

---

## **GLOSSARY**

---



## GLOSSARY

**Abiotic:** Pertaining to the non-living components of the environment.

**Abysal (zone):** Relating to the bottom waters of oceans, usually below 1,000 meters.

**Adaptive management:** The process of adjusting management actions or directions as new and better information emerges about the ecosystem

**Adaptive reuse:** A process that changes a disused or ineffective item into a new item that can be used for a different purpose.

**Alien species (exotic, nonnative):** With respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.

**Anthropogenic:** Caused by humans.

**Apex predator:** A species (e.g., fish) at the top of the food chain.

**Appropriate Use (NWR):** A proposed or existing use on a refuge that meets the criteria in 603 FW 1.

**Aquaculture:** Cultivation of aquatic organisms under controlled or semi-controlled conditions.

**Archipelago:** A group or cluster of islands.

**Ballast water:** Any water and associated sediments used to manipulate the trim and stability of a vessel

**Bathymetry:** Study and mapping (benthic mapping) of sea floor elevations and the variations of water depth; the topography of the sea floor.

**Battle of Midway:** A naval battle in the Pacific Theater of World War II. It took place from June 4, 1942 to June 7, 1942, approximately one month after the Battle of the Coral Sea, about five months after the Japanese capture of Wake Island, and six months after the Empire of Japan's attack on Pearl Harbor that had led to a formal state of war between the United States and Japan.

**Benthic habitat:** Of the sea floor, or pertaining to organisms living on or in the sea floor.

**Biodiversity:** Defined as the number of different organisms or species that inhabit a given ecosystem or the earth overall. It can also refer to the variability within species and among species living on the earth or in a particular community. Many ecologists also include the interaction of species the environment when describing biodiversity. All biodiversity has its origins in the different combinations of genetic material (DNA) and how this is expressed in different organisms.

**Biogeographical:** Of relating to or involved with biogeography, a branch of biology that deals with the geographical distribution of animals and plants.

**Biological community:** A naturally occurring assemblage of plants and animals that live in the same environment and are mutually sustaining and interdependent.

**Biological inventory or Biodiversity inventory:** Catalog of all biota in a given area.

Inventories of large clades (a clade is a related group with a common ancestor) of organisms that are likely to contain many undescribed species or otherwise require major revision to complete their taxonomy.

**Biomass:** The total weight of all the living organisms, or some designated group of living organisms, in a given area.

**Bioprospecting:** Search for new chemicals compounds, genes and their products in living things that will have some value to people.

- Biota:** All the organisms, including animals, plants, fungi and microorganisms, living components of an ecosystem.
- Biotic:** Pertaining to any aspect of life, especially to characteristics of entire populations or ecosystems.
- Bishop Museum:** Founded in 1889, the Bishop Museum is the largest museum in Hawai‘i and the premier natural and cultural history institution in the Pacific, recognized throughout the world for its cultural collections, research projects, consulting services and public educational programs. It also has one of the largest natural history specimen collections in the world.
- Board of Land and Natural Resources:** An appointed Board of the State of Hawai‘i composed of seven members, one from each land district and two at large, and the Chairperson, the executive head of the Department. Members are nominated and, with the consent of the Senate, appointed by the Governor for a 4-year term. The BLNR convenes twice monthly to review and take action on department submittals, including Monument permits.
- Bottomfish species:** Means bottomfish management unit species as defined at 50 CFR 665.198.
- Bottomfishing:** Fishing for bottomfish species using hook-and-line method of fishing where weighted and baited lines are lowered and raised with electric, hydraulic, or hand-powered reels.
- Calderas:** A crater whose diameter is many times that of the volcanic vent because of the collapse or subsidence of the central part of a volcano or because of explosions of extraordinary violence.
- Catch-per-unit-effort (CPUE):** The average number of fish caught in a discrete amount of time.
- Categorical Exclusion:** A category of actions that the agency has determined does not individually or cumulatively have a significant effect on the quality of the human environment.
- Ciguatera toxin:** Toxins produced by a marine microalgae called *Gambierdiscus toxicus*. These toxins become progressively concentrated as they move up the food chain from small fish to large fish that eat them, and reach particularly high concentrations in large predatory tropical reef fish.
- Co-Trustees:** U.S. Department of Commerce, through the National Oceanic and Atmospheric Administration, the U.S. Department of the Interior through the Fish and Wildlife Service, and the State of Hawai‘i.
- Commercial Fishing:** Fishing in which the fish harvested, either in whole or in part, and are intended to enter commerce through sale, barter or trade.
- Compatible use:** A proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the national wildlife refuge. (50 CFR 29.21)
- Comprehensive Conservation Plan:** A document that describes the desired future conditions of the refuge, and provides long-range guidance and management direction for the refuge manager to accomplish the purposes of the refuge, contribute to the mission of the system, and to meet other relevant mandates.
- Coral bleaching:** When zooxanthellae, symbiotic algae that live in coral tissue, leave the coral as a result of thermal and other types of stress.
- Crustacean:** A member of the phylum Crustacea, such as a crab, shrimp, or lobster.

- Cultural literacy:** The art and understanding of the intangible meanings and emotions conveyed through a particular written cultural language.
- Cultural resources:** Any resources, whether they are tangible or intangible, such as stories, people, structures, or artifacts that identifies a certain native people's culture inherent in the way they live and practice their traditions.
- Cumulative effects (National Environmental Policy Act, NEPA):** Cumulative impact of the direct and indirect effects of the proposed action and its alternatives when added to the aggregate effects of past, present, and reasonably foreseeable future actions.
- Customary rights:** Rights customarily and traditionally exercised for subsistence, cultural, and religious purposes and possessed by ahupua‘a tenants who are descendants of Native Hawaiians who inhabited the Hawaiian Islands prior to 1778.
- Derelict:** Abandoned, especially by the owner or occupant; forgotten or unused.
- Direct effects (NEPA):** Effects caused by the action and occurring at the same time and place.
- Distance-learning:** Education initiated on-site at a remote location offered to others often times providing two way communication through audio or video (or both) technology links.
- Ecological:** Of, or having to do with, the environments of living things or with the pattern of relations between living things and their environments.
- Ecological impacts:** The effect that a human-caused or natural activity has on living organisms and their environment.
- Ecological Reserve:** An area of the Monument consisting of contiguous, diverse habitats that provide natural spawning, nursery, and permanent residence areas for the replenishment and genetic protection of marine life, and also to protect and preserve natural assemblages of habitats and species within areas representing a broad diversity of resources and habitats found within the monument.
- Ecological Restoration:** Replacement of lost ecosystem function and integrity.
- Ecosystem:** A geographically specified system of organisms (including humans), the environment, and the processes that control its dynamics.
- Ecosystem Health:** A condition in which structure and functions allow the desired maintenance over time of biological diversity, biotic integrity, and ecological processes.
- Ecological Integrity:** A condition determined to be characteristic of an ecosystem that has the ability to maintain its function, structure, and abundance of natural biological communities, including rates of change in response to natural environmental variation.
- Ecosystem Services:** The natural processes by which the environment produces resources. Common examples are water, timber, and habitat for fisheries, and pollination of native and agricultural plants.
- Ecosystem-based management approach:** Management that carefully considers impacts to all species and trophic interactions, including maintenance of biological communities and the protection of natural habitats, populations and ecological processes. The approach emphasizes the inherent value of ecosystems and recognizes the importance of species interactions and conservation of habitats, and only permits resource utilization in a manner that is consistent with the Monument's primary goal of resource protection.
- Ecotourism:** Travel to natural areas to foster environmental and cultural understanding, and appreciation and conservation. The Proclamation defines Ocean-Based Ecotourism as a class of fee-for-service activities that involves visiting the Monument for study, enjoyment, or volunteer assistance for purposes of conservation and management.

**Effects (Impacts):** As defined by NEPA (direct, indirect, cumulative): Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

**El Niño:** A climatic phenomenon characterized by a large scale weakening of the trade winds and warming of the surface layers in the eastern and central equatorial Pacific Ocean. El Niño events occur irregularly at intervals of two to seven years, although the average is about once every three to four years and typically last 12 to 18 months. During El Niño, unusually high atmospheric sea level pressures develop in the western tropical Pacific and Indian Ocean regions, and unusually low sea level pressures develop in the southeastern tropical Pacific. Southern Oscillation tendencies for unusually low pressures west of the date line and high pressures east of the date line have also been linked to periods of anomalously cold equatorial Pacific sea surface temperatures, sometimes referred to as **La Niña**.

**Endangered species:** An animal or plant species in danger of extinction throughout all or a significant portion of its range.

**Endemic:** Referring to species native to and confined to a particular region, thus often having a comparatively restricted distribution.

**Environmental Assessment (EA):** A concise public document, prepared in compliance with the National Environmental Policy Act, that briefly discusses the purpose and need for an action, alternatives to such action, and provides sufficient evidence and analysis of impacts to determine whether to prepare an environmental impact statement or finding of no significant impact.

**Environmental Impact Statement (EIS):** Documentation that assesses the impacts of major Federal actions significantly affecting the quality of the human environment as required by Section 102(2)(C) of NEPA.

**Exclusive Economic Zone (EEZ):** A zone contiguous to the territorial sea, including zones contiguous to the territorial sea of the United States, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands (to the extent consistent with the Covenant and the United Nations Trusteeship Agreement), and United States overseas territories and possessions extending to a distance of 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

**Fathom:** A unit of length equal to 1.8 meters (6 feet) used to measure water depth.

**Field camp (camp):** In this document refers to both seasonal camps that are placed on Lisianski, Pearl and Hermes, Kure, and Nihoa; and one permanent camp at Laysan Island. Seasonal camps are established for specific activities such as monk seal research. The Laysan Island camp is staffed year-round to work on restoration of the island. Camps depend on tents, import all water, and have very limited communications and physical access.

**Field station:** In this document is used to refer to permanent infrastructures on Tern Island or Midway Atoll. These stations have buildings, water-making abilities, greater power sources, advanced communication, and regular access by boat and aircraft.

**Fishery:** The act, process, or season of taking fish or other sea products for sale or consumption.

**Friends of Midway Atoll NWR:** Association whose mission is “[t]o support the Midway Atoll National Wildlife Refuge in its efforts to preserve, protect and restore the biological diversity

and historic resources of Midway Atoll, while providing opportunity for wildlife-dependent recreation, education and scientific research.”

**Geographic Information System (GIS):** A system of spatially referenced information, including computer programs that acquire, store, manipulate, analyze, and display spatial data.

**Geomorphologic:** Relating to geomorphology, a science that deals with land and submarine relief features of the earth’s surface.

**Hazardous material:** A substance or material that is capable of posing an unreasonable risk to health and safety or property when transported in commerce and has been designated as hazardous under the Federal Hazardous Materials Transportation Law (49 USC 5103).

**Hazardous Waste:** The Resource Conservation and Recovery Act (RCRA) specifically defines a hazardous waste as a solid waste (or combination of wastes) that, based on its quantity, concentration, physical, chemical, or infectious characteristics, can cause or significantly contribute to an increase in mortality. RCRA further defines a hazardous waste as one that can increase serious, irreversible, or incapacitating reversible illness or pose a hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise managed.

