

*Mālamalama ka lā nui a Kane puka i Ha'ehe'e  
Apakau ke kukuna i ka 'ili kai o nā kai 'ewalu  
He 'ike makawalu ka'u e 'ano'i nei,*

*'O nā au walu o Kanaloa Haunawela noho i ka moana nui  
He Hu'akai ka makani o Lehua 'au i ke kai  
Kū'ono'ono ka lua o Kūhaimoana i ke kapa 'ehukāi o Ka'ula  
'O Kū i ka loulū, ulu a'e ke aloha no Nihoa moku manu  
Manu o kū i ka 'āhui, he alaka'i na ka lāhui  
'O Hinapūko'a  
'O Hinapūhalako'a  
'O Hina kupukupu  
'O Hinaikamalama*

*Hua ka 'ohua, lū'u ke kohola  
Aloha kahi limu kala, kia'i 'ia e ka 'ākala noho i uka  
Hanau ka pe'a, puka ka pe'ape'a i ke kai  
He 'ina'i ka 'ina, 'ono i ka hūna o ka pa'akai  
Manomano ka 'ike li'u o ka ho'opo o Kanaloa  
Koiko'i lua ho'i no ka lēhulēhū, 'o ka'u lūhi ia  
Hanohano wale ka 'āhū, 'o ka 'āhū o Nihoa  
No Papahānaumoku o Nihoa*

*Na Kainani Kama'ehu o Nihoa me Halealoha*



*Protection and Management*

## 5. Protection and Management

### 5.a Ownership

All of the Papahānaumokuākea Marine National Monument property is owned or controlled by the Governments of the United States and the State of Hawai'i. Pursuant to Presidential Proclamations 8031 of June 15, 2006 and 8112 of February 28, 2007, applicable laws and agreements, the U.S. Department of Commerce through the National Oceanic and Atmospheric Administration (NOAA), the U.S. Department of the Interior through the U.S. Fish and Wildlife Service (FWS), and the State of Hawai'i are the government entities with legal authority, jurisdiction or control of Papahānaumokuākea. These three government entities are the Co-Trustees of the public interest. There is no private ownership of the Papahānaumokuākea Marine National Monument property.

#### Representatives of the Papahānaumokuākea Marine National Monument Co-Trustees:

Governor of the State of Hawai'i  
Executive Chambers  
State Capitol  
Honolulu, Hawai'i 96813  
USA

Director  
U.S. Fish and Wildlife Service  
1849 C Street N.W. (3256 MIB)  
Washington, D.C. 20240  
USA

Under Secretary of Commerce for Oceans  
and Atmosphere  
U. S. Department of Commerce and  
Administrator of National Oceanic and  
Atmospheric Administration  
1401 Constitution Avenue, N.W.  
[HCHB 6217]  
Washington, D.C. 20230  
USA



Wedge-tailed Shearwater or 'ua'u kani  
(Photo: Susan Middleton & David Liittschwager)

#### Traditional or Customary Ownership

In 1893, the Kingdom of Hawai'i, which included most of the Northwestern Hawaiian Islands, was overthrown with the involvement of certain United States officials and others. Some involved in the overthrow and others went on to create a provisional government and then the Republic of Hawai'i, which assumed control of approximately 1.8 million acres of crown, government, and public lands of the Kingdom of Hawai'i, including certain submerged and fast lands of the Northwestern Hawaiian Islands. Upon its annexation, the Republic ceded these lands to the United States in 1900. A majority of these lands were again ceded, this time to the State of Hawai'i, upon statehood in 1959.

Under the terms of the statute admitting Hawai'i as a state in 1959, the federal government granted title to Hawai'i to most of the previously ceded lands and mandated that these ceded lands be held by Hawai'i in public trust. In accordance with the Hawaii Organic Act of April 30, 1900, c 339, 31 Stat 141, and the Hawaii Admission Act of March 18, 1959, Pub L 86-3, 73 Stat 4, most of the islands of the Hawaiian Archipelago that were part of the Territory of Hawai'i became part of the State of Hawai'i as part of the public land trust. Hawai'i's lands continue to hold a considerable amount of legal, historical, and sentimental significance to Native Hawaiians. Pursuant to Section 5(f) of the Hawaii Admission Act, one purpose for which the ceded lands are held in trust by the State is "for the betterment of the conditions of native Hawaiians."

The Native Hawaiian community has expressed a strong interest in participating in management decisions affecting Papahānaumokuākea. Respecting Native Hawaiian traditions and values and providing an effective degree of participation in the protection and stewardship of the area will provide an opportunity for Native Hawaiians to maintain ancestral connections to Papahānaumokuākea.

### *Representative Management Body*

The State of Hawai‘i, FWS, and NOAA (collectively, the Co-Trustees) carry out coordinated management for the long-term comprehensive conservation and protection of the property. The representative body that manages, coordinates, plans and monitors activities within Papahānaumokuākea Marine National Monument is known as the Monument Management Board:

Monument Management Board  
Papahānaumokuākea Marine  
National Monument  
6600 Kalaniana‘ole Highway, Suite 300  
Honolulu, Hawai‘i 96825  
USA

The functional relationships among the Co-Trustees to coordinate management actions in Papahānaumokuākea are established and defined by a Memorandum of Agreement (MOA) that the Co-Trustees executed on December 8, 2006.

Per the MOA, policy guidance is provided by a Senior Executive Board, consisting of three senior level designees representing the Co-Trustees. In addition, the seven-member Monument Management Board coordinates management of the Papahānaumokuākea Marine National Monument at the field level, and includes designees from NOAA’s Office of National Marine Sanctuaries and National Marine Fisheries Service, FWS’s National Wildlife Refuge Program and Pacific Islands Fish and Wildlife Office, the State of Hawai‘i Department of Land and Natural Resources’ (DLNR) Division of Aquatic Resources and Division of Forestry and Wildlife, and the

Office of Hawaiian Affairs. Together, the Senior Executive Board and the Monument Management Board represent the combined policy and field-level management authority of the Co-Trustees, acting on behalf of the State of Hawai‘i and the United States.

### *Restrictions on Public Access*

Presidential Proclamation 8031, which established Papahānaumokuākea Marine National Monument, as well as federal regulations promulgated by the U.S. Departments of the Interior and Commerce to implement the provisions of the Proclamation, prohibit entering the property unless permission has been granted by the Co-Trustees via a rigorous permit or notification system to manage activities that may affect Papahānaumokuākea’s resources.

Any domestic vessel or persons passing through Papahānaumokuākea without interruption must notify an official designated by the Secretaries of Commerce and Interior at least 72 hours, but no longer than one month, prior to the entry date. Notification of departure from Papahānaumokuākea must be provided within 12 hours of leaving. Any vessel granted permission to enter and engage in activities within Papahānaumokuākea is required to have a vessel monitoring system (VMS).

As under international law, rights of navigation are respected, but regulated.



*A field party approaches their work site*  
(Photo: James Watt)



(Photo: State of Hawai'i Archives)

In this case, the regulation of access to Papahānaumokuākea by vessels has been reviewed and approved through processes of the International Maritime Organization (IMO). The IMO is a specialized agency of the United Nations responsible for measures to improve the safety and security of international shipping and protect the marine environment from threats associated with international shipping. Within the IMO, the Marine Environmental Protection Committee (MEPC) and the Maritime Safety Committee (MSC) have agreed that Papahānaumokuākea Marine National Monument be designated as a Particularly Sensitive Sea Area (PSSA).

The PSSA is complemented by the associated IMO protective measures of voluntary Areas To Be Avoided (ATBAs) and a ship reporting system (SRS). See Section 5.b for additional details.

There are, of course, the standard exceptions for official access that are necessary for certain emergency conditions, law enforcement purposes, and activities of the Armed Forces of the United States.

All Papahānaumokuākea prohibitions and restrictions are prescribed consistent with international law. The restrictions apply against foreign vessels and nationals within the territory and territorial sea, unless the application interferes with their international right of innocent passage. No prohibitions or restrictions are applied or enforced against a person who is not a citizen, national, or resident alien of the United States (including foreign flag vessels) outside of the 12-nautical-mile territorial sea unless in accordance with international law.

Consistent with international law, the U.S. has proclaimed a 12 nautical mile territorial sea, a 24-nautical-mile contiguous

zone, and a 200-nautical-mile Exclusive Economic Zone (EEZ). Foreign states are thus notified that U.S. laws regulating the exploration and exploitation of marine resources, such as oil and fisheries, also apply within the 200-nautical-mile EEZ/continental shelf. While it does not own the EEZ/continental shelf beyond its territorial sea, as a coastal state- the U.S. does have the necessary jurisdiction, authority and control over the resources and activities for long-term protection and management of Papahānaumokuākea resources as established under the Antiquities Act and other applicable laws.

In complement to federal law, Hawai'i State law administers the only public meeting process for permitting a limited access to Papahānaumokuākea areas and waters under state jurisdiction. Under the MOA, the Co-Trustees jointly issue permits for access and activities in Papahānaumokuākea.

## 5.b Protective Designations

Over the past century, the NWHI have been the focus of various conservation efforts by the United States, receiving increasing protections that have culminated in Proclamation 8031, which created Papahānaumokuākea Marine National Monument. In 1903, U.S. President Theodore Roosevelt sent in U.S. Marines to stop the slaughter of seabirds at Midway Atoll. In 1909, the remaining islets and reefs of the NWHI were placed within the Hawaiian Islands Reservation. And in 1940, the Reservation became the Hawaiian Islands National Wildlife Refuge through Presidential Proclamation 2416.

Within the last ten years, state and federal government have made the highest possible commitment to the long-term protection of this area, with the establishment and the designation of the area first as the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve under Presidential Executive Orders 13178 in 2000 and 13196 in 2001; the full protection of all State of Hawai'i waters in the Northwestern Hawaiian Islands upon creation of the Northwestern Hawaiian Islands Marine Refuge

**Table 5.1: Protections in Papahānaumokuākea Marine National Monument**

All commercial fishing eliminated as of 2011
All extractive activities restricted
Access only by permit or notification
No mining, drilling or exploring for oil or gas
No anchoring on coral
Tourism limited only to Midway Atoll
Vessel monitoring system required for all vessels permitted to enter Papahānaumokuākea
No use of explosives, poisons, or electrical charges
No introduction of non-indigenous species
Discharge or disposition of any materials prohibited or severely restricted
Quarantine protocols for moving between islands, access, disease, introduced species and organism sampling applied to all activities
Rigorous permit review system in place for approval of all activities
International Maritime Organization Particularly Sensitive Seas Area designation
Specific laws to protect endangered species, cultural and historic resources
Hull inspections and rat-free certification required for all vessels permitted to enter Papahānaumokuākea
Numerous general and specific permit conditions for all permitted activities

in 2005; and the creation of the Monument under Presidential Proclamation 8031 in 2006. The Co-Trustees are committed to preserving the ecological integrity of Papahānaumokuākea and perpetuation of the NWHI ecosystems, Native Hawaiian culture, and other historic resources. Table 5.1 summarizes many of the protections in Papahānaumokuākea.

In addition to the numerous overlays of protection designated within Papahānaumokuākea through the Hawaiian Islands National Wildlife Refuge, the Midway Atoll National Wildlife Refuge, the Battle of Midway National Memorial, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, the Hawai'i State Seabird Sanctuary at Kure Atoll, and the Northwestern Hawaiian Islands Marine Refuge, the numerous laws detailed below are all in effect and enforced to ensure compliance. See Appendices G-J for full documents of measures listed below.

### *International Legal Measures*

#### **1. Areas to be Avoided “In the Region of the North-West Hawaiian Islands” (International Maritime Organization, 1981)**

Areas to Be Avoided (ATBAs) are navigation measures approved by the International

Maritime Organization (IMO). The IMO is the United Nations organization that promotes cooperation among governments and the international shipping industry to improve maritime safety and to prevent marine pollution. In 1981, six voluntary ATBAs were adopted by IMO to protect eight of the coral reef areas of the NWHI. Each of the ATBAs extend out 50 nautical miles from the islands to keep ships well away from the vibrant and integrated coral reef ecosystem and sensitive ecological resources. The ATBAs not only prevent groundings and oil spills, they also provide emergency response teams more time to mount a response to any maritime emergency developing outside of the ATBAs.



Reef fish at French Frigate Shoals (Photo: James Watt)

## 2. Papahānaumokuākea Marine National Monument designation as a Particularly Sensitive Sea Area (PSSA) by the International Maritime Organization (IMO), (April 3, 2008)

A PSSA is an area recognized by the IMO as requiring special protection because of its significance for recognized ecological, socioeconomic or scientific attributes which may be vulnerable to damage from international shipping activities. An area approved as a Particularly Sensitive Sea Area has specific measures that may be used to control the maritime activities, including routing measures, strict application of MARPOL discharge and equipment requirements for ships, such as oil tankers; and installation of Vessel Traffic Services (VTS).

