Cognitive and Usability Pretesting of the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation Pre-Screener and Screener

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Executive Summary

At the request of the U.S. Census Bureau’s Associate Directorate for Demographic Programs, staff in the Center for Survey Measurement conducted cognitive and usability testing of sections of the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR). The FHWAR has been conducted about every five years since 1955 in partnership with state fish and wildlife agencies and national conservation organizations. The survey collects data on the number of anglers, hunters and wildlife-watching participants, trips and days spent on different types of activities, expenditures, number of participants and days of participation by animal sought, and demographic characteristics of participants. National and state level results are used to make policy decisions related to fish and wildlife restoration and management. This report presents the findings from thirty cognitive and usability interviews that were conducted in two rounds between November 2014 and February 2015.

Overall, results from both rounds of cognitive interviewing indicated that respondents were able to answer most questions with little to no difficulty; however, the wildlife-watcher question was difficult for respondents. While revisions from the first round helped reduce misreports, respondents still had difficulty with the length and complexity of the wildlife-watcher question in Round 2. While most respondents did not have trouble with the Web pre-screener, CSM suggested changes to improve the flow and usability of the questionnaire. Changes included adjustments to the layout of questions on the screen, modifications to the titles and banners, redesigning the collection of telephone numbers, and adjustments to the placement of navigation buttons.
Introduction

At the request of the Census Bureau’s Associate Directorate for Demographic Programs (ADDP), staff in the Center for Survey Measurement (CSM) conducted cognitive and usability testing of sections of the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR).

The FHWAR has been conducted about every five years since 1955 in partnership with state fish and wildlife agencies and national conservation organizations. It is coordinated by the U. S. Fish and Wildlife Service and data are collected by the Census Bureau. The survey collects data on the number of anglers, hunters and wildlife-watching participants, trips and days spent on different types of activities, expenditures, number of participants and days of participation by animal sought, and demographic characteristics of participants. National and state level results are used to make policy decisions related to fish and wildlife restoration and management.

In the past, the FHWAR has consisted of two parts. The first questionnaire, or screener, was designed to identify specific household members to be sampled for the second part, which consisted of a detailed interview for sportspersons or wildlife-watchers. To reduce screening costs, for the 2016 FHWAR a Web-based pre-screener is being added before the original screener to identify households who participate in wildlife-associated recreation activities.

This report presents the findings from thirty cognitive and usability interviews that were conducted in two rounds between November 2014 and February 2015.
Methodology

Thirty joint usability and cognitive interviews were conducted between November 2014 and February 2015 over two rounds of testing. To test two different modes of the FHWAR pre-screener, approximately half of the respondents began with the Web pre-screener and the other half began with a paper version of the pre-screener. Specifically, in Round 1, seven participants completed the self-administered Web pre-screener and eight respondents completed the paper pre-screener. In Round 2, nine respondents completed the Web pre-screener and six respondents completed the paper pre-screener. After completing the pre-screener, all 30 respondents were then administered the Computer Assisted Personal Interview (CAPI) screener instrument.

Each cognitive/usability test consisted of the respondent completing the survey while being observed by the test administrator (TA). It was a one-on-one interview. During the Web or paper pre-screener testing, the respondent completed either the Web instrument or the paper form while the TA observed. For the CAPI testing, the TA administered both the survey and probing questions designed to collect information about the respondent’s understanding of the questions.

In both rounds, Web pre-screener participants were given a letter (Appendix A) with the login information for the FHWAR Pre-screener Questionnaire. They were asked to login to the instrument to complete the Web pre-screener by answering the questions as they related to their real life situations. After the participants completed the Web pre-screener, they completed the CAPI screener with another TA. The procedures differed slightly for participants who tested the paper pre-screener. They did not receive the letter, and they completed both the paper pre-screener and CAPI screener with one interviewer. Appendix B contains the screenshots of the Web pre-screener instrument tested in Round 1. Appendix C is a copy of the paper pre-screener from Round 1. See Appendices D and E for the protocols used in the first round of Web and paper testing.

In Round 2, an advance letter (Appendix F) was added to the testing. It was given to both paper and Web pre-screener participants before beginning the CAPI screener portion of the testing.

Screenshots from the Round 2 Web pre-screener can be found in Appendix G. A copy of the Round 2 paper pre-screener is in Appendix H. Appendices J and K contain the Round 2 protocols for the Web and paper pre-screener testing, respectively.

CAPI interviews and the paper pre-screener were audiotaped. The Web pre-screener interviews were audiotaped and Web survey screen was recorded. One consent form was used for both the Web/Paper and CAPI portions of the session. Each session lasted approximately one hour. Respondents received a stipend of $40 for their participation.

Prior to beginning the session, participants were informed about the purpose of the study and the use of the data collected. Participants were asked to read and sign a consent form stating that they understood that the session would be recorded. The consent form also informed participants of their rights and that they were voluntarily taking part in the study. After the participant signed the consent form, video and audio recording of the session began. Participants were asked to complete a demographic questionnaire before the test began.
In all testing modes, respondents were instructed to “think aloud” as they were answering the survey questions to allow more detailed analysis of their cognitive processes. Pre-scripted probes were used to determine how respondents interpreted specific terms in the questions and unscripted probes were used when interviewers thought that respondents were having difficulty responding to a question. The TA encouraged the respondents to continue to think-aloud, using prompts such as “Keep talking” if they became silent for more than ten seconds (See Round 1 protocol in Appendix D).

In addition to the think-aloud technique, information about the data collection process was obtained in a debriefing that was conducted after the Web and CAPI screeners were completed. The Web survey screens were shown in a PowerPoint presentation as the TA administered debriefing probes. These probes were used to capture cognitive problems with the questions.

Testing took place in the Usability Lab Testing Room at the Census Bureau in Suitland, MD and at other offsite locations for the other participants. For testing within the Census Bureau headquarters, participants sat in a 10’ X 12’ room facing a one-way mirror and wall camera. During the usability test, the TA sat in the control room on the other side of the one-way glass. The TA and the participant communicated via microphones and speakers. For offsite testing, participants sat at a table with the TA and other observers.¹

For all sessions in Round 2 and the majority of Round 1 usability sessions, the participant’s workstation consisted of a Dell laptop computer with a Windows 7 operating system, a standard laptop keyboard, a standard mouse with a wheel. The screen resolution was set to 1366 x 768 pixels, and participants used the Internet Explorer browser to access the online pre-screener. Eye tracking was conducted in Round 1, but not Round 2. In Round 2, eye tracking was attempted for the first two participants, but was abandoned because the eye tracking software, Tobii Studio, was overlaying survey screens as the participant navigated forward within the instrument. We did not experience this problem in Round 1.

Digital video of the participant’s laptop screen was recorded using Camtasia, as was audio recording. The screens tested in this round of testing were fully functioning Web survey screens. Screen shots for the screens appear in the body of the report. We conducted one practice interview in Round 1.

¹ Members of the survey team working on the 2016 FHWAR observed both onsite and off-site interviews.
Participants

Participants were recruited through advertisements on social media, from local organizations, and personal networks in the local Washington, DC metropolitan area and in Charleston, WV, where we were able to recruit through personal networks. Table 1 provides the participants’ demographics.

Table 1: Demographics of Participants

<table>
<thead>
<tr>
<th></th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>11</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
</tr>
</tbody>
</table>
| More than one race | 2  
|              |                        |
| **Education**|                        |
| Less than High School | 1  |
| High School or GED | 2  |
| Some College  | 4                      |
| College Graduate | 5  |
| Graduate Education | 3  |
**Round 1 Findings and Recommendations**

This section presents findings and recommendations from the first round of fifteen cognitive interviews conducted between November 2014 and December 2014.

**Web Pre-screener**

This section presents findings and recommendations for the Web pre-screener instrument and the notification letter. Screenshots of the Round 1 Web pre-screener are attached in Appendix B.

**Login Letter**

Five of the seven participants who tested the self-administered Web pre-screener understood the letter notifying the sample that they were selected to participate in the FHWAR survey (Appendix A). For example, one participant said, “Thrilled to know I’m selected, fishing, hunting, associated, rec. I love that.” As for the two with comprehension problems: one participant, who had difficulty throughout the entire session, could not articulate what the letter was asking him to do, and the other participant did not understand if she qualified for the survey because she did not fish or hunt.

Five of the participants said that they would be generally willing to participating in the survey if the letter were sent to them at home. Of the two who were reluctant, one said he would read it and then put it on his table (this is the same individual who could not articulate what the letter was telling him to do) and the other participant said he wondered what the content of the survey was about – how his responses benefit the environment, and what the data uses were.

Two participants spontaneously said they would do the survey if it were not too long. They wondered aloud how long the survey would take while reading the front of the letter and found the answer to that question in the FAQs on the back of the letter.

Although one participant spontaneously wondered aloud if the letter was legitimate, no one else expressed this concern, even when asked about it. Respondents said that the header with the Census Bureau seal and the email with “@census.gov” in the domain were clear signs that the letter was legitimate.

After reading the letter and completing the pre-screener questionnaire, no one understood that this was a screening questionnaire and that there would be three other parts to the study if they qualified and were sampled.

**Recommendation:** Consider revising the letter to explain more clearly how data will be used, the structure of the survey, and eligibility criteria. The shortness of the survey perhaps is something to highlight on the front of the letter, as participants were also interested in that information.

**Sponsor’s Feedback:** We will incorporate information about how the data will be used and the length of the pre-screener interview.

**Login Screen**

Five of the seven participants spontaneously commented that they needed to count the zeroes they had to enter for their login. One of the five made an error and was not sure what he had done incorrectly.
During the debriefing, the research participants were asked to locate the title of the survey on the computer screen. All participants pointed to the white box on the screen and not the banner. When asked what “Pre-screener Questionnaire” meant, only two participants figured out that it was possibly a screener to another survey.

**Recommendation:** Consider removing “Pre-screener Questionnaire” and instead make the second line bigger and change the text to read: “National Survey of Fishing, Hunting and Wildlife-Associated Recreation Screener.” The white-on-green banner is perhaps difficult to read, because there were no eye fixations in the header/banner for the four people who used the laptop. We also recommend reducing the number of consecutive zeros in the login numbers.

As an aside: Although the research participants did not comment on this, we noticed that the reverse print of the word “Login” is centered whereas on all other screens the text is left justified.

**Sponsor’s Feedback:** We removed “Pre-Screener Questionnaire” from this page. The login data used for test is fictional; however, the username and password are required to have certain characteristics to help ensure confidentiality. We will keep these suggestions in mind. At this time, we do not plan to change the color scheme for the Web pre-screener.

**Recommendation:** Be consistent and left justify “Login.”

**Sponsor’s Feedback:** We determined that we prefer to leave this Login button as is. It is in direct line with where the user ends their password entry and should make it easy to proceed into the interview.

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2 There was a technical error in eye tracking for the three participants who used the desktop at the Census Bureau and one person who used the laptop. We were unable to recover their eye tracking data.
The contact information (Figure 2) worked well for users. Although it is not typically a design used at the Census Bureau, the longer horizontal scroll design worked well. No users had problems, either with difficulty navigating the page or by inadvertently skipping past questions. Even though there were few errors made on this page and the design generally worked well, there are a few design changes to consider.

Radio button design: For question 2 in Figure 2, the radio buttons are horizontally arranged. None of the participants made an error when using this design; however, it is not a typical design for online surveys at the Census Bureau. Census Bureau surveys usually align the Yes/No radio buttons vertically as in Figure 4. However, during recent testing of the American Community Survey (ACS) on mobile devices (specifically smartphones), usability researchers observed that selection of horizontally-designed radio buttons was easier (that is, the user has to make fewer clicks, resulting in fewer chances to select incorrectly) than when the radio buttons were vertically designed (Olmsted Hawala, Nichols, and Holland, forthcoming). The ACS does not have a mobile-optimized design setting, and would affect our recommendation for the arrangement of the radio buttons.
**Recommendation:** If the pre-screener will not have a mobile-optimized design version, then the horizontal placement of radio buttons should be kept so that users who access the pre-screener using their smartphone will have an easier time making the correct selection. If there will be a mobile-optimized design version of the pre-screener, then use the more typical vertical design for the radio buttons. Use the same design across all questions in the survey (e.g., Questions 1-6).

**Sponsor’s Feedback:** We accepted this recommendation and adjusted the radio buttons as suggested.

**State drop-down:** Although no one made an error in entering their state, one participant spontaneously commented that typically state is a drop-down field.

**Recommendation:** Consider using a drop-down for that field. Use the drop-down with state spelled out and the state abbreviation (Maryland--MD).

**Sponsor’s Feedback:** A drop-down menu for state selection was added for testing in Round 2.

**Telephone number:** No one made an error entering their telephone number and no one typed the same number twice, but usability researchers have found in other testing using this design, specifically for the National Survey of College Graduates (NSCG), that participants whose daytime phone number is the same as their evening telephone number enter it twice (Nichols et al., 2014). For the 2015 survey, NSCG will remove the home, work, and cell check boxes and use these labels in place of daytime, evening, and other phone number. Additionally, one participant spontaneously commented that he would be receiving solicitations by entering this information. During the debriefing, one participant wondered aloud why we needed his name and his phone number if, as the letter indicated, his address was sampled and not him. He said that he thought perhaps that it was because they needed some demographic information about him. Two other participants said that they would not enter their telephone numbers if they were at home answering this survey. One of the two participants recounted how she added her telephone number to an application and then received burdensome phone calls afterwards. These comments indicate that participants have no idea that they might be in sample for a subsequent survey.

**Recommendation:** In order to collect relevant telephone numbers, consider asking for a primary and secondary telephone number and allowing respondents to select whether this number is a cell phone, landline, or other. If necessary, respondents could also indicate whether each number is a daytime or evening number.

Consider letting participants know that they might be contacted in the future via the telephone about this topic and that the Census Bureau would never sell their information to a third-party vendor.