**Hi‘ialakai:** NOAA research vessel. Hi‘ialakai means “embracing pathways to the sea” in the Hawaiian language.

**Hōkūle‘a:** A traditional Hawaiian double hulled voyaging canoe recreated by the Polynesian Voyaging Society in the 1970s which signified a rebirth of ancient voyaging and navigation and a new cultural renaissance period in Hawaiian history. [*Hōkūle‘a* is Hawaiian for star of gladness].

**Hypersaline:** Salinity well in excess of that of seawater; found in enclosed water bodies.

**Impacts:** See **Effects**

**Indirect effects (NEPA):** Those are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

**In situ** [Latin]: In place

**In-reach:** Purposefully communicating to personnel working within your agency, or Co-Trustees.

**Indigenous (species):** Existing within a historical ecological range, usually within a balanced system of coevolved organisms.

**Infrastructure:** In this document refers to physical buildings and structures, roads, and utility and communications systems.

**Interagency:** Involving two or more public or government agencies.

**Introduced Species:**

1. A species (including, but not limited to, any of its biological matter capable of propagation) that is nonnative to the ecosystem(s) protected by the Monument; or
2. Any organism into which genetic matter from another species has been transferred in order that the host organism acquires the genetic traits of the transferred genes.

“Introduction” means the intentional or unintentional escape, release, dissemination, or placement of a species into an ecosystem as a result of human activity.

- Invasive species:** A nonindigenous species that may threaten the diversity or abundance of native species or the ecological stability and or uses of infested waters and the introduction of which into an ecosystem may cause harm to the economy, environment, human health, recreation, or public welfare.
- Invertebrates:** Any animal that is not a vertebrate, that is, whose nerve cord is not enclosed in a backbone of bony segments.
- Island-specific:** Pertains to a specific island of the Monument and may not be translated to other islands.
- Knowledge-base:** Information and ideas acquired through pre-existing experiences and cumulative education.
- La Niña:** see **El Niño**
- Larval:** An immature stage of any invertebrate animal that differs dramatically in appearance from the adult.
- Lead-based paint:** Paint that contains high levels of lead, generally found in houses and apartments built before 1978, when the federal government banned it from housing.
- Longline Protected Species Zone:** The area in the Northwestern Hawaiian Islands where longline fishing is prohibited, described as within a 50 nm radius from the geographic centers of Nihoa, Mokumanamana, French Frigate Shoals, Gardner Pinnacles, Maro Reef, Laysan Island, Lisianski Island, Pearl and Hermes Atoll, Midway Atoll, and Kure Atoll.
- Management Zones:** Special Preservation Areas, Ecological Reserves, and the Midway Atoll Special Management Area (SMA) as defined in Monument regulations (50 Code of Federal Regulations [CFR] 404).
- Marine debris:** Any persistent solid material and contents that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment.
- Maritime:** Of or relating to navigation or commerce on the sea.
- Memorandum of Agreement or Understanding (MOA/U):** A nonbinding agreement between state or federal agencies, or divisions within an agency, that delineates tasks, jurisdiction, standard operating procedures or other matters which the agencies or units are duly authorized and directed to conduct.
- Meta-population:** A subdivided population of a single species.
- Midway Atoll Special Management Area:** The area of the monument surrounding Midway Atoll out to a distance of 12 nautical miles, established for the enhanced management, protection, and preservation of Monument wildlife and historical resources.
- Migratory bird:** Birds that are listed in Title 50 of the Code of Federal Regulations, Section 10.13.
- Mitigate (mitigation):** To make less severe. An action or series of actions that offset the environmental impact, or reduce the severity or consequences. Usually done by sequestering or reducing contact thereby reducing risk or by compensating, enhancing, or restoring areas adversely affected.
- Mobile transceiver unit:** A vessel monitoring system or VMS device installed on board a vessel that is used for vessel monitoring and transmitting the vessel's position as required by this proclamation.
- Monument Management Board (MMB):** The MOA established a locally based Monument Management Board (MMB) to guide field level coordination. The seven-member MMB includes representation of the Co-Trustee agencies and the Office of Hawaiian Affairs.



- Monument Regulations:** Initial regulations prescribed by Presidential Proclamation 8031 completed jointly by the FWS and NOAA on August 29, 2006 (71 FR 51134). Monument regulations, codified under 50 CFR Part 404, establish the scope and purpose, boundary, definitions, prohibitions, marine zones, and regulated activities for managing the Monument.
- National Historic Landmark:** Nationally significant historic places designated by the Secretary of the Interior possessing exceptional value or quality in illustrating or interpreting the heritage of the United States.
- National Historic Properties:** Properties listed in, or eligible for listing in the National Register of Historic Places (National Historic Preservation Act of 1966, as amended; implementing regulation for evaluation and determination of eligibility are in 36 CFR 60), “National Register of Historic Places.”
- National Marine Sanctuary Foundation:** A private, nonprofit, 501(c)(3) tax-exempt organization created to assist the federally managed National Marine Sanctuary Program with education and outreach programs designed to preserve, protect, and promote meaningful opportunities for public interaction with the nation’s marine sanctuaries.
- National Monument:** An area on lands owned or controlled by the Government of the United States designated by the President of the United States under the Antiquities Act of 1906, to recognize historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest.
- National Register of Historic Places:** The nation’s official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources.
- National Wildlife Refuge System:** All lands, waters, and interests therein administered by the U.S. Fish and Wildlife Service as wildlife refuges, wildlife ranges, wildlife management areas, waterfowl production areas, and other areas for the protection and conservation of fish, wildlife, and plant resources.
- Native Hawaiian:** Any individual who is a descendent of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawai‘i.
- Native Hawaiian Practices:** Cultural activities conducted for the purposes of perpetuating traditional knowledge, caring for and protecting the environment, and strengthening cultural and spiritual connections to the Northwestern Hawaiian Islands that have demonstrable benefits to the Native Hawaiian community. This term may include, but is not limited to, the noncommercial use of monument resources for direct personal consumption while in the Monument.
- Native species:** A species (plant or animal) within its natural range or natural zone of dispersal without human aid.
- Natural variability:** Uncertainties that stem from inherent or assumed randomness and unpredictability in the natural world.
- Northwestern Hawaiian Islands (NWHI):** Beginning 155 miles (249.4 kilometers) from the main Hawaiian Island of Kaua‘i, the 10 islands and atolls of this chain that extend for 1,200 miles (1,931 kilometers) to Kure Atoll. In past decades, also known as the Leeward or Kūpuna Islands, and now as Papahānaumokuākea.

**NOWRAMP or NWHIRAMP:** The Northwestern Hawaiian Islands Coral Reef Assessment and Monitoring Program, which began in 2000, to rapidly evaluate and map the shallow water reef habitats in the NWHI.

**Oceania:** Collective name for the islands scattered throughout most of the Pacific Ocean.

**Oceanographic:** Of or relating to oceanography, a science that deals with the ocean and its phenomena.

**Outreach:** The act of communicating activities and conceptual ideas to public audiences outside the administering agency/agencies and actively involving them in Monument activities.

**Pacific Rim:** includes the countries that lie along the Pacific Ocean, plus the island countries of the Pacific.

**Passage without interruption:** A vessel passing through waters within the Monument boundary without stopping anywhere within the boundary of the Monument.

**Pelagic:** Referring to the open ocean.

**Pelagic species:** From the Proclamation: Pelagic Species means Pacific Pelagic Management Unit Species as defined at 50 CFR 660.12.

**Permit:** As used in the Monument Management Plan, authorization by the Co-Trustees to conduct an activity within the Monument that: (i) is research designed to further understanding of monument resources and qualities; (ii) will further the educational value of the monument; (iii) will assist in the conservation and management of the monument; (iv) will allow Native Hawaiian practices; (v) will allow a special ocean use; or (vi) will allow recreational activities.

**Petrels:** Any of numerous seabirds constituting the families Procellariidae and Hydrobatidae.

**Polynesian Voyaging Society (PVS):** A society founded in 1973 to research how Polynesian seafarers discovered and settled on the islands in the Pacific Ocean before European explorers arrived in the 16th century.

**Pono:** [Hawaiian] Appropriate, correct, and deemed necessary by traditional standards in the Hawaiian culture.

**Precautionary approach:** In the decisionmaking process, if there is a reasonable suspicion of harm, this approach urges a full evaluation of available alternatives for the purpose of preventing or minimizing harm. When consequences are uncertain, managers err on the side of caution thereby giving the benefit of the doubt to nature, public health, and community well-being.

**Predator-dominated marine ecosystem:** Reef ecosystems that have relatively greater abundance of large fish, such as sharks and jacks and fewer smaller fish that graze on the coral and algae.

**Presidential Proclamation 8031:** Establishment of the Northwestern Hawaiian Islands Marine National Monument, A Proclamation by the President of the United States of America, June 15, 2006. (also Proclamation, Presidential Proclamation, and Proclamation 8031)

**Productivity:** Rate of energy fixation or storage per unit time; not to be confused with production.

**Prohibitions:** Actions prohibited by authority of law.

**Recreational Activity:** For the purposes of the Monument, an activity conducted for personal enjoyment that does not result in the extraction of Monument resources and that does not involve a fee-for-service transaction. This term includes, but is not limited to, wildlife viewing, SCUBA diving, snorkeling, and boating.

**Remediation:** Rehabilitation of a section of the environment that has been polluted or degraded from a sustainable (self-repairing) state.

**Repatriation:** The transfer of legal interest in and physical custody of Native American cultural items to lineal descendants, culturally affiliated Indian tribes, and Native Hawaiian organizations.

**Resiliency:** The ability of an ecosystem to recover from, or adjust to, stress or change.

**Restoration:** Replacement of lost ecosystem function and integrity.

**SCUBA:** A self-contained underwater breathing apparatus and includes, but is not limited to, open circuit and rebreather technology.

**Seamount:** Submerged volcanic mountain rising above the deep-sea floor.

**Secretaries:** For the Monument, collectively refers to the Secretary of Commerce and the Secretary of the Interior

**Sessile invertebrates:** Organism being attached to a substrate.

**Shoal:** Elevation of the sea bottom comprising any material except rock or coral (in which case it is a reef) and which may endanger surface navigation.

**Socioeconomic:** Relating to or involving a combination of social and economic factors.

**Spawning:** The direct release of sex cells into the water for reproduction.

**Special Ocean Use:** An activity or use of the Monument that is engaged in to generate revenue or profits for one or more of the persons associated with the activity or use, and does not destroy, cause the loss of, or injure monument resources. This term includes ocean-based ecotourism and other activities such as educational and research activities that are engaged in to generate revenue, but does not include commercial fishing for bottomfish or pelagic species conducted pursuant to a valid permit issued by NOAA.

**Special Preservation Area (SPA):** Discrete, biologically important areas of the Monument within which uses are subject to conditions, restrictions, and prohibitions, including but not limited to access restrictions. SPAs are used to avoid concentrations of uses that could result in declines in species populations or habitat, to reduce conflicts between uses, to protect areas that are critical for sustaining important marine species or habitats, or to provide opportunities for scientific research.

**Stakeholder:** Any and all interested parties; an organization, governmental entity, or individual that has a stake in, or may be affected by, a given approach to environmental regulation or other agency action.

**Submersible:** A research submarine, designed for manned or remote operation at great depths.

**Substrate:** The material making up the base on which an organism lives or to which it is attached.

**Substratum:** The bottom of the bay, the soils of the bay bottom. May also refer to any surface that allows for the colonization of marine life.