The IMO's designation as a PSSA gives international recognition to the significance of the waters, coral and other resources of Papahānaumokuākea. The PSSA is complemented by associated IMO protective measures as voluntary Areas To Be Avoided (ATBAs) and a mandatory ship reporting system. The protective measures include amendments to the six existing Areas To Be Avoided (ATBAs), which were adopted by the IMO in 1981, and the adoption of additional ATBAs around Kure Atoll and Midway Atoll as well as three other areas between islands. The action expanded and consolidated the areas into four enlarged ATBAs. The ship reporting system, whose boundary extends an additional 10 nautical miles seaward of the PSSA/Papahānaumokuākea boundary, is mandatory for all ships 300 gross tonnage or greater that are going to or coming from a U.S. port or place, as well as for vessels involved in a developing emergency. Under the system, vessels are required to notify the U.S. when they cross into and out of the reporting area, including when they enter or exit an environmentally sensitive ATBA. The ship reporting area and related measures adopted by IMO provide additional notice to mariners of the significance and vulnerability of resources in Papahānaumokuākea, as well as potential hazards to navigation in the area, such as shallow coral reefs. The reporting requirements do not apply to sovereign immune vessels.

### *Federal Legal Measures Specific to Papahānaumokuākea and the Northwestern Hawaiian Islands*

## 3. Executive Order 1019 – Hawaiian Islands Reservation (February 3, 1909)

Through this Executive Order, President Theodore Roosevelt set aside the islets and reefs of the Northwestern Hawaiian Islands (except for Midway Atoll) as a preserve and breeding ground for native birds. The order made it unlawful for any person to hunt, trap, capture, willfully disturb or kill any bird of any kind whatever, or take the eggs of such birds within the Hawaiian Islands Reservation. The reservation became known as the Hawaiian Islands National Wildlife Refuge on July 25, 1940, through Presidential Proclamation 2416.

## 4. Executive Order 13022 – Administration of the Midway Islands, 61 FR 56875 (October 31, 1996)

Midway Atoll National Wildlife Refuge was created on April 22, 1988, as an “overlay” national wildlife refuge through a cooperative agreement with the U.S. Navy. Executive Order 13022 transferred jurisdiction and control over the atoll to the U.S. Fish and Wildlife Service. It required the atoll to be managed for the following purposes:

- (1) maintaining and restoring natural biological diversity within the refuge;
- (2) providing for the conservation and management of fish and wildlife and their habitats within the refuge;
- (3) fulfilling the international treaty obligations of the United States with respect to fish and wildlife;
- (4) providing opportunities for scientific research, environmental education, and compatible wildlife dependent recreational activities; and
- (5) in a manner compatible with refuge purposes, recognizing and maintaining the historic significance of the Midway Islands.

**5. Department of the Interior Secretary's Order 3217 – Battle of Midway National Memorial (September 13, 2000)**

Congress provided the Secretary of the Interior the authority to designate Midway Atoll National Wildlife Refuge as the Battle of Midway National Memorial in Section 126 of Public Law 106-113, the Consolidated Appropriations Act for Fiscal Year 2000.

**6. Executive Order 13178 - Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, 65 FR 76903 (December 4, 2000)**

On December 4, 2000, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (Reserve) was created by Executive Order 13178. The Reserve encompasses an area of the marine waters and submerged lands of the Northwestern Hawaiian Islands extending approximately 1200 nautical miles long (2,222.4 km) and 100 nautical miles (185.2 km) in width. As part of the establishment of the Reserve, Executive Order 13178 contains conservation measures that restrict some activities throughout the Reserve, and establishes Reserve Preservation Areas around certain islands, atolls, and banks where all consumptive or extractive uses are prohibited.

**7. Executive Order 13196 - Final Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, 66 FR 7395 (January 18, 2001)**

On January 18, 2001, the process and establishment of the Reserve was finalized by issuance of Executive Order 13196. This Executive Order modified Executive Order 13178 by revising certain conservation measures and making permanent the Reserve Preservation Areas, with modifications. With this action, the establishment of the Reserve, including conservation measures and permanent Reserve Preservation Areas, was completed. The Reserve's outer boundary is essentially the same as the Papahānaumokuākea boundary. The Reserve prohibited certain activities that could harm natural and cultural resources and established preservation areas to provide additional protection in designated zones.

**8. Presidential Proclamation 8031 of June 15, 2006, 71 FR 36443 (June 26, 2006)**

Presidential Proclamation 8031 of June 15, 2006 establishing the Northwestern Hawaiian

Islands Marine National Monument, by regulations at 71 FR 36443 (June 26, 2006); as amended by Presidential Proclamation 8112 (codified at 50 CFR Part 404) (2006) and under the authority of February 28, 2007, 72 FR 10031 (March 6, 2007) 16 U.S.C. 431 et seq.; 16 U.S.C. 460k-3; 16 U.S.C. 1801 et seq.; 16 U.S.C. 742f, 16 U.S.C. 742l, and 16 U.S.C. 668dd-ee; 16 U.S.C. 1361 et seq.; 16 U.S.C. 1531 et seq., Pub. L. No. 106-513, Sec. 6(g) (2000);

The Northwestern Hawaiian Islands Marine National Monument was established on June 15, 2006, by Presidential Proclamation 8031 under the authority of the Antiquities Act. The Proclamation reserves approximately 139,793 square miles of emergent and submerged lands and waters of the Northwestern Hawaiian Islands from all forms of entry, location, selection, sale or leasing or other disposition under public land laws. Presidential Proclamation 8112, dated February 28, 2007, amended Proclamation 8031 to give the property a Native Hawaiian name, Papahānaumokuākea, which was developed by Native Hawaiians.

There are numerous prohibitions against exploitation of Papahānaumokuākea resources and introduction of non-native species as well as restrictions on activities that may impact or injure area resources. See Table 5.1 at the end of this section.

**9. Northwestern Hawaiian Islands Marine National Monument codifying regulations, 50 CFR Part 404 (2006)**

Federal regulations codifying the provisions of Proclamation 8031 were published on August 29, 2006 (50 CFR Part 404). The regulations generally prohibit exploitation or extractive use of natural, historical and cultural resources. With exceptions for law enforcement, emergency personnel, armed forces, and uninterrupted passage, access to Papahānaumokuākea is restricted to persons who have applied for and received permits to conduct approved activities. Commercial fishing is prohibited except for a small commercial fishery consisting of eight boats that will be allowed to continue fishing in certain areas of Papahānaumokuākea until June 2011. Thereafter, commercial fishing

will be completely prohibited. Limited fishing for Native Hawaiian cultural reasons and sustenance fishing for bottomfish and pelagic species in certain areas of Papahānaumokuākea may be authorized by permit.

**10. Northwestern Hawaiian Islands Marine National Monument regulations implementing IMO PSSA Mandatory Ship Reporting System, 50 CFR Part 404 (2008)**

Federal regulations implementing the IMO mandatory ship reporting system were published on December 3, 2008. The regulations amend the Monument reporting requirements at 50 CFR 404.4 to be consistent with and to implement the IMO ship reporting system as follows. The regulations establish a reporting area around the Monument that extends outward ten nautical miles from the Monument boundary but that excludes the ATBA's within the Monument. Vessel passing through the Monument without interruption must notify the United States by e-mail upon crossing into the Reporting Area and again upon exiting the Reporting Area. The notification must provide specific information regarding the vessel, its location, etc., and must be sent in a reporting format that is consistent with the reporting system adopted by IMO. Vessels that do not have e-mail capability remain subject to current regulations that require notification by various means (telephone, fax, e-mail) at least 72 hours but not more than one month before passing through the Monument without interruption. The ship reporting requirements do not apply to sovereign immune vessels including vessels of the United States Armed Forces (and the United States Coast Guard) but voluntary participation in the reporting system is recommended for all vessels.

*General Federal Legal Measures  
Applicable to Papahānaumokuākea  
Resources*

**11. Antiquities Act of 1906, 16 U.S.C. § 431, et seq.**

The Antiquities Act of 1906 was the first general federal preservation law in the United States and provides protection for archaeological, historic or scientifically interesting resources on lands owned or controlled by the federal government.



*White Tern  
or manu o kū  
(Photos: Susan Middleton  
& David Liittschwager)*

The Act authorizes the President to declare by proclamation such resources to be national monuments, and may reserve parcels of land for the proper care and management of such resources.

The Act provides criminal penalties for unlawful appropriation, excavation, injury or destruction of certain monument resources including but not limited to coral and cultural resources. It also provides authority for regulations and a permit system at each monument site created.

**12. Migratory Bird Treaty Act of 1918, as amended, 16 U.S.C. §§703-712**

This statute makes it unlawful to pursue, hunt, take, capture, kill or sell parts of live or dead migratory birds, giving equal and full protection to bird parts, such as feathers, eggs and nests. This law originally implemented a convention between the United States and Great Britain (for Canada). Later, the United States entered into similar agreements with Canada, Mexico, Japan, and Russia to protect migratory birds.

More than 800 species are currently on the list of protected migratory birds, some of which currently migrate to or through Papahānaumokuākea.

**13. Historic Sites, Buildings, Objects and Antiquities Act of 1935, 16 U.S.C. §§461-462, 464-467**

The Historic Sites Act declares it a national policy to preserve historic sites and objects of national significance and provides procedures for designation, administration and protection of such sites.

National Historic Landmarks, such as the World War II facilities designated on Midway Atoll on May 28, 1987, are named under the authority of this act.

**14. Fish and Wildlife Act of 1956, as amended, 16 U.S.C. § 742f**

The Fish and Wildlife Act establishes a comprehensive national fish, shellfish and wildlife resources policy with emphasis on the commercial fishing industry but also with a direction to administer the Act with regard to the inherent right of every citizen and resident to fish for pleasure, enjoyment and betterment and to maintain and increase public opportunities for recreational use of fish and wildlife resources. Among other things, it directs a program of continuing research, extension, and information services on fish and wildlife matters, both domestically and internationally.

**15. National Historic Preservation Act (NHPA) of 1966, 16 U.S.C. § 470 *et seq.***

The National Historic Preservation Act is intended to preserve historical and archaeological sites in the United States. Among other things, the act requires Federal agencies to evaluate the impact of all federally funded or permitted projects through a process known as Section 106 Review.

Section 106 of the NHPA is of particular importance since it requires Federal agencies to take into account the effects of their undertakings on historic properties. It also provides a process whereby representatives of Native Hawaiian organizations are afforded opportunity to comment on federal undertakings that may adversely affect Native Hawaiian historic properties.

**16. National Wildlife Refuge System Administration Act of 1966, as amended, 16 U.S.C. § 668dd-ee**

The National Wildlife Refuge System Administration Act of 1966, together with the Refuge Recreation Act of 1962, provides the principal management authority for the Midway Atoll and the Hawaiian Islands National Wildlife Refuges. The refuges are managed in order to conserve and enhance their fish, wildlife and plant resources and habitats. Islands, reefs and atolls administered as part of these refuges include Nihoa, Mokumanamana (Necker), French Frigate Shoals, Gardner Pinnacles, Maro Reef, Laysan Island, Lisianski Island, Pearl and Hermes Atoll, and Midway Atoll.

**17. Refuge Recreation Act of 1962, as amended, 16 U.S.C. § 460k-460k-4**

The Refuge Recreation Act authorizes the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use, when such uses do not interfere with the area's primary purposes. It provides for public use fees and permits, and penalties for violation of regulations. It also authorizes the acceptance of donations of funds and real and personal property to assist in carrying out its purposes. Enforcement provisions were amended in 1978 and 1984 to make violations misdemeanors in accordance with the uniform sentencing provisions of 18 U.S.C. §§3551-3586.

This Act applies in the two National Wildlife Refuges within Papahānaumokuākea: the Hawaiian Islands National Wildlife Refuge extending from Nihoa to Pearl and Hermes Atoll, and Midway Atoll National Wildlife Refuge.

**18. Coastal Zone Management Act of 1972, 16 U.S.C. § 1451, *et seq.***

In an effort to encourage states to better manage coastal areas, Congress enacted the Coastal Zone Management Act (CZMA). CZMA



*The Hawaiian Monk Seal (*Monachus schauinslandi*) and its critical habitat are protected by various federal laws (Photo: Susan Middleton & David Liittschwager)*



Laysan Ducks  
(Photo: James Watt)

provides grants to states that develop and implement federally approved coastal zone management plans. It also allows states with approved plans the right to review Federal actions to ensure they are consistent with those plans, and it authorizes the National Estuarine Research Reserve System. Hawai'i's coastal zone management program was approved in 1977 (Chapter 205A, Hawai'i Revised Statutes).

**19. Marine Mammal Protection Act of 1972, 16 U.S.C. § 1361, et seq.**

The Marine Mammal Protection Act makes it unlawful to harass, hunt, capture or kill any marine mammal in waters or on lands under the jurisdiction of the United States.

The Act applies to all marine mammals in Papahānaumokuākea, including all species of seals, dolphins and whales, thus some species enjoy protections in addition to those under the Endangered Species Act.

**20. Endangered Species Act of 1973, as amended, 16 U.S.C. § 1531, et seq.**

The Endangered Species Act was enacted in 1973 to provide protection for critically imperiled species from extinction. It provides for the conservation of species of fish, wildlife, and plants identified by NOAA or FWS as threatened or endangered species. The species listing is based on a number of factors including the scientific and other information available on the species and the ecosystems upon which they depend. Activities prohibited by the Act include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing or collecting, any species officially listed as endangered or threatened, or attempting any of these activities.

Animals in Papahānaumokuākea that are currently protected under the Act include the Hawaiian Monk Seal, sea turtles, great whales, Short-tailed Albatross, and four species of land birds—the Nihoa Finch, Nihoa Millerbird, Laysan Finch, and the Laysan Duck. In addition, six plant species found in Papahānaumokuākea are listed as endangered species. In 1988, the waters surrounding each of the islands and atolls in Papahānaumokuākea (except Sand Island, Midway Atoll) to a depth of 20 fathoms were designated as critical habitat for the Hawaiian Monk Seal.

