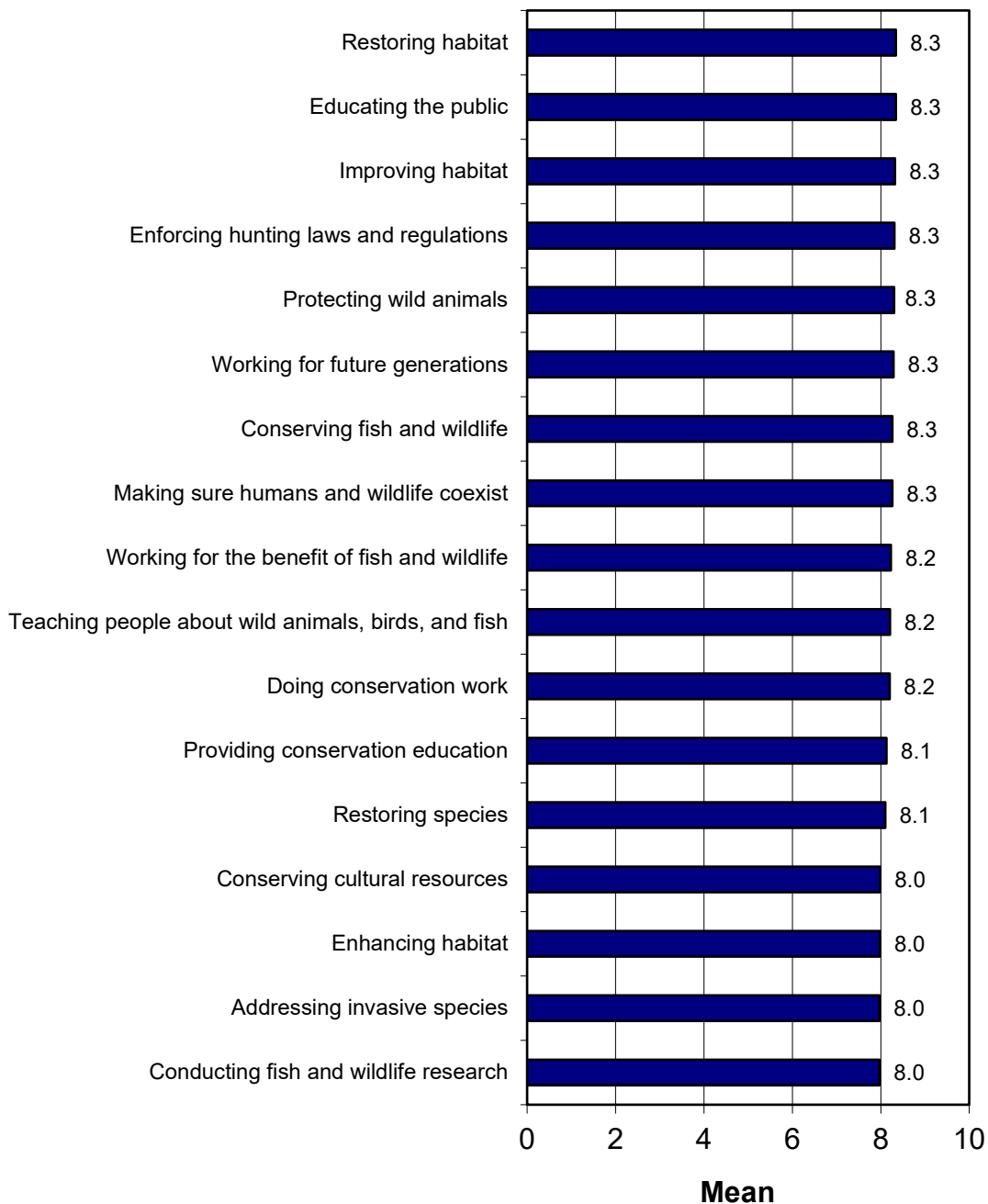
Another way that the topic of agency work was explored was through a series of questions where residents rated the importance of various efforts of their state agency's work. The top three efforts relate to water. Just below that are efforts related to healthy wildlife and habitat, endangered species, and natural resources.

Because 55 phrases that describe agency work were tested, no one respondent received all 55 questions. Rather, only a randomized portion of the full series of questions was given to each respondent. The results are shown in three graphs.

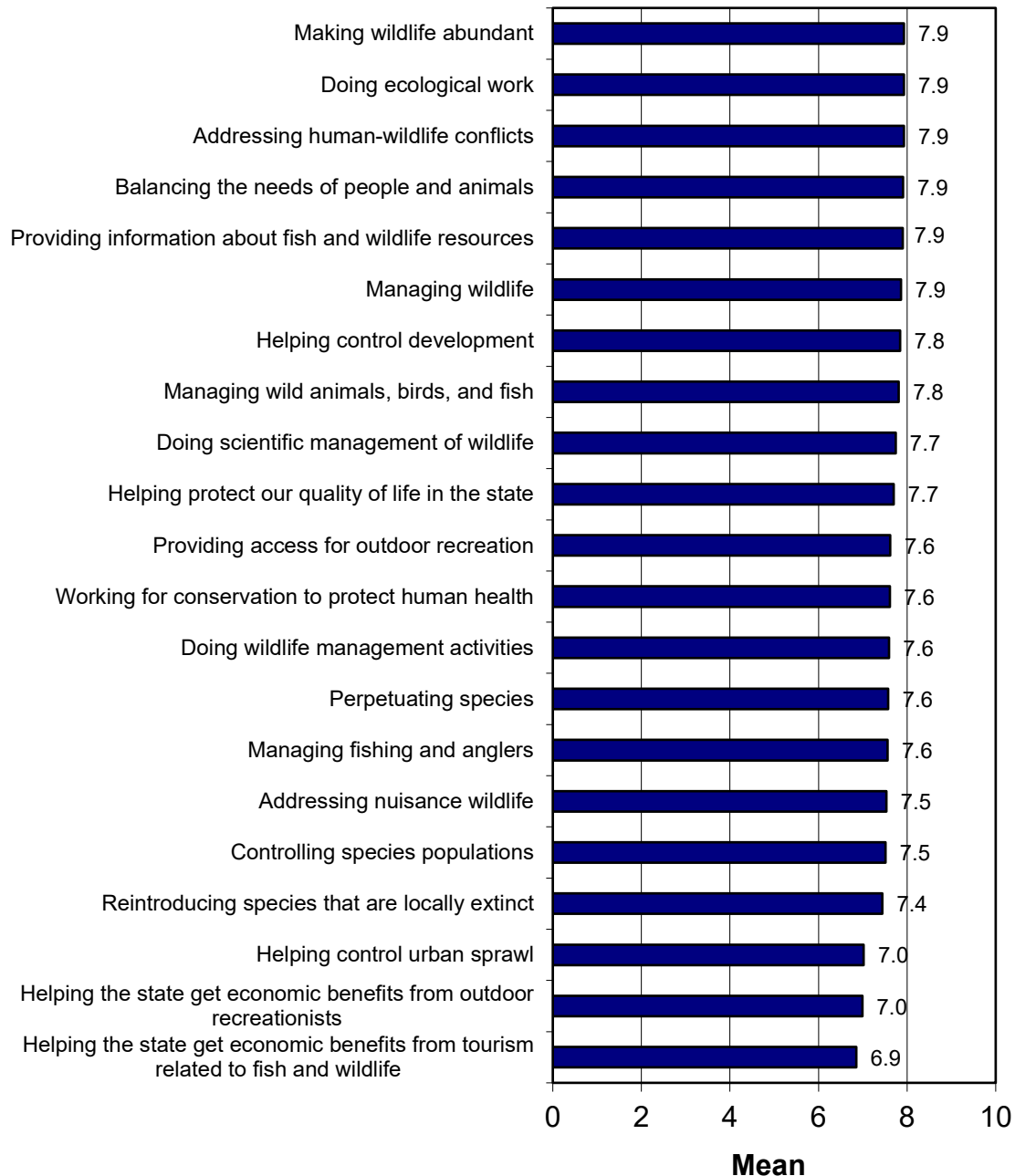
For each of the following, please rate its importance as part of the work that the [agency] does, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important. What about...?
(Chart 1 of 3)



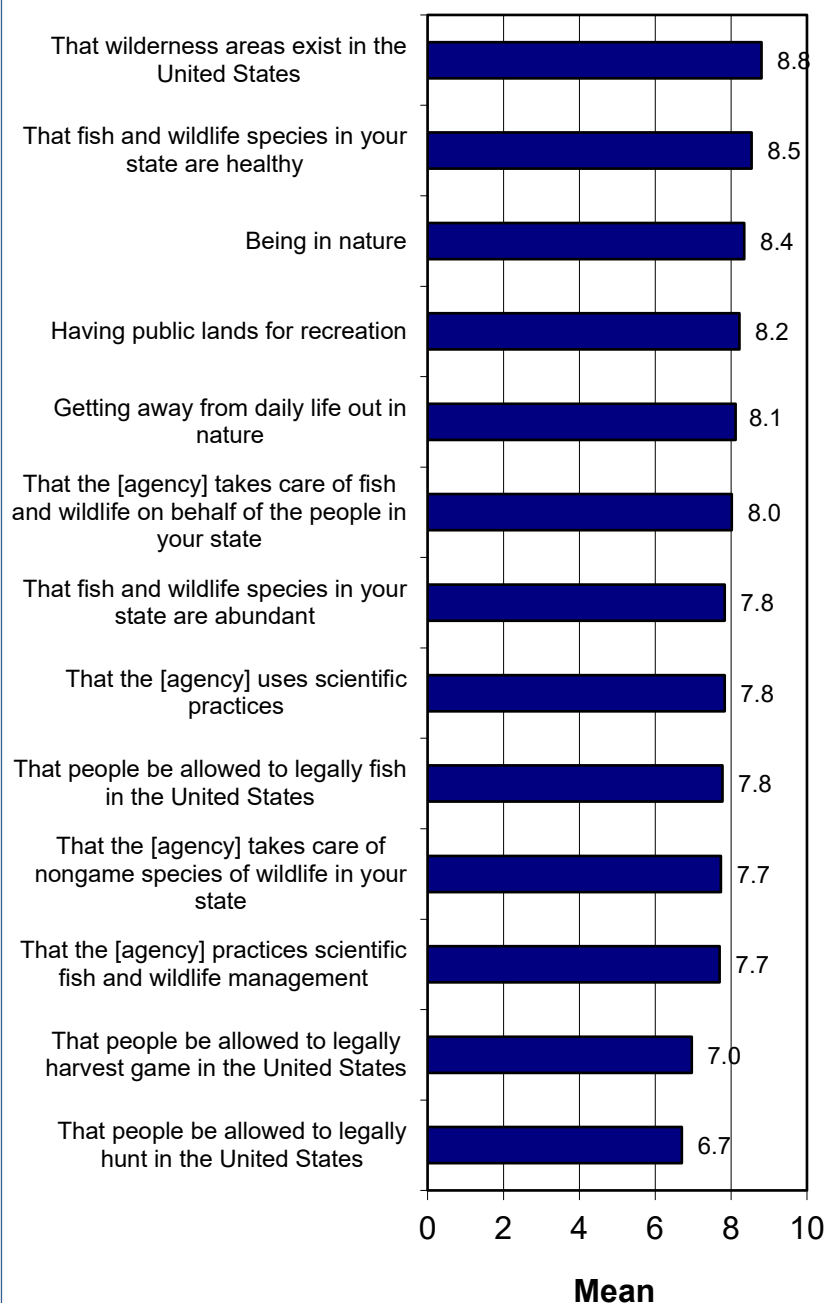
For each of the following, please rate its importance as part of the work that the [agency] does, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important. What about...? (Chart 2 of 3)



For each of the following, please rate its importance as part of the work that the [agency] does, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important. What about...? (Chart 3 of 3)



Please tell me how important or not important the following are to you. We'll use a 0 to 10 scale, where 0 is not at all important and 10 is extremely important. What about...?

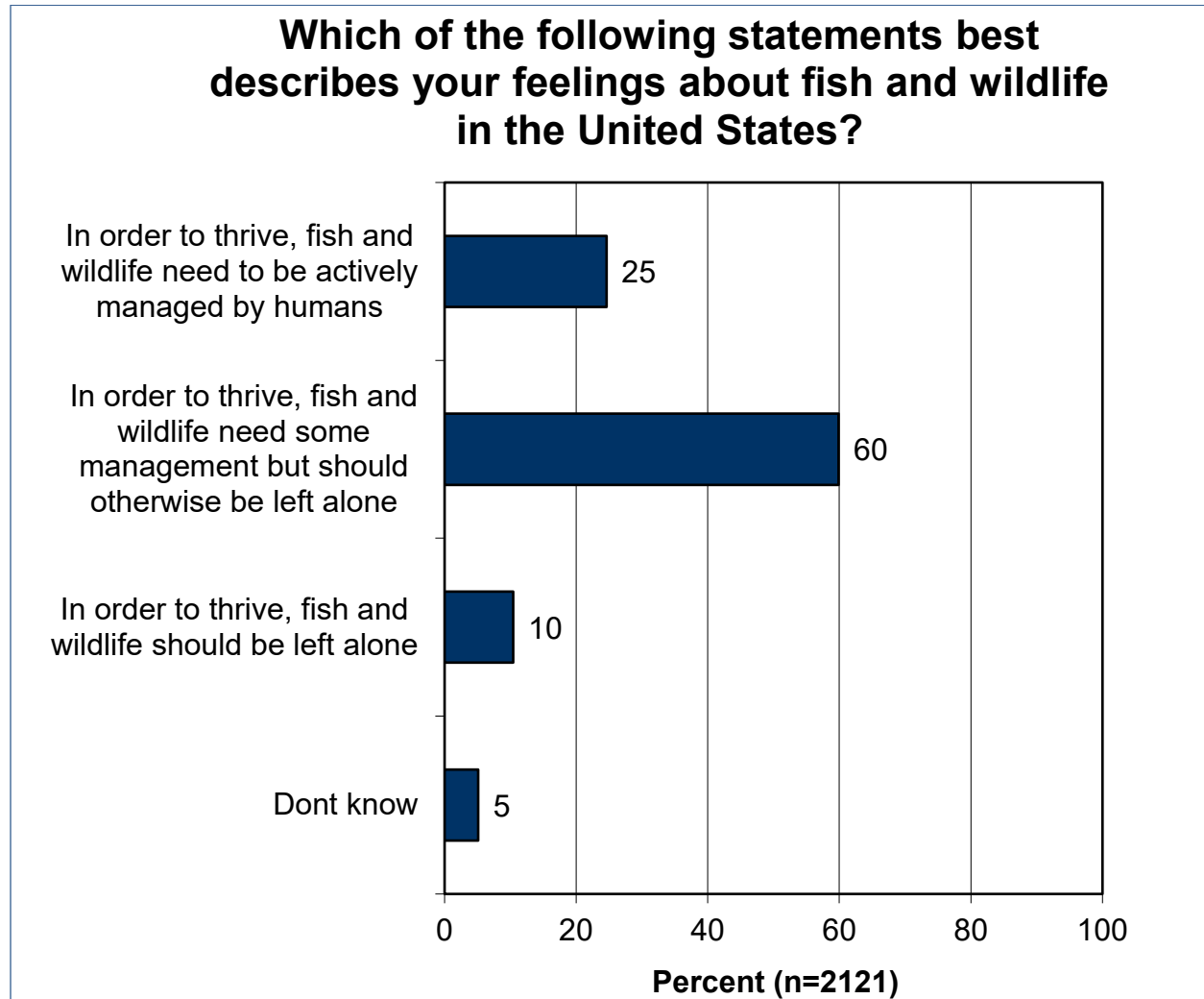


A final way to examine the work of the agency is through a series of questions that delved into U.S. residents' feelings toward fish and wildlife, conservation, outdoor recreation (including what they want that experience to be), and the work of the agency. All of the questions in this series asked respondents to rate (on a 0 to 10 scale) the importance of various concepts that were expressed in statements such as "that wilderness areas exist in the United States" or "that fish and wildlife species in your state are healthy." These two statements—which relate to ecological values—are at the top of the ranking.

Also highly rated, with a mean of 8.0 or higher, are the recreational values of being in nature, having public lands for recreation, and getting away. The top tier is rounded out by another ecological value: that the state agency takes care of fish and wildlife on behalf of the people of the state. (In the survey itself, the name of each respondent's state agency was substituted in the wording of the question.)

ATTITUDES TOWARD MANAGEMENT OF WILDLIFE

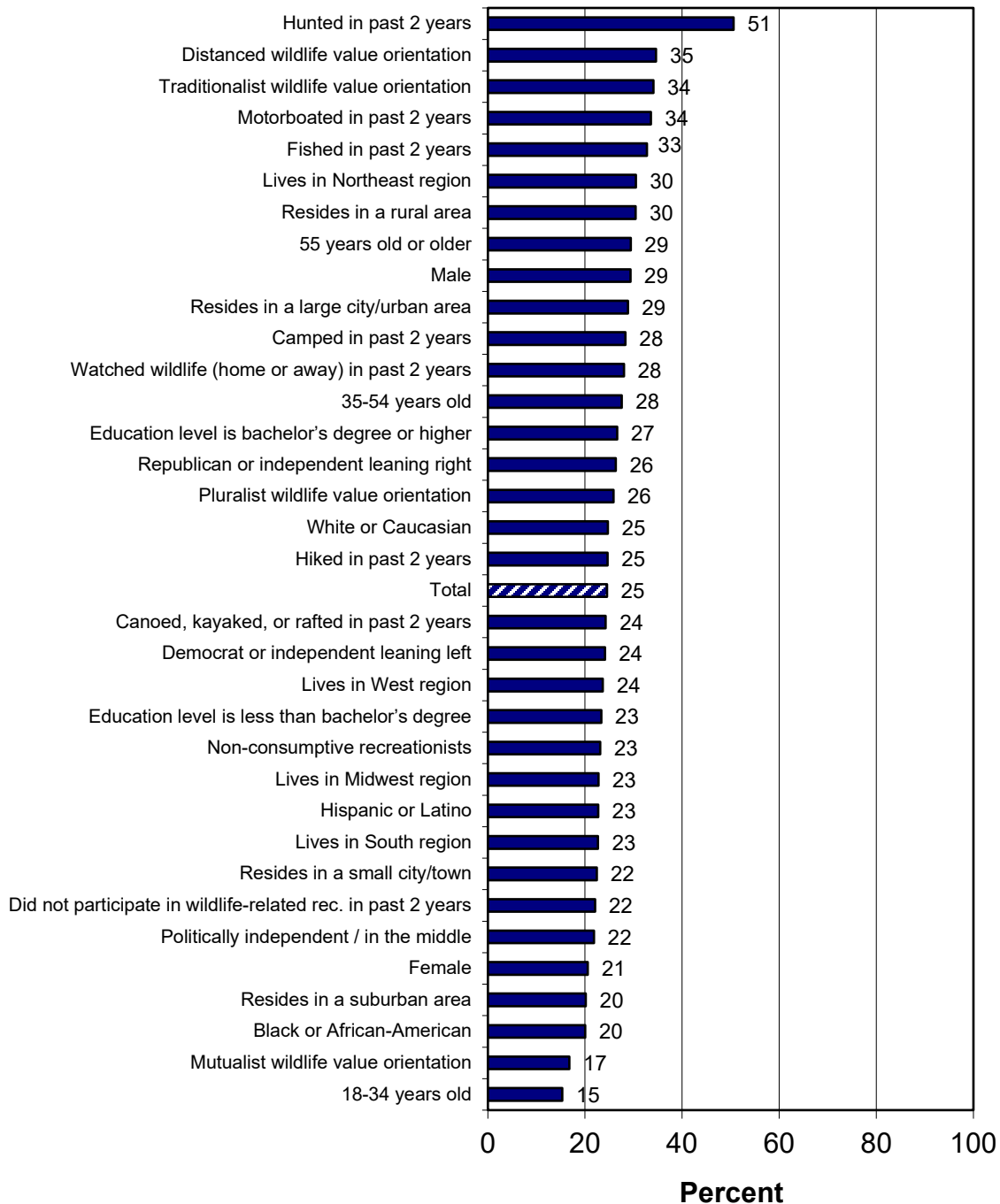
The majority of U.S. residents are in the middle (60%) when asked to choose whether fish and wildlife need to be actively managed or left alone in order to thrive. Otherwise, they are more on the side of active management than on the side of leaving fish and wildlife alone.



Demographic analyses of this question reveal that those 25% above who think fish and wildlife need to be actively managed are associated with participation in hunting, motorboating, and/or fishing; having a Distanced or Traditionalist wildlife value orientation; living in the Northeast Region; and living in a rural area.

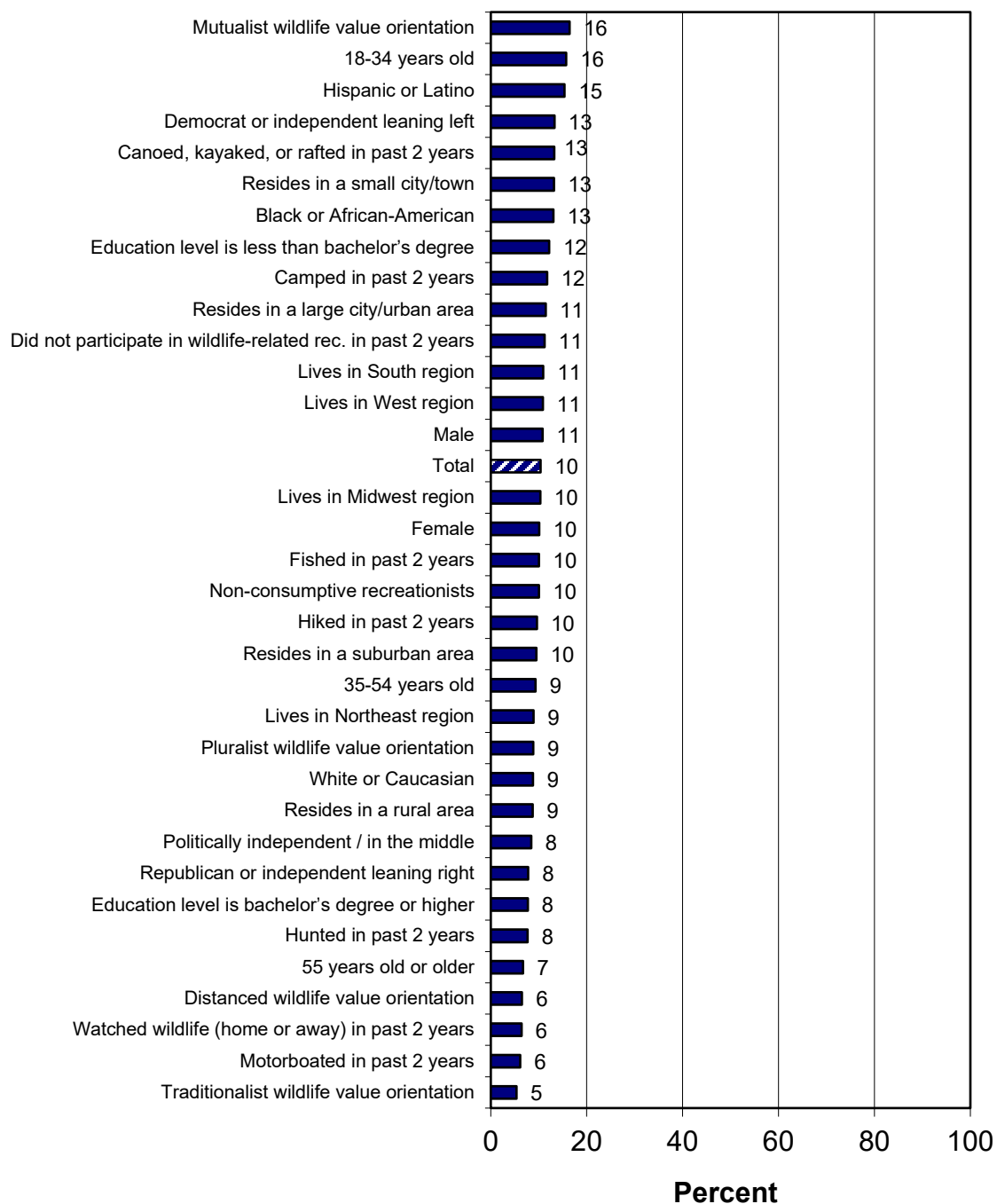
Meanwhile, the 10% above who think that, for fish and wildlife to thrive, they should be left alone were analyzed in the same way. The characteristics that are associated with them are having a Mutualist wildlife value orientation and being young. These graphs start on the next page.

Percent of each of the following groups who think that, in order to thrive, fish and wildlife should be **ACTIVELY MANAGED by humans:**

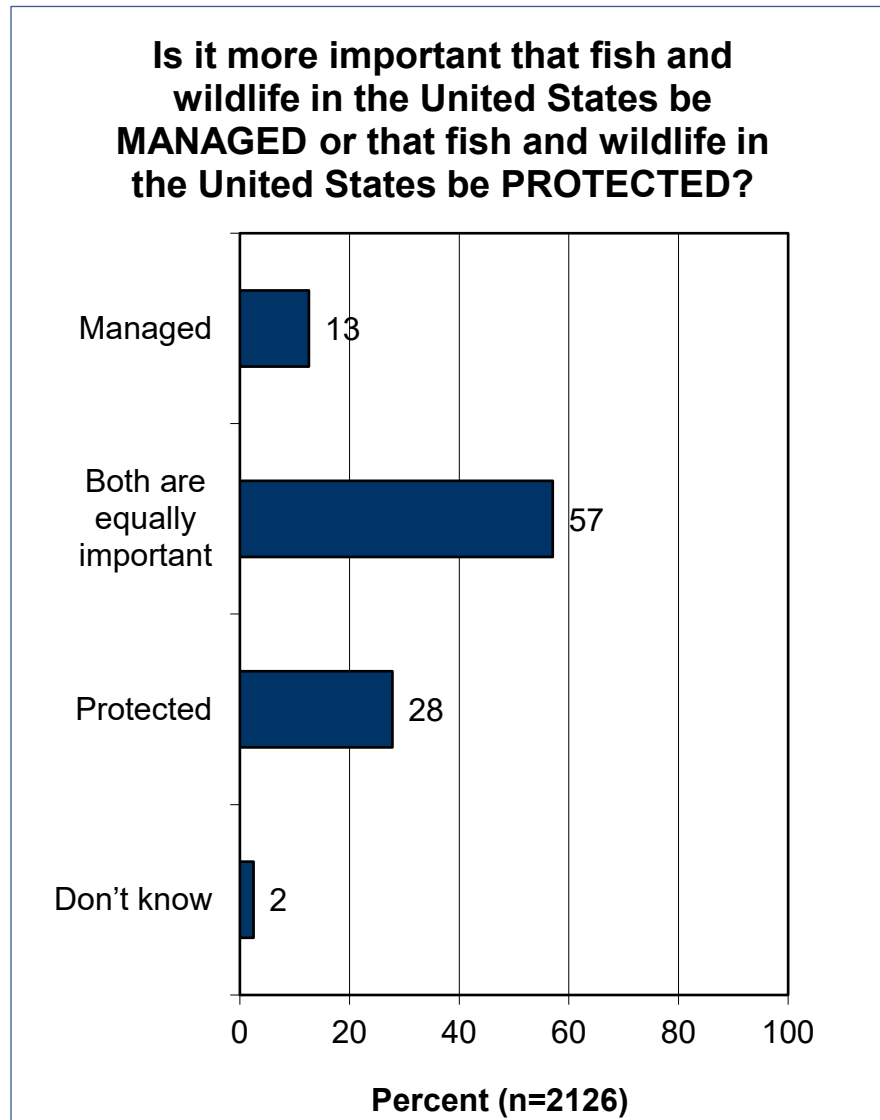


An explanation of how to interpret these types of graphs is presented on page 4.

Percent of each of the following groups who think that, in order to thrive, fish and wildlife should be LEFT ALONE:



An explanation of how to interpret these types of graphs is presented on page 4.



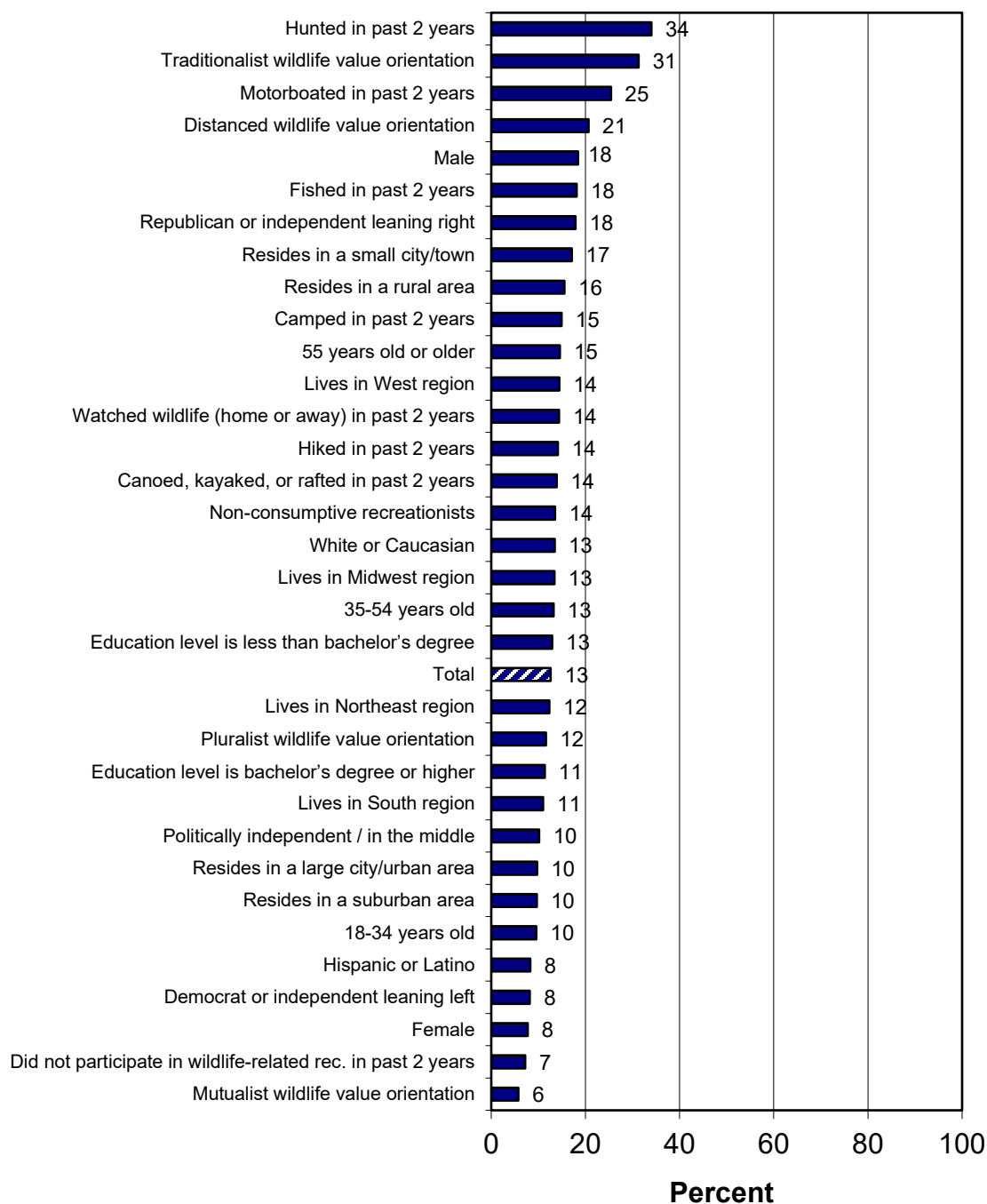
The results presented above compared *management* to being *left alone*. Now the analysis compares *management* to *protection*. Again, most people are in the middle (57%) regarding whether it is more important to *manage* fish and wildlife or *protect* fish and wildlife. Otherwise, by about a 2 to 1 ratio, they say that it is more important that fish and wildlife be *protected* rather than *managed*.

In the survey, the terms were self-defined by each respondent. Also note that the two terms are not actually mutually exclusive, as management of some species entails their protection (i.e., they cannot be legally hunted).

Demographic analyses were conducted on the groups formed by these results. The characteristics associated with saying it is more important that fish and wildlife be managed are participation in hunting, motorboating, and/or fishing; having a Traditionalist or Distanced wildlife value orientation; being male; and being a Republican or right leaning Independent.

