

A LOOK AHEAD

June 15, 2011, marks the 5th anniversary of the establishment of Papahānaumokuākea Marine National Monument, the largest single conservation area in the United States. Operating under a unique co-trustee management arrangement between the U.S. Departments of Commerce and Interior and the State of Hawai'i, the next five years of the Monument's existence will mark the continued refinement of operational and management practices as well as dedicated emphasis on protection of both natural and cultural resources, scientific research, and education. In particular, the Monument will continue to take a lead role amongst the world's marine protected areas, with cooperative initiatives such as the U.S.-French bilateral Pacific Exchange and Big Ocean, a network of the world's largest marine protected areas, as well as ongoing efforts to develop coordinated and effective management regimes for marine World Heritage sites, and implementation of the overarching management philosophy Holo I Moana to integrate western and traditional knowledge practices through all Monument activities.

Conserving Nature and Culture in the Northwestern Hawaiian Islands

In July 2010, Papahānaumokuākea was designated the first mixed World Heritage site in the U.S. for its outstanding natural and cultural features. International recognition of the importance of traditional knowledge and peoples by UNESCO, further emphasizes Papahānaumokuākea's stature as a leader in integrated resource conservation and management. With the departure of the military from Midway and the end of commercial fishing in 2010, all access to the Monument is now controlled through a permitting process managed by the Co-Managers. Permitted activities fall into six categories, including research, education, conservation, Native Hawaiian practices, special ocean uses, and recreation. A vast majority of human activity is restricted to Midway Atoll, which is also the primary access point for most visitors. The Office of National Marine Sanctuaries also operates the Mokuāpapa Discovery Center in Hilo, HI where last year over 60,000 visitors viewed exhibits and participated in interactive displays and education programs. The Monument is also working with the Hawaiian Island Humpback Whale National Marine Sanctuary and the Pacific Island Region to develop a similar facility on Kaua'i.

NOAA's Office of National Marine Sanctuaries is committed to supporting lives and livelihoods across the nation and in sanctuary communities through socioeconomic research and monitoring to understand the economic and social drivers of sanctuary resources and improve management practices.

Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council

Officers

Chair: Timothy E. Johns
 Vice Chair: Linda Paul
 Secretary: Kem Lowry

Conservation: Jessica Wooley
 Alternate: vacant

Conservation: Laura Thompson
 Alternate: Carol Wilcox

Marine Mammal Commission (non-voting): David W. Laist

Conservation: Linda Paul
 Alternate: Julie Leialoha

Department of Defense (non-voting): Becky Hommon
 U.S. Coast Guard (non-voting): Eric Roberts

Ocean-Related Tourism: Matt Zimmerman
 Alternate: vacant

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

Recreational Fishing: Rick Gaffney
 Alternate: Rick Hoo

DOI, U.S. Fish and Wildlife Service (non-voting): Ray Born

Commercial Fishing: Bobby Gomes
 Alternate: Gary Dill

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

Education: Gail Grabowsky
 Alternate: Gail Clarke

NOAA National Marine Fisheries Service (non-voting): Michael Tosatto

Citizen At-Large: Kem Lowry
 Alternate: Sean Naleimaile

NOAA/Hawaiian Islands Humpback Whale National Marine Sanctuary: (non-voting): Malia Chow

