SUPPORTING STATEMENT HAWAIIAN MONK SEAL: PUBLIC KNOWLEDGE AND OPINION SURVEY OMB CONTROL NO. 0648-XXXX

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

The potential respondent universe for the tourist/local resident intercept surveys is all local residents and tourists in the five MHI where the surveys will be administered. The vast majority of residents and tourists live on or visit these five islands. According to the U.S. Census Bureau, the estimated population of Hawai'i in 2008 was 1,288,198. Tourism is Hawai'i's largest industry. According to the State of Hawai'i Department of Business, Economic Development and Tourism (DBEDT), an estimated 6.8 million visitors came to Hawai'i in 2008. Therefore the total potential universe for the tourist/local residents intercept survey is estimated to be just above 2.4 million people (1.2 million residents plus 9 weeks/52 weeks of tourists or 1.2 million). The potential respondent universe for the commercial tour boat operators' survey is all commercial passenger vessels that operate as tour boats in the five MHI where the surveys will be administered. According to the U.S. Coast Guard, Honolulu Vessel Inspections there are 689 commercial passenger tour boats that operate in the five islands. The potential respondent universe for the lodging operator survey includes all operators of commercial lodging facilities that have front desk services. According to the State of Hawai'i DBEDT in 2008, there were 532 bed & breakfasts, hotels, hostels and condominium hotels in the five MHI where the surveys will be administered.

Respondents for surveys will be randomly selected from target audiences. Potential respondents for intercept surveys include tourists and local residents at area beaches, fisher people, patrons of commercial boat tours and others at local marinas. Respondents for the mail surveys will be randomly selected from commercial boat tour and lodging operators in the MHI.

The survey will be conducted over a nine week period. The tourist/local resident intercept survey will be stratified by time of day (morning and afternoon), day of the week (weekday and weekend) and location in order to capture a variety of different visitors (tourists and locals) that are in a selected location for different purposes (swimming, surfing, spear fishing, snorkeling, lounging, etc.). The commercial boat tour and lodging operators' mail survey will each be stratified by the location within Hawai'i (which of the five MHI islands) and for islands with more than one harbor, the location on that island.

Table 2 tabulates the anticipated aggregate number of completed intercept surveys, based on an anticipated response rate of 80%. Table 3 tabulates the anticipated number of completed mail surveys based on an anticipated response rate of 80%.

Table 2: Intercept Surveys for Tourists/Local Residents and Anticipated Number of Completion

Approximate Number of		
Tourists/ Local Residents		Number of Surveys That
Approached	Anticipated Response Rate	Would Be Completed
525	80%	420

Table 3: Mail Surveys for Commercial Boat Tours and Lodging Operators and Anticipated Number of Completion

Approximate Number of Commercial Boat Tour		
Captains and Lodging		Number of Surveys That
Operators Approached	Anticipated Response Rate	Would Be Completed
100	80%	80

The survey is intended to be used as a research tool to gather information regarding opinions and behaviors and although statistical information is important it is not imperative that results are quantified with a certain confidence interval or significance. It is not imperative to rank opinions in terms of prevalence, only to determine which ones are prevalent. Descriptive statistics will be used to develop the analysis necessary to interpret the results in a manner that may be translated into developing effective messages for education and outreach campaigns, guiding management strategies for dealing with human seal interactions and indicating audiences to which efforts should be targeted.

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

The data collection for tourists and local residents will occur as an in-person survey provided by the survey administrator using the intercept method. This data collection effort will occur at beaches and popular fishing areas near known monk seal haul out, pupping, and molting locations, at marinas and local fishing tournaments. Participants will be randomly selected. After the completion of each survey, the administrator will notify the nth passerby that the individual has been randomly selected and ask if the individual would be able to complete a survey in writing. Individuals declining will be asked if they are willing to take a couple of minutes to answer "just a few questions" about monk seals. If the potential respondent still declines, the next individual to pass by will be asked. The survey administrators will be available to explain the survey, answer questions, and either collect the written survey upon completion, administer the short interview survey or provide a prepaid postage return envelope if the respondent is unable to complete the survey until a later time.

The primary goal is to obtain a general assessment of the level of knowledge and the opinions that visitors and residents have of issues related to monk seals in the wild, therefore we do not need a high degree of accuracy in terms of targeting the respondents or with a large sample size. The intercept survey will be stratified by the time of day, day of the week and location. However, we will not attempt to stratify sampling based on respondent characteristics. Summary statistics

and information (mainly frequencies/percentages of individual responses to particular questions and mean/medians) will be calculated for survey responses.