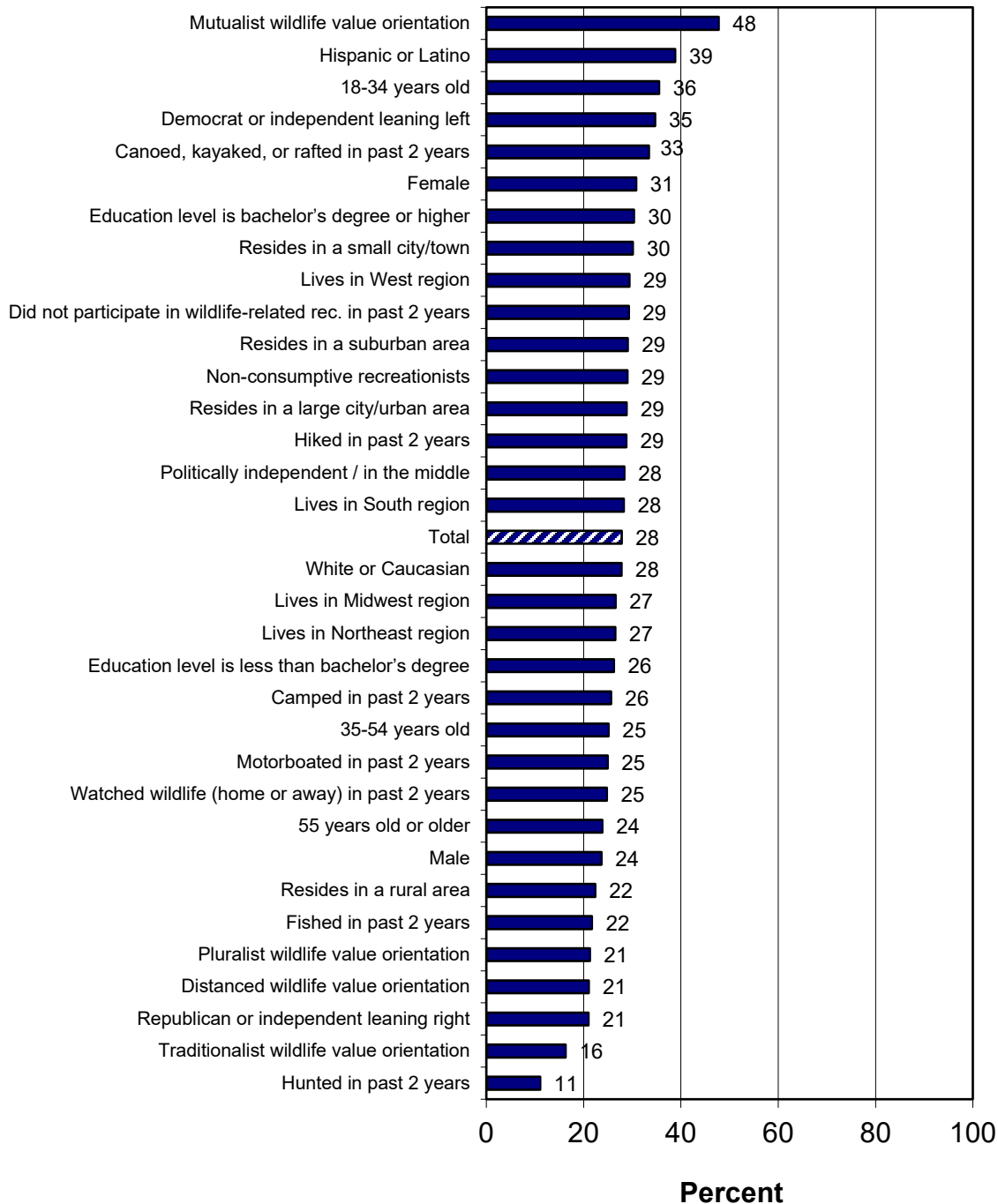
The characteristics associated with saying that wildlife should be protected rather than managed are having a Mutualist wildlife value orientation, being Latino, being young, being a Democrat or left leaning Independent, and participation in the paddling sports. These graphs start on the next page.

Percent of each of the following groups who think that fish and wildlife should be **MANAGED** rather than **PROTECTED**:



An explanation of how to interpret these types of graphs is presented on page 4.

Percent of each of the following groups who think that fish and wildlife should be PROTECTED rather than MANAGED:

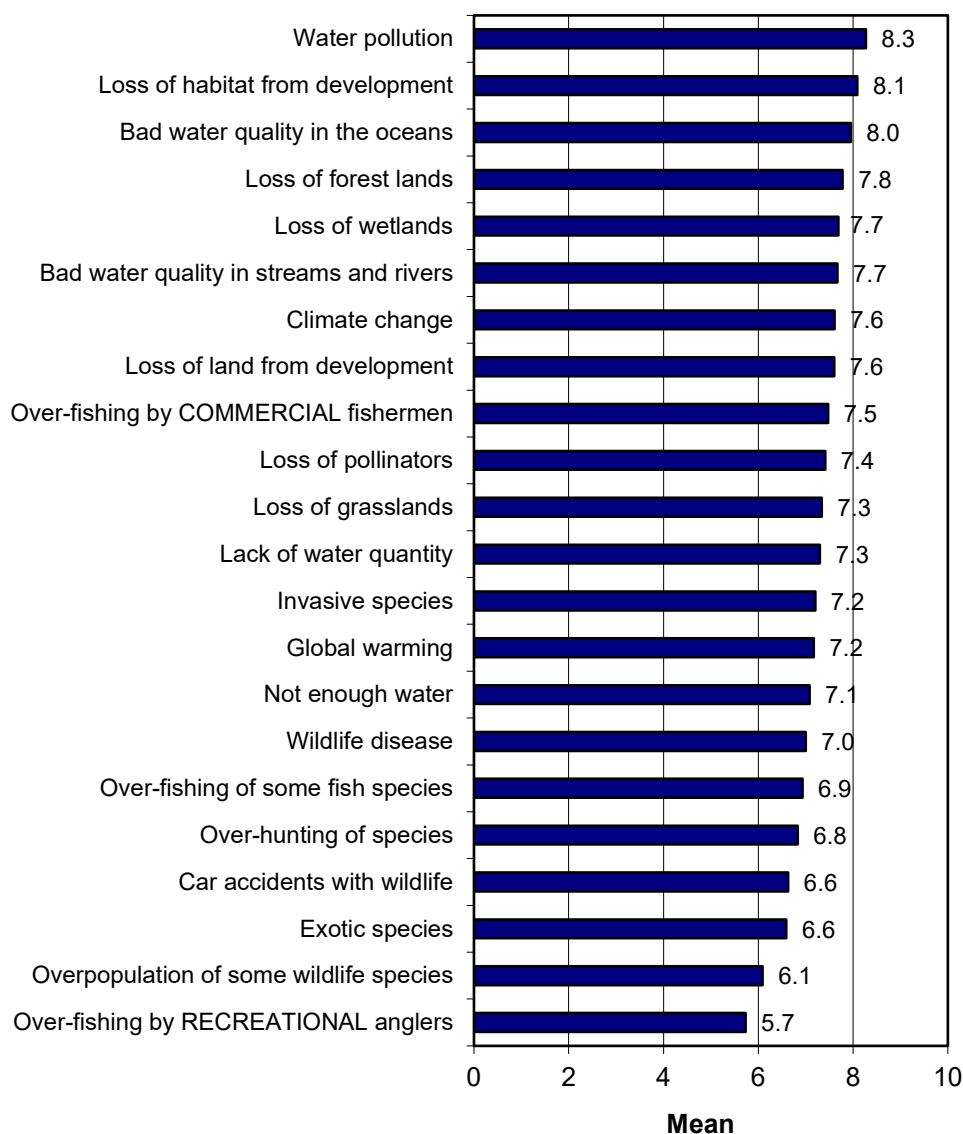


An explanation of how to interpret these types of graphs is presented on page 4.

PERCEIVED PROBLEMS FOR FISH AND WILDLIFE

The survey had Americans rate the severity of 22 potential problems for fish and wildlife, using a 0 to 10 scale. The top perceived problems are water pollution, loss of habitat due to development, and bad water quality in the oceans. In general, water-related problems are given high ratings of severity: two of those top three ranked items are water-related, and four of the top six.

Please rate whether you think these are currently problems for fish and wildlife in the United States, on a scale of 0 to 10, where 0 is currently not a problem at all and 10 is currently an extreme problem.
What about...?



ATTITUDES TOWARD AND OPINIONS ON WORDING

The survey presented respondents with 28 terms, asking them if they had a positive, neutral, or negative reaction to each term. In the graph, they are ranked by the sum of strongly and moderately positive. Only one term has a majority who have a strongly positive reaction: *responsible recreation*. This term also has the highest overall positive reaction: 82% have a strongly or moderately positive reaction (summed on unrounded numbers).

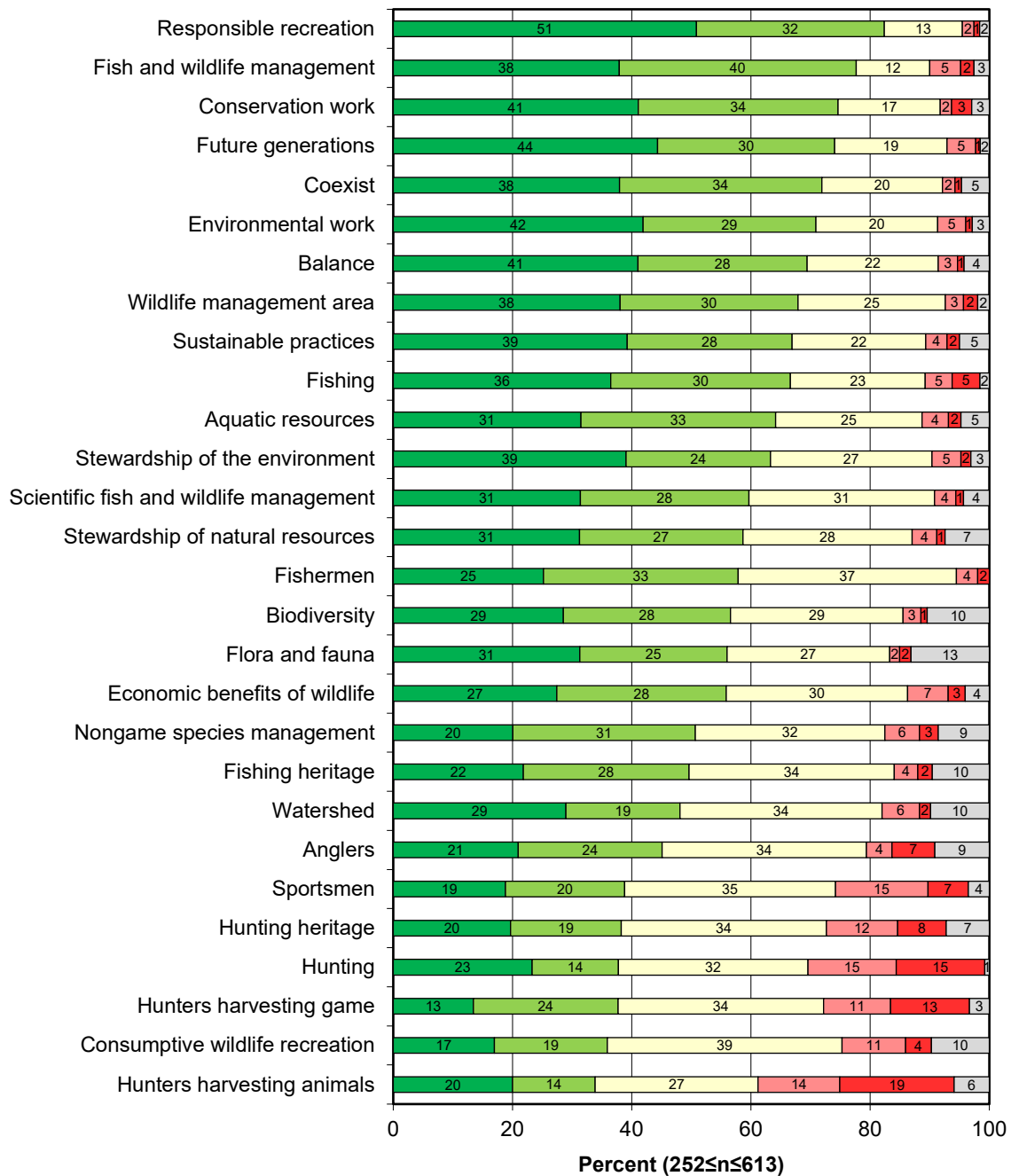
Five more terms round out the top tier—all with at least 70% having an overall positive reaction: fish and wildlife management (78% overall positive), conservation work (75%), future generations (74%), coexist (72%), and environmental work (71%). The graph appears on the following page.

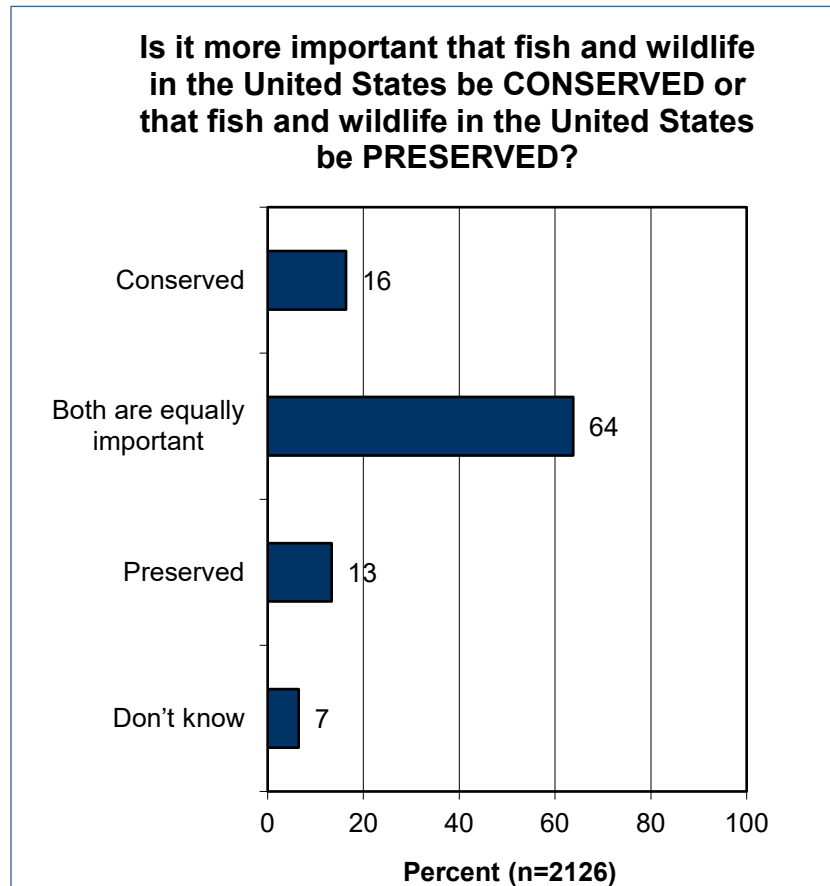
On the other hand, the terms with the greatest negative reactions are related to hunting and consumption. They are tabulated below, taken from the data shown in the graph on the next page. All had 15% or greater having a negative reaction to the terms.

Term	Percentage of U.S. Residents Having a Negative Reaction to the Term (Moderately or Strongly Negative)
Hunters harvesting animals	33
Hunting	30
Hunters harvesting game	24
Sportsmen	22
Hunting heritage	20
Consumptive wildlife recreation	15

**Please tell me if you have a positive, neutral, or negative reaction to each of the following.
What about...?**

Strongly positive Moderately positive Neutral Moderately negative Strongly negative Don't know





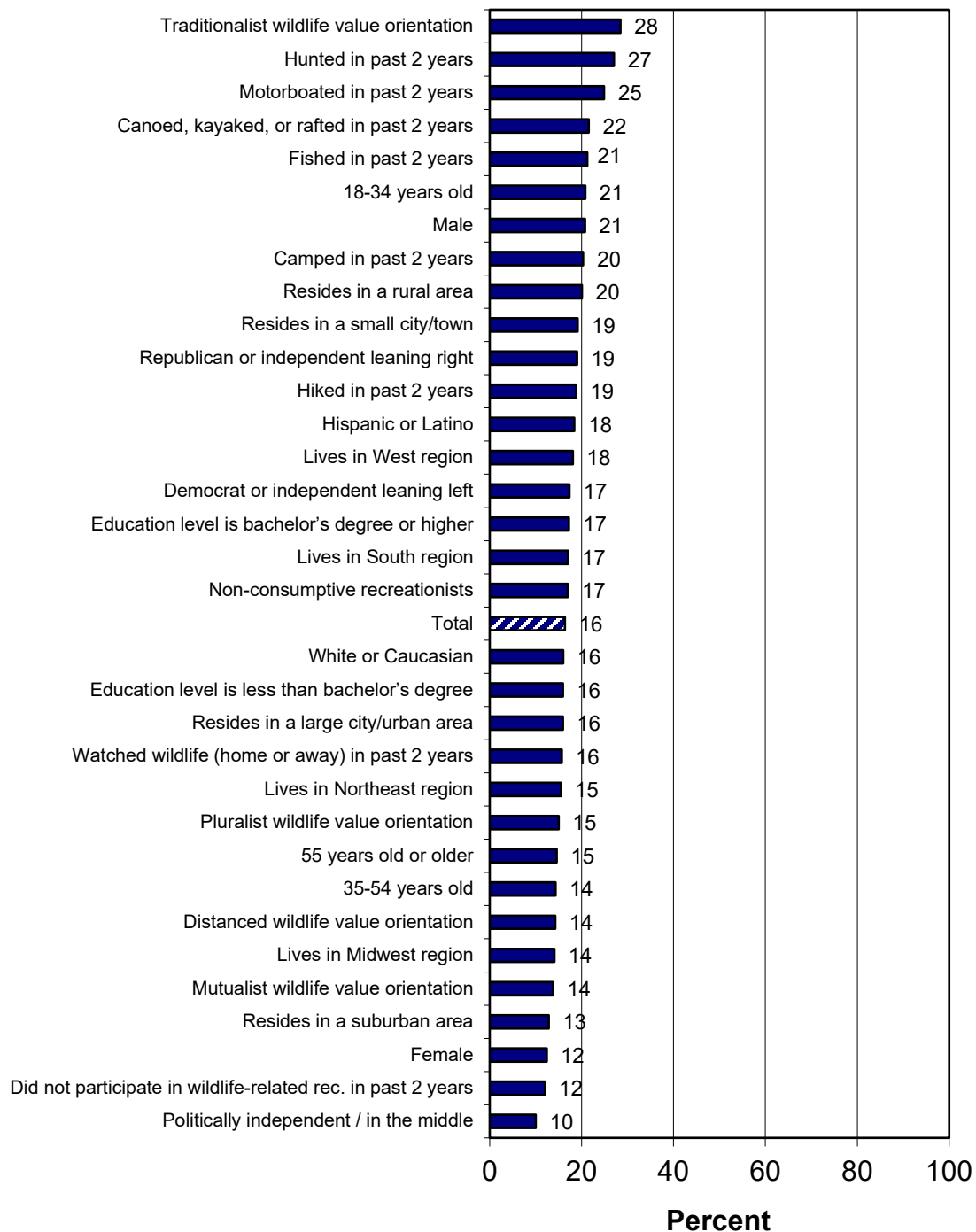
The survey also looked at a comparison of specific terms and concepts. Again, these terms were self-defined by the respondents. Americans most commonly are in the middle, saying that fish and wildlife should be both conserved and preserved about equally (64% give this response). Otherwise, they are fairly evenly split: 16% say conserved, while 13% say preserved. In the general parlance of fish and wildlife professionals, conserve can include use without depletion of the resource, while preserve means that the resource is not used.

Demographic analyses (which start on the following page) show that those selecting *conserve* (over *preserve*) are associated with having a Traditionalist wildlife value orientation; participating in hunting, motorboating, or paddling sports; being young; and being male.

Meanwhile, the selection of *preserve* (over *conserve*) is associated with being politically in the middle, participation in motorboating and/or fishing (more about those below), being Latino, having a Mutualist wildlife value orientation, residing in a small city/town, and being female.

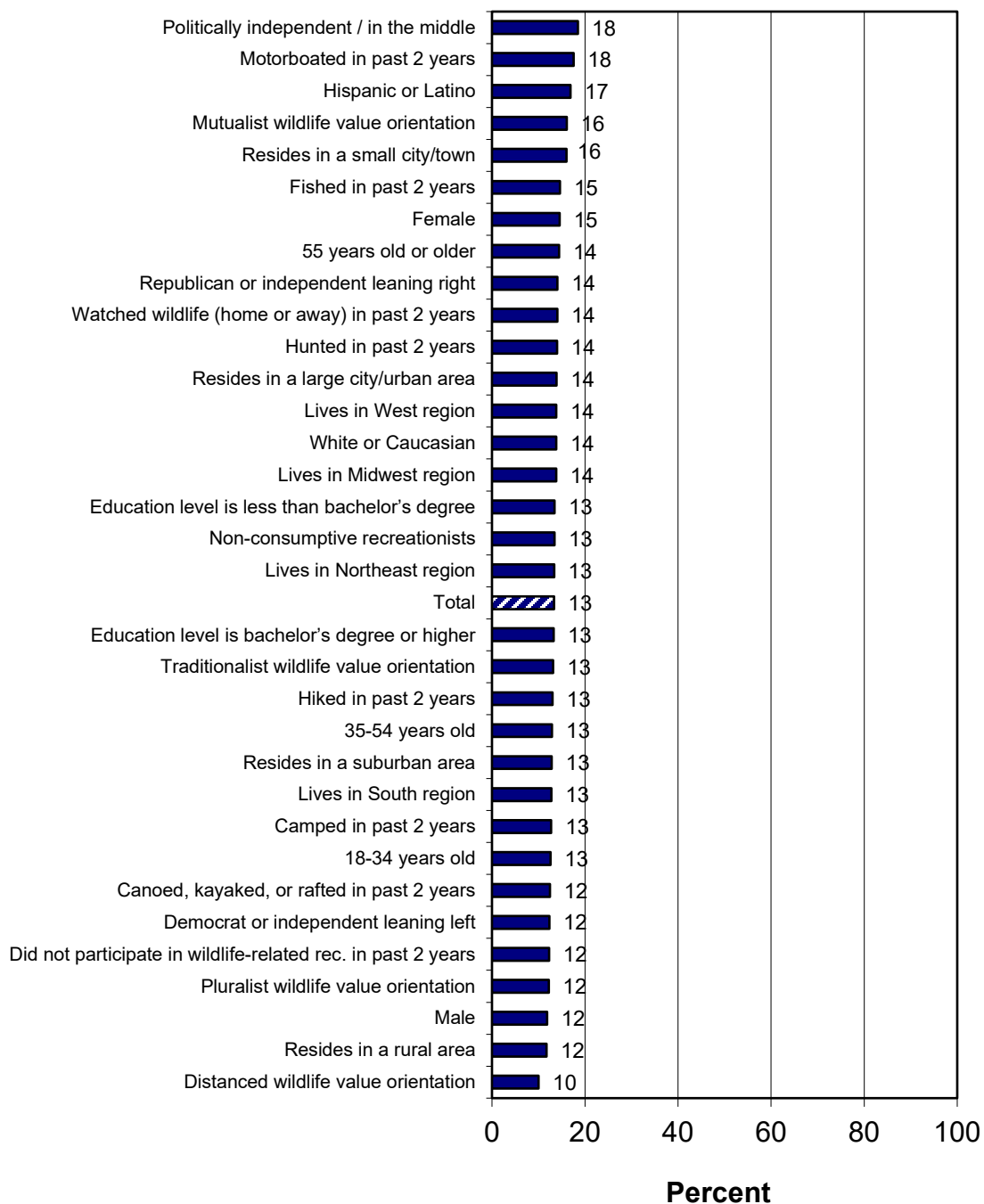
The reason that motorboating and fishing are associated with both of these viewpoints is because they are *not* associated with being in the middle on the question that asked whether fish and wildlife should be conserved or preserved. In other words, those who go motorboating and those who go fishing are more likely to choose one of the sides (conserved or preserved) rather than saying that both are equally important.

Percent of each of the following groups who think it's more important to CONSERVE fish and wildlife rather than PRESERVE them:



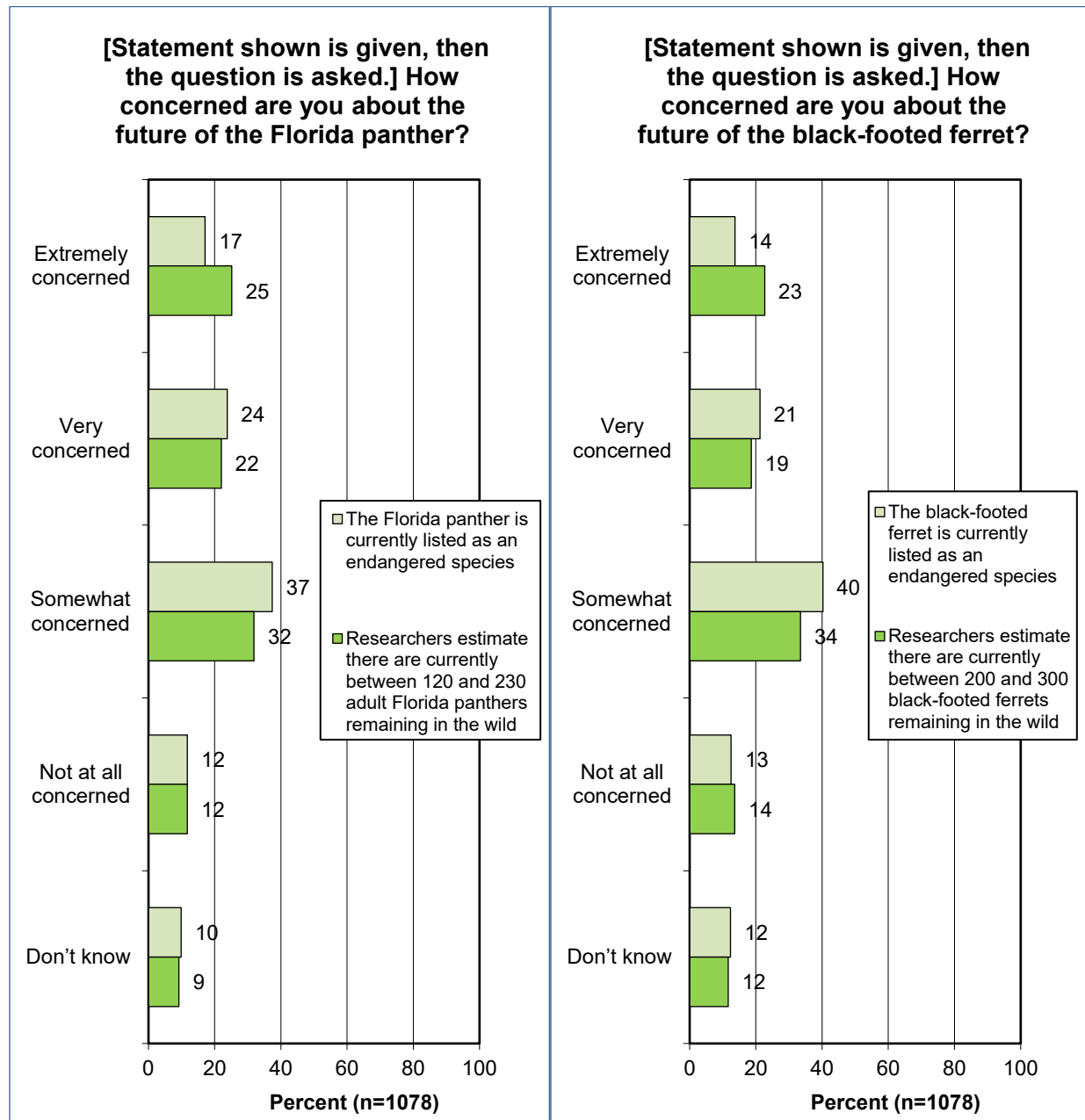
An explanation of how to interpret these types of graphs is presented on page 4.

Percent of each of the following groups who think it's more important to PRESERVE fish and wildlife rather than CONSERVE them:



An explanation of how to interpret these types of graphs is presented on page 4.

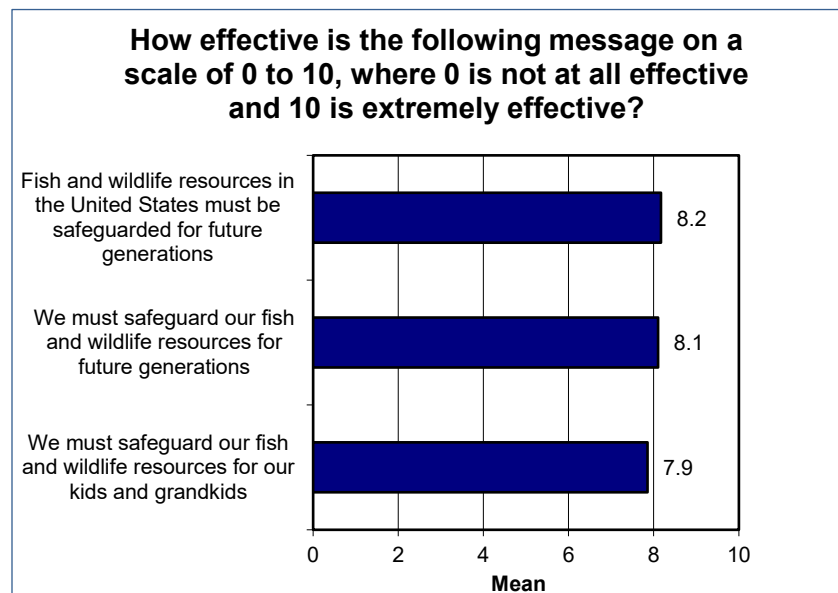
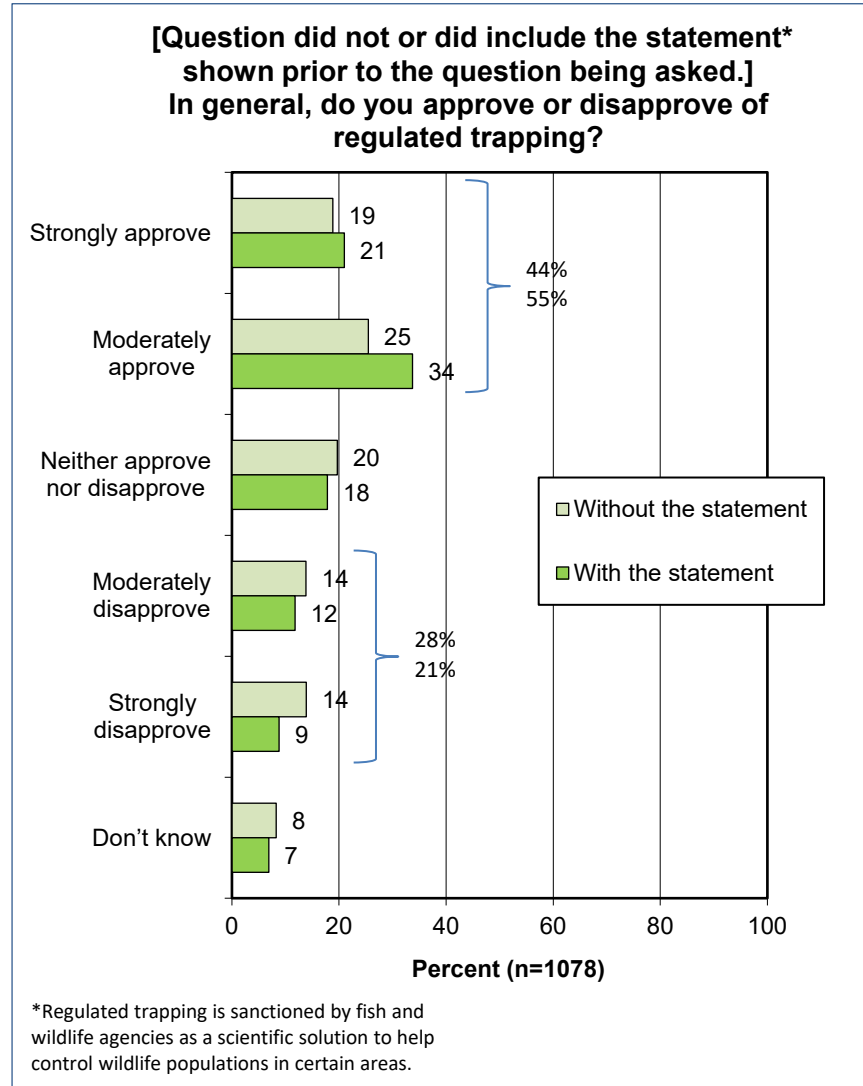
Some of the literature reviewed as part of this overall project suggested that saying the actual numbers of remaining animals elicited more reaction than did statements that a species was endangered.²² This was tested regarding the Florida panther and the black-footed ferret. In both cases, the wording appeared to increase the percentage who were *extremely* concerned (by 8 and 9 percentage points, respectively), but only at the expense of being *very* concerned or *somewhat* concerned. It did not show any appreciable change in the percentage who were *not at all* concerned (or who said that they did not know).



²² Research by Hwanseok Song and Jonathon Schuldt of Cornell University (2016). "In Communicating Wildlife Conservation, Focus on the Right Message." *ScienceDaily*. Accessed December 16, 2021: www.sciencedaily.com/releases/2016/10/161031133844.htm.

The effect of the choice of wording on approval or disapproval of trapping was likewise explored. Some respondents, randomly selected, were asked about their approval or disapproval of trapping with no statement preceding the question, while other randomly selected respondents were first informed that “regulated trapping is sanctioned by fish and wildlife agencies as a scientific solution to help control wildlife populations in certain areas.”

The statement increases approval—in this survey by 11 percentage points. Of note is that the wording increases both *strong* approval and *moderate* approval, raising them at the expense of the *neither* response as well as both disapproval responses.