**Sponsor’s Feedback:** We revised the telephone descriptions to “Primary” and “Secondary” as recommended and included radio buttons indicating “Cell,” “Home,” and “Other.” The login letter notifies respondents that they will be contacted.

**Navigation:** No one made an error using the forward navigation button, but it is not in a typical design over to the right of the page.
**Recommendation**: Move the navigation button to the left of the screen, under the response categories as shown in Figure 4. This placement aids in the navigational flow of the screen. Furthermore, this placement will be easier to see if the user accesses the pre-screener on their smartphone. Using the current design, the user would have to scroll horizontally to the right to see the navigation button if they were on their smartphone.

**Sponsor’s Feedback**: This recommendation was accepted and the suggested change was made for testing in Round 2.

![Figure 2: Name Entry and Address Verification and Correction Questions](image-url)
Test Questions 1-6

Underreporting: There is possible underreporting in Questions 1-6 (see Figures 5, 6 and 7). It was not clear if participants were answering for everyone in their household or just themselves. For example, one participant did not consider her husband’s annual fishing trip in Questions 5 and 6 (Figure 7) and answered “No.” Participants could have been concentrating on answering for themselves because the prior screen requested only the respondent’s name. We did not include a probe in Round 1 to determine who participants were thinking about when they answered this question, but we will probe on this issue in the next round of interviews.

Recommendation: We recommend underlining “anyone in your household” in these questions.

Sponsor’s Feedback: This recommendation was accepted and the suggested change was made for testing in Round 2.
Figure 5: Questions 1 and 2 (Round 1)

1. Have you or anyone in your household closely observed, fed, or photographed wildlife recreationally or maintained natural areas around your home for the benefit of wildlife in the past 5 years?

   - Yes
   - No

2. Do you or anyone in your household plan to closely observe, feed, or photograph wildlife recreationally or maintain natural areas around your home for the benefit of wildlife within the next 12 months?

   - Yes
   - No

Figure 6: Questions 3 and 4 (Round 1)

3. Have you or anyone in your household hunted game or other wildlife recreationally in the past 5 years?

   - Yes
   - No

4. Do you or anyone in your household plan to hunt game or other wildlife recreationally within the next 12 months?

   - Yes
   - No
Within-Question Navigation: There was a lot of moving back and forth between the question and the response categories because the response categories were over on the right side of the page. For the three participants for whom we have eye tracking data, the mean fixation count is provided in Table 1. (A “fixation” is when the eyes are still enough to read a word. Therefore, the mean count is the average number of times where the eye stopped to read something.)

The mean fixation count for the first two questions is greater than the mean for the subsequent questions. Fixation counts provide supplementary evidence to help explain how respondents are interacting with the survey questions. This higher fixation count is most likely due to the longer length of Questions 1 and 2 and the complexity of those questions. It might also be because the participants were getting familiar with the design of the questionnaire.

Table 2: Round 1 Mean Fixation Count (n=3)

<table>
<thead>
<tr>
<th>Survey part</th>
<th>Mean Fixation Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Header (across all pages)</td>
<td>0</td>
</tr>
<tr>
<td>Question 1 and 2 (text and response categories)</td>
<td>53</td>
</tr>
<tr>
<td>Question 3 and 4 (text and response categories)</td>
<td>15</td>
</tr>
<tr>
<td>Question 5 and 6 (text and response categories)</td>
<td>19</td>
</tr>
</tbody>
</table>
**Recommendation:** Move the response choices under the question. This placement is a better design for respondents who access the survey on a smartphone, because they would not have to use the horizontal scroll bar to answer the question. If the question text does not change between rounds but the radio placement does change, we can measure whether the new placement of the response choices reduces the mean fixation counts.

*Sponsor’s Feedback:* This recommendation was accepted and the suggested change was made for testing in Round 2.

**Forward Navigation:** No one had difficulty using the forward navigation, but one participant incorrectly reported that she hunted (because she fished) in Question 3. This participant did not go back and self-correct her answers when she realized that fishing was covered in Questions 5 and 6. She said that she did not see the “previous” button and that she likely would not have gone back to change her answer in a real situation.

**Recommendation:** Consider placing all six questions on the same screen since the survey is short. Move the “save” and “next” buttons (and the “submit” button – if the questions are presented separately) closer to the “previous” button. Left justify all these buttons. This design would work well for people who access the survey using their mobile device and is a typical design lining up the response choices with the navigational buttons.

*Sponsor’s Feedback:* This recommendation was accepted and the suggested change was made for testing in Round 2.
Submission screen:

Figure 8: Submission screen (Round 1)

Several participants did not realize that they had finished the pre-screener, perhaps because it was so short.

Recommendation 1: Consider using the thank you screen that is used in Decennial Web instruments:

“Thank you for completing the [TEST NAME].

Your answers have now been submitted to the U.S. Census Bureau.

[Date/Timestamp]”

Sponsor’s Feedback: We adjusted the text on this screen to indicate that they have completed the questionnaire.

Recommendation 2: Consider launching the respondent into the second part of the survey if they qualify.

Sponsor’s Feedback: We cannot incorporate this suggestion at this time although we agree this would be optimal if we are granted a future survey cycle.
Printing: No one said they would need to print the confirmation screen. One person said he would print the report, but then he found an error and did not know how to go back and correct it. Most Web surveys do not include an option to print answers.

**Recommendation:** Consider removing the option to print confirmation, as respondents can always print the screen (by selecting “print screen” function on their computer). Include instructions on what a respondent should do if he or she finds an error when printing the confirmation screen.

**Sponsor’s Feedback:** We will revisit the description of this button.

**Navigation from logout:** One participant who clicked “logout” said that the instrument shouldn’t go back to the “login” screen.

**Recommendation:** None
Paper Pre-screener

This section presents Round 1 findings and recommendations for the paper pre-screener (Appendix C). Eight respondents answered the paper pre-screener before moving on to the CAPI screener.

Steps 1-4: Contact Information

Respondents did not have trouble entering their names. The paper form included a fake address and most respondents corrected the address in Step 3. One respondent did not correct his address and commented that since it was only a test he did not think he needed to change it.

![Telephone Number Collection](image)

Figure 9: Telephone Number Question (Round 1)

Respondents generally did not have trouble entering their phone numbers on the paper pre-screener. However, respondents did not understand why the Census Bureau needed their phone number or what would be done with the information. Respondents did not know that they were providing their phone numbers to facilitate the next part of the survey.

Five out of fifteen respondents wrote their cell phone number twice for daytime and evening phone number. Only three respondents entered a home phone number. A few respondents wondered why the daytime phone number question did not include an option for a work number. About half of respondents were cell-only households. Responses suggest that the layout of this question could be improved by asking for cell phone and home phone numbers with options for daytime and evening.

Recommendations: We recommend adding language that informs respondents why their telephone numbers are necessary and how they will be used. As noted in the Web pre-screener section, we also recommend amending the format of the telephone number collection to ask for a primary and secondary telephone numbers with options for home, cell and possibly daytime and evening.
**Sponsor’s Feedback:** This recommendation was accepted and the suggested change was made for testing in Round 2.

**Step 5. Question 2:**

![Age and Gender Household Member Table](image)

Figure 10: Age and Gender Household Member Table (Round 1)

Generally, respondents did not have trouble filling out this table. They described it as clear and easy. Most respondents did not read the directions and filled out the table without difficulty. One respondent began to enter tally marks in the boxes rather than numbers. After reading the instructions this respondent filled out the table correctly. There were no issues with Q1 in Step 5.

**Recommendation:** We do not have any recommendations for this question.

**Step 6. Question 1:**

![2014 Pre-screener Wildlife Watcher Question](image)

Figure 11: 2014 Pre-screener Wildlife Watcher Question (Round 1)

Twelve out of fifteen respondents answered yes to this question. Examples of activities that respondents described included: walking in parks and taking pictures, taking pictures of fish they had caught, hiking and taking pictures, birding, scouting for game, deer spotting in their backyard, and keeping bird feeders.

Two respondents described taking pictures of fish they had caught as photographing wildlife and two respondents described cameras that are used for scouting game at hunt clubs. These four responses are possible misreports based on the instructions.
Respondents’ interpretations of the phrase “maintaining natural areas for wildlife” included: keeping areas clean and free of trash, planting butterfly bushes, bird feeding, environmental conservation, and planting native plants.

**Recommendation:** We recommend changing the order of the list in the instructions to begin with “scouting for game” and to underline the phrase to prevent misreporting the use of scouting cameras as wildlife photography. We also recommend adding an instruction excluding noticing wildlife while doing other activities. The new instruction should read:

“Please do not include scouting game, trips to zoos, circuses, aquariums, museums or trips for hunting and fishing. Please do not include noticing wildlife while doing other activities.”

**Sponsor’s Feedback:** We did not incorporate this recommendation. We decided that the exclusion of zoos, circuses, etc., was more important than scouting for game or trips for hunting and fishing.

**Step 6. Question 2:**

![Figure 12: 2015 Pre-screener Wildlife-Watcher Question (Round 1)](image)

Respondents did not have trouble answering this question.

**Recommendation:** We recommend changing the instructions to match Q1 in this series. The new instruction should read: “Please do not include scouting game, trips to zoos, circuses, aquariums, museums or trips for hunting and fishing. Please do not include noticing wildlife while doing other activities.”

**Sponsor’s Feedback:** We did not incorporate this recommendation. We decided that the exclusion of zoos, circuses, etc., was more important than scouting for game or trips for hunting and fishing.
Step 7. Question 1:

1. How many members of your household six years old or older participated in any target shooting or sport shooting with a firearm (e.g., rifle, handgun, muzzleloader, shotgun, air gun) in 2014?

Figure 13: Target and Sport Shooting Participation Question (Round 1)

Nine respondents were asked this question and six answered that at least one person in the household participates in target or sport shooting. Respondents described target shooting at local ranges as well as on private property. Respondents also included BB guns in their answers.

Respondents generally did not have trouble answering this question. However, one respondent in a practice session mentioned that he considered hunting a form of sport shooting. Does the sponsor intend hunting to be considered sport shooting?

One respondent included himself but not his nine-year-old daughter outside to shoot a BB gun in response to this question. He said that he would not include his daughter because he considered a BB gun to be distinct from an air gun. The respondent said he would have answered yes if the examples included a “pellet gun.”

Recommendation: Consider adding “pellet gun” to the list of examples. The new question would read: “How many members of your household six year old or older participated in any target shooting or sport shooting with a firearm (e.g. rifle, handgun, muzzleloader, shotgun, air gun, pellet gun) in 2014?”

Sponsor’s Feedback: We did not incorporate this recommendation.

Step 7. Question 2:

2. How many members of your household six years old or older participated in any archery activities using a bow and arrow, compound bow, or crossbow in 2014?

Figure 14: Archery Participation Question (Round 1)

Nine respondents were asked this question and four answered that at least one member of the household participated in archery activities. Respondents reported bow hunting, archery classes and shooting arrows in their backyard. Respondents did not have difficulty answering this question.

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3 In addition to the eight paper pre-screener respondents, one web respondent was asked to answer the target shooting and archery questions as well as the web pre-screener.
CAPI Screener

This section presents findings and analysis of the Round 1 CAPI screener. All fifteen respondents participated in this part of the testing.

CAPI Instrument Errors:

During testing, the interviewers found two errors in the programming of the CAPI instrument. The first error is the use of “there” rather than “here” in the roster question (SCNAME_FNAME). When choosing an in-person interview this question should read “here” rather than “there” because the interviewer will be in the same location as the respondent. Another error is the fill for questions when the person being interviewed is not Person 1 in the roster. For example, the fill for SCEVHUNT is incorrect if the person being interviewed is not listed first in the roster.

![Figure 15: SCINTRO Screen (Round 1)](image-url)
Respondents began answering before the interviewer could finish asking the question. This is likely due to the question being split into two parts and requiring the interviewer to enter a character to access the rest of the question text.

**Recommendation:** We recommend shortening the question to the standard roster question used on the American Housing Survey. The new question should read: “**Now I will ask you some questions about the people who live here. What are the names of all persons living or staying here? Start with the name of the person, or one of the persons, who owns or rents the home.**”

**Sponsor’s Feedback:** We have not decided on the incorporation of this recommendation. This needs further discussion to make sure we are maintaining continuity between survey cycles. As we continue with internal testing, we will finalize the wording and discuss this suggestion further.
All fifteen respondents answered this question and respondents did not have difficulty. However, previous research has shown that asking for age or date of birth yields more accurate data and lower rates of refusal (Healey and Gendall 2008; Smit et al. 1997; Peterson 1984).

**Recommendation:** We recommend changing this question to asking for age rather than its current wording. The new question should read: “What is your/ [NAME]’s age?

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**How likely is it that Sidney Poitier will do any hunting during 2016; likely, unlikely, or neither?**

**Figure 18: SCH96LIK (Round 1)**

SCF96LIK

**How likely is it that you will do any fishing during 2016; likely, unlikely, or neither?**

**Figure 19: SCF96LIK (Round 1)**

**How likely is it that Rosa Parks will take SPECIAL INTEREST in wildlife this year; likely, unlikely, or neither?**

**Figure 20: SCW96LIK (Round 1)**

Respondents were confused by the “neither” option in this question and interpreted the question in a wide variety of ways. One respondent commented, “I guess it would mean if the opportunity comes around you’d take it, but you don’t know.” Two other respondents said that the “neither” option doesn’t make sense while another two respondents interpreted it to mean “No.”

**Recommendation:** We recommend dropping the “neither” option and only giving respondents a choice between likely or unlikely. Interviewers would have a Don’t Know and a Refusal option available to them, but they should not be read aloud. The new question should read: **How likely is it that (you/ [name]) will do any hunting during 2014; likely, or unlikely?**

**Sponsor’s Feedback:** We changed this question for testing in Round 2. The new question includes a scale of 1 to 5.

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Next, I would like to ask about SPECIAL INTEREST in wildlife in ways OTHER THAN hunting and fishing. We are interested in whether you closely observe, photograph, feed, or maintain natural areas or plantings for wildlife. Please do not include noticing wildlife while doing other activities.