State Government

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

NOAA/Papahānaumokuākea Marine National Monument (non-voting): Aulani Wilhelm

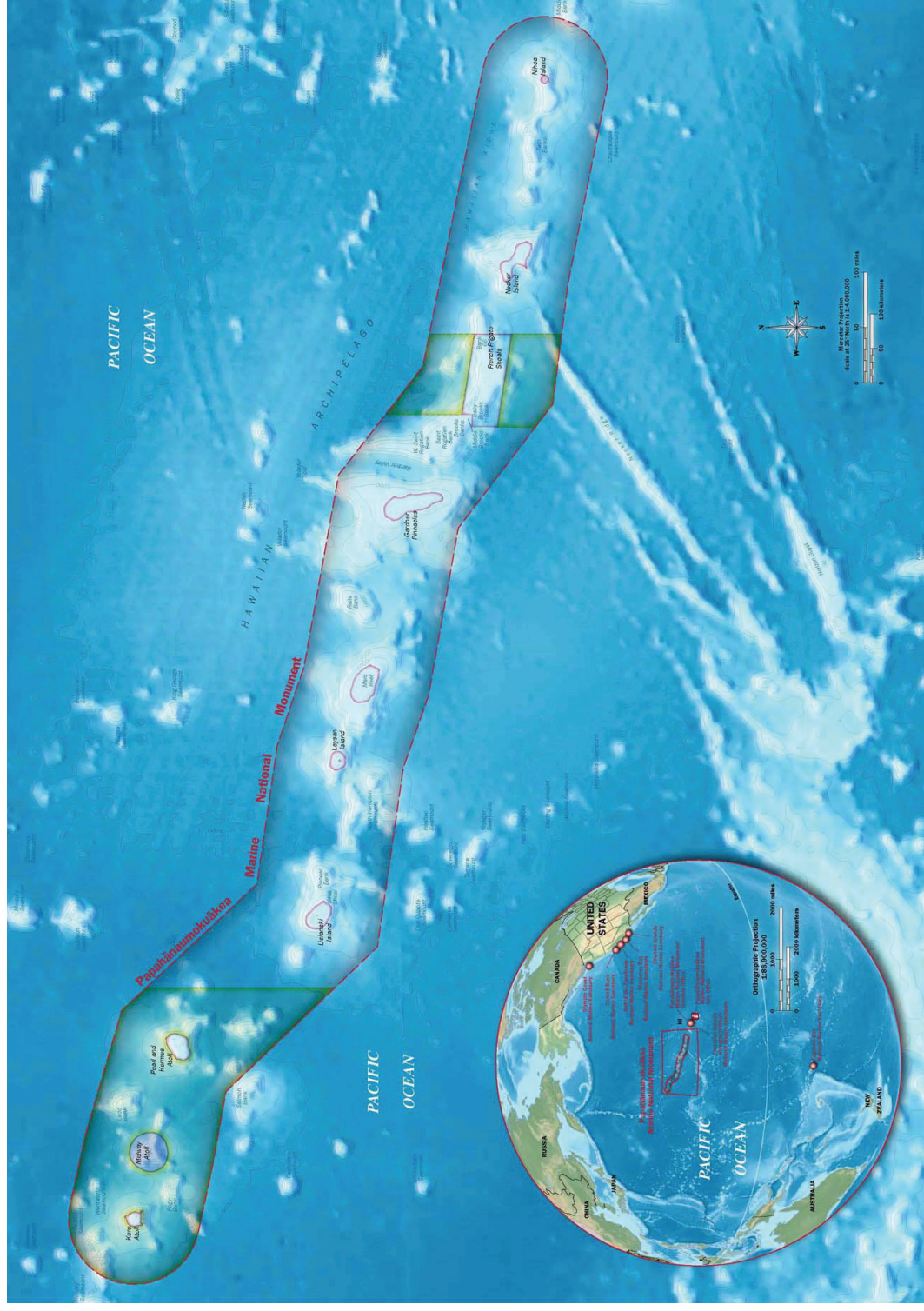
Reserve Advisory Council Coordinator: Wesley Byers

National Marine Sanctuaries
 National Oceanic and Atmospheric Administration



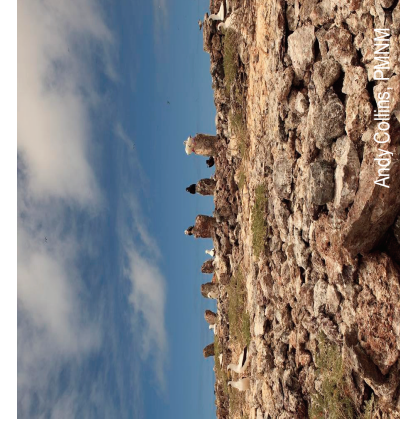
PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

