

REPORTS FROM FOCUS GROUPS FOR THE DEVELOPMENT OF THE CALIFORNIA RECREATIONAL GROUND FISH SURVEY

Qualitative testing objectives

To evaluate the content, clarity, and flow of draft versions of the survey instrument. Members of the general public who had participated in recreational groundfish fishing in California within the last two years were recruited to voluntarily participate in focus groups. The qualitative testing period for this data collection was from August through December 2012.

Qualitative testing provided National Marine Fisheries Service (NMFS) researchers with the following information:

- how information in the survey was understood and perceived;
- whether the list of groundfish target species was complete and relevant to recreational fishermen;
- to learn about which factors contribute to the enjoyment of a groundfish fishing trip;
- to learn how current groundfish regulations affected their fishing experience;
- to test the ability of participants to recall groundfish fishing trip expenses within the last 12 and 24 months;
- to test whether the expenditure table was complete based on their fishing experiences; and
- other elements of the survey instrument noted during focus group discussions and interviews.

The information collected as a result of these focus groups helped to shape iterations of the survey instrument over the course of the qualitative testing period. Specific objectives and lessons learned from each focus group are summarized and detailed below. The actual “raw” notes and results from these groups are available upon request.

Focus group overview

Focus group participants were recruited in each city by a focus group facility contracted by the NMFS. Generally, we had more male participants show up than female participants. This is likely due to the fact that the majority of sport fishermen are men. Also, it was more difficult to recruit recreational fishermen (anglers) versus members of the “general public.” Though each focus group facility was asked to recruit 12 possible participants for each focus group, we rarely had all 12 people show up on the day of the groups. In past experience with focus groups for other projects which had a broader focus on members of the general public, the rate of no-shows was higher for anglers than for the general public. Lastly, we also found that participants in our groups tended to be the more avid anglers. That is, recreational fishermen who went fishing more often. For our later focus groups (i.e., Los Angeles and our second set in San Francisco), we asked the focus group facilities to try to bring in more anglers with a broader range of fishing experience (e.g., those who fished less frequently).

Our requirements for all of our focus groups are listed below:

- Twelve individuals were recruited for each focus group to help ensure that at least nine participants showed up for each group.
 - Local area residents were recruited using random recruitment methods. The specific method was left to the discretion of the focus group facility.
 - A recruitment screener was provided to the contacted facility by NMFS researchers. Participation in recreational fishing in waters off of California within the last 24 months was the initial critical screening criterion. Other characteristics such as which fishing mode they used (private/rental boat, party/charter boat, jetty/pier/wharf, or beach/bank/shore), whether they targeted or caught groundfish, years of fishing experience, employment level, and gender were also used to screen participants. These characteristics were noted to ensure that each group consisted of a diverse group of participants. Over the course of the focus groups, the screener became more focused on rockfish or groundfish fishermen due to changes made in the survey instrument itself. Focus group screeners for each group are available upon request.
- The following requirements were followed for each group:
- No more than nine participants in each focus group
 - One moderator (NMFS researcher) per group
 - One to two observers (NMFS researchers) per group
 - Two focus groups were conducted in each city. Either one focus group per night over two nights was conducted, or two focus groups were conducted sequentially on one day or night.
 - Each group lasted approximately 1.5 hours.
 - All groups were audio recorded with the consent of participants.
 - Draft survey instruments and moderator guides are available upon request.

Focus groups, San Francisco, CA
8/22 – 8/23/12

What we did

San Francisco was the location of our first set of focus groups conducted by NMFS researchers. These groups were an opportunity to test the first drafts of the survey instrument. For each focus group, the survey instrument was broken up into three handouts. There was one moderator and two observers for the first group and one moderator and one observer for the second group. There were 8 participants in the first group and 9 participants in the second group. Conducting these groups over two nights allowed for feedback from the first group to be incorporated into the handouts for the second group. Fairly significant changes were made to the handouts between the first and second groups. Lastly, the majority of recreational fishermen (anglers) in California are men. As a result, there were no more than one female in each of our focus groups at each location throughout our qualitative testing period.