**21. Magnuson-Stevens Fishery Conservation and Management Act of 1976, 16 U.S.C. § 1801, et seq.**

The Magnuson-Stevens Fishery Conservation and Management Act was enacted in 1976 and is the primary legal authority for the United States to manage fish stocks within federal waters out to the limit of the 200 nautical mile exclusive economic zone.

Eight commercial fishing boats are allowed to continue to fish for bottomfish and associated pelagic species in certain areas of Papahānaumokuākea until June 2011. The on-going fishing activities of these boats are regulated under the Magnuson-Stevens Act to prevent overfishing and to maintain the sustainability of the fish stocks.

**22. Fish and Wildlife Improvement Act of 1978, as amended (16 U.S.C. § 742I)**

The Fish and Wildlife Improvement Act authorizes the Secretaries of the Interior and Commerce to establish, conduct and assist with national training programs for State fish and wildlife law enforcement personnel. It also authorized funding for research and development of new or improved methods to support fish and wildlife law enforcement. The law also provides authority to the Secretaries to enter into law enforcement cooperative agreements with State or other Federal agencies.

**23. Archaeological Resources Protection Act (ARPA) of 1979, 16 U.S.C. § 470aa-mm**

The Archaeological Resources Protection Act was enacted to strengthen federal law prohibiting the looting and unwanted recovery



*Papahānaumokuākea contains over 120 sunken vessels and aircraft (Photo: James Watt)*

of archaeological resources from federal public lands. A main focus of ARPA is the regulation of legitimate archaeological investigation in accordance with professional archaeological standards for research, conservation and curation. The Act also strengthened the enforcement of penalties against those who loot or vandalize archaeological resources that exist under the Antiquities Act.

#### **24. Abandoned Shipwreck Act (ASA) of 1987, 43 U.S.C. §§ 2101-2106**

The Abandoned Shipwreck Act is a United States law meant to protect historic shipwrecks from treasure hunters and salvagers by transferring the title of the wreck to the state whose waters it lies in.

The ASA protects abandoned shipwrecks on the submerged lands of Hawai'i including those State submerged lands within the boundaries of Papahānaumokuākea. Abandoned shipwrecks on state submerged lands are owned and controlled by the State but jointly managed as a Papahānaumokuākea resource.

#### **25. Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, 25 U.S.C. §3001 *et seq.***

NAGPRA provides a process for museums and Federal agencies to return certain Native American cultural items, such as human remains, funerary artifacts, sacred objects and objects of cultural patrimony, to lineal descendants and culturally affiliated Indian tribes and Native Hawaiian organizations. It also includes provisions for intentional and inadvertent discoveries of such cultural items, and penalties for noncompliance and illegal trafficking.

#### **26. Sunken Military Craft Act (SMCA) of 2004, Public Law 108-375**

The Sunken Military Craft Act provides for the protection of sunken U.S. military ship and aircraft wherever they are located; protection of sensitive archaeological artifacts and historical information; codification of existing case law, which supports federal ownership of sunken U.S. military ship and aircraft wrecks; provides a mechanism for permitting and civil enforcement to prevent unauthorized disturbance; and encourages the Secretary of State, in consultation with the Secretary of Defense, to enter into bilateral and multilateral agreements with foreign countries for the protection of sunken military craft. It does not affect salvage of commercial merchant shipwrecks, recreational diving, commercial fishing, or the laying of submarine cables; and does not relate to the routine operation of ships.



*A diver surveys the site of sunken WWII Corsair aircraft (Photo: James Watt)*

**27. National Environmental Policy Act of 1969, 42 U.S.C. 4321 et seq.**

NEPA requires federal agencies that are proposing a major action significantly affecting the quality of the human environment to prepare a detailed environmental impact statement (EIS) describing the impacts of the proposed action. NEPA provides a mandate and a framework for federal agencies to consider all reasonably foreseeable environmental effects of their proposed actions and to involve and inform the public in the decisionmaking process.

*State Legal Measures*

**28. Hawaii Organic Act of April 30, 1900, c339, 31 Stat. 141 Section 2; and Hawaii Admission Act of March 18, 1959, Pub. L. 86-3, 73 Stat. 4 Section 2**

The Organic Act of April 30, 1900 established the Territory of Hawai‘i, transferring sovereignty over the Hawaiian Islands from the Republic of Hawai‘i to the United States of America. The constitution and statutory law of the Republic of Hawai‘i were adopted in the Organic Act as the laws of Hawai‘i.

The Admission Act of March 18, 1959 (Admission Act) admitted Hawai‘i to the Union of the United States of America, and

established statehood status for Hawai‘i on an equal footing with the other states. Upon admission, most of the Northwestern Hawaiian Islands that were part of the Territory of Hawai‘i became part of the State of Hawai‘i.

**29. Constitution of the State of Hawai‘i, Article XI, Sections 1, 2, 6, and 9; and Article XII, Section 7**

The Constitution of the State of Hawai‘i, Article XI, Section 1, entitled “Conservation, Control and Development of Resources,” provides that “the State and its political subdivisions shall conserve and protect Hawaii’s natural beauty and all natural resources,” and also provides that “all public natural resources are held in trust by the State for the benefit of the people.”

Article XI, Section 2, establishes the management authority of one or more executive boards or commissions to manage natural resources including public lands set aside for conservation purposes.

Article XI, Section 6, establishes the State’s authority to manage and control “marine, seabed and other resources within the boundaries of the State, including the archipelagic waters of the State....”

Article XI, Section 9, provides that “each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, ....”

Article XII, Section 7 provides that the State shall “protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians” “subject to the right of the State to regulate such rights.”

**30. Hawaii Revised Statutes (HRS): Title 1 - Chapter 6E; Title 10 - Chapter 128D; Title 12 - Chapters 171, 183C, 183D, 187A, 188, 190, 195D, 200; Title 13 – Chapter 205A; Title 19 - Chapters 339, 342D, 343;**

HRS Chapter 6E – Historic Preservation. Establishes the State’s Historic Preservation Division, and declares the intent to preserve, restore and maintain historic and cultural

*Papahānaumokuākea is home to 14 million seabirds  
(Photo: Dan Suthers)*





*Leopard Blenny or pō'o kauila*  
(Photo: Susan Middleton  
& David Liittschwager)

property through stewardship and trusteeship for future generations; claims state ownership to all historic, cultural and burial sites within its jurisdiction; establishes civil, administrative, and criminal (misdemeanor) penalties for violations of this chapter.

**HRS Chapter 128D – Environmental Response Law.** Creates a duty to report a release of a hazardous substance from a vessel; authorizes an appropriate state response to protect the public health, safety, and the environment. Civil penalties and injunctive relief may be sought for violations of this chapter. Knowing releases may be prosecuted as a Class C felony.

**HRS Chapter 171 – Public Lands, Management and Disposition of.** Establishes state authority for management of public lands, including preventing illegal activities and trespass. Administrative penalties may be sought for violations of this chapter. On July 7, 2008, Act 215 was signed into law, increasing the per day fines for encroachments upon public lands to \$1,000 per day for a first offense. Fines for prohibited use or activity on of public lands were also significantly increased, from \$500 per day, to \$5,000 per violation for a first violation. Repeat offenders may be liable for up to \$20,000 per violation and additional \$4,000 per day after notice is given if the violation persists.

**HRS Chapter 183C – Conservation District.** Recognizes the importance to conserve, protect, and preserve important natural resources, including fragile natural ecosystems, through appropriate management and use. All submerged lands in state territorial waters are zoned in the conservation district. Administrative fines and costs are

available for violations of this chapter. On July 7, 2008, Act 217 was signed into law revising Chapter 183C, HRS. It increased fines assessed from up to \$2,000 per violation, to up to \$15,000 per violation, and the possibility of fines of up to \$15,000 per day after notice is given and the violation persists.

**HRS Chapter 183D – Wildlife.** Gives DLNR authority for the management and administration of wildlife and wildlife resources of the state, including the establishment and maintenance of wildlife sanctuaries, forest reserves, and natural area reserves. Prohibits the taking or injury of wild birds. Criminal violations may be prosecuted as petty misdemeanors or misdemeanors. Administrative penalties are also applicable.

**HRS Chapter 187A – Aquatic Resources.** Allows the state to adopt regulations for the conservation and management of aquatic life in any area as appropriate, and encourages cooperation between DLNR and other governmental authorities; prevents or controls the introduction of alien aquatic organisms via handling of ballast water discharges. Criminal violations may be prosecuted as petty misdemeanors. Administrative penalties are also available under this chapter.

**HRS Chapter 188 – Fishing Rights and Regulations.** Regulates or prohibits the use or possession of certain types of fishing gear or methods. Section 188-37 was formerly used to regulate commercial fisheries in the Northwestern Hawaiian Islands by license and permit. Section 188-53, HRS, gives DLNR authority to establish such areas as the Northwestern Hawaiian Islands Marine Refuge (under Chapter 60.5, Hawaii Administrative Rules) for the purposes of managing, preserving, protecting, and conserving marine life. Criminal violations of this chapter are petty misdemeanors, with certain exceptions prosecuted as felonies.

**HRS Chapter 190 – Marine Life Conservation Program.** By this chapter, all marine waters of the State are marine life conservation areas administered by the State. Authorizes rules governing the take of marine resources such as fish, invertebrates, and algae. Violations of this chapter are petty misdemeanors.

**HRS Chapter 195D – Conservation of Aquatic Life, Wildlife, and Land Plants.** The Hawai'i State counterpart to the Endangered Species Act of 1973, but affords additional safeguards through determinations that certain indigenous species believed to need protection, may be additionally listed as threatened or endangered. Provides for separate state administrative enforcement and criminal misdemeanor penalty proceedings for violations.

**HRS Chapter 200 – Ocean Recreation and Coastal Areas Program.** Allows certain derelict, abandoned, or vessels aground to be immediately removed from state waters under certain conditions such as when posing an imminent danger to life or property. In addition to administrative penalties, certain violations of this chapter may be prosecuted as a misdemeanor.

**HRS Chapter 205A – Coastal Zone Management.** Creates a comprehensive and coordinated approach to regulation of development in coastal special management areas; including shoreline setback; and managing marine and coastal resource issues including recreation, historic preservation, scenic and open space preservation, protection of ocean ecosystems, reduction of coastal hazards, and beach protection. Civil fines may be available for violations of this chapter.

**HRS Chapter 339 – Litter Control.** Prohibits the disposal of refuse or waste material into the waters of the State. Infractions of this chapter may be prosecuted as violations.

**HRS Chapter 342D – Water Pollution. Prohibits discharge of a water pollutant into state waters.** Violations of this chapter may result in imposition of fines. Knowing violations may be criminally prosecuted as a Class C felony.

**HRS Chapter 343 – Environmental Impact Statements.** Provides for a state environmental review process, including proposed land uses within the conservation district or shoreline area defined by section 205A-41, HRS, or for certain uses of state funds.

**31. Hawaii Administrative Rules (HAR): Title 11 - Chapters 54, 55, 60.1, 200; Title 13 - Chapters 5, 60.5, 75, 76, 124, 125, 221, 275, 277, 280, and 300**

**HAR Chapter 54 – Water Quality Standards.** Creates state water quality standards including the policy mandate that where high quality waters constitute an outstanding national resource, such as waters of national and state parks and wildlife refuges and waters of exceptional or ecological significance, that water quality shall be maintained and protected. Section 11-54-7, HAR, classifies all beaches of the Northwestern Hawaiian Islands to be protected as “Class I” water areas.

**HAR Chapter 55 – Water Pollution Control.** Further elaborates water pollution discharge prohibitions defined under § 342D-50, HRS, and under NPDES permit criteria issued under this chapter.

**HAR Chapter 60.1 – Air Pollution Control.** Creates air quality emission standards; prohibitions against activities by any person causing air pollution also apply to any public body

**HAR Chapter 200 – Environmental Impact Statement Rules.** Provides agencies and persons with procedures, specifications of contents of environmental assessments and environmental impact statements, and criteria and definitions of statewide application.

**HAR Chapter 5 – Conservation District.** Regulates land uses in the conservation district (submerged lands are zoned in the conservation district) for the purpose of conserving, protecting, and preserving important natural resources of the State through appropriate management and use to promote their long-term sustainability. Any placement or erection of any solid material on land is a land use if that material remains on the land more than 14 days, or causes a permanent change in the land area on which it occurs.

**HAR Chapter 60.5 – Northwestern Hawaiian Islands Marine Refuge.** Creates the State of Hawai'i's Northwestern Hawaiian Islands Marine Refuge; requires a permit for access, and creates a fully protected zone to the extent of the State's jurisdiction.

**HAR Chapter 75 – Rules Regulating the Possession and Use of Certain Fishing Gear.** Regulates the use of certain fishing gear and methods, including a prohibition of use of poisonous substances, explosives, electrofishing devices, and firearms.

**HAR Chapter 76 – Non-indigenous Aquatic Species.** Protects against introduction of non-indigenous aquatic species by requiring ballast water management practices for shipping vessels

**HAR Chapter 124 – Indigenous Wildlife, Endangered and Threatened Wildlife, and Introduced Wild Birds.** Promotes conservation, management, protection, and enhancement of indigenous wildlife; and management of introduced wild birds.

**HAR Chapter 125 – Rules Regulating Wildlife Sanctuaries.** Establishes a Hawai'i State Seabird Sanctuary on various offshore islands in the main Hawaiian Islands as well as at Kure Atoll, to conserve, manage, and protect indigenous wildlife in sanctuaries.

