Channel Islands National Marine Sanctuary Protected Species

Management Issue

Certain species found in the Channel Islands National Marine Sanctuary (CINMS or Sanctuary) are protected under laws in addition to the National Marine Sanctuaries Act (NMSA). Mandates in these laws call for enhanced protection, restoration and recovery efforts from multiple agencies. These efforts need to be coordinated, prioritized and have their effectiveness verified.

Description

In accordance with the NMSA and federal wildlife conservation laws such as the Endangered Species Act, Marine Mammal Protection Act, and Migratory Bird Treaty Act, the CINMS assists in determining the status and trends of protected species within the Sanctuary, and in population recovery



Nesting Xantus's murrelet (Synthliboramphus hypoleucus. Photo Credit: Darrell Whitworth

efforts. While this status and trends monitoring is important, there is less coordinated effectiveness monitoring of the collection of restoration actions within the Sanctuary. The CINMS is currently assisting with a variety of studies initiated by partners addressing large cetaceans, white abalone, and several seabirds (Cassin's auklet, Xantus's murrelet, Ashy Storm-petrels). A collaborative needs assessment should be conducted with a focus on developing a prioritized list of studies and restoration activities needed within Sanctuary waters.

Questions and Information Needs

- 1) What is the abundance, distribution, and status of populations of seabirds, marine mammals, and other endangered or sensitive species in the Sanctuary?
- 2) What threats, natural and anthropogenic, do these species face?
- 3) Could restoration activities help recovery of these species?
- 4) What restoration activities would be most effective?
- 5) What restoration projects have been deployed in the sanctuary in the last 15 years? And which are most effective?
- 6) How are patterns of habitat use by large whales related to patterns of primary and secondary productivity?
- 7) Are there predictive relationships that relate monitored water conditions to whale distribution on a scale that can mitigate whale ship interactions?
- 8) How does the acoustic environment affect whale behavior and ecology?

Scientific Approach and Actions

- Seek long term stability for monitoring of seabird habitats
- Field surveys for seabirds and marine mammals
- SCUBA surveys for sensitive marine species such as abalone
- Pilot restoration efforts such as enhanced nesting habitat
- Inventory restoration actions
- Analyze potential restoration activities such as predator removal and native vegetation enhancement
- Perform effectiveness monitoring of management actions to reduce large whale mortality with ongoing research on Blue Whale movement within the Sanctuary
- Coordinate with physical oceanography and remote sense research programs at the University of California Santa Barbara (UCSB)
- Analysis spatial and temporal data on whale locations and behavior with physical conditions to understand factors that influence distribution

Key Partners and Information Sources

Channel Islands National Park, California Institute of Environmental Studies, Carter Biological Consulting, US Geologic Survey, UC Santa Barbara, National Marine Fisheries Service, UC San Diego, White Abalone Recovery Team, Cascadia Research Group, US Fish and Wildlife Service

Management Support Products

- Data and reports on populations status and trends of selected species
- Maps of suitable habitat and targeted areas for restoration
- Cost/benefit analysis of restoration efforts
- Data on factors that influence distribution of whales
- A predictive model for whale distribution

Planned Use of Products and Actions

- Inform stakeholders of species' status
- Focus research and resource protection efforts on critical habitats, sites, and species
- Incorporate information into adaptive management
- Collaborate with partners on restoration activities and recovery planning
- Coordinate management response with Coast Guard, potentially request Notice to Mariners for cargo ships to slow down in Santa Barbara Channel



Fin whale on the bow of a ship in Long Beach harbor. Photo credit: Long Beach Press-Telegram

- Educate the public about the threats to whales from large vessels
- Inform long term management planning for large whales in the sanctuary

Program References

CINMS Management Plan

- Management Plan Conservation Science Action Plan CS.3

CINMS Condition Report

- What is the status of key species and how is it changing?
- What is the condition or health of key species and how is it changing?
- What are the levels of human activities that may influence living resource quality and how are they changing?

ONMS Performance Measures

 Number of sites in which living marine resources, based on long-term monitoring data, are being maintained or improved