Handout A introduced the survey, the survey's sponsor (NOAA Fisheries Services) and defined the scope of the survey (recreational fishing in California, specifically groundfish fishing).

Questions related to general saltwater recreational fishing behavior in California were asked such as number of years of fishing experience, number of days spent fishing in 2012 and 2011, whether they owned a boat, fishing modes used (beach/bank, pier/jetty, party/charter boat, private/rental boat), and target species.

Handout B (first group) and Handout C (second group) were focused on rockfish fishing in California: which fishing modes they used to catch rockfish, why they targeted rockfish (e.g., they just like fishing, they prefer certain sizes), which species they prefer, how often they reach the limits set by current regulations, and why they might not keep rockfish (e.g., not their preferred size or species). These questions, their format, and the response categories were evaluated.

Handout C (first group) and Handout D (second group) were intended to learn about fishing depth preferences of rockfish fishermen (anglers) and whether they would choose to fish in deeper depths if they were open. Information about possible species and sizes that might be caught in different depth categories was provided so that respondents had some information about fishing potential in these areas. Also asked were questions about why anglers might choose to fish in deeper depths relative to increased time or cost to get to those fishing areas.

What we learned

Overall, we found that recreational fishermen (anglers) had specific preferences for different groundfish species. For example, lingcod was a popular target species because they were bigger fish and the meat was sweet. Other species like black and blue rockfishes were easier to clean and olive rockfish were bigger fish. These species preferences were of interest to us; changes were made to these survey handouts, prior to our next set of focus groups in San Diego, to help us gain more information about these preferences. For example, we changed the format of Table 1 in Handout C and D.

Also, anglers were sensitive to different regulations. For example, making changes to the current groundfish bag limit (10 fish) was not popular because it was perceived that this was already very low. Some participants had fished during times when the bag limit was higher (e.g., 20-25 fish). Changes to current season lengths were less controversial, though some anglers preferred longer seasons. Length of season depended on where they fished so fishing location mattered when season length was discussed. Regarding depth restrictions, the majority of anglers were not very interested in changes to current restrictions. This appeared to be due to lack of fishing experience in these deeper depths (i.e., before these depths were closed), distance to these fishing grounds (i.e., the time that it would take to travel to deeper depths), and the time it would take to reel up a fish from those deeper depths.

Other comments led to the addition of a fourth handout between the first and second groups. Handout B in the first group was focused on rockfish fishing experiences specifically whereas Handout B used for the second focus group was focused on recent saltwater fishing trips in general. Handout C in the second group was focused on rockfish fishing specifically, thus more similar to Handout B tested in the first group. This change was made because we learned in the first group that rockfish was not always the primary target species; anglers may be fishing for something else and happen to catch rockfish. These anglers were accommodated in the second

focus group and given an opportunity to provide feedback about saltwater fishing in general, even if they did not target rockfish.

Handout A asked respondents for information about their general saltwater fishing experiences in California waters. Participants in both groups agreed that estimating the number of days they fishing in 2011 and 2012 was “hard” and a shorter time frame would likely provide more accurate estimates. For subsequent focus groups, this question was modified to ask about fishing activity in the last 12 months. The variety of target species listed in Question A5 was modified for subsequent groups with the addition of several species suggested by anglers in San Francisco.

As mentioned, Handout B varied between the two focus groups. Handout B in the first group was similar to Handout C in the second group. These handouts were perceived as straightforward by participants in both groups. Question B4 regarding species preferences resulted in a lively discussion about various species that were sought after because they were “tasty”, “trophy fish”, or “good fighters”. It was clear that anglers had preferences and these preferences were not easy to generalize across all groundfish anglers. Question B6 sought to gain information about how often anglers were limited by existing regulations. In the first group, it was rare that groundfish regulations limited their fishing activities. Handout C in the second group similarly asked about their rockfish fishing experiences and contained an expanded table of current groundfish regulations (relative to Handout B used in the first group). That is, in addition to bag and sublimits, size limits and non-retention of specific species were also mentioned. Similar to the first group, there was a lively discussion about species preferences and species that had “good flavor” or were a certain color. Also similar to the first group, anglers mentioned that they were rarely limited by existing groundfish regulations.