By wildlife I mean birds, mammals, fish, insects, reptiles such as snakes and lizards, and amphibians such as frogs. DO NOT include farm animals and pets.

Has anyone in this household sixteen years of age or older taken any SPECIAL INTEREST in wildlife so far in 2016?

**Figure 21: SCWILD96 (Round 1)**
Respondents had difficulty with the length and complexity of this question. A few respondents asked for the question to be repeated, described the question as “confusing,” and mentioned it as a difficult question in the debriefing portion of the interview.

Two respondents answered no to this question and thirteen said yes. Activities that respondents described included: taking pictures of fish they caught; feeding fish while fishing; taking care of pet turtles; hiking and taking pictures of wildlife; going to the zoo and taking pictures; birding; providing native plants for animals around the home; donating money to a wildlife habitat fund; planting soybeans at a hunt club; feeding deer at a hunt club; bird watching; setting up birdfeeders around the home; going to parks and taking pictures of wildlife; scouting for game; setting up trail cameras; and hunting.

While many of the answers seem to be appropriate for this question, others are explicitly excluded in the question text. These misreports are likely due to the length and complexity of the question text as well as the term “special interest,” which can be widely interpreted. Does the sponsor intend for activities such as setting up bird feeders around the home and casual observation of wildlife while taking a walk to qualify as positive responses to this question?

Three respondents mentioned scouting for game as taking a special interest in wildlife. When asked the subsequent item (SCWILD95) that excludes scouting for game, these respondents began to doubt their answer to this question. This suggests that this question should include an instruction to not include scouting for game.

**Recommendation:** We recommend that the sponsor clarify the intent of this question and amend the question text to be clearer for respondents. We also recommend adding an instruction that excludes scouting for game to prevent confusion when answering the next question.

**Sponsor’s Feedback:** We incorporate the recommendation to exclude zoos, circuses, etc., and scouting for game from the instruction.

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*Did anyone in this household six years of age or older take special interest in wildlife last year, that is, during the period January 1 to December 31, 2015? Do not include trips to zoos, circuses, aquariums, museums, or scouting for game.*

**Figure 22: SCWILD95 (Round 1)**

As mentioned in the previous question, respondents who answered yes to the previous question and described scouting for game as their special interest in wildlife were confused by the additional instruction in this question that excludes scouting for game.

**Recommendation:** We recommend including instructions in the previous question that exclude scouting for game.

**Sponsor’s Feedback:** We incorporated this recommendation.
Round 2 Findings and Recommendations

Web Pre-Screener
This section presents findings and recommendations from testing of the Round 2 Web pre-screener. Screenshots of the Round 2 instrument can be found in Appendix G.

Letter:
We did not cognitively test the pre-screener letter during Round 2. All participants found the user ID and password information easily. Not all participants read the letter thoroughly, most likely because we had explained that the first part would be a survey on a computer and so they immediately began completing the survey on the laptop. No changes were made to the letter between Round 1 and Round 2.

Login page:
Passwords: Although there were no consecutive zeroes in the password as there were in the prior round, participants continued to have difficulty. Four of the nine participants failed their initial login attempt. These four participants understood that they failed the login and each successfully logged in on the second attempt.

Recommendation: Consider creating easier passwords as the current passwords are still long and almost half of the participants made an error in entering it. Creating an easier password might also help the response rate to this voluntary survey, especially for reluctant participants. For example, one participant who was not Web savvy said he would have probably thrown the letter in the trash if he were at home. Minimizing roadblocks should be the goal.

Sponsor’s Feedback: We agree and will keep this in mind as we create the username/passwords. We must follow the Census standards in creating these fields, which may limit our ability to ease this process.

Returning to the survey: One participant exited the survey prematurely due to the eye tracking difficulty. When she re-entered the survey after logging back in, the survey immediately took her to the place where she left off. She did not remember where she was in the survey, so she went back a screen to reorient herself.

Recommendation: Consider adding a screen for people who log back into the survey after having completed some of it. Users who log back into the American Community Survey (ACS) midway receive a transition screen (Figure 23) informing them that they will be taken to the place in the survey where they left off. This screen performs well in usability testing.
**Sponsor’s Feedback:** If this questionnaire was longer, we agree that an introductory screen would help. However, with this short a survey, we believe the respondent can easily review past answers and finish the questionnaire without an Intro screen if they are returning to the questionnaire.

![Image of ACS transition screen for survey break off and returns](image)

**Figure 23:** ACS transition screen for survey break off and returns

**Banner:** The Round 2 banner included the title in a larger font than in Round 1 and deleted the words “Pre-screener Questionnaire.” Although we were not able to perform eye tracking in this round, we asked during the debriefing where the title of the survey was. Many participants said the title was in the green banner, and not the white box that said welcome (See Figure 24). During the debriefing, one participant pointed out that the title was in two places, which she said was redundant. She also said, however, that it gave her extra insurance that she was at the correct survey.

**Recommendation:** Consider removing the Welcome box.

**Sponsor’s Feedback:** This recommendation has been incorporated.

**Title:** In this round of testing, the words “Pre-screener Questionnaire” were removed. All participants reported that the current title was clear and that the survey would be about recreational activities related to fishing, and hunting and wildlife.

**Recommendation:** None.

**Box with “Login” word in reverse print and centered:** Although no participants made a comment, the reverse print of the word “Login” is centered in Figure 24. On other screens, that text is left justified.

**Recommendation:** Be consistent and left justify this word.
**Sponsor's Feedback:** We did not revise “Login” at this time but will consider it in future testing.

![National Survey of Fishing, Hunting, and Wildlife-Associated Recreation](image)

**Figure 24:** Login Screen (Round 2)

**Contact information:**

A new problem was identified on the contact page during Round 2.

The current address design looks like a text box (See Figure 25). Two out of the nine participants tried to click on the address in the box to change their address. One participant quickly recovered and answered the question below the box. During the debriefing, this participant said the box looked like a text box that he could edit. Another participant tried several times to edit the information in the box.

![Address box](image)

**Figure 25:** Address box (Round 2)
**Recommendation:** Remove the box and the yellow highlight from around the address to make it look less like a text box.

**Sponsor’s Feedback:** This recommendation was incorporated.

**State drop-down:** The drop-down “state” field worked well for participants. Only one participant self-corrected the state she initially selected. At first, this older participant selected WA and then she changed it to WV.

**Recommendation:** Consider using a drop-down with the name of the state spelled out like the Decennial Census forms.

**Sponsor’s Feedback:** This recommendation was not incorporated at this time. As we use this field to compare for an address change, spelling out the state may introduce more issues in the instrument.

**Telephone number:** The new labeling of the telephone number fields worked very well. In Round 1, the labels were evening telephone number and daytime telephone number, and these changed to Primary telephone number and Secondary telephone number as shown in Figure 26. No one entered the same number twice, and all participants understood that the primary phone number was the number the participant would want to be reached on. One participant spontaneously said he liked that we didn’t assume his home number was his primary number. Some participants listed their cell phone first and some participants listed their home phone first. One participant said during the debriefing the “This is” label confused him slightly, but he ignored it and went on.

![Figure 26: Contact Information (Round 2)](image)

**Recommendation:** Consider removing “This is.”

**Sponsor’s Feedback:** This recommendation was incorporated into the instrument.

**Navigation:** No one made an error using the forward navigation, but it is not in a typical design over to the right of the page. In Round 2, the navigation button labels change on different screens as shown in Figures 27, 28 and 29.
Recommendation 1: Use consistent navigation labels across the pages of the survey.

Sponsor’s Feedback: We will review the instrument for consistency.

Recommendation 2: We continue to recommend moving the navigation button to the left side of the page, under the response categories as shown in Figure 30. This placement aids in the navigational flow of the page and reduces burden. Additionally, this placement will be easier to see if the user accesses the screener on his or her smartphone.

Sponsor’s Feedback: At this time, we are not incorporating this recommendation.

Recommendation 3: Consistently use the same size buttons throughout the instrument.

Sponsor’s Feedback: We will consider this recommendation as we continue the internal testing of the instrument.

Figure 27: Navigation buttons on Contact Information page (Round 2)

Figure 28: Navigation button on household information and target shooting page (Round 2)

Figure 29: Navigation button on Q1-Q6 page (Round 2)

Figure 30: Typical design of radio button and forward navigation from 2015 Census Test
Household questions

Household Information

There were very few problems with the household information page (Figure 31); two participants included members of their household who live elsewhere. One participant included her college son since he was just home on break. Another participant included her daughter’s family as she spends most of the time with them and they hunt and fish and she wanted to report their activity.

Participants also seemed to correctly record gender and age information with little to no difficulty. They reported during the debriefing that the instructions were clear, although not all of them read the instructions during the actual session.

The edit message worked well (Figure 32). One participant received an edit message because the number of people in Q1 did not equal the number of people in Q2. He realized he had forgotten to include himself in Q2.

Figure 31: Household information screen (New for Round 2)
Figure 32: Household information screen showing edit message for number of household members (Round 2)

Questions 1-6

Over reporting in Questions 1 and 2: Most participants answered yes to Questions 1 and 2 (Figure 33) because they considered casual observation of wildlife when answering those questions. Examples of their passive observation included “talking to the birds,” swimming with the dolphins on a honeymoon, throwing food scraps outside for the animals to eat, seeing deer, squirrel, and fox in the neighborhood, feeding the ducks on a walk, taking pictures of nature, and taking pictures of horses while on vacation. Two participants reported no to Q1. One of these participants said that people observe nature when they go hiking, but he did not consider that enough to answer yes to Q1. Another participant who casually observed wildlife in Q1 answered no to Q2 because he did not “plan” to observe wildlife, noting that it just happens.
Underreporting: We did not detect any underreporting in Round 2. Participants appeared to be considering their whole household in the question series.

Within-Question Navigation: Placing the answer categories underneath the question worked well for this series. Reported answers appeared correct based on the think-aloud and debriefing data. One participant was going so fast his Q6 answer did not register. He received an edit, quickly found and then corrected his response.

Between-Question Navigation: Including all the questions on the same page worked well for participants. No one had difficulty with the format. Additionally, when answering Q3 and Q4, one participant orally asked whether fishing was considered hunting. She then answered her own question as she saw Q5 and Q6 asked about fishing and so she answered “No” to Questions 3 and 4.

Recommendations: None

Target Shooting and Archery Participation

Over reporting Target Shooting (Figure 34): Five of the nine Round 2 participants were current hunters. All five of these households also reported target-shooting activity. Three of the four non-hunters reported target shooting activity. While the non-hunters all reported going to a range to shoot, none of the five hunter households did. One participant who reported that her son hunted said, “Sport shooting is hunting, right?” She said that she answered positively to the target-shooting question because he uses a rifle when he hunts deer and because she assumed hunting was sport shooting. Another participant thought that hunting and target shooting were the same. She explained that her boyfriend participates in target shooting and considered a deer
to be a target. A third participant said they target shoot on the farm they own. The farm is the same place where they hunt. When asked during the debriefing, a non-hunter reported that hunting is sport shooting.

Based on debriefing reports, no one is including shooting a BB gun when thinking about this question.

**Recommendation:** We recommend adding BB gun to the list of example answers. If the sponsor does not intend for hunting to be counted as either sport shooting or target shooting we recommend adding an instruction. The new instruction would read: **Please do not include hunting as target or sport shooting.**

**Sponsor’s Feedback:** The sponsor is currently reviewing the question wording and examples. They have a copy of this report and will be finalizing the question wording and examples to be incorporated into the instrument.

The archery question appears to work well. We did not find over- or underreporting of archery, although one participant counted his archery activity at a recent Renaissance festival.

![Figure 34: Target Shooting and Archery Participation Question (New for Round 2)](image-url)
Review page

Figure 35: Review page (New for Round 2)

All participants read the review page carefully. No one had any issues reported and no one used the links to navigate back to a screen.

Of the two participants who found the screen confusing, one said she initially read it as “The system has detected that there are potential issues…” leaving off the “If.” The other participant found it confusing because he said usually issues are in red. He said everything looked the same, and he knew he could not have made that many errors.

Recommendation: It is not clear whether this page is needed as there are edits on all the other pages to correct problems as they occur. If such a page is desired and there are no issues, perhaps use a screen that says, “You can return to the pages to review your answers or submit the data.” If there are issues, perhaps use a screen that says “Please return to the pages highlighted with a * to correct your responses. After you have reviewed these responses you may submit your data.”

Sponsor’s Feedback: This screen will be updated to display the respondent’s entries for their review. They will have a link that will return them to a section if a correction needs to be made.
Submission screen:

![Submission Confirmation](image)

**Figure 36: Submission screen (Round 2)**

The automatic (?) return to the login page after logging out continues to be confusing: One participant selected “logout” and then at the login page she asked whether she should login again. Another participant who returned to the survey after logging out said during the debriefing she was surprised she went back to the beginning of the survey and she expected to go to a page that said she was logged out.

**Recommendation:** Go to a logout page “You are now logged out of the National Survey of Fishing, Hunting and Wildlife Recreation.” Do not go back to the login screen.

**Sponsor’s Feedback:** This recommendation will not be incorporated at this time. The last screen informs the respondent that they will be logged out and can close their browser. We may also include an FAQ on the letter to inform them of how to end the interview.

**U.S. Census Bureau:** This page contains two typos in the abbreviation of United States in Figure 29. We recommend adding periods and changing “US” to “U.S.”

**Recommendation:** Change “US” to “U.S.”

**Sponsor’s Feedback:** This recommendation will be incorporated.

**Printing:** One participant said he would print the report if he were home. Another participant said she looked around the testing room to see if there was a printer and since there was not one, she selected logout.
Paper Pre-Screener
The six respondents who answered the paper pre-screener in Round 2 did not have difficulty answering the questions. During the debriefing, they reported that the paper pre-screener was easy to navigate and that the questions were not difficult to answer.