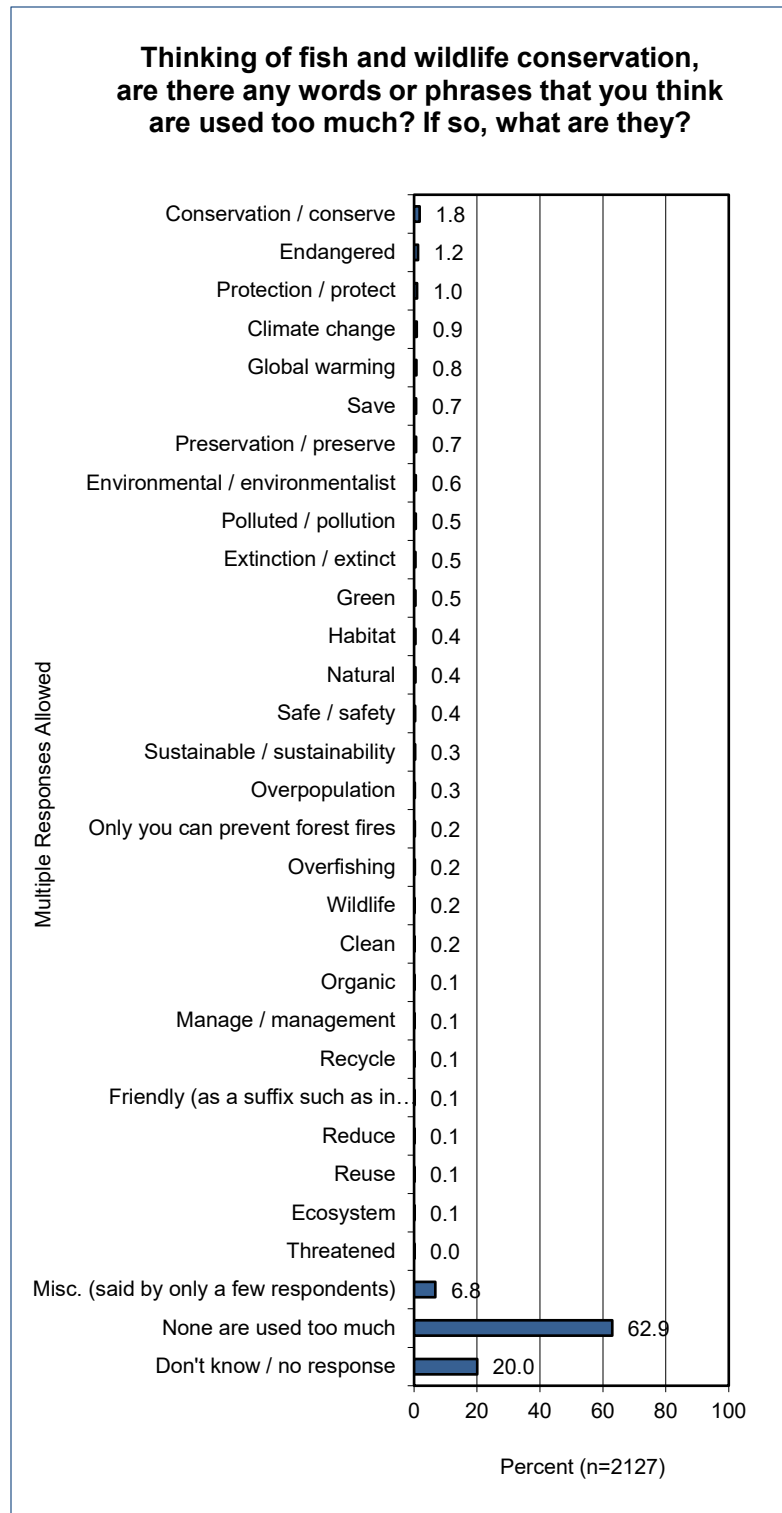
Another part of the survey compared wording regarding “for future generations” or “for our kids and grandkids.” The results were quite close, but “future generations” scored slightly better than did “kids and grandkids.”

At the same time, these three questions were used to explore the use of the pronouns *we* and *our* in messages. One question presented the message in a general sense (“Fish and

wildlife resources in the United States must be safeguarded for future generations”), while the others incorporated the use of *we* and *our* in the message framing (“We must safeguard *our* fish and wildlife resources for future generations” and “We must safeguard our fish and wildlife resources for *our* kids and grandkids”). Although the overall ratings, as indicated previously, were quite close—no stark differences emerged—further analysis showed that some groups had a clear preference for one of the three messages (green-shaded cells, which show when a marked difference occurs).

- The message, “Fish and wildlife resources in the United States must be safeguarded for future generations,” was preferred by females, those between the ages of 35 and 54 years old, Latino residents, those with an education level of less than a bachelor’s degree, those identifying as politically Independent or in the middle, Mutualists, Northeast Region residents, West Region residents, campers, and residents of small cities/towns.
- The message, “We must safeguard our fish and wildlife resources for future generations,” was preferred by those 55 years old and older, those holding the Distanced wildlife value orientation, and hikers.
- Finally, the message, “We must safeguard our fish and wildlife resources for our kids and grandkids,” was preferred by residents of the Midwest Region, anglers, motorboaters, paddlers, and residents of rural areas.

	Fish and wildlife resources in the United States must be safeguarded for future generations	We must safeguard our fish and wildlife resources for future generations	We must safeguard our fish and wildlife resources for our kids and grandkids
Male	8.05	8.12	8.00
Female	8.27	8.15	7.83
18-34 years old	7.59	7.57	6.87
35-54 years old	8.21	8.08	8.03
55 years old or older	8.53	8.62	8.54
White or Caucasian	8.26	8.20	7.97
Black or African-American	8.01	8.08	7.44
Hispanic or Latino	8.17	8.01	7.65
Education level is less than bachelor’s degree	8.19	8.08	7.88
Education level is bachelor’s degree or higher	8.14	8.18	7.86
Democrat or independent leaning left	8.24	8.30	7.99
Politically independent / in the middle	8.26	7.97	7.80
Republican or independent leaning right	8.04	7.80	8.06
Traditionalist wildlife value orientation	7.66	7.63	7.61
Pluralist wildlife value orientation	8.16	8.08	8.06
Mutualist wildlife value orientation	8.49	8.35	7.70
Distanced wildlife value orientation	7.22	7.96	5.73
Lives in Northeast region	8.21	8.07	8.01
Lives in South region	8.21	8.19	7.40
Lives in Midwest region	8.14	8.13	8.26
Lives in West region	8.12	7.97	7.94
Hunted in past 2 years	8.15	8.22	7.64
Fished in past 2 years	7.70	8.07	8.16
Motorboated in past 2 years	8.01	8.30	8.40
Canoed, kayaked, or rafted in past 2 years	7.96	7.83	8.30
Watched wildlife (home or away) in past 2 years	8.52	8.50	8.25
Camped in past 2 years	8.34	8.12	8.10
Hiked in past 2 years	8.17	8.28	7.84
Did not participate in wildlife-related recreation in the past 2 years	8.01	7.90	7.58
Resides in a large city/urban area	8.28	8.31	8.00
Resides in a suburban area	8.05	8.04	7.78
Resides in a small city/town	8.33	8.09	7.42
Resides in a rural area	8.12	8.05	8.35

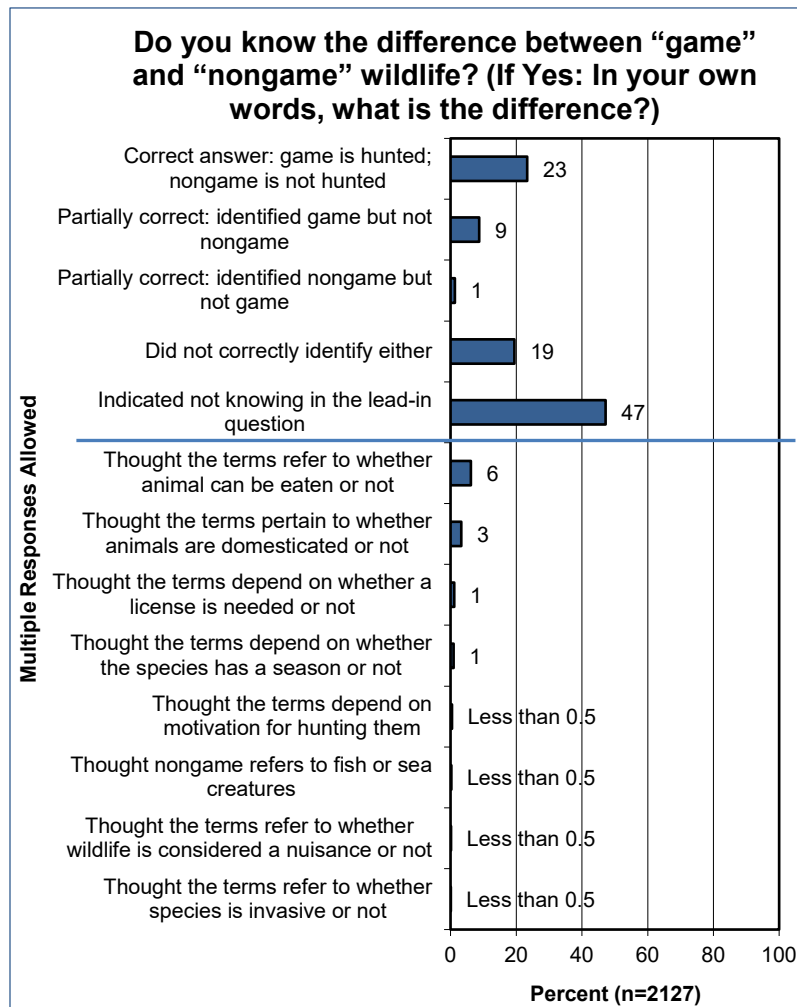


The survey asked about words that might be overused in an open-ended question wherein respondents could say any words or phrases that came to mind. The first observation is that no word garnered more than 2% saying it was overused; the top was *conservation*, which was named by 1.8% of respondents. Ten more words were named by 0.5% or more, as shown in the graph, with two of those being the divisive terms referring to manmade changes to the climate that are ongoing: global warming and climate change. However, most commonly, respondents indicated that no words are overused when it comes to wildlife conservation.

In general, the findings suggest that some people think a word is overused because they obviously disagree with the ideology behind it. The prime example of this being that many people said that *global warming* was overused, and nearly all of them who said it think it is overused because they do not believe it is happening. In other instances, people seem to be on the side of conservation but will mention words or phrases that they feel are overused but not because they do not believe in the underlying ideology.

Note that there was a distinction made in the analysis between those who said that no word is overused or that they cannot think of a word that is overused versus those who simply said that they did not know. There is a nuanced difference between someone saying, "I don't know," versus someone saying, "I can't think of any that are overused." (The graph shows percentages out to one decimal point. This is not to imply that the survey had findings to that level of precision; rather, it was done so that the bottom items do not round to 0 on the graph.)

Some of the preliminary work for this project revealed that the terms *game* and *nongame* may not be well understood, so the survey asked respondents if they knew the difference and to state what the terms mean if they indicated knowing. Only 23% fully know the difference between game and nongame, while another 10% could be said to partially know the difference. In total, 67% do not know the difference, including 19% who indicated knowing the difference but who did not. The responses indicated that many respondents were incorrect because they think game refers to species that can be eaten and nongame refers to species that cannot be eaten. Another common incorrect response was that the terms, game and nongame, distinguish wild from domesticated species.

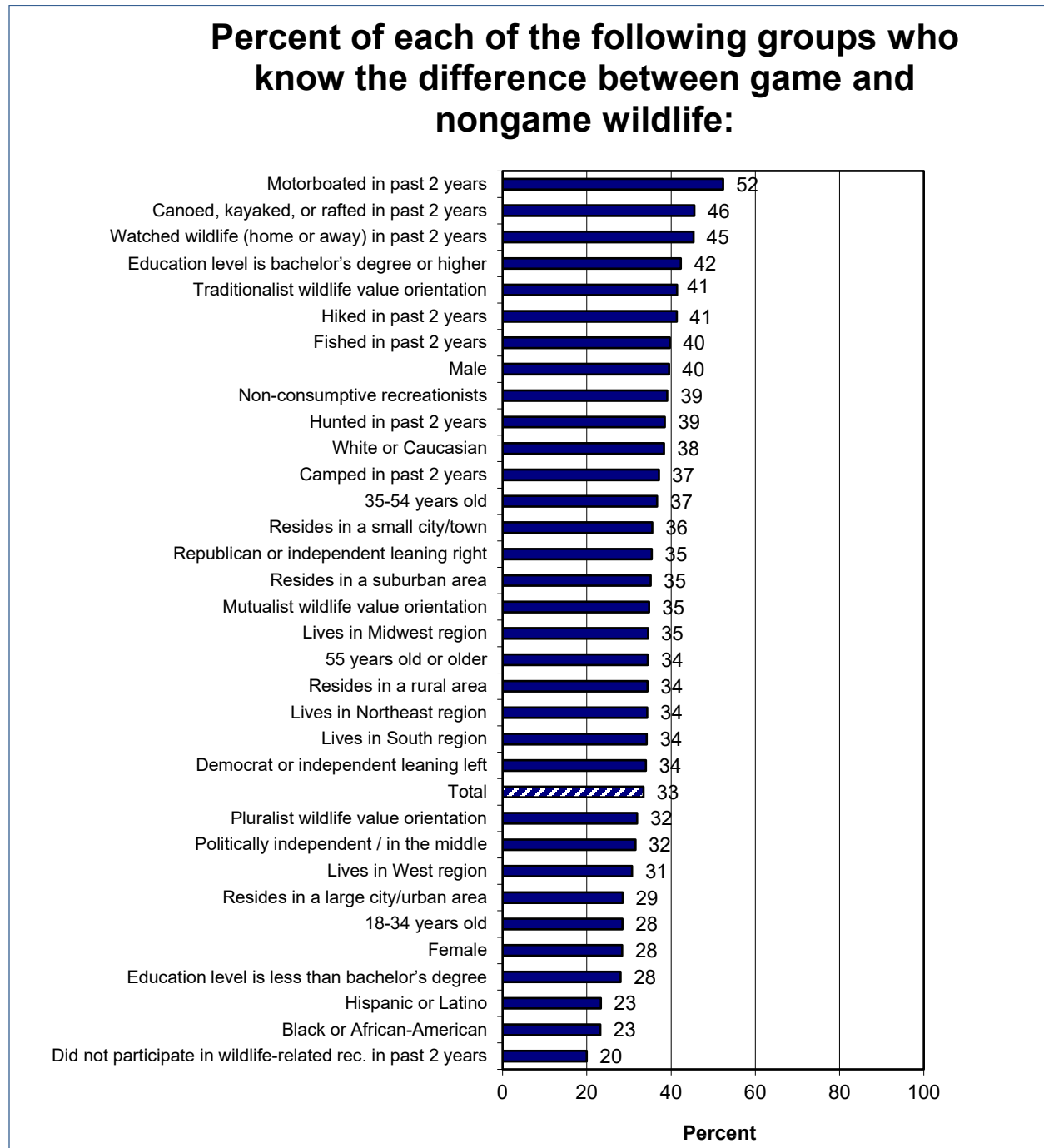


In the analysis, those categorized as partially correct because they defined game but did not define nongame were *not* automatically categorized as fully knowing for this reason: many respondents correctly indicated that game species are those that can be hunted, but then would finish the response with a statement indicating that nongame means you can't eat it. In other words, they correctly defined the one but not the other. Therefore, when respondents simply said, "Game means it can be hunted," and did not further say what nongame was, they were not put into the correct answer category. It may be that they *do* know what nongame means, but they did not explicitly say what it means, and the analysis cannot assume that they do.

A response category that was very close to being correct, but not quite, was identifying game as a species for which a license is needed, but appended to these responses were incorrect statements that identified nongame as varmints and stuff you can shoot without a license. There were those identifying game as species in season but nongame as species not in season. Their implication is that game are species that are hunted (because they have a season), but then misperceptions are occurring when they think those same species are nongame when they are out of season. In reality, deer is a game species all year long; it just cannot be hunted all year long.

In the graph, those items above the line are mutually exclusive: everyone is shown in the first five categories, which total to 100% on unrounded numbers. Those items below the bar are the most common misperceptions among those who indicated knowing but who did not give a fully correct answer.

Demographic analyses were run on the game/nongame question. In this analysis, those who correctly responded as well as those who were partially correct were put together: 33% of all U.S. residents fall into that category. Knowing the difference between *game* and *nongame* is associated with participation in motorboating, paddling sports, watching wildlife, hiking, fishing, and hunting. It is also associated with being in the upper education bracket, having a Traditionalist wildlife value orientation, and being male.



An explanation of how to interpret this graph is presented on page 4.

SUMMARY TABLES

This section presents summary tables that show how various demographic and participatory groups respond to a variety of survey questions. In addition to their use in the analysis, these summary tables are intended for future use by those conducting any type of conservation or human dimensions of wildlife research, or implementing marketing or communications campaigns that target specific audiences and groups. They start on the following page.

KEY RESULTS AMONG MALES

Thinks state fish and wildlife agency is...*	
Very relevant to me	35
Somewhat relevant to me	37
A little relevant to me	15
Not at all relevant to me	11

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	40
Indicated knowing but gave incorrect response	23
Does not know the difference	37

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	4
For both about equally	51
Mostly for fish and wildlife	30
Entirely for fish and wildlife	11

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.04
Protecting lakes, rivers, and streams	9.03
Making sure waters are clean	9.01
Conserving habitat	8.56
Preserving habitat	8.55
Managing hunting and hunters	8.55

Top 5 most important conservation problems**	
Water pollution	8.10
Loss of habitat from development	7.88
Bad water quality in streams and rivers	7.61
Loss of wetlands	7.52
Bad water quality in the oceans	7.49

Top 5 positive reactions to conservation terms***	
Responsible recreation	86
Fish and wildlife management	83
Future generations	79
Coexist	77
Conservation work	77
Sustainable practices	77

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	29
Need some management but should otherwise be left alone	57
Should be left alone	11

Is it more important that fish and wildlife in the United States be...*	
Conserved	21
Both are equally important	62
Preserved	12

Is it more important that fish and wildlife in the United States be...*	
Managed	18
Both are equally important	56
Protected	24

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.99
That fish and wildlife species in your state are healthy	8.39
Having public lands for recreation	8.34
Being in nature	8.20
That people be allowed to legally fish in the United States	8.17

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.12
Fish and wildlife resources in the United States must be safeguarded for future generations	8.05
We must safeguard our fish and wildlife resources for our kids and grandkids	8.00

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG FEMALES

Thinks state fish and wildlife agency is...*	
Very relevant to me	26
Somewhat relevant to me	35
A little relevant to me	23
Not at all relevant to me	9

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	28
Indicated knowing but gave incorrect response	16
Does not know the difference	56

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	3
For both about equally	58
Mostly for fish and wildlife	27
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Making sure waters are clean	9.16
Conserving natural resources	8.98
Teaching people about wild animals, birds, and fish	8.95
Helping protect the sources of our drinking water	8.94
Protecting natural resources	8.91

Top 5 most important conservation problems**	
Water pollution	8.42
Loss of habitat from development	8.33
Bad water quality in the oceans	8.29
Loss of grasslands	8.17
Loss of land from development	8.16

Top 5 positive reactions to conservation terms***	
Responsible recreation	78
Conservation work	73
Fish and wildlife management	72
Future generations	70
Environmental work	69

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	21
Need some management but should otherwise be left alone	63
Should be left alone	10

Is it more important that fish and wildlife in the United States be...*	
Conserved	12
Both are equally important	66
Preserved	15

Is it more important that fish and wildlife in the United States be...*	
Managed	8
Both are equally important	59
Protected	31

Top 5 most important conservation values**	
That fish and wildlife species in your state are healthy	8.82
That wilderness areas exist in the United States	8.68
Being in nature	8.53
Getting away from daily life out in nature	8.30
Having public lands for recreation	8.21

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.27
We must safeguard our fish and wildlife resources for future generations	8.15
We must safeguard our fish and wildlife resources for our kids and grandkids	7.83

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG THOSE 18-34 YEARS OLD

Thinks state fish and wildlife agency is...*	
Very relevant to me	22
Somewhat relevant to me	39
A little relevant to me	22
Not at all relevant to me	9

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	28
Indicated knowing but gave incorrect response	14
Does not know the difference	58

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	7
For both about equally	46
Mostly for fish and wildlife	31
Entirely for fish and wildlife	13

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.01
Making sure waters are clean	8.89
Protecting species	8.71
Making sure wildlife is healthy	8.69
Conserving habitat	8.48

Top 5 most important conservation problems**	
Water pollution	8.33
Climate change	8.14
Global warming	8.05
Loss of habitat from development	7.73
Bad water quality in streams and rivers	7.70

Top 5 positive reactions to conservation terms***	
Responsible recreation	81
Coexist	71
Biodiversity	67
Conservation work	67
Future generations	66
Balance	66

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	15
Need some management but should otherwise be left alone	63
Should be left alone	16

Is it more important that fish and wildlife in the United States be...*	
Conserved	21
Both are equally important	58
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	10
Both are equally important	51
Protected	36

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.35
Being in nature	8.20
That fish and wildlife species in your state are healthy	7.98
Getting away from daily life out in nature	7.92
That the [agency] uses scientific practices	7.79

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	7.59
We must safeguard our fish and wildlife resources for future generations	7.57
We must safeguard our fish and wildlife resources for our kids and grandkids	6.87

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG THOSE 35-54 YEARS OLD

Thinks state fish and wildlife agency is...*	
Very relevant to me	31
Somewhat relevant to me	34
A little relevant to me	20
Not at all relevant to me	10

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	37
Indicated knowing but gave incorrect response	16
Does not know the difference	48

Thinks state fish and wildlife agency should be working...*	
Entirely for people	13
Mostly for people	59
For both about equally	25
Mostly for fish and wildlife	13
Entirely for fish and wildlife	59

Top 5 most important agency functions**	
Making sure waters are clean	9.06
Protecting the places where wild animals, birds, and fish live	9.01
Protecting lakes, rivers, and streams	8.94
Conserving habitat	8.88
Helping protect the sources of our drinking water	8.76

Top 5 most important conservation problems**	
Loss of habitat from development	8.11
Water pollution	7.91
Bad water quality in the oceans	7.82
Loss of forest lands	7.74
Loss of wetlands	7.56

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	87
Responsible recreation	82
Conservation work	79
Future generations	76
Balance	75

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	28
Need some management but should otherwise be left alone	57
Should be left alone	9

Is it more important that fish and wildlife in the United States be...*	
Conserved	14
Both are equally important	69
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	13
Both are equally important	59
Protected	25

Top 5 most important conservation values**	
That wilderness areas exist in the United States	9.09
That fish and wildlife species in your state are healthy	8.47
Having public lands for recreation	8.47
Being in nature	8.29
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.02

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.21
We must safeguard our fish and wildlife resources for future generations	8.08
We must safeguard our fish and wildlife resources for our kids and grandkids	8.03

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG THOSE 55 YEARS OLD OR OLDER

Thinks state fish and wildlife agency is...*	
Very relevant to me	36
Somewhat relevant to me	35
A little relevant to me	15
Not at all relevant to me	11

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	35
Indicated knowing but gave incorrect response	27
Does not know the difference	38

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	2
For both about equally	59
Mostly for fish and wildlife	27
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Protecting lakes, rivers, and streams	9.24
Helping protect the sources of our drinking water	9.16
Making sure waters are clean	9.11
Working on behalf of endangered species	9.11
Conserving natural resources	9.03

Top 5 most important conservation problems**	
Water pollution	8.52
Loss of habitat from development	8.35
Bad water quality in the oceans	8.28
Loss of wetlands	8.19
Loss of land from development	8.01

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	85
Responsible recreation	84
Future generations	80
Wildlife management area	77
Stewardship of natural resources	77
Environmental work	77

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	30
Need some management but should otherwise be left alone	60
Should be left alone	7

Is it more important that fish and wildlife in the United States be...*	
Conserved	15
Both are equally important	65
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	15
Both are equally important	61
Protected	24

Top 5 most important conservation values**	
That fish and wildlife species in your state are healthy	8.99
That wilderness areas exist in the United States	8.96
Having public lands for recreation	8.63
Being in nature	8.51
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.50

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.62
We must safeguard our fish and wildlife resources for our kids and grandkids	8.54
Fish and wildlife resources in the United States must be safeguarded for future generations	8.53

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG WHITES

Thinks state fish and wildlife agency is...*	
Very relevant to me	31
Somewhat relevant to me	36
A little relevant to me	20
Not at all relevant to me	9

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	38
Indicated knowing but gave incorrect response	21
Does not know the difference	40

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	2
For both about equally	53
Mostly for fish and wildlife	32
Entirely for fish and wildlife	10

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.05
Making sure waters are clean	9.01
Protecting lakes, rivers, and streams	8.87
Working on behalf of endangered species	8.79
Conserving habitat	8.78

Top 5 most important conservation problems**	
Water pollution	8.26
Loss of habitat from development	8.23
Loss of forest lands	7.88
Bad water quality in the oceans	7.79
Loss of wetlands	7.69

Top 5 positive reactions to conservation terms***	
Responsible recreation	86
Future generations	76
Conservation work	76
Coexist	75
Fish and wildlife management	75

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	25
Need some management but should otherwise be left alone	62
Should be left alone	9

Is it more important that fish and wildlife in the United States be...*	
Conserved	16
Both are equally important	64
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	14
Both are equally important	57
Protected	28

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.97
That fish and wildlife species in your state are healthy	8.54
Being in nature	8.51
Having public lands for recreation	8.41
Getting away from daily life out in nature	8.30

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.26
We must safeguard our fish and wildlife resources for future generations	8.20
We must safeguard our fish and wildlife resources for our kids and grandkids	7.97

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG BLACKS

Thinks state fish and wildlife agency is...*	
Very relevant to me	32
Somewhat relevant to me	33
A little relevant to me	15
Not at all relevant to me	15

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	23
Indicated knowing but gave incorrect response	13
Does not know the difference	64

Thinks state fish and wildlife agency should be working...*	
Entirely for people	5
Mostly for people	5
For both about equally	59
Mostly for fish and wildlife	23
Entirely for fish and wildlife	8

Top 5 most important agency functions**	
Making sure waters are clean	9.36
Helping protect the sources of our drinking water	9.36
Conserving natural resources	9.11
Protecting lakes, rivers, and streams	8.99
Providing conservation education	8.91

Top 5 most important conservation problems**	
Climate change	8.80
Bad water quality in the oceans	8.65
Bad water quality in streams and rivers	8.24
Water pollution	8.06
Lack of water quantity	8.04

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	80
Responsible recreation	77
Conservation work	73
Balance	72
Environmental work	68

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	20
Need some management but should otherwise be left alone	60
Should be left alone	13

Is it more important that fish and wildlife in the United States be...*	
Conserved	12
Both are equally important	68
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	8
Both are equally important	65
Protected	25

Top 5 most important conservation values**	
That fish and wildlife species in your state are healthy	8.73
That wilderness areas exist in the United States	8.57
That the [agency] uses scientific practices	7.98
That fish and wildlife species in your state are abundant	7.94
Being in nature	7.91

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.08
Fish and wildlife resources in the United States must be safeguarded for future generations	8.01
We must safeguard our fish and wildlife resources for our kids and grandkids	7.44

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG HISPANICS

Thinks state fish and wildlife agency is...*	
Very relevant to me	23
Somewhat relevant to me	43
A little relevant to me	19
Not at all relevant to me	10

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	23
Indicated knowing but gave incorrect response	15
Does not know the difference	62

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	7
For both about equally	51
Mostly for fish and wildlife	26
Entirely for fish and wildlife	12

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.44
Helping control development	9.41
Restoring habitat	9.40
Protecting the places where wild animals, birds, and fish live	9.26
Making sure wildlife is healthy	9.25
Educating the public	9.25

Top 5 most important conservation problems**	
Climate change	9.02
Water pollution	8.62
Lack of water quantity	8.38
Global warming	8.22
Bad water quality in streams and rivers	8.16

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	85
Responsible recreation	79
Environmental work	74
Future generations	71
Aquatic resources	71

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	23
Need some management but should otherwise be left alone	56
Should be left alone	15

Is it more important that fish and wildlife in the United States be...*	
Conserved	18
Both are equally important	59
Preserved	17

Is it more important that fish and wildlife in the United States be...*	
Managed	8
Both are equally important	51
Protected	39

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.60
Getting away from daily life out in nature	8.41
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.35
That fish and wildlife species in your state are healthy	8.30
Being in nature	8.19

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.17
We must safeguard our fish and wildlife resources for future generations	8.01
We must safeguard our fish and wildlife resources for our kids and grandkids	7.65

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG THOSE WITH LESS THAN BACHELORS DEGREE

Thinks state fish and wildlife agency is...*	
Very relevant to me	28
Somewhat relevant to me	34
A little relevant to me	20
Not at all relevant to me	12

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	28
Indicated knowing but gave incorrect response	19
Does not know the difference	53

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	4
For both about equally	54
Mostly for fish and wildlife	28
Entirely for fish and wildlife	11

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	8.96
Making sure waters are clean	8.95
Protecting the places where wild animals, birds, and fish live	8.93
Protecting lakes, rivers, and streams	8.85
Making sure wildlife is healthy	8.67

Top 5 most important conservation problems**	
Water pollution	8.33
Bad water quality in the oceans	7.93
Loss of habitat from development	7.93
Loss of land from development	7.92
Loss of wetlands	7.77

Top 5 positive reactions to conservation terms***	
Responsible recreation	81
Fish and wildlife management	75
Future generations	71
Fishing	68
Coexist	68

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	23
Need some management but should otherwise be left alone	59
Should be left alone	12

Is it more important that fish and wildlife in the United States be...*	
Conserved	16
Both are equally important	65
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	13
Both are equally important	58
Protected	26

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.63
That fish and wildlife species in your state are healthy	8.41
Being in nature	8.23
Getting away from daily life out in nature	8.10
Having public lands for recreation	8.07

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.19
We must safeguard our fish and wildlife resources for future generations	8.08
We must safeguard our fish and wildlife resources for our kids and grandkids	7.88

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG THOSE WITH BACHELOR'S DEGREE OR HIGHER

Thinks state fish and wildlife agency is...*	
Very relevant to me	33
Somewhat relevant to me	42
A little relevant to me	16
Not at all relevant to me	6

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	42
Indicated knowing but gave incorrect response	19
Does not know the difference	38

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	3
For both about equally	53
Mostly for fish and wildlife	32
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Protecting lakes, rivers, and streams	9.34
Making sure waters are clean	9.18
Working for the environment	8.97
Helping protect the sources of our drinking water	8.95
Protecting the ecosystem	8.95

Top 5 most important conservation problems**	
Loss of habitat from development	8.37
Water pollution	8.24
Bad water quality in the oceans	8.05
Loss of forest lands	7.79
Over-fishing by COMMERCIAL fishermen	7.78

Top 5 positive reactions to conservation terms***	
Conservation work	90
Fish and wildlife management	85
Responsible recreation	85
Coexist	82
Sustainable practices	82

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	27
Need some management but should otherwise be left alone	62
Should be left alone	8

Is it more important that fish and wildlife in the United States be...*	
Conserved	17
Both are equally important	63
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	11
Both are equally important	57
Protected	30

Top 5 most important conservation values**	
That wilderness areas exist in the United States	9.16
That fish and wildlife species in your state are healthy	8.73
Being in nature	8.57
Having public lands for recreation	8.49
Getting away from daily life out in nature	8.26

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.18
Fish and wildlife resources in the United States must be safeguarded for future generations	8.14
We must safeguard our fish and wildlife resources for our kids and grandkids	7.86

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

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***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG DEMOCRATS AND LEFT-LEANING INDEPENDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	31
Somewhat relevant to me	39
A little relevant to me	18
Not at all relevant to me	9

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	34
Indicated knowing but gave incorrect response	17
Does not know the difference	49

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	3
For both about equally	50
Mostly for fish and wildlife	33
Entirely for fish and wildlife	12

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.50
Protecting lakes, rivers, and streams	9.35
Making sure waters are clean	9.26
Protecting species	9.11
Conserving natural resources	9.06

Top 5 most important conservation problems**	
Climate change	8.97
Global warming	8.92
Water pollution	8.86
Loss of habitat from development	8.51
Loss of forest lands	8.41

Top 5 positive reactions to conservation terms***	
Responsible recreation	89
Environmental work	86
Coexist	82
Conservation work	80
Fish and wildlife management	78

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	24
Need some management but should otherwise be left alone	59
Should be left alone	13

Is it more important that fish and wildlife in the United States be...*	
Conserved	17
Both are equally important	64
Preserved	12

Is it more important that fish and wildlife in the United States be...*	
Managed	8
Both are equally important	56
Protected	35

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.93
That fish and wildlife species in your state are healthy	8.59
That the [agency] uses scientific practices	8.54
Being in nature	8.45
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.45

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.30
Fish and wildlife resources in the United States must be safeguarded for future generations	8.24
We must safeguard our fish and wildlife resources for our kids and grandkids	7.99

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

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***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG REPUBLICANS AND RIGHT-LEANING INDEPENDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	33
Somewhat relevant to me	36
A little relevant to me	19
Not at all relevant to me	10

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	35
Indicated knowing but gave incorrect response	21
Does not know the difference	44

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	4
For both about equally	57
Mostly for fish and wildlife	27
Entirely for fish and wildlife	8

Top 5 most important agency functions**	
Making sure wildlife is healthy	8.93
Enforcing fishing laws and regulations	8.83
Helping protect the sources of our drinking water	8.83
Making sure waters are clean	8.79
Conserving habitat	8.57
Educating the public	8.57

Top 5 most important conservation problems**	
Water pollution	7.49
Loss of habitat from development	7.45
Bad water quality in streams and rivers	7.37
Bad water quality in the oceans	7.30
Invasive species	7.18

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	84
Responsible recreation	81
Future generations	81
Fishing	80
Conservation work	74

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	27
Need some management but should otherwise be left alone	62
Should be left alone	8

Is it more important that fish and wildlife in the United States be...*	
Conserved	19
Both are equally important	62
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	18
Both are equally important	60
Protected	21