**Sustenance Fishing:** For the Monument, sustenance fishing means fishing for bottomfish or pelagic species in which all catch is consumed within the Monument, and that is incidental to an activity permitted.

**Symbiotic:** Situation in which two dissimilar organisms live together in close association.

**Temporary Structure (Nonpermanent):** A structure with no permanent foundation that is easy to assemble, dismantle, and transport and is removed from a site between periods of actual use except as specifically permitted otherwise.

**Terrestrial species:** Plants and animals living on land.

**Threatened species:** Any species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

**Topographic:** General elevation pattern of the land surface or the ocean bottom.

**Traditional knowledge:** A way of knowing and learning that is acquired through expressions of dance or other forms of art, orally, or thru actual hands-on experiences passed down from generation to generation.

**Trolling:** Fishing using one or more lines with hooks or lures attached and drawn through the water behind a moving vessel.

**Trophic:** Relating to nutrition; the position of an organism in a food chain or food pyramid.

**Unexploded Ordnance (UXO):** Munitions that contain explosive components. In the Monument, refers to lost or abandoned military items.

**Unified Ocean Governance:** An integrated ecosystem-based management approach using an overall governance framework of shared principles and authority, clear communications and protocols.

**Unusual Mortality Events:** Criteria used to determine if mortalities seen in the Hawaiian monk seal are significantly abnormal to indicate an underlying vector. Criteria include: a marked increase in the magnitude of strandings is occurring when compared with prior records; animals are stranding at a time of the year when strandings are unusual; an increase in strandings is occurring in a very localized area; the species, age, or sex composition of the stranded animals is different; stranded animals exhibit similar or unusual pathologic findings, or the general physical condition; mortality is accompanied by unusual behavior patterns; and endangered species are stranding.

**Vessel Monitoring System (VMS):** Means a vessel monitoring system or mobile transceiver unit approved by the NOAA Office for Law Enforcement for use on vessels permitted to access the Monument in accordance with the Proclamation and 50 CFR 404. The hardware and software used by vessels to track and transmit their positions to a receiver in a remote location.

**Wayfinding:** Noninstrument navigation. Wayfinding involves navigating on the open ocean without sextant, compass, clock, radio reports, or satellites reports. The wayfinder depends on observations of the stars, the sun, the ocean swells, and other signs of nature for clues to the direction and location of a vessel at sea.

**Zooxanthellae:** A group of dinoflagellates living symbiotically in association with one of a variety of invertebrate groups and found in corals and other marine organisms.

---

## **REFERENCES**

---



## REFERENCES

Act 50, Session Laws of Hawaii 2000. A Bill for an Act Relating to Environmental Impact Statements

Aeby, G.S. 2006. Baseline levels of coral disease in the Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543:471-488.

Aeby, G.S., J.C. Kenyon, J.E. Maragos, and D.C. Potts. 2003. First record of mass coral bleaching in the Northwestern Hawaiian Islands. *Coral Reefs* 22 (3): 256.

Agard, B. 2000. Public comment during Western Pacific Regional Fishery Management Council. 104<sup>th</sup> Western Pacific Regional Fisheries Management Council Meeting, June 16, 2000. Honolulu.

Ainley, D.G., D.N. Nettleship, H.R. Carter, and A.E. Storey. 2002. In: *The Birds of North America*, No. 666, eds. A. Poole and F. Gill. Philadelphia: The Birds of North America, Inc.

Alexander, C., R. Kosaki, S. Gittings, and M.S. Tartt. 2004. Information Needs for Conservation Science and Management of the Northwestern Hawaiian Islands: A product of the I Ke Āmio O Nā Wa'a Workshop. Silver Spring, MD: Marine Sanctuaries Division, National Ocean Service, NOAA.

Amerson, A.B. 1971. The natural history of French Frigate Shoals, Northwestern Hawaiian Islands. *Atoll Research Bulletin*. 150:1-383.

Amerson, A.B., Jr., R.C. Clapp, and W.O. Wirtz, II. 1974. The Natural History of Pearl and Hermes Reef, Northwestern Hawaiian Islands. *Atoll Research Bulletin*. 174:1-306.

Andrews, K.R., L. Karczmarski, W.W.L. Au, S.H. Rickards, C.A. Vanderlip and R.J. Toonen. 2006. Patterns of genetic diversity of the Hawaiian spinner dolphin *Atoll Research Bulletin* 543: 65-73.

Antiquities Act. 1906, as amended 16 U.S.C. § 431-433, *et seq.*

Antonelis, G.A., J.D. Baker, T.C. Johanos, R.C. Braun, A.L. Harting. 2006. Hawaiian Monk Seals (*Monachus schauinslandi*): Status and Conservation Issues. *Atoll Research Bulletin* 543:75-101.

Apology Resolution. 1993. Pub. L. 103-150, (Presidential and Congressional Resolution)

Archaeological Resources Protection Act. 1979. Public Law 96-95; 16 U.S.C. 470 aa-mm

Ashmole, M.J., and N.P. Ashmole. 1967a. The use of food samples from seabirds in the study of seasonal variation in the surface fauna of tropical oceanic areas. *Pacific Science* 22: 1-10.

———. 1967b. Notes on the breeding season and food of the Red-footed Booby (*Sula sula*) on Oahu, Hawaii. *Ardea* 55: 265-267.

Ashmole, N.P. 1963. The biology of the Wide-awake or Sooty Tern (*Sterna fuscata*) on Ascension Island. *Ibis* 103b: 297-364.

- Athens, J.S., J.V. Ward, and D.W. Blinn. 2007. Vegetation History of Laysan Island, Northwestern Hawaiian Islands. *Pacific Science* 61: 17-37.
- Au, D.K. and R.L. Pitman. 1986. Seabird Interactions with Dolphins and Tuna in the Eastern Tropical Pacific. *The Condor* 88 (3): 304-317.
- Auman, H.J., J.P. Ludwig, C.L. Summer, D.A. Verbrugge, K.L. Froese, T. Colborn, and J.P. Giesy. 1997. PCBs, DDE, DDT, and TCDD-EQ in two species of albatross on Sand Island, Midway Atoll, North Pacific Ocean. *Env. Toxicol. Chem.* 16(3): 498-504.
- Auman, H.J., J.P. Ludwig., J.P. Giesy, and T. Colborn. 1998. Plastic ingestion by Laysan albatross chicks on Sand Island, Midway Atoll, in 1994 and 1995. In *Albatross Biology and Conservation*, eds. G. Robertson and R. Gales, pp. 239-244. Chipping Norton: Surrey Beatty & Sons.
- Ayau, H., and T.K. Tengan. 2002. Ka Huaka'i o Nā 'Ōiwi – The Journey Home. In *The Dead and Their Possessions: Repatriation in Principle, Policy, and Practice*, eds. Frode et al., pp. 171-189. New York: Routledge Publications.
- Baco-Taylor, A.E. Yam, E.C. Kelley, Smith, J.R, and S. Cairns. 2006. Distribution of Deep-Sea Corals in Relation to Geological Setting in the Northwestern Hawaiian Islands. *Eos Trans. AGU*, 87 (36), Ocean Sci. Meet. Suppl., Abstract OS11E-03.
- Baker, J.D, C.L. Littnan, and D.W. Johnston. 2006. Potential effects of sea level rise on the terrestrial habitats of endangered and endemic megafauna in the Northwestern Hawaiian Islands. *Endang. Species Res.* 4(1): 1-10.
- Bakun, A. (2006) Fronts and eddies as key structures in the habitat of marine fish larvae: Opportunity, adaptive response and competitive advantage. *Scientia Marina* 70 (S2): 105-122.
- Balazs, G.H., and D.M. Ellis. 2000. Satellite telemetry of migrant male and female green turtles breeding in the Hawaiian Islands. In *Proceedings of the 18th International Sea Turtle Symposium*, eds. A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, 3-7 March 1998, pp. 281-283. U.S. Dept. of Comm., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436.
- Balazs, G.H., and M. Chaloupka. 2004a. Thirty-year recovery trend in the once depleted Hawaiian green sea turtle stock. *Biological Conservation* 117: 491–498.
- Balazs, G.H., and M. Chaloupka. 2004b. Spatial and temporal variability in somatic growth of green sea turtles (*Chelonia mydas*) resident in the Hawaiian Archipelago. *Mar. Bio.* 145 (5): 1043-1059.
- Balazs, G.H., and S. G. Pooley. 1991. Research plan for marine turtle fibropapilloma. NOAA Technical Memorandum NMFS-SWFSC-156.
- Ballantine, W.J. 1991. *Marine Reserves for New Zealand*. Auckland: University of New Zealand.



———. 1997. No-take marine reserve networks support fisheries. *Conservation Biology* 17 (6): 1769-1784.

Balwani, S. 2006. Personal communication with Emily Fielding. February 8.

Barlow, J. 2003. Cetacean abundance in Hawaiian waters during summer/fall of 2002. NMFS Southwest Fisheries Science Center manuscript.

———. 2006. Cetacean Abundance in Hawaiian Waters Estimated From a Summer/Fall Survey In 2002 *Marine Mammal Science* 22: 446–464.

Beckwith, M., ed. & trans. 1951. The Kumulipo: A Hawaiian Creation Chant. University of Hawai'i Press. Honolulu.

Benoit-Bird, K.J., W.W.L. Au, R.E. Brainard, and M. O. Lammers. 2002. Diel Horizontal Migration of the Hawaiian Mesopelagic Boundary Community Observed Acoustically. *Marine Ecology Progress Series* 217: 1-14.

Berkes, F. 2003. Re-thinking community-based conservation. /*Conservation Biology*/ 18: 621-630.

Berkley, S.A., M.A. Hixon, R.J. Larson, and M.S. Love. 2004. Fisheries Sustainability Via Protection of Age Structure and Spatial Distribution of Fish Populations. American Fisheries Society. Fisheries Magazine, August. URL: [www.fisheries.org](http://www.fisheries.org)

Beyer, W.N., E.E. Connor, and S. Gerould. 1994. Estimates of soil ingestion by wildlife. *J. Wildl. Manage* 58(2): 375-382.

Blackburn, T.M., P. Cassey, R.P. Duncan, K.L. Evans, and K.J. Gaston. 2004. Avian extinction and mammalian introductions on oceanic islands, *Science* 305: 1955–1958.

Boehlert, G. 1993. Fisheries and marine resources of Hawaii and the U.S.-associated Pacific Islands: an introduction. *Marine Fisheries Review* 55: 3-7.

Boland, R.C., and M. Donohue. 2003. Marine debris accumulation in the nearshore marine habitat of the endangered Hawaiian monk seal, *Monachus schauinslandi* 1999-2001. *Mar. Poll. Bull.* 46(11): 1385-1394.

Bolton, M.R. Medeiros, B. Hothersall and A. Campos. 2004. The use of artificial breeding chambers as a conservation measure for cavity-nesting procellariiform seabirds: a case study of the Madeiran storm petrel (*Oceanodroma castro*). *Biological Conservation* 116: 73-80.

Botsford, L., G. DiNardo, M. Fogarty, D. Goodman, and J. Hampton. 2002. Workshop proceedings on the development of spatially structured population models for Northwestern Hawaiian Islands lobster resources. Southwest Fisheries Science Center, Administrative Report, H-02-01.

Bowen, B.W., A.B. Meylan; J.P. Ross; C.J. Limpus; G.H. Balazs; J.C. Avise. 1992. Global Population Structure and Natural History of the Green Turtle (*Chelonia mydas*) in Terms of Matriarchal Phylogeny. *Evolution* 46: 865-881.