Handout B used in the second group was created between the first and second group, thus not tested in the first group. This handout was developed because we found that though anglers caught rockfish species, these were not always the species initially targeted. Handout B in the second group sought to gain information about saltwater sport fishing in general (whether or not they targeted rockfish) before presenting them with questions about rockfish fishing specifically. Questions in this handout included the date of their most recent saltwater trip, fishing mode used, which species were targeted and where they fished, why they chose to fish at that location, and estimated costs of that fishing trip (e.g., travel costs, food, bait, etc). Several wording changes were suggested and incorporated (e.g., in Questions B5 and B6). In addition, we learned that some costs were more notable than others (e.g., launch fee, boat fuel, car fuel, party boat fees, and bait).

Handout C (first group) and Handout D (second group) were similar. These handouts sought to gain information about depth ranges that anglers currently fished at and whether there was interest in fishing in deeper waters that were currently closed to fishing. A table was provided that featured different depth ranges and the species and average sizes of those species that might be caught in those ranges. Generally, anglers were not very interested in fishing at deeper depths due to increased time to reach those fishing grounds and that “it is very hard to reel in a fish from 200-400 feet down.” A couple of anglers mentioned that they didn’t mind the closed areas because those areas helped contribute to sustainable fish populations. This idea – support for measures that helped to sustain fish populations – was added as a response category in the second group (Handout D, Question D3). However, many anglers indicated that they had never

fished in depths currently closed so they did not know how good or bad fishing would be in these areas. This was influential when answering questions about these depths. Other general comments were related to the “quality of fish” caught now versus in previous years. That is, the size of the fish are smaller. Some anglers did not seem to mind having a smaller bag limit if the fish they caught were bigger.

Focus groups, San Diego, CA 9/8/12

What we did

San Diego was the location of our second set of focus groups. These groups were an opportunity to test the changes we made since our groups in San Francisco. For each focus group, the survey instrument was broken up into five handouts: Sections A through E. There was one moderator and one observer per group. Each group was conducted sequentially on the same day. We had nine participants in each group. Handouts did not change between groups; however, the second group was focused on clarifying any issues that came out of the first group.

Section A was similar to Handout A in previous focus groups with questions such as years of saltwater fishing experience, whether they owned a boat, how many days fished in 2011 and 2012, the fishing mode they used and how often, and species targeted on those fishing trips. One additional question was added to this section which asked whether certain costs, such as travel cost or fishing gear, affected the number of trips they took in 2011 and 2012.

Section B was similar to Handout B in the second focus group in San Francisco. It asked questions about recent saltwater fishing experience in general: the date of the most recent fishing trip, what fishing mode they primarily used, which species they targeted, where they went, and why they chose that particular location.

In Section C, we were again interested in learning about their more specific fishing experience relative to rockfish. However, in this version of the survey, we changed the wording from “rockfish” to “groundfish” in order to encompass a larger range of target species. This section sought information about which modes they used to fish for groundfish, why they fish for groundfish, what types of groundfish they would choose to keep and why they would keep them.

Section D intended to elicit feedback about how often current regulations (bag limits, sublimits, size limits, and non-retention of particular species) affected their fishing experience. There were also questions about why they might not keep all the groundfish they keep (excluding regulatory limits), how often they keep all the groundfish they catch, and how their fishing experience is affected by having to release some of those groundfish. Lastly, questions were asked about current depth restrictions relative to the recreational management area they did most of their fishing in: what depths they typically fished in, what depths they might choose to fish in if they could, and why they had these particular depth preferences.