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.86
That fish and wildlife species in your state are healthy	8.61
That people be allowed to legally fish in the United States	8.60
Having public lands for recreation	8.40
Being in nature	8.36

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for our kids and grandkids	8.06
Fish and wildlife resources in the United States must be safeguarded for future generations	8.04
We must safeguard our fish and wildlife resources for future generations	7.80

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**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG INDEPENDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	28
Somewhat relevant to me	36
A little relevant to me	25
Not at all relevant to me	9

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	32
Indicated knowing but gave incorrect response	16
Does not know the difference	52

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	3
For both about equally	57
Mostly for fish and wildlife	30
Entirely for fish and wildlife	7

Top 5 most important agency functions**	
Making sure waters are clean	9.18
Protecting lakes, rivers, and streams	8.99
Protecting natural resources	8.90
Protecting wild animals	8.80
Working on behalf of endangered species	8.77

Top 5 most important conservation problems**	
Climate change	8.01
Water pollution	8.55
Loss of land from development	8.35
Loss of habitat from development	8.22
Bad water quality in the oceans	7.90

Top 5 positive reactions to conservation terms***	
Responsible recreation	79
Conservation work	76
Fish and wildlife management	76
Coexist	72
Environmental work	70

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	22
Need some management but should otherwise be left alone	66
Should be left alone	8

Is it more important that fish and wildlife in the United States be...*	
Conserved	10
Both are equally important	66
Preserved	19

Is it more important that fish and wildlife in the United States be...*	
Managed	10
Both are equally important	61
Protected	28

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.62
That fish and wildlife species in your state are healthy	8.41
Being in nature	8.13
Getting away from daily life out in nature	8.10
Having public lands for recreation	7.96

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.26
We must safeguard our fish and wildlife resources for future generations	7.97
We must safeguard our fish and wildlife resources for our kids and grandkids	7.80

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG UTILITARIANS/TRADITIONALISTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	21
Somewhat relevant to me	41
A little relevant to me	24
Not at all relevant to me	10

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	41
Indicated knowing but gave incorrect response	21
Does not know the difference	37

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	3
For both about equally	64
Mostly for fish and wildlife	25
Entirely for fish and wildlife	6

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	8.59
Restoring habitat	8.57
Making sure waters are clean	8.54
Conserving natural resources	8.52
Protecting lakes, rivers, and streams	8.52

Top 5 most important conservation problems**	
Invasive species	7.47
Bad water quality in the oceans	7.26
Loss of habitat from development	7.12
Water pollution	7.06
Over-fishing by COMMERCIAL fishermen	6.91

Top 5 positive reactions to conservation terms***	
Fishermen	94
Fish and wildlife management	85
Responsible recreation	79
Future generations	78
Fishing	78

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	34
Need some management but should otherwise be left alone	57
Should be left alone	5

Is it more important that fish and wildlife in the United States be...*	
Conserved	28
Both are equally important	50
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	31
Both are equally important	50
Protected	16

Top 5 most important conservation values**	
That people be allowed to legally fish in the United States	8.92
That wilderness areas exist in the United States	8.59
That people be allowed to legally hunt in the United States	8.49
Having public lands for recreation	8.38
That people be allowed to legally harvest game in the United States	8.24

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	7.66
We must safeguard our fish and wildlife resources for future generations	7.63
We must safeguard our fish and wildlife resources for our kids and grandkids	7.61

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG PLURALISTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	34
Somewhat relevant to me	35
A little relevant to me	17
Not at all relevant to me	9

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	32
Indicated knowing but gave incorrect response	21
Does not know the difference	47

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	5
For both about equally	58
Mostly for fish and wildlife	26
Entirely for fish and wildlife	8

Top 5 most important agency functions**	
Making sure waters are clean	9.07
Helping protect the sources of our drinking water	8.96
Protecting lakes, rivers, and streams	8.87
Making sure wildlife is healthy	8.79
Conserving habitat	8.68

Top 5 most important conservation problems**	
Water pollution	8.22
Loss of habitat from development	7.95
Bad water quality in the oceans	7.77
Loss of land from development	7.67
Bad water quality in streams and rivers	7.60

Top 5 positive reactions to conservation terms***	
Responsible recreation	84
Fish and wildlife management	77
Future generations	76
Fishing	74
Conservation work	73
Coexist	73

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	26
Need some management but should otherwise be left alone	59
Should be left alone	9

Is it more important that fish and wildlife in the United States be...*	
Conserved	15
Both are equally important	67
Preserved	12

Is it more important that fish and wildlife in the United States be...*	
Managed	12
Both are equally important	65
Protected	21

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.78
That fish and wildlife species in your state are healthy	8.53
Being in nature	8.49
Having public lands for recreation	8.32
That people be allowed to legally fish in the United States	8.32

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.16
We must safeguard our fish and wildlife resources for future generations	8.08
We must safeguard our fish and wildlife resources for our kids and grandkids	8.06

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG MUTUALISTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	28
Somewhat relevant to me	38
A little relevant to me	20
Not at all relevant to me	9

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	35
Indicated knowing but gave incorrect response	17
Does not know the difference	49

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	1
For both about equally	42
Mostly for fish and wildlife	38
Entirely for fish and wildlife	17

Top 5 most important agency functions**	
Working on behalf of endangered species	9.30
Making sure wildlife is healthy	9.18
Making sure waters are clean	9.17
Protecting lakes, rivers, and streams	9.11
Protecting natural resources	9.09

Top 5 most important conservation problems**	
Climate change	8.96
Loss of forest lands	8.94
Water pollution	8.91
Bad water quality in the oceans	8.74
Loss of wetlands	8.73

Top 5 positive reactions to conservation terms***	
Responsible recreation	81
Environmental work	80
Coexist	79
Conservation work	75
Fish and wildlife management	75

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	17
Need some management but should otherwise be left alone	64
Should be left alone	17

Is it more important that fish and wildlife in the United States be...*	
Conserved	14
Both are equally important	62
Preserved	16

Is it more important that fish and wildlife in the United States be...*	
Managed	6
Both are equally important	44
Protected	48

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.98
That fish and wildlife species in your state are healthy	8.87
Being in nature	8.47
Getting away from daily life out in nature	8.20
That the [agency] takes care of nongame species of wildlife in your state	8.18

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.49
We must safeguard our fish and wildlife resources for future generations	8.35
We must safeguard our fish and wildlife resources for our kids and grandkids	7.70

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG THOSE WHO ARE DISTANCED

Thinks state fish and wildlife agency is...*	
Very relevant to me	9
Somewhat relevant to me	31
A little relevant to me	23
Not at all relevant to me	34

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	17
Indicated knowing but gave incorrect response	9
Does not know the difference	74

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	7
For both about equally	60
Mostly for fish and wildlife	21
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Working for the environment	10.00
Protecting species	10.00
Conserving natural resources	10.00
Protecting lakes, rivers, and streams	10.00
Helping protect the sources of our drinking water	9.80

Top 5 most important conservation problems**	
Bad water quality in streams and rivers	9.16
Invasive species	9.12
Loss of forest lands	9.11
Loss of habitat from development	9.09
Climate change	9.01

Top 5 positive reactions to conservation terms***	
Balance	93
Fish and wildlife management	91
Conservation work	85
Fishermen	85
Responsible recreation	81

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	35
Need some management but should otherwise be left alone	45
Should be left alone	7

Is it more important that fish and wildlife in the United States be...*	
Conserved	14
Both are equally important	68
Preserved	10

Is it more important that fish and wildlife in the United States be...*	
Managed	21
Both are equally important	56
Protected	21

Top 5 most important conservation values**	
That people be allowed to legally fish in the United States	8.39
That wilderness areas exist in the United States	8.13
That fish and wildlife species in your state are abundant	7.82
That the [agency] uses scientific practices	7.68
That the [agency] practices scientific fish and wildlife management	7.68

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	7.96
Fish and wildlife resources in the United States must be safeguarded for future generations	7.22
We must safeguard our fish and wildlife resources for our kids and grandkids	5.73

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG NORTHEAST RESIDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	26
Somewhat relevant to me	39
A little relevant to me	20
Not at all relevant to me	10

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	34
Indicated knowing but gave incorrect response	15
Does not know the difference	50

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	4
For both about equally	58
Mostly for fish and wildlife	21
Entirely for fish and wildlife	14

Top 5 most important agency functions**	
Protecting lakes, rivers, and streams	9.13
Restoring habitat	9.02
Making sure waters are clean	8.99
Managing hunting and hunters	8.94
Protecting the ecosystem	8.88

Top 5 most important conservation problems**	
Bad water quality in the oceans	8.39
Loss of habitat from development	8.16
Water pollution	8.07
Global warming	7.98
Loss of wetlands	7.77

Top 5 positive reactions to conservation terms***	
Responsible recreation	85
Conservation work	82
Fish and wildlife management	77
Balance	72
Environmental work	71
Sustainable practices	71

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	31
Need some management but should otherwise be left alone	56
Should be left alone	9

Is it more important that fish and wildlife in the United States be...*	
Conserved	16
Both are equally important	63
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	12
Both are equally important	58
Protected	27

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.67
Having public lands for recreation	8.52
That fish and wildlife species in your state are healthy	8.31
That the [agency] uses scientific practices	8.13
Being in nature	8.04

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.21
We must safeguard our fish and wildlife resources for future generations	8.07
We must safeguard our fish and wildlife resources for our kids and grandkids	8.01

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG SOUTH RESIDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	32
Somewhat relevant to me	34
A little relevant to me	20
Not at all relevant to me	11

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	34
Indicated knowing but gave incorrect response	18
Does not know the difference	48

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	4
For both about equally	55
Mostly for fish and wildlife	29
Entirely for fish and wildlife	8

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.36
Protecting species	9.09
Making sure waters are clean	9.02
Making sure wildlife is healthy	8.97
Teaching people about wild animals, birds, and fish	8.93

Top 5 most important conservation problems**	
Water pollution	8.02
Loss of habitat from development	7.98
Loss of forest lands	7.89
Bad water quality in the oceans	7.87
Bad water quality in streams and rivers	7.69

Top 5 positive reactions to conservation terms***	
Fishing	83
Responsible recreation	82
Coexist	78
Future generations	75
Fish and wildlife management	74

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	23
Need some management but should otherwise be left alone	60
Should be left alone	11

Is it more important that fish and wildlife in the United States be...*	
Conserved	17
Both are equally important	66
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	11
Both are equally important	59
Protected	28

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.87
That fish and wildlife species in your state are healthy	8.56
Being in nature	8.33
Having public lands for recreation	8.25
That people be allowed to legally fish in the United States	8.10
Getting away from daily life out in nature	8.10

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.21
We must safeguard our fish and wildlife resources for future generations	8.19
We must safeguard our fish and wildlife resources for our kids and grandkids	7.40

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG MIDWEST RESIDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	32
Somewhat relevant to me	36
A little relevant to me	16
Not at all relevant to me	8

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	35
Indicated knowing but gave incorrect response	21
Does not know the difference	44

Thinks state fish and wildlife agency should be working...*	
Entirely for people	1
Mostly for people	4
For both about equally	52
Mostly for fish and wildlife	34
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.33
Protecting lakes, rivers, and streams	9.16
Making sure waters are clean	9.09
Working for the environment	9.02
Making sure wildlife is healthy	8.91

Top 5 most important conservation problems**	
Water pollution	8.49
Loss of habitat from development	8.31
Loss of land from development	8.15
Climate change	8.08
Bad water quality in the oceans	8.02

Top 5 positive reactions to conservation terms***	
Responsible recreation	84
Future generations	79
Fish and wildlife management	78
Environmental work	76
Conservation work	76

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	23
Need some management but should otherwise be left alone	61
Should be left alone	10

Is it more important that fish and wildlife in the United States be...*	
Conserved	14
Both are equally important	65
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	13
Both are equally important	58
Protected	27

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.70
That fish and wildlife species in your state are healthy	8.59
Being in nature	8.59
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.48
Getting away from daily life out in nature	8.13

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for our kids and grandkids	8.26
Fish and wildlife resources in the United States must be safeguarded for future generations	8.14
We must safeguard our fish and wildlife resources for future generations	8.13

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG WEST RESIDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	29
Somewhat relevant to me	38
A little relevant to me	18
Not at all relevant to me	11

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	31
Indicated knowing but gave incorrect response	24
Does not know the difference	46

Thinks state fish and wildlife agency should be working...*	
Entirely for people	5
Mostly for people	3
For both about equally	51
Mostly for fish and wildlife	31
Entirely for fish and wildlife	10

Top 5 most important agency functions**	
Preserving habitat	9.17
Making sure waters are clean	9.02
Educating the public	8.92
Working on behalf of endangered species	8.78
Conserving habitat	8.74

Top 5 most important conservation problems**	
Water pollution	8.61
Bad water quality in streams and rivers	8.25
Loss of habitat from development	8.08
Lack of water quantity	7.98
Loss of grasslands	7.86

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	87
Responsible recreation	78
Balance	75
Future generations	73
Stewardship of the environment	73
Environmental work	73
Conservation work	73

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	24
Need some management but should otherwise be left alone	61
Should be left alone	11

Is it more important that fish and wildlife in the United States be...*	
Conserved	18
Both are equally important	61
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	15
Both are equally important	53
Protected	29

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.93
That fish and wildlife species in your state are healthy	8.64
Getting away from daily life out in nature	8.58
Being in nature	8.41
That the [agency] takes care of nongame species of wildlife in your state	8.29

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.12
We must safeguard our fish and wildlife resources for future generations	7.97
We must safeguard our fish and wildlife resources for our kids and grandkids	7.94

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***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG HUNTERS

Thinks state fish and wildlife agency is...*	
Very relevant to me	57
Somewhat relevant to me	31
A little relevant to me	8
Not at all relevant to me	4

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	39
Indicated knowing but gave incorrect response	32
Does not know the difference	30

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	8
For both about equally	50
Mostly for fish and wildlife	29
Entirely for fish and wildlife	10

Top 5 most important agency functions**	
Improving habitat	8.86
Protecting the places where wild animals, birds, and fish live	8.83
Addressing wildlife diseases	8.78
Conserving habitat	8.72
Making sure wildlife is healthy	8.69

Top 5 most important conservation problems**	
Loss of habitat from development	7.65
Bad water quality in the oceans	7.56
Loss of pollinators	7.56
Loss of land from development	7.40
Loss of forest lands	7.35

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	91
Fishing	90
Hunting	89
Sportsmen	86
Responsible recreation	86

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	51
Need some management but should otherwise be left alone	41
Should be left alone	8

Is it more important that fish and wildlife in the United States be...*	
Conserved	27
Both are equally important	58
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	34
Both are equally important	55
Protected	11

Top 5 most important conservation values**	
That people be allowed to legally fish in the United States	8.90
That people be allowed to legally harvest game in the United States	8.85
That fish and wildlife species in your state are healthy	8.84
Getting away from daily life out in nature	8.78
Being in nature	8.73

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.22
Fish and wildlife resources in the United States must be safeguarded for future generations	8.15
We must safeguard our fish and wildlife resources for our kids and grandkids	7.64

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***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG ANGLERS

Thinks state fish and wildlife agency is...*	
Very relevant to me	43
Somewhat relevant to me	35
A little relevant to me	16
Not at all relevant to me	5

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	40
Indicated knowing but gave incorrect response	22
Does not know the difference	39

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	3
For both about equally	56
Mostly for fish and wildlife	25
Entirely for fish and wildlife	13

Top 5 most important agency functions**	
Making sure waters are clean	8.91
Protecting lakes, rivers, and streams	8.83
Making sure wildlife is healthy	8.77
Working for future generations	8.76
Working for the environment	8.73

Top 5 most important conservation problems**	
Loss of forest lands	7.99
Water pollution	7.87
Bad water quality in the oceans	7.86
Loss of land from development	7.83
Loss of pollinators	7.67

Top 5 positive reactions to conservation terms***	
Responsible recreation	88
Fish and wildlife management	85
Fishing	83
Wildlife management area	81
Conservation work	79

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	33
Need some management but should otherwise be left alone	54
Should be left alone	10

Is it more important that fish and wildlife in the United States be...*	
Conserved	21
Both are equally important	62
Preserved	15

Is it more important that fish and wildlife in the United States be...*	
Managed	18
Both are equally important	59
Protected	22

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.74
Being in nature	8.62
That fish and wildlife species in your state are healthy	8.57
That people be allowed to legally fish in the United States	8.44
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.42

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for our kids and grandkids	8.16
We must safeguard our fish and wildlife resources for future generations	8.07
Fish and wildlife resources in the United States must be safeguarded for future generations	7.70

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***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG NON-CONSUMPTIVE RECREATIONISTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	33
Somewhat relevant to me	40
A little relevant to me	19
Not at all relevant to me	6

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	39
Indicated knowing but gave incorrect response	21
Does not know the difference	40

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	3
For both about equally	53
Mostly for fish and wildlife	31
Entirely for fish and wildlife	10

Top 5 most important agency functions**	
Making sure waters are clean	9.16
Protecting lakes, rivers, and streams	9.15
Conserving natural resources	8.87
Conserving habitat	8.86
Helping protect the sources of our drinking water	8.86

Top 5 most important conservation problems**	
Water pollution	8.53
Loss of habitat from development	8.36
Bad water quality in streams and rivers	7.96
Bad water quality in the oceans	7.80
Loss of wetlands	7.79

Top 5 positive reactions to conservation terms***	
Responsible recreation	86
Conservation work	83
Coexist	80
Future generations	79
Stewardship of the environment	77

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	23
Need some management but should otherwise be left alone	64
Should be left alone	10

Is it more important that fish and wildlife in the United States be...*	
Conserved	17
Both are equally important	64
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	14
Both are equally important	57
Protected	29

Top 5 most important conservation values**	
That wilderness areas exist in the United States	9.07
Being in nature	8.79
That fish and wildlife species in your state are healthy	8.59
Having public lands for recreation	8.42
Getting away from daily life out in nature	8.36

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.35
We must safeguard our fish and wildlife resources for future generations	8.20
We must safeguard our fish and wildlife resources for our kids and grandkids	7.94

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

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***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG NON-RECREATIONISTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	17
Somewhat relevant to me	29
A little relevant to me	21
Not at all relevant to me	21

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	20
Indicated knowing but gave incorrect response	14
Does not know the difference	66

Thinks state fish and wildlife agency should be working...*	
Entirely for people	5
Mostly for people	5
For both about equally	55
Mostly for fish and wildlife	26
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.45
Making sure waters are clean	8.84
Protecting the places where wild animals, birds, and fish live	8.67
Conserving natural resources	8.56
Working on behalf of endangered species	8.55

Top 5 most important conservation problems**	
Bad water quality in the oceans	8.35
Water pollution	8.06
Loss of forest lands	7.90
Loss of habitat from development	7.68
Loss of wetlands	7.62

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	77
Responsible recreation	71
Future generations	66
Conservation work	60
Environmental work	60

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	22
Need some management but should otherwise be left alone	56
Should be left alone	11

Is it more important that fish and wildlife in the United States be...*	
Conserved	12
Both are equally important	66
Preserved	12

Is it more important that fish and wildlife in the United States be...*	
Managed	7
Both are equally important	57
Protected	29

Top 5 most important conservation values**	
That fish and wildlife species in your state are healthy	8.40
That wilderness areas exist in the United States	8.31
Having public lands for recreation	7.84
That the [agency] takes care of fish and wildlife on behalf of the people in your state	7.58
That people be allowed to legally fish in the United States	7.54

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.01
We must safeguard our fish and wildlife resources for future generations	7.90
We must safeguard our fish and wildlife resources for our kids and grandkids	7.58

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG HIKERS

Thinks state fish and wildlife agency is...*	
Very relevant to me	35
Somewhat relevant to me	42
A little relevant to me	17
Not at all relevant to me	5

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	41
Indicated knowing but gave incorrect response	22
Does not know the difference	37

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	3
For both about equally	51
Mostly for fish and wildlife	35
Entirely for fish and wildlife	10

Top 5 most important agency functions**	
Making sure waters are clean	9.32
Protecting lakes, rivers, and streams	9.18
Conserving habitat	8.84
Making sure wildlife is healthy	8.84
Working for the environment	8.82

Top 5 most important conservation problems**	
Water pollution	8.37
Loss of habitat from development	8.21
Loss of forest lands	8.04
Loss of land from development	8.01
Bad water quality in streams and rivers	7.95

Top 5 positive reactions to conservation terms***	
Responsible recreation	89
Conservation work	85
Stewardship of the environment	81
Coexist	80
Future generations	80

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	25
Need some management but should otherwise be left alone	64
Should be left alone	10

Is it more important that fish and wildlife in the United States be...*	
Conserved	19
Both are equally important	63
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	14
Both are equally important	56
Protected	29

Top 5 most important conservation values**	
That wilderness areas exist in the United States	9.15
Being in nature	8.95
Getting away from daily life out in nature	8.63
That fish and wildlife species in your state are healthy	8.53
Having public lands for recreation	8.46

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.28
Fish and wildlife resources in the United States must be safeguarded for future generations	8.17
We must safeguard our fish and wildlife resources for our kids and grandkids	7.84

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG MOTORBOATERS

Thinks state fish and wildlife agency is...*	
Very relevant to me	44
Somewhat relevant to me	45
A little relevant to me	10
Not at all relevant to me	1

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	52
Indicated knowing but gave incorrect response	25
Does not know the difference	23

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	3
For both about equally	51
Mostly for fish and wildlife	35
Entirely for fish and wildlife	7

Top 5 most important agency functions**	
Protecting lakes, rivers, and streams	9.29
Making sure waters are clean	9.02
Conserving natural resources	8.81
Working on behalf of endangered species	8.78
Helping protect the sources of our drinking water	8.77

Top 5 most important conservation problems**	
Loss of habitat from development	8.28
Water pollution	8.00
Bad water quality in streams and rivers	7.40
Loss of forest lands	7.39
Loss of wetlands	7.37

Top 5 positive reactions to conservation terms***	
Conservation work	91
Responsible recreation	84
Coexist	83
Fish and wildlife management	82
Anglers	82
Balance	82

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	34
Need some management but should otherwise be left alone	59
Should be left alone	6

Is it more important that fish and wildlife in the United States be...*	
Conserved	25
Both are equally important	55
Preserved	18

Is it more important that fish and wildlife in the United States be...*	
Managed	25
Both are equally important	49
Protected	25

Top 5 most important conservation values**	
That wilderness areas exist in the United States	9.26
Being in nature	9.19
That people be allowed to legally fish in the United States	8.92
That fish and wildlife species in your state are healthy	8.73
Getting away from daily life out in nature	8.61

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for our kids and grandkids	8.40
We must safeguard our fish and wildlife resources for future generations	8.30
Fish and wildlife resources in the United States must be safeguarded for future generations	8.01

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG CANOEISTS/KAYAKERS

Thinks state fish and wildlife agency is...*	
Very relevant to me	34
Somewhat relevant to me	43
A little relevant to me	17
Not at all relevant to me	5

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	46
Indicated knowing but gave incorrect response	18
Does not know the difference	37

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	2
For both about equally	52
Mostly for fish and wildlife	32
Entirely for fish and wildlife	11

Top 5 most important agency functions**	
Protecting species	8.98
Protecting lakes, rivers, and streams	8.97
Restoring habitat	8.91
Making sure wildlife is healthy	8.89
Conserving habitat	8.88

Top 5 most important conservation problems**	
Water pollution	8.50
Loss of habitat from development	7.95
Loss of land from development	7.95
Loss of forest lands	7.78
Bad water quality in streams and rivers	7.76

Top 5 positive reactions to conservation terms***	
Responsible recreation	91
Conservation work	81
Coexist	81
Sustainable practices	80
Future generations	79

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	24
Need some management but should otherwise be left alone	61
Should be left alone	13

Is it more important that fish and wildlife in the United States be...*	
Conserved	22
Both are equally important	61
Preserved	12

Is it more important that fish and wildlife in the United States be...*	
Managed	14
Both are equally important	52
Protected	33

Top 5 most important conservation values**	
That wilderness areas exist in the United States	9.26
Being in nature	8.92
That fish and wildlife species in your state are healthy	8.60
Getting away from daily life out in nature	8.50
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.34

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for our kids and grandkids	8.30
Fish and wildlife resources in the United States must be safeguarded for future generations	7.96
We must safeguard our fish and wildlife resources for future generations	7.83

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG WILDLIFE WATCHERS

Thinks state fish and wildlife agency is...*	
Very relevant to me	41
Somewhat relevant to me	40
A little relevant to me	14
Not at all relevant to me	4

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	45
Indicated knowing but gave incorrect response	25
Does not know the difference	30

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	2
For both about equally	54
Mostly for fish and wildlife	31
Entirely for fish and wildlife	11

Top 5 most important agency functions**	
Making sure waters are clean	9.29
Protecting the places where wild animals, birds, and fish live	9.15
Protecting lakes, rivers, and streams	9.15
Preserving habitat	9.10
Restoring habitat	9.03

Top 5 most important conservation problems**	
Loss of habitat from development	8.54
Water pollution	8.54
Bad water quality in the oceans	8.25
Loss of forest lands	8.13
Loss of land from development	8.09

Top 5 positive reactions to conservation terms***	
Responsible recreation	90
Conservation work	87
Fish and wildlife management	82
Stewardship of the environment	80
Coexist	79
Future generations	79
Balance	79

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	28
Need some management but should otherwise be left alone	64
Should be left alone	6

Is it more important that fish and wildlife in the United States be...*	
Conserved	16
Both are equally important	66
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	14
Both are equally important	61
Protected	25

Top 5 most important conservation values**	
That wilderness areas exist in the United States	9.34
Being in nature	8.97
That fish and wildlife species in your state are healthy	8.70
Having public lands for recreation	8.67
Getting away from daily life out in nature	8.64

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.52
We must safeguard our fish and wildlife resources for future generations	8.50
We must safeguard our fish and wildlife resources for our kids and grandkids	8.25

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG CAMPERS

Thinks state fish and wildlife agency is...*	
Very relevant to me	37
Somewhat relevant to me	41
A little relevant to me	16
Not at all relevant to me	4

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	37
Indicated knowing but gave incorrect response	21
Does not know the difference	42

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	4
For both about equally	51
Mostly for fish and wildlife	32
Entirely for fish and wildlife	10

Top 5 most important agency functions**	
Conserving habitat	9.09
Making sure waters are clean	9.08
Protecting lakes, rivers, and streams	9.06
Educating the public	8.89
Preserving habitat	8.85

Top 5 most important conservation problems**	
Water pollution	8.42
Loss of habitat from development	8.01
Climate change	7.85
Loss of wetlands	7.76
Bad water quality in streams and rivers	7.69

Top 5 positive reactions to conservation terms***	
Responsible recreation	84
Coexist	83
Future generations	83
Conservation work	79
Environmental work	79
Fish and wildlife management	79
Stewardship of the environment	79

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	28
Need some management but should otherwise be left alone	57
Should be left alone	12

Is it more important that fish and wildlife in the United States be...*	
Conserved	20
Both are equally important	63
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	15
Both are equally important	59
Protected	26

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.96
That fish and wildlife species in your state are healthy	8.89
Being in nature	8.71
Getting away from daily life out in nature	8.48
Having public lands for recreation	8.14

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.34
We must safeguard our fish and wildlife resources for future generations	8.12
We must safeguard our fish and wildlife resources for our kids and grandkids	8.10

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG URBAN RESIDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	34
Somewhat relevant to me	35
A little relevant to me	18
Not at all relevant to me	9

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	29
Indicated knowing but gave incorrect response	15
Does not know the difference	57

Thinks state fish and wildlife agency should be working...*	
Entirely for people	3
Mostly for people	3
For both about equally	57
Mostly for fish and wildlife	23
Entirely for fish and wildlife	14

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.36
Making sure waters are clean	9.11
Preserving habitat	9.09
Protecting the places where wild animals, birds, and fish live	9.06
Protecting lakes, rivers, and streams	9.04

Top 5 most important conservation problems**	
Global warming	8.48
Loss of habitat from development	8.48
Climate change	8.46
Water pollution	8.46
Loss of wetlands	8.21

Top 5 positive reactions to conservation terms***	
Responsible recreation	84
Conservation work	83
Coexist	77
Environmental work	76
Balance	76

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	29
Need some management but should otherwise be left alone	57
Should be left alone	11

Is it more important that fish and wildlife in the United States be...*	
Conserved	16
Both are equally important	64
Preserved	14

Is it more important that fish and wildlife in the United States be...*	
Managed	10
Both are equally important	59
Protected	29

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.70
Having public lands for recreation	8.52
That fish and wildlife species in your state are healthy	8.46
That the [agency] uses scientific practices	8.32
Getting away from daily life out in nature	8.25

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for future generations	8.31
Fish and wildlife resources in the United States must be safeguarded for future generations	8.28
We must safeguard our fish and wildlife resources for our kids and grandkids	8.00

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG SUBURBAN RESIDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	24
Somewhat relevant to me	38
A little relevant to me	24
Not at all relevant to me	8

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	35
Indicated knowing but gave incorrect response	14
Does not know the difference	51

Thinks state fish and wildlife agency should be working...*	
Entirely for people	2
Mostly for people	4
For both about equally	52
Mostly for fish and wildlife	33
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Protecting lakes, rivers, and streams	9.20
Protecting species	9.12
Making sure waters are clean	8.98
Protecting natural resources	8.96
Working for the environment	8.85

Top 5 most important conservation problems**	
Water pollution	8.41
Loss of habitat from development	8.26
Bad water quality in the oceans	8.12
Loss of land from development	8.06
Loss of forest lands	8.04

Top 5 positive reactions to conservation terms***	
Responsible recreation	84
Conservation work	82
Fish and wildlife management	79
Coexist	74
Sustainable practices	74
Future generations	74

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	20
Need some management but should otherwise be left alone	66
Should be left alone	10

Is it more important that fish and wildlife in the United States be...*	
Conserved	13
Both are equally important	68
Preserved	13

Is it more important that fish and wildlife in the United States be...*	
Managed	10
Both are equally important	60
Protected	29

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.96
That fish and wildlife species in your state are healthy	8.37
Being in nature	8.25
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.23
That the [agency] takes care of nongame species of wildlife in your state	8.09

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.05
We must safeguard our fish and wildlife resources for future generations	8.04
We must safeguard our fish and wildlife resources for our kids and grandkids	7.78

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG RESIDENTS OF A SMALL CITY OR TOWN

Thinks state fish and wildlife agency is...*	
Very relevant to me	28
Somewhat relevant to me	38
A little relevant to me	15
Not at all relevant to me	15

Knows difference between "game" and "nongame" wildlife	
Yes, knows the difference	36
Indicated knowing but gave incorrect response	22
Does not know the difference	43

Thinks state fish and wildlife agency should be working...*	
Entirely for people	4
Mostly for people	4
For both about equally	51
Mostly for fish and wildlife	32
Entirely for fish and wildlife	9

Top 5 most important agency functions**	
Helping protect the sources of our drinking water	9.09
Protecting lakes, rivers, and streams	9.04
Making sure waters are clean	8.93
Conserving natural resources	8.93
Managing hunting and hunters	8.86

Top 5 most important conservation problems**	
Water pollution	8.38
Loss of wetlands	7.90
Loss of habitat from development	7.81
Loss of grasslands	7.76
Bad water quality in the oceans	7.70

Top 5 positive reactions to conservation terms***	
Responsible recreation	81
Fishing	79
Future generations	77
Fish and wildlife management	77
Wildlife management area	71
Coexist	71

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	22
Need some management but should otherwise be left alone	59
Should be left alone	13

Is it more important that fish and wildlife in the United States be...*	
Conserved	19
Both are equally important	61
Preserved	16

Is it more important that fish and wildlife in the United States be...*	
Managed	17
Both are equally important	52
Protected	30

Top 5 most important conservation values**	
That wilderness areas exist in the United States	8.70
That fish and wildlife species in your state are healthy	8.47
Being in nature	8.46
Getting away from daily life out in nature	8.17
That the [agency] takes care of fish and wildlife on behalf of the people in your state	8.12

Ratings of effectiveness of conservation messages**	
Fish and wildlife resources in the United States must be safeguarded for future generations	8.33
We must safeguard our fish and wildlife resources for future generations	8.09
We must safeguard our fish and wildlife resources for our kids and grandkids	7.42

*Shows percentage giving response. May not sum to 100% because "Don't know" responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

KEY RESULTS AMONG RURAL RESIDENTS

Thinks state fish and wildlife agency is...*	
Very relevant to me	38
Somewhat relevant to me	36
A little relevant to me	15
Not at all relevant to me	7

Knows difference between “game” and “nongame” wildlife	
Yes, knows the difference	34
Indicated knowing but gave incorrect response	30
Does not know the difference	35

Thinks state fish and wildlife agency should be working...*	
Entirely for people	5
Mostly for people	3
For both about equally	57
Mostly for fish and wildlife	29
Entirely for fish and wildlife	7

Top 5 most important agency functions**	
Making sure waters are clean	9.33
Helping protect the sources of our drinking water	9.25
Protecting the places where wild animals, birds, and fish live	8.99
Improving habitat	8.97
Making sure wildlife is healthy	8.94

Top 5 most important conservation problems**	
Bad water quality in the oceans	7.86
Water pollution	7.86
Loss of habitat from development	7.80
Loss of pollinators	7.61
Loss of forest lands	7.58

Top 5 positive reactions to conservation terms***	
Fish and wildlife management	89
Responsible recreation	86
Fishing	75
Conservation work	75
Future generations	74

Thinks that, in order to thrive, fish and wildlife...*	
Need to be actively managed by humans	31
Need some management but should otherwise be left alone	57
Should be left alone	9

Is it more important that fish and wildlife in the United States be...*	
Conserved	20
Both are equally important	63
Preserved	12

Is it more important that fish and wildlife in the United States be...*	
Managed	16
Both are equally important	60
Protected	22

Top 5 most important conservation values**	
That fish and wildlife species in your state are healthy	9.28
That wilderness areas exist in the United States	8.90
That people be allowed to legally fish in the United States	8.82
Having public lands for recreation	8.81
Being in nature	8.60

Ratings of effectiveness of conservation messages**	
We must safeguard our fish and wildlife resources for our kids and grandkids	8.35
Fish and wildlife resources in the United States must be safeguarded for future generations	8.12
We must safeguard our fish and wildlife resources for future generations	8.05

*Shows percentage giving response. May not sum to 100% because “Don’t know” responses omitted.