The data collection for commercial boat tour and lodging operators will be distributed by mail to those businesses operating in areas of known monk seal activity. The primary goal is to obtain a general assessment of knowledge and the opinions of the operators as well as determine what amount and type of information operators are conveying to clients; therefore we do not need a high degree of accuracy in terms of targeting the respondents, or a large sample size. A list of commercial boat tour operators conducting tours on the five MHI targeted will be compiled, stratified according to which island they operate on, the location on that island and then sorted alphabetically by name. The nth (e.g. 5th, 10th) name off of the list will be selected for the survey to be mailed to. The same procedure will be followed for lodging operators. Summary statistics and information (mainly frequencies/percentages of individual responses to particular questions and mean/medians) will be calculated for survey responses.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

Each of the survey instruments as well as the survey implementation incorporates various elements to help maximize response rates. The surveys are user-friendly, with clear, easy to comprehend questions. The survey topic and related questions were developed so as to be interesting to respondents. Each survey makes ample use of listing options to allow the respondent to answer by checking the appropriate boxes, which may aid in recall and analysis. In addition, an in-person survey should increase the response rate over other methods that may have been used. ¹

A variety of techniques has been incorporated into this study to maximize response rates. For those randomly selected individuals who are unable to complete the intercept survey at the time, but who are willing to be surveyed, and those receiving the survey by mail, a postage paid preaddressed return envelope will be provided. Each questionnaire is short enough to complete in 15 minutes or less.

Intercept surveys will be conducted near the entrance point of locations. Participants will not be required to stand at the entrance points to the chosen areas but rather will be allowed to go to a comfortable area to sit and complete the survey, which will later be collected by one of the survey administrators. Participants will be given the opportunity to receive and/or return the survey by mail if they are unable to complete it onsite. Participants will have a choice to take a copy of the survey with them or have one mailed to their home. All participants choosing this method will be provided with a pre-addressed stamped envelope. Potential respondents who decline to take the written survey will be asked if they are willing to answer "just a few questions" in a one-on-one interview. In order to increase response, gain cooperation of the tour operators and not to interfere with the limited time of paid tours, clients of commercial tours will be asked to participate only after the tour has been completed.

¹ Dillman, Don A, Jolene Smyth and Leah Christian. (2009) Internet, Mail and Mixed-Mode Surveys: The Tailored Design Method. New York: John Wiley & Sons.

The implementation of the mailed surveys is based on the Dillman Tailored Design Method (2009), which consists of multiple contacts. The initial mailing will include the questionnaire, a pre-addressed stamped envelope and a detailed cover letter. The cover letter will explain the project, why a response is important, a statement indicating that all personal information will be kept confidential, and instructions for completing and returning the survey (via mail/fax/email). Addresses on envelopes will be handwritten, and colored envelopes will be used to make them stand out. Surveys will be tracked using individual identification numbers. A follow-up thank you postcard will be sent seven to nine days after the questionnaire. The postcard will express appreciation for participating and will indicate that if the completed questionnaire has not yet been mailed, it is hoped that it will be returned soon. A second mailing will be sent to all who have not returned the survey to date at three weeks after the initial mailing. This follow up will consist of a different cover letter, another copy of the questionnaire, and a pre-addressed stamped envelope.

Since the information collection is being conducted to research prevalent knowledge and opinions for developing education and outreach tools and not to make strict statistical inferences, it is not necessary for the correction for bias to have a high degree of accuracy. To gain some understanding of possible bias, and determine if persons who responded to the complete survey differ substantially for those who did not: individuals, if willing, will be given a shorter intercept survey and commercial respondents will be sent a pre-addressed stamped postcard with a few questions to answer. The questions are taken directly from the full surveys and include both demographic characteristics and opinions.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

Development of the survey instrument and methods of collection included internal reviews by NMFS employees. Fewer than seven people were administered the survey instrument over the course of development in order to determine both the amount of time necessary to complete the survey and if the questions are presented in an easy to understand manner. There were no formal focus groups held as a part of the development of this information collection.

Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

The following individuals were consulted on the statistical aspect of the survey design:

Dr. Stewart Allen NMFS Pacific Islands Fisheries Science Center Honolulu, HI (808) 944-2186 Michelle Roberts Natural Resource Management Specialist Sustainable Resources Group Intn'l, Inc. Kailua, HI. (808) 356-0552

The following individuals will analyze the information for the agency:

Kristin Duin Principal Sustainable Resources Group Intn'l, Inc. Kailua, HI. (808) 356-0552

Michelle Roberts Natural Resource Management Specialist Sustainable Resources Group Intn'l, Inc. Kailua, HI. (808) 356-0552