Finally, Section E was focused on groundfish trip preferences: what specific groups of groundfish they would like to catch and how many, and why they have these preferences. This question was structured as a conjoint/discrete choice question.

What we learned

Overall, we found the anglers in San Diego to be less experienced in fishing for rockfish (a subset of groundfish) than our anglers in San Francisco. However, they preferred the term, “bottomfish” rather than “groundfish”. The perception was that “groundfish” was more “academic” and not used as often. Generally, the suggestion was that whichever term we used, we needed to define it very clearly because the term might refer to different species depending on the experience level and preferences of the angler. Other terms we used but were unfamiliar to our participants included: boscos, CPFVs, and benthic. Also, our focus groups participants emphasized to us that the species variety in San Diego is different than in San Francisco. It was suggested that we have different surveys for different areas of California. This last suggestion, though a good one, will not be possible due to the difficulty in matching anglers by their residence to their fishing location. That is, anglers who live in southern CA may have spent their most recent groundfish fishing trip in northern CA, but we would not know this in advance of mailing them a survey. It was also suggested that we add pictures of each fish we were interested in because some anglers were not always sure what they were called but could likely recognize them.

For Section A, we again received feedback that the two year recall period for the number of days spent saltwater fishing, was too long and hard to remember with great accuracy. Regarding different fishing modes, it was mentioned that spearfishing and snorkeling were modes sometimes used by anglers but it was unclear which mode it might fit into in Question A4. We may want to explicitly mention spearfishing and snorkeling/diving in subsequent versions of the survey. For Question A5, additional target species caught in waters off of San Diego were mentioned by participants. These included corbina (a type of croaker), yellowtail jack, Humboldt squid, and “bait fishes” such as mackerels. In Question A6, it was suggested that a “boat maintenance/repair” and a “tips” category be added to the cost table. Lastly, a wording change for this question was suggested, from “Affected number of trips” to “Frequency of trips”.

In Section B, most of the feedback we received was related to wording changes, re-formatting and re-categorizing response categories in questions, and adding additional target species (similar to suggestions given in Question A5). For example, regarding fishing modes in Question B2, the difference between a “party” and “charter” boat was not clear to some anglers. In subsequent survey versions, we chose to combine these categories to alleviate any confusion. It was also mentioned to us that target species off of San Diego can be temperature dependent. That is, when sea surface temperatures are warmer (i.e., above 60 degrees), there are fewer types of fish available to catch. Target species in southern California seems to depend on the season, more so than in other parts of CA. Also as mentioned in the overview for these San Diego groups, the term “groundfish” was not a common term for most people. “Bottomfish” was suggested as an alternative. For Question B5 regarding why they chose their particular fishing location, some additional categories were suggested such as whether parking was available and free, the style or type of fishing (i.e., whether a new fishing technique was being used), checking into fish reports (such as “976 bite” or “fish dope”), and a location where they have had previous success. These additional categories were mentioned as factors that influenced their choice of fishing location on a given day.

It was emphasized several times the terminology used in Section C, whether groundfish or bottomfish, be defined clearly. That is, participants requested that we define which species are included (rockfish, lingcod, etc.) and are not included (halibut, sheephead, etc.). There was also a discussion in the second focus group about “top” and “bottom” fish; more reason to define these terms clearly. These suggestions were important ones and clarified in subsequent survey versions. Regarding what interests anglers about catching groundfish (Question C2), additional response categories were suggested such as catching a legal sized fish (which often meant they were bigger fish), whether there was a “freezer special” for a particular party boat trip, and whether or not an angler even ate groundfish. For Question C4, the species categories listed for this question seemed a bit problematic because they were not understood by anglers to encompass all the species they were interested in targeting and catching. Also, terminology such as “benthic” were not well understood (and unfortunately, not defined in the survey by us!). Additional target species such as barracuda and treefish were suggested. It was also suggested that we list the species individually rather than group them and provide pictures of each fish. For Question C5, additional categories such as “easy to catch” were suggested as reasons why they may prefer to keep particular types of groundfish.