**HAR Chapter 221 – Unencumbered Public Lands.** Regulates public activities on unencumbered public lands.

**HAR Chapter 275 – Rules Governing Procedures for Historic Preservation Review for Governmental Projects Covered Under Sections 6E-7 and 6E-8, HRS.** Requires historic properties to be evaluated and classified for potential impacts, mitigation, and conservation through a review process.

**HAR Chapter 277 – Rules Governing Requirements for Archaeological Site Preservation and Development.** Creates standards for preservation of historic property or cultural sites.

**HAR Chapter 280 – Rules Governing General Procedures for Inadvertent Discoveries of Historic Properties During a Project Covered by the Historic Preservation Review Process.** Provides rules for inventory, assessment, and potential mitigation upon inadvertent discovery of historical property.

**HAR Chapter 300 – Rules of Practice and Procedure Relating to Burial Sites and Human Remains.** Is the Hawai'i counterpart to the federal Native American Graves Protection and Repatriation Act, and it sets out the rules relating to burial sites and human remains.

#### *Traditional Customs that Safeguard the Property*

Under the Proclamation, the implementing regulations, and Monument Management Board policy, cultural and historic resources receive the same stringent protection as do the natural resources within Papahānaumokuākea. To Native Hawaiians, natural resources are cultural resources, and they are genealogically linked to those natural resources, including all of the Hawaiian Islands in the archipelago. Thus, the area must be treated with appropriate reverence and honor.

Under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470f, the Co-Trustees must consult with the State Historic Preservation Division, the Office of Hawaiian Affairs (OHA) and other Native Hawaiian organizations and individuals to avoid or minimize adverse impacts to historic properties that may arise from permitted and management activities. In addition, the Co-Trustees, OHA and other Native Hawaiian organizations and individuals will help ensure that Native Hawaiians have appropriate access to natural and cultural Papahānaumokuākea resources to continue practices that are important for the preservation and perpetuation of Native Hawaiian culture.

The Office of Hawaiian Affairs facilitates the Native Hawaiian Cultural Working Group, which provides input into Papahānaumokuākea management, permits and activities. Within the Monument Management Plan, two action plans are devoted to Native Hawaiian participation in management and access to the resources of Papahānaumokuākea.

# Cultural Research Cruise

From the Blog: Papahānaumokuākea Marine Educators and Cultural Practitioners Cruise, July 23rd, 2008  
by Andy Collins

In celebration of International Year of the Reef, Papahānumokuākea Marine National Monument took ten educators from across Oceania to the Northwestern Hawaiian Islands. Along with Oceania's educators, several Native Hawaiian cultural practitioners were offered berths on the cruise to conduct cultural research. Below are blog entries written by cruise participants that were published *Honolulu Advertiser*, and online at <http://hawaiianatolls.org>.

## The Waters of the NWHI Prove Very Refreshing



By expedition member  
Craig McGrogan (Australia)

[On] an expedition to Papahānaumokuākea Marine National Monument (PMNM)... a stimulating mix of marine educators, from throughout Oceania, coupled with the expansive waters of PMNM are ideal conditions in which to take a step back and reflect on my position and responsibilities as a Marine Educator.

I'm reminded that no matter how far apart the different islands we represent may be throughout Oceania, we have in common the same concerns and issues facing us in our field of marine education. From overfishing to declining water quality, these are challenges all coral reef managers are facing, and we as educators are tasked with communicating to others as we raise awareness and hopefully stimulate positive behavioral changes.

It is enriching for all to learn how different regions of our Pacific community are responding to these challenges, allowing us all to compare our own approach and the sort of messages (themes) we are communicating through our education and conservation work. Take, for instance, subsistence agriculture in Palau using composting techniques passed down from one generation to the next, not only to nourish crops, but to retain water and reduce soil erosion at times of high rainfall. A simple, yet effective means of improving crop production, whilst reducing nutrient and sediment run-off into coastal waters.

The use of fish ponds, a form of traditional aquaculture in Hawai'i, is yet another example of how coastal communities are able to enhance subsistence food production

in an environmentally sustainable way. By introducing such cross-cultural awareness and appreciation into our individual educational activities, we will in turn be able to offer a far richer learning experience.

We are all linked by the very ocean that separates us, no matter how far apart our countries may be. Strengthening these connections within the group that we are, on this expedition to the NWHI, will prove a valuable first step towards developing a collaborative network of marine educators throughout Oceania.

Practitioners hoped relationships built across Oceania would better enable management of the Pacific's fragile ecosystems.



Nai'a Watson, expedition member and Monument staff, and Uncle Mervin Dudoit from Moloka'i



## My Treasured of Memories of the National Monument



By expedition member  
Fatima Sauafea-Le'au

The purpose of the expedition is “to build a network of marine educators across Oceania committed to forwarding the goals of marine conservation and in inspiring future generations to be better stewards of

their natural resources”. The expedition to the national monument... reached its purpose. The most inspiring moments that I have witnessed in the national monument are the snorkeling activities... I swam around looking at live corals in Shark Island and saw a huge green turtle sitting on the sand looking at me as if she is saying “I got here first...find your own spot”. It is just so amazing to swim in the water with fish that come up close to your face. I will always remember too the hiking up Nihoa. When our group reached the top of the plateau.... It was such a beautiful site to watch the birds flying all over.

This expedition has been an exciting and once in a lifetime opportunity for me. I have learned so much from the expedition and I have also built a network of friends that, I hope, we will continue on our journey in sharing and exchange of our knowledge and ideas to conserve, protect and manage our resources for the future generations of the Pacific Islands.



(Photo: James Watt)



Marine educators and cultural practitioners after snorkeling in the Monument.

## Our Kupuna Islands

By expedition member  
Legario “Hank” Eharis



The Northwestern Hawaiian Islands is definitely remote, yet still a part of the Hawaiian people; they signify connections to the beliefs and cultural ties to the land and seas. When I first set foot upon the island of Nihoa, there came an overwhelming feeling of peacefulness. It was like being away from home for a very long time and suddenly you're home and everyone is sad but yet happy to see you again. Awesome feeling! You look around and fish rise to the surface of the water; monk seals come up to greet you; birds hover in your presence.

My most memorable moments will be the diving at the many off-shore reefs, in the coral lagoons, and to see the abundance of fish species still in a natural, pristine habitats, diving in the blue waters off of Mokumanamana and Mokupāpapa Atolls. I'm at a loss for words of the vast open blue planet I am just beginning to experience and see.

I have learned a lot from the different teachers and educators from throughout Oceania. There are similarities we encounter in the fight to better our land and ocean resources and in how to take care and promote malama ka aina, malama i ke kai (caring for the land, caring for the ocean). Hopefully this expedition will allow the doors to be open for more practitioners, educators and maka'ainana (people of the land—Hawaiians) to see and experience our Kupuna Islands.

## 5.c Implementation of Protective Measures

### Permitting System

One of the means by which the integrity of this property is upheld is through the restriction of access to only those who can demonstrate a convincing need to enter. Access to Papahānaumokuākea Marine National Monument is regulated through a rigorous permitting system, and permits are limited to activities that fall under the following permit types:

- **Research:** for activities designed to enhance the understanding of Papahānaumokuākea's resources and activities and improve resource management decision-making.
- **Conservation and Management:** for activities that make up the general management of Papahānaumokuākea, such as field station operations and marine debris removal.
- **Education:** for activities that further the educational value of Papahānaumokuākea.
- **Native Hawaiian Practices:** for activities that constitute Native Hawaiian cultural practices.
- **Special Ocean Use:** for activities related to commercial ocean uses that generate revenue or profits, including ecotourism and documentary filmmaking, which have a net benefit to Papahānaumokuākea.
- **Recreation (Midway only):** for all recreational activities.

Review of all permit applications is thorough, conducted by members of all State and Federal agencies involved. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031 to ensure the conservation and management of the natural, historic and cultural resources of Papahānaumokuākea. To be granted a permit for access to the site, the proposed activities must be found by the Co-Trustees to be compatible with the stringent requirements codifying Presidential Proclamation 8031 and the federal and state regulations for Papahānaumokuākea Marine National Monument (referred to below as the Monument, as taken from the Proclamation):

- a. The activity can be conducted with adequate safeguards for the resources and ecological integrity of the Monument;
- b. The activity will be conducted in a manner compatible with the management direction of Presidential Proclamation 8031, considering the extent to which the conduct of the activity may diminish or enhance Monument resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects;
- c. There is no practicable alternative to conducting the activity within the Monument;
- d. The end value of the activity outweighs its adverse impacts on Monument resources, qualities, and ecological integrity;



Establishing reef monitoring sites (Photo: James Watt)

- e. The duration of the activity is no longer than necessary to achieve its stated purpose;
- f. The applicant is qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct;
- g. The applicant has adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct;
- h. The methods and procedures proposed by the applicant are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument resources, qualities, and ecological integrity;
- i. The applicant's vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031; and
- j. There are no other factors that would make the issuance of a permit for the activity inappropriate.

In addition to meeting the findings of the Proclamation, each activity is reviewed to ensure that it is both biologically sound and culturally appropriate,

As a matter of policy, permit applications are sent to a select group of Native Hawaiian cultural experts and are also reviewed by the Office of Hawaiian Affairs (OHA) to determine if the activity will have any detrimental impacts to the culture. In addition, under Section 106 of the National Historic Preservation Act (NHPA), the Co-Trustees coordinate and consult with the State Historic Preservation Division, and seek input from OHA and other representatives of Native Hawaiian organizations to avoid or minimize the adverse impacts to historic properties that may arise from permitted activities.

Before the designation of Papahānaumokuākea, separate permits were issued by each agency; currently, all Papahānaumokuākea

permits are jointly issued as single unified permits and are signed by all three Co-Trustee agency designees. Each agency, as laid out in the Proclamation establishing Papahānaumokuākea, retains its sphere of jurisdiction, responsibility and expertise. Each brings different knowledge and strengths to this process. They work together on many aspects of the management process. Throughout this process however, each partner agency continues to carry out its statutory and enforcement responsibilities. Even where one of the MMB member agencies has primary responsibility, input from the other agencies is presumed as part of overall management.

#### Permit requirements and protocols

In addition to the required review of each activity to ensure that it meets the findings of the Proclamation and is both biologically sound and culturally appropriate, there are several permit requirements and protocols that must be complied with.

**Cultural:** All permittees are required to participate in a Native Hawaiian cultural briefing prior to departure for Papahānaumokuākea. They are also encouraged to provide opportunities for cultural monitors and practitioners to accompany them in the property.

**Vessels:** All permitted vessels must undergo a hull inspection, and hull cleaning if necessary, prior to entering Papahānaumokuākea. In addition, all vessels must be certified as rat-free. All vessels must also be equipped with an approved Vessel Monitoring System (VMS) for tracking purposes.

**Gear and Supplies:** All tenders, dive gear, clothes, and even food that will be eaten ashore must undergo additional quarantine requirements before entering all areas except Midway Atoll and French Frigate Shoals. The protocols are intended both for activities at a single site and for moving between sites within Papahānaumokuākea. See Appendix F for the full protocols regarding the special conditions and rules for moving between islands and atolls and packing for field camps, as well as for disease and introduced species prevention for permitted activities in the marine environment.

# Day 3: Images from the Nihoa Expedition

From the Blog of the Marine Educators and Cultural Practitioners Cruise to PMNM, July 2008. Published online and in the newspaper, The Honolulu Advertiser.



Nihoa's sea cliffs are hundreds of feet high, with the highest point approaching 900 feet.

Frontal view of Nihoa just prior to access as the crew of the NOAA ship *Hi'ialakai* prepares to take the



educators ashore. Expedition members are first loaded into safe boats, then lowered into the water and finally driven to meet an even smaller zodiac boat that will take them to shore at Nihoa.

Once on Nihoa, the group is lead by Kekuewa Kikiloi, a Ph.D. candidate in archaeology who has done the most recent research and study of the archaeological sites on both Nihoa and Mokumanamana. Kikiloi prepped the group with detailed instructions and then asked the ancestors for permission to enter with an *oli*, or chant.



The groups accessed the island in two small groups to minimize disturbance to the birds and cultural sites. Each group hiked in single file, again to minimize disturbance. The initial part of the trail was very steep; the group had to work as a team to ensure everyone's safety.



About half-way up the Middle Valley trail, Kikiloi spoke to the group

**Biological Samples:** Commonly collected samples (coral, fish, invertebrates, etc.) are subject to protocols developed to ensure the proper handling, storage, and transport of biological samples within Papahānaumokuākea. See Appendix F for the full protocol regarding general storage and transport for scientific collection in Papahānaumokuākea.

A major factor in the development of these requirements and protocols is the fact that the islands and atolls of Papahānaumokuākea provide habitat for many rare, endemic plants and animals. Many of these species are formally listed as endangered under the Endangered Species Act and/or by the IUCN. Endemic plants and insects, and the predators they support, are especially vulnerable to the introduction of competing or consuming species. Such introductions may cause the extinction of island endemics or even the destruction of entire island ecological communities. The protocols listed above detail the rigorous policies and procedures that must be strictly adhered to when access to particular islands and atolls is given. Restrictions are included on the movement of not only personnel, but all materials, vessels, dive and monitoring equipment, camping and terrestrial supplies, and food to these islands and atolls. For example, all cloth items (clothes, camera straps, hats, shoes, under garments, etc.) must be purchased new and frozen for 48 hours prior to going ashore at any of the islands and atolls, except Midway. All dive gear must be soaked in an approved solution at the end of each day. Transport protocols include the collection of samples and their disposition.