Brodziak, J. 2007. An investigation of alternative production models to assess the Hawaiian Bottomfish Complex. NMFS Pacific Islands Fisheries Science Center. Admin. Rep. H-07-01

Browman, H.L., and K.I. Stergiou. 2004. Politics and socio-economics of ecosystem-based management of marine resources: Introduction. *Marine Ecology Progress Series*, vol. 300: 241-296. September 16.

Brueggemann, M.M. 1995. Report on a botanical survey of Midway Atoll, April 1-7, 1995. United States Fish and Wildlife Service, U.S. Department of the Interior, Honolulu.

Campbell, S., M. David, L.A. Woodward, & Q.X. Li. 2004. Persistence of carbofuran in marine sand and water. *Chemosphere* 54(2004): 1155-1161.

Carpenter, E.J., S.J. Anderson, G.R. Harvey, H.P. Miklas, and B.B. Peck. 1972. Polystyrene spherules in coastal waters. *Science* 178: 749-750.

Carpenter, E.J., and K.L. Smith, Jr. 1972. Plastics on the Sargasso Sea Surface. *Science* 175 (4027): 1240 – 1241.

Center for Biodiversity Conservation. 2004. *Sustaining Seascapes: the science and policy of marine resource management. Symposium glossary* [online]. American Museum of Natural History, New York.

Cho, D. 2004. Derelict Fishing Gear and Related Marine Debris: An Educational Outreach Seminar among APEC Partners. Paper read at APEC Marine Debris Seminar, 13-16 January 2004, Honolulu.

Christensen, N.L., A.M. Bartuska, J.H. Brown, S. Carpenter, C. D'Antonio, R. Francis, J.F. Franklin, J.A. MacMahon, R.F. Noss, D.J. Parsons, C.H. Peterson, M.G. Turner, and R.G. Woodmansee. 1996. The Report of the Ecological Society of America Committee on the Scientific Basis for Ecosystem Management. *Ecological Applications* 6 (3): 665-691.

Christie, P., B. McCay, M. Miller, C. Lowe, A. White, R. Stoffle, D. Fluharty, L. McManus, R.R. Chuenpagdee, C. Pomeroy, D. Suman, B. Blount, D. Huppert, R. Eisma, E. Oracion, K. Lowry, and R. Pollnac. 2003. Toward developing a complete understanding: A social science research agenda for marine protected areas. *Fisheries* 28 (12): 22-26.

Citta, J., M.H. Reynolds, and N.E. Seavy. 2006. Seabird Monitoring Assessment for Hawaii and the Pacific Islands. USGS Pacific Island Ecosystems Research Center. Unpubl. Rept. to U.S. Fish and Wildlife Service, Migratory Birds and Habitat Programs, Portland, Oregon.

Clague, D.A. 1996. The Growth and Subsidence of the Hawaiian-Emperor volcanic chain. In: *The origin and evolution of Pacific Island biotas, New Guinea to Eastern Polynesia: patterns and processes.* :Keast, A.:Miller, S.E.: (Editors), SPB Academic Publishing, Amsterdam. 35-50.

- Clapp, R.B. 1972. The natural history of Gardner Pinnacles, northwestern Hawaiian Islands. *Atoll Research Bulletin*. 163:1-25.
- Clapp, R.B., and E. Kridler. 1977. The natural history of Necker Island, Northwestern Hawaiian Islands. *Atoll Research Bulletin*. 207: 1-147.
- Clarke, R.P., S.S. Yoshimoto, and S.G. Pooley. 1992. A Bioeconomic Analysis of the Northwestern Hawaiian Islands Lobster Fishery. *Marine Resource Economics* 7: 225-240.
- Cleghorn, P. 1988. The Settlement and abandonment of Two Hawaiian Outposts: Nihoa and Necker. In: *Bishop Museum Occasional Papers* 28:35-49. Bishop Museum Press, Honolulu.
- Cohen, S. 1985. *Wings to the Orient*. Pictorial Histories Publishing Company, Missoula, Montana.
- Colley, Ben. *Midway*. MS DOC 29. Bishop Museum Library and Archives, Honolulu.
- Coloma-Agaran, G. 2003. First Quarterly report for Nuisance Seaweed Control, Kihei, Maui, Hawai'i. Report submitted to EPA.
- Creighton, J.L. 1981. *The Public Involvement Manual*. Abt Books, Cambridge, Massachusetts.
- Cressman, R.J., S. Ewing, B. Tillman, M. Horan, C. Reynolds, and S. Cohen, 1990. "A Glorious Page in Our History" *The Battle of Midway 4-6 June 1942*. Pictorial Histories Publishing Company, Missoula, Montana.
- Cury, P.M. 2004. Tuning the Ecoscope for the Ecosystem Approach to Fisheries. *Marine Ecological Progress Series* 274: 277-275.
- Dalrymple, G.B., E.A. Silver, E. Jackson. 1974. NASA. Ames Res. Center Guidebook to the Hawaiian Planetology Conference: 23-36.
- Dameron, O.J., M. Parke, M.A. Albins, and R. Brainard. 2007. Marine debris accumulation in the Northwestern Hawaiian Islands. *Marine Pollution Bulletin*. 54(4): 423-433.
- David, M., S. Campbell, L.A. Woodward, & Q.X. Li. 2001. Characterization of a carbofuran-contaminated site in the Hawaiian Islands National Wildlife Refuge. J.J. Johnston, ed., *Pesticides and Wildlife: ACS Symposium Series 771*. Chapter 3. pp. 22-37.
- Dean, M., ed., 1992. *Archaeology Underwater: the NAS Guide to Principles and Practice*. Nautical Archaeology Society, London.
- DeFelice, R.C., S.L. Coles, D. Muir, and L.G. Eldredge, 1998. Investigation of the marine communities of Midway Harbor and adjacent lagoon, Midway Atoll, Northwestern Hawaiian Islands. Hawai'i Biological Survey Contribution No. 1998-014. Bishop Museum, Honolulu.
- DeFelice, R.C., D. Minton, and L.S. Godwin. 2002. Records of shallow-water marine invertebrates from French Frigate Shoals, Northwestern Hawaiian Islands, with a note on non-indigenous species.

Report to the U.S. Fish and Wildlife Service. Technical Report No. 23. Contribution No. 2002-01 to the Hawai'i Biological Survey Bishop Museum, Honolulu.

De Leo, G.A., and S. Levin. 1997. The multifaceted aspects of ecosystem integrity. *Conservation Ecology* 1(1): 3. URL: <http://www.consecol.org/vol1/iss1/art3/>

Delgado, J.P. 1985. Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places. *National Register Bulletin* 20. National Park Service, U.S. Department of the Interior.

DeMartini, E.E., G.T. DiNardo, and H.A. Williams. 2003. Temporal changes in population density, fecundity and egg size of the Hawaiian spiny lobster, *Panulirus marginatus*, at Necker Bank, Northwestern Hawaiian Islands. *Fish. Bull.*, U. S. 101:22-31.

DeMartini, E.E. and A.M. Friedlander. 2004. Spatial Patterns of Endemism in Shallow Reef Fish Populations of the Northwestern Hawaiian Islands. *Marine Ecology Progress Series* 271:281-296.

———. 2006. Predation, endemism, and related processes structuring shallow-water reef fish assemblages of the NWHI. *Atoll Research Bulletin*. 543: 237-256.

Department of the Interior. 1997. Department of the Interior Manual Chapter 411, Chapters 1 through 3; and Reclamation Policy and Directives & Standards for Cultural Resources Management and Museum Property Management. 411 DM and 36 CFR Part 800; 43 CFR Part 7.

Department of the Interior. 2008. U.S. World Heritage Tentative List 2008. URL [www.doi.com](http://www.doi.com)

Department of the Interior Secretary's Order 3217. 13 September 2000. Designation of the Battle of Midway National Memorial.

DLNR (Department of Lands and Natural Resources, State of Hawai'i). 2003a. The State of Hawai'i Aquatic Invasive Species Management Plan. Division of Aquatic Resources, Honolulu.

———. 2003b. Wao Akua: Sacred Source of Life. Honolulu: State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife.

———. 10 August 2007. Hawai'i Administrative Rules Chapter 13-76. Non-Indigenous Aquatic Species. Division of Aquatic Resources.

Diamond, A.W. 1978. Feeding strategies and population size in tropical seabirds. *American Naturalist* 112: 215-223.

DiNardo, G.T., and R. Marshall. 2001. Status of Lobster Stocks in the Northwestern Hawaiian Islands, 1998-2000. Southwest Fisheries Science Center, Administrative Report, H-01-04.

Dollar, S.J. 1982. Wave stress and coral community structure in Hawai'i. *Coral Reefs* 1: 71-81.

Dollar, S.J., and R.W. Grigg. 2004. Anthropogenic and Natural Stresses on Selected Coral Reefs in Hawai'i: a multi-decade synthesis of impact and recovery. *Pacific Science* 58(2): 281-304.

Donohue, M.J. 2005. Eastern Pacific Ocean source of Northwestern Hawaiian Islands marine debris supported by errant fish aggregating device. *Marine Pollution Bulletin* 50: 886-888.

Donohue, M.J., and D. Foley. 2007. Remote sensing reveals links among the endangered Hawaiian monk seal, marine debris and El Niño. *Marine Mammal Science* 23 (2): 468–473.

Donohue, M.J., and R.E. Brainard. 2001. A comprehensive effort to mitigate marine debris and restore coral reef habitat in the Northwestern Hawaiian Islands. [Abstr.] For Oceans 2001, 5-8 November 2001, Pelagic Fisheries Session, Hilton Hawaiian Village, Honolulu, Hawai‘i.

Duda, A.M., and K. Sherman. 2002. A New Imperative for Improving Management of Large Marine Ecosystems. *Ocean and Coastal Management* 45: 797-833.

Eagles, P.F.J., S.F. McCool, and C.D. Haynes. 2002. *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*. IUCN, Gland, Switzerland and Cambridge, UK.

Ehler, R. 2004. Socio-Economic Assessment of Commercial Bottomfishing in the Northwestern Hawaiian Islands (Draft). National Marine Sanctuary Program, NOAA-NOS. Silver Spring, MD.

Eldredge, L.G. 2002. Literature Review and Cultural, Geological, and Biological History for the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. Contribution to the Hawaii Biological Survey No. 2002-026. Bishop Museum, Honolulu.

———. 2005. Assessment of the potential threat to the introduction of marine non-indigenous species in the Northwestern Hawaiian Islands. Final Report Prepared for Environmental Defense. Contribution No. 2005-001 to the Hawaii Biological Survey. Bishop Museum, Honolulu.

Eldredge, L. and J. Carlton .2002. Hawaiian Marine Bioinvasions: A Preliminary Assessment. *Pacific Science*. 56(2): 211-212.

Ely, C.A., and R.B. Clapp. 1973. The natural history of Laysan Island, Northwestern Hawaiian Islands. *Atoll Research Bulletin*. 171: 1-361.

Emanuel, K. 2005. Increasing destructiveness of tropical cyclones over the past 30 years. *Nature* 436:686-688.

Emory, K. 1928. The Archaeology of Nihoa and Necker Islands. *Bishop Museum Bulletin* 53. Bishop Museum Press, Honolulu.