In Section D where we asked anglers about how they are affected by existing groundfish regulations, we added size and non-retention of certain species for these San Diego groups. No one seemed to have a problem filling out the table (Question D1). Regarding the questions about depth preferences, for depths greater than 360 feet it was mentioned that they would have to travel to Mexican waters, an area not covered in this survey. Also similar to our San Francisco groups, many people were not familiar with fishing in areas currently closed; they did not know whether or not they would enjoy fishing in those deeper depths if they were open. Travel time and the time it would take to reel up fish from deeper depths were also mentioned.

In Section E and as noted above, we learned that “benthic” was not a word that anyone was familiar with. This should be changed to “fish that live on the bottom” or terminology more familiar to anglers. Also, the categories that defined target species as “bigger” or “smaller” seemed to bias some anglers toward the “bigger” groundfish category and against the “smaller” one. It was also noted that “rockfish” are also known as “rockcod”; the terms are synonymous for anglers. Also, these San Diego groups were the first ones where we formatted species preferences in a conjoint or discrete choice type format. The combination of the conjoint table format and the unfamiliar species categories we used (e.g., “smaller benthic”) created confusion for some anglers, making the table hard for some to interpret. Additionally, someone in our second focus group suggested that the instructions to the table should emphasize that these were “hypothetical trips.” Lastly, it was noted that the length of a trip for Trip A and Trip B was critical for determining how much they were willing to spend for that trip. For example, party boat trips vary in length (e.g., half day, three-quarters day, full day, “twilight”) and therefore cost. The instructions and questions related to this table did not specify trip length. These, as well as other issues mentioned in the above section, were considered and updated for our next set of focus groups in Los Angeles.

Focus groups, Los Angeles, CA
11/7/12

What we did

Los Angeles was the location for our third set of focus groups. For these groups we tested five sections, as well as two figures not tested in previous groups. The handouts were the same for both groups but the discussion in the second group was focused on aspects of the survey that we found problematic or particularly interesting in our first group. There were nine participants in our first group and eight participants in our second group. These groups were held sequentially on a Wednesday evening. There was one moderator and one observer for each group.

Section A for these focus groups was almost identical in format and questions with the previous groups. That is, it was focused on their general saltwater fishing experiences, particularly those in waters off of California. Changes included additional target species (Question A5) and more explicit cost categories (Question A6). This handout seemed to be pretty close to a final version. That is, very few if any questions or edits were suggested by our focus group participants.

Section B was also similar to the handouts shown in our Los Angeles groups with the exception of additional target species (Question B3) and reasons for choosing a particular fishing location (Question B5). This handout seemed to be pretty close to a final version as well. As in our previous groups, this handout was focused on their most recent saltwater sport fishing trip in waters off of California.

Similar to previous groups, Section C was focused the participants' experience fishing for "bottomfish" in waters off of California. This handout now contained only two questions: one about how often they fished in different fishing modes and the second on what interests them about catching "bottomfish". As in past groups, the "bottomfish" terminology was confusing because in the minds of some anglers, this term automatically included flatfishes such as halibut; species which we are not interested in learning about at this time. This term was changed for our last set of focus groups in San Francisco (described in more detail in the next section).

Section D was focused on current regulations related to bottomfish and how these regulations affected their fishing experience. Questions about depth preferences (Question D3 through D6) were again of interest to us.

Figures 1 and 2 were added to these Los Angeles focus groups. These handouts depicted pictures of six species of rockfish (Figure 1) and ten species of "bottomfish" (Figure 2). These pictures were depicted with their common names (e.g., bocaccio, ocean whitefish) as well as their average size, as summarized from existing catch data from our state agency partner, the California Department of Fish and Wildlife (CDFW). For each of these figures, each moderator had a list of three to four questions to generate discussion about whether participants recognized the species by name and/or by picture, whether the species were commonly caught, and which ones they preferred to catch and why.