## Enforcement and Resources

NOAA and FWS both have law enforcement officials who investigate violations of Papahānaumokuākea resources or quality. Both these agencies work in partnership cooperatively with the State of Hawai'i Division of Conservation and Resources Enforcement within the Department of Land and Natural Resources to investigate and cite parties who have violated Papahānaumokuākea regulations. Systems to monitor both domestic and international

maritime traffic have been implemented. NOAA works in concert with the U.S. Coast Guard (USCG) to monitor all vessel activity in Papahānaumokuākea and to track movement via the required VMS. The USCG regularly sends ships and planes to patrol and monitor activity in the area.

Staff are in Papahānaumokuākea year-round at three sites: Midway Atoll, French Frigate Shoals, and at a field camp at Laysan Island. In addition, field camps are staffed for at least six months of the year at other locations such as Kure Atoll. This presence also ensures that any unauthorized vessel or activity near these islands will be observed promptly and reported, as each of these islands are equipped with communications technology.

Additional innovative enforcement technology and programs are being considered in the Monument Management Plan. In the past two years, the USCG and NOAA-Fisheries OLE have taken swift action on alleged fishing violations, resulting in over \$100,000 in combined fines.

Adequate resources are available to ensure the property is protected. Resources are available from both the Federal government of the United States and the government of the State of Hawai'i. In addition, myriad government agencies can and do provide additional resources, both in financial terms and in-kind services.

## 5.d Existing Plans

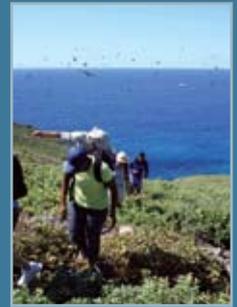
All plans related to the conservation and management of Papahānaumokuākea Marine National Monument are developed by the Co-Trustees. The islands of Papahānaumokuākea that are part of the State of Hawai'i remain under the jurisdiction of the City and County of Honolulu; however, no current municipal plans address the property.

Please refer to Section 5.e "Monument Management Plan" regarding preparation of the management plan for the property.

The following list provides an overview of some of the existing plans for resource

about the many agricultural terraces located on this particular side of the island. As a group, they have not yet been mapped in detail.

The group continues to hike in single file to the top of the ridge crest above Middle Valley.



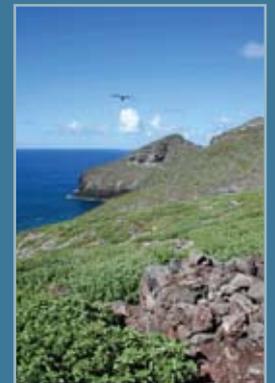
This picture does not fully convey the feeling of thousands of birds flying overhead, but it provides an opportunity to

understand just how many birds call this small rocky island home.



An immature great frigate bird rests in its nest amongst the thick 'ilima bushes that cover the entire island.

In the foreground is an agricultural terrace. In the background is "Dogs Head Peak" a name given by the Tanninger expedition (1923-1924); atop this peak sits the largest *heiau*, or ceremonial temple, on the island. Kikilo'i said that as many as 40 coral heads often a key feature of ceremonial sites—were found there.



A group shot of the first access group.

After two-hours on-island the group headed back to the landing area for pick up by the zodiac.



management in Papahānaumokuākea that demonstrate the breadth and depth of protective plans already in operation (see Appendix L for full documents). As discussed in Section 5.b “Protective Designations”, a range of applicable protective laws and current management strategies already provide comprehensive and long lasting protective measures for the property. These plans were in existence prior to designation of Papahānaumokuākea; many are site- or species-specific. The Monument Management Plan is a comprehensive, overarching approach to management which incorporates, by reference or action plan, all of these plans. For example, the actions and strategies of the Threatened and Endangered Species Action Plan incorporate many of the activities outlined in each of the stand-alone species recovery plans listed below.

#### **Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Operations Plan**

This plan was written to guide the operations within the NWHI Coral Reef Ecosystem Reserve. It was the basis for the day-to-day management decisions during the first five years of reserve operation. All components of this plan that were not already implemented were incorporated into the Monument Management Plan. The NOAA Office of National Marine Sanctuaries was the lead agency for this plan.

#### **Visitor Services Plan for Midway Atoll**

This plan documents approved recreational activities at Midway Atoll and identifies the structure of the visitor services program managed by the U.S. Fish and Wildlife Service, the lead Co-Trustee agency. The plan also addresses activities that honor and interpret World War II history as recognized by the Battle of Midway National Memorial. It discusses operational limitations, biological constraints and partnership opportunities beyond Midway Atoll. A key feature of the plan is that it limits the total number of overnight visitors to 50 people per night for 2009 and beyond.

#### **Hawaiian Islands National Wildlife Refuge Master Plan**

Since its approval in 1986, this plan has guided the management of the Hawaiian

Islands National Wildlife Refuge. It places primary emphasis on protecting and enhancing refuge wildlife resources, particularly threatened and endangered species. It also includes a strategy to evaluate and nominate, if appropriate, lands and waters of the refuge for status as a World Heritage site. Primary responsibility for implementation of the plan is with the FWS as the lead agency.

#### **Fish and Wildlife Service Draft Laysan Island Ecosystem Restoration Plan**

In 1998, the draft Laysan Restoration Plan was developed in response to a need for coordinated ecosystem restoration that takes an integrated approach to managing the island’s entire biota rather than a species-by-species approach. It includes recommendations that are helping FWS attain the following objectives:

- (1) Stabilize the present ecosystem by preventing any new introductions.
- (2) Recreate as nearly as possible the Laysan Island ecosystem that was present prior to major human caused habitat modification during the 1890s and early 1900s.
- (3) Whenever possible, eliminate nonnative species, prioritizing those that cause obvious or significant ecosystem alterations.
- (4) Replant or reintroduce native species that were extirpated from Laysan.
- (5) Establish regular comprehensive ecosystem monitoring, so that any nonnative introductions or declines in native species will be detected early enough for management to react in a cost-effective manner.

#### **Fish and Wildlife Service Regional Seabird Conservation Plan, Pacific Region**

The purpose of the Pacific Region’s Regional Seabird Conservation Plan is to identify the Fish and Wildlife Service’s priorities for seabird management, monitoring, research, outreach, planning and coordination. The plan includes a review of seabird resources and habitats, a description of issues and

threats, and a summary of current management, monitoring and outreach efforts. All species are prioritized by conservation concern at the regional scale, and recommendations for conservation actions are identified and prioritized. Papahānaumokuākea populations of five species discussed in the plan are considered globally significant, including two listed as vulnerable by the IUCN.



*From the tiniest flatworm to grandest coral-cape, the colors of Papahānaumokuākea are unforgettable*  
(Photo: James Watt)

**Fish and Wildlife Service Contingency Plans for Disasters – Covering the Pacific Remote Island National Wildlife Refuge Complex**

The purpose of this document is to establish communications procedures and delegation of authority procedures for emergency situations that may affect the safety of the staff or operation of the Pacific Remote Islands National Wildlife Refuge Complex.

**National Marine Fisheries Service - Final Environmental Impact Statement: Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region**

NOAA first implemented a federal bottomfish fishery management plan in the early 1980s, and has since added several amendments to the plan. The management regime for the waters around the property have been divided into the Ho'omalulu zone (area west of 165° 00' W longitude) and the Mau zone (area between 161° 20' W longitude and 165° 00' W longitude); a limited-entry fishery has been established to carefully manage and control fishing effort. Additional restrictions, including limits on vessel size, have also limited fishing pressure within the property. A total of 17 fishery permits were authorized under the limited-entry program for the two management zones, but only eight of these fishery permits were still in effect when the Proclamation was issued on June 15, 2006. No additional permits will be issued before the fishery is phased out in 2011.

**Fish and Wildlife Service - Prehistoric Cultural Resources and Management Plan for Nihoa and Necker Islands, Hawai'i**

This plan outlines management strategies for the cultural resources of the islands of Nihoa and Mokumanamana.

**Hawai'i's Comprehensive Wildlife Conservation Strategy (CWCS)**

Hawai'i's CWCS is a comprehensive review on the status of the full range of the State's native species, both terrestrial and aquatic. In addition to identifying major threats, it also presents strategies for long-term conservation of these species and their habitats. The mission of this strategy is to guide conservation efforts across the State, including the Northwestern Hawaiian Islands, to ensure protection of Hawai'i's wide range of native wildlife and the diverse habitats that support them. Congress requires states to develop such strategies as an eligibility condition for state wildlife grants.

**State of Hawai'i Aquatic Invasive Species Management Plan**

The goal of this plan is to minimize the harmful ecological, economic and human health impacts of aquatic invasive species through the prevention and management of their introduction, expansion, and dispersal into, within, and from Hawai'i. To accomplish this goal, the plan identifies seven objectives (ranging from collaboration and prevention, to research and policy) as well as associated strategies for each.

### Various Species Recovery Plans

Pursuant to the Endangered Species Act, recovery plans for numerous species within the property have been developed by FWS and the National Marine Fisheries Service. A recovery plan develops goals, objectives, criteria, and actions needed for protecting and enhancing rare and endangered species populations. The plans provide for the conservation of species at risk of extinction throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend. Summaries of the various recovery plans are outlined below (see Appendix M for full recovery plans).

**Hawaiian Monk Seal:** As a species, the Hawaiian Monk Seal is in crisis. The population remains in a grave decline that has lasted 20 years; only about 1,200 monk seals remain. Modeling predicts that the total monk seal population will fall below 1,000 animals by the year 2012. Actions to date have not been sufficient to result in a recovering population. Most of the total world population of Hawaiian Monk Seals breeds and forages inside Papahānaumokuākea. A recent revision of the recovery plan for the Hawaiian Monk Seal provides guidance for the lead agency in this recovery program, NOAA Fisheries. The Hawaiian Monk Seal Recovery Plan details the ways in which the MMB can facilitate and support those efforts (NOAA Fisheries 2007).

**Cetaceans:** In the NWHI, sighting and acoustic recordings of baleen whales as well as toothed whales and dolphins have been documented. Five species of baleen whales listed as “endangered” under the Endangered Species Act of 1973, and as “depleted” under the Marine Mammal Protection Act of 1972, have been sighted or heard in Papahānaumokuākea. In addition to these five, the endangered sperm whale and at least 18 other non-ESA listed species are found in Papahānaumokuākea. It has now been documented that humpback whales are calving in the eastern portion of the property (Johnston et al. 2007). Recovery actions for this listed species are summarized in the final recovery plan for the humpback whale,

*Megaptera novaeangliae* (NOAA Fisheries 1991). Draft recovery plans are available for the fin whale and sperm whale (NOAA Fisheries 2006a, 2006b), and a final plan is available for the recovery of the blue whale (NOAA Fisheries 1998).

**Marine Turtles:** The marine turtles known to occur in Papahānaumokuākea are the Hawaiian population of the Green, Hawksbill, Loggerhead, and Leatherback turtles. While there are no records of the endangered Olive Ridley Turtle within Papahānaumokuākea waters, their wide distribution throughout the tropical Pacific makes it likely that they do also occur there. Green and Loggerhead turtles are listed as threatened species; the Hawksbill and Leatherback turtles are classified as endangered species. Recovery plans are in place for each of these species in the Pacific and five-year reviews were jointly published in 2007 (NOAA Fisheries and FWS 1998a; 1998b; 1998c; 1998d; 1998e; 2007). Nesting habitat loss, the harvesting of eggs and turtles for commercial and subsistence purposes, and fishery interactions have caused sea turtle populations to decline across the Pacific. About 90% of the Green Turtles in the Hawaiian Islands are known to nest in the NWHI, the majority on a few islets at French Frigate Shoals (Balazs and Chaloupka 2003).

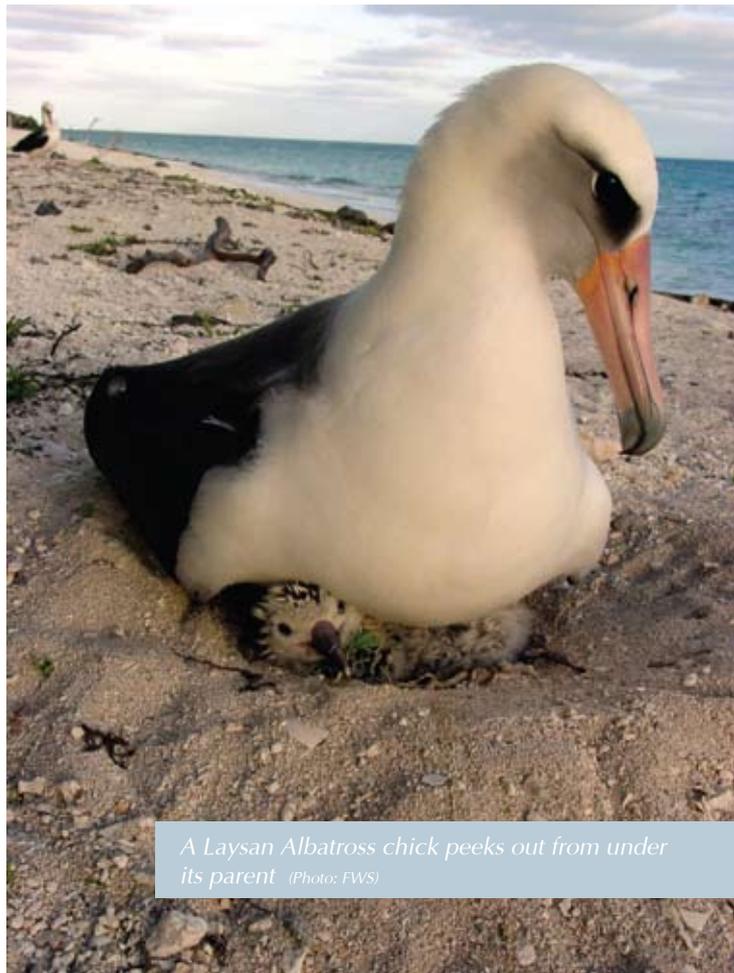
**Birds:** Five bird species in Papahānaumokuākea are afforded protection under the Endangered Species Act. Three species are passerines: the Laysan Finch, found on Laysan Island and Pearl and Hermes Atoll, and the Nihoa Finch and the Nihoa Millerbird, which are endemic to Nihoa. Research, recovery, and management for these species takes into consideration the recommendations of the Northwestern Hawaiian Islands Passerines Recovery Plan (FWS 1984) and ongoing input from species experts. Numerous sites were evaluated and ranked for translocation of these species to establish additional populations; this information and some recommendations for proceeding with translocation were provided recently by Morin and Conant

(2007). This plan is implemented by FWS.

