

PACIFIC ISLANDS REGIONAL PRIORITIES

Pacific Region Supports Interns in Marine Conservation Fields

The Pacific Islands Region is collaborating with partners to facilitate student interns working at regional sites. The University of Hawai'i's Institute of Marine Biology has begun collaboration on a new fellowship program that supports master's-level marine science students for two semesters. The students will work at a regional site and complete a two-month internship in a NOAA office in Washington, D.C. In addition, two graduate students in the NOAA Office of Education's Graduate Sciences Program have begun working for regional partners. Upon graduation, the students will then join the Pacific Islands Region team.

NOAA Preserve America Supports Projects in the Pacific Islands Region

The Pacific Islands Region was awarded two NOAA Preserve America Initiative Grants in 2009. One allowed the region to conduct a historical preservation project focusing on Lahaina's colorful history, and will be used to record oral histories and produce outreach products from that knowledge. A second grant supported a training for University of Hawai'i Marine Option Program students to learn marine archaeology survey techniques. The students trained were trained by regional maritime archeologists on O'ahu, then traveled to Lāna'i to survey a historic inter-island steamship wreck. In addition, the county of Kaua'i was designated a Preserve America Community, through a process supported by the Pacific Islands Region. This designation makes Kaua'i the second county in Hawai'i to achieve this status.

Rose Atoll Designated a Marine National Monument

On Jan. 6, 2009, Rose Atoll in American Samoa was named a marine national monument. Presidential Proclamation 8337, which established the monument, directs NOAA to initiate a process to add the marine areas of the monument to the Fagatele Bay National Marine Sanctuary under the National Marine Sanctuary Act. The Pacific Islands Region is supporting Fagatele Bay National Marine Sanctuary as it addresses this issue through its management plan review process.

Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council

Officers

State of Hawai'i: Timothy E. Johns (Chair)
Alternate: vacant

Conservation: Linda Paul (Vice Chair)
Alternate: Julie Leialoha

Native Hawaiian: William Ailā (Secretary)
Alternate: Tammy Harp

Other Non-Governmental Members

Citizen At-Large: Kem Lowry
Alternate: Sean Naleimaile

Commercial Fishing: Bob Gomes
Alternate: Gary Dill

Conservation: Laura Thompson
Alternate: Carol Wilcox

Conservation: Jessica Wooley
Alternate: vacant

Education: Gail Grabowsky
Alternate: Gail Clarke

Native Hawaiian: Louis "Buzzy" Agard
Alternate: Isabella Aiona Abbott

Native Hawaiian: Carlos Andrade
Alternate: vacant

Ocean-Related Tourism: Matthew Zimmerman
Alternate: vacant

Recreational Fishing: Rick Gaffney
Alternate: Rick Hoo

Research: Bill Gilmartin
Alternate: Brian Bowen

Research: Cynthia Hunter
Alternate: Kanekoa Shultz

Research: Don Schug
Alternate: William Worcester

Federal Government

Department of Defense (non-voting): Becky Hommon

Marine Mammal Commission (non-voting): David Laist

National Science Foundation (non-voting): Phillip Taylor

NOAA Fisheries (non-voting): Michael Tosatto

NOAA Hawaiian Islands Humpback Whale NMS (non-voting): Naomi McIntosh

NOAA Papahānaumokuākea Marine National Monument (non-voting): T. 'Aulani Wilhelm

U.S. Dept of State (non-voting): vacant

U.S. Coast Guard (non-voting): Eric Roberts

U.S. Fish and Wildlife Service (non-voting): Susan White

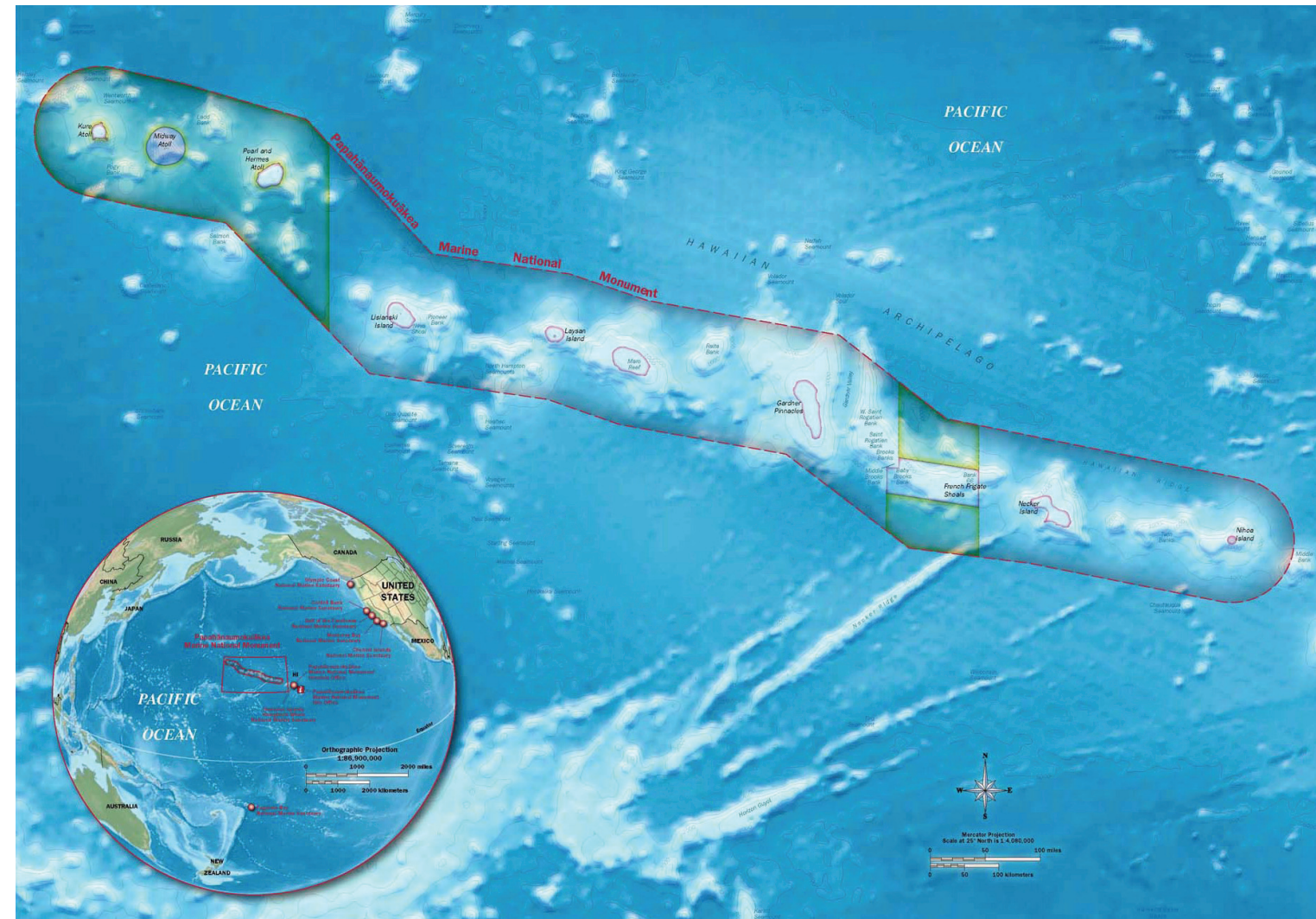
Western Pacific Fishery Management Council (non-voting): Kitty Simonds

National Marine Sanctuaries
National Oceanic and Atmospheric Administration

PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT



2009 ACCOMPLISHMENTS



Papahānaumokuākea Marine National Monument contains one of the last large-scale, predator-dominated coral reef ecosystems on the planet. The monument's waters are home to more than 7,000 marine species — a quarter of which are found only in the Northwestern Hawaiian Islands — including endangered and threatened species like Hawaiian monk seals and green sea turtles. Encompassing nearly 140,000 square miles of ocean and coral reefs, the monument has great cultural significance to Native Hawaiians and blends the management of terrestrial, marine and cultural resources with a focus on the connections between land and sea. *Established June 15, 2006.*

<http://papahanaumokuakea.gov>



Greg McFall, NOAA

Historic Alliance to Enhance Management and Protection

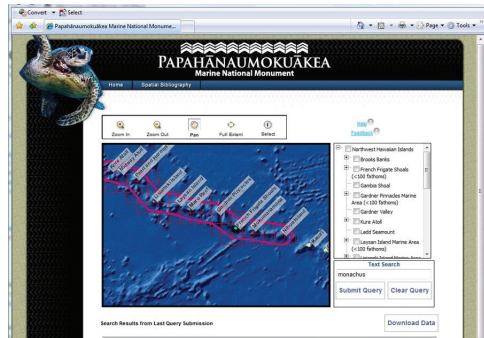
The world's two largest marine protected areas announced a historic alliance to enhance the management and protection of almost 300,000 square miles of marine habitat in the Pacific Ocean. A "sister site" relationship was announced in September 2009 between Papahānaumokuākea Marine National Monument and the Phoenix Islands Protected Area near the equator in the Republic of Kiribati. Managers of both sites met in November in French Polynesia to formalize the agreement. Combined, the two sites encompass 25 percent of all marine protected areas on Earth. The partnership links the sites and is designed to enhance management knowledge and practices for these tropical and subtropical marine and terrestrial island ecosystems. Both sites were nominated this year by their respective governments as World Heritage Sites, a designation of the United Nations Educational, Scientific and Cultural Organization.



Greg McFall, NOAA

Advanced Technology Gets Researchers Deeper

Over the course of a month, 111 dives to depths of 275 feet showed the safety and utility of using trimix (oxygen, nitrogen, helium) diving technology for deep reef exploration. Research divers working off of the NOAA ship *Hi'ialakai* in August and September 2009 demonstrated the application of this technology for scientific diving in the Papahānaumokuākea Marine National Monument. The primary goal was to demonstrate the tremendous increase in our understanding of deep coral reefs that can result from the use of advanced diving technologies. The scientists found at least a dozen new records of fishes in the Northwestern Hawaiian Islands, collected an undescribed species of butterfly fish and documented previously unknown deep-water nursery habitats for reef fishes that live in the mesophotic zone. Monument staff hope that in the future the use of closed-circuit rebreathers will provide additional efficiency and safety.