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

Engilis, Jr., A and M. Naughton. 2004. U. S. Pacific Islands Regional Shorebird Conservation Plan. U. S. Shorebird Conservation Plan. U. S. Dept. of Interior. Portland, OR.

Entsch, B., R.G. Sim, and B. G. Hatcher, 1983. Indication from photosynthetic components that iron is a limiting nutrient in primary producers on coral reefs. *Mar. Biol.* 73(1): 17-30.

Evenhuis, N.L. and L.G. Eldredge, (eds). 2004. Natural History of Nihoa and Necker Islands. Bishop Museum Press, Honolulu.

Executive Order 1019—Hawaiian Islands Reservation, February 3, 1909

Executive Order 10413—Restoring Kure (Ocean) Island to the Jurisdiction of the territory of Hawaii, November 17, 1952 (17 FR 10497)

Executive Order 13022—Administration of the Midway Islands, October 31, 1996 (61 FR 56875)

Executive Order 13089—Coral Reef Protection, June 11, 1998 (63 FR 32701)

Executive Order 13112—Invasive Species, February 3, 1999 (64 FR 6183)

Executive Order 13158—Marine Protected Areas, May 26, 2000 (65 FR 34909)

Executive Order 13178 and 13196—Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, December 4, 2000 (65 FR 76903) and January 18, 2001 (66 FR 7395)

Executive Order 13287—Preserve America, March 3, 2003 (68 FR 10635).

Feare, C.J., 1976. The breeding of the Sooty Tern *Sterna fuscata* in the Seychelles and the effects of experimental removal of its eggs. *Journal of Zoology, London* 179: 317–360.

Fefer, S.I., C.S. Harrison, M.B. Naughton, and R.J. Shallenberger. 1984. Synopsis of results of recent seabird research conducted in the Northwestern Hawaiian Islands. In: R.W. Grigg and K.Y. Tanoue (ed.s). Resource investigations in the Northwestern Hawaiian Islands, University of Hawaii Sea Grant College Program, UNIHI-SEAGRANT-MR-84-01, Honolulu, Hawaii, pp 9-76.

Fine, M. and D. Tchernov. 2007. Scleractinian Coral Species Survive and Recover from Decalcification. *Science* 315: 1811.

Finkelstein, M.E., K.A. Grasman, D.A. Croll, B.R. Tershy, B.S. Keitt, W.M. Jarman, and D.R. Smith. 2007. Contaminant-associated alteration of immune function in black-footed albatross (*Phoebastria nigripes*), a North Pacific predator. *Environ. Toxicol. Chem.* 26:1896-1903.

Firing, J. and R.E. Brainard. 2006. Ten years of shipboard ADCP measurements along the Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543:347-364.

Fish and Wildlife Improvement Act. 1978. 16 U.S.C. § 7421

Flint, E. 1991. Time and energy limits to the foraging radius of sooty terns *Sterna fuscata*. *Ibis*. 133: 43-46.

———. 2004. Personal communication with Sean Corson, NWHI Coral Reef Ecosystem Reserve. April 12.

———. 2006. Personal communication with Emily Fielding, NWHI Coral Reef Ecosystem Reserve. February 1.

Flint, E. and C. Rehkemper. 2002. Control and Eradication of the Introduced Grass, *Cenchrus echinatus*, at Laysan Island, Central Pacific Ocean. In *Turning the Tide: The Eradication of Invasive species* (pp. 110-115), Auckland, New Zealand, IUCN SSC Invasive Species Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.

Floros, C.D., M.J. Samways, and B. Armstrong. 2004. Taxonomic patterns of bleaching within a South African coral assemblage. *Biodiversity and Conservation* 13: 1175-1194.

Fowler, C.W., and L. Hobbs. 2002. Limits to natural variation: Implications for systematic management. *Animal Biodiversity and Conservation* 25: 7-45.

Fowler, H.W., and S.C. Ball. 1925. Fishes of Hawai'i, Johnston Island, and Wake Island. (Tanager Expedition Publ. 2). *Bull. B.P. Bishop Mus.* 26: 1-31. Honolulu.

Franklin, E.C. 2008. An assessment of vessel traffic patterns in the Northwestern Hawaiian Islands between 1994 and 2004. *Marine Pollution Bulletin* 56 (2008): 136-162.

Frid, C.L.J., S. Hansson, S.A. Ragnarsson, A. Rijnsdorp, and S.A. Steingrímsson. 1999. Changing Levels of Predation on Benthos as a Result of Exploitation of Fish Populations. *Ambio*. 28, 7:578-582.

Friedlander, A. and E. DeMartini. 2002. Contrast in density, size, and biomass of reef fishes between the Northwestern and the main Hawaiian Islands: the effects of fishing down apex predators. *Marine Ecological Progress Series* 230: 253-264.

Friedlander, A., G. Aeby, R. Brainard, A. Clark, E. DeMartini, S. Godwin, J. Kenyon, R. Kosaki, J. Maragos, and P. Vroom. 2005. The State of Coral Reef Ecosystems of the Northwestern Hawaiian Islands. In: *The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2005*, ed. J. Waddell, pp. 270-311. NOAA Technical Memorandum NOS NCCOS 11. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team. Silver Spring, MD.

Friedlander, A., J. Sladek Nowlis, J. Sanchez, R. Appeldoorn, P. Usselio, C. McCormick, S. Benharano, and A. Mitchell-Chui. 2003. Designing Effective Marine Protected Areas in Seaflower Biosphere Reserve, Colombia, Based on Biological and Sociological Information. *Conservation Biology* 6: 1769-1784.

Fry, D.M., S.I. Fefer, and L. Sileo. 1987. Ingestion of plastic debris by Laysan albatrosses and wedge-tailed shearwaters in the Hawaiian Islands. *Marine Pollution Bulletin* 18: 339-343.

Galver, L. 2000. The molecular ecology of spinner dolphins, *Stenella longirostris*: genetic diversity and population structure. Ph.D. dissertation, University of California, San Diego, 192 p

Geitz, M. 2004. Cruise Tourism on Slavbard. Norway: WWF International Arctic Programme.

Giambelluca, T.W., and T.A. Schroeder 1998. Climate. In: *Atlas of Hawaii*, J. Juvik and S. Juvik, (eds). University of Hawai'i Press. Honolulu.

Glimartin, W.G., ed. 2005. Workshop to Identify Research and Mitigation Measures on Nihoa Island, Northwestern Hawaiian Islands. April 25-26, 2005 Honolulu. Hawai'i Wildlife Fund, Volcano, HI. 96785.

Gilmartin, W., S. Canja, C. Vanderlip, and J. Mangel. 1990. Managing human activity aids recovery of endangered Hawaiian monk seals at Midway Islands. Abstract in: *Society for Marine Mammalogy Proceedings of the 13th Biennial Conference on the Biology of Marine Mammals*, p. 67. Hawai'i.

Gittings, S., M. Tartt, C. Alexander, and R. Kosaki. 2004. Information needs for conservation science and management of the Northwestern Hawaiian Islands. National Marine Sanctuary Program, NOAA. Silver Spring, MD., 66 pp.

Giongo, F., J. Bosco-Nizeye, and G.N. Wallace. 1994. A Study of Visitor Management in the World's National Parks and Protected Areas. Paper prepared for Colorado State University, The Ecotourism Society and the World Conservation Monitoring Centre.

Godwin, L.S. 2000. NWHI derelict fishing net removal project: Survey of marine organisms associated with net debris. Report submitted to: NMFS, Coral Reef Ecosystem Investigation.

———. 2002. Preliminary report on non-coral marine invertebrates: NMFS.

Godwin, S. 2005. Preliminary species inventory for marine invertebrates associated with the coral reef communities of the Northwestern Hawaiian Islands. Report submitted to the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. Honolulu.

Godwin, S., K.S. Rodgers, and P.L. Jokiel. 2006. Reducing potential impacts of invasive marine species in the Northwestern Hawaiian Islands Marine National Monument. A report for research conducted under DOI, NOAA, National Ocean Service. MOA 2005-008/6882 Amendment No. 001, Research in Support of the NWHI Coral Reef Ecosystem Reserve, HIMB, SOEST, University of Hawai'i at Mānoa, Honolulu.

Godwin, L.S. 2008. The marine invertebrate species associated with the biofouling of derelict fishing gear in the Papahānoumokuākea Marine National Monument. Report submitted to NOAA-NMFS, PIFSC, Coral Reef Ecosystem Division. (In Review).

Gon, S. 2003. Application of Traditional Ecological Knowledge and Practices of Indigenous Hawaiians to the Revegetation of Kaho'olawe. *Ethnobotany Research and Applications* 1:5-20.

Grandcourt, E.M. 2003. The Effect of Intensive Line Fishing on the Virgin Biomass of a Tropical Deepwater Snapper, the Crimson Jobfish (*Pristipomoides filamentosus*). *Fisheries Bulletin* 101:305-311.

Graves, M., and K. Kikiloi. In prep. Preliminary Reconnaissance Report for the Archaeological Sites of Nihoa Islands, February 2006. Prepared for the U.S. Fish and Wildlife Service.



Grigg, R.W. 1981. *Acropora* in Hawaii. Part II. Zoogeography. *Pacific Science* 35: 15-25.

———. 2006. The history of marine research in the Northwestern Hawaiian Islands: lessons learned from the past and hopes for the future. *Atoll Research Bulletin* 543: 13-22.

Grigg, R.W., and R. Pfund, eds. 1980. *Proceedings of the Symposium on the Status of Resource Investigations in the Northwestern Hawaiian Islands*. Sea Grant Miscellaneous Report UNIHI-SEAGRANT-MR-80-04. University of Hawai‘i Sea Grant College Program. Honolulu.

Grigg, R.W., and K.Y. Tanoue, eds. 1984. *Proceedings of the Second Symposium on Resource Investigations in the Northwestern Hawaiian Islands*. Sea Grant Miscellaneous Report UNIHI-SEAGRANT-MR-84-01. University of Hawai‘i Sea Grant College Program. Honolulu.

Handy, C.E.S., E.G. Handy, and M.K. Pukui. 1972. Native Planters in Old Hawai‘i: Their Life, Lore, and Environment. *Bishop Museum Bulletin* 233. Bishop Museum Press. Honolulu.

Harbottel-Boyd, J. 1886. Report to the Minister of Interior relative to the Annexation of the above or Mokupāpapa to the Hawaiian Islands. Interior Dept. of Land, Sept. 1886, Box 87, Hawai‘i State Archives. Honolulu.

Harrison, D., and A. Craig, 1993: Ocean Model Studies of Upper-Ocean Variability at 0°, 160°W during the 1982–1983 ENSO: Local and Remotely Forced Response. *J. Phys. Oceanogr.* 23: 425–451.

Harrison, C.S., T.S. Hida, M.P. Seki. 1983. Hawaiian Seabird Feeding Ecology. *Wildlife Monographs* 85:1-71.

Harvell, C., K. Kim, J. Burkholder, R. Colwell, P. Epstein, D. Grimes, E. Hofmann, E. Lipp, A. Osterhaus, R. Over-Street, J. Porter, G. Smith, and G. Vasta. 1999. Emerging Marine Diseases—climate links and anthropogenic factors. *Science* 285: 1505-1510.