The Laysan Duck has the most restricted range of any duck species and is especially vulnerable to extinction because of its small population size (fewer than 800 individuals) and extremely limited range. In 2004 and 2005, 42 Laysan Ducks were translocated to Midway Atoll NWR, where their population has grown to 200 birds (Reynolds et al. 2007).

The Short-tailed Albatross was first observed at Midway Atoll between 1936 and 1941. Since then, between one and three individuals have been observed every year in Papahānaumokuākea. While the Short-tailed Albatross primarily breeds on Torishima, an island owned and administered by Japan, the *Short-tailed Albatross Draft Recovery Plan* (FWS 2005) provides suggestions for ways in which Monument staff can facilitate recovery of this species.

**Plants:** Six plant species known historically from the NWHI are listed as endangered. Three plant taxa have probably always been rare and restricted to Nihoa, although one species, the loulou or fan palm, also occurred on Laysan Island. *Mariscus pennatiformis* ssp. *bryanii* is known only from Laysan Island. *Cenchrus agrimonioides* var. *laysanensis* was historically known from Laysan Island and Midway and Kure Atolls, but has not been seen there since about 1980 (O'Connor 1999; HBMP database 2007). A recovery plan for three species found only at Nihoa (the Nihoa fan palm, *Schiedea verticillata*, and *Amaranthus brownii*) was finalized in 1998 (FWS 1998). Recovery actions for the other three species (*Cenchrus agrimonioides*, *Mariscus pennatiformis*, and *Sesbania tomentosa* or 'ohai) are described in the *Recovery Plan for the Multi-Island Plants* (FWS 1999).



A Laysan Albatross chick peeks out from under its parent (Photo: FWS)

### 5.e Monument Management Plan

The Co-Trustees have developed a joint agency Monument Management Plan to serve as the guiding document for coordinated conservation and management actions in Papahānaumokuākea over the next 15 years. The final plan will be released in late 2008. The Monument Management Plan focuses on coordinated management across Co-Trustee agencies and addresses issues such as conservation, research, monitoring, enforcement, education, Native Hawaiian practices, cultural resources, permitting and field operations. As it was developed, the Monument Management Plan incorporated many of the plans that had been previously developed to guide current management actions within the NWHI. These plans are listed in Section 5.d.

The Monument Management Plan is organized into three sections:

Section 1, the introduction, describes Papahānaumokuākea’s setting and the current status and condition of the ecosystem and cultural resources based on existing scientific and historic knowledge. It also describes known anthropogenic stressors that affect Papahānaumokuākea’s resources or may do so in the future.

Section 2, the management framework, includes key elements to move toward an ecosystem approach to management. The framework comprises the following elements:

- The legal and policy basis leading to the establishment of Papahānaumokuākea
- Vision, mission and guiding principles that provide an overarching policy direction for Papahānaumokuākea
- Goals to guide the implementation of specific action plans to address priority management needs
- Institutional arrangements for management among the Co-Trustees and other stakeholders
- Regulations and zoning to manage human activities and threats
- Concepts and direction to move toward a coordinated ecosystem approach to management

Section 3 presents action plans to address six priority management needs over a 15-year planning horizon. These priority management needs are:

- Understanding and interpreting NWHI resources
- Conserving wildlife and their habitats
- Reducing threats to Papahānaumokuākea’s resources
- Managing human activities
- Facilitating coordination
- Achieving effective operations

Each action plan consists of multiple strategies and activities to address one or more priority management needs and achieve a desired outcome. Performance measures will be developed to evaluate implementation of the Monument Management Plan. Papahānaumokuākea regulations and other policy and operating instruments are provided in the Appendices, along with references.

*The Vision, Mission, Guiding Principles, and Goals for Managing Papahānaumokuākea Marine National Monument*

The Papahānaumokuākea Marine National Monument vision, mission and guiding principles establish the overarching policy direction and guidance for Papahānaumokuākea’s management (see Table 5.2). The vision describes the long-term management desire of the Co-Trustees to maintain the ecosystem health and diversity and Native Hawaiian cultural significance of Papahānaumokuākea in perpetuity. The mission establishes the need for integrated management in order to ensure ecological integrity and achieve strong, long-term protection and perpetuation of NWHI ecosystems, Native Hawaiian culture, and heritage resources for current and future generations. The guiding principles provide direction for making informed decisions about human activities consistent with the vision and mission for Papahānaumokuākea. The goals are the unifying elements of successful property management. They identify and focus management priorities, resolve issues, and link to the public interest in preserving and caring for the historic and scientific objects within Papahānaumokuākea.



(Photo: James Watt)

*Table 5.2: Monument vision, mission, guiding principles, and goals*

Vision
To forever protect and perpetuate ecosystem health and diversity and Native Hawaiian cultural significance of Papahānaumokuākea.
Mission
Carry out seamless integrated management to ensure ecological integrity and achieve strong, long-term protection and perpetuation of NWHI ecosystems, Native Hawaiian culture, and heritage resources for current and future generations.
Guiding Principles
<p>Papahānaumokuākea shall be managed in a manner that—</p> <ul style="list-style-type: none"> <li>• Is consistent with the Vision and Mission;</li> <li>• Recognizes that the resources of the NWHI are administrated by the Co-Trustees for the benefit of present and future generations;</li> <li>• Affirms that the NWHI and its wildlife are important, unique, and irreplaceable;</li> <li>• Honors the significance of the region for Native Hawaiians;</li> <li>• Honors the historic importance of the region;</li> <li>• Incorporates best practices, scientific principles, traditional knowledge, and an adaptive management approach;</li> <li>• Errs on the side of resource protection when there is uncertainty in available information on the impacts of an activity;</li> <li>• Enhances public appreciation of the unique character and environment of the NWHI;</li> <li>• Authorizes only uses consistent with Presidential Proclamation 8031 and applicable laws;</li> <li>• Coordinates with federal, state, and local governments, Native Hawaiians, relevant organizations, and the public; and</li> <li>• Carries out effective outreach, monitoring, and enforcement to promote compliance.</li> </ul>
Goals
<b>Goal 1:</b> Protect, preserve, maintain, and where appropriate restore the physical environment and the natural biological communities and their associated biodiversity, habitats, populations, native species, and ecological integrity.
<b>Goal 2:</b> Support, promote, and coordinate research, ecosystem characterization, and monitoring that increases understanding of the NWHI, improves management decision-making, and is consistent with conservation and protection..
<b>Goal 3:</b> Manage and only allow human activities consistent with Proclamation 8031 to maintain ecological integrity and prevent or minimize negative impacts for long-term protection.
<b>Goal 4:</b> Provide for cooperative conservation including community involvement that achieves effective property operations and ecosystem-based management.
<b>Goal 5:</b> Enhance public understanding, appreciation, and support for protection of the natural, cultural, and historic resources.
<b>Goal 6:</b> Support Native Hawaiian practices consistent with long-term conservation and protection.
<b>Goal 7:</b> Identify, interpret, and protect Papahānaumokuākea’s historic and cultural resources.
<b>Goal 8:</b> Offer visitors opportunities at Midway Atoll to discover and appreciate the wildlife and beauty of the NWHI, enhance conservation, and honor its unique human history.

### **Toward ecosystem-based management**

An ecosystem approach to management for Papahānaumokuākea requires that multiple steps be implemented in a comprehensive and coordinated way. The Papahānaumokuākea Marine National Monument approach is unique in that it includes:

- Ecosystem level planning;
- Cross-jurisdictional management goals;
- Co-management;
- Adaptive management;
- Marine zoning;
- Habitat restoration;
- Incorporation of traditional knowledge; and
- Long-term ocean and coastal observing, monitoring and research.

### **Effective management plan implementation**

The Monument Management Plan has recently been finalized. A key component of overall management effectiveness will be a review and updating of the plan every five years, as described below. In addition, an entire action plan is devoted specifically to developing measures of effectiveness across all Papahānaumokuākea activities. Additional activities to assess the health of the resources of Papahānaumokuākea are outlined in Section 6 “Monitoring”.

### **Monument Management Plan development and review**

The management plan will be reviewed every five years. The review represents an essential element of the adaptive management process and includes public involvement, characterization of issues, and review and evaluation of action plans.

The Monument Management Plan was developed based on the current state of knowledge regarding the most appropriate management measures. These management measures consist of regulations and action plans to govern the first five years of Papahānaumokuākea management, and project activities over a 15-year time frame where appropriate. Action plans will be implemented, and where regulations apply, enforced, through interagency collaborative

mechanisms based on the jurisdiction of each government agency. After five years, the Monument Management Plan will be reviewed, incorporating lessons learned and new data and information from monitoring, ecosystem science, and traditional knowledge, along with a comprehensive evaluation to develop or refine management strategies and actions.

### **Achieving effective property operations**

A key priority management need in the management plan focuses on property operations, including central and field operations, information management, and overall program evaluation. Central and field operations are essential to support action plans to address all other priority management needs. Monument staff and facilities provide essential operational capacity for effective collaboration between the MMB and other stakeholders. Operational effectiveness will be evaluated and improved through an adaptive management process that captures lessons learned and transforms them into action.

The Co-Trustees are committed to developing management plan performance measures, which fall into three categories: annual benchmarking, management capacity assessment and outcome assessment.

Annual benchmarking measures will be used to determine whether activities have occurred as planned. Management capacity assessment measures will be used every two to three years to determine the adequacy of implementation mechanisms and processes, including interagency coordination and stakeholder and community participation. Outcome assessment measures will be used every four to five years to evaluate the impacts of management actions on the resources and ecosystem status.

## **5.f Sources and Levels of Finance**

The primary sources of funding for the property come from the Co-Trustee agencies. Budgets are appropriated annually from the U.S. Congress or the State of Hawai'i Legislature to the federal

and state administrations. NOAA's Office of National Marine Sanctuaries annual operating budget for the Monument is approximately \$7.1 million. FWS has an annual Monument budget of approximately \$6.8 million, including operations and deferred maintenance funds, roughly half of which administers contracts (including a portion of airport operations) at Midway Atoll. The Federal Aviation Administration also finances a portion of the airport management at Midway Atoll. While the State of Hawai'i does not have a budget that is solely devoted to the Monument, they allocate nearly \$462,000 of staff and resources annually with in-kind services. NOAA-Fisheries also does not have a budget that is solely devoted to the Monument, but allocates considerable funds to protected species restoration, monitoring and protection through the Hawaiian Monk Seal programs, programs for turtles, marine debris removal, and coral reef monitoring. The combined funding for these NOAA-Fisheries programs is \$11 million annually.

In addition to the Co-Trustee agencies, numerous other agencies provide added resources to support the management of Papahānaumokuākea. NOAA's Office of Law Enforcement and FWS' refuge law enforcement staff both support enforcement actions in Papahānaumokuākea. The USCG regularly patrols the area with ships and planes; these assets cost on average \$5,600/hour for patrols and/or emergency response. The Hawai'i Undersea Research Lab of the University of Hawai'i has a deep diving submersible and remotely operated vehicles that are used to assess deep ocean resources in Papahānaumokuākea. Funding for these efforts comes from numerous sources, including National Science Foundation grants, NOAA's Ocean Exploration Program and NOAA's Undersea Research Center. The Hawai'i Institute of Marine Biology of the University of Hawai'i has received an annual appropriation in the last four years, ranging from \$1.2–\$2.5 million to assist in characterizing, understanding and assessing connectivity between islands and throughout the Hawaiian Archipelago. Additional resources have been allocated by various entities to document and find many of the maritime heritage resources within

Papahānaumokuākea. These funds come from both government and private sources. The total financial allocation to manage, restore and enforce the property's resources is difficult to quantify exactly, but ranges from about \$34 million to more than \$50 million annually.

While the funding to manage Papahānaumokuākea is adequate, recent cuts have diminished the Co-Trustees' ability to address the threat of marine debris. In addition, funding for the restoration and annual population assessments of an iconic Papahānaumokuākea species, the Hawaiian Monk Seal, has decreased in the past few years, raising additional concerns about the ability of the management agencies to halt the decline of this critically endangered species.