Spatial Bibliography and Ship-Board Reporting System

Researchers, scientists and managers now have a high-tech tool available for searching an extensive collection of scientific literature on the Northwestern Hawaiian Islands and Papahānaumokuākea Marine National Monument. For example, a researcher seeking to find the number of articles related to monk seals in the Northwestern Hawaiian Islands over the last 30 years can get the answer quickly through this Web application instead of having to enlist other staff to run the query. Currently, one person is assigned to tracking and adding new articles for the spatial bibliography, which is located at <http://www.pmnmims.org>.

World Heritage Preparations and Evaluation

Papahānaumokuākea Marine National Monument is under consideration for inscription onto UNESCO's World Heritage List. A three-week long visit and 26 events served as key steps in the evaluation of Papahānaumokuākea for inscription, set for consideration in July 2010. It was nominated for both its natural and cultural characteristics and if inscribed for both, would become the first mixed World Heritage Site in the U.S. Evaluators from the International Union of the Conservation of Nature and the International Council on Monuments and Sites arrived in Honolulu in August 2009 and received thorough exposure to the monument's resources, including archaeological sites, unique endemic marine and terrestrial biota, ecosystem restoration projects, and management. Papahānaumokuākea is the first site ever nominated with indigenous cultural connections to the sea. If inscribed as a World Heritage Site, Papahānaumokuākea would represent the heritage of Oceania and become one of just a few marine conservation areas on the list.



Kekuēwa Kikiloj



Kekuēwa Kikiloj

Unveiling the Secrets of a Mystery Island

A Honolulu-based researcher and an archaeologist from the U.S. Fish and Wildlife Service spent nearly three weeks on rugged, isolated and wind-swept Mokumanamana (Necker Island), completing the longest archaeological research project ever held there. Mokumanamana is categorized as a mystery island, because when the first Europeans rediscovered it, it had no inhabitants but did have evidence of prior human occupation. The research is intended to help uncover the mysteries of who lived on the island, when, and for how long. Researchers gathered geological source material to try and determine whether basalt artifacts from Mokumanamana were made locally or brought to the island. Perhaps their most exciting discovery occurred at a work site where they found a rare "Necker Island stone image." A number of these rare stone images were first rediscovered in 1894, as well as on later trips.



Kelly Gleason, NOAA

Maritime Heritage Biogeography Project

As part of a larger, multidisciplinary expedition to Papahānaumokuākea Marine National Monument on the NOAA ship *Hi'ialakai*, a Hawai'i Institute of Marine Biology graduate student in collaboration with the Monument maritime archaeologist worked to compare the biology of maritime heritage sites to their surrounding habitat. In order to carry out this work, divers conducted surveys at five shipwreck sites in the monument over the course of 16 days. The team collected data on benthic community structure and substrate type, fish and coral populations, genetics and oceanographic information including temperature, salinity, pH, wave height, tidal range and dissolved oxygen at both shipwreck and control sites in the Northwestern Hawaiian Islands. The goal of the project was to create a snapshot of the shipwreck ecosystem to determine if there are differences between the shipwreck and control sites. This work will assist in developing long-term monitoring strategies and help establish a way in which monument managers and scientists can begin to understand shipwreck sites as part of the larger ecosystem.



Dan Dennison, PMN

Navigating Change: Inspiring a New Generation of Leaders

In 2009, more than 70 Hawai'i teachers and 300 students participated in Navigating Change, a program that celebrates the diverse marine life, indigenous and cultural significance and balance in ecology in Papahānaumokuākea Marine National Monument. The program attempts to incorporate indigenous and local knowledge and Western science to inspire a new generation of conservation leaders. Through study, activities and field experiences the students gain a better understanding of human impacts on natural environments. During the 2008-2009 school year, the program launched the Ahupua'a Alliance, which is a partnership between restoration groups, scientists and Native Hawaiians. Students from five schools focused on the restoration of Maunalua Bay in East O'ahu. During 2009-2010, Navigating Change focuses on Hawai'i Island, the state's largest.

Report Assesses Monument Resource Conditions, Threats

Papahānaumokuākea Marine National Monument's remote location and isolation helps keep its natural resources in an "overall good state." This was a finding of a NOAA report released in March 2009 on the condition of the monument. The report did, however, note a need to address potential impacts to key habitats; declining conditions of some living resources; a general need to increase knowledge of regional biodiversity; and enhanced research and discovery of marine archaeological resources. Given their isolation and as a result of past management efforts, the reefs of the Northwestern Hawaiian Islands are considered to be in nearly pristine condition. Global issues, outside of the monument boundaries, such as marine debris, ocean acidification, climate change and invasive species have the potential to degrade fragile monument resources and habitats.



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