

STELLER SEA LION STUDY Summary of Survey Results

Thank you for participating in our 2007 mail survey entitled "The Future of Steller Sea Lions: What is your Opinion?" Public input is an important source of information for the National Oceanic and Atmospheric Administration, a U.S. government agency charged with managing Steller sea lion protection activities. Nationwide, of the randomly-selected households requested to participate, about 60% returned a completed survey (2,458 households), and in a special sample of randomly-selected Alaska households, about 70% returned a completed survey (486 households). The high response rate achieved with your assistance will help assure the validity of the public input received.

Below are results for selected questions from the survey. How these results may be used by resource managers, and decisions about additional efforts, if any, to protect Steller sea lions may take several years. If you wish to learn more about Steller sea lions, programs to protect them, and ongoing decision making, the following website may be useful: http://stellersealions.noaa.gov/.

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Summary of Survey Results

The majority of Steller sea lions live off the coast of Alaska, and the protection measures put in place to protect them affect Alaska commercial fishing and communities more directly than the rest of the U.S. As a result, we distinguish the survey results for the sample of Alaska households and the sample of households from the rest of U.S.

In general, Alaskan households and other U.S. households had similar attitudes toward the Endangered Species Act and the importance of protecting threatened and endangered species. Both samples generally have a positive view of the Endangered Species Act (Figure 1) and tend to feel it is important to protect threatened and endangered species (Figure 2).

Figure 1. When you think of the Endangered Species Act, how positive or negative is your general reaction?

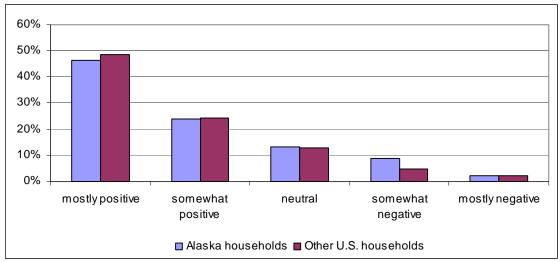
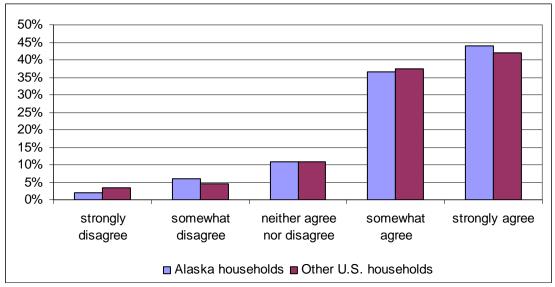


Figure 2. How much do you agree or disagree with the statement, "Protecting threatened and endangered species is important to me"?



There is a wide range of opinions about the relative importance of protecting jobs versus threatened and endangered species protection. (Figure 3).

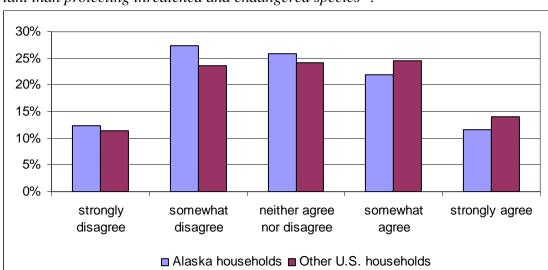


Figure 3. How much do you agree or disagree with the statement, "Protecting jobs is more important than protecting threatened and endangered species"?

Alaskans tended to be more knowledgeable and experienced with Steller sea lions, with about 92% of Alaskan households indicating they had seen, heard, or read about them compared with about 40% of other U.S. households.

The survey describes the two stocks of Steller sea lions in the U.S., the Eastern stock and Western stock, and the population trends of each.

- The Eastern stock is currently listed as *threatened* under the Endangered Species Act, and its population has been slightly increasing for a number of years.
- The Western stock is listed as *endangered*. Until recently, the Western stock population has been declining.