Havlik, B. 2005. Branch Chief, Aids to Navigation, United States Coast Guard, District 14. Personal communication with Joel Paschal, Tetra Tech, Inc., January 4

Hawai‘i Administrative Rules, 2007. Title 13, Department of Land and Natural Resources. Subtitle 4, Part IV, Fisheries Resource Management. Chapter 76, Non-Indigenous Aquatic Species.

Hawai‘i Admissions Act. 8 March 1959. Pub. L. 86-3, 73 Stat. 4 § 2.

Hawai‘i Biodiversity and Mapping Program. 2007. Program database. unpublished, Honolulu.

Hawai‘i Endangered Species. Hawaii Revised Statutes, Chapters 183D and 195D, State of Hawai‘i.

Hawai‘i Environmental Impact Statements. Hawaii Revised Statutes. Chapter 343, State of Hawai‘i

Hawai‘i Fishing Adventures and Charters (HFAC). 2004. Hawai‘i Fishing Adventures and Charters. Available from the Internet. URL: <http://www.sportfishhawaii.com/midwayreports.htm>.

Hawai'i Organic Act of 30 April 1900, c339, 31 Stat.141 § 2.

Hawai'i State Constitution, Article XI, §§ 1,2,6,9; and Article XII § 7.

Helber Hastert & Fee 1995. *Cultural Resources Management Plan* for Midway Islands. Submitted to the Department of the Navy, Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawai'i.

Henderson, J.R. 1984a. Encounters of Hawaiian Monk Seals with Fishing Gear at Lisianski Island, 1982. *Marine Fisheries Review* 46(3):59-61.

———. 1984b. A Review of Hawaiian Monk Seal Entanglements in Marine Debris. In: *Proceedings of the Workshop of the Fate and Impact of Marine Debris, 26-29 November 1984*, eds. R. S. Shomura and H. O. Yoshida, pp. 326-335. NOAA-TM-NMFS-SWFSC-54.

———. 1990. Recent Entanglements of Hawaiian Monk Seals in Marine Debris. In: *Proceedings of the Second International Conference on Marine Debris, 2-7 April, 1989*, eds. R. S. Shomura and M. L. Godfrey, pp. 540-553. NOAA-TM-NMFS-SWFSC-154.

———. 2001. A Pre- and Post- MARPOL Annex V Summary of Hawaiian Monk Seal Entanglements and Marine Debris Accumulation in the Northwestern Hawaiian Islands, 1982-1998. *Marine Pollution Bulletin* 42 (7): 584-589.

———. 2006. Personal communication with Emily Fielding, NWHI Coral Reef Ecosystem Reserve, March 13.

Hepburn Board Report. Jan 3, 1939. House Doc No. 65, 76<sup>th</sup> Congress, 1<sup>st</sup> Session, "Report on the Need of additional Naval bases to defend the coast of the United States, Its Territories and Possessions".

Herbst, L.H. 1995. Green turtle fibropapillomatosis: Challenges to assessing the role of environmental cofactors. *Environmental Health Perspectives* 103 (Supp.4): 27-30.

Hilborn, R., 2004. Ecosystem-based fisheries management: the carrot or the stick? *Marine Ecological Progress Series* 274: 275-278.

Hoegh-Guldberg, O., and et. al. 2007. Coral Reefs Under Rapid Climate Change and Ocean Acidification. *Science* 318.

Hoeke, R., R. Brainard, R. Moffitt, and M. Merrifield 2006. The role of oceanographic conditions and reef morphology in the 2002 coral bleaching event in the Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543: 489-503.

Holling, C. S. 1996. Surprise for Science, Resilience for Ecosystems, and Incentives for People. *Ecological Applications*, 6 (3): 733-735.

Hope, B., S. Scantolini, E. Titus, and J. Cotter. 1997. Distribution patterns of polychlorinated biphenyl congeners in water, sediment and biota from Midway Atoll (North Pacific Ocean). *Mar. Poll. Bull.* 34(7): 548-563.

Howe, K. R., ed. 2006. *Vaka Moana, Voyages of the Ancestors: the Discovery and Settlement of the Pacific*. University of Hawai'i Press, Honolulu.

Hoyt, E. 2005. *Marine Protected Areas for Whales, Dolphins and Porpoises*. Earthscan, UK, and U.S.

Hui, C.A. & W.N. Beyer, 1998. Sediment ingestion of two sympatric shorebird species. *Sci. Tot Env.* 224 (1998): 227-233.

Ilett, A., R. Aiello, M. Power, C. Recchia, and L. Saunders. 2000. The Great Barrier Reef World Heritage Area - Ecotourism in the world's largest marine protected area. In: T. Charters and K. Law, eds., pp. 65-80. *Best Practice Ecotourism in Queensland*. Brisbane, Queensland.

Ingraham, W.J. Jr. and C.C. Ebbesmeyer. 2001. Surface current concentration of floating marine debris in the North Pacific Ocean: 12-year OSCURS model experiments. In: *Proceedings of the International Conference on Derelict Fishing Gear and the Ocean Environment, 2001*, Hawaiian Islands Humpback Whale National Marine Sanctuary publication.

International Maritime Organization (IMO). 1997. Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens.

———. 2001. International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS): Adopted 5 October 2001. [www.imo.org/Conventions](http://www.imo.org/Conventions).

IPPC (Intergovernmental Panel on Climate Change). 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Solomon, S, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.). Cambridge University Press, Cambridge, United Kingdom and New York, NY, 996 pp.

Irwin, G.J. 1992. *The Prehistoric Exploration and Colonisation of the Pacific*. United Kingdom: Cambridge University Press.

Itano, D.G. 2001. The Reproductive biology of yellowfin tuna (*Thunnus albacares*) in Hawaiian waters and the Western Tropical Pacific Ocean: Project summary. SOEST Publication 00-01, JIMAR Contribution 00-328, University of Hawai'i, Honolulu, 69 pp.

Itano, D.G. and K.N. Holland. 2000. Movement and vulnerability of bigeye (*Thunnus obesus*) and yellowfin tuna (*Thunnus albacares*) in relation to FADs and natural aggregation points. *Aquat. Living Resour.* 13: 213-223.

Jaques, D.L., and C. Strong. 2002. Disturbance of brown pelicans at communal roosts in Southern and Central California. Prepared for the American Trader Trustee Council, California Department

of Fish and Game, U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration.

Johannes, R.E. 1981. *Words of the Lagoon: Fishing and marine lore in the Palau District of Micronesia*. University of California Press, Berkeley.

Johns, G.M., V.R. Leeworthy, F.W. Bell, and M.A. Bonn. 2001. Socioeconomic Study of Reefs in Southeast Florida: Hazen & Sawyer Environmental Engineers and Scientists in association with Florida State University and the National Oceanic and Atmospheric Administration.

Johnson, K.T.M. 2004. Geology in N.L. Evenhuis and L.G. Eldredge, eds., *Natural History of Nihoa and Necker Islands*. Bishop Museum Press. Honolulu, Hawai'i.

Johnston, D.W., M. E. Chapla, L.E. Williams, D.K. Mattila. 2007. Identification of humpback whale *Megaptera novaeangliae* wintering habitat in the Northwestern Hawaiian Islands using spatial habitat modeling. *Endangered Species Research* 3: 249–257.

Kaho'olawe Island Reserve Commission (KIRK). 2004. Kaho'olawe Island Reserve Commission Strategic Plan 2004-2008, May.

Kaly, U.L., and G.P. Jones, 1994. Test of the effect of disturbance on ciguatera in Tuvalu. *Memoirs of the Queensland Museum Brisbane* 34: 523-532.

Kamakau, S. 1976. Na Hana o ka Po'e Kahiko [The works of the people of old]. *Bernice P. Bishop Museum Special Publication* 61. Bishop Museum Press. Honolulu.

Karczmarski, L., B. Würsig, G. Gailey, K.W. Larson, and C. Vanderlip.. 2005. Spinner dolphins in a remote Hawaiian atoll: social grouping and population structure *Behavioral Ecology* 16(4): 675-685.

Karr, J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. *Journal of Environmental Management* 5:55-68.

Kaunamano. 1862. Ka Mo'olelo no Aukelenuiaiku. Hōkū o ka Pakipika, 6 Nov.-18 Dec.

Kawamoto, K. and S. Pooley. 2000. *Annual Report of the 1999 Western Pacific Lobster Fishery*, Preliminary Draft. Southwest Fisheries Science Center, Honolulu Laboratory, NMFS, NOAA.

Kay, J.J. 1991. A non-equilibrium thermodynamic framework for discussing ecosystem integrity. *Journal of Environmental Management* 15 (4): 483-495.

Keenan, E.E., R.E. Brainard, and L.V. Basch. 2006. Historical and present status of the pearl oyster, *Pinctada margaritifera*, at Pearl and Hermes Atoll, Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543:333-344.

Kelley, C., R. Moffitt, and J.R. Smith. 2006. Mega- to macro-scale classification and description of bottomfish essential fish habitat on four banks in the Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543:319-332.

Kelley, C. and W. Ikehara. 2006. The impacts of bottomfishing on Raita and West St. Rogatien Banks in the Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543: 305-318.

Kelly, M. 1989. Dynamics of production intensification in pre-contact Hawai'i. *What's New? a closer look at process of innovation*. London.

Kenyon, J.C. and R.E. Brainard. 2006. Second recorded episode of mass coral bleaching in the Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543: 505-523.

Kenyon, J.C., R.E. Brainard, G.S. Aeby, J.D. Chojnacki, M.J. Dunlap, and C.B. Wilkinson. In press. Mass coral bleaching on high latitude reefs in the Hawaiian Archipelago. In: *Proceedings of the 10th International Coral Reef Symposium*, Okinawa.

Kenyon, K.W. 1972. Man versus the monk seal. *Journal of Mammalogy* 58: 97-98.

Kerkvliet, J. and C. Nowell. 2000. Tools for recreation management in parks: the case of the Greater Yellowstone's blue-ribbon fishery. *Ecological Economics* 34 (1): 89-100.

Kikiloi, K. 2003. A new synthesis in oceanic domestication: the symbiotic development of loko i'a aquaculture in pre-contact Oceania. In *SPC Traditional Resource Management and Knowledge Information, Bulletin* 15. South Pacific Commission, Noumea.

———. In prep. Reconnecting with Ancestral Islands: Examining Historical Relationships between Kānaka Maoli and the Northwestern Hawaiian Islands. A Report by the University of Hawai'i Center for Hawaiian Studies to the National Oceanic Atmospheric Administration and the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. Honolulu.

Kikuchi, W. 1976. Ancient Hawaiian Fishponds. *Science*, vol. 193. pp. 295-299.

King, W. B. 1970. The trade wind zone oceanography pilot study. Part VII: observations of seabirds March 1964 to June 1965. *U.S. Fish and Wildl. Ser. Spec. Sci. Rep. - Fish*. 586. 136p.

Kingdom of Hawaii. 1857. Resolution 1. Reaffirmation of Laysan and Lisianski Islands. Privy Council Minute Books, Series 421, vol. 10. Hawai'i State Archives. Honolulu.

Klavitter, John. 2005. Calculation of the amount of plastic "land filled" each year by albatross at Midway Atoll NWR. U.S. Fish and Wildlife Service, Honolulu, HI. June 9, 2005. 1 page handout.

Kleypas, J.A., R.A. Feely, V.J. Fabry, C. Langdon, C.L. Sabine, and L.L. Robbins. 2006. Impacts of Ocean Acidification on Coral Reefs and Other Marine Calcifiers: A Guide for Future Research, report of a workshop held 18-20 April 2005, St. Petersburg, FL, Sponsored by NSF, NOAA and the U.S. Geological Survey, 88pp.