The only problem detected in Round 2 with the paper pre-screener was the omission of BB guns in the target shooting and archery activities question. (Step 7: Q1). This is the same problem we found and reported in Round 1. Our recommendation stays the same: We recommend adding BB gun to the list of example answers.

Figure 37: Page 1 of Paper Pre-screener (Round 2)
Page 1 Step 4: Telephone Number: Four respondents entered a cell phone as the primary number with no secondary number. One respondent entered a home phone number as primary and a cell phone number as secondary. One respondent entered his cell phone number as primary and his fiancée’s cell phone number as secondary.

Figure 38: Page 2 of Paper Pre-screener (Round 2)

Page 2 Step 5 Question 1 and 2: Respondents did not have difficulty entering the number of people in their households. All respondents included themselves in their answers.

A few respondents had difficulty answering this question. Two respondents did not fill out the table correctly. One respondent entered the age of household members in the boxes rather than the number of people who fit the age and gender groups. This respondent said that he did not
read the instructions clearly and that he misunderstood. Another respondent also thought that he had to list the ages of his household members; however, he quickly realized that he needed to write numbers and answered correctly. One respondent made an ‘x’ in the boxes that matched his household’s characteristics. He wrote an x in the box for female between 6 and 15, another x in the box for male over 16 and one in the space for female over 16. The interviewer asked the respondent to read the instructions and he said they were clear. The respondent did not realize his mistake.

Figure 39: Page 3 of Paper Pre-screener (Round 2)
Page 3 Step 7 Questions 1 and 2: Three respondents answered that at least one person in their household participated in target or sport shooting in 2014. One respondent who also answered yes to hunting said that she was thinking about her hunting and considered hunting to be sport shooting. When asked if they were thinking about BB guns when answering this question, respondents consistently reported that they were not considering BB guns.

One respondent answered that two people in her household participated in archery activities in 2014 and one respondent wrote that six people in her household participated. All other respondents wrote zero in the space provided.

Recommendation: We recommend adding BB gun to the list of example answers. If the sponsor does not intend for hunting to be counted as either sport shooting or target shooting we recommend adding an instruction. The new instruction would read: **Please do not include hunting as target or sport shooting.**

Sponsor’s Feedback: The sponsor is currently reviewing the question wording and examples. They have a copy of this report and will be finalizing the question wording and examples to be incorporated into the instrument.
**Advance Letter Notification for the Screener Interview:**

The advance letter included in Appendix F was added to testing in Round 2. All 15 respondents were asked to read the letter and answer follow-up questions before they answered the CAPI screener. Respondents generally understood that the letter was notifying them that they were going to be asked follow-up questions about the survey that they had taken earlier. However, a few respondents were not sure how they were going to be contacted. Three respondents expected to be contacted by phone and two respondents expected to be contacted by mail. Two respondents expressed confusion about the FAQs on the back of the letter, specifically the section about why their household was selected. One respondent commented, “How would it harm the quality of the data if you selected someone else?” Two respondents commented that they liked that the letter explained how long the survey would take. One respondent questioned the legitimacy of the letter but decided that it looked and sounded “official.”

**Recommendation:** We recommend adding language to clarify how respondents will be contacted for the follow-up survey. The edited sentence should read “Sometime in the next few weeks, a Census Bureau representative will contact you either in person or by telephone, to ask additional questions about your household’s participation in fishing, hunting, or wildlife-watching activities during 2016.”

**Sponsor’s Feedback:** We are currently drafting the advance letters. We have to be very careful with the wording as not all respondent households will be contacted again. At this time, we are not including verbiage that they will be contacted again.
CAPI Screener
This section presents the findings and recommendations for the screener portion of the cognitive interview. What follows is a question-by-question analysis of the results of cognitive testing and recommendations for changes. Questions are only included if there were issues with the question or if there were changes made after Round 1.

First, I will ask you about the people in your household who may or may not participate in wildlife-associated activities.

List all persons staying there and all persons who usually live there who are absent.

Start with the name of the person (or one of the persons) who owns or rents the residence.

1. Enter 1 to Continue

Figure 40: SCINTRO screen

What is the name of the first person staying here? List all people, including:
- lodgers, boarders, or persons you employ who live here
- anyone who usually lives here, but is away at present or in a hospital

READ IF NECESSARY AS A REMINDER:
Start with the name of the person (or one of the persons) who owns or rents the residence.

♦ Enter First Name

Enter 999 if no more persons

Figure 41: SCNAME FNAME screen

All 15 respondents answered this question and did not have difficulty answering. However, three respondents began answering with the names of people in their household before the interviewer could finish reading the question. This is likely due to the length of the question and the format that requires interviewers to pause before finishing reading the question by entering a 1 to continue. One respondent commented that the question was wordy and asked for it to be repeated. This respondent was also concerned about giving the names of the people in his household who are non-relative roommates. The respondent mentioned the advance letter and said that since he had received a letter he thought that he would list his roommates in a real survey situation.

Recommendation: As stated in our Round 1 recommendations, we recommend shortening this and using the standard roster question used on the American Housing Survey. The new question
should read: “Now I will ask you some questions about the people who live here. What are the names of all persons living or staying here? Start with the name of the person, or one of the persons, who owns or rents the home.”

*Sponsor’s Feedback*: We agree with this recommendation and will discuss the update with the appropriate staff at the agency.

**Figure 42: SCURE question**

Is this Jill Scott's usual place of residence?

**Figure 43: Example of Topic-Based Question Format for SCURE question**

Fifteen respondents were asked this question and most did not have difficulty with it. Two respondents were confused about how to answer for children who are in college. One respondent explained that her son is in college and only spends summers and vacations at home. She said, “He spends more months living at school.” Another respondent, when asked about his son’s usual place of residence replied, “When he’s not in college.” This suggests that respondents who have children living on campus at college will not be sure whether to list the person as a household member’s usual residence.

Beginning with this question and including all demographic questions, the sponsor changed the structure of the questionnaire to a topic-based approach as opposed to the original person-based approach. Along with this change in the structure of the question, the sponsor also made repetitive text in the question optional for the interviewer. In the above example, Figure 43 shows the first question in the series where the entire question is read aloud. Figure 44 is an example of a subsequent question in the topic-based series where the gray text is only read if necessary. We found that the topic-based structure did well in cognitive testing. This finding is supported by the literature (Moore and Moyer 2002).

**Recommendation**: We recommend adding an FR instruction to direct respondents about whether or not to include students living away at college as household members for the purposes of this survey. Depending on the sponsor’s intent, the instruction should direct FRs to either include or exclude household members who are in college and stay on campus.

*Sponsor’s Feedback*: This is included in the FR manual.

**Figure 44: SCAGE**
Respondents did not have difficulty with this question. All 15 respondents reported the ages of their family members and themselves. One respondent who lived with roommates commented that he was not completely sure of the ages of his roommates. However, this respondent answered to the best of his knowledge.

**Recommendation:** Based on other surveys and the current literature we recommend keeping the question as amended from the first round of cognitive interviews.

**Sponsor’s Feedback:** We agree with this recommendation and will keep the question as it is in Round 2.

![Image of a table asking about the highest grade (or year) of regular school ever completed.](image)

**Figure 45: SCSSCHOOL question**

The 15 respondents who answered this question did not have difficulty responding with one exception. One respondent who lives with roommates was not confident about the educational attainment of his roommates. This suggests that proxy respondents who live with non-relatives might have difficulty answering about their household members in this situation.

![Image of a survey question asking on a scale of 1 to 5, where 1 is “Very Unlikely” and 5 is “Very Likely,” how likely is it that you will do any hunting during 2016?](image)

**Figure 46: SCH96LIK question**

This question was changed from Round 1. Nine respondents were asked this question. Respondents were more likely to choose either a one or a five in this question. Respondents did not have difficulty answering this question.

![Image of a survey question asking if anyone in the household sixteen years of age or older done any fishing so far in 2016?](image)

**Figure 47: SCFISH96**

All 15 respondents answered no to this question. Respondents commented that it was too cold to fish so far this year. This suggests that the timing of this round of cognitive interviews is likely to have affected these responses.
What was the most recent year in which Yasiin Bey fished?

Figure 48: SCFSHREC question

One of the four respondents had trouble recalling when other members of their household had fished most recently.

On a scale of 1 to 5, where 1 is “Very Unlikely” and 5 is “Very Likely,” how likely is it that Yasiin Bey will do any fishing during 2018?

Figure 49: SCF96LIK question

One respondent interpreted a “3” answer as meaning “neutral but not negative.” Another respondent said a 3 meant, “Equal chances” of going fishing. One respondent said that a 4 meant “Likely but not definite.” Respondents did not have difficulty with this question.

Figure 50: SCWILD96 question

Five respondents answered yes to this question. Respondents described activities including: observing and taking pictures of deer in their yard, taking pictures of deer on a farm, maintaining areas as part of a Woodland Management Program, hiking and taking pictures of birds, observing ducks by the water, feeding birds and planting native plants, going to wildlife camp, filling birdfeeders, walking a dog in the woods and taking in nature, and bird watching.

Similar to Round 1, many responses to this question are appropriate; however, other responses are explicitly excluded in the question instructions. For example, one respondent mentioned taking pictures of farm animals and another respondent said that when she goes outside to smoke, drink coffee, and read the newspaper that she also talks to the birds from her porch. This respondent did not think that smoking and reading were “other activities” that the question instructions said she should exclude. Respondents described this question as “broad” and “hard” and interviewers were asked to repeat the question.

Two respondents misunderstood the meaning of the phrase “so far in 2015” in this question. Each respondent hesitated to answer because they thought the phrase meant that they had only recently taken a special interest in wildlife. She explained, “If I have always been interested in it then I haven’t so far.” This suggests that the phrase “so far” might have different meanings for some people.
One respondent who answered no said that he sets up game cameras and that he did not answer yes because the question instructed him not to include scouting for game. This suggests that the change in the instruction text was effective for this respondent.

**Recommendation:** We recommend reducing the length and complexity of the question and revising the phrase “so far.” The new question text could read, “**Next, I would like to ask about SPECIAL INTEREST in wildlife in ways OTHER THAN hunting and fishing. We are interested in whether you closely observe, photograph, feed, or maintain natural areas or plantings for wildlife. Please do not include farm animals or pets. Do not include noticing wildlife while doing other activities, and do not include trips to zoos, circuses, aquariums, museums, or scouting for game.**

Have you/Has anyone in your household 16 years of age or older taken a SPECIAL INTEREST in wildlife as we have defined it in 2015?

**Sponsor’s Feedback:** We agree with the recommendation but need to have approval concerning the wording. Currently, this is unlikely to be incorporated, based on the directive to maintain comparability to previous surveys, especially 2011. We will continue to discuss with the sponsor to see where we can possibly reduce the complexity of the introduction to this question.

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**Figure 51: SCW96LIK question**

Three of the 15 respondents noticed that the scale for this question was different from the other two likelihood questions in the survey. Most respondents did not notice the difference and answered based on the earlier scale where 5 meant “Very likely” and 1 meant “Very unlikely.”

**Recommendation:** We recommend changing the scale in this question to match the scale in the earlier likelihood questions. The new question would read: “**On a scale of 1 to 5 where 1 is “Very Unlikely” and 5 is “Very Likely” how likely is it that you/[NAME] will take a SPECIAL INTEREST in wildlife in 2015?”**

**Sponsor’s Feedback:** We agree with this recommendation and have incorporated it into the instrument.
References


A message from the Director, U.S. Census Bureau

Your household has been selected to participate in an important study associated with the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FWWAR). The U.S. Census Bureau conducts this survey for the U.S. Fish and Wildlife Service, whose mission includes working with the states and other federal agencies to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. The data collected in the FWWAR are used to evaluate federal and state programs that manage wildlife populations and assist wildlife-related recreationists. The survey results also help to identify the impact of environmental disasters, such as the recent oil spills on our Nation’s wildlife resources.

We selected your address, not you personally, as part of a scientifically-designed survey. Your household represents hundreds of other households in your state. Although your participation is voluntary, it is deeply encouraged. We cannot substitute another household in your place. Even if no one in your household participates in wildlife-related activities, it is important that you complete this short questionnaire. Your answers will be kept completely confidential.

Please complete the questionnaire online by following the two easy steps listed below:

1. Go to https://respond.census.gov/fwwar
2. Enter the following information on the opening screen:
   - Login ID:
   - Password:

You can help us keep our costs down and help the Fish and Wildlife Service better manage our Nation’s natural resources by completing the study within the next two weeks.

If you have any questions about the study or the questionnaire, please contact the Census Bureau at fishhunt@census.gov or call our toll free number at 1-888-340-7125.

On the back of this letter are answers to questions that study participants ask most frequently.

Thank you for your cooperation. The Census Bureau and the Fish and Wildlife Service appreciate your help.
Appendix B: Round 1 Screenshots of Web Pre-screener

National Survey of Fishing, Hunting and Wildlife-Associated Recreation: Round 1 Internet Pre-screener Screenshots
Appendix C: Round 1 Paper Pre-screener

In the United States Census Bureau, the National Survey of Fishing, Hunting, and Wildlife-Associate Recreation Pre-Screener Questionnaire is used to gather information from participants who have taken the time to complete the survey. This survey is designed to help the U.S. Fish and Wildlife Service and state conservation agencies better manage our Nation’s natural resources and keep costs down. It must be 18 years or older to complete the survey. Please fill out the form completely and mail it back using the enclosed postage-paid envelope within two weeks. This information will be kept strictly confidential and will be used only to contact you for this survey.