**Shows mean rating on a 0 to 10 scale: 10=extremely important/extreme problem/extremely effective; 0=not at all important/not at all a problem/not at all effective.

***Shows the sum of the percentage saying strongly positive or moderately positive.

METHODOLOGY

This section contains the methodology for the survey. The methodology for the inventory is contained within Appendix A, and the focus group methodology is detailed in Appendix B.

The survey phase of the project entailed a multi-modal survey of adult United States residents, with oversamples of Black and Latino residents. The survey methods are fully explained below.

DESIGN OF SURVEY QUESTIONNAIRE

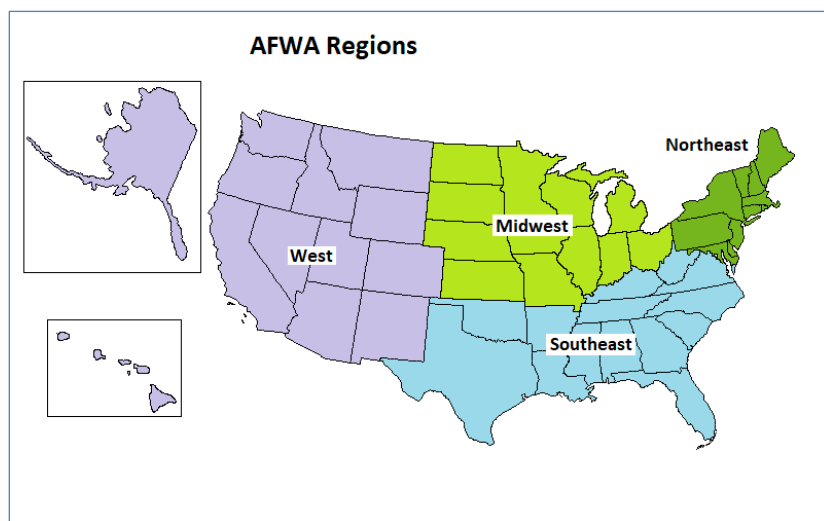
Responsive Management, working with the research partners (the Wildlife Management Institute and Judy Stokes Weber), designed the survey instrument for both telephone and online surveying. Separate questionnaires were developed for telephone and online surveying that were the same with the exception of wording differences to account for the survey mode. Additionally, versions were developed for the oversamples with screeners to ensure that the oversampled respondent matched the criteria for the oversample.

The telephone questionnaire was coded for integration with Responsive Management's computer-assisted telephone interviewing (CATI) process. An important aspect of the CATI process is that the computer controls which questions are asked and allows for immediate data entry, but the telephone surveys are administered by live Responsive Management interviewers with extensive experience conducting surveys about conservation and attitudes toward agencies. The online questionnaire was coded in an online platform. Responsive Management conducted pre-tests of the questionnaires to ensure proper wording, flow, and logic in the surveys.

Because of the length of the survey, which precluded any one respondent answering every question, there are places where the survey randomly splits the sample and gives only a portion of the sample a particular question. In this way, all the questions of interest could be included in the survey, but no single respondent would have an egregiously long survey. Because these were *random* splits, there is no bias introduced by having only a portion of the sample get the question.

SURVEY SAMPLES

The sampling components comprised a telephone sample of United States general population residents, an online sample of United States general population residents, and online samples of Black and Latino residents. The oversamples of minorities were weighted down to be in their proper proportions for nationwide results. Additionally, sampling was stratified by the four AFWA regions (see the accompanying map) to ensure enough respondents in each of the regions for statistically valid results at the regional level, with weighting applied to ensure that the regions were in their proper proportions for nationwide results. All respondents were 18 years old or older.



The national telephone sample was purchased from MSG, a firm that provides statistically valid samples for survey research. The telephone sample was dual-frame, meaning that it contained both landlines and cell phones in their proper proportions. The supplemental online samples of Blacks and Latinos were purchased from Dynata.

SURVEY ADMINISTRATION

For the telephone phase, telephone interviews were conducted Monday through Friday from 10:00 a.m. to 9:00 p.m., Saturday from 12:00 p.m. to 7:00 p.m., and Sunday from 2:00 p.m. to 9:00 p.m., local time, using interviewers with experience conducting computer-assisted surveys about conservation. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The telephone phase of the survey was conducted in November 2021.

For quality control, Survey Center Managers monitored some of the interviews in real time and provided feedback to the interviewers. To further 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 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 questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaire.

In the online survey, proprietary questions were used to help ensure the integrity of the online data. The online phase of the survey was conducted in November 2021.

In total, Responsive Management obtained 2,127 completed surveys. This includes 224 Black residents and 281 Latino residents. For nationwide data, all the surveys were put together weighted to be in their proper proportions to account for the oversampling.

After both the telephone and online surveys were obtained, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. Additionally, the survey code included proprietary error checkers and other quality control checks.

DATA ANALYSIS

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The data were weighted by age and gender to match the proper proportions in the nationwide population, and the data were also weighted to account for the oversampling—essentially weighting the oversamples down to be in their proper proportions. The purpose of the oversamples is to ensure robust sample sizes on those specific data runs, but they were included in the nationwide results in their proper proportions.

Throughout this report, findings of the surveys are reported at a 95% confidence interval. For the overall sample of United States residents, the sampling error is estimated to be at most plus or minus 2.12 percentage points. The sampling error was calculated using the formula described below, with a sample size of 2,127 U.S. residents and a population of 258 million adult U.S. residents.

Sampling Error Equation

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

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

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

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

APPENDIX A: INITIAL INVENTORY OF CONSERVATION TERMS

The initial inventory of conservation terms was completed by Judy Stokes Weber, one of the project partners. First, the wording of state fish and wildlife agency mission statements was analyzed to identify recurring terms. Following agency mission statements, supplemental online materials from the agencies (e.g., annual reports, news items, educational items, social media posts) were reviewed and analyzed for additional recurring terms. The resulting overall list was then de-duplicated to produce an inventory of unique terms.

The initial inventory of conservation terms included the following:

Abundance	Forests	Promote
Appreciation	Habitat	Provide
Aquatic	Harvest	Public
Benefit	Healthy	Public lands
Boating	Hunting	Put-and-take fishery (stocking)
Citizens	Improve	Quality of life
Connect people with the outdoors	Invasive	Recovery
Conservation	Land	Recreation
Conservation Education	Licensing/license	Research
Conservation officers, Police	Manage	Resources
Conserve	Migratory/migration	Responsible
Cultural resources	Native	Responsible recreation
Current and future generations	Natural resources	Restore
Development	Nature	Safe
Disease	Nongame	Science/scientific
Duck/Conservation stamp	Nuisance wildlife	Serve
Ecology	Opportunities	Shooting range
Economic benefits	Outdoor recreation	Sportsman-conservationist
Ecosystem	Parks	Sportsman/-person
Education	Partnerships	Stewardship
Endangered species	People	Sustainable
Engage	Perpetuate	Use
Enhance	Plants	Visitors
Enjoyment	Pollinators	Water
Environment	Populations	Wetlands
Fish	Preserve	Wildlife
Fishing	Protect	Wildlife management area

Following the inventory of terms based primarily on resources from the state fish and wildlife agencies, Responsive Management staff reviewed the websites of prominent nongovernmental conservation organizations (e.g., Ducks Unlimited, the Rocky Mountain Elk Foundation, Trout Unlimited, the Recreational Boating and Fishing Foundation, the National Wild Turkey Federation) to identify further terms for inclusion in the inventory (terms subsequently added to the initial inventory are listed in the table that follows in blue).

Because this project was intended to drill down into the individual components of conservation language, the initial inventory of terms was subsequently categorized by nouns, verbs, and adjectives. This categorization provides a more refined look at the ideas and concepts (nouns), actions (verbs), and descriptors (adjectives) that are commonly used by conservation professionals.

Finally, for the sake of comprehensiveness, certain terms that have multiple linguistic functions (such as “access,” which can function as both a noun and a verb) are listed separately in each applicable column in the table that follows. (Note that in some cases, the adjective/noun or verb/noun wording of the terms differs, as in “abundant” and “abundance” or “conserve” and “conservation.”)

NOUNS	VERBS	ADJECTIVES
Abundance [a. abundant]	Access [n. access]	Abundant [n. abundance]
Access [v. access]	Appreciate [n. appreciation]	Aquatic
Angler	Benefit [n. benefit]	Consumptive/Non-consumptive
Benefit [v. benefit]	Connect (people with the outdoors)	Diverse
Biodiversity	Conserve [n. conservation]	Game/nongame
Boating	Engage	Ecological [n. ecology]
Citizens	Enhance	Endangered
Conservation [v. conserve]	Enjoy [n. enjoyment]	Exotic
Conservation Education	Harvest	Freshwater [n. freshwater]
Conservation officers, Police	Improve	Healthy
Cultural resources	Manage	Invasive
Current and future generations	Perpetuate	Migratory [n. migration]
Development	Preserve	Native
Disease	Protect	Public [n. public]
Duck/Conservation stamp	Promote	Responsible
Ecology [a. ecological]	Provide	Scientific [n. science]
Economic benefits	Recover [n. recovery]	Safe
Ecosystem	Restore	Saltwater [n. saltwater]
Education	Serve	Sustainable
Endangered species	Use [n. use]	Terrestrial
Enjoyment [v. enjoy]		Threatened

Note: Table is continued on the next page only for the Nouns column.

NOUNS (continued)
Enjoyment [v. enjoy]
Environment
Fauna
Fish
Fishing
Flora
Forests
Grasslands
Habitat
Heritage
Hunting (hunt / hunter)
Land
Landowner
Licensing/license
Natural resources
Nature
Nuisance wildlife
Opportunities
Parks
Partnerships
People
Plants
Pollinators
Populations
Predator/predation
Public [a. public]
Public lands
Public trust
Put-and-take fishery (stocking)
Quality of life
Recovery [v. recover]
Recreation
Research
Resources
Responsible recreation
Science [a. scientific]
Shooting range
Sportsman-conservationist
Sportsman/-person
Stewardship
Trapping
Use [v. use]
Visitors
Water
Watershed
Wetlands
Wildlife
Wildlife management area

APPENDIX B: FOCUS GROUP REPORT

FOCUS GROUP EXECUTIVE SUMMARY

Introduction and Methodology

America's conservation story must be skillfully conveyed based on the terminology and concepts that connect with each audience, so there is a need to fully understand how the various audiences react to words and phrases about conservation. This ongoing project will fulfill that need.

The overall project includes an inventory of terms and phrases that are currently used in the conservation community, focus groups of a broad spectrum of Americans (which are detailed in this report), a quantitative survey to test reactions to terms and phrases and to gather data specifically on how different target markets react to terms and phrases, and the development of a final report and handbook on communicating about conservation and the concomitant work of fish and wildlife agencies. This document contains the focus group findings.

The focus group methodology used in this study is explained below. Focus groups entail an in-depth, structured discussion with participants about their opinions and attitudes regarding various issues. These focus groups explored the terms and phrases they use when discussing conservation, as well as their attitudes toward certain terms and phrases used by the conservation community. The use of focus groups is an accepted research technique for the qualitative exploration of attitudes, opinions, perceptions, motivations, constraints, and behaviors.

Focus groups allow for extensive open-ended responses to questions; probing, follow-up questions; group discussion; and observation of emotional responses to topics—aspects that cannot be measured in a quantitative survey. Four of the focus groups consisted of a cross-section of Americans (referred to as general population focus groups), with one group devoted to each of four regions in the United States, and a fifth focus group consisted of hunters and anglers from across the country.

Each focus group was conducted using a discussion guide, moderated by one of Responsive Management's trained moderators. Using the discussion guide, the moderator kept the discussions within design parameters without exerting a strong influence on the discussion content. The focus groups were recorded for further analysis.

Responsive Management conducted the qualitative analyses in three phases. The first phase was the direct observation of the discussions by the moderator and his notes after the focus groups. The second phase of the analysis consisted of transcriptions of the discussions and a review of the recordings and transcriptions by other researchers. The development of findings into the report itself made up the third phase of the focus group analysis.

The Role of State Fish and Wildlife Agencies

The fish and wildlife agency name is not well known among the general population and even among hunters and anglers, although people generally come close enough that they could find it using the name they think it is as search terms on the internet. However, many conflate the agency with a multitude of other agencies, such as parks departments or the U.S. Forest Service. Many people who do not know the name indicate that their ignorance stems from the fact that they do not hunt or fish—in other words, the agency does not have relevance to them. People generally associate the fish and wildlife agency with management of hunting and fishing, but they less commonly associate the agency with protecting and managing fish and wildlife.

Other than managing hunting and fishing and the multitude of efforts related to that, such as checking licenses and stocking fish, the general public appears to know only a scattershot of the things that their state fish and wildlife agency does. There was less awareness about wildlife management and conservation. And again, there was conflation of responsibilities and efforts of the fish and wildlife agency with those of other organizations and even some non-governmental organizations.

When focus group participants talked about wildlife management work that the agencies do or should do, they almost never used the term, “wildlife management.” Instead, they talked of activities that were part of wildlife management, using other terms. They commonly indicated that they do not know specific tasks of wildlife management that agencies do, but they had a vague sense that agencies protect fish and wildlife through the enforcement of regulations and other things. Others talked of some specific tasks that are within the overall umbrella of wildlife management, such as addressing invasive species. Some expressed a desire to know more about the agency’s work.

There was the perception that fish and wildlife agencies address wildlife-human conflicts, which is only partly true—true only of certain species for the most part. It is not true across the board for every species in every situation, as responsibility for addressing human-wildlife conflict is often not clearly delegated in state laws and regulations.

This study also looked at focus group participants’ priorities related to conservation through questions about the agency work that they think is important and what they want the agency to do. Ecological work is primary. People want the agency to ensure that species are healthy, not endangered, and have habitat in which to thrive. Some expressed the desire that their state fish and wildlife agency preserve land from development. Education was also seen as important, particularly to instill an ethic of conservation in the general public.

Rather than naming specific tasks they thought their state fish and wildlife agency should do, some focus group participants expressed the desire that the work, whatever it is, be balanced between the wildlife and the human stakeholder groups as well as balanced between hunters/anglers as a whole and non-hunters/non-anglers. As is shown in the results, “balance” as a term and as a concept was frequently used favorably. In fact, when asked directly about whether the fish and wildlife agency should work on behalf of people primarily, on behalf of

fish and wildlife primarily, or both about equally, the opinion was mostly in the middle—that the agency should work for both in balance.

The general population commonly does *not* have much contact with their fish and wildlife agency. Obviously, hunters and anglers have more contact because of the need to purchase licenses and because they may be checked when engaged in these activities. Unfortunately, this lack of contact goes hand-in-hand with a lack of perceived relevancy. Those with contact, such as hunters and anglers, think of the agency as being relevant to them, but others find less relevancy or they perceive the agency as being relevant to them only when they are engaged in outdoor recreation, but not otherwise.

A few in the focus groups found the fish and wildlife agency to be relevant to them, even though they did not participate in hunting or fishing. They felt the relevance to be in their connection to wanting and knowing that fish and wildlife populations are being cared for in their state, even though they had little personal interaction with fish and wildlife. However, this link to their state agency was not felt by many others.

This part of the focus group discussions also touched on agency funding. It was apparent that some had the perception that general tax dollars fund the agency, which is generally not the case for fish and wildlife agencies. Some focus group participants worried how their state's fish and wildlife agency would fare if there are budget cuts.

Fish and Wildlife Management and Conservation

Development and concomitant loss of habitat are perceived as the most worrisome problems confronting fish and wildlife. The focus groups discussed these problems extensively and other problems that proceed from development and loss of habitat, such as water scarcity problems, pollution, litter, and so forth. Some saw the possibility of overhunting and overfishing as problems—or they saw that these would be problems without the fish and wildlife agency.

There were many different interpretations of the term, “management.” There also seemed to be confusion regarding its meaning, or it was perceived differently than the fish and wildlife conservation community perceives it. Some talked in broad terms that management meant conservation and protection of species in general. There was some push-back regarding the term, as “management” does not always have positive connotations.

Regarding whether wildlife needed to be managed, thoughts were on both sides of this issue. Commonly, though, focus group participants said that there was need for management in a world that has humans. They discussed management as allowing humans and wildlife to coexist. They talked of having a balance between human and wildlife needs.

The term, “conserve,” was also interpreted in different ways. Generally, though, it was said to mean keeping species and natural resources healthy into the future. It was generally favorably received, as well, although some people had a mixed perception about “conserve,” suggesting that it demonstrated that a problem existed. There was no consensus on the differences or similarities of “conserving” and “managing” fish and wildlife, and there was no consensus on

the meaning of “preserve” as opposed to “conserve” among focus group participants. “Habitat” was favorably received in general.

There was great confusion regarding the terms “game” and “nongame.” People had either not heard of the terms, or they had the incorrect perception of the meaning. Some focus group participants thought “game” meant larger species and “nongame” referred to those smaller, but still hunted, species. Just a few knew that game referred to huntable species and nongame to those that are not hunted.

Some focus group participants understood the connection of fishing/hunting and fish/wildlife management, but many did not.

Agency Program Areas and Conservation Messaging

The public in general, as evidenced by the focus groups, see the agency as having a role in getting more people involved in conservation, with agency outreach and education being seen as the way to achieve this active support of conservation.

In discussions of specific terms and phrases, the focus groups revealed the division of the audience into separate target audiences, manifested by the lack of consensus on terms and phrases. For nearly all terms, some people liked and responded to them, and some did not. So outreach aimed at one audience may not have much crossover for other target audiences.

Before this part of the focus group discussion guide, focus group participants had been encouraged to speak about conservation issues using their own terms. In these discussions, “balance,” both as a term and as an overall concept, resonated well, and this was one of the few terms that had no vocal detractors. “Coexist” was received well by many focus group participants. Focus group participants also frequently used “future” and specifically “future generations” throughout the focus group discussions. Note that the focus group discussion guide included “future generations” as a term to be discussed, but the term was used in the discussions many times prior to its being asked about by the moderator, so it would appear to resonate well.

In this part of the discussions that parsed out terms and phrases, many focus group participants still talked about general concepts, particularly “balance,” when they were asked about the terms. This suggests that their reaction to any terms and phrases may be situational—it may depend on the overall theme more than any specific term or phrase.

In the discussions, opinion was divided on the phrase, “scientific management,” with some reassured that science backed up the policies, but others having a negative reaction to the phrase that sounds a little like jargon. Others expressed their opinion that the phrase would be misunderstood. “Sustainability” also had a mixed reaction: some said the word has been overused, but others liked it. The discussions also revealed some misunderstanding of the word in the meaning that the conservation community generally ascribes to it. “Biodiversity” had a mixed reaction, with one portion of focus group participants thinking it was like jargon and was overused, and another portion reacting well.

The discussions about the differences between the terms “conservation” and “preservation” showed that people had a wide range of interpretations of each term, as well as the nuanced differences in the terms.

FOCUS GROUP INTRODUCTION AND METHODOLOGY

One of the key recommendations of the Blue Ribbon Panel on Sustaining America’s Diverse Fish and Wildlife Resources (a coalition of governmental, industry, and non-governmental organizations) is to reinforce the relevancy of fish and wildlife conservation to Americans, especially by “keeping people of all ages and walks of life connected with nature.” That requires understanding how terms and phrases about conservation resonate with Americans, which in turn requires an understanding of Americans themselves.

In a nation known for its diversity, the term “Americans” does not encompass a single constituency of stakeholders; rather, Americans comprise many disparate groups, and each group reacts to terms and phrases with its own set of attitudes and preconceptions. America’s conservation story must be skillfully conveyed based on the terminology and concepts that connect with each audience, so there is a need to fully understand how the various audiences react to words and phrases about conservation.

This ongoing project will fulfill that need. The overall project includes an inventory of terms and phrases that are currently used in the conservation community, focus groups of a broad spectrum of Americans (which are detailed in this report), a quantitative survey to test reactions to terms and phrases and to gather data specifically on how different target markets react to terms and phrases, and the development of a final report and handbook on communicating about conservation and the concomitant work of fish and wildlife agencies.

Both the administration of the quantitative survey and the development of the final report and handbook are still to be done; this report contains only the findings of the focus groups that were conducted in February and March 2021. The precursor inventory was incorporated into the focus group discussion guides (and will be incorporated into the upcoming survey); a detailed report of the inventory findings is included in the progress report for this project titled *Words Matter: Determining How to Engage the American Public Through the Language of Conservation, December 2020 Project Update*, produced by the research team of the Wildlife Management Institute, Responsive Management, and Judy Stokes Weber of Wildlife Conservation Partners.

As stated previously, this document contains the focus group findings. The focus group methodology used in this study is explained below.

Overview of Focus Group Research

Focus groups entail an in-depth, structured discussion with participants about their opinions and attitudes regarding various issues. These focus groups explored the terms and phrases they use when discussing conservation, as well as their attitudes toward certain terms and phrases used by the conservation community. The use of focus groups is an accepted research technique for the qualitative exploration of attitudes, opinions, perceptions, motivations,

constraints, and behaviors. Focus groups provide researchers with understanding and insights of the thought processes and the emotions of the participants in the group discussions.

Focus groups allow for extensive open-ended responses to questions; probing, follow-up questions; group discussion; and observation of emotional responses to topics—aspects that cannot be measured in a quantitative survey. Qualitative research sacrifices reliability for increased validity. This means that focus group findings cannot be replicated statistically as a survey can be (i.e., focus groups have low reliability), but focus groups provide a more nuanced understanding of the issues being discussed (i.e., they have high validity). Focus group discussions are recorded for further analysis.

Composition of the Focus Groups

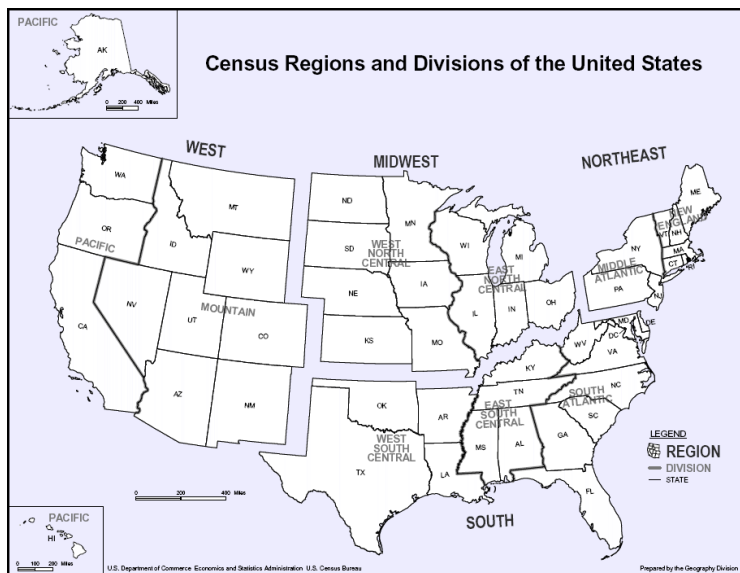
Four of the focus groups consisted of a cross-section of Americans (referred to as general population focus groups), with one group devoted to each of four regions in the United States, and a fifth focus group consisted of hunters and anglers from across the country.

Focus Group Participant Recruiting

Focus group participants were recruited in consultation with Responsive Management staff. People who met the criteria for the focus groups were contacted and given a brief summary of the focus group topics. They were then further questioned to verify their eligibility for participation and, if qualified and interested, scheduled for attendance (virtually). Responsive Management developed the recruiting parameters in coordination with the research partners.

To qualify for the focus groups, potential participants could not be currently employed by a marketing or advertising firm, and they could not be employed in the hunting or fishing industries. The selection criteria were based on certain attitudes and demographic characteristics to ensure that a wide range of attitudes and characteristics were represented in each group. Furthermore, for the one focus group of hunters and anglers, participation criteria were added to ensure that the group was of active hunters and anglers.

An advantage of having virtual focus groups is that participants are not constrained by travel distance to a single focus group facility—in other words, these participants were recruited from various locations across each region. The four main U.S. Census Bureau regions were used (which are the same regions used by the U.S. Fish and Wildlife Service), as shown on the accompanying map, obtained from the U.S. Census Bureau website.



Responsive Management ensured that there was follow-up contact with qualified, interested individuals as needed to provide confirmation that included the date and time of the focus group. To encourage participation, a monetary incentive was provided to participants. Responsive Management also ensured that each focus group participant had the necessary computer equipment and internet access to be able to participate, and Responsive Management remained available to the participants for any assistance needed or for any questions prior to the focus groups.

During the recruiting process, the recruiting staff provided project managers with status updates that included participant names, addresses, contact telephone numbers, and essential participant characteristics. The project managers carefully reviewed each status update to ensure that each new recruit met the criteria. Reminder calls and interaction with potential participants prior to the focus group helped ensure their attendance, resulting in quality participation. Each group had six to eight participants, which is the ideal size for virtually conducted focus groups. The focus groups were conducted in February and March 2021.

Discussion Guide and Moderator

Each focus group was conducted using a discussion guide, moderated by one of Responsive Management's trained moderators. Using the discussion guide, the moderator kept the discussions within design parameters without exerting a strong influence on the discussion content. In this sense, the focus groups were non-directive group discussions that exposed the spontaneous attitudes, insights, and perceptions of Americans regarding conservation, as well as the terms and phrases they use when discussing conservation. The focus group discussion guide is presented in Appendix A.

While each discussion is allowed to flow organically and does not need to adhere precisely to the guide, the guide is in place when it is necessary for the moderator to steer the discussion back to the focus group topics. The order of the discussion topics on the guide, as well, does not

need to be precisely followed; if the discussion naturally flows to a topic that is included further on in the guide, the moderator can later circle back to the parts of the guide that were skipped.

The guide was developed by Responsive Management in coordination with WMI and Judy Stokes Weber. Its major topic areas included attitudes toward conservation, the language focus participants use when talking about conservation, as well as reactions to various terms and phrases. The use of the guide helped ensure consistency in the data collection.

Focus Group Facilities

Typically, focus groups are done in person in a professional facility around a table with the moderator at the head of the table. However, because of Covid-19 during the time of this project, these focus groups were conducted online using commercial virtual meeting software with each participant in his or her own home. The focus groups were recorded for further analysis.

Focus Group Analysis

Responsive Management conducted the qualitative analyses in three phases. The first phase was the direct observation of the discussions by the moderator and his notes after the focus groups. The second phase of the analysis consisted of transcriptions of the discussions and a review of the recordings and transcriptions by other researchers. The development of findings into the report itself made up the third phase of the focus group analysis.

The Presentation of Results in the Report

The results are presented thematically, with all five focus groups included in each of the thematic writeups. Quotations that help explain or that highlight a theme are included, but the identities of the focus group participants are not divulged in the quotations. They are identified only as participants of one of the regional focus groups or the hunter/angler focus group. For this reason, pronouns are given as he/she, him/her, and so forth in the writeups to help preserve anonymity, except when gender is pertinent to the comment.

In a few places, there is a distinction made between the general population focus groups and the hunter/angler focus groups, referred to in those terms. However, there were hunters and anglers within the general population focus groups. There was no requirement in the general population groups that the focus group participant did *not* hunt or fish; the general population focus groups were recruited from a general population sample, which contains people who hunt and fish.

The quotations are presented using standard editing rules of ellipses to indicate where words were excised from the quotation and brackets for clarifying wording, typically when a pronoun is replaced with the noun for clarity, particularly when the underlying pronoun would be misunderstood without the context of the entire quotation. **Bold text** within a quotation indicates emphasis that the speaker made.

Remarks by the researchers, including the editor of the report, are in brackets and are preceded by “Ed.” to distinguish them from the words of the focus group participant, except when *[sic]* is used without “Ed.” to indicate a malapropism. When laughter was elicited from several in a focus group, the text shows it like this: *<laughter>*.

In some places, several quotations are included together where focus group participants had talked back and forth or had commented or added to something that another had said. When one of these exchanges is presented, it is identified as a “focus group participant exchange.”

FOCUS GROUP RESULTS

The results are presented around three primary themes, mirroring the outline of the focus group discussion guide. The first examines attitudes toward fish and wildlife agencies. The second theme is how fish and wildlife agencies and the work they do fit into overall conservation in the United States. The third is a look at agency program areas and conservation messaging.

The Role of State Fish and Wildlife Agencies

This was the first topic area in the focus group discussions, and each of the focus groups looked at broad attitudes that focus group participants held about conservation. This broad look purposely did not present any terms or phrases to the participants at this point in the discussions. Rather, focus group participants were asked general questions that exposed the terms and phrases that they use when discussing conservation and the work of fish and wildlife agencies. Furthermore, it exposed, in some cases, their attitudes toward certain terms and phrases before being formally presented with them later in the discussions. This aspect was invaluable, as it allowed researchers to see and hear the terms and phrases that Americans themselves use when discussing conservation.

Summary of Findings About the Role of State Fish and Wildlife Agencies

The fish and wildlife agency name is not well known among the general population and even among hunters and anglers, although people generally come close enough that they could find it using the name they think it is as search terms on the internet. However, many conflate the agency with a multitude of other agencies, such as parks departments or the U.S. Forest Service. Many people who do not know the name indicate that their ignorance stems from the fact that they do not hunt or fish—in other words, the agency does not have relevance to them. People generally associate the fish and wildlife agency with management of hunting and fishing, but they less commonly associate the agency with protecting and managing fish and wildlife.

Other than managing hunting and fishing and the multitude of efforts related to that, such as checking licenses and stocking fish, the general public appears to know only a scattershot of the things that their state fish and wildlife agency does. There was less awareness about wildlife management and conservation. And again, there was conflation of responsibilities and efforts of the fish and wildlife agency with those of other organizations and even some non-governmental organizations.

When focus group participants talked about wildlife management work that the agencies do or should do, they almost never used the term, “wildlife management.” Instead, they talked of activities that were part of wildlife management, using other terms. They commonly indicated that they do not know specific tasks of wildlife management that agencies do, but they had a vague sense that agencies protect fish and wildlife through the enforcement of regulations and other things. Others talked of some specific tasks that are within the overall umbrella of wildlife management, such as addressing invasive species. Some expressed a desire to know more about the agency’s work.

There was the perception that fish and wildlife agencies address wildlife-human conflicts, which is only partly true—true only of certain species for the most part. It is not true across the board for every species in every situation, as responsibility for addressing human-wildlife conflict is often not clearly delegated in state laws and regulations.

This study also looked at focus group participants’ priorities related to conservation through questions about the agency work that they think is important and what they want the agency to do. Ecological work is primary. People want the agency to ensure that species are healthy, not endangered, and have habitat in which to thrive. Some expressed the desire that their state fish and wildlife agency preserve land from development. Education was also seen as important, particularly to instill an ethic of conservation in the general public.

Rather than naming specific tasks they thought their state fish and wildlife agency should do, some focus group participants expressed the desire that the work, whatever it is, be balanced between the wildlife and the human stakeholder groups as well as balanced between hunters/anglers as a whole and non-hunters/non-anglers. As is shown in the results, “balance” as a term and as a concept was frequently used favorably. In fact, when asked directly about whether the fish and wildlife agency should work on behalf of people primarily, on behalf of fish and wildlife primarily, or both about equally, the opinion was mostly in the middle—that the agency should work for both in balance.

The general population commonly does *not* have much contact with their fish and wildlife agency. Obviously, hunters and anglers have more contact because of the need to purchase licenses and because they may be checked when engaged in these activities. A school event was discussed favorably as one place that a non-angler/non-hunter had interacted with fish and wildlife agency personnel. Unfortunately, this lack of contact goes hand-in-hand with a lack of perceived relevancy. Those with contact, such as hunters and anglers, think of the agency as being relevant to them, but others find less relevancy or they perceive the agency as being relevant to them only when they are engaged in outdoor recreation, but not otherwise.

A few in the focus groups found the fish and wildlife agency to be relevant to them, even though they did not participate in hunting or fishing. They felt the relevance to be in their connection to wanting and knowing that fish and wildlife populations are being cared for in their state, even though they had little personal interaction with fish and wildlife. However, this link to their state agency was not felt by many others.

This part of the focus group discussions also touched on agency funding. It was apparent that some had the perception that general tax dollars fund the agency, which is generally not the case for fish and wildlife agencies. Some focus group participants worried how their state's fish and wildlife agency would fare if there are budget cuts.

Focus Group Results Regarding the Role of State Fish and Wildlife Agencies

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Do you know your state fish and wildlife agency?

To get the discussion started, the moderator first asked focus group participants if they knew their state fish and wildlife agency. Many general population focus group participants did not know the name of the agency, particularly those who did not hunt or fish (although even one hunter within the general population focus groups could not name the agency from which he/she presumably bought licenses). One person did not know the name of the agency and rationalized not knowing because he/she "never hunted personally," indicating right away in the discussion that the agency had no relevance to him/her (more about relevancy later). Similarly, one person indicated not knowing because a friend was the person who fished and who would know. In general, even those with little knowledge readily associate their "state fish and wildlife agency" with fishing and hunting and other outdoor recreation.