## 5.g Expertise and Training

Staff expertise and training in conservation and management is extensive and often complex. The FWS and NOAA establish strict eligibility requirements for their scientific and management positions. Current staff have extensive experience in wildlife biology and fish and wildlife management, or policy; some are recognized worldwide as experts in their field. In addition to this expertise, the FWS operates the National Conservation Training Center in Shepherdstown, West Virginia, where training courses in a wide range of sciences, technologies and management are offered. NOAA has laboratories and training programs around the country. Many staff are members of professional organizations and have close contact with their peers in other agencies and organizations, often far beyond the boundaries of the United States. All are highly educated; most possess at least a bachelor's degree from an accredited University.

Coordination with other agencies for training is ongoing and undertaken frequently, depending on the discipline. All field staff from the agencies are trained together in wilderness first aid, small vessel operations, and other emergency response protocols. NOAA ship operations are on par with military efficiency levels, and all officers are part of a quasi-military corps. Emergency response

for oil and vessel events is coordinated via the USCG area command, and all agencies participate in these exercises.

The USCG has developed area contingency plans for response to oil spills and vessel groundings throughout Papahānaumokuākea. Because of the extensive infrastructure found at Midway Atoll National Wildlife Refuge, FWS has also developed several Midway-specific contingency plans, including an Emergency Spill Response Plan, Spill Prevention and Control Countermeasure Plan, and an Airport Emergency Action Plan. A team made up of staff from each Co-Trustee agency works together to train and develop response plans for both anticipated and unanticipated events. This includes evacuation protocols for emergencies and weather, as well as for response to natural events such as disease outbreaks. While not all response plans have been developed, many are called for and outlined in the Monument Management Plan.

Education and outreach staff are trained in communications techniques; many of the education staff are former teachers. Papahānaumokuākea Marine National Monument staff are also reaching out to colleagues in other marine protected areas, such as the Great Barrier Reef Marine Park Authority in Australia, to gain knowledge from their management experiences. Conferences such as Our Sea of Islands, held in November 2006, allow for sharing of experiences across the Pacific.

Monument staff have contributed resources as well as logistical and technical support to projects that have helped to bring the majesty of this coral reef and Pacific island area to a broad audience. Films such as *Ocean Futures' "Voyage to Kure,"* BBC and National Geographic features, and Susan Middleton and David Liittschwager's photographic works in *National Geographic* and their book *Archipelago* are several examples. Monument managers, research and education staff, and field support personnel were instrumental in assisting

in the production of these visual journeys, and continue to support projects like these, that reach a broad audience.

Multiple staff have expertise in Native Hawaiian cultural resource management and practices. Within NOAA, there is a team that works explicitly on Native Hawaiian traditional knowledge and management as it pertains to Papahānaumokuākea. Several staff work exclusively with Native Hawaiian cultural research and constituency relations, and multiple staff are Native Hawaiian practitioners themselves. Additionally, the December 2006 Memorandum of Agreement for Promoting Coordinated Management of the Northwestern Hawaiian Islands Marine National Monument (agreement) provided for the inclusion of the Office of Hawaiian Affairs into the Monument management process to provide a voice for Native Hawaiians and their cultural rights and practices. Through this Agreement and as described in the MMP, the Co-Trustees will undertake coordinated, integrated management to achieve strong, long-term protection and perpetuation of NWHI ecosystems, Native Hawaiian traditional and customary cultural and religious practices, and heritage resources for current and future generations.

## 5.h Visitor Facilities and Statistics

One of the management principles of Papahānaumokuākea Marine National Monument is to bring the place to the people rather than the people to the place. As provided in the Presidential Proclamation establishing Papahānaumokuākea, Midway Atoll is the only place where the public is welcomed to learn about and experience this remote island ecosystem, and hopefully to return home with a newfound knowledge of how their actions far from these shores can affect Papahānaumokuākea's resources.

Visitation at Midway Atoll is managed under a Visitor Services Plan incorporated into the overall Monument Management Plan. It provides for a very small-scale

program, with no more than 50 overnight visitors present at any one time. Currently, that number is much lower based on limited transportation availability to the atoll (see Table 5.3).

Visitors are housed in a converted U.S. Navy Bachelor Officers' Quarters; 24 rooms are currently available. In the future, one of the historic officers' houses may also be converted to accommodate visitors. All meals are served in the Clipper House restaurant. A small food and supply store and a separate gift shop are available. Transportation is almost entirely by bicycle or on foot, although a limited number of golf carts are available to visitors.

In addition to overnight visitors, Midway occasionally hosts larger groups for less than a day, generally to commemorate the Battle of Midway. These visitors are offered guided walking tours along existing roadways with interpretive programs at specific historic or wildlife stops. The management plan and Midway Visitor Services Plan limit such larger day visits to three per year.

At Midway Atoll, a small visitor center interprets natural and historic resources, and visitors participate in a mandatory orientation session that furthers their knowledge about Papahānaumokuākea resources and their importance to Native Hawaiian culture. Several guided tours are offered by FWS staff. Guided tours focus on refuge management, historic resources, restoration activities, and biological resources. Other visitor facilities include a road/trail system throughout Sand Island, a "trail" along the historic runways of Eastern Island, a theater, library, gymnasium, bowling alley and small community center. In the future, a new museum and expanded interpretive programs are planned. Many of the current visitors come to Midway with a guided tour operator, providing additional programs and information for guests.

The Midway visitor services plan and all proposed visitor experiences meet all seven criteria for sustainable tourism proposed by the World Heritage Alliance.

Visitation at Midway Atoll over the past several years is as follows:

*Table 5.3: Visitation at Midway Atoll, 2005 - present*

Fiscal Year	Visitor Count
2005	610
2006	250
2007	1,861*
2008 (to date)	310

\*This number is due largely to a 1-day event to commemorate the 65th anniversary of the Battle of Midway.

Other than Midway Atoll, Papahānaumokuākea is closed to public visitation, although occasionally small groups of educators, documentary filmmakers, or government officials visit some of the islands under permit.

### 5.i Property Promotion and Presentation

As outlined in the Monument Management Plan, the Co-Trustees plan to continue and strengthen their outreach, interpretation and educational efforts in the coming years. Educational programs such as Navigating Change focus not just on Papahānaumokuākea's natural, cultural and historic resources, but on raising awareness and motivating students to change their attitudes and behaviors to better care for all of Hawai'i's land and ocean resources. Workshops on Midway Atoll for teachers and other community leaders and educators offer participants the opportunity to experience Papahānaumokuākea and bring it back to their students and lifetime learners. Colleges, universities and private organizations also have the opportunity to conduct college-level classes or informal educational camps on Midway Atoll to bring Papahānaumokuākea to life for students.

As stated earlier, to limit impact on the property's resources, among other goals, promotion and presentation of Papahānaumokuākea largely brings the place to the people rather than the people to the place.

# *Our Sea of Islands:*



## **A Regional Forum for Oceania on Marine Managed Areas and World Heritage**

29 January – 2 February, 2007  
Honolulu, Hawai'i

The forum, organized by Papahānaumokuākea Marine National Monument and the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Centre, together with their partners, provided an opportunity for Pacific island leaders to work together for better marine and heritage conservation.

More than 100 delegates from over 20 Pacific nations, including the United States, Solomon Islands, Cook Islands, Fiji, Sāmoa and the Federated States of Micronesia came together to enhance natural and cultural heritage and management of marine managed areas (MMAs). The Our Sea of Islands Forum was the first opportunity in over a decade for people across Oceania to meet and discuss the diversity of types, scales, approaches and status of MMA development and management across the region. Participants valued this opportunity for dialogue as an interconnected Oceania and recognized the need to work together to protect our ocean home.

The Pacific Ocean spans more than one-third of the Earth's surface and is known for its vast marine resources, high biological diversity and diverse cultural heritage. The islands of Oceania are connected by common history, culture and ancestry: indigenous Oceanic cultures and traditions, their proud history of distant ocean navigators who utilized the wind, sea and stars to maintain regional connections over centuries, and their rich heritage in natural resource stewardship, management practices and knowledge.

Oceania has demonstrated global leadership in their commitment to marine conservation and the sustainable use of marine resources. Approximately 25% of the world's marine protected areas are located in Oceania, and all the jurisdictions in Oceania have established MMAs, particularly using community-based and traditional approaches. The three largest MMAs in the world are in Oceania: Australia's well-known Great Barrier Reef Marine Park, the Phoenix Islands Protected Area (PIPA) in Kiribati, and NWHI Papahānaumokuākea Marine National Monument.

Participants at the Forum identified and recognized critical needs, gaps and opportunities that must be addressed to sustain Oceania's people and environment. Outcomes focused in six key areas of marine area management - progress and status in MMA development, customary practices, surveillance and enforcement, science to inform management, conservation finance, and the application of the World Heritage Convention.

The participants affirmed that traditional knowledge and management practices are integral to the maintenance, development and management of MMAs in Oceania. This principle underpins all of the commendations, proposed participant actions and recommendations to governments and organizations by the Our Sea of Islands Forum.



*Our Sea of Islands participants came from over 20 Pacific nations (Photo: Papahānaumokuākea Marine National Monument)*

### *Telepresence*

As technologies develop, telepresence is one way to vividly bring the place to the people. Underwater video cameras, real-time video transmission, virtual field trips, formal distance learning, Web site interfaces, etc., offer many promising options for the creation of educational programs about this remote area.

### *Mokupāpapa: Discovery Center*

In the main Hawaiian Islands, Hilo's Mokupāpapa: Discovery Center for Hawai'i's Remote Coral Reefs interprets the natural science, culture and history of the Northwestern Hawaiian Islands and surrounding marine environment. More than 200,000 people have learned about the wonders of Papahānaumokuākea through the Center, including thousands of students and community groups. Since opening, the Center has hosted at least 60,000 visitors and 3,500 schoolchildren per year. In addition to school visitations during the school year, Mokupāpapa: Discovery Center offers a week-long summer course to more than 7,000 students each summer. Monument staff also participate in community events and forums to share their knowledge of the region's resources.

### *Information Kiosks*

Cooperative arrangements have been made with other facilities to host displays about the reefs and resources of the Papahānaumokuākea Marine National Monument. These include an aquarium display at the Waikīkī Aquarium on coral reef resources, as well as displays at the Hawai'i Maritime Center depicting life on a field camp and on a research vessel in Papahānaumokuākea. Additional interpretive displays are planned in concert with the new Visitor and Interpretive Center on Maui at the Hawaiian Islands Humpback Whale National Marine Sanctuary offices. Additional collaborative interpretive projects are being considered at other sites around the state.

### *Film and Internet*

The Co-Trustees also work with commercial and nonprofit filmmakers to develop documentaries and news programs that reach audiences around the world. A new Papahānaumokuākea Web site ([papahanaumokuakea.gov](http://papahanaumokuakea.gov)) has been developed to provide a virtual visit to the region. Additional informative materials are prepared and distributed as needed.

### *Teacher at Sea Program*

Since 2001, the Papahānaumokuākea Co-Trustees, along with a host of educational partners, have facilitated field-based educational experiences for teachers and other educators within the Northwestern Hawaiian Islands. These experiences have ranged from educator-at-sea voyages aboard NOAA research vessels to island- and atoll-based field trips. From 2001 to 2008, more than 70 educators have experienced Papahānaumokuākea's relatively pristine environments and cultural treasures, from flourishing coral reefs to sacred Native Hawaiian archaeological sites. Through blogging and online journaling to video podcasting and teleconferencing with classrooms, Papahānaumokuākea has provided mechanisms for these individuals to share their personal experiences with the world. Every year, a new cadre of ambassadors returns home with personal experience of Papahānaumokuākea and the skills to share this knowledge widely with those who can benefit from it most.

### *School Curriculum: Navigating Change*

In addition to the interpretive programs and documentaries, one of the key programs of Papahānaumokuākea is Navigating Change, an educational program offered to schoolchildren throughout the state, which predates the inception of the property. At this program's core is *Hōkūle'a*, a modern-day reincarnation of a double-hulled sailing vessel that has been instrumental in the accomplishment of superlative modern-day feats of navigation, using science built upon a foundation of ancestral knowledge. In 2001, *Hōkūle'a's* navigator, Nainoa

Thompson, envisioned sailing *Hōkūle‘a*, a replica of an ancient Polynesian voyaging canoe, among the wild and protected Northwestern Hawaiian Islands. Calling his idea “Navigating Change,” he wrote that he wanted to “bring the beauty of the Earth’s rare wildlife to living rooms and classrooms to create an awareness of the difference between where nature is protected and what happens when it is not.”

Navigating Change is currently made possible by a partnership of private and government organizations called the Navigating Change Educational Partnership (NCEP). Through environmental education that utilizes place-based stewardship components, it continues to focus on influencing attitudes and behaviors to understand, protect and care for all our islands and ocean resources. The NCEP includes: the Polynesian Voyaging Society, the Hawai‘i Department of Land and Natural Resources, the U.S. Fish and Wildlife Service, NOAA, Bishop Museum, University of Hawai‘i at Manoa, and the Pacific American Foundation. This group partners with many others, including the Hawai‘i Department of Education, to bring the curriculum to the teachers and into the classrooms.