**STEP 1**
Please print your first and last name.
1. First name
2. Last name

**STEP 2**
We have your address listed as:

If your address above is correct – Please SKIP to Step 4 below

If your address is incorrect – Please complete Step 3 below

**STEP 3**
If any part of the address in Step 2 is incorrect – Please enter your complete correct address below.

Address line 1

Address line 2 – If required

City
State
ZIP/Postal Code

**STEP 4**
Telephone number – Please provide a current telephone number below.
1. Evening telephone number
   - Mark (X) appropriate box

   Area code
   Number
   Home
   Cell
   Other

2. Daytime telephone number
   - Mark (X) appropriate box

   Area code
   Number
   Home
   Cell
   Other

Please continue with questions on reverse.
The next two questions ask general information regarding the makeup of your household. Please enter your response in the answer spaces provided.

1. How many people are in your household, including you?  

2. Please enter the number of people in your household, including you, into the correct boxes of the table below based on age and gender breakdown for each age group in the table below.

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 5 years old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 – 15 years old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 years old and older</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The next questions ask about different kinds of wildlife activities. We are only interested in recreational activities, that is, activities done for pleasure or sport and not for earning money or other compensation.

1. Have you or anyone in your household taken any wildlife-related trips or outings at least one mile away from your home for the primary purpose of observing, photographing, or feeding wildlife, including wild birds, in the past 5 years?  
   Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.  
   ☐ Yes ☐ No

2. Do you or anyone in your household plan to take any wildlife-related trips or outings at least one mile away from your home for the primary purpose of observing, photographing, or feeding wildlife, including wild birds, in 2019?  
   Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.  
   ☐ Yes ☐ No

3. Have you or anyone in your household closely observed, fed, or photographed wildlife recreationally or maintained natural areas for the benefit of wildlife within one mile around your home in the past 5 years?  
   ☐ Yes ☐ No

4. Do you or anyone in your household plan to closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife within one mile around your home in 2019?  
   ☐ Yes ☐ No

Please continue with questions on next page.
5. Have you or anyone in your household hunted game or other wildlife recreationally in the past 5 years?
   1. Yes  2. No

6. Do you or anyone in your household plan to hunt game or other wildlife recreationally in 2015?
   1. Yes  2. No

7. Have you or anyone in your household fished recreationally, including shell fishing, in the past 5 years?
   1. Yes  2. No

8. Do you or anyone in your household plan to fish recreationally, including shell fishing, in 2015?
   1. Yes  2. No

**STEP 7** The final two questions collect information regarding target shooting and archery activities. Please enter your response in the answer spaces provided.

1. How many members of your household six years old or older went target shooting or sport shooting with a firearm (e.g., rifle, handgun, air gun, muzzleloader, shotgun, etc.) in 2015? Please include any informal target shooting on your own property.

   

2. How many members of your household six years old or older participated in any archery activities using a bow and arrow, compound bow, or crossbow, in 2015?

   

Thank you for your participation! Please return your completed questionnaire in the postage-paid envelope you received with your mailing and mail back to our processing facilities.

For Official Use Only

Outcome Code: [ ]

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prints black (100%) and pantone green #3255 (20% and 100%)
Appendix D: Round 1 Web Pre-screener Protocol


My name is __________ and I work for the Census Bureau. Thank you for agreeing to participate in our study.

What: In order to help us improve our surveys, we turn to people like you to find out if our questions make sense and are easy to understand and answer. We have found that the best way to do that is to actually conduct the survey with people and see how it works for them. In our lab, we evaluate how easy or difficult Census products are to use. What works well, we keep. When potential users, such as you, have difficulty with something, we have an opportunity to fix it. You will be helping us test the National Survey of Fishing, Hunting and Wildlife-Associated Recreation.

How: Today we will be completing two different survey tasks. The first task is a short online survey and the second is a survey where an interviewer will ask you questions face to face.

Confidentiality: Our session today is completely confidential. Any names you provide will never be used in our reports. Your participation in this study is voluntary and you can decline to answer any particular question. In addition to me, you will be working with another researcher. They also will watch this session, and your session might be observed by the sponsors.

Consent: This is a consent form. It explains the purpose of today’s session and your rights as a participant. It also informs you that we would like to videotape the session to get an accurate record of your feedback. Only those of us connected with the project will review the tape and it will be used solely for research purposes. Your name will not be associated with the tape or any of the other data collected during the session.

[Hand consent form; give time to read and sign; sign own name and date, start recording.] Thank you.

Eye tracking: We are also going to record where you look on the screen as you go through the survey. Now we will do a simple task that will allow the computer to find your eyes. I am going to have you position yourself in front of the screen so that you can see your nose in the reflection at the bottom of the monitor. To calibrate your eyes, please follow the dot across the screen with your eyes.

[Calibrate the participants’ eyes]

Ok great. I now have a demographic questionnaire that I’d like you to fill out.

[Hand the demographic questionnaire to participant and wait in the room while they fill it out and return it to you]

Thank you.

Think Aloud: I want you to answer the questions exactly the way you would if you were completing it on your computer at home, but with one major difference. I would like you to think aloud as you answer the questions. I am interested in your answers, but I am also interested in the process you go through in your
mind when you answer the questions. I would like you to tell me everything that you are thinking and feeling as you go about answering each question.

**Practice:** Let’s do a practice question before we start: Please think aloud as you answer the question, how many windows are in your home?

Great that’s what I want you to do throughout our session. I will remind you to think aloud if you get quiet.

From time to time, I’ll ask you some questions about your answers, or about the questions themselves. Remember, there are no right or wrong answers, because only you know what you are thinking.

If you run into any difficulties as you work on the survey, please don’t blame yourself. Any difficulties are the result of the design of the Web survey, not your skills or abilities. We are going to use your comments and experiences as well as comments and experiences of other participants to help improve the survey. I did not create the online survey, so don’t feel like you have to hold back on your thoughts to be polite to me. We appreciate your help so we can make the online survey work well for everyone.

At the end of the session, I will have some additional questions for you about your experience.

**Internet Push Letter:** You would have received this letter at your home. [Show respondent letter] Please use this to help you login to the survey. Please answer the questions as you would if you were home answering the questionnaire as they pertain to you in your real life.

Now I am going to go around to the other room and do a sound check, but we will still be able to communicate through a series of microphones and speakers. Do you have any questions before we begin?

**[BEGIN SESSION]**

FOR EACH SCREEN: Remind respondent to think aloud if necessary. If respondent hesitates or expresses confusion: “Tell me about your hesitation here.”

If they do not correct their address – and select yes – interrupt and ask “Why did you answer “yes” to that question?”

Thank you. I am going to come around and ask you a few debriefing questions before you move on to the face-to-face interview.

**Retrospective Probes:** [Researcher will use power point slides to show respondent questions on the screen.]

Screen 1 (Login): Tell me about your experience working with the login screen. What difficulties, if any, did you have? (Mention anything you noticed during the session.)

Tell me your thoughts about the title of the survey. What does that mean to you?

Screen 2 (Address Verify): What was this question asking you to do? Tell me about your experience working with this screen. What difficulties, if any, did you have? What is your opinion on the layout? Was it easy to navigate?
Screen 2 (phone numbers): Tell me about how many phone numbers you have? Why did you choose to report those phone numbers? (If not clear) is your daytime and evening phone number the same or different? What do you think we will do with your phone numbers?

Screen 5 (Q1-2) For any yes, please tell me why you answered yes. For any no – give me some examples of what someone would need to do to answer yes to this question.

(Q5-6): What does the term recreationally mean to you in this question?

Thank you for your help. Now we are going to move on to the face-to-face interview. It will be in another room. [Escort participant to Cognitive Interview Room]
Hello. My name is ________________, and I work for the Census Bureau. Thank you again for agreeing to participate in our study. We are going to begin this session just like the last one with a letter. In just a moment, I will ask you to take a minute to read it and then we will complete the second part of the survey.

Rather than video recording, we will be only audio recording this part of the interview.

[Turn on digital recorder]

Hand participant advance letter and allow time for participant to read.

Advance Letter Questions:
1. What is the letter asking you to do?
2. Is the letter easy or difficult to understand?
3. Did you notice the other side of the page? Give respondent a chance to read.
4. Do you have any other feedback on this letter?

Thanks. We are ready to move to the second part of the survey. For this part, we are going to do a different type of interview. I am going to be using a computer to ask you some questions. Many of the questions will sound the same as those you just answered on paper so please excuse some of the repetition.

Please remember to think aloud and answer the questions as if an interviewer had come to your home.
Ok, let us begin. Please remember to think aloud as you answer the questions.
SCINTRO First, I will ask you about the people in your household who may or may not participate in wildlife-associated activities. List all persons staying there and all persons who usually live there who are absent. Start with the name of the person (or one of the persons) who owns or rents the residence.

SCNAME_FNAME What is the name of the FIRST_NEXT person staying THERE_HERE? List all people, including:
- lodgers, boarders, or persons you employ who live THERE_HERE
- anyone who usually lives THERE_HERE, but is away at present or in a hospital

HHCHECK I have [COUNT] of household members listed as living her now. Did we miss anyone like babies or small children?

SCURE Is this your/ [NAME]’s usual place of residence?

SCAGE How old are you/ is [NAME]?

SCSEX What is your/ [NAME]’s sex?

SCRELATE What is your/ [NAME]’s relationship to [PERSON 1]?

Loop back to SCURE and ask SCURE, SCAGE, SCSEX and SCRELATE for all members of household. Then go to SCMSTAT.

SCMSTAT Are you/ is [NAME] now married, widowed, divorced, separated, or never married?

Ask SCMSTAT, SCSCHOOL, and SCJOB for each person in household 16 years old and older.

SCSCHOOL What is the highest grade (or year) of regular school you have/Name has ever completed?

SCJOB DO_DOES have a job or business? If SCJOB =no, then ask SCRETIRE.

Loop back to SCMSTAT and ask SCMSTAT, SCSCHOOL, and SCJOB for each person in household 16 years old and older.

SCRETIRE Are you/ Is [NAME] retired, going to school, keeping house or doing something else?

Probe: What does “keeping house” mean to you in this question? How would you ask this question in your own words?
SCHISP  Are you/ Is any person in this household six years or older of Spanish, Hispanic or Latino origin? Who?

SCRACE  What is your/ [NAME]’s race?

SCEVHUNT  Now I would like to ask you about [your hunting activities/ the hunting activities of household members six years old and older]. Have you/Has anyone in this household six years of age or older EVER hunted game or other wildlife?

SCHUNWHO  Who would that be? Anyone else?

Probe: Tell me more about your/family member’s hunting.

SCHUNT96  Have you/Has anyone in this household sixteen years of age or older done any hunting so far in 2014? If necessary: Who? Anyone else?

Probe: Can you tell me more about your answer?

If SCHUNT96= no for any household member, then go to SCHUNT95 for that household member. Else go to SCEVFISH.

SCHUNT95  If SCVEHUNT=yes and SCHUNT96=no then ask SCHUNT95 Did (you/ anyone in this household six years of age or older) hunt game or other wildlife last year, that is, during the period January 1 to December 31, 2013? If necessary: Who? Anyone else?

If SCHUNT95= no, then go to SCHU95FY.

SCHU95FY  Was 2013 the first year that (you/anyone in this household six year of age or older/ [name]) hunted?

SCH95DAY  During 2013, did (you/anyone in this household sixteen year of age or older) hunt 10 or more days?

SCHUSPND  During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for hunting, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?
SCHNTREC  What was the most recent year in which (you/[name]) hunted?

SCH96LIK  How likely is it that (you/[name]) will do any hunting during 2014; likely, unlikely, or neither?
            Can you tell me more about your answer?

SCEVFISH  Now I would like to ask you about your fishing activities/the fishing activities of household members six years old or older. Have you/ Has anyone in this household six years or age or older EVER done any recreational fishing, including shellfishing?

SCFSHWHO  Who would that be? Anyone else?
            Probe: If yes, Can you tell me more about your fishing?
            What does the phrase recreational fishing mean to you in this question?

SCFISH96  Have you/ Has anyone in this household sixteen years of age or older done any fishing so far in 2014?
            Probe: How did you come up with your answer?

SCFISH95  Did you/ anyone in this household six years or age or older do any recreational fishing last year, that is, during the period January 1 to December 31, 2013?
            If yes to SCEVFISH and no to SCFISH96 and no to SCFISH95 then go to SCFSHREC?

SCFI95FY  Was 2013 the first year that you/anyone in this household six years of age or older fished?

SCF95DAY  During 2013, did you/anyone in this household sixteen years of age or older fish 10 or more days?
            Probe: How did you come up with your answer? Was it easy or difficult to remember how many days you fished?

SCFISPND  During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for fishing, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?
            Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?
SCFSHREC  What was the most recent year in which (you/name) fished?

SCF96LIK  How likely is it that (you/[name]) will do any fishing during 2014; likely, unlikely, or neither?

Probe: How did you come up with your answer?

SCWILD96  Next, I would like to ask about SPECIAL INTEREST in wildlife in ways OTHER THAN hunting and fishing. We are interested in whether you closely observe, photograph, feed, or maintain natural areas or plantings for wildlife. Please do not include noticing wildlife while doing other activities.

By wildlife I mean birds, mammals, fish, insects, reptiles such as snakes and lizards, and amphibians such as frogs. DO NOT include farm animals and pets. Have you/Has anyone in this household 16 years of age or older taken any SPECIAL INTEREST in wildlife so far in 2014?

Probe: If yes, tell me more about your answer? How often do they observe/feed/photograph wildlife? If no, can you give me an example of something that would fit in this category?

SCWILD95  Did (you/anyone in this household) take special interest in wildlife last year, that is, during the period January 1 to December 31, 2013? Do not include trips to zoos, circuses, aquariums, museums, or scouting for game.

Probe: If yes, can you tell me more about that?

SCW95DAY  During 2013, did you/anyone in this household sixteen years of age or older observe, photograph, or feed wildlife at least one mile from home for 21 or more days?

Probe: If yes, can you tell me more about that? Where did you/they observe, photograph or feed wildlife? For how long?

SCWWSPND  During 2013, did you/anyone in this household sixteen years of age or older spend $300 or more to observe, photograph, or feed wildlife at least one mile from home, that is, (you/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

SCW96LIK  How likely is it that YOU_NAME will take SPECIAL INTEREST in wildlife this year; likely, unlikely, or neither?