Section E depicted the conjoint/discrete choice table first introduced in our Los Angeles groups. In addition, this handout built off of Figures 1 and 2 and specifically asked participants to substitute Species W through Z in the table (Question E2) with the species they preferred to catch from Figures 1 and 2. Using these self-reported, preferred target species, participants were then asked to choose between Trip A (some number of fish caught), Trip B (different number of

fish caught), and Option C (do something other than Trips A or B). In addition, a cost table (Question E1) was included in this handout to gain information on how much each participant spent on their last bottomfish fishing trip. They were asked to sum their costs in this table and apply it to the conjoint table in Question E2. This proved to be a challenging exercise, as will be described in more detail below.

What we learned

Overall, though “bottomfish” was a term more familiar to our participants than “groundfish” (as was found in our previous groups), they interpreted bottomfish to always include halibut and other species. These other species are not of interest to us for this survey so we will not use the “bottomfish” term in subsequent survey versions. Instead, we realized that we needed to better define which species are included when we refer to “groundfish”. Also as mentioned in our previous groups, anglers wanted pictures of the different species and appreciated the pictures we used in Figures 1 and 2. These types of pictures, with modifications, were incorporated into the handouts for our final set of focus groups (again in San Francisco) detailed in the next section.

Section A was generally straightforward for our Los Angeles focus group participants. However, as mentioned in all of our previous groups, having to remember the number of fishing days in 2011 (vs. 2012) was challenging. This was finally updated in our last set of focus groups in San Francisco, described in more detail below. A small change to Question A2 was suggested because we had one participant who formerly owned a boat and was unsure how to answer this question. We added the word, “currently” to clarify this. Other target species suggested for Question A5 included yellowtail (type of tuna) and sand dabs. For Question A6, it was suggested we explicitly mention beverages, tips, fish cleaning, and galley fees in our cost categories for this question. At least one participant mentioned that time rather than cost was more of a constraint on how frequently they went fishing. Also regarding these cost categories, one participant mentioned, and several agreed, that the cost of gasoline influenced how many times they went fishing and the location they fished at. This referred to either boat or car fuel.

Section B was fairly straightforward for these focus groups. Suggested changes included adding additional target species (Question B3) and additional response categories for why they chose the fishing location they did (Question B5). These additional response categories included ocean conditions such as tides and currents, the type of “structure” available on the beach, how much time they had to go fishing, whether there was a “special deal” available (e.g., senior discounts or kids fish free, etc.), and the current gasoline prices which would dictate how far they were willing to travel by car or by boat. These were suggestions easily incorporated in our subsequent handouts.

Similar to Section B, Section C was also fairly straightforward for our focus group participants. The discussion for this section focused on what target species they wrote into the “Other” response category in Question C2 and why they liked to catch those species (e.g., good size and taste). It was also mentioned during this discussion that during certain times of the year, rockfish were the only species that you could catch.

Some wording changes were suggested for Section D. Otherwise, this section also seemed fairly straightforward for these anglers. Specifically, the word “impacted” in the table in Question D1

was not preferred by several participants. Instead, wording such as “constrained” or simply rewording the question to, “How often have you reached these limits?” were suggested. Other than these suggestions, the discussion on this section focused on the fact that almost all anglers in these groups had not fished in the now closed depths. Only one angler mentioned having fished in “Cherry Bank” which had depths up to 650 feet. Thus, most anglers did not have experience or insight into whether fishing in deeper depths would yield larger fish, species they preferred, or would be enjoyable in general. These comments were similar to what we heard in our previous sets of focus groups.