I don't know anything about ours. I was just going to state that I'm not familiar with what South Carolina offers or what they have, who controls it.

South Region focus group participant

I wouldn't know the official name off the top of my head. I've never hunted personally.

West Region focus group participant

No. I just do outdoor camping and things like that. Not fishing, just camping outdoors. I've been fishing one time but that was 20 years ago with other people. As far as the agency in my area, I'm not too sure. No, the only thing I've done is basically camping with family and friends.

Midwest Region focus group participant

Kind of like, you just think of Smokey the Bear, or Yogi—it all just kind of goes together.

Northeast Region focus group participant

But North Carolina, not too much [Ed.: speaking of hearing about the agency]. I'm in the city. The part [of the state] I'm in is probably 10 to 15 minutes from Raleigh, so we don't have a lot of wildlife. So I haven't really heard much about the agency.

South Region focus group participant

Honestly, I have not thought much about it. I'm not really an outdoor—well, actually I am an outdoor type of person—but I don't fish, I don't really interact with wildlife or anything like that, so I have never had a reason to know different regulations and laws concerning the environment. I know it is something I should be aware of, in general, but I just haven't done my due diligence in knowing about this information.

Northeast Region focus group participant

When focus group participants had a stronger sense of the agency than exhibited above, it was through hunting and fishing as outdoor activities, even if they did not actively hunt and fish themselves. In some cases, there appeared to be conflation of fish and wildlife agency law enforcement personnel and other law enforcement personnel, such as park rangers or employees of the United States Forest Service.

I know about them generally. I live in New York City, in Manhattan, so I don't come across them in my day-to-day life, but I think of them for fishing and hunting when I have been outside of the state.

Northeast Region focus group participant

My boyfriend is into fishing, and I've gone with him a few times. So, he has most of the contacts. So I don't ask the questions. I just go.

West Region focus group participant

Growing up. Going fishing here in Missouri. They're the people who put the signs up telling you [that] you can do this or you can't do that, I think. There're some parks here in Missouri that they're the cops of the park, aren't they? If you go fishing, you see the signs they post. I see them on advertisements, their logo every once in a while. That's my interaction with them.

Midwest Region focus group participant

I don't know it well, but I do know that there are certain things you have to do—like if you want to go fishing, you have to get a license through them. I know people who have that, but other than that, not really.

Northeast Region focus group participant

A few within the general population focus groups were quite familiar with their state's agency. Not unexpectedly, participants in the hunter/angler focus groups commonly were more familiar than those within the general population focus groups. Interestingly, one focus group participant indicated knowing the agency in Florida because he/she had lived there at one time and had saltwater fished but did not know the agency in his/her current state because he/she no longer fished. For the record, however, the fish and wildlife agency name he/she gave for Florida was incorrect. In fact, many focus group participants conflated the fish and wildlife agency with other agencies and, sometimes, with non-governmental organizations.

Here in Minnesota, we have the Department of Natural Resources, the DNR, and they're really great people. ... They do everything from stocking the lake to doing net studies, where they catch fish and take a look at them—what sizes. They're the ones that come

through and check licenses, to see if you've got a fishing license or a hunting license. Lots of times they're involved in gun safety programs, that type of thing. Very active here in Minnesota. ... I do a lot of fishing here in Minnesota; it's the land of 10,000 lakes.

Midwest Region focus group participant

If I'm fishing, they'll come around just to be sure you have your licenses. They're pretty big in Michigan making sure that you have your licenses. They'll check on that, so they're pretty much a regulatory body for us.

Midwest Region focus group participant

I know they recently changed their name, so I think they're trying to rebrand or something. I'm not sure why they changed their names. I moved to Virginia three years ago from Georgia. [Ed.: This is correct: Virginia's agency changed from the Department of Game and Inland Fisheries to Department of Wildlife Resources. Interestingly, this focus group participant also thought of the "Resources" part of the name as referring to resources that he/she could use to obtain information about wildlife, such as online resources about wildlife or identification guides available to the public, which is not the primary meaning of the word in the name, "Virginia Department of Wildlife Resources."]

Hunter/angler focus group participant

I interact with them pretty frequently because they also do the parks, including where you can take a dog. Where I live in Wisconsin, you basically have to have a permit to take your dog to certain parks. It has to be registered and everything. It's crazy. ... I'm pretty sure [the agency] is the DNR. Maybe Wisconsin DNR. [Ed.: While the focus group participant was correct that the agency is the Wisconsin Department of Natural Resources—the DNR—the researchers could not definitively determine to whom he/she is referring regarding issuing permits to take dogs to parks.]

Midwest Region focus group participant

For me, I grew up in a small town. I know six or seven of the guys I graduated with work for the OK Wildlife Department [Ed.: This is essentially correct: the agency in that state is the Oklahoma Department of Wildlife Conservation]. Very versed in regulations because I came from a family who poached, and I was not doing that. After seeing repercussions of what they went through, I make sure I am very well versed in the rules and what they change. ... I'm also part of...a local group of women who hunt and fish together. We bounce ideas because hunting and fishing isn't really a normal women's [activity] per se. I'm one of those girls that will come in on a boys' club and try to fire back wherever I can. I want to know everything the guys have. I want to know every perspective because not a lot of women are in this industry, this sport, or anything else. I want to know everything.

Hunter/angler focus group participant

I've dealt with them more so when I lived in Florida because I was more active in saltwater fishing there. They would check the boats or anybody fishing, making sure you had your licenses and such, making sure you didn't have a type of fish you weren't allowed to have, maybe over a certain length, or a type you couldn't keep. That's about

all I've dealt with them, and that was the Florida Natural Resources. [Ed.: The agency in Florida that licenses anglers is the Florida Fish and Wildlife Conservation Commission.] [I am] not [fishing] very much here because it's not as much fun as saltwater fishing. I got stuck on it there, and I'm hoping to move back there one day. It's much easier to stay active outdoors when the weather is nice year-round. I'm not interested in going ice fishing. <laughter> It's cold; I don't think I could handle it.

Midwest Region focus group participant

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What does your state fish and wildlife agency do? What kind of work are they engaged in?

Many general population focus group participants did not know what their state fish and wildlife agency does, again particularly if they did not personally hunt or fish. Those who knew the work of the agency mentioned providing hunting and fishing opportunities and enforcing regulations, as well as fish stocking. A nuance of this is that some focus group participants thought of the agency as only that—the managers of hunting and fishing.

Other work mentioned was sometimes a scattershot of things that fish and wildlife agencies do, such as reintroducing species that were extirpated and efforts related to invasive species, but all generally pertaining to protection of habitat. In Colorado, a person also mentioned camping as a fish and wildlife agency responsibility, which is true of that state's fish and wildlife agency (Colorado Parks and Wildlife), which oversees some camping areas.

The comments also revealed some conflation of responsibilities of their state fish and wildlife agency and other agencies, such as parks agencies in states where they are separate from the fish and wildlife agency. Additionally, the comments revealed that some people even conflated the fish and wildlife agency with non-governmental organizations.

The first block of quotations reveal the thoughts of those who had little or no familiarity of their state fish and wildlife agency.

*But we don't really know **what** they do. We don't know to what their ground covers because it's not talked about. It's not covered. And it would be nice to have reports to know what they're doing and how they're helping us, and what's being controlled and what's not being controlled.*

South Region focus group participant

We have our own town people who dictate or tell us what we need to do. And then we have a state park nearby, and then we have the beaches right here. So it seems there's all these different groups. I don't know where the state wildlife and fish [agency], where they come in, whether they're the overarching piece or not. So that's a little confusing for me. I apologize, but I'm not educated enough on that.

Northeast Region focus group participant

I've never interacted with them before so I can't really say I have any knowledge of what they do.

West Region focus group participant

The only thing that I know is that I was fishing with my boyfriend over the summer, and I didn't have a license, so he said you can't even touch my fishing pole or, if the warden sees you, we can get in trouble. You can't touch anything.

Northeast Region focus group participant

All hunters and anglers were aware of the agency's efforts related to managing those outdoor activities. Some non-hunters/non-anglers, nonetheless, were also aware of these efforts.

They mandate that the waters aren't getting one hundred percent fished out. There are limits on what size you can take, there are limits on commercial fishing boats being at least a mile out, so they can't come in and take all the fish that are out here and deplete the waters. It's also an ecosystem thing. If you took all the sharks and killed them all off, it would disrupt the ecosystem and the food chain, because they eat this, and the scavengers eat that, and it could screw everything up. They also watch out for poachers—people who are hunting without licenses.

Northeast Region focus group participant

Don't they tell you what not to hunt? Stuff like that? When you can hunt, when you can't hunt?

Midwest Region focus group participant

Hunting is kept under control. Fishing is a big deal here; they stock the streams and Platte River. ...You get your license through parks, you have to get a permit to go camping.

West Region focus group participant

I know a little bit about Virginia as far as fishing. They basically regulate the size of the fishes, the number of fish you can get, if I am not mistaken. But I haven't fished in a year, so I am kind of out of the loop on that one. I haven't done anything in North Carolina because of Covid, of course. I will do the research once things open back up.

South Region focus group participant

They have the hatcheries where they raise fish so that fishing can actually be a thing without wiping out entire populations. They make it so you can go out and enjoy those things.

South Region focus group participant

They sponsor “Take Kids Fishing Days.” Because we’re in the city, a lot of kids have never been fishing. A lot of people come in who make the fishing tackle and rods. They give the kids a rod and a reel, and artificial lures. They do stuff like that. I don’t want to give them a negative connotation because, of course, they enforce the law. They do a lot to educate and make it fun for everybody, too.

Midwest Region focus group participant

Some touched on wildlife management (without specifically saying “wildlife management”) as part of the agency’s work. This work included “routing” of wildlife away from certain parts of roads, which may actually be work of the state’s transportation department, although advice might be provided by the state’s fish and wildlife agency to the state’s transportation department. Some talked of wildlife management but had no idea of how information to manage wildlife was obtained. Some indicated the agency protects wildlife in general.

Without any knowledge of it, I would assume they keep track of the animals..., that they keep track of populations, because it changes from year to year.

West Region focus group participant

They control the size of the elk herds.

West Region focus group participant

Keep track of...the big migration corridors, any particular highways where animals are getting killed by cars or if people are getting injured. Do we have to build a fence or something to try to re-route the animals as they cross a specific area?

West Region focus group participant

Maintaining the populations—they’re either too many or too little. I would think that’s a thing we’re trying manage or keep an eye on.

Northeast Region focus group participant

I don’t really know how they know how big of a population there is. I guess people calling in? Or what do they do? Do they chip them or something?

Northeast Region focus group participant

Making sure there aren’t too many fish or deer or moose or whatever it is that are getting killed so much so they can’t reproduce. They preserve it for future generations type of thing. [Ed.: Note that this focus group participant used the term, “future generations,” prior to its being asked specifically about by the moderator later in the discussion guide.]

Northeast Region focus group participant

Protecting animals.

Northeast Region focus group participant

I would think they are...preserving wildlife and such.

West Region focus group participant

I am assuming conservation-type activities—making sure we aren't overfishing; here's not any invasive species coming in. That's what I'm thinking, but I don't really know a lot about what they do in my state.

West Region focus group participant

In our area they have a pretty extensive sturgeon program. They tag and release just for different numbers.

Midwest Region focus group participant

Some mentioned agency efforts at addressing invasive species.

I had seen an alert they put out through an email about an invasive mussel, I think, in pet store products, in some of the aquatic plants. Apparently there's an invasive freshwater mussel in it, and they were putting out an alert for people to check it and make sure they weren't bringing it home and then have it accidentally get in the waterways.

Hunter/angler focus group participant

They have a lot of signs posted, especially about invasive species, in Wisconsin in all the parks. ... They want you to clean your motors, not spread any invasive species.

Midwest Region focus group participant

Our agency recently did that with the zebra mussels. That's big, big, big. We get them on our boats when we're out skiing, fishing, anything. You bring them to another lake. They contaminated the lake.

It was actually on the news here, especially getting into boating season and people being on the lakes, more fishing and stuff. They want us to be very aware. Oklahoma actually has no natural lakes. Everything we have here is manmade. We're on the flats. So, they are very strict about "You can't go into this if you found mussels on your boats or in your propellers"....

New Jersey Fish and Game has a social media page. They just recently released the same thing about zebra mussels as well—about a week ago, maybe two weeks ago.

Hunter/angler focus group participant exchange

Many think the fish and wildlife agency takes care of wildlife-human conflicts, which is true of some state fish and wildlife agencies, or true of certain species, but not true across the board. Responsibility for addressing human-wildlife conflict is often not clearly delegated in state laws and regulations; often several agencies or entities play a role.

Periodically I'll see something on "Next Door" like there's an alligator and they had to call, I am sure it's some kind of wildlife agency to come. ... I venture to say that is the agency they would call when they have issues—the alligator's loose on the streets, which does happen periodically. I know that somebody had a problem with beavers eating the tree in their yard, and they had to call some local agency.

South Region focus group participant

If there's something that's [dangerous in] a lake or something, I'm assuming it's their job to go in there and take care of it.

South Region focus group participant

I was sitting here listening and just thinking, if I was to ever find a snake in my apartment, I don't even know who to call. Nobody thinks about it. I wouldn't know if I have to call the cops. I wouldn't know if I call Fish and Game. I wouldn't even know if they even deal with it.

South Region focus group participant

It's important that we have a sense of...when we need them and when we don't need them. When is it important enough that we should call them, or who would we call?

South Region focus group participant

*It's a completely different life living out in the country. **You** [Ed.: indicating other focus group participants who live in cities] find a snake in your house or a coyote, you could probably get ahold of an animal control number. If I called animal control because there was a snake or coyote, they're going to laugh at me. They're just going to laugh hysterically at me. They're going to be like, "You got guns." <laughter> You live here. You're used to it. I feel like they'd just laugh at me. If I call them to take care of a snake, they'd just laugh at me. They're not going to come.*

South Region focus group participant

Sometimes animals get...out of their element and wander into certain areas, maybe commercial. And I'm guessing, could be wrong, but part of their [Ed.: the agency's] function is to make sure that these animals get back to their neck of the woods where...their habitat [is], their place where they dwell. One, it's public safety when you talk about keeping them away from communities that have children or other citizens. But also protecting those particular animals that live in that region or that area. I'm just thinking maybe that's one of their functions. I'm not certain about some of the other things they may be doing.

South Region focus group participant

Other participants had other specific efforts that did not pertain directly to hunting and fishing in mind when they thought of the work of their state fish and wildlife agency.

It's a big deal in Colorado. Colorado Parks and Wildlife is trying to reintroduce the lynx into the wild; it's almost extinct here. There's things going on with the great wolf.

West Region focus group participant

I think of Fish and Wildlife as being largely an educational organization. I think they make an effort to educate the public about issues. For example we have invasive species picked up on motorboats and fishermen's shoes and boots. So if I went to a fishing access area, I would expect to see a sign from Fish and Wildlife that says, "If I am bringing my boat in, wash it off after I take it out." So I think of them in large part as being educational.

Northeast Region focus group participant

One of the big things right now, and I am sure a lot of the states have this. They're in charge of the eagle cams.

Midwest Region focus group participant

They control the spread of suburban sprawl.

West Region focus group participant

Well, they do a lot in educating the public. They do a lot of good.

South Region focus group participant

They have a cleanup program, too, or they sponsor clean up programs for different water areas that tend to get neglected or waste builds up. They'll sponsor different companies that want to spend time or volunteer hours doing that.

Midwest Region focus group participant

Finally, some may have conflated responsibilities of their state fish and wildlife agency with other agencies.

Are they the people that are responsible, that have a hand in making sure that the oil companies and such, that the pollution and stuff, is not going into the waters to hurt us? ... We've had so many oil spills. So with the oil spills, I don't know if Wildlife are the people that actually have to deal with the fact that the oil's in there, or how they get it out, or how they can make it safer for the people to drink water, and stuff like that.

South Region focus group participant

I babysit across the way, they're always talking about how, when they were in school in person, they were learning about this stuff in the parks. They'd go on little field trips and learn about stuff, it sounded like the DNR? I assume that's who was sponsoring that. I know they have tons of volunteer opportunities that you can do—trash pickup and stuff like that. I've definitely seen all those signs whenever I go to a state park. I see so many signs around like "Don't wander off the trails. Don't pick any of the flowers."

Midwest Region focus group participant

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What would you say are the most important things that your state fish and wildlife agency is CURRENTLY involved in? Why do you feel those specific things are important? What do you think your state fish and wildlife agency SHOULD be doing? Why?

The focus group discussions also delved into focus group participants' priorities related to conservation, particularly as that relates to the agency work that they think is important. This was asked about in general terms at first (see the next subsection for a specific question on priorities). Participants were asked about agency work that they thought was important, and participants were asked what they thought their state fish and wildlife agency *should* be doing. Ecological work—ensuring that species are healthy and not endangered and that habitat is maintained—was top of mind for many focus group participants. This includes preservation of land from development. Education was also seen as a necessary endeavor so that people know why the agency work is important.

Ecological work of wildlife management and keeping species healthy are highlighted in the quotations below. This includes work related to hunting and fishing law enforcement.

Just keeping track of all the different species and making sure certain ones don't get extinct from a lot of hunting, fishing. Putting a lot of regulations on that to make sure they are preserving certain types of fish as well as wildlife.

West Region focus group participant

They're keeping an eye on what type of species might be going extinct, how often people are fishing...I guess. That's what I think they should be doing: just keeping an eye on those things. Also looking at, as time goes on, are there certain species that are disappearing. Are there human habits that are really affecting the wildlife. As long as they're kind of keeping an eye on that and constantly researching and studying it, that's really important.

West Region focus group participant

Here in Arkansas we are farmland predominantly. We are the number one producer of rice, and that takes a lot of water. I know that the Wildlife, Fish and Management [Ed.: This was an apparent attempt to name an agency with water management responsibilities; however, the fish and wildlife agency in the state is the Arkansas Game and Fish Commission, and the other state agency that has many responsibilities with

water management is the Arkansas Department of Agriculture.] are responsible for making sure that we aren't depleting all those resources even with all the farmland. And again, touchy balances. We need the farm. We don't want to get rid of all the jobs and say no more farming. We still have to have food. But we also can't deplete all of the water available to us.

South Region focus group participant

There's a lot of other things that they could be doing. Checking for rabies, checking for certain things. They could be doing more, but that is one of the things they could be doing—keeping man and predatory animals separate from each other.

Northeast Region focus group participant

We are so far gone with pollution and oil spills and littering and all that stuff. They cut open a bird and find trash inside of its stomach. So the idea of restoring it to natural-ness is great.

Northeast Region focus group participant

Where I used to live..., there was a lot of poaching or people feeding the deer at night and then shooting them when they came. I'm very much against that. ... It's very unfair. That's not hunting.

Midwest Region focus group participant

[Expressing the desire that the agency step up enforcement:]

I feel like we don't have enough Game Wardens in New Jersey, and a lot of people I speak to on the state level all say the same thing. I've had to call about dogs off the leash just running around rampant in the woods, and I called, and the woman flat out said, "We may not be there for another two hours." I've spoken to her..., and she openly says that we just don't have enough Game Wardens. That whole area, I don't know how big it is, but there's only two Game Wardens for the entire area.... So it's pretty vast for just two people to maintain. That's my biggest gripe really.

That's kind of our thing in Oklahoma because...I live in Oklahoma County, but we mostly hunt in southeast Oklahoma; that's where family land is. But you call a Game Warden, and it might be two or three hours before somebody can get to you, just depending on what season it is.

I agree with pretty much everything everybody said. Even here in Indiana, the biggest problem is a shortage of officers. So, there's a lot of things that they could do more of but don't have the manpower or budget to do it.

Hunter/angler focus group participant exchange

Research in support of ecological work was mentioned as being important, as shown by the quotation that follows.

So it's really a balance where you have to figure out what the best thing to do is. That requires a lot of research. I think they should be doing a lot of research, figuring out how many animals there are, getting actual, accurate numbers so they can figure out where

to go, which way do they need to go with it. Do we need less? Do we need more? Do we just not do anything? They definitely need funding to do research.

South Region focus group participant

Environmental protection in general was indicated in the following quotations. This included work at addressing invasive species.

Protecting the environment first. I don't really care so much about seeking a balance. I think the balance is provided by their existence. Everyone else is providing the counterbalance quite frankly. So, yes, I think they should be stewards and protectors of the environment, enforcers of policies, and laws and regulations. But environment first is what they should be about, environment and wildlife.

Northeast Region focus group participant

*I also feel really strongly about educating about invasive species, because that can kill entire ecosystems of lakes, and making sure that people are aware, or if they find something that it **can** be researched. That's pretty important, too.*

Midwest Region focus group participant

Desires for preservation and ameliorating the effects of urban sprawl are shown in these quotations.

I'm in northern Virginia, and the area is growing, growing, growing quickly. We see a lot of rural areas that, you know, trees are being cut down, housing is being built up. So, preservation of wildlife in the northern Virginia area. ... I guess it's just trying to preserve the nature of Virginia. That's important for us here in Northern Virginia. [Ed.: Northern Virginia refers to a highly built-up part of Virginia that encompasses the cities and suburbs of Washington, D.C.]

Hunter/angler focus group participant

I think they should be keeping it as much of a natural state as possible, how it should be, as it was in the beginning.

Northeast Region focus group participant

There is so much development going on, there's a lot of building of warehouses. It seems like Amazon has just taken over everywhere, and some of that land should be protected for the natural habitat [of animals] that reside there because they have nowhere to go.

West Region focus group participant

*In Oklahoma,...we have some state representatives that are wanting to shut down the idea of the Wildlife Department and the conservation areas, wanting more of the land. We have limited amount of public land that we **can** hunt here. We have tons of hunters that come in, spend a couple thousand dollars a year, and they have tens of thousands of lands to hunt. And they sell their spots for tens of thousands of dollars **to** hunt. The state of Oklahoma politically is trying to shut our Wildlife and Conservation [Ed.: This refers to the agency, the Oklahoma Department of Wildlife Conservation.] down, and we, us as a*

group of hunters, lifetime hunters, and everything, we want more land. It's going to come to housing additions and everything. We go out and scout these public lands. We do everything we can to keep those going. [Ed.: The issue being referenced is the introduction of a bill in Oklahoma's state legislature by Republican State Senator Casey Murdock to limit the ability of the Department of Wildlife Conservation from purchasing more land for hunting access in favor of private use of the land for farming, ranching, and industry.]

Hunter/angler focus group participant

Education/outreach as a priority is highlighted in these quotations.

[Citing the importance of education:]

*Why do I care. How does it affect me? Or how is it going to affect me? What we're dealing with right now in real time is honeybees. They aren't just bees. They have a great effect on the supply of things that we **DO** have, that we use, on a daily basis: 75% of our food supply is affected by pollination that the bees are responsible for. So everybody should care and be aware of why these are so important as far as preservation of our own food supply.*

South Region focus group participant

[Citing the importance of education:]

I agree with what she said about education, and to do it in schools, and for the parents and grandparents because if the kids learn it in school, and they come home, and it's not reinforced because the parents and grandparents don't understand it, then they're going to think it's foolish, and they won't pay attention. So it's education for every age level.

South Region focus group participant

[Citing the importance of outreach:]

I'd like to see posts on social media, where they're actually putting it out there. What are they actually doing? Where are the tax dollars going? I want to see those projects.

South Region focus group participant

[Also concerning the importance of outreach:]

Like X said, there should be more on social media. There should be more on the forefront than what it is.

More self promotion.

South Region focus group participant exchange

Education is a huge part of what they do in Minnesota. It's not just that they're there to give you a ticket or to catch you doing something wrong. They're trying to educate everybody.... They're there to educate.

Midwest Region focus group participant

There's a general need for [education]. We all want to make sure that the...animals and the land is maintained, is there for generations to come. We all know what happens when people come and encroach on animal's space, litter, and overfish and overhunt. I don't want to see those seemingly small things that last for years. I don't want to see those damages happen.

Midwest Region focus group participant

Finally, instead of naming a particular task or type of work, some focus group participants simply expressed the desire that the work be balanced between the wildlife and the human stakeholder groups, which include hunters/anglers and non-hunters/non-anglers. "Balance" as a term and as a concept was frequently discussed in a positive manner in the focus group discussions.

I think they should be finding the right balance, if there is one, between preserving the environment and tending to the needs of those in the environment.

Northeast Region focus group participant

It's a combination when I think about that—a combination of safety of the public but also the safety of the environment, the animals, the habitat in the areas.

West Region focus group participant

We are on the earth, and there is this thing about coexistence between us humans and animals. We do need them in order for us to be here as well. The best thing I would want them to do is to help create that balance between making sure our needs are met as well as making sure the environment is still going in the same fashion it was before we were involved. Now I know it won't always be the same as it was before we were involved—but as best as possible.

Northeast Region focus group participant

I think the agencies should be listening more to people like X who lives on, that has farmland, and going off her experiences. A lot of what she's saying, the agencies should be listening to her, and making rules and decisions based on what she's saying because she's out there living it every day. I don't know if the agencies listen to you.

Not particularly.

They really should because you're living it. ... To keep a balance, the agencies need to be listening to people like X. I don't know if the agencies are doing that, but they really should be aiming to do that.

South Region focus group participant exchange

We've had a big controversy here...because we've had a lot of coyotes. The attitude is people just want to get their guns and go shoot them. They were here first. We're encroaching on their territory. We have to find a way to coexist. I think that all falls within their jurisdiction; they need to regulate.

Midwest Region focus group participant

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Should the agency be working on behalf of people, on behalf of fish and wildlife, or both about equally? Why do you feel that way?

Focus group participants were asked specifically if the agency should work on behalf of people primarily, on behalf of fish and wildlife primarily, or both about equally. Opinion ranged from one side of the continuum to the other. This is obviously one attitude that helps define different audiences for outreach.

I think they should work more on behalf of the animals and the environment.

Northeast Region focus group participant

I would say on behalf of fish and wildlife. Their goal should be to protect the wildlife from us.... That's how I see it.

West Region focus group participant

If I had to choose, I'd say...working for the fish and wildlife. They're the population most at risk. They're the population that's most vulnerable. I am not particularly threatened by much of anything that Fish and Wildlife could protect me from. I am pretty sure fish and wildlife needs protection from what's happening, what we've all been talking about, what's happening right now.

Northeast Region focus group participant

I think the focal point needs to be the wildlife. Without that being the focal point, there are no fisherman, there are no hunters. So, to maintain and conserve the habitat.

Hunter/angler focus group participant

I think...more on the side of the fish and the wildlife because they don't really have a voice. And if you ask any hunter out there, I'm sure he would say that there are so many regulations for us. So I would say [their work is] more heavily on the side of the animals and fish and the birds.

Northeast Region focus group participant

The name [is] "fish and wildlife." The purpose is the preservation of wildlife and fish, as the name dictates. ... This agency's role is well defined in its title.

West Region focus group participant

Well, once again, that word "balance" comes back into play. The agencies should be working for the wildlife, but they should also be working for the people.

South Region focus group participant

It should be about equally because that's the resource.... It has to be a perfect balance, otherwise you're going get either overpopulation of whatever animal and not enough hunters, or you just regulate the hell out of it and it's overpopulated, or you do not regulate it enough and the people are just going out there and you just don't have anything there anymore. ... I didn't even know the whole backstory of how Oklahoma had no deer in 1932. We were wiped out. So for us to now be at the point where we're able to take six deer during a season is amazing. My own grandfather couldn't even take one.

Hunter/angler focus group participant

I think both. We all have to live on this earth together to protect them as well, not just ourselves. I think they're [Ed.: the wildlife are] much more limited in the land they used to have because of all the buildings we're putting up. They're getting less and less. We have to protect what they do have. I'm not sure they don't have as much open land as they're used to.

Midwest Region focus group participant

It has to be a well-balanced machine so to speak. It's important for them to be there for the wildlife. That's what it's all about, what we're trying to protect and regulate. But also a big part of that comes from educating the people. There's a fine line they have to balance. They've got to spend equal amount of time on the people as they do protecting the animals and wildlife. They go hand in hand.

Hunter/angler focus group participant

I would probably be of the opinion that it needs to be somewhat balanced—working on behalf of people and the wildlife. Especially here in Utah, [which] is really growing in population quickly. ... There needs to be an amount of active management, both for the sake of the wildlife and the people, for the safety of everybody. ... People need to know what type of animals are in what areas to have that harmony between us and them.

West Region focus group participant

The agency is responsible for regulating wildlife and organizing conservation efforts, but they're also doing it with the money we spend on stamps and licenses and all that stuff. So in one sense you have to please the people that want to hunt, fish, and all that other stuff, but...there also has to be a balance of regulating the amount of wildlife that is there for us to enjoy. The initial reason is for the wildlife. But now that there are people that want to hunt and fish, it's also there for the people.

Hunter/angler focus group participant

Both equally.

South Region focus group participant

I think it's both, too. They kind of go hand-in-hand. You're protecting animals, but you're also protecting humans against animals [and] you're also protecting animals against humans. It goes both ways. There's a push-pull for both of them.

Midwest Region focus group participant

We need a balance. Their job is to look out for the wildlife. It's necessary for the balance. ... And you're going to intrude on their land as much as they come into our land. It's hard. Our population keeps growing and pushing farther and farther out, so we have to try to find a way to find a balance and educate people. But [the agency] should be leaning toward the balance of the wilderness. It's important to us all.

West Region focus group participant

As X was saying, fish and wildlife is literally in the name of the agency and yet, as X and some others were saying, they're also involved in some of these recreational activities: hunting, fishing.... Primarily there for natural resources, people, both about equally.

West Region focus group participant

*The fish and wildlife agencies should be working to manage the populations of species for the benefit of the population of people, especially for those who want to hunt and depend on game and fish in order to survive, in order to eat, and want to hunt and fish. But as X alluded to, without proper regulations animals would be annihilated..., but the populations of animals and fish should be regulated for **our** benefit, but managed so they don't decrease unnaturally or dangerously so.*

West Region focus group participant

It's for the people.

Hunter/angler focus group participant

Maybe it depends on the area. For northern Virginia, I would say it should be for the wildlife just because of the [human] population here. ... As a result we're losing a lot of our wildlife because we're taking over the area. Animals and wildlife: I think the agency should play that part here. But maybe in southern Virginia it may not be the same thing because maybe the [human] population isn't quite as dense as it is here. So maybe the location plays a factor. I don't know how that will work.

Hunter/angler focus group participant

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Have you ever interacted with the agency in any way? If so, how?

This part of the focus group discussions was about personal interactions with agency personnel that focus group participants may have had. The general population focus groups had many people with limited or no contact. Even the hunter/angler focus group participants had only limited contact. A school event was one place that a non-angler/non-hunter had interacted with fish and agency personnel.

Not that I'm aware of.

South Region focus group participant

Been fishing with friends, but I'm not the one in charge to do any of the research to be properly licensed or outfitted. I'm the one that brings the drinks.

South Region focus group participant

As far as me interacting with any of it? I haven't been fishing. I don't hunt or anything, but I know that there's a lot of people who do around here.

South Region focus group participant

Most of my interaction with the DNR is when we go fishing. They're checking boats or whatever. We live on a river, so we see them going by regularly, especially during certain seasons, like the walleye season. So that's who we usually see or interact with; they come check licenses, fish count, whatever it might be.

Midwest Region focus group participant

Maybe once a month, I interact with the local Game Warden about something—I might have a question. I find the local Fish and Game [personnel] to be very responsive to individual landowners. I had a porcupine that was living on my front porch for a while, and I was afraid it was hurt, so I called Fish and Wildlife and talked to a Game Warden.

Northeast Region focus group participant

A group of them came up to the school where I work at, maybe last year. ... They came to the school because it was for the kids for the most part. ... They spoke about a lot of different types of animals that I didn't even realize Georgia had. Also their overall knowledge of everything was good, and I think it was good for the kids to hear not only the different types of animals, but the endangered part, too. It was educational.

South Region focus group participant

No, I get the emails maybe once a week, a couple times a month. So, I keep up with that. But other than social media, other than that, no.

Hunter/angler focus group participant

I make sure I'm within the rules and regulations when I go fishing and hunting. Other than that, I'm not really involved.

Hunter/angler focus group participant

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Do you think of your state fish and wildlife agency as being relevant to you? Why or why not?

The interactions question above led directly to a discussion of whether the agency is relevant to focus group participants, whether they have had contact or not. Not surprisingly, those with contact, such as hunters and anglers, think of the agency as being relevant to them. A nuance of this relevancy is that it is conditional: for some focus group participants, the agency had relevance only when the participant was engaged in outdoor recreation, but not otherwise.

The...agency is pretty relevant to my family. Our year revolves around hunting seasons. Every year my sons familiarize themselves. We get the book they put out, the pamphlets, the manuals, to know the areas, the zones. They get tags. They fill tags. It's pretty relevant to our family. I am glad they do the job that they do to limit, as they see fit, the animals that are taken so they're not put into extinction.

West Region focus group participant

I would definitely say they're relevant. It's 100 percent relevant...no matter if it's just the person who's going to just use the state park for the day. If you have somebody out there who enjoys just going and feeding the ducks. They take their kids. If we don't have those agencies available to make sure to keep everything in check, then maybe those resources won't be there.

Hunter/angler focus group participant

It's definitely relevant to me and my way of life just because we are avid hunters. That's the way we feed ourselves. We legit go get deer and kill hogs and fish. We process them and put them in our freezer. That's how we eat.