Probe: How did you come up with your answer?

SCINC  What was the total income of this household during 2013 before taxes and other deductions?
Debriefing Questions

1. Overall, did you find the questions easy or difficult to answer?

2. Were any of the questions sensitive? Do you think others might find them sensitive?

3. Is there anything you wanted to mention that you have not had a chance to talk about yet?

Thank the participant for their help.

How to shut down the computer: While in the instrument press F10. Answer the necessary questions until the window closes. This will allow you to go back through the instrument and gather any answers you may need.
Appendix E: Round 1 Paper Pre-screener Protocol


My name is __________ and I work for the Census Bureau. Thank you for agreeing to participate in our study.

What:  In order to help us improve our surveys, we turn to people like you to find out if our questions make sense and are easy to understand and answer. We have found that the best way to do that is to actually conduct the survey with people and see how it works for them. You will be helping us test the National Survey of Fishing, Hunting and Wildlife-Associated Recreation.

How: Today we will be completing two different survey tasks. The first task is a short paper survey and the second is a survey where I will ask you questions with the help of a computer.

Think Aloud: I want you to answer the questions exactly the way you would if it were sent to your home, but with one major difference. I would like you to think aloud as you answer the questions. I am interested in your answers, but I am also interested in the process you go through in your mind when you answer the questions. I would like you to tell me everything that you are thinking and feeling as you go about answering each question.

Practice:  Let’s do a practice question before we start: Please think aloud as you answer the question, how many windows are in your home?

Great that’s what I want you to do throughout our session. I will remind you to think aloud if you get quiet.

From time to time I’ll ask you some questions about your answers, or about the questions themselves. Remember, there are no right or wrong answers, because only you know what you are thinking.

Confidentiality:  Our session today is completely confidential. Any names you provide will never be used in our reports. Your participation in this study is voluntary and you can decline to answer any particular question.

Consent: This is a consent form. It explains the purpose of today’s session and your rights as a participant. It also informs you that we would like to audio record the session to get an accurate record of your feedback. Only those of us connected with the project will review the tape and it will be used solely for research purposes. Your name will not be associated with the tape or any of the other data collected during the session.

[Hand consent form; give time to read and sign; sign own name and date, start recording.]

Thank you.

This is a short questionnaire that I will ask you to fill out in a moment. [Show participant Paper Pre-screener Questionnaire] I might interrupt to ask you questions at certain points. Please remember to think aloud and answer questions as you would if the survey had been sent to your home.
[Hand participant questionnaire]

Instructions:

Step 1:
Q1: 
Q2: 

Step 2: 

Step 3: 

Step 4: 
Q1: Probe any hesitation.
Q2: Tell me about the phone numbers you wrote down. Would you have given your phone number in a real situation? What do you think they will do with your phone number?
If participant writes the same number twice: Tell me more about your answer.
If necessary: Do you have more than one phone number that you use?

Step 5: 
Q1: 
Q2: Remind participant to think aloud. Probe any hesitation.
Tell me more about how you came up with the answers for this table.
Was it easy or difficult to fill it out?
Did you include yourself in the table?
Did you read the instructions? If no, as respondent to read instructions. Were the instructions clear?

Step 6: 
Q1: If yes: Can you tell me more about that? OR What are you thinking about when answering yes to this question
If no: Can you give me an example of something that you think would qualify for this question?

If yes or no: If yes or no: If you were to rephrase this question in your own words, how would you ask this question?

Q2: If yes: Tell me more about your answer.
If yes or no:
What does “maintained natural areas for the benefit of wildlife” mean to you in this question?
Q3: If yes: Can you tell me more about that?

If yes or no:
What does the term “recreationally” mean to you in this section?

Q4: If yes: How did you come up with your answer?

Q5: Remind respondent to think aloud. Probe any hesitation

Q6: If yes: How did you come up with your answer?

Point to the instructions in Step 6: Did you read these instructions?
In your own words, can you tell me what the instructions are saying?
What does the term recreational mean to you in this section?

Step 7:
Q1: If yes: Can you tell me more about that?
Does anyone in your household shoot a BB gun? Did you include this in your answer?

Q2: If yes: Can you tell me more about that?

I have a few questions before we move on to the next part of the test.

1. Did you think the questions were easy or difficult to answer?

2. If respondent has children: Have your children ever participated in archery activities in summer camp? Did you include that in your answer to the archery question?

This is the end of this portion of our testing. Thank you. Now we will move on to the second part of our interview. For this part of the survey we are going to do a different type of interview. I am going to be using a computer for this part. Many of the questions will sound the same as the questions you just answered on paper so please excuse some of the repetition.

Please remember to think aloud and answer the questions as if an interviewer had come to your home.
**SCINTRO**  First, I will ask you about the people in your household who may or may not participate in wildlife-associated activities. List all persons staying there and all persons who usually live there who are absent. Start with the name of the person (or one of the persons) who owns or rents the residence.

**SCNAME_FNAME**  What is the name of the FIRST_NEXT person staying THERE_HERE? List all people, including:
- lodgers, boarders, or persons you employ who live THERE_HERE
- anyone who usually lives THERE_HERE, but is away at present or in a hospital

**HHCHECK**  I have [COUNT] of household members listed as living her now. Did we miss anyone like babies or small children?

**SCURE**  Is this your/ [NAME]‘s usual place of residence?

**SCAGE**  How old are you/ is [NAME]?

**SCSEX**  What is your/ [NAME]‘s sex?

**SCRELATE**  What is your/ [NAME]‘s relationship to [PERSON 1]?

*Loop back to SCURE and ask SCURE, SCAGE, SCSEX and SCRELATE for all members of household. Then go to SCMSTAT.*

**SCMSTAT**  Are you/ is [NAME] now married, widowed, divorced, separated, or never married?

*Ask SCMSTAT, SCSCHOOL, and SCJOB for each person in household 16 years old and older.*

**SCSCHOOL**  What is the highest grade (or year) of regular school you have/Name has ever completed?

**SCJOB**  DO_DOES have a job or business? *If SCJOB =no, then ask SCRETIRE.*

*Loop back to SCMSTAT and ask SCMSTAT, SCSCHOOL, and SCJOB for each person in household 16 years old and older.*

**SCRETIRE**  Are you/ Is [NAME] retired, going to school, keeping house or doing something else?

*Probe: What does “keeping house” mean to you in this question? How would you ask this question in your own words?*

**SCHISP**  Are you/ Is any person in this household six years or older of Spanish, Hispanic or
Latino origin? Who?

SCRACE What is your/ [NAME]’s race?

SCEVHUNT Now I would like to ask you about [your hunting activities/ the hunting activities of household members six years old and older]. Have you/Has anyone in this household six years of age or older EVER hunted game or other wildlife?

SCHUNWHO Who would that be? Anyone else?

Probe: Tell me more about your/family member’s hunting.

SCHUNT96 Have you/Has anyone in this household sixteen years of age or older done any hunting so far in 2014? If necessary: Who? Anyone else?

Probe: Can you tell me more about your answer?

If SCHUNT96= no for any household member, then go to SCHUNT95 for that household member. Else go to SCEVFISH.

SCHUNT95 If SCEVHUNT=yes and SCHUNT96=no then ask SCHUNT95 Did (you/ anyone in this household six years of age or older) hunt game or other wildlife last year, that is, during the period January 1 to December 31, 2013? If necessary: Who? Anyone else?

If SCHUNT95= no, then go to SCHU95FY.

SCHU95FY Was 2013 the first year that (you/anyone in this household six year of age or older/[name]) hunted?

SCH95DAY During 2013, did (you/anyone in this household sixteen year of age or older) hunt 10 or more days?

SCHUSPND During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for hunting, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

SCHNTREC What was the most recent year in which (you/[name]) hunted?
SCH96LIK  How likely is it that (you/[name]) will do any hunting during 2014; likely, unlikely, or neither?

Can you tell me more about your answer?

SCEVFISH  Now I would like to ask you about your fishing activities/the fishing activities of household members six years old or older. Have you/ Has anyone in this household six years or age or older EVER done any recreational fishing, including shellfishing?

SCFSHWHO  Who would that be? Anyone else?

Probe: If yes, Can you tell me more about your fishing?

What does the phrase recreational fishing mean to you in this question?

SCFISH96  Have you/ Has anyone in this household sixteen years of age or older done any fishing so far in 2014?

Probe: How did you come up with your answer?

SCFISH95  Did you/ anyone in this household six years or age or older do any recreational fishing last year, that is, during the period January 1 to December 31, 2013?

If yes to SCEVFISH and no to SCFISH96 and no to SCFISH95 then go to SCFSHREC?

SCFI95FY  Was 2013 the first year that you/anyone in this household six years of age or older fished?

SCF95DAY  During 2013, did you/anyone in this household sixteen years of age or older fish 10 or more days?

Probe: How did you come up with your answer? Was it easy or difficult to remember how many days you fished?

SCFISPND  During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for fishing, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

SCFSHREC  What was the most recent year in which (you/name) fished?
SCF96LIK  How likely is it that (you/[name]) will do any fishing during 2014; likely, unlikely, or neither?

Probe: How did you come up with your answer?

SCWILD96  Next, I would like to ask about SPECIAL INTEREST in wildlife in ways OTHER THAN hunting and fishing. We are interested in whether you closely observe, photograph, feed, or maintain natural areas or plantings for wildlife. Please do not include noticing wildlife while doing other activities.

By wildlife I mean birds, mammals, fish, insects, reptiles such as snakes and lizards, and amphibians such as frogs. DO NOT include farm animals and pets. Have you/Has anyone in this household 16 years of age or older taken any SPECIAL INTEREST in wildlife so far in 2014?

Probe: If yes, tell me more about your answer? How often do they observe/feed/photograph wildlife?
If no, can you give me an example of something that would fit in this category?

SCWILD95  Did (you/anyone in this household) take special interest in wildlife last year, that is, during the period January 1 to December 31, 2013? Do not include trips to zoos, circuses, aquariums, museums, or scouting for game.

Probe: If yes, can you tell me more about that?

SCW95DAY  During 2013, did you/anyone in this household sixteen years of age or older observe, photograph, or feed wildlife at least one mile from home for 21 or more days?

Probe: If yes, can you tell me more about that? Where did you/they observe, photograph or feed wildlife? For how long?

SCWWSPIPD  During 2013, did you/anyone in this household sixteen years of age or older spend $300 or more to observe, photograph, or feed wildlife at least one mile from home, that is, (you/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

SCW96LIK  How likely is it that YOU_NAME will take SPECIAL INTEREST in wildlife this year; likely, unlikely, or neither?

Probe: How did you come up with your answer?

SCINC  What was the total income of this household during 2013 before taxes and other deductions?

After entering the answer for income, STOP. End the CATI portion of the interview and move to the debriefing questions.
Debriefing Questions

4. Overall, did you find the questions easy or difficult to answer?

5. Were any of the questions sensitive? Do you think others might find them sensitive?

6. Is there anything you wanted to mention that you have not had a chance to talk about yet?

Thank the participant for their help.

How to shut down the computer: While in the instrument press F10 or click on the tab that says FIN. Answer the necessary questions until the window closes. This will allow you to go back through the instrument and gather any answers you may need.
Appendix F: Advance Letter Notification of Screener Interview

Dear Resident:

Someone in your household recently completed a short survey associated with the U.S. Fish and Wildlife Service. Thank you for taking the time to respond to our questions.

Based on your answers, your household has been selected for participation in the 2016 National Survey of Fishing, Hunting and Wildlife-Associated Recreation. The U.S. Census Bureau conducts this survey for the U.S. Fish and Wildlife Service every five years. We will be collecting information about people’s involvement in fishing, hunting, and wildlife-watching activities (feeding, observing, or photographing wildlife) during 2016. Fish and wildlife agencies and organizations will use the information to improve management of fish and wildlife resources.

We selected your address, not you personally, as part of a scientifically determined national sample. Although your participation is voluntary, your help is very important. Because this is a sample survey your household represents hundreds of other households in your state. Your participation will help ensure that the survey results are complete and accurate.

Sometime in the next few weeks, a Census Bureau representative will contact you to ask additional questions about your household’s participation in fishing, hunting, or wildlife-watching activities during 2016. Your answers will be completely confidential.

On the back of this letter are answers to questions that survey participants ask most frequently. Thank you for your cooperation. The Census Bureau and the Fish and Wildlife Service appreciate your help.

Sincerely,

John Thompson
Director
Appendix G: Round 2 Screenshots of Web Pre-screener

National Survey of Fishing, Hunting, and Wildlife-Associated Recreation:

Screenshots of Round 2 Pre-screener
Welcome to the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

You can help the U.S. Fish and Wildlife Service and state conservation agencies better manage our Nation’s natural resources and help us keep our costs down by completing this short questionnaire and submitting it within the next 2 weeks. This information will be kept strictly confidential and will be used only to contact you for this study. (Please note: Anyone 16 years old or older in your household can complete this questionnaire.)

1. Please enter your first and last name:
   First Name:  
   Last Name:  

2. We have your address listed as:
   5005 Beach Way SE
   Any Town, RI 99999

   Is this address correct?
   ☐ Yes ☐ No

3. If any part of the above address is incorrect, please enter your complete correct address below:
   Address line 1: 5005 Beach Way SE
   Address line 2—if required:  
   City: Any Town
   State: RI
   ZIP/Postal Code: 99997

4. Please provide a current telephone number, including area code:
   Primary telephone number:  
   This is  
   Area Code:  
   Telephone Number:  
Recreation.

You can help the U.S. Fish and Wildlife Service and state conservation agencies better manage our Nation’s natural resources and help us keep our costs down by completing this short questionnaire and submitting it within the next 2 weeks. This information will be kept strictly confidential and will be used only to contact you for this study. (Please note: Anyone 18 years old or older in your household can complete this questionnaire.)