Survey respondents are asked to indicate how concerned they are about the Western stock and about the Eastern stock. Over 40% of respondents in each sample (44% of Alaska respondents and 41% of other U.S. respondents) indicated they are "very concerned" or "extremely concerned" about the Western stock. In contrast, the proportion of respondents in each sample that is "very concerned" or "extremely concerned" about the Eastern stock is lower (23% of Alaska respondents and 25% of other U.S. respondents).

The survey also presents information and asks the respondents how concerned they are about possible costs of additional protection, including the possibility of commercial fishing jobs being lost and higher prices for seafood that may result as the fishing industry adjusts to commercial fishing restrictions that may occur as part of measures to protect Steller sea lions. Most respondents in each sample either indicated they were "a little concerned" or "somewhat concerned" (63% of Alaska respondents and 70% of other U.S. respondents). A higher proportion of Alaskans were "very concerned" or "extremely concerned" (22%) compared to non-Alaskans (16%). With respect to concern about the possibility of higher seafood prices, the

most frequently selected response in each sample was "not at all concerned" (36% of Alaskan respondents and 33% of other U.S. respondents). About 17% of Alaskan respondents and 15% of other U.S. respondents were "very concerned" or "extremely concerned" about higher seafood prices that may result from additional Steller sea lion protection.

To gauge respondents' preferences for the need for further protection actions, respondents were asked the extent to which they agreed or disagreed with two statements:

- 1. "Even if it costs us more money, we should do more so the Western stock is no longer endangered." Over 60% of respondents in each sample indicated they "strongly agree" or "somewhat agree" with this statement (62% of Alaska respondents and 61% of other U.S. respondents), indicating the majority of each sample believe more should be spent to ensure the Western stock is no longer endangered.
- 2. "So long as the Eastern stock recovers, it doesn't matter to me if the Western stock remains endangered." A similarly large proportion of respondents in each sample indicated they "strongly disagree" or "somewhat disagree" with this (74% of Alaska respondents and 67% of other U.S. respondents), suggesting the majority of respondents feel protecting the Western stock is independent of how the Eastern stock is doing.

Respondents were asked several questions (Q10, Q12, and Q13) that each presented three alternatives for future additional actions and costs to protect Steller sea lions (Alternatives A, B, and C), from which a Most Preferred and Least Preferred alternative was selected. Alternative A keeps the current programs and does not increase costs to each household. Alternatives B and C would do more to protect Steller sea lions than the current protection program, but would also cost more for each household. Responses to these questions help identify preferences across a range of actions that can be taken to improve Steller sea lions' Endangered Species Act population status (Endangered, Threatened, or Recovered) and population sizes at different costs. The questions also help us understand how much U.S. households are willing to pay (WTP) to undertake additional protection efforts.

An indication that a respondent has a positive WTP (or value) for additional Steller sea lion protection is when Alternative B or C is selected by the respondent. Conversely, a sign that respondents may not be willing to pay more for additional protection measures occurred when the respondent always chooses Alternative A, the alternative that represents the current protection program. The percent of respondents who always chose Alternative A, thus indicating they would not be willing to pay the stated amounts for additional protection, is 26.8% for Alaska respondents and 25.8% for other U.S. respondents, though some percentage of these individuals may be willing to pay some positive amount for additional protection, but just not for the specific alternatives they were confronted with in the survey. Additional detailed statistical analysis of these data is in progress to more precisely reveal the value of providing additional Steller sea lion protection actions. Those results are expected to be released on this web site later in 2008.

After answering the choice questions concerning actions to protect Steller sea lions and costs to households, respondents were asked to indicate the level of confidence they felt towards the

answers they provided to these questions. While these types of questions can be difficult, people generally felt their responses should be considered in decision making, with less than 5% of respondents indicating they were not at all confident in their responses (Figure 6).

Figure 6. How confident are you that your answers in Q10, Q12, and Q13 accurately reflect how you feel about the alternatives for protecting Steller sea lions?