Beginning in 2001, pre-voyage preparation for this program involved a statewide “warm-up” sail and a week-long summer workshop that engaged over 200 teachers in workshops throughout the state on the basic principles of Navigating Change. During the 18-day voyage in May 2004 to the NWHI, NCEP acted as “mission control,” connecting 1,800 students and 80 classrooms across America and the Pacific with the vessel’s crew for an hour-long satellite link-up. Through these teleconferences, students participated in the excitement of voyaging. Teachers could extend that experience into the everyday classroom using a Teacher’s Guide to Navigating Change curriculum, with carefully designed interfacing DVD modules and video clips.

More than 300 teachers, principals, and administrators (including participation by family members) have attended full-day workshops—reaching an estimated 4,000

students in the State of Hawai‘i. Workshops often interface with cultural components (for instance, an opportunity to sail on a voyaging canoe). In addition, over 50 teachers have provided feedback and encouragement by continuing to contact the NCEP through e-mails and by sharing their project work and examples of how their students have been positively influenced by the program.

In August 2005, seven teachers who were previously involved in developing and field testing the Navigating Change Teacher’s Guide were chosen to sail on a NOAA ship to explore and produce lessons about the Northwestern Hawaiian Islands.

The current focus for Navigating Change is the Ahupua‘a Alliance Program, a year long strategy to help students, teachers, nonprofit organizations, private businesses and government agencies focus on specific place-based learning sites. A field site that safely provides rich learning activities (including an opportunity to conduct stewardship activities) will be developed or enhanced in each *ahupua‘a* (a traditional Hawaiian land division, which usually runs from the deep sea to the mountaintops) with members of the local community.

#### Participation at Conferences and Events

An important part of promotion of the property is the participation of Monument staff at various conference, workshops, and events. A sample of recent events attended includes:

**Our Sea of Islands: A Regional Forum for Oceania on Marine Managed Areas and World Heritage, January 29–February 2, 2007.** Our Sea of Islands brought together participants from over 20 countries, states and territories around the Pacific and was co-sponsored by NOAA, the Department of Interior, and UNESCO World Heritage Programme. Its purpose was to highlight current efforts to protect important marine areas in Oceania, to share and expand technical expertise, and to develop balanced management practices by incorporating science and customary marine management techniques. The forum was also an

opportunity to build upon and collaborate with ongoing marine managed area networks across Oceania. Of the forum's multiple specific outcomes and recommended actions, the one most significant and relevant to this section is the need to integrate customary resource management into national and regional marine management policies.

**Traditional Ecological Knowledge Workshop, Kona, Hawai'i Island. August 21–24, 2008 (Prior to the 2008 U.S. Coral Reef Task Force Meeting).** Addressing concerns about the erosion of traditional ecological knowledge (TEK) and its transfer to younger generations, Monument staff hosted a Traditional Ecological Knowledge Workshop prior to the 2008 U.S. Coral Reef Task Force Meeting. This inter-agency and cross-cultural learning exchange hosted participants from six countries, including 30 traditional practitioners and youth from their communities across the Pacific. Responding directly to the forum's recommended actions, the TEK workshop aimed to promote and strengthen traditional knowledge and customary practices in Oceania, foster the intergenerational transfer of traditional knowledge and customary marine management practices, and share lessons about the importance of incorporating traditional knowledge into modern management at the 2008 U.S. Coral Reef Task Force Meeting in Kona, Hawai'i Island. Additionally, each community represented at the TEK Workshop received a "TEK Toolkit," including digital cameras and voice recorders, and instruction on how to (1) collect oral histories relevant to traditional marine management, and (2) instructions on the incorporation of TEK into marine management.

**U.S. Coral Reef Task Force Meeting, 2008.** At the 2008 U.S. Coral Reef Task Force Meeting, Monument staff worked to foster broader engagement between coral reef management and TEK. In particular, a Native Hawaiian practitioner presented a video of outcomes from the TEK Workshop (which had been held the week before). The objective was to inspire marine managers from across the United States and partner nations to more fully



*Pristine Papahānaumokuākea reef with numerous Acropora coral colonies, a species extremely rare in the main Hawaiian Islands (Photo: James Watt)*

incorporate TEK into marine management policies and regulations.

**Response to Climate Change Workshop, Kāne'ohe, Hawai'i September 2–5, 2008.**

The Co-Trustees hosted the fourth-ever Response to Climate Change (RtCC) workshop in September 2008. It discussed implications for climate change on coral reefs and practical steps reef managers can undertake to build resiliency and reduce the threat of global climate change. The curriculum was customized to provide information specifically relevant to Pacific reefs, including the vital role traditional ecological knowledge can play in managing Hawai'i's reefs. The workshop sought to build a bridge between Western science and traditional management approaches, as well as supporting resiliency and management efforts. RtCC participants included cultural practitioners, marine managers, scientists and academics.

**National Institute of Water and Atmosphere (New Zealand) and National Oceanic and Atmospheric Administration (U.S.A.) exchange, July 2008.** Aiming to foster direct relationships with other indigenous peoples of the Pacific, the National Oceanic and Atmospheric Administration hosted an information exchange with indigenous representatives from the National Institute of Water and Atmosphere (New Zealand) in July 2008. During this exchange, managers focused on indigenous management framework tools for managing marine resources.

### *Presentation of Research to the Public*

As is discussed in Sections 2 and 4, research in Papahānaumokuākea has been ongoing for a number of years. Since the 1970s, one of the key aspects of this research has been to provide data to inform management decisions. In the mid 1970s through the mid 1980s, the Tripartite NWHI Fishery Expeditions resulted in significant new findings and the hosting of two major scientific symposia where results were presented to researchers, representatives of management agencies, and the general public. In addition, two publications from these symposia were produced, which collectively presented the results of more than 50 peer-reviewed papers documenting the scientific findings to date. The documents were the 1980 and 1984 Proceedings of the Symposium on Status of Resource Investigations in the Northwestern Hawaiian Islands, both published by the University of Hawai'i (UH) Sea Grant College Program.

Patterned after the first two successful symposia held in the 1980s, a third symposium was held in Honolulu, Hawai'i during November 2004, under the joint sponsorship of NOAA's Pacific Islands Fisheries Science Center, NOAA's National Ocean Service, the U.S. Fish and Wildlife Service, the Western Pacific Fishery Management Council, and the State of Hawai'i's Department of Land and Natural Resources. The Symposium covered a range of scientific themes, including the history

of research and management in the NWHI; protected species; fish, shellfish, and fisheries; oceanography and mapping; and ecology and environmental impacts. The symposium was attended by more than 300 representatives from research institutions, agencies and the public at large. The proceedings of the Northwestern Hawaiian Islands Third Scientific Symposium are published in the Atoll Research Bulletin No. 543, issued by the Smithsonian Institution's National Museum of Natural History.

Additional emerging findings from studies undertaken by the University of Hawai'i's Hawai'i Institute of Marine Biology, NOAA and others have been presented each year since 2006 at an annual mini-symposium held in conjunction with the Hawai'i Conservation Conference, which is attended by up to 300 participants. In addition, NOAA's Pacific Islands Fisheries Science Center (PIFSC), the Hawai'i Institute of Marine Biology (HIMB), and Papahānaumokuākea Marine National Monument host a Semi-Annual Northwestern Hawaiian Islands Joint Symposium and have been doing so for the past few years. Overall, significant efforts have been undertaken to bring the science to the managers and to inform the general public on the state of conservation and the health of the resources in Papahānaumokuākea.

### *Programs and Events Engaging the Native Hawaiian Community*

Engaging the Native Hawaiian community in Papahānaumokuākea management is a priority for the Co-Trustees. Success in this effort will promote long-term support and greater understanding from the host culture of the Hawaiian Archipelago. In addition to seeking input from the Native Hawaiian Cultural Working Group, some of the ways in which Papahānaumokuākea engages with the Native Hawaiian Community include:

**Aloha 'Āina: Cultural resilience and cultural connectivity.** An array of research and outreach activities with Native Hawaiian communities, the Aloha 'Āina

*Reef Assessment and Monitoring Program Team preparing for Rapid Ecological Assessments*  
(Photo: James Watt)



(Love of the Place) programs involve Monument staff working to assess the needs of, and to facilitate, a Native Hawaiian Research Plan looking at questions common to all. “It’s simple, really,” says Mahina Paishon-Duarte, cultural practitioner and Monument liaison to Native Hawaiian communities. “It’s helping people to remember their love for the place.” This series of programs engages in multiple activities, which include securing research berths for cultural practitioners; facilitating collaborations between Native Hawaiian practitioners and scientists at the University of Hawai‘i’s Hawai‘i Institute of Marine Biology; ensuring that communities from each of the main Hawaiian Islands are involved in the discussion; and that lessons learned are shared throughout communities. Program directions stem from roundtable discussions in Native Hawaiian communities on Moloka‘i, Maui, Hawai‘i Island, O‘ahu, and Kaua‘i, which were facilitated by Monument staff and help to ensure that major Papahānaumokuākea program areas (e.g., the Native Hawaiian Research Plan) address questions and concerns shared with Native Hawaiian communities across the state.

#### **Native Hawaiian Cultural Research Plan.**

Preliminary development of the Native Hawaiian Cultural Research Plan (NHCRP) is being fostered by Native Hawaiian community roundtable discussions and initial results from the Native Hawaiian Cultural Research programs (2008). The vision for the NHCRP is stated in the Monument Management Plan. A formal workshop to begin the NHCRP’s development is planned for the fall/winter of 2008.

**Ongoing information exchange between Native Hawaiian program leaders and academia, governmental and/or marine management agencies, the public and others.** For several years, Native Hawaiian practitioners working for the Monument (e.g., in the position of Native Hawaiian programs and outreach) have been engaged in a wide variety of collaborations with governmental, academic, non-governmental, and community organizations, and other entities in Hawai‘i. Other collaborative

exchanges include giving presentations about TEK and social-ecological resilience. Future plans include expanding the existing partnership with the Hawai‘i Institute of Marine Biology to establish a traditional knowledge internship program, in which Native Hawaiian youth (e.g., college students) apply for paid internships to spend time in traditional communities and learn traditional ecological knowledge and practices from elders.

#### **5.j Staffing Levels**

The level of training and staff expertise required is significant, complex, and difficult to adequately describe. Each of the Co-Trustees and many of the partner agencies, such as the law enforcement offices or USCG, have their own training programs, many that span multiple years. A basic description of the primary agency roles is outlined here and many of the specific tasks are further described in the Monument Management Plan (Appendix K).

For the National Oceanic and Atmospheric Administration (NOAA), day-to-day management of Papahānaumokuākea at the field level is through the Office of the National Marine Sanctuaries (ONMS) and the National Marine Fisheries Service Pacific Islands Regional Office (PIRO). The NOAA-ONMS Papahānaumokuākea Superintendent operates out of the central office in Honolulu, with support from 25 additional staff to implement programs in policy, research, permits, education and outreach, and information management. NOAA-ONMS also has four full-time staff in the office on the Island of Hawai‘i in the main Hawaiian Islands to manage the Mokupāpapa Discovery Center. PIRO staff include a full-time Management Officer and a policy specialist, both based in Honolulu. NOAA-ONMS have four full time contractors dedicated to the development of the centralized Monument Information Management System, which will standardize and make available data necessary for the effective management of Papahānaumokuākea.

For the U.S. Fish and Wildlife Service, Papahānaumokuākea is managed both from Honolulu, Hawai'i, and onsite at Tern Island in French Frigate Shoals, Laysan Island, and Midway Atoll.

The FWS Papahānaumokuākea Superintendent is based in Honolulu, along with a permits manager, logistics coordinator, and administrative staff. Midway Atoll staffing includes a Refuge Manager, Deputy Refuge Manager, wildlife biologists, a visitor services manager, interpretive ranger, law enforcement ranger, and equipment operator. In addition, FWS contracts with a private entity to operate the infrastructure of the island, including airport operation, medical facilities, food preparation, electrical generation and distribution, water system, sewage system, etc. This company has approximately 50 workers on Midway, fully trained in their particular skill. In addition, upon first arriving on Midway, they receive a full orientation about working on a National Wildlife Refuge and within Papahānaumokuākea Marine National Monument.

Staffing at French Frigate Shoals consists of a Refuge Manager and Assistant Refuge Manager. Biological science technicians and volunteers are also stationed at French Frigate Shoals and Laysan Island.

The State of Hawai'i staff is mainly located in Honolulu, however, field staff are on site at Kure Atoll each summer for an extended period of time (up to six months). The State

Papahānaumokuākea Superintendent is based in Honolulu, along with a permits coordinator, a research coordinator, policy specialists and administrative staff. The Kure Atoll Field Manager is based part of the year in Honolulu and part of the year on site at Kure Atoll. A team of two to three volunteers works alongside the Kure Atoll Manager during the field season to manage activities at the site.

As previously indicated, all field staff from each agency undergo rigorous training in wilderness first aid, small vessel operations and other safety procedures to ensure that they are well equipped to handle emergencies in remote field sites. All researchers and crew on all agency vessels must engage in emergency response training on every voyage into Papahānaumokuākea. Coordination of oil and other hazardous material response procedures and simulated response activities are scheduled regularly by the USCG. All agencies are required to follow standard operating procedures for diving, operation of heavy equipment, food handling, hazardous materials handling and disposition, and the like as required by national and state occupational health and safety regulations. All persons entering Papahānaumokuākea are also required to attend a briefing in which the important cultural significance and consideration of protocols is discussed. Similarly, any activities that occur on the most sensitive sites usually require accompaniment by a staff member from one of the agencies who is trained in both the biological and cultural considerations of the site.



*Jeweled Anemone Crab or unauna*  
(Photo: Susan Middleton & David Liittschwager)