1. Please enter your first and last name:
   First Name:
   Last Name:

2. We have your address listed as:

   5005 Beach Way SE
   Any Town, WA 99997

   Is this address correct?
   ☐ Yes ☐ No

3. If any part of the above address is incorrect, please enter your complete correct address below:
   Address line 1:
   Address line 2—if required:
   City:
   State: [ ]
   ZIP/Postal Code: [ ]

4. Please provide a current telephone number, including area code:
   Primary telephone number:
   This is:
     ☐ Home ☐ Cell ☐ Other
   Secondary telephone number:
   This is:
     ☐ Home ☐ Cell ☐ Other
Household Information

The next two questions ask general information regarding the makeup of your household.

1. How many people are in your household, including you?  

2. Please enter the number of people in your household into the correct boxes of the table below. In the first column, please enter the number of males for each age group listed. In the second column, please enter the number of females for each age group listed. Please include yourself in the table.

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5 years old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 - 15 years old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 years old and older</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Recreational Participation

The next questions ask about different kinds of wildlife activities. We are only interested in recreational activities, that is, activities done for pleasure or sport and not for earning money or other compensation.

1. **Did you or anyone in your household closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife in 2015?** Please include activities around your home and on trips away from home.
   
   Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.
   
   - [ ] Yes
   - [ ] No

2. **Do you or anyone in your household plan to closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife in 2016?** Please include activities around your home and on trips away from home.
   
   Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.
   
   - [ ] Yes
   - [ ] No

3. **Did you or anyone in your household hunt game or other wildlife recreationally in 2015?**
   
   - [ ] Yes
   - [ ] No

4. **Do you or anyone in your household plan to hunt game or other wildlife recreationally in 2016?**
   
   - [ ] Yes
   - [ ] No

5. **Did you or anyone in your household fish recreationally, including shell fishing, in 2015?**
1. Did you or anyone in your household closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife in 2015? Please include activities around your home and on trips away from home.

   Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.

   ○ Yes
   ○ No

2. Do you or anyone in your household plan to closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife in 2016? Please include activities around your home and on trips away from home.

   Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.

   ○ Yes
   ○ No

3. Did you or anyone in your household hunt game or other wildlife recreationally in 2015?

   ○ Yes
   ○ No

4. Do you or anyone in your household plan to hunt game or other wildlife recreationally 2016?

   ○ Yes
   ○ No

5. Did you or anyone in your household fish recreationally, including shellfishing, in 2015?

   ○ Yes
   ○ No

6. Do you or anyone in your household plan to fish recreationally, including shellfishing, 2016?

   ○ Yes
   ○ No
Target Shooting and Archery Participation

The final two questions collect information regarding target shooting and archery activities.

1. How many members of your household six years old or older participated in any target shooting or sport shooting with a firearm (e.g., rifle, handgun, muzzleloader, shotgun, air gun) in 2015?

2. How many members of your household six years old or older participated in any archery activities using a bow and arrow, compound bow, or crossbow in 2015?
Submission Confirmation
Thank you for completing this initial wave of the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. The US Census Bureau and US Fish and Wildlife Service appreciate your participation.

Select 'Logout' to exit the questionnaire. The Login screen will be displayed and you can close your internet browser.

Submission Date & Time: Thu Jan 15 09:35:46 2015
Appendix H: Round 2 Paper Pre-screener
STEP 5  The next two questions ask general information regarding the makeup of your household.

1. How many people are in your household, including you? [ ]

2. Please enter the number of people in your household into the correct boxes of the table below. In the first column, please enter the number of males for each age group listed. In the second column, please enter the number of females for each age group listed. Please include yourself in the table.

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
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<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>16 years old and older</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

STEP 6  The next questions ask about different kinds of wildlife activities. We are only interested in recreational activities, that is, activities done for pleasure or sport and not for earning money or other compensation.

1. Did you or anyone in your household closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife in 2014? Please include activities around your home and on trips away from home. Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.

   [ ] Yes  [ ] No

2. Do you or anyone in your household plan to closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife in 2015? Please include activities around your home and on trips away from home. Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game.

   [ ] Yes  [ ] No

3. Did you or anyone in your household hunt game or other wildlife recreationally in 2014?

   [ ] Yes  [ ] No

4. Do you or anyone in your household plan to hunt game or other wildlife recreationally in 2015?

   [ ] Yes  [ ] No

PLEASE CONTINUE WITH QUESTIONS ON NEXT PAGE.
5. Did you or anyone in your household fish recreationally, including shellfishing, in 2014?
   1. Yes  2. No

6. Do you or anyone in your household plan to fish recreationally, including shellfishing, in 2015?
   1. Yes  2. No

**STEP 7** The final two questions collect information regarding target shooting and archery activities.

1. How many members of your household six years old or older participated in any target shooting or sport shooting with a firearm (e.g., rifle, handgun, muzzleloader, shotgun, air gun) in 2014?

2. How many members of your household six years old or older participated in any archery activities using a bow and arrow, compound bow, or crossbow in 2014?

Thank you for your participation! Please return your completed questionnaire in the postage-paid envelope you received with your mailing within two weeks.

For Official Use Only

**Outcome Code:**
Appendix J: Round 2 Web Pre-screener Protocol


My name is __________ and I work for the Census Bureau. Thank you for agreeing to participate in our study.

What: In order to help us improve our surveys, we turn to people like you to find out if our questions make sense and are easy to understand and answer. We have found that the best way to do that is to actually conduct the survey with people and see how it works for them. In our lab, we evaluate how easy or difficult Census products are to use. What works well, we keep. When potential users, such as you, have difficulty with something, we have an opportunity to fix it. You will be helping us test the National Survey of Fishing, Hunting and Wildlife-Associated Recreation.

How: Today we will be completing two different survey tasks. The first task is a short online survey and the second is a survey where an interviewer will ask you questions face to face.

Confidentiality: Our session today is completely confidential. Any names you provide will never be used in our reports. Your participation in this study is voluntary and you can decline to answer any particular question. In addition to me, you will be working with another researcher. They also will watch this session, and your session might be observed by the sponsors.

Consent: This is a consent form. It explains the purpose of today’s session and your rights as a participant. It also informs you that we would like to videotape the session to get an accurate record of your feedback. Only those of us connected with the project will review the tape and it will be used solely for research purposes. Your name will not be associated with the tape or any of the other data collected during the session.

[Hand consent form; give time to read and sign; sign own name and date, start recording.]

Thank you.

Eye tracking: We are also going to record where you look on the screen as you go through the survey. Now we will do a simple task that will allow the computer to find your eyes. I am going to have you position yourself in front of the screen so that you can see your nose in the reflection at the bottom of the monitor. To calibrate your eyes, please follow the dot across the screen with your eyes.

[Calibrate the participants’ eyes]

Ok great. I now have a demographic questionnaire that I’d like you to fill out.

[Hand the demographic questionnaire to participant and wait in the room while they fill it out and return it to you]

Thank you.

Think Aloud: I want you to answer the questions exactly the way you would if you were completing it on your computer at home, but with one major difference. I would like you to think aloud as you answer the questions. I am interested in your answers, but I am also interested in the process you go through in your
mind when you answer the questions. I would like you to tell me everything that you are thinking and feeling as you go about answering each question.

**Practice:** Let’s do a practice question before we start: Please think aloud as you answer the question, how many windows are in your home?

Great that’s what I want you to do throughout our session. I will remind you to think aloud if you get quiet.

From time to time I’ll ask you some questions about your answers, or about the questions themselves. Remember, there are no right or wrong answers, because only you know what you are thinking.

If you run into any difficulties as you work on the survey, please don’t blame yourself. Any difficulties are the result of the design of the Web survey, not your skills or abilities. We are going to use your comments and experiences as well as comments and experiences of other participants to help improve the survey. I did not create the online survey, so don’t feel like you have to hold back on your thoughts to be polite to me. We appreciate your help so we can make the online survey work well for everyone.

At the end of the session, I will have some additional questions for you about your experience.

**Internet Push Letter:** You would have received this letter at your home. [Show respondent letter] Please use this to help you log-in to the survey. Please answer the questions as you would if you were home answering the questionnaire as they pertain to you in your real life.

Now I am going to go around to the other room and do a sound check, but we will still be able to communicate through a series of microphones and speakers. Do you have any questions before we begin?

[BEGIN SESSION]

FOR EACH SCREEN: Remind respondent to think aloud if necessary. If respondent hesitates or expresses confusion: “Tell me about your hesitation here.”

If they do not correct their address – and select yes – interrupt and ask “Why did you answer “yes” to that question?”

Thank you. I am going to come around and ask you a few debriefing questions before you move on to the face-to-face interview.

**Retrospective Probes:** [Researcher will use power point slides to show respondent questions on the screen.]

Screen 1(Log-in): Tell me about your experience working with the login screen. What difficulties, if any, did you have? (Mention anything you noticed during the session.)

Tell me your thoughts about the title of the survey. What does that mean to you?

Screen 2 (Address Verify): What was this question asking you to do? Tell me about your experience working with this screen. What difficulties, if any, did you have? What is your opinion on the layout? Was it easy to navigate?
Screen 2 (phone numbers): Tell me about how many phone numbers you have? Why did you chose to report those phone numbers. (If not clear) is your daytime and evening phone number the same or different? What do you think we will do with your phone numbers?

Screen 5:
Q4: Tell me about the phone numbers you entered. How did you interpret the phrase “primary telephone number?” What about “secondary telephone number?” Would you have given your phone number in a real situation? What do you think they will do with your phone number?

If participant writes the same number twice: Tell me more about your answer.

If necessary: Do you have more than one phone number that you use?

Household Information Screen:
Tell me more about how you came up with the answers for this table.
Was it easy or difficult to fill it out?
Did you include yourself in the table?
Did you read the instructions? If no, as respondent to read instructions. Were the instructions clear?

Recreational Participation (Q1-6):
What does “maintained natural areas for the benefit of wildlife” mean to you in this question?

Thank you for your help. Now we are going to move on to the face-to-face interview. It will be in another room. [Escort participant to Cognitive Interview Room]
Hello. My name is ________________, and I work for the Census Bureau. Thank you again for agreeing to participate in our study. We are going to begin this session just like the last one with a letter. In just a moment, I will ask you to take a minute to read it and then we will complete the second part of the survey.

Rather than video recording, we will be only audio recording this part of the interview.

[Turn on digital recorder]

Hand participant advance letter and allow time for participant to read.

Advance Letter Questions:
5. What is the letter asking you to do?
6. Is the letter easy or difficult to understand?
7. Did you notice the other side of the page? Give respondent a chance to read.
8. Do you have any other feedback on this letter?

Thanks. We are ready to move to the second part of the survey. For this part, we are going to do a different type of interview. I am going to be using a computer to ask you some questions. Many of the questions will sound the same as those you just answered on paper so please excuse some of the repetition.

Please remember to think aloud and answer the questions as if an interviewer had come to your home.
Ok, let us begin. Please remember to think aloud as you answer the questions.
First, I will ask you about the people in your household who may or may not participate in wildlife-associated activities. List all persons staying there and all persons who usually live there who are absent. Start with the name of the person (or one of the persons) who owns or rents the residence.

What is the name of the FIRST_NEXT person staying THERE_HERE? List all people, including:
- lodgers, boarders, or persons you employ who live THERE_HERE
- anyone who usually lives THERE_HERE, but is away at present or in a hospital

I have [COUNT] of household members listed as living her now. Did we miss anyone like babies or small children?

Is this your/ [NAME]’s usual place of residence?

How old are you/ is [NAME]?

What is your/ [NAME]’s sex?

What is your/ [NAME]’s relationship to [PERSON 1]?

Are you/ is [NAME] now married, widowed, divorced, separated, or never married?

Ask SCMSTAT, SCSCHOOL, and SCJOB for each person in household 16 years old and older.

What is the highest grade (or year) of regular school you have/Name has ever completed?

DO_DOES have a job or business? If SCJOB =no, then ask SCRETIRE.

Are you/ Is [NAME] retired, going to school, keeping house or doing something else?

Probe: What does “keeping house” mean to you in this question? How would you ask this question in your own words?
SCHISP Are you/ Is any person in this household six years or older of Spanish, Hispanic or Latino origin? Who?

SCRACE What is your/ [NAME]’s race?

SCEVHUNT Now I would like to ask you about [your hunting activities/ the hunting activities of household members six years old and older]. Have you/Has anyone in this household six years of age or older EVER hunted game or other wildlife?

SCHUNWHO Who would that be? Anyone else?

Probe: Tell me more about your/family member’s hunting.

SCHUNT96 Have you/ Has anyone in this household sixteen years of age or older done any hunting so far in 2014? If necessary: Who? Anyone else?

Probe: Can you tell me more about your answer?

If SCHUNT96= no for any household member, then go to SCHUNT95 for that household member. Else go to SCEVFISH.

SCHUNT95 If SCVEHUNT=yes and SCHUNT96=no then ask SCHUNT95
Did (you/ anyone in this household six years of age or older) hunt game or other wildlife last year, that is, during the period January 1 to December 31, 2013? If necessary: Who? Anyone else?

If SCHUNT95= no, then go to SCHU95FY.

SCHU95FY Was 2013 the first year that (you/anyone in this household six year of age or older/[name]) hunted?

SCH95DAY During 2013, did (you/anyone in this household sixteen year of age or older) hunt 10 or more days?

SCHUSPND During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for hunting, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?
SCHNTREC: What was the most recent year in which (you/[name]) hunted?

SCH96LIK: How likely is it that (you/[name]) will do any hunting during 2014; likely, unlikely, or neither?

Can you tell me more about your answer?

SCEVFISH: Now I would like to ask you about your fishing activities/the fishing activities of household members six years old or older. Have you/Has anyone in this household six years or age or older EVER done any recreational fishing, including shellfishing?

SCFSHWHO: Who would that be? Anyone else?

Probe: If yes, Can you tell me more about your fishing?