Figures 1 and 2 generated a lot of discussion in both groups about these species as well as the many others we did not depict in these handouts. That is, there are many other species these anglers targeted and were therefore curious as to why those species were not included. We also received many questions about the average size information that was provided on the handouts. Many anglers said that the sizes looked very small relative to what they had experience with. Through this discussion, we realized that the average sizes might have been in kilograms rather than pounds; a mistake on our part. Also, information about common names used by anglers for various species was also gleaned from these discussions. For example, a flag rockfish is sometimes known as a “barber pole” and a gopher rockfish is sometimes known as “sugar bass”. Reasons as to why they preferred some species over others was also discussed.

Section E as formatted and worded proved to be fairly challenging for our focus group participants in both groups. Question E1 which asked participants to list and sum their costs from their most recent bottomfish trip was not too difficult. We received suggestions that we should emphasize that the table not include costs spent prior to that fishing trip. We also received suggestions to add “fishing cleaning”, “tips” (again), and “parking and boat launch” fees. Also, some participants mentioned that seeing their total cost from their most recent trip was a surprise. They did not realize they had spent so much. However, these same participants mentioned they would still go fishing regardless of these costs because they were “addicts”.

What did prove more difficult for this section was taking the sum from the cost table and translating it into the conjoint/discrete choice table in Question E2. Taking their favorite species from Figures 1 and 2 and translating them to the table in Question E2 was also challenging for some. The challenge was generally more concerned with how the instructions were worded. These instructions were not very clear. Once described verbally, these questions were not as difficult to these anglers. However, we found it challenging to word the instructions in a way that resonated with all participants. Some participants did understand the purpose of the table: to change the composition of their 10 fish limit to see which trip they preferred, relative to changes in trip cost. However, due to the diversity of groundfish species that are favored by different anglers, this type of table, question, and instruction format may not work successfully on a larger scale.

What we did

Our final set of focus groups for this project were conducted in San Francisco. We would have preferred to conduct a set of focus groups in northern California but no focus group facility could be located in that area. Additionally, we were told by our CDFW state agency partners that finding anglers in that less populated region of the state would be more challenging and require more time and expense. We had eight participants in each of these San Francisco focus groups. Each group had one moderator and one observer, and was held over two nights. This allowed time for making changes to the handouts if necessary. There were five handouts and two figures used in the first group, and a total of four handouts for the second group. The survey was shortened to four handouts due to length.

Section A for the first focus group was nearly identical to previous versions tested in the last two sets of groups. One main difference was that Question A2, regarding how many days spent saltwater fishing, was focused on 2012 only rather than 2011 and 2012. Additional target species for Question A5 (Q4 in the second group) were mentioned in both groups, particularly shellfish such as abalone, other invertebrates such as lobster, and other tunas in addition to albacore. In Question A6 (first group) regarding how costs affected the frequency of fishing trips, clarification for the cost category regarding time and time constraints was requested. For the second focus group, this question was removed due to the length of the survey overall.

Section B for the first focus group was very similar to previous versions. One change was the addition of a question about how long their most recent fishing trip was (Question B2). This was added due to concerns in our Los Angeles focus groups that the cost of a fishing trip was directly related to the length of that trip.

Additionally, Sections A and B tested in the first focus group were combined and into one section, Section A, for the second focus group. This new Section A for the second group was significantly shorter than tested previously, focused on saltwater sport fishing and the number of days spent in each mode. Questions regarding their most recent saltwater sport fishing trip were no longer asked due to length and the intent that this survey focus on groundfishing specifically.

Section B tested in our second focus group was focused on groundfish fishing experiences and was more similar to Section C tested in the first group. However, the format and composition of the questions tested in the first group were changed for the second group. For example, rather than identifying how frequently an angler fished in each fishing mode in 2012, they were asked to specify the number of days they spent fishing in those modes. Also, rather than ask anglers to list favorite and least favorite rockfish species and why they like to catch groundfish in general, they were asked to describe a typical groundfish trip in terms of trip length, location, and why they chose that location. In the final version of the survey (Attachment 1), the focus for this section was their most “recent” groundfish fishing trip rather than their “typical” trip. This was changed so that information would be collected for a randomly selected trip rather than one they might find more memorable or typical.