Kuffner, I.B. and V. Paul. 2001. Effects of nitrate, phosphate and iron on the growth of macroalgae and benthic cyanobacteria from Cocos lagoon, Guam. *Mar. Ecol. Prog. Ser.* 222:63-72.

Kure Atoll, part of the State Seabird Sanctuary. Hawaii Revised Statutes Chapter 125, State of Hawai'i.

Kushlan, J.A., M.J. Steinkamp, K.C. Parsons, J. Capp, M. Acosta Cruz, M. Coulter, I. Davidson, L. Dickson, N. Edelson, R. Elliot, R.M. Erwin, S. Hatch, S. Kress, R. Milko, S. Miller, K. Mills, R. Paul, R. Phillips, J.E. Saliva, B. Sydeman, J. Trapp, J. Wheeler, and K. Wohl. 2002. Waterbird Conservation for the Americas: The North American Waterbird Conservation Plan, Version 1. Washington, D.C., 78 pp.

Lacey Act of 1900, as amended. 18 U.S.C. 42, 16 U.S.C. 3371.

Lammers, M.O., R.E. Brainard, and W.W.L. Lau. 2006. Diel trends in the mesopelagic biomass community of the Northwestern Hawaiian Islands observed acoustically. *Atoll Research Bulletin* 543: 391-408.

Lehane, L. and R.J. Lewis. 2000. Ciguatera: recent advances but the risk remains. *Int. J. Food Microbiol.* 61(2-3): 91-125.

Leslie, H. & K. L. McLeod. 2007. Confronting the challenges of implementing marine ecosystem-based management. *Frontiers in Ecology & Environment*, 5(10): 540-548.

Levington, J.S. 1995. *Marine biology. Function, biodiversity, ecology.* Oxford University Press, New York.

Liholiho, A. 16 March 1856. Reaffirmation of Nihoa Island. Circular of the Kingdom of Hawai'i.

Lili'uokalani, L. trans. 1978. *The Kumulipo: A Hawaiian Creation Myth.* 2nd ed. Pueo Press. California.

Liller, W., 2000. Necker Island, Hawai'i: Astronomical implications of an island located on the Tropic of Cancer. *Rapa Nui Journal*, vol. 14 (4).

Limburg, K.E., S.A. Levin, and C.C. Harwell. 1986. Ecology and estuarine impact assessment: lesson learned from the Hudson River (USA) and other estuarine experiences. *Journal of Environmental Management* 22: 255-280.

Longhurst, A.R. and D. Pauly. 1987. *Ecology of Tropical Oceans.* Academic Press, Inc. San Diego.

Lotze, H.K. 2004. Repetitive history of resource depletion and mismanagement: the need for a shift in perspective. *Marine Ecological Progress Series* 274: 282-285.

Lowe, C.G., B.M. Wetherbee, and C.G. Meyer . 2006. Using acoustic telemetry monitoring techniques to quantify movement patterns and site fidelity of sharks and giant trevally around French Frigate Shoals and Midway Atoll. *Atoll Research Bulletin* 543: 281-304.

Ludwig, J.P., C.L. Summer, H.J. Auman, V. Gauger, D. Bromley, J.P. Giesy, R. Rolland and T. Colborn. 1997. The roles of organochlorine contaminants and fisheries bycatch in recent population

changes of Black-footed and Laysan Albatrosses in the North Pacific Ocean. In: Robinson, G. and R. Gales, eds. *Albatross Biology and Conservation*. Surrey Beatty & Sons, Chipping Norton.

Mac, M.J., A. Opler, C.E.P. Haecker, and P.D. Doran 1998. Status and Trends of the Nation's Biological Resources. Volume 2. U.S. Department of Interior. U.S. Geological Survey, Reston, VA pp 437-964.

MacDonald, M.A. 2008. Nihoa Millerbird Pre-translocation and Nihoa Biological Monitoring Expedition, July 17-September 22, 2007. Nihoa Island, Northwest Hawaiian Islands, Hawaiian Islands National Wildlife Refuge, U.S. Fish and Wildlife Service, Honolulu.

Macintyre, I.G. ed., 2006. Northwestern Hawaiian Islands Third Scientific Symposium. November 2-4, 2004. *Atoll Research Bulletin* 543.

Mackenzie, M.K. and B. Kaiama. 2003. Native Hawaiian claims to the Lands and Natural Resources of the Northwestern Hawaiian Islands. Report to Office of Hawaiian Affairs.

Magnuson-Stevens Fishery Conservation and Management Act, 1976, as amended. Pub. L. 94-265. 16 U.S.C. § 1801 *et seq.*

Malo, D. 1951. Hawaiian Antiquities: Mo'olelo Hawai'i, translated by N. B. Emerson 1898. *Bernice Pauahi Bishop Museum Publication* 2. 2nd ed. Bishop Museum Press, Honolulu.

Maly, K. 2003. Ka Hana Lawai'a a me na ko'a o na kai 'ewalu: A history of fishing practices and marine fisheries of the Hawaiian Islands. Kumu Pono Associates LLC. Prepared for The Nature Conservancy.

Manning, R.E. and S.R. Lawson. 2002. Carrying capacity as "informed judgement": The values of science and the science values. *Environmental Management* 30 (2): 157-168.

Mantua, N.J., S.R. Hare, Y. Zhang, J.M. Wallace, and R.C. Francis. 1997. A Pacific interdecadal climate oscillation with impacts on salmon production. *Bulletin of the American Meteorological Society* 78: 1069-1079.

Manu, M. 1899. He moolelo kaa o Hawai'i no ke kaa nui weliweli mawaena o Pele-Keahialoa me Waka-Keakaikawai. He mau kupua wahine kaaeaa. *Ka Loea Kālai'āina*, May 13-December 30.

Maragos, J.E. and P.L. Jokiel. 1986. Reef corals of Johnston Atoll: One of the world's most isolated reefs. *Coral Reefs* 4:141-150.

Maragos, J., D. Potts, G. Aeby, D. Gulko, J. Kenyon, D. Siciliano and D. VanRavenswaay. 2004. 2000-2002 rapid ecological assessment of corals on the shallow reefs of the Northwestern Hawaiian Islands. Part 1: Species and distribution. *Pacific Science*, 58(2): 211-230.

Maragos, J., and D. Gulko, eds. 2002. Coral Reef Ecosystems of the Northwestern Hawaiian Islands: Interim Results Emphasizing the 2000 Surveys. U.S. Fish and Wildlife Service and the State of Hawaii Department of Land and Natural Resources. Honolulu.

Marine Mammal Commission. 2005. *Annual Report to Congress 2004*. Bethesda, MD.

Marion, J. L. and C.S. Rogers. 1994. The applicability of terrestrial visitor impact management strategies to the protection of coral reefs. *Ocean Coastal Management* 22: 153-163.

MARPOL (Marine Pollution Convention), 1973/78

Matsumura, S. and K. Nasu. 1997. Distribution of floating debris in the North Pacific Ocean: sighting surveys 1986–1991. In: J. Coe and D. Rogers, Editors, *Marine Debris: Sources, Impacts and Solutions*, Springer-Verlag, New York (1997), p. 15.

Mathers, D. 2005. Personal communication with Joel Paschal, TetraTech, Inc.

Maxfield, B. 2005. Personal communication with Joel Paschal, Tetra Tech, Inc.

McArdle, D. 1997. California Marine Protected Areas. California Sea Grant College System. La Jolla, CA.

McDermid, K. 2006. Personal communication with Kitty Courtney, Tetra Tech, Inc. Feb. 8.

McDermid, K., and I.A. Abbott. 2006. Deepwater marine plants from the Northwestern Hawaiian Islands: New perspectives on biogeography. *Atoll Research Bulletin*. 543:525-532.

McLeod, K.L., J. Lubchenco, S.R. Palumbi, and A.A. Rosenberg. 2005. Scientific Consensus Statement on Marine Ecosystem-Based Management. Signed by 219 academic scientists and policy experts with relevant expertise and published by the Communication Partnership for Science and the Sea. Available from the Internet. URL: <http://compassonline.org/?q=EBM>

Meyer, C.M., K.N. Holland, and Y.P. Papastamatiou 2007. Site fidelity of giant trevally (*Caranx ignobilis*) to remote Hawaiian atolls: implications for the design of Marine Protected Areas. *Mar. Eco. Prog. Ser.* Vol. 333:13-25.

Miao, X.S., L.A. Woodward, C. Swenson, and Q.X. Li. 2001. Comparative concentrations of metals in marine species from French Frigate Shoals, North Pacific Ocean, *Mar. Poll. Bull.* 42 (11): 1049-1054.

Miao, X. S., C. Swenson, K. Yanagihara, and Q.X. Li. 2000a. Polychlorinated biphenyls and metals in marine species from French Frigate Shoals, North Pacific Ocean. *Arch. Environ. Contam. Toxicol.* 38: 464-471.

Miao, X. S., C. Swenson, L.A. Woodward, and Q.X. Li. 2000b. Distribution of polychlorinated biphenyls in marine species from French Frigate Shoals, North Pacific Ocean. *Sci. Tot. Environ.* 257 (2000): 17-28.

Michener, W.K., E.R. Blood, K.L. Bildstein, M.M. Brinson, and L.R. Gardner. 1997. Climate change, hurricanes and tropical storms and rising sea level in coastal wetlands. *Ecological Applications* 7: 770-801.



- Midway Atoll National Wildlife Refuge. 1996. Executive Order No. 13022. October 31 (61 FR 56875).
- Miller, J.E., R.K. Hoeke, T.B. Appelgate, P.J. Johnson, J.R. Smith, and S. Bevacqua. 2004. Bathymetric Atlas of the Northwestern Hawaiian Islands (Draft). National Oceanic and Atmospheric Administration. February.
- Miller, J.E., S. Vogt, R. Hoeke, S. Ferguson, B. Applegate, J.R. Smith, and M. Parke 2006. Bathymetric atlas and website for the northwestern Hawaiian Islands. *Atoll Research Bulletin* 543: 409-422.
- Mitchell, C., C. Ogura, D.W. Meadows, A. Kane, L. Strommer, S. Fretz, D. Leonard, and A. McClung. 2005. Northwestern Hawaiian Islands. Pages 93-104, in Hawaii's Comprehensive Wildlife Conservation Strategy. Honolulu: Department of Land and Natural Resources. 722 pp.
- Moffitt, R.B., J. Johnson, and G. DiNardo. 2006. Spatiotemporal analysis of lobster trap catches: impacts of trap fishing on community structure. *Atoll Research Bulletin* 543: 217-236.
- Mooney, H.A. and E.E. Cleland. 2001. The evolutionary impact of invasive species. *Proc. Natl. Acad. Sci. U S A.* 98 (10): 5446–5451.
- Morin, M. and S. Conant. 2002. Laysan Finch (*Telespiza cantans*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; retrieved from the Birds of North America Only: <http://bna.birds.cornell.edu/species/639a>.
- Morin, M. and S. Conant. 1998. Laysan Island Ecosystem Restoration Plan (draft). University of Hawaii at Manoa, Dept. of Zoology, Honolulu. 111pp.
- Morin, M. and S. Conant. 2007. Summary of Scoping, Evaluation, and Recommendations for Northwestern Hawaiian Islands Passerines' Translocation Sites. Report to U.S. Fish and Wildlife Service, Honolulu, Hawaii. 129 pp.
- Morishige, C., M.J. Donohue, E. Flint, C. Swenson, and C. Woolaway. 2007. Factors affecting marine debris deposition at French Frigate Shoals, Northwestern Hawaiian Islands Marine National Monument, 1990–2006. *Marine Pollution Bulletin* 54: 1162-1169.
- Morison, S.E. 1950. History of United States Naval Operations in World War II. v4. Coral Sea, Midway, and Submarine Actions, May 1942-August 1942, University of Illinois Press.
- Mullon, C., P. Curry, and L. Shannon. 2004. Viability model of trophic interactions in marine ecosystems. *Natural Resource Modeling* 17: 27-58.
- Myers, R.A. and B. Worm. 2003. Rapid worldwide depletion of predatory fish communities. *Nature* 423:280-283.
- NAS Barbers Point, 1962. U.S. Naval Air Station, Barbers Point: Base Guide.