South Region focus group participant

The only time they are really relevant is when I am out on the fishing boat. You don't see them every single time. On the Fourth of July weekend, there was heavy police/warden presence...before we put the boat in the water. My boyfriend's boat is actually registered in Rhode Island, and we're in Massachusetts. So that was a red flag because that's what they check for, your boat license and things like that. If you were to ask my boyfriend, he'd say, "Definitely. They're the worst thing ever. Oh my God, they're always on your case." He thinks they're there just to make life miserable.

Northeast Region focus group participant

[The agency] is [relevant], but since everything's shut down, it's not relevant right now, but it will be.

South Region focus group participant

Like she said, they're only relevant to me when I am interacting with parks.

Northeast Region focus group participant

They're relevant when it impacts me.

Northeast Region focus group participant

It's relevant to me because I am involved in the things [the agency] has something to do with. If people are interested in conservation..., maybe it would become relevant to them.

Midwest Region focus group participant

It's only relevant when, in my everyday life, when I'm using a park or something 'cause I normally only do bike rides and stuff like that. 'Cause they're a part of parks and preserving the wildlife there, it's relevant in the sense that I can do things. Other than that I don't really think about them at all. I mostly experience their work...in...parks and [when I] go hiking and stuff. But outside of that, no, I don't really, wouldn't say that they are relevant to me.

Northeast Region focus group participant

As touched on previously, many people without a reason to contact their state fish and wildlife agency feel that the agency has no relevance to them. This would be despite the likelihood that they want species in their state to be healthy and they want habitat to be protected—very few people in America are actually hostile to wildlife. So the fact that the agency does those very things, helping to ensure that healthy wildlife and habitat exists, is the way for the agency to be relevant to them. The focus group discussions, however, show that this connection is not always strong, although a few focus group participants had made that connection.

I don't interact with them. In terms of knowledge [of what the agency does], I would assume it varies from area to area because California is such a huge state. If I lived up in northern California, I assume I'd have a lot of contact, but not in my area, I don't.

West Region focus group participant

Not really. I realize that they're there, but [not] as far as my day-to-day life. I'm happy that they're there. I definitely think they should be working more on behalf of the animals, the wildlife, and educating us. The wildlife's going to do what they want and we have to learn their ways just so we don't keep getting rid of species. But as far as my day-to-day life, I suppose I should think more about it, but they don't advertise that well.

Midwest Region focus group participant

The animals aren't one of the top priorities for most people, I believe, until they find a wild mountain lion in their backyard, or a wild possum or raccoon. Then it becomes an issue.

West Region focus group participant

"Out of sight, out of mind" kind of thing.

Yeah, until I focus on it. On the one hand I feel very strongly about their [Ed.: wildlife's] existence. Don't get me wrong. I do. ... I really feel they [Ed.: the agency] really should be all about the animals and the environment. They should be defenders or protectors. But I never think about it. I think about it, but not actively. It's not something I put time into ever.

Northeast Region focus group participant exchange

Is it relative to my day-to-day life? No, not really. I don't hunt or fish. I live in a concrete jungle really, but I care.... I don't want [my actions] to affect anything out there, because every now and then when I want to go hiking or tag along with friends to go drink while they hunt, I don't want to be disrupting the ecosystem. So I care. I'm just not an outdoorsy kind of person.

South Region focus group participant

[Talking about lack of relevance among others, not himself/herself:]

*I'll say no. Inner city, urban kids that may not go to parks, national parks. They don't go out hunting, fishing. Their outdoor play may be just a playground within their complex. They're not checking for the wildlife agency. It **should** be relevant to them, but, because of their environment, it's not relevant to them. They're not looking for those agencies. It's not something they're going to seek out to learn about or to find out about what's going on with that agency.*

Hunter/angler focus group participant

Not actively [relevant to me], but I do have an opinion when it does come up. Like I said I don't think animals should go extinct. They should be cared for and looked for, but it's not something on the top of my mind on a daily basis.

West Region focus group participant

I don't really see too many animals in this super industrial area that I live in, but I would like to see more content from them [Ed.: the agency], whether it be on the nightly news or various news sources.

West Region focus group participant

[The agency is not relevant] until I decide to go fishing or on a hike. Then it's one of those things: I wish they would do this, or I wish they would do that. It's not a day-to-day topic.

West Region focus group participant

*I feel bad saying that [the agency is not relevant to me], but I don't really think about it. I feel like I **should** care because it feels like I'm saying I don't care about animals. ... But I don't think about the actual wildlife itself or the conservation, the government. If we didn't have the agency, we'd have a lot less animals, so I do think they play an important role overall.*

West Region focus group participant

Listening to everyone talk, I never really thought about recycling and the different things we should be doing. I never thought recycling had anything to do with wildlife reservations [sic] and stuff like that. I never really thought about it. I looked at it as all run by different things.

South Region focus group participant

I would add that a lot of people understand, even when they're in the urban areas, how much conservation and all that really does mean to them. Even if they're not dealing with the animals directly or dealing with conservation officers or anything directly a lot. Again it may come down to awareness that clean water and stuff like that does affect them, even in urban areas. The city doesn't just make water and send it down the pipes. It still comes from a water source, from somewhere managed by conservation. Maybe the fault is [that] awareness or education is not really good in those areas. So no, they don't have the knowledge to know that it does affect their everyday life. But actually, it does.

Hunter/angler focus group participant

Rarely, a non-hunter/non-angler felt that his/her state fish and wildlife agency was relevant to him/her, typically as the agency that ensures that wildlife continues to exist and is healthy. In one case, relevancy was based on making the state an attractive place for tourists who want to hunt and fish—in other words, there was an economic relevance.

Relevant to me every day? No. ... I expect them to save the rest of New York State, just not obviously here in the City. I think they are completely relevant to me, and I appreciate them. Without them, like I said before, it would kind of be a free-for-all in the state. So they are relevant to me, just in a different way than most people think because I don't think about it every day.

Northeast Region focus group participant

[The agency] would be [relevant] for me personally. When I was growing up, as a younger boy, I loved animals. I wanted to actually be a vet maybe one day. I kind of changed paths, but they're very relevant to me because I still to this day love animals. I've always been...somebody who's, let's say, "pro." So I'm always looking for anything or definitely an organization that is into helping or protecting animals. So they're definitely relevant for me.

South Region focus group participant

Part of tourism involves fishing and hunting. So they're an agency...[that] is financially beneficial to the state. So part of their work is trying to maintain a safe and pleasant environment to hunt and fish in, because that is a revenue source. So...it is very relevant to me.

Northeast Region focus group participant

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Although not a question on the focus group discussion guide, the moderator asked one group (because the topic came up in the discussion) **how they thought their state fish and wildlife agency is funded**. Some had the perception that “tax dollars” are used, using the term, “taxes,” in a broad sense, which in turn implies general tax funds that everyone pays (this quotation was previously shown in a larger point about the need for outreach, but the quotation included the line, “Where are the tax dollars going?”). It is not well known in the general public that fish and wildlife agencies are *not* primarily funded with *general* tax dollars. Taxes that are used are very specific, such as the excise taxes on hunting and fishing equipment or sales taxes that voters have imposed on themselves through voter referendums. However, most focus group participants did not know specifically how their state fish and wildlife agency is funded, with just a few exceptions, such as in Colorado, evidenced by one of the quotations in this section.

I haven't any idea [how the agency is funded] actually.

I don't either.

No, I don't.

West Region focus group participant exchange

In Colorado, Parks and Wildlife is mainly funded through our lottery system, and now online gambling and some from the casinos we have up in the mountains. But primarily from the lottery system.... That's the main funding for [the agency]. Also, the fees to get into the park, fees to camp, and fishing fees, hunting fees, things like that.

West Region focus group participant

Funding also came up as a concern in that some focus group participants worried how the fish and wildlife agency would fare when budget cuts come down the line.

One of the concerns I would have going forward is how agencies will receive their budget because there [are] issues in funding government state agencies. Those are the ones that usually take the big hit. If that occurs, how will that involve us who want to be involved in recreation and are hunting?

West Region focus group participant

I expect they're underfunded. That's maybe another matter.

Northeast Region focus group participant

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This section also highlighted the **confusion about which state agency is which**. Personnel from other agencies were often attributed to the fish and wildlife agency. A case in point is the confusion of National Forest personnel with state agency personnel.

They basically have their own police force: the forest rangers.

West Region focus group participant

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Summary of Findings About Fish and Wildlife Management and Conservation

Development and concomitant loss of habitat are perceived as the most worrisome problems confronting fish and wildlife. The focus groups discussed these problems extensively and other problems that proceed from development and loss of habitat, such as water scarcity problems, pollution, litter, and so forth. Some saw the possibility of overhunting and overfishing as problems—or they saw that these would be problems without the fish and wildlife agency.

There were many different interpretations of the term, “management.” There also seemed to be confusion regarding its meaning, or it was perceived differently than the fish and wildlife conservation community perceives it. Some talked in broad terms that management meant conservation and protection of species in general. There was some push-back regarding the term, as “management” does not always have positive connotations.

Regarding whether wildlife needed to be managed, thoughts were on both sides of this issue. Commonly, though, focus group participants said that there was need for management in a world that has humans. They discussed management as allowing humans and wildlife to coexist. They talked of having a balance between human and wildlife needs.

The term, “conserve,” was also interpreted in different ways. Generally, though, it was said to mean keeping species and natural resources healthy into the future. It was generally favorably received, as well, although some people had a mixed perception about “conserve,” suggesting that it demonstrated that a problem existed. There was no consensus on the differences or similarities of “conserving” and “managing” fish and wildlife, and there was no consensus on the meaning of “preserve” as opposed to “conserve” among focus group participants. “Habitat” was favorably received in general.

There was great confusion regarding the terms “game” and “nongame.” People had either not heard of the terms, or they had the incorrect perception of the meaning. Some focus group participants thought “game” meant larger species and “nongame” referred to those smaller, but still hunted, species. Just a few knew that game referred to huntable species and nongame to those that are not hunted.

Some focus group participants understood the connection of fishing/hunting and fish/wildlife management, but many did not.

Focus Group Results Regarding Fish and Wildlife Management and Conservation

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How much do you think about fish and wildlife in your state? Do you interact with fish and wildlife in any way?

Do you have any concerns related to fish and wildlife?

The overarching problem of expanding human development was seen as a problem for wildlife, as its habitat is shrinking. The concomitant human-caused problems of water scarcity in rivers, water and land pollution, and litter were often mentioned. Many people also brought up deer overpopulation. Of course, many concerns had been expressed previously in the discussions of the work that people wanted and expected their fish and wildlife agency to do, such as maintain habitat, protect the viability of species, and enforce hunting and fishing regulations. The quotations below start with the human-caused problems and finish with several quotations about deer overpopulation.

Population growth, spread. Energy requirements—wind energy and solar panels—are taking up more land and spreading...into wilderness. It's...more and more forcing on wildlife, pushing...into it. ... We have a lot of problems with people on the outskirts having wildlife coming down and looking for food. Just a few years ago, that was their feeding grounds. We just keep pushing further and further out. It's a big land, but a lot of it's occupied. A lot of the land needs to be [for] keeping the balance of nature. So that's a big concern for me.

West Region focus group participant

We want things left for the future generations, but the human encroachment is everywhere. I live in Santa Fe; it's just booming. People are moving away from cities and coming and populating the small towns. ... So that's certainly affecting the fish and wildlife. [Ed.: Note that this focus group participant used the term, "future generations," prior to its being asked specifically about by the moderator later in the discussion guide.]

West Region focus group participant

Just to start off, I know that Utah has a lot of issues with water conservation here. It seems that...the [human] population growth is out of control and unsustainable. They need to find different ways to route water for human population. But I also wonder how it's affecting the fish species here, too. ... I know that's a big issue right now that people are pretty passionate about, trying to figure that out.

West Region focus group participant

Pollution in the water just because...people are littering. There's a lot of sewage and chemicals, things like that, and the fish are contaminated. Then we fish and we eat it. That's all.

West Region focus group participant

There's two things: the overpopulation of deer, at least in my area; the other is the rising levels of the lakes. All the lakes, I don't know if flooding is the right term, but they're very high. That ultimately has an effect on the ecosystem. There's a lot of deer, and where I live it's somewhat suburban, somewhat rural. There are so many car accidents because of deer, more than I ever remember in my life. It's just nuts.

Midwest Region focus group participant

When [deer] appear, they appear very quickly. I have actually hit and killed two myself. The one I hit and the other actually hit me, but it killed both of them. That's kind of a trauma to go through. And my vehicle was totaled so that wasn't a good thing either. We live really close to a County Park.... They've even talked about opening up deer hunting in the park because that seems to be an issue in the suburban area. That's where they're congregating. A friend of mine had a photo on Facebook; there were 22 deer walking down the street in front of her house, <laughter> and it's a suburban area. You can't have that many. There will be accidents. People get hurt. People get killed.

Midwest Region focus group participant

I actually had an accident one time, driving my car in town one night, and a deer ran into my car in town. I was shaking because I thought I'd hit a person. What in the world? I stopped and got out, and this deer got up and ran off. Where in the world did you come from? There aren't even three trees next to each other near there. It was okay, but it almost went through my window. Where did it come from? How did it get lost in town? Maybe they're getting more displaced? I don't know.

Midwest Region focus group participant

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You sometimes hear the phrase “fish and wildlife management”—what does that mean to you? What does it mean to “manage” fish and wildlife? What’s involved?

The term, “management,” was open to interpretation for some focus group participants, and it did not always appear to be understood or perceived in the same way that the fish and wildlife conservation community thinks of it. A few focus group participants, nonetheless, defined it the way that the fish and wildlife conservation community does—applying it to managing the size and health of wildlife species. The quotations start off with those that indicate an understanding that is commensurate with the fish and wildlife conservation community.

I see the word “management” as a term that describes the work of optimizing the relationship between humans and the wildlife around us, a mutually beneficial term, meant to improve our lives as well as theirs, too.

West Region focus group participant

When someone mentions wildlife and fish management in Montana, it's basically monitoring the herds, the activity, the populations, and determining what we can and cannot hunt, where we can and cannot hunt. That is what comes to mind when it comes to managing the wildlife in Montana.

West Region focus group participant

Population control. You don't want it too high. You don't want it too low. You don't want it to disappear altogether, but you don't want to be overrun.

South Region focus group participant

A lot of it has to do with tracking the diseases, too, chronic wasting disease of deer. There are also other diseases that affect specifically waterfowl. Those are ones that they're [Ed.: referring to agency personnel] doing a lot of research on to ensure they [Ed.: referring to the diseases] aren't wiping out an entire population, similar to the whole Covid thing that we're going through right now. Animals experience the same thing where's there's viruses that can wipe out entire areas.

South Region focus group participant

Making sure a species doesn't disappear because of our actions. Maybe that's part of Fish and Wildlife's job, the more we keep moving into the rural areas. The place I bought was nothing but woods. Then I built a house on it, and all of a sudden deer were all over my property. They were probably there before. We just keep building up and building up. We're just doing harm. Maybe that's their job, to be sure they're not going to all die off, and we can still, I guess, keep building up. Maybe it entails letting them reproduce by letting humans take care of them.

Midwest Region focus group participant

Others talked in more broad terms that management meant conservation and protection of the viability of species in general.

To make sure their habitat is as clean and livable as possible.

West Region focus group participant

Perhaps human encroachment versus managing sustainable wildlife. That's managing—bringing in the balance.

West Region focus group participant

I was just going to say my favorite word: balance.

South Region focus group participant

The overall concept of fish and management, wildlife management, as far as lands and protecting lands, lakes and populations— most people don't fully grasp that. They have a small grip on it but they don't understand what's going on behind the scenes that makes all that happen.

Hunter/angler focus group participant

*Different things come to mind. The first thing, we kind of touched on it earlier, concerning preserving the fish and wildlife. That's what I think about when I think about "managing." That would be my first thing, making sure they are preserved and kept. The second would be that we may also have a hand in **how** the ecosystem is balanced. ... So there's a two-fold thing when it comes to management—preserving fish and wildlife over all and then, also, having a little bit of a hand in how the fish and wildlife are able to prosper in the environment that we live in.*

Northeast Region focus group participant

Managing the balance between what is home for both sides. People are creating the limits because of what we need but also protecting the wildlife and fish so they can coexist peacefully and not harm either side.

Midwest Region focus group participant

As indicated above, there were comments suggesting that the term, "management," is somewhat open to interpretation.

Because of the different areas we live in, the word "management" might take on different needs.

West Region focus group participant

About once every season, they would gather volunteers around to go pick up litter and all that. That's a form of management—we're fixing things the way we can so the animals can also live, so we can all live together. That clean-up was very necessary. So when I think of management, I think of helping the animals be able to live without us having a negative effect on their lifestyle or habitat.

West Region focus group participant

The exchange below highlights one person who had a good grasp on management as ensuring the health and viability of species, followed by another person with no real idea about what wildlife management entails.

Manage, the whole thing of it. It's population control, the health of it. If there's certain fish that work well together, that would be part of it. Who goes well with who? You're not going to put a fighter with anything else because they'll eat it up. I'm just using a very basic example.

Me? I don't know anything about it. I wouldn't know which one's a saltwater fish, freshwater fish, or who plays well with who. Don't give me that job. <laughter>

Fish eat fish. You want the fish to all be friends and get along, but there has to be a good balance. There has to be enough food. There has to be enough little fish that they survive and don't go extinct, but they're still supplying up the food chain. ... It gets really complicated because they eat each other. ... When you get into the fish aspect, there's a lot that goes into play because it's just a fish-eat-fish world. You have to have good populations across all of those different types for it to actually work as an ecosystem, 'cause if one disappears, they don't have food. Then it just goes up the line in a chain.

South Region focus group participant exchange

Some of the discussions of management were about “wildlife management” as a term versus using “conservation” instead.

I think [it would be good] if [the agency] stepped away from the idea of “wildlife management” and...more towards calling it something like “wildlife conservation.” “Management”: that’s all [people] hear. Wildlife managers—oh they manage the deer population. They manage this and manage that. ... A lot of volunteers cut the trails. A lot of our volunteers go in and take out the trash. [People] don’t understand. Yes, there’s Game Wardens. They’re going to manage the hunters and fishermen. But there’s the people behind it that actually do the conservation. It’s not just about managing the animals and managing numbers.

Hunter/angler focus group participant

*I feel like calling it a “conservation agency,” though [it] would be confusing to the general public because there’s a disconnect in understanding hunting **is** managing the species. I would think, “Conserving—oh you’re saving them. But why are you letting people kill them?” Hunters manage the population, but I don’t think the general public understands that.*

Hunter/angler focus group participant

One focus group participant wanted a no-management approach, but it was unclear if this was because of a belief that fish and wildlife need no management or because management is futile, expressing a pessimist view that nothing could be done.

I chose...that we should step back and let nature take its course. ... It’s more about money. We can try to regulate things, ...we have wetlands, but they...build homes where they shouldn’t build homes. You have all these animals that are losing their homes. There’s nothing we can really do. It’s money talks.

Northeast Region focus group participant

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Do fish and wildlife need to be managed or are they okay existing on their own? Why do you feel that way?

Thoughts were on both sides of this issue. Some thought there was *no* need for management, while others felt there was a need for management. There was often expressed the idea that there would be no need for management in a world without humans but that humans create the need for wildlife management because of the need for coexistence between humans and wildlife. Finally, some indicated that the management of wildlife to them meant managing the humans interacting with the wildlife, not so much the species themselves.

You pretty much let them live on their own. You just leave them alone. They know where they need to be. They’re in their own space. I don’t think they need to be touched unless

there was some kind of danger or something. I could understand that. Other than that, we need to leave them alone. I don't think they need to be managed.

South Region focus group participant

You do have to manage it, even if it's organic and maintained in its natural habitat. You have to manage it once it becomes a supply to meet a demand. Otherwise it would just end up being a shortage if we, as regular humans, were left to our own devices. If it's not regulated, we would run down the supply almost immediately because humans suck. We're hoarders. We would deplete the resources without managing the maintenance or growth of it.

South Region focus group participant

As long as we live as close to nature as we do, there is absolutely a need for management. It's necessary. ... We're introducing and re-introducing species, relocating species to other areas, managing the herds, making sure there's some balance there, using humans to some extent to manage the herds when they get too big because natural predators are starting to disappear from different areas. ... The natural balance has been upset so you have to manage it. Humans may have tried not to do that [Ed.: upset the balance] but our mere presence so close to it has caused that.

West Region focus group participant

*It would be fine if we weren't here, but people **are** here. And not all people are honest and smart about it. That's why we need to manage it; otherwise, it would be fine. But we're here.*

Midwest Region focus group participant

Humans and animals have to coexist. Humans have come in and taken away from animals' habitats. Now we have to step in and try to keep the ecosystem balanced again. So there's definitely a need for management. Like I said, we came in and we interrupted the ecosystem and the food chain.... It's going to take humans to help because we're part of the problem. It definitely needs some management.

Yes, I agree with you. We're part of the problem. We cause that imbalance by what we do as humans. If we were completely separate from the animals, then they could be on their own. But we're not. We're causing that negative balance. We're causing [the problem], so it [wildlife] needs to be managed so it [the ecosystem] can work.

We eat the animals so they're helping us. To be fair, we need to help them survive so that we can survive. Again, balance.

South Region focus group participant exchange

Part of management has to do with health, the health of animals. I would like to imagine that there was a time before we were all here that it was the way that it was supposed to be, whatever, and I am sure that was always changing. But our arrival here has really thrown things out of order. Part of management would be an effort to return the environment around us, and the animals around us, to some original balance. There used to be a bird that was around here a lot; we used to see a lot of the bird called the bob-o-link. The bob-o-link nests in hayfields; it built its nest on the ground in the

hayfields. Here in Vermont agriculture is speeding up. Everything is done sooner. So hayfields are being cut for the first time much earlier than they used to be. When I was young, they were cut on the Fourth of July. Now by the First of July they have done two cuttings of hay. Bob-o-links can no longer exist here because their nesting takes place in hayfields that have been cut, and the possibility of nesting is gone. So now Fish and Wildlife is working with farmers to pay farmers to delay their first cut of hay on a portion of their land so that bob-o-links can have a chance to come back. To my mind, that's management.

Northeast Region focus group participant

I know we've done enough that we can't just leave it alone at this point.

Northeast Region focus group participant

I chose the middle ground. ... I mentioned the black bears. Sometimes there has to be management. Sometimes you do have to manage the animal for the betterment of the animal population as well as the people living in that area.

Northeast Region focus group participant

I picked the middle option. The more humans get involved in things, sometimes the worst they can become. It gets overcomplicated. They solve one problem but create another one. So they should monitor things but I'm not sure they should get hands on and everything. They should be managing fish populations and things like that, but I'm not sure if they should be adding farm-raised fish to lakes and stuff to restock. I don't know if that's the right thing. If we get too involved, things get messed up.

Northeast Region focus group participant

There's a couple reasons why I think they have to manage it. Like all of us, a couple have mentioned they like to go out and hike and enjoy the scenery. After a long day's work, or on a weekend, you like to get away. It's fun and entertaining. That's number 1. So it should be an enjoyable place for us to go, like flora, fauna, flowers, trees, whatever. So that's number 1. They should also manage it because birds, insects, butterflies, all that, they all grab from the trees. They grab the nectar. They help pollination, which also helps us breathe. Trees, birds, they help us breathe.

Northeast Region focus group participant

There's a huge need.

Midwest Region focus group participant

I suppose...to prevent invasion of nonnative species. So there was an eel in Lake Champlain, which was grabbing onto fish and killing fish, and I was in favor of having larvicides coming into streams and into Lake Champlain to kill that eel. I'm not in favor of killing a lot of things, but it felt to me like that was an important management tool to get things back to whatever they were supposed to be, whatever that was. So for me that's a piece of management.

The ancient carp and the snake heads that came over here and were choking off fisheries which messed up the ecosystem. So you are right. You don't want something climbing around Lake Champlain that doesn't belong there. It's going to kill everything else off.

Northeast Region focus group participant exchange

There's too many people who really don't care about the law. If they feel like going hunting, they'll go hunting. If they feel like taking more fish than what's allowed, they're going to do it. If it's not protected, we won't have animals. We won't have fish. We won't have deer to contend with because there are people who will take more than they should. I agree with whoever said it's okay to take what you're going to eat as long as it's legal and in season. But I know people who shoot deer, take the prime pieces of meat out of it, and then leave it in the woods. I've seen that happen many times.

Midwest Region focus group participant

I don't think they're okay on their own because, if they were left on their own, people would take advantage of them and the environment. Obviously if there were certain areas where we couldn't reach them, they'd be fine. We interact with them, and they will disappear if we don't have some type of management—at least some species will.

West Region focus group participant

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How should fish and wildlife be managed? What specifically should be done to manage them? What's the right level of management?

Many focus group participants' ideas on management had been previously expressed in other sections of the discussions. They had previously talked of striking the right balance between human and wildlife needs. They had also discussed keeping the species healthy—not overpopulated but also not endangered. When asked specifically about what should be done, some mentioned specific efforts of their agency, such as reintroduction of species.

I think the goal would be to sustain any species to make sure that it doesn't become overpopulated and so that, for the most part, they can coincide living with humans, that they can live with humans without either of us doing harm to the other.

West Region focus group participant

They need to keep the populations in check. In the area where there are too many, maybe they open up some special hunting seasons to take care of that. Then those that want to hunt 20 can have that. But it's to control the populations and keep them balanced. I don't know exactly what the balance is. It's their job to know that.

Midwest Region focus group participant

Haven't there been some means of introducing the wild species that were totally eradicated on the plains, and some parts of the U.S.? So maybe that is also a part of what the agency should be looking at.

West Region focus group participant

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What should be the ultimate goal of fish and wildlife management?

Comments that stemmed from this question talked about healthy and viable species in the future—about the long-term protection of the species. This included addressing the need for habitat protection.

Keeping fish and wildlife at a healthy level, whatever that means, and making sure that they're breeding as they should. That there's enough space. Give them the amount of space that they have. So, there's enough of them, that they're not overpopulated, that they're healthy, that there aren't any contaminants in their areas.

Midwest Region focus group participant

Protecting...the animals [and habitat] that these animals live in [should be the goal], because if those particular areas, or habitats or whatever, are invaded or disrupted or even soiled in some sense, it'll affect how the animals live. That in turn affects how we live in terms of certain things we need.

South Region focus group participant

Find a way to live in harmony together. Waste not, want not.

Midwest Region focus group participant

The environment. Everybody else is out to kill it. That should be the motto. Defend the environment. Minimize the future damage.

Northeast Region focus group participant

Conserving for the future and for the enjoyment of future generations is the ultimate goal. That it would continue into the future for their enjoyment. That's why we manage it now so that it stays for the future. That would be the ultimate goal. [Ed.: Note that this focus group participant used the term, "future generations," prior to its being asked specifically about by the moderator later in the discussion guide.]

Midwest Region focus group participant

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What comes to mind when you hear the term "conservation"—what does it mean to "conserve" fish and wildlife?

The term, "conserve," was somewhat open to interpretation. Universally, however, it was applied to perpetuation of species and natural resources into the future.

Protect them definitely—protect their integrity, protect them from us. ... I think of preserving for the future when I think of conservation. Longevity.

West Region focus group participant

"Conserve" means there's a finite resource, whether that be an animal or a resource. We are always talking about conserving water. It's something that needs protected.

Northeast Region focus group participant

Protecting them. Protecting their habitat from us. When we go into the waters and hike and all that, we pollute. So conservation is protecting their space and making sure we don't ruin it.

West Region focus group participant

To not take advantage of it? To keep it a steady population or a steady environment. ... You conserve things...to try to keep a balance, or try to keep it as close as it should be, to make things interact with each other, people interact with animals, that balance.

South Region focus group participant

Keeping it around for future generations, long term. [Ed.: Note that this focus group participant used the term, "future generations," prior to its being asked specifically about by the moderator later in the discussion guide.]

Northeast Region focus group participant

The conserving and preserving, whether it's the wildlife that actually live somewhere or the quality of the waters so they can live there That whole litter piece, keeping up with those things so we can preserve it for future generations. I think that's all part of the conservation piece of it. That's not just with parks that are neatly squared off...but onshore riverbeds and all that. [Ed.: Note that this focus group participant used the term, "future generations," prior to its being asked specifically about by the moderator later in the discussion guide.]

Midwest Region focus group participant

Some people had a mixed perception about "conserve," suggesting that it demonstrated that a problem existed or that "conserve" was done only to slow the inevitable progression to the demise of the natural resource in question.

"Conserve" suggests there is something about...the situation which doesn't want to conserve [Ed.: This is not grammatical, but the point is apparent]. If we have to conserve something, there must be something we are pushing against. I don't know what that means except that "conserving" means something is wanting to take something away.

Northeast Region focus group participant

I think it's a depleting word though. Conserving means...We're not replenishing. We're steadying the curve of how much we're taking from it. We're managing its slow demise. It's like we only have so much; let's control how much we're taking to elongate it as long as possible.

South Region focus group participant

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Is "conserving" fish and wildlife different than "managing" fish and wildlife?

There was no consensus on the differences or similarities of "conserving" and "managing" fish and wildlife.

"Conserving" versus "managing." "Conserving" is like saving the amount you have. Say you have 100 number of fish. We don't want less than that. We know they need this much space. What's the best we can do? What do they need to facilitate that? What do they need to thrive? When I think of "managing," I think of going beyond, doing better than what you're currently at. When I think of "conservation," it's like we need to save them. The few that we have left, we need to make sure we don't lose any more. That's what I think when I think of those two words.

Midwest Region focus group participant

I think they go hand in hand. I agree with X that [the term "conservation"] definitely has kind of a negative connotation to it. We're conserving. It's going to run out. Oh no! It's limited.

South Region focus group participant

"Managing" is the balance right now. "Conserving" is a greater emphasis on making wildlife thrive. I want to bring in that word "thrive" like what was in the past.

West Region focus group participant

I see "conservation" as a subset within "management." Management is an overarching term that encompasses all of it. Conservation is protecting the species that has become potentially endangered or at risk due to, specifically, human encroachment or their environment has changed due to us. That's an important part, but management could mean the opposite of conservation. Maybe a certain population is getting really out of control. Then you have to loosen up the restrictions for hunting, kind of help bring that back around, bring free and natural balance back.

I would agree that conservation would be a subset of management. I know we are talking about fish and wildlife. But to make a comparison to something else Montana has, we do a lot of lumbering. ... When I think of managing, it's not wrong to harvest trees, but they do it in such a way that the forest replenishes itself. They don't harvest in such a way that the forest is permanently damaged. I would see that same concept applied to fish and wildlife. It's not wrong to harvest but do it in a way that the species can actually replenish itself easily.

West Region focus group participant exchange

"Conserve" has a generational connotation.

Northeast Region focus group participant

Along this line of questioning, the moderator asked if conservation was different than preserving fish and wildlife. There was no consensus on the meaning among focus group participants.

"Preserving" is for now. We preserve eagles so we can see them next week. "Conserve" is long term, where my kids and grandkids could see them in nature.

Northeast Region focus group participant

I think of them as the same when I hear either one of those terms. I think about endangered species that are already in the process of dying out or being killed off. ... I just think of the same thing when I hear both of those terms.

West Region focus group participant

I think conservation is keeping from wiping something out, using something up, eradicating it. Preservation is more like keeping things the way they are.

West Region focus group participant

I was imagining that I was looking at a brochure in the mail that arrived in the mail and looking for my money, and it said, "Help us conserve wildlife" or "Help us preserve wildlife." I don't know what the other options would be but I do think I'd be more likely to write out a check if it said "conserve" rather than "preserve." I don't know why.

Northeast Region focus group participant

[Conserving and preserving] sound very similar to me.

Conserving seems a little less permanent than preserving.

Conservation is basically natural habitat and animals' natural habit whereas preservation is protecting animals against humans interfering with their lives.

I think of preserve as keeping it as it is, whereas conserve is more like helping it, keeping it. Preserve: you preserve cherries to make jam. Preserve is more of that proactive, protecting to keep it going.

I totally agree. When I think of preservation I think of a museum or something whereas conservation is like "Let's save this little pond" to save the fish right here from dying.

Preserve is like having a model of a fish, and let's keep that.

Midwest Region focus group participant exchange

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What does the term "habitat" mean to you? What qualifies as "habitat"?

"Habitat" is a fairly well understood term, and it generally has good connotations to people.

It's a widely used term since the '70s when Jimmy Carter worked with Habitat for Humanity. It's a shelter or place where something lives.

West Region focus group participant

People associate habitat with where animals live and that's about it. For the most part a lot of people are ignorant when it comes to knowing what terminology is.

Midwest Region focus group participant

Habitat, to me, is where a species is going to thrive. I think it goes hand in hand with conservation or management.

Midwest Region focus group participant

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How much does habitat need to be managed?

For the most part, this topic had been talked out by this point in the focus group discussion guide when participants talked about whether wildlife needed to be managed. The nuance that this question was asking about habitat rather than wildlife was apparently lost on many, as evidenced that much of the discussion was about the wildlife rather than the habitat.

Yeah, more people are expanding, more houses are being built and no one's managing them, taking care of them, their voice, saying 'Hey, we don't need to expand anymore because you're running the habitat for this creature.' Management is also a voice for the creatures and wildlife.

Hunter/angler focus group participant

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Have you ever heard the terms "game" or "nongame" used to describe wildlife? Do you know the difference between "game" and "nongame" wildlife?

"Game" and "nongame" are not generally understood. Some had not heard of the terms (the first few quotations), including at least one hunter. Others had specific, but incorrect, ideas on what the terms mean. Some focus group participants thought "game" meant larger species (perhaps that are more fun to hunt?) and "nongame" referred to those smaller, but still hunted, species. These are the middle quotations in the set below. A few knew that game referred to huntable species and nongame to those that are not hunted, as evidenced by the last few quotations.

