REQUEST FOR PROPOSALS

MONTEREY BAY NATIONAL MARINE SANCTUARY
SANCTUARY INTEGRATED MONITORING NETWORK (SIMON)
December 1, 2004

TO: Scientific Community and Interested Parties

SUBJECT: Request for pre-proposals to monitor the dynamics of critical prey species within the Monterey Bay National Marine Sanctuary (RFP-04-01)

With support from the Packard Foundation, and in collaboration with the Monterey Bay Sanctuary Foundation, the Sanctuary Integrated Monitoring Network (SIMoN) will fund research to monitor the dynamics of the following critical prey species within the Monterey Bay National Marine Sanctuary (MBNMS): krill, squid, jellies, sardines, anchovies, or juvenile rockfishes.

Characterizations and monitoring of specific habitats and their associated flora and fauna is crucial for effective management, but commonly do not include organisms that are transient in space or time. Therefore, SIMoN will focus on critical living marine resources that are not being monitored by existing programs. Understanding the population dynamics of the groups of species listed above is particularly important for managing the Sanctuary.

While several studies examine or monitor local primary production, some grazers (e.g., euphausiids or krill) and large top predators such as marine mammals, less attention has been given to a critical trophic level – prey species. Various species of herbivores and carnivores are critical intermediate links in the energy flow through food chains and webs and in some cases can regulate the abundance of primary producers and higher predators.

Although taxonomically diverse, dense populations of animals such as krill, squid, jellies, sardines, anchovies, and juvenile rockfishes (*Sebastes* spp.) play a similar key role in the health and vitality of local marine ecosystems and commercial fisheries. For example, krill form a critical trophic link in coastal upwelling systems between primary production and higher consumers, they are the primary prey of 7 of the 10 most important nearshore commercial fishes, and they generally make up over 90% of the diet of endangered blue and fin whales. Similarly, squid, jellies, sardines, anchovies, and juvenile rockfishes are crucial food items for several marine predators and three species support commercially important fisheries.

The Sanctuary Integrated Monitoring Network (SIMoN) through the Monterey Bay Sanctuary Foundation will fund a contract to examine the spatial and temporal distribution of krill (the various common species), market squid (*Loligo opalescens*), Pacific sardines (*Sardinops sagax*), northern anchovies (*Engraulis mordax*), or juvenile rockfishes throughout the Sanctuary. It is also requested that known or potential impacts of human activities on these key prey be discussed.

Pre-proposals (up to 3 pages) describing the intended research must be **received** at the SIMoN office by **5:00 PM January 7, 2005**. Each pre-proposal must contain:

(1) A clear statement on the type of work to be performed (including acoustic equipment specifications, mapping methods, and boating requirements)
(2) A statement describing how the proposed work will be integrated with other ongoing efforts and how it will integrate historic data sets
(3) A list of products, including materials for the SIMoN website www.mbnms-simon.org
(4) A brief description of the qualifications of all primary investigators and level of student involvement
(5) A budget outline.

SIMoN recognizes that different strategies and approaches can be used to address the identified goals. Pre-proposal reviewers will be open to any and all sound scientific approaches that will lead to successful completion of the tasks. Experienced professionals (or graduate students under the direction of a qualified researcher with experience in similar studies) are expected to lead the study. Cross-disciplinary collaborations among several research groups with varying expertise and linkages with other regional research and monitoring programs are encouraged.

Work products to be provided in a timely manner may include, but are not limited to: descriptions of materials and methods; maps; data files; statistical summaries; literature reviews; periodic progress reports; and a comprehensive final report. This information will be integrated and disseminated through the SIMoN program for a broader ecosystem understanding of the MBNMS. It is also expected that results from this work will be published in a peer-reviewed journal.

MBNMS staff will evaluate all pre-proposals to determine if the objectives outlined in the RFP are met. Investigators whose pre-proposals meet these criteria will be notified by January 21, 2005 and asked to submit full proposals describing the details of their work by March 4, 2005.

Full proposals will first be sent out for a thorough and objective review to scientists who are experts in the particular fields represented in the proposal. External reviewers will be asked to score the proposed activities based on scientific merit, feasibility and broader impacts of the work. MBNMS staff and the SIMoN Science Committee will then evaluate proposals and external reviews for the ability of each proposal to provide the specific information needed for resource management decisions and a broad, long-term understanding of the Sanctuary. Authors of the successful proposal will be notified by May 6, 2004. Prior to the start of work, SIMoN staff will negotiate specific terms of the contract, including summary data of work in progress and similar materials that will be quickly disseminated by SIMoN and MBNMS staff.

Expected Level of Funding

The Monterey Bay Sanctuary Foundation anticipates funding for this project in the range of $175,000 over a 1-3 year period to complete the work. Full proposals will be asked to provide detailed budgeting information including a proposed quarterly payment schedule. A maximum of fifteen-percent (15%) of project funds may be used for institutional overhead and fees.

Submit pre-proposals electronically as Microsoft Word (preferred) or Adobe PDF files. Print copies are also acceptable. Questions and the pre-proposal should be directed to:

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Monterey Bay National Marine Sanctuary

The Monterey Bay National Marine Sanctuary (MBNMS) is the nation's largest marine sanctuary, encompassing over 5,300 square miles of coastal waters off central California. Created in 1992, and managed by the National Oceanic and Atmospheric Administration (NOAA), the mission of the MBNMS is to understand and protect the coastal ecosystem and submerged cultural resources stretching from the Marin Headlands north of San Francisco to Cambria in San Luis Obispo County.

Sanctuary Integrated Monitoring Network

The Sanctuary Integrated Monitoring Network (SIMoN) has been developed by the MBNMS, in partnership with the regional science and management communities, to better understand the local marine environment and to identify and track natural and human-induced changes to resources and processes within the Sanctuary. The SIMoN program utilizes existing data sets, supports and augments current research/monitoring efforts, and initiates new efforts to address important gaps in our knowledge. SIMoN also serves as a hub to integrate and disseminate regional monitoring information.

Monterey Bay Sanctuary Foundation

The Monterey Bay Sanctuary Foundation (MBSF) is an independent nonprofit organization established to advance the understanding and protection of the Monterey Bay National Marine Sanctuary. Founded in 1995, the organization performs two roles: provide fiscal sponsorship and management services to augment Federal activities; and generate funds for MBNMS related projects. The Foundation is organized to solicit and administer grants, donations and other revenues in support of Sanctuary programs. The MBSF is operating under an agreement with the Sanctuary to manage the SIMoN program and will administer funds that are designated for new monitoring efforts. Successful SIMoN proposals will therefore enter into a contract with the MBSF to conduct the monitoring work required.