National Environmental Policy Act. 1969, as amended. Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, 40 CFR Parts 1500-1508.

National Historic Preservation Act. 1966. 16 U.S.C. 470.

National Invasive Species Act of 1996. Public Law 104-332.

NMFS (National Marine Fisheries Service). 2002. Endangered Species Act Section 7 Consultation on the Fishery Management Plan for the Bottomfish and Seamount Groundfish Fisheries in the Western Pacific Region. Silver Spring, MD.

———. 2003. Stock Assessment Report, Hawaiian Monk Seal (*Monachus schauinslandi*). URL: [www.nmfs.noaa.gov/pr/PR2/Stock\\_Assessment\\_Program/individual\\_sars.html](http://www.nmfs.noaa.gov/pr/PR2/Stock_Assessment_Program/individual_sars.html)

———. 2004a. Stock Assessment Report: Hawaiian Monk Seal (*Monachus schauinslandi*). URL: [www.nmfs.noaa.gov/pr/PR2/Stock\\_Assessment\\_Program/individual\\_sars.html](http://www.nmfs.noaa.gov/pr/PR2/Stock_Assessment_Program/individual_sars.html)

———. 2004b. Assessment of the 2004 Marine Debris Field Season: Multi-Agency Marine Debris Program Synopsis. Presented by NMFS Coral Reef Ecosystem Division, Marine Debris Program, Honolulu Laboratory.

NMFS and FWS (U.S. Fish and Wildlife Service). 1998a. Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle (*Eretmochelys imbricata*). National Marine Fisheries Service, Silver Spring, MD.

———. 1998b. Recovery Plan for the U.S. Pacific Populations of the East Pacific Green Turtle (*Chelonia mydas*). National Marine Fisheries Service, Silver Spring, MD.

———. 1998c. Recovery Plan for U.S. Pacific Populations of the Loggerhead Turtle (*Caretta caretta*). National Marine Fisheries Service, Silver Spring, MD.

———. 1998d. Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle (*Dermochelys coriacea*). National Marine Fisheries Service, Silver Spring, MD.

———. 1998e. Recovery Plan for U.S. Pacific Populations of the Olive Ridley Turtle (*Lepidochelys olivacea*). National Marine Fisheries Service, Silver Spring, MD.

———. 2007. 2007 ESA Reviews for Federally Listed Sea Turtles. <http://www.fws.gov/northflorida/SeaTurtles/2007-Reviews/2007-sea-turtle-ESA-reviews.htm>

NOAA (National Oceanic and Atmospheric Administration). 2001. Sensitivity of Coastal Environments and Wildlife to Spilled Oil: Hawaii Atlas. 2 Volumes. National Ocean Service, Office of Response and Restoration. Seattle, Washington.

———. 2003a. A Strategic Plan for NOAA's National Ocean Service: FY 2003-2008 and Beyond. Silver Spring, MD.

———. 2003b. Atlas of the shallow-water Benthic Habitats of the NWHI (Draft). 160 pp. National Ocean Service. Silver Spring, MD.

———. 2003c. Northwestern Hawaiian Islands Explorers. Office of Explorations. URL: <http://oceanexplorer.noaa.gov/explorations/03nwhi/explorers/explorers.html>

———. 2004a. New Priorities for the 21st Century: NOAA Strategic Plan FY 2005 - FY 2010. National Oceanic and Atmospheric Administration. Silver Spring, MD.

———. 2004b. Proposed Northwestern Hawaiian Islands National Marine Sanctuary: Advice and recommendations on development of draft fishing regulations under National Marine Sanctuaries Act Section 304(a)(5). Honolulu, HI and Silver Spring, MD.

———. 2005a. *Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Final Reserve Operations Plan*. Honolulu, HI and Silver Spring, MD.

———. 2005b. *Our National Marine Sanctuaries: Strategic Plan 2005-2015*. National Ocean Service. Silver Spring, MD.

———. 2006. *State of the Reserve 2000-2005*. Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. National Marine Sanctuary Program. Honolulu, HI and Silver Spring, MD.

NOAA (National Oceanic and Atmospheric Administration) Fisheries, 1991. Humpback Whale Recovery Plan, Silver Spring, MD

———. 1998. Blue Whale Recovery Plan, Silver Spring, MD

———. 2006a. Fin Whale Recovery Plan, Silver Spring, MD

———. 2006b. Sperm Whale Recovery Plan, Silver Spring, MD

———. 2007. Monk Seal Recovery Plan, Silver Spring, MD.

National Oceanic and Atmospheric Administration and U.S. Fish and Wildlife Service. 19 August 2006. Northwestern Hawaiian Islands Marine National Monument Regulations. 50 CFR Part 404. (71 FR 51134).

National Marine Sanctuaries Amendments Act. 2000. Pub. L. 106-513 §6 (g) (2000).

National Wildlife Refuge Improvement Act of 1997. 1997. Pub. L. 105-57, amending 16 U.S.C. 668dd-ee.

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

Naughton, M. and E. Flint. 2004. Populations and conservation status of seabirds nesting in the Northwestern Hawaiian Islands. Paper read at Northwestern Hawaiian Islands Third Scientific Symposium, Honolulu.

- Navigating Change. 2006. Navigating Change Teacher's Guide. URL: [www.hawaiianatolls.org](http://www.hawaiianatolls.org).
- Newman, A.L. 1988. Mapping and Monitoring Vegetation Change on Laysan Island. Thesis, University of Hawai'i, Department of Geography, Honolulu.
- Nickerson, T. circa 1828. On the loss of the ship *Two Brothers* at French Frigate Shoals 1823. Nantucket Historical Association. MS 106 folder 3.5.
- Nishida, G. 1998. Midway Terrestrial Arthropod Survey, Final Report prepared for USFWS, by Hawaii Biological Survey, Bishop Museum, Honolulu.
- . 2001. NOWRAMP 2000 Terrestrial Arthropod Report.. Prepared for the USFWS, Honolulu.
- . 2002. *Hawaiian Terrestrial Arthropod Checklist, 4<sup>th</sup> Edition*. Bishop Museum Technical Report 22., Bishop Museum Press, Honolulu. pp i-iv, 1-313.
- Nolan, R.S. 1981. Shark Control and the Hawaiian Monk Seal. Marine Mammal Commission PB82-201808.
- Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 U.S.C. 4701).
- Noss, R. 1995. Maintaining ecological integrity in representative reserve networks. Discussion Paper. World Wildlife Fund Canada and World Wildlife United States.
- Northwestern Hawaiian Islands. Hawaii Revised Statutes, Title 12, Chapter 171, State of Hawai'i.
- Northwestern Hawaiian Islands Marine National Monument, 19 August 2006. 50 CFR Part 404.
- Northwestern Hawaiian Islands State Marine Refuge 2005, Hawaii Revised Statutes Chapters 187A-6, 188, and Hawaii Administrative Rules Title 13, Chapter 60.5. State of Hawai'i.
- NTSC Joint Subcommittee on Ocean Science and Technology. 2007. Charting the Course for Ocean Science in the United States for the Next Decade: An Ocean Research Priorities Plan and Implementation Strategy. Available online at: <http://ocean.ceq.gov/about/docs/orppfinal.pdf>.
- O'Connor, P.J. 1999. Poaceae. In: Wagner, W.L., D.R. Herbst, and S.H. Sohmer (eds.), *Manual of the Flowering Plants of Hawaii*, Bishop Museum Special Publication 97. Pp. 1,481-1,604. University of Hawaii Press and Bishop Museum Press, Honolulu.
- Office of Hawaiian Affairs. Hawaii Revised Statutes Chapter 10-1(b), State of Hawai'i.
- Office of Hawaiian Affairs. Wahi Pana Database. [www.oha.org/index](http://www.oha.org/index).
- Ogden Environmental and Energy Services Co., Inc. January 1996. Naval Air Facility (NAF) Midway Island Site Inspection (SI) Report. As cited in U.S. Navy 2001.

Ogden Environmental and Energy Services Co., Inc. July 1997. Remedial Investigation (RI) Report for Naval Air Facility (NAF) Midway Island, Volume I: Technical Report.

Olsen, S.B., K. Lowry, and J. Tobey. 1999. *A manual for assessing progress in coastal management*. University of Rhode Island: Coastal Resources Center.

Overpeck, J.T., B.L. Otto-Bliesner, G.H. Miller, D.R. Muhs, R.B. Alley, and J.T. Kiehl. 2006. Paleoclimatic Evidence for Future Ice-Sheet Instability and Rapid Sea-Level Rise. *Science* 311: 1747-1750.

Pandolfi, J.M., J.B.C. Jackson, N. Baron, R.H. Bradbury, H.M. Guzman, T.P. Hughes, C.V. Kappel, F. Micheli, J.C. Ogden, H.P. Possingham, and E. Sala. 2005. Are U.S. Coral Reefs on the Slippery Slope to Slime? *Science* 307: 1725-1727.

*Paradise of the Pacific* 1936 <http://www.janeresture.com/midway/index.htm>

Parrish, F.A., A.R. Baco. 2007. State of Deep Coral Ecosystems in the Western Pacific Region: Hawaii and the United States Pacific Islands. Pages 155-194. In: Lumsden, S.E., T.F. Hourigan, A.W. Bruckner, and G. Dorr (eds.). *The State of Deep Coral Ecosystems of the United States*. NOAA Technical Memorandum CRCP-3, Silver Spring, Maryland.

Parrish, F. and K. Abernathy. 2006. Movements of monk seals relative to ecological depth zones in the lower Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543: 115-130.

Parrish, F.A., K. Abernathy, G.J. Marshall, and B.M. Buhleiert. 2002 Hawaiian monk seals (*Monachus schauinslandi*) Foraging in deep-water coral beds. *Marine Mammal Science* 18 (1): 244-258.

Parrish, F.A. and J.J. Polovina. 1994. Habitat thresholds and bottlenecks in production of the spiny lobster (*Palinurus marginatus*) in the Northwestern Hawaiian Islands. *Bulletin of Marine Science* 53 (3): 151-163.

Pauly, D., J. Alder, E. Bennett, V. Christensen, P. Tyedmers, and R. Watson. 2003. The Future for Fisheries. *Science* 302: 5649, 1359-1361.

Pew Oceans Commission. 2003. *America's Living Oceans: Charting a Course for Sea Change*. A Report to the Nation: Recommendations for a New Ocean Policy.

Podolsky, R.H. and S.W. Kress