What does the phrase recreational fishing mean to you in this question?

SCFISH96: Have you/Has anyone in this household sixteen years of age or older done any fishing so far in 2014?

Probe: How did you come up with your answer?

SCFISH95: Did you/anyone in this household six years or age or older do any recreational fishing last year, that is, during the period January 1 to December 31, 2013?

If yes to SCEVFISH and no to SCFISH96 and no to SCFISH95 then go to SCFSHREC?

SCFI95FY: Was 2013 the first year that you/anyone in this household six years of age or older fished?

SCF95DAY: During 2013, did you/anyone in this household sixteen years of age or older fish 10 or more days?

Probe: How did you come up with your answer? Was it easy or difficult to remember how many days you fished?

SCFISPND: During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for fishing, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?
SCFSHREC: What was the most recent year in which (you/name) fished?

SCF96LIK: How likely is it that (you/[name]) will do any fishing during 2014; likely, unlikely, or neither?

Probe: How did you come up with your answer?

SCWILD96: Next, I would like to ask about SPECIAL INTEREST in wildlife in ways OTHER THAN hunting and fishing. We are interested in whether you closely observe, photograph, feed, or maintain natural areas or plantings for wildlife. Please do not include noticing wildlife while doing other activities.

By wildlife I mean birds, mammals, fish, insects, reptiles such as snakes and lizards, and amphibians such as frogs. DO NOT include farm animals and pets. Have you/Has anyone in this household 16 years of age or older taken any SPECIAL INTEREST in wildlife so far in 2014?

Probe: If yes, tell me more about your answer? How often do they observe/feed/photograph wildlife?

If no, can you give me an example of something that would fit in this category?

SCWILD95: Did (you/anyone in this household) take special interest in wildlife last year, that is, during the period January 1 to December 31, 2013? Do not include trips to zoos, circuses, aquariums, museums, or scouting for game.

Probe: If yes, can you tell me more about that?

SCW95DAY: During 2013, did you/anyone in this household sixteen years of age or older observe, photograph, or feed wildlife at least one mile from home for 21 or more days?

Probe: If yes, can you tell me more about that? Where did you/they observe, photograph or feed wildlife? For how long?

SCWWSPND: During 2013, did you/anyone in this household sixteen years of age or older spend $300 or more to observe, photograph, or feed wildlife at least one mile from home, that is, (you/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

SCW96LIK: How likely is it that YOU_NAME will take SPECIAL INTEREST in wildlife this year; likely, unlikely, or neither?

Probe: How did you come up with your answer?

SCINC: What was the total income of this household during 2013 before taxes and other deductions?
Debriefing Questions

7. Overall, did you find the questions easy or difficult to answer?

8. Were any of the questions sensitive? Do you think others might find them sensitive?

9. Is there anything you wanted to mention that you have not had a chance to talk about yet?

Thank the participant for their help.

How to shut down the computer: While in the instrument press F10. Answer the necessary questions until the window closes. This will allow you to go back through the instrument and gather any answers you may need.
Appendix K: Round 2 Paper Pre-screener Protocol


My name is ________ and I work for the Census Bureau. Thank you for agreeing to participate in our study.

What: In order to help us improve our surveys, we turn to people like you to find out if our questions make sense and are easy to understand and answer. We have found that the best way to do that is to actually conduct the survey with people and see how it works for them. You will be helping us test the National Survey of Fishing, Hunting and Wildlife-Associated Recreation.

How: Today we will be completing two different survey tasks. The first task is a short paper survey and the second is a survey where I will ask you questions with the help of a computer.

Think Aloud: I want you to answer the questions exactly the way you would if it were sent to your home, but with one major difference. I would like you to think aloud as you answer the questions. I am interested in your answers, but I am also interested in the process you go through in your mind when you answer the questions. I would like you to tell me everything that you are thinking and feeling as you go about answering each question.

Practice: Let’s do a practice question before we start: Please think aloud as you answer the question, how many windows are in your home?

Great that’s what I want you to do throughout our session. I will remind you to think aloud if you get quiet.

From time to time I’ll ask you some questions about your answers, or about the questions themselves. Remember, there are no right or wrong answers, because only you know what you are thinking.

Confidentiality: Our session today is completely confidential. Any names you provide will never be used in our reports. Your participation in this study is voluntary and you can decline to answer any particular question.

Consent: This is a consent form. It explains the purpose of today’s session and your rights as a participant. It also informs you that we would like to audio record the session to get an accurate record of your feedback. Only those of us connected with the project will review the tape and it will be used solely for research purposes. Your name will not be associated with the tape or any of the other data collected during the session.

[Hand consent form; give time to read and sign; sign own name and date, start recording.]

Thank you.

This is a short questionnaire that I will ask you to fill out in a moment. [Show participant Paper Pre-screener Questionnaire] I might interrupt to ask you questions at certain points. Please remember to think aloud and answer questions as you would if the survey had been sent to your home.
Instructions:

Step 4:
Q1: Probe any hesitation.

Q2: Tell me about the phone numbers you wrote down. Would you have given your phone number in a real situation? What do you think they will do with your phone number?

If participant writes the same number twice: Tell me more about your answer.

If necessary: Do you have more than one phone number that you use?

Step 5:
Q1:

Q2: Remind participant to think aloud. Probe any hesitation.

Tell me more about how you came up with the answers for this table.

Was it easy or difficult to fill it out?

Did you include yourself in the table?

Did you read the instructions? If no, as respondent to read instructions. Were the instructions clear?

Step 6:
Q1: If yes: Can you tell me more about that? OR What are you thinking about when answering yes to this question

If no: Can you give me an example of something that you think would qualify for this question?

If yes or no:

If yes or no:
If you were to rephrase this question in your own words, how would you ask this question?

Q2: If yes: Tell me more about your answer.

If yes or no:

If yes or no:
What does “maintained natural areas for the benefit of wildlife” mean to you in this question?

Q3: If yes: Can you tell me more about that?

If yes or no:
What does the term “recreationally” mean to you in this section?

Q4: If yes: How did you come up with your answer?

Q5: Remind respondent to think aloud. Probe any hesitation

Q6: If yes: How did you come up with your answer?

*Point to the instructions in Step 6:* Did you read these instructions? In your own words, can you tell me what the instructions are saying? What does the term recreational mean to you in this section?

Step 7:
Q1: If yes: Can you tell me more about that?

*Does anyone in your household shoot a BB gun? Did you include this in your answer?*

Q2: If yes: Can you tell me more about that?

I have a few questions before we move on to the next part of the test.

3. Did you think the questions were easy or difficult to answer?

4. If respondent has children: Have your children ever participated in archery activities in summer camp? Did you include that in your answer to the archery question?

This is the end of this portion of our testing. Thank you. Now we will move on to the second part of our interview. First, I will show you a letter and ask you to take a minute to read it. Then we will complete the second part of the survey.
Hand participant advance letter and allow time for participant to read.

Advance Letter Questions:
9. What is the letter asking you to do?
10. Is the letter easy or difficult to understand?
11. Did you notice the other side of the page? Give respondent a chance to read.
12. Do you have any other feedback on this letter?

Thanks. We are ready to move to the second part of the survey. For this part, we are going to do a different type of interview. I am going to be using a computer to ask you some questions. Many of the questions will sound the same as those you just answered on paper so please excuse some of the repetition.

Please remember to think aloud and answer the questions as if an interviewer had come to your home.
First, I will ask you about the people in your household who may or may not participate in wildlife-associated activities. List all persons staying there and all persons who usually live there who are absent. Start with the name of the person (or one of the persons) who owns or rents the residence.

What is the name of the FIRST_NEXT person staying THERE_HERE? List all people, including:
- lodgers, boarders, or persons you employ who live THERE_HERE
- anyone who usually lives THERE_HERE, but is away at present or in a hospital

I have [COUNT] of household members listed as living her now. Did we miss anyone like babies or small children?

Is this your/ [NAME]’s usual place of residence?

What is your/[NAME]’s age?

What is your/ [NAME]’s sex?

What is your/ [NAME]’s relationship to [PERSON 1]?

Loop back to SCURE and ask SCURE, SCAGE, SCSEX and SCRELATE for all members of household. Then go to SCMSTAT.

Are you/ is [NAME] now married, widowed, divorced, separated, or never married?

Ask SCMSTAT, SC SCHOOL, and SCJOB for each person in household 16 years old and older.

What is the highest grade (or year) of regular school you have/Name has ever completed?

DO DOES have a job or business? If SCJOB =no, then ask SCRETIRE.

Loop back to SCMSTAT and ask SCMSTAT, SC SCHOOL, and SCJOB for each person in household 16 years old and older.

Are you/ Is [NAME] retired, going to school, keeping house or doing something else?

Probe: What does “keeping house” mean to you in this question? How would you ask this question in your own words?

Are you/ Is any person in this household six years or older of Spanish, Hispanic or
Latino origin? Who?

**SCRACE**
What is your/ [NAME]’s race?

**SCEVHUNT**
Now I would like to ask you about [your hunting activities/ the hunting activities of household members six years old and older]. Have you/Has anyone in this household six years of age or older EVER hunted game or other wildlife?

**SCHUNWHO**
Who would that be? Anyone else?

Probe: Tell me more about your/family member’s hunting.

**SCHUNT96**
Have you/ Has anyone in this household sixteen years of age or older done any hunting so far in 2014? *If necessary: Who? Anyone else?*

Probe: Can you tell me more about your answer?

*If SCHUNT96= no for any household member, then go to SCHUNT95 for that household member. Else go to SCEVFISH.*

**SCHUNT95**
*If SCVEHUNT=yes and SCHUNT96=no then ask SCHUNT95*
Did (you/ anyone in this household six years of age or older) hunt game or other wildlife last year, that is, during the period January 1 to December 31, 2013? *If necessary: Who? Anyone else?*

*If SCHUNT95= no, then go to SCHU95FY.*

**SCHU95FY**
Was 2013 the first year that (you/anyone in this household six year of age or older/[name]) hunted?

**SCH95DAY**
During 2013, did (you/anyone in this household sixteen year of age or older) hunt 10 or more days?

**SCHUSPND**
During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for hunting, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

**SCHNTREC**
What was the most recent year in which (you/[name]) hunted?
SCH96LIK On a scale of 1 to 5, where 1 is “Very Unlikely” and 5 is “Very Likely,” how likely is it that [you/name] will do any hunting during 2016?

Can you tell me more about your answer?

SCEVFISH Now I would like to ask you about your fishing activities/the fishing activities of household members six years old or older. Have you/Has anyone in this household six years or age or older EVER done any recreational fishing, including shellfishing?

SCFSHWHO Who would that be? Anyone else?

Probe: If yes, Can you tell me more about your fishing?

What does the phrase recreational fishing mean to you in this question?

SCFISH96 Have you/Has anyone in this household sixteen years of age or older done any fishing so far in 2014?

Probe: How did you come up with your answer?

SCFISH95 Did you/anyone in this household six years or age or older do any recreational fishing last year, that is, during the period January 1 to December 31, 2013?

If yes to SCEVFISH and no to SCFISH96 and no to SCFISH95 then go to SCFSHREC?

SCFI95FY Was 2013 the first year that you/anyone in this household six years of age or older fished?

SCF95DAY During 2013, did you/anyone in this household sixteen years of age or older fish 10 or more days?

Probe: How did you come up with your answer? Was it easy or difficult to remember how many days you fished?

SCFISPND During 2013, did (you/anyone in this household sixteen years of age or older) spend $100 or more for fishing, that is, (your/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

SCFSHREC What was the most recent year in which (you/name) fished?
On a scale of 1 to 5, where 1 is “Very Unlikely” and 5 is “Very Likely,” how likely is it that [you/name] will do any fishing during 2016?

Probe: How did you come up with your answer?

Next, I would like to ask about SPECIAL INTEREST in wildlife in ways OTHER THAN hunting and fishing. We are interested in whether you closely observe, photograph, feed, or maintain natural areas or plantings for wildlife. Please do not include noticing wildlife while doing other activities.

By wildlife I mean birds, mammals, fish, insects, reptiles such as snakes and lizards, and amphibians such as frogs. DO NOT include farm animals and pets. Have you/Has anyone in this household 16 years of age or older taken any SPECIAL INTEREST in wildlife so far in 2014?

Probe: If yes, tell me more about your answer? How often do they observe/feed/photograph wildlife?
If no, can you give me an example of something that would fit in this category?

Did (you/anyone in this household) take special interest in wildlife last year, that is, during the period January 1 to December 31, 2013? Do not include trips to zoos, circuses, aquariums, museums, or scouting for game.

Probe: If yes, can you tell me more about that?

During 2013, did you/anyone in this household sixteen years of age or older observe, photograph, or feed wildlife at least one mile from home for 21 or more days?

Probe: If yes, can you tell me more about that? Where did you/they observe, photograph or feed wildlife? For how long?

During 2013, did you/anyone in this household sixteen years of age or older spend $300 or more to observe, photograph, or feed wildlife at least one mile from home, that is, (you/his/her) share of expenses (for equipment, travel, lodging, license fees, etc.)?

Probe: How did you come up with your answer? Was it easy or difficult to remember how much you spent?

On a scale of 1 to 5, where 1 is “Very Unlikely” and 5 is “Very Likely,” how likely is it that [you/name] will take a SPECIAL INTEREST in wildlife during 2016?

Probe: How did you come up with your answer?

What was the total income of this household during 2013 before taxes and other deductions?

After entering the answer for income, STOP. End the CATI portion of the interview and move to the debriefing questions.
Debriefing Questions

10. Overall, did you find the questions easy or difficult to answer?

11. Were any of the questions sensitive? Do you think others might find them sensitive?

12. Is there anything you wanted to mention that you have not had a chance to talk about yet?

Thank the participant for their help.

How to shut down the computer: While in the instrument press F10 or click on the tab that says FIN. Answer the necessary questions until the window closes. This will allow you to go back through the instrument and gather any answers you may need.