I've heard it used before. I don't believe New Jersey uses that lingo. Maybe X can correct me on that.

Hunter/angler focus group participant

Gamey taste?

It's all a matter of how you process it whether it tastes gamey or not, and if it's a doe or a buck, whether it's young or old. There's a lot of things that come into play.

South Region focus group participant exchange

Game fish are the ones on the list of regular game. They're the ones that are regulated, I believe, whereas nongame is everything that's not on the list, not endangered or having issues. "Game fish" are officially regulated like that—bass, trout. But there's a lot more fish than the little list that they have posted. There's all the little fish you could pull out of the water. Sunfish, I don't think they're regulated. I believe those are the "nongame" ones.

[Moderator:] Same on the wildlife side?

I think so, not entirely sure on that. Deer's game. Hogs are game. My husband goes rabbit hunting. That's more of a sport; we're not going to eat those, but I feel like there's

still a season. I can't think of a land animal that doesn't have a season. Frogs have a season. I guess snakes don't have a season. You don't hunt snakes. You're not allowed to kill them. Deer have a season. Rabbits? There's a season. Birds? There's a dove season, a duck season. I feel like there's a season for everything, so I'm having a hard time thinking of something that's "nongame." Maybe mice, squirrels, rodents, things that aren't necessarily regulated, but as long as they're not in danger you can shoot them? That's kind of the way I'm taking that. Pastoral, I guess? Raccoons probably; there's not a raccoon season. So they're a nongame animal.

South Region focus group participant exchange with moderator

When I think of "game," I think of rabbits. "Game" could be more commonly hunted animals. I'm not totally familiar with it, but more commonly hunted. Then nongame is less common animals that we eat or are hunted.

West Region focus group participant

Usually when they're thinking of "game" species, they are thinking of, generally, predatory species like mountain lions, coyotes, cougars, bears, jaguars. Things like squirrels and rabbits are not generally thought of as "game" species, although they are all game. They're all game. ... They're all "game." There's just some that are predatory, some non predatory.

Not heard those terms, but I like X's explanation, so I'll go with it.

Say deer, venison, whatever. They say "it tastes gamey" or whatever. I don't even know what that means. Does it mean it's wild? I don't know.

Are bats "nongame"? Nobody's hunting bats. Bats are considered "nongame." Anytime you pick up a weapon and you're going to hunt something, you're hunting "game." Even trapping. You're trapping beaver. You're not hunting them. You're trapping them. They're still game animals. They live in the wild. Bats and pelicans, they're not considered game.

I've heard of them, not really familiar, but I guess it's like a game with the animal. I don't think that's fair to the animal.

Northeast Region focus group participant exchange

That's a great question. Let's put my guesswork to use here. I was a chef for 10 years. "Game" to me meant "gamey flavor," or rare meats, not farmed, commercialized, or readily available. The accessibility is a little bit harder. So I just [define] "game" by availability and flavor profile. And that's influenced by its natural habitat. ... So game, to me, is something you have to go hunt..., [it's] not produced. That's my attempt at an educated answer.

South Region focus group participant

I thought game meant wild animals. [Nongame] would be dogs and cats.

Midwest Region focus group participant

To me game is wild, and nongame is farm raised.

That's exactly my thought, too. Game has the connotation of being wild as opposed to not game.

South Region focus group participant exchange

Game are those animals we tend to hunt, eat, or raise for eating. Nongame animals are not edible to us, from our perspective, from a human perspective.

West Region focus group participant

I feel like the defining factor is whether you can hunt it or not, whether it has a season or not.

Midwest Region focus group participant

I kind of agree: game are those we hunt or fish for; nongame would be those that we don't. ... Cardinals for example. There's a lot of species in our environment that we don't hunt or fish that still need to be regulated so we have them 100 years from now.

Midwest Region focus group participant

It's tied to the hunting aspect, it seems.

Northeast Region focus group participant

"Game" is things that you can hunt versus "nongame" is other species you might see but you can't hunt them.

Hunter/angler focus group participant

I have to say, when you started talking about "game" and "nongame," it occurred to me, do I think of Fish and Wildlife [Ed.: the agency] as having to do with "nongame" species? And for the most part, I think I don't. I think of Fish and Wildlife [Ed.: the agency] as being [responsible for] hunting and fishing.

Northeast Region focus group participant

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Do you think of hunting and fishing as being related to fish and wildlife management or conservation? Why or why not?

Some focus group participants understood the connection of fishing/hunting and fish/wildlife management. Some conjectured that this was probably the case, although that perception may have arisen solely from the question itself, as evidenced by the first quotation. A nuance of this is that focus group participants thought of the connection of fishing and hunting to "management" of wildlife but not necessarily to "conservation."

I would think so.

Midwest Region focus group participant

Pretty much. Fish and wildlife, hunting and fishing, I would think, common sense, that they're related in some way.

Midwest Region focus group participant

I would be pretty naive to not think that those two issues are at all connected because they obviously are. ... The issues are very closely intertwined.

West Region focus group participant

Both X and I touched on that. She had brought up the idea of hunting for sport, and I mentioned that people don't understand that hunting is managing. They just see it that we're killing animals or hunting animals for food—depending on the person you talk to. But I don't think that most people would understand the concept that hunting is a management activity.

Hunter/angler focus group participant

So, I'm sure the average student of mine has seen deer hit by a car along the side of the road. So, the fact that hunters are out there hunting deer is helping to manage the population so it doesn't get so big. I teach biology; that ties into carrying capacity. Because we have all the farmland out here, we have provided great habitat for all these deer. There's also a lot of residences that prevent hunters from hunting in a lot of the hotspots deer hang out in. So, we have a lot of deer, and hunting keeps that population down, so we're seeing less deer get hit by cars. I think that's something they can definitely relate to.

Hunter/angler focus group participant

*I don't know if it's a part of fish and wildlife **management**. People hunt and fish. Some of it's for game. But some's for a trophy. Some of it though is for people to survive. I don't know how that fits into fish and wildlife **management** per se. People use it for different resources. That may be food, clothing, a trophy on their wall. That's a good question. I need to think about that one a little bit more.*

South Region focus group participant

Yes, I think they have to. You have to have a license. You have to protect that 'cause otherwise, if you didn't [need] a license, people would overfish, overhunt. There would be nothing left. Then it would be wanton waste. There's no way that our society uses every piece of the animal like they did way back in the day. So without conservation management, and them, it wouldn't work. There would be nothing left right away.

Northeast Region focus group participant

I would definitely think they are part of it. It's something we would do that could get rid of a species, so I would think that's something that would need to be conserved.

West Region focus group participant

*I think they **are** a part of fish and game management. They control it. ... I know Fish and Game controlled that, so I'm assuming that they **are** part of the management of everything else like that.*

South Region focus group participant

I do think that hunting and fishing can be used as conservation efforts especially in western Montana where I am. Natural resources are more limited than in eastern Montana from starving or hardship. They are hunted, and that's widely understood here in Montana. Hunting is actually good for the herds.

West Region focus group participant

I think of it as such even though I don't participate in that activity. I do think of it.

West Region focus group participant

I definitely think they are related. There are definitely times when there's an overpopulation of this one species. Natural selection isn't doing a thing right now, so it's okay to hunt that particular species. I've heard of that happening. But when that happens, it's very specific. You can hunt that species, but don't try to hunt any other species right now. Or they try to use it to manage it, so I do see them as connected.

West Region focus group participant

I don't think they're necessary, but since they exist, I think they need to be incorporated into it. You're not going to stop humans from hunting and fishing. So, it needs to be used as a tool.

West Region focus group participant

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Although not specifically a question, there were comments on the **efficacy of agencies in carrying out their missions.**

Unfortunately, the way I look at this agency, maybe there's a lot of red tape that is involved instead of trying to find a common solution. So there may be a lot of conversation and discussion that doesn't result in anything. Then we have the change of power after elections.

West Region focus group participant

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Summary of Findings About Agency Program Areas and Conservation Messaging

The public in general, as evidenced by the focus groups, see the agency as having a role in getting more people involved in conservation, with agency outreach and education being seen as the way to achieve this active support of conservation.

In discussions of specific terms and phrases, the focus groups revealed the division of the audience into separate target audiences, manifested by the lack of consensus on terms and phrases. For nearly all terms, some people liked and responded to them, and some did not. So outreach aimed at one audience may not have much crossover for other target audiences.

Before this part of the focus group discussion guide, focus group participants had been encouraged to speak about conservation issues using their own terms. In these discussions, “balance,” both as a term and as an overall concept, resonated well, and this was one of the few terms that had no vocal detractors. “Coexist” was received well by many focus group participants. Focus group participants also frequently used “future” and specifically “future generations” throughout the focus group discussions. Note that the focus group discussion guide included “future generations” as a phrase to be discussed, but the phrase was used in the discussions many times prior to its being asked about by the moderator, so it would appear to resonate well.

In this part of the discussions that parsed out terms and phrases, many focus group participants still talked about general concepts, particularly “balance,” when they were asked about the terms. This suggests that their reaction to any terms and phrases may be situational—it may depend on the overall theme more than any specific term or phrase.

In the discussions, opinion was divided on the phrase, “scientific management,” with some reassured that science backed up the policies, but others having a negative reaction to the phrase that sounds a little like jargon. Others expressed their opinion that the phrase would be misunderstood.

“Sustainability” also had a mixed reaction: some said the word has been overused, but others liked it. The discussions also revealed some misunderstanding of the word in the meaning that the conservation community generally ascribes to it.

“Biodiversity” had a mixed reaction, with one portion of focus group participants thinking it was like jargon and was overused, and another portion reacting well.

The discussions about the differences between the terms “conservation” and “preservation” showed that people had a wide range of interpretations of each term, as well as the nuanced differences in the terms.

Focus Group Results Regarding Agency Program Areas and Conservation Messaging

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Should state fish and wildlife agencies be trying to get more people involved in conservation? Why or why not?

Focus group participants by and large wanted more people to be involved in conservation, and they saw a role their state fish and wildlife agency could play to help make that happen. Outreach and education were seen as important in securing this active support of conservation among the public.

I think they should be. I don't know anything different. I grew up on a farm, wasn't born in a city. If I had grown up in the city, my views would be totally different. But for me? I am sure my dad was teaching me about guns when I was seven or eight years old because we were out there hunting. To really start with younger people, we old people aren't going to change a whole lot. We're going to do things the way we've always done them. So we've got to go with the younger generation.

Midwest Region focus group participant

*I agree they should. They could start with the education part so people understand why they're being asked to do certain things. I think it needs to be explained. ... If you don't give somebody a reason for doing something, they're just going to pass it off. They're not going to even pay attention. It's a matter of educating not only to say you need to do this but if you **don't** do this, this is what the result could be. If you **do** do this, then this is what the benefits are.*

South Region focus group participant

I think so. Education is the key.

Midwest Region focus group participant

It would be great if we could get some of these guys down here and maybe get a little bit more education out on the street talking about conservation, wildlife, and everything they do. I don't know about anywhere else but here in Indiana, but our resources don't really get the budget to be able to hire the manpower to do that kind of stuff. ... So you've got those people that don't understand what they do so, therefore, they don't understand why they need more money. So they're not going to vote for it or advocate it.

Hunter/angler focus group participant

They should tell people. They should involve people. The more people involved the more knowledge they have. The more knowledgeable the more power they have. There's so much power in numbers especially the ease of using the Internet to spread ideas. It's insane what people could accomplish. ... As far as getting people interested, they could do a lot more partnering with companies, just global efforts. There's so much focus on green right now. Especially that part of companies people want to work with; there's just an awful lot of opportunity there that hasn't been tapped. And maybe those partnerships will develop ideas that will maybe resonate with their employee groups, resonate with their customer groups.

Midwest Region focus group participant

It depends on how you play your audience in terms of getting people more aware. So, for example, we run a "women in the outdoors" archery camp. ... We do workshops with them. We do mentored hunts a few times over the weekend. One of the things we've set up the last couple years is we invite a conservation officer to come, and the girls sit around a fire and just hang out on a break. They can ask all kinds of questions about regulations and things like that. But if you put out to the public, "Oh come out for a fireside chat with a conservation officer," I don't think that will entice most people. But if you put out "Come for a fun day with your family to try clamming, kayaking, and whatever." And then once you get them there, you put out more of the education about what's going on with the organization, that's how you draw in the general public.

Hunter/angler focus group participant

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In terms of specific words or messages, what could agencies say to motivate people to support conservation or get involved in it?

What would you consider a convincing or persuasive message about conservation?

Some focus group participants discussed specific terms and phrases, while others discussed broader themes. Finally, in response to the above question, some focus group participants talked about specific media—generally social media. Terms that resonated strongly with some focus group participants include "resources," "balance," "coexist," and "future." As a concept, "balance" was strong across all the focus groups.

"Resources" was a really good [term] because everybody knows what "resources" means, and it's more of a neutral term. "Conservation": everyone's like, "Oh save the animals." "Management" doesn't really mean anything to a bunch of people. But "resources" isn't too bad because everyone knows what "resources" is. But to some people, "management," what's that got to do with creatures and animals, habitat, and what not?

Hunter/angler focus group participant

This country's backbone was built on "pursuit of happiness," its quality of life, legacy, history, tradition. Isn't wildlife part of our history? Isn't it legacy? The great American buffalo. It could be anywhere you live that was indigenous. We all have state animals and state birds. It's part of who we are. It's part of the fabric of being an American. I think it is anyway.

Northeast Region focus group participant

So "cause and effect" would be one set of words. ... Sustainability would be another good word.

South Region focus group participant

I love that word [Ed.: referring to "coexist"]. We have to coexist with all the animals. Whatever we eat, however we live, we have to coexist. When we trample into an environment that was balanced, and we come in and mess it up, it's our responsibility because we do have to coexist with animals, nature, fish, whatever. It's important that we do have some management because of the coexistence.

South Region focus group participant

You know who is a really cool mascot. It was that Indian, Russell Means? He was actually an actor, but he was an Indian staying on the banks of the Hudson River. He was crying because of all the garbage in the river. That kinda hit home. But most people resonate with [the words] integrity, transparency. I think a good word for them is "defend," like "conserve, protect, defend." Which sounds better than "maintain." Let's defend what we have. Let's defend what's ours. Let's defend our resources. [Ed.: The focus group participant is apparently referring to an anti-littering public service advertisement from the 1970s, but it did not star Russell Means, who is, nonetheless, an actor as well as activist. The anti-littering advertisement featuring a (supposed) Native American starred Iron Eyes Cody, the stage name for Espera Oscar de Corti, whose parents were Sicilian and Italian.]

Northeast Region focus group participant

If you want to enact change, you have to start with future generations who are going to be the ones who are going to oversee. They're going to take over the world at some point. Start there. There's power in doing that. [Ed.: Note that this focus group participant used the term, "future generations," prior to its being asked specifically about by the moderator later in the discussion guide.]

Midwest Region focus group participant

Could it be related to global warming? We talk about global warming a lot. That may bring about a lot of interest in the fish and wildlife. It's now or never. Global warming—everyone talks about it; it brings a lot of interest.

West Region focus group participant

*It's important that they explain what they want people to do, and **why** they want them to do it. That, to me, is the important part.*

South Region focus group participant

I just think everything works better with balance. If the agencies were to say [that] because we have to coexist there needs to be a balance. If they were to send that message, it would get through to a lot of people. People might think about it a little bit more, act on it, contribute, help create that balance. If they used the words "coexist" and "balance" together, like "in order to coexist, we need to have a balance," that's a simple enough message for most people to understand. I think that would come across pretty strong.

South Region focus group participant

I think all of us here can agree that we want to conserve and, hopefully, promote for future generations. [Ed.: Note that this focus group participant used the term, "future generations," prior to its being asked specifically about by the moderator later in the discussion guide.]

Northeast Region focus group participant

Right now it's just social media. Everybody has got Facebook, Instagram, Snapchat. Who else knows what other social media there is. It's a matter of getting it out there, getting it out to the public. I don't know how because there are so many different ways you can do it now. But it seems like social media is the main part.

Hunter/angler focus group participant

News media? Here in Oklahoma anyway, it's like pulling teeth; if it's not about murder, they don't want to show it. ... We don't have a lot of newspapers around here anymore. Everything's on social media.

Hunter/angler focus group participant

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[Regarding convincing or persuasive messages.] What about mentioning the importance of "scientific management"?

Opinion was divided on the phrase, "scientific management." Some focus group participants were glad to know that science backed up the policies. Others, however, had a negative perception, while still others felt that it would be misunderstood.

I assume that's what they're using—science. They don't need the adjective put on there.... It wouldn't affect me either way. If I started hearing the word, "scientific management," I'd be like "Okay, are they coming up with something new?" I am assuming they're using science, some type of science. I hope they aren't simply winging it.

West Region focus group participant

I like it. I like to know the science behind it. I'd really like to know how they determine these limits on the animals. How did we determine this? What kind of research was done? How did you decide that the population in certain areas are hurting worse than others? I'd be more than thrilled to know more about the scientific aspect as to what they're doing. How did they determine that we can only pull this many fish out per person? How did we determine that that's a good number?

South Region focus group participant

*I don't think people would know what the hell that is.
It's pretty stuffy.*

Midwest Region focus group participant exchange

I don't like it. To me it's saying that they're messing with nature. They shouldn't do that too much.

That sounds like Jurassic Park. Gene, DNA, messing with their DNA.

Manipulation?

Yeah. Scientific research is okay. If, like, global warming was affecting the habitat of the pine snake or something, I can see things to rectify that. But getting scientific about it, Nature wasn't designed to be scientific. It's nature. It is what it is. It was here before we were here. Sometimes you just need to leave things well enough alone, by themselves.

Northeast Region focus group participant exchange

Some terms like you mentioned: "scientific management." The general public is not scientifically literate. So, using certain terms are going to impede people from even beginning to understand just because they'll be like, "Whoa! Back up! Science!"

Hunter/angler focus group participant

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[Regarding convincing or persuasive messages.] What about "sustainability"?

Opinion was also mixed on "sustainability," with some feeling the word has been overused. Others, however, liked the word and what it represented. There was some misunderstanding of the word.

It's an overused word.

West Region focus group participant

Sustainability was a word popular 15 years ago. I don't think it's a fresh word. That's all.

Northeast Region focus group participant

That word is coming up so much. There's sustainability packaging. It's just very commonly used now.

People start to get numb to things that are overused, and used out of context, in situations where it doesn't apply. Then when it's needed to be used, in reality people don't pay attention anymore.

West Region focus group participant exchange

Some of those phrases are too overused, and people don't hear them. You hear that all the time: "sustainability." ... Some people don't even know what it means. But even if you do, you kind of stop listening because it's overused. Sometimes it turns people off because they think somebody's just saying that.

South Region focus group participant

It's a very popular word and probably has been for the last 15 years. It speaks to everyone's need for maintaining, sustaining what they care about for the future.

Northeast Region focus group participant

Sustainability definitely is more positive [than the term, "conservation"]. We can sustain this, rather than conserve what we don't have enough [of]. It pretty much means the same thing, but sustainability means you can sustain what you're doing right now.

South Region focus group participant

It goes to conserving for me. It's the same.

Northeast Region focus group participant

Part of me wonders if sustainability is possible. ... It sounds like a swell word. There are other words that speak to me more clearly about the damage that we've done. There's something about the notion that we can sustain something.

Northeast Region focus group participant

Sustainability: I've mostly heard that in reference to someone being self-sufficient, self-sustaining. There's so many survival things floating about. That's what I think about when I hear sustainability, even though I know it can apply to different kinds of situations.

Midwest Region focus group participant

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[Regarding convincing or persuasive messages.] What about “future generations”?

This phrase was used several times in different focus groups prior to this point in the discussions in which it was asked about specifically. In that sense, it would appear to be a phrase that resonates, based on its use many times before this. When asked about specifically, there were generally positive comments about it.

Obviously that’s important and that would catch a lot of people’s attention. They’d sit back, read it, and see what it says. In terms of catching the public’s attention right now, that’s kind of the thing. Every time you see an ad, it’s worded like that. ... If we saw that, we might stop and read it and see what the state has going on.

West Region focus group participant

I like the idea of my children and my grandchildren being able to grow up and enjoy nature and wildlife, just as much as we are. And if we take the steps now, that will still be available in the future.

South Region focus group participant

*We all know it’s important for future generations. Whoever doesn’t know that? They have to realize it. So when you say it, it’s like, “well, of course, everybody knows that.” Maybe we need to come up with different buzzwords, a different way of saying something because that **is** the most important thing is for future generations—us, and our children and our grandchildren, even if we don’t have children or grandchildren. Everybody has a niece or a nephew, next door neighbor, child, or something. You don’t have to have your own children to talk about trying to conserve or preserve for future generations.*

South Region focus group participant

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[Regarding convincing or persuasive messages.] What about “biodiversity”?

As with most other terms and phrases that were asked about, opinion was mixed, with some concern expressed that people would not understand its meaning. It was deemed by some to be too technical and too much like jargon.

It’s really relevant. When I think of “biodiversity,” I think of the diversity of different animals and species in nature. That’s what I think about—different habitats, different species—but they all kind of work together.

West Region focus group participant

That might be too confusing. I think people would say, "Huh, what does that mean?" You can't go too far overboard one way. You have to have something that's understandable. Not that it's such a big word, but I think a lot of people wouldn't understand it.

The simpler the terms the better.

Yes! The simpler the better.

South Region focus group participant exchange

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Though not in the discussion guide, the moderator asked one group **whether "conservation" or "preservation" was a better word**. Additionally, the moderator asked about **attitudes toward the term, "preserve."** People had their own interpretations of the words.

They're the same to me.

West Region focus group participant

I would probably go with the term "preserve" over "conserve." The whole word "preservation." It rings a little truer for me than "conservation." I can't really explain it, but when you're talking about conserving something, we're trying to keep it in its natural state, not let anything erode it, tear it down.

South Region focus group participant

*We "conserve" to "preserve." The action is we're conserving, and it's **to** preserve the environment, nature as it should be, the natural environment. But we're conserving. That's what popped into my mind.*

South Region focus group participant

Something just came to me: "Conservation leads to preservation." I think that would be a good term for them to use. They kind of go hand in hand. If you conserve correctly, you should be able to preserve a little bit better.

South Region focus group participant

I actually looked up the definition of "conservation." It says "conservation is the preservation of or official use of resources or the conservation of various quantities under physical laws." So they do go hand in hand. I'm not really sure how to separate the two.

South Region focus group participant

You were talking about the difference between “conserve” and “preserve.” When they’re telling us they want us to conserve the water, they want us to use it wisely. With wildlife, maybe that’s the reason they limit, people can only kill so many things at a time. They’re trying to conserve to be sure there’s enough in there. But they’re trying to preserve to make sure somebody’s not just out there shooting them all. Say deer—if there was no limit on how much somebody to kill, then they’re going to be out there shooting all the deer. Then we’re not going to have any deer to preserve for another time, for them to mate again, for there to be other deer. Maybe to conserve it they have to limit us. To preserve is to, for the fish and wildlife, they’re wanting us to preserve wildlife without going overboard.

South Region focus group participant

I feel like “conserve” is like minimizing, you’re trying to minimize the resources you’re using, whereas “preserve,” we’re trying to keep them the same. We’re trying to keep them at this level.

South Region focus group participant

When I talk about “preservation,” I am trying to protect the overall. The animals can’t protect themselves. So what I’m saying is their job is to make sure that those animals are okay, to make sure man doesn’t invade their area, or to cause them to be in an unsafe, or even toxic, one.

South Region focus group participant

[Preserve means] preserving the whole wildlife system as a whole. There’s predators and prey. There just has to be a balance. So the agencies try to step in and keep everything in balance. We take away from the animals’ habitats; we have to come up with a way to balance it out.

South Region focus group participant

Preservation is a big one. Not only do I live in Arkansas, but I’ve lived up in Montana at Yellowstone. I can see the differences there. With Yellowstone they wanted to leave everything intact. You couldn’t pick up a rock and walk out of the park. Everything was right there. But the downfall of that is that as everything, the underbrush, all accumulates, you’re at a higher risk for forest fires. Arkansas takes a different approach and, the fact that they monitor the forest, and makes sure they’re safe so we’re not going up in flames like California. That’s the whole thing. There is a balance there where you want to leave it alone but at some point you’re going to be at risk. That’s the thing. There’s a balance. I know that was already brought up but there’s definitely a balance as to what you need to do and where you are, and it’s a very, very touchy balance when it comes to the wildlife. because you don’t want to go too far and completely eliminate a species.

South Region focus group participant

[Ed.: Talking about how preservation is a mind-set:] I grew up in Canada. Canada is way more advanced, relatively speaking. So coming to Texas later in life was kind of a culture shock for me as far as how seriously things are taken, how natural it is there [in Canada] versus here [in Texas]. Of all things I've been exposed to or experienced, here is one of the most ethnocentrically charged places, more wasteful than a lot of other places. I haven't seen such a disdain for it. Like trash—usually it's just one trash bin and you throw everything in there. And that's it. I will be bold enough to say that about 75% of the rest of the world, trash is just automatically sorted. You have like six bins, where one is for all the recycling categories. And trash waste is actually the smallest container. That's how I grew up. That's what I've seen, and books I read or places I've been or cultures I've been involved in, that is very normal practice except for here. Even if there was a recycling bin, or compost bin, the habit is just to dump everything into one trash landfill. And it just, never mind.

South Region focus group participant

Also not in the discussion guide was a question about **the concept of “balance.”** Although this subsection pertains to balance, note that the term was used extensively, as shown in quotations in other sections, including the above. In fact, one overarching finding is that concepts of balance were extremely important to people, even when they did not use the word, “balance” (although it was used extensively).

*I like the word “balanced.” I think it **is** a little overused. I think it's kind of a reassuring word for a lot of people to hear, especially with all the political turmoil and all these extremes that people are constantly hearing about in the news. Balance—it's right down the middle. There's nothing super controversial about it, also nothing interesting or intriguing.*

West Region focus group participant

It's unfortunate. The word balance is a pretty subjective term depending on your personal perspective. It's a word that can be politicized, that can be polarized.

West Region focus group participant

I'm going to stick with my word “balance.” That's a simple term that would resonate with a lot of people.

South Region focus group participant

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The term, “coexistence,” was also asked about in the focus groups (although it was not in the discussion guide). This also was a word that had been often used in the discussions prior to its being asked about here. The word resonated well.

I think it’s important. We need each other. We’d better coexist.

West Region focus group participant

“Coexistence” is an important word to think about. People understand there’s no way to get around it. We are coexisting. I like that word.

South Region focus group participant

When I hear coexist, I feel like there’s that balance feeling. That has a happier, peaceful kind of connotation.

Midwest Region focus group participant

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FOCUS GROUP DISCUSSION GUIDE

The discussion guide is used by the moderator to keep the discussion within design parameters without exerting a strong influence on the discussion content. It is not seen by the focus group participants.

WMI Words Matter MSCG Focus Group Discussion Guide**I. INTRODUCTION.****A. Purpose.**

1. We're meeting tonight as part of a national research study on Americans' attitudes toward wildlife and conservation.
2. I'll hold off on saying too much more about the specific purpose of the study now but I can tell you more later.
3. I work for a research firm called Responsive Management; we're in Harrisonburg, Virginia, in the Shenandoah Valley. We conduct surveys and focus groups like this one for our clients.
4. We are recording the discussion, but nothing you say will ever be associated with your name; we simply use the recording to transcribe comments and analyze the data for research purposes.

B. Group rules.

1. Please be candid and honest—the discussion is for research purposes, so there are no right or wrong answers.
2. Please be respectful of others' opinions, even if you disagree.
3. Please do not interrupt; everyone will have a chance to speak.

C. Participant introductions.

1. Please share your name, where you live, and what you do for a living.

II. THE ROLE OF STATE FISH AND WILDLIFE AGENCIES

- A. The first thing I'd like to ask you about is your state fish and wildlife agency.
1. Do you know your state fish and wildlife agency?
 2. What does your state fish and wildlife agency do? What kind of work are they engaged in?
 3. What would you say are the most important things that your state fish and wildlife agency is CURRENTLY involved in? Why do you feel those specific things are important?
 4. What do you think your state fish and wildlife agency SHOULD be doing? Why?
 5. Should the agency be working on behalf of people, on behalf of fish and wildlife, or both about equally? Why do you feel that way?
 6. Have you ever interacted with the agency in any way? If so, how?
 7. Do you think of your state fish and wildlife agency as being relevant to you? Why or why not?

III. FISH AND WILDLIFE MANAGEMENT AND CONSERVATION

- A. Let's talk a little about fish and wildlife itself.
1. How much do you think about fish and wildlife in your state? Do you interact with fish and wildlife in any way?
 2. Do you have any concerns related to fish and wildlife?
 3. You sometimes hear the phrase "fish and wildlife management"—what does that mean to you? What does it mean to "manage" fish and wildlife? What's involved?
 4. Do fish and wildlife need to be managed or are they okay existing on their own? Why do you feel that way?
 5. How should fish and wildlife be managed? What specifically should be done to manage them? What's the right level of management?
 6. What should be the ultimate goal of fish and wildlife management?
 7. What comes to mind when you hear the term "conservation"—what does it mean to "conserve" fish and wildlife?
 8. Is "conserving" fish and wildlife different than "managing" fish and wildlife?
 9. What does the term "habitat" mean to you? What qualifies as "habitat"?
 10. How much does habitat need to be managed?
 11. Have you ever heard the terms "game" or "nongame" used to describe wildlife? Do you know the difference between "game" and "nongame" wildlife?
 12. Do you think of hunting and fishing as being related to fish and wildlife management or conservation? Why or why not?

IV. AGENCY PROGRAM AREAS AND CONSERVATION MESSAGING

- A. Should state fish and wildlife agencies be trying to get more people involved in conservation? Why or why not?
- B. In terms of specific words or messages, what could agencies say to motivate people to support conservation or get involved in it?
- C. What would you consider a convincing or persuasive message about conservation?
 - 1. What about mentioning the importance of “scientific management”?
 - 2. What about “sustainability”?
 - 3. What about “future generations”?
 - 4. What about “biodiversity”?

V. RESEARCH PURPOSE AND FINAL COMMENTS

- A. We’re getting to the end of my questions. I can tell you now that this focus group is part of a national study on conservation language—basically, the specific terms and phrases that resonate with Americans when it comes to fish and wildlife management and the work of fish and wildlife agencies.
- B. My company, Responsive Management, is working with a nonprofit organization called the Wildlife Management Institute under a grant from the U.S. Fish and Wildlife Service and the Association of Fish and Wildlife Agencies.
- C. Do you have any further comments about any of the issues or topics we’ve discussed tonight, especially now that you’ve heard the purpose of the study?

ABOUT THE WILDLIFE MANAGEMENT INSTITUTE

The Wildlife Management Institute (WMI) was established in 1911 by sportsmen/businessmen gravely concerned about the dramatic declines of many wildlife populations. Its founders saw a need for a small, independent and aggressive cadre of people dedicated to restoring and ensuring the well-being of wild populations and their habitats.

Although methods of operation have changed since the Institute's inception, the wildlife conservation objectives remain essentially the same. WMI remains a small, mobile, private, nonprofit (501[c]3), scientific and educational organization. Headquartered in Washington, D.C., until late 2007, WMI now operates efficiently and effectively from field offices. Its staff personnel are highly trained and experienced wildlife science and management professionals, typically working away from the public limelight to catalyze and facilitate strategies, actions, decisions and programs to benefit wildlife and wildlife values.

WMI works mostly on request with federal, state, and provincial agencies, Congress, college and university researchers and educators, other private conservation organizations, and professional associations. It advises, testifies and, in a variety of other ways, provides educational services on timely wildlife-related issues.

In simplest terms, WMI is a professional conservation organization that works to improve the professional foundation of wildlife management. It does not support a large membership or expend time and dollars on promotional efforts to attract and sustain membership. Instead, the staff concentrates fully on addressing resource issues and opportunities. WMI members know that their affiliation will not bring them glossy magazines or frequent fund-raising appeals. They are promised the best efforts of every WMI staff member to provide opportunities for more and better-managed wildlife.

WMI supports the wise use of wildlife, including regulated recreational hunting of designated populations. WMI endorses the proposition of game management, the concept of biological diversity and principles of ecology. It recognizes that wildlife management must be a skillful blend of science and art in relation to dynamic human circumstances, values and expectations. And the Wildlife Management Institute believes that wildlife not only reflects the continent's wealth but, in many respects, wildlife is that wealth.

<https://wildlifemanagement.institute>

ABOUT RESPONSIVE MANAGEMENT

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

Focusing only on natural resource and outdoor recreation issues, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of human dimensions research measuring how people relate to the natural world for more than 30 years. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 human dimensions projects *only* on natural resource and outdoor recreation issues.

Responsive Management has conducted research for every state fish and wildlife agency and every federal natural resource agency, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, Bureau of Land Management, U.S. Coast Guard, and the National Marine Fisheries Service. Additionally, we have provided research for all the major conservation NGOs, including the Archery Trade Association, the American Sportfishing Association, the Association of Fish and Wildlife Agencies, Dallas Safari Club, Ducks Unlimited, Environmental Defense Fund, the Izaak Walton League of America, the National Shooting Sports Foundation, the National Wildlife Federation, the Recreational Boating and Fishing Foundation, the Rocky Mountain Elk Foundation, Safari Club International, the Sierra Club, Trout Unlimited, and the Wildlife Management Institute.

Other nonprofit and NGO clients include the American Museum of Natural History, the BoatUS Foundation, the National Association of Conservation Law Enforcement Chiefs, the National Association of State Boating Law Administrators, and the Ocean Conservancy. As well, Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others.

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

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

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