As mentioned in the previous paragraph, some elements and ideas from Section C tested in the first group were incorporated into Section B tested in the second group.

Section D tested in the first group and Section C tested in the second group were both focused on how groundfish regulations affected the fishing experience of anglers. Only change made for the second group was the addition of a question about what interests them about catching groundfish (Question C4 in the second group, taken from Question C2 in the first group).

Figures 1 and 2 tested in the first group were similar to the handouts tested in Los Angeles. Average weights of the different target species were updated to better reflect what sizes anglers may have experience with (a criticism when testing these handouts in Los Angeles). Anglers were asked whether they recognized these species by name or picture, and whether they were commonly caught or targeted.

Section D tested in the second group focused on costs incurred on their typical groundfish fishing trip (Question D1), species preferences and trade-offs between species (Question D2), and whether they would take the trip mentioned in the previous two questions given a change in cost (Question D3) or species composition (Question D4). This handout reflected feedback we heard in our first focus group as well as feedback from previous groups relative to the conjoint/discrete choice table tested in Section E (first focus group).

Section E tested only in the first group included questions about their most recent groundfish trip such as trip length (Question E1), a table for telling us about trip expenditures (Question E2), a conjoint/discrete choice table to elicit species trade-offs relative to different trip costs (Questions E3 and E4), and why they chose the trip they did (Questions E5 through E7). Only the first two questions were retained for our second focus group.

What we learned

Overall, we learned that the conjoint/discrete choice table was not going to work for this survey due to the large number of desirable groundfish species that anglers' target. Instead, we reformatted some of the survey questions to elicit feedback about a wider range of species rather than limiting them to only three or four, as was the case in the conjoint table. In addition, the most recent version of the survey (tested in the second focus group) was much more groundfish-focused. We removed some of the broader, saltwater fishing questions to reduce the survey's length and to get the respondent thinking about groundfish earlier in the survey. In general, we were confident with Sections A through C after this last set of focus groups. The last section, Section D, seemed more understandable than previous versions of the survey but would require some wording changes to ensure that it was understandable to a wider range of respondents.

Also, the version of the survey we tested in our first group took participants a maximum of 33 minutes to complete. This was more than we would prefer; our goal was to develop a survey that could be completed within 25 minutes on average. Changes to Section E and the conjoint/discrete choice table in particular would need to be made prior to the second group. Specifically, the handouts for the second group did not include a conjoint table. Instead, we focused on having anglers identify their species preferences given two different bag limits (10 versus 7 fish per bag per day). This version of the survey took participants a maximum of 24 minutes to complete. This was preferable given our 25 minute per survey goal.

Sections A and B tested in the first focus group (comprised of seven and six questions, respectively) were shortened and combined into one Section A for the second group (comprised of four questions). These handouts were focused on saltwater fishing in general. We determined that we were overemphasizing general saltwater fishing experience at the expense of more groundfish-focused questions.

Section C in the first group and Section B in the second group were similar in their focus on groundfish fishing experiences. Relative to the handout tested in the first group, less emphasis was made on specific species in the handout tested in the second group. This change was made because more species-specific questions were tested in the handout in the second group.

Section D in the first group and Section C in the second group were similar in their focus on groundfish regulations and their effect on anglers. The handouts tested in each group were nearly identical and our participants did not seem to have difficulty understanding and responding to these questions.

Figures 1 and 2 and Section E tested in the first group, helped to inform and frame Section D tested in the second group. As in our Los Angeles groups, taking the sum of their expenditures (Question E2) and translating it over to the conjoint table (Questions E3 through E5), as well as understanding and responding to the conjoint table, was difficult for participants. This format did not seem to work well so for the second group, we opted to test a more straightforward, multi-species table where anglers could pick and choose which species they preferred given different total bag limits (10 and 7 fish bag limits). This allowed us to see which species they were choosing between while providing a table format that was more easily read and understood.