2010 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>



Andy Collins, PMNM

Papahānaumokuākea Designated UNESCO World Heritage Site
On July 30, 2010 Papahānaumokuākea was designated as the first mixed UNESCO World Heritage site in the United States. Papahānaumokuākea is now one of only 27 mixed (natural and cultural) World Heritage sites and one of the largest World Heritage sites on the planet. It is recognized for globally significant natural attributes incorporated with living, indigenous, cultural connections to the sea. On Dec. 3, 2010, high ranking officials from the U.S. Departments of Commerce, Interior and State, joined UNESCO representatives, Monument staff and managers, and some 400 invited guests for an official World Heritage inscription ceremony in Honolulu. This designation is resulting in collaborations, and sharing of knowledge and experience with other marine protected areas; some currently in various stages of seeking World Heritage status. Papahānaumokuākea is the only World Heritage site in the National Marine Sanctuary System and the first site designated in the entire U.S. in more than 15 years.



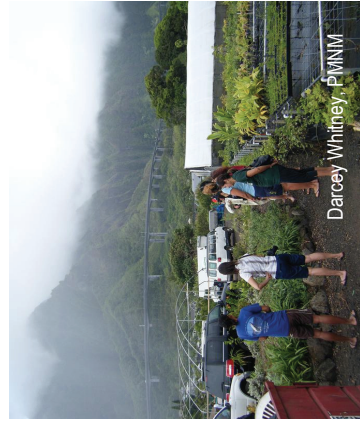
Greg McFall, GRNMS

10th Anniversary of the Coral Reef Ecosystem Reserve
On Dec. 3, 2010, ten years after creation of the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, President Clinton again recognized the importance of the action which created the vast, remote Reserve. "When I signed this Executive Order on Dec. 4, 2000, I did so proudly, knowing that our actions would protect close to 140,000 square miles of vibrant and diverse habitats," President Clinton wrote in a congratulatory letter. Excerpts of President Clinton's letter were read during the 10th anniversary celebration of the Reserve. The bold and visionary action created the single largest conservation area ever established in the U.S. and was the result of efforts by an unprecedented coalition of government agencies, conservation groups and concerned citizens. The Reserve, now overlaid by Papahānaumokuākea Marine National Monument, embodies a continuing commitment to preserve and protect the delicate region. Dozens of events in 2010 helped bring attention to the critical heritage values of the sea, and to further global understanding of this special place.



Greg McFall, GRNMS

Hawaiian Fishes Dominance Discovered on Deep Coral Reefs
Another year of groundbreaking discoveries from Papahānaumokuākea Marine National Monument included the finding that deep coral reef fish communities are dominated by endemic fishes found only in Hawai'i. Scientists on a 2010 research cruise used technical diving equipment to reach depths as great as 250 feet to continue the characterization of deep reef ecosystems. It is likely that unique Hawaiian endemic species comprise over 90% of the fish communities at these depths, representing the highest level of endemism recorded in any marine ecosystem on earth. These discoveries underscore the importance of the protected status of the Northwestern Hawaiian Islands (NWHI) and the need for continued research in the mesophotic zone, which lies between shallow waters researched by traditional diving methods and extreme depths researched by deep sea submersibles. Papahānaumokuākea is a hotbed for previously undiscovered Hawaiian endemic species due to its geographic isolation and ancient age.



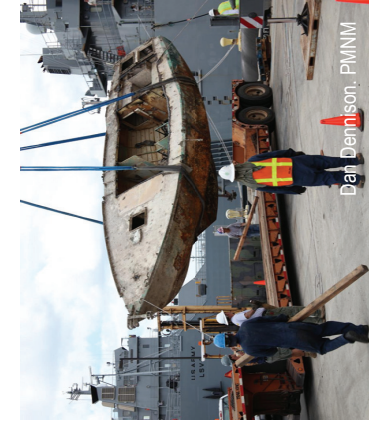
Darcey Whitney, PMNM

Pacific Exchange - Sharing of Experience, Knowledge & Culture
A Memorandum of Agreement (MOA) between the Office of National Marine Sanctuaries and L'Agence des Aires Marines Protégées (French Marine Protected Areas Agency) led to the first Pacific Exchange event when ten government and agency representatives from French Polynesia and France met with Papahānaumokuākea Marine National Monument staff and other agencies and individuals involved in marine conservation in Hawai'i. Two guests sailed on the *Holo i Moana* interdisciplinary cruise, where they participated in research activities integrating western science and traditional knowledge in the NWHI. Participants also focused on learning about the specifics of developing World Heritage nominations based on the recent experiences of Papahānaumokuākea. The relationship is intended to strengthen connections with oceanic partners and expand to include other Pacific Ocean marine protected areas as well. This program complements the Monument's sister site relationship with the Phoenix Island Protected Area (PIPA) in Kiribati.



NOAA/HURL/PMNM

New Corals and Sponges Discovered During Deep Ocean Dives
Submersibles operated by Hawaii Undersea Research Laboratory (HURL) and supported by NOAA and the Office of National Marine Sanctuaries uncovered new species of corals and sponges during deep dives in Papahānaumokuākea Marine National Monument. In December 2009, operating off the University of Hawai'i R/V *Ka'imikai-o-Kanaloa*, scientists conducted dives off Middle Bank and Twin Banks near Nihoa Island. Researchers, diving to depths of nearly a mile, found sponges that "were absolutely bizarre." Using High Definition video cameras for the first time to capture quality images of deep ocean work, scientists expect to identify some species from the video alone, rather than having to collect specimens. These discoveries, based on a very small number of submersible dives, suggest we are barely scratching the surface when it comes to documenting biodiversity in these poorly explored, deep-water areas of the Monument. Future exploration will undoubtedly lead to the discovery of more undescribed species that are completely new to science.



Dan Denison, PMNM

Long-grounded Sail Boat Freed From Reef at Kure Atoll
A team from NOAA and the U.S. Navy returned to Pearl Harbor with the remains of a 33 foot-long, steel-hulled sailboat that ran aground on Kure Atoll's reef. NOAA enlisted the support of Navy Mobile Diving and Salvage Unit 1 and USNS *Salvor*, to salvage the *Grendel* and transport it to Honolulu to be recycled. Navy divers used the opportunity to practice salvaging as an innovative readiness training (IRT) evolution. Their assistance was requested to help prevent environmental and ecological damage to the reef in Papahānaumokuākea Marine National Monument. The *Grendel* was last seen with its captain, leaving Fiji in October 2006. The wreckage of the boat was discovered in about 10 feet of water in June 2007. After the boat was refloated, it was towed into deeper water and lifted by crane onto the deck of *Salvor*. The cooperative venture was described as a model for future efforts to remove marine debris from the Northwestern Hawaiian Islands.



Greg McFall, GRNMS

Whaling Shipwreck Two Brothers Identified at Papahānaumokuākea
A collaborative team conducted 25 days of surveys on five islands and atolls during the Explorations 2010 research cruise to Papahānaumokuākea Marine National Monument. Focusing their efforts on documenting a previously unidentified whaling shipwreck site discovered at French Frigate Shoals in 2008, archaeologists identified the wreck as the *Two Brothers*, a whaler lost in 1823 under the command of Captain George Pollard. The shipwreck was Pollard's second; his first was the ship *Essex*, rammed by a whale and sunk in the South Pacific in 1820. The story of the loss of the *Essex* and its survivors inspired Herman Melville to write "Moby-Dick". The 2010 expedition also included exploration, surveys of numerous maritime archaeological sites and biogeographical assessment of several shipwreck and sunken aircraft sites in the monument.



Andy Collins, NOAA

Lost on a Reef Exhibit Opening
More than 400 people toured Hilo's Mokuāpapa Discovery Center in conjunction with the opening of the *Lost on a Reef* maritime heritage exhibit. Designed to celebrate Papahānaumokuākea Marine National Monument's rich and varied maritime archaeology, the exhibit is a primary way of connecting people to the place. During remarks to invited guests, the Director of the Office of National Marine Sanctuaries explained that it's important for communities to connect with Sanctuaries and one way of doing that is through maritime heritage exploration and discovery. The exhibit features two ships bells recovered from the NWHI, a collection of 19th Century whaling era artifacts, interpretive panels highlighting some of the shipwreck sites and the stories behind them, a whaling harpoon, and an 1870s metal dive helmet. Additional recovered and conserved artifacts are expected to be added to the exhibit and will likely become part of a traveling exhibition highlighting the Monument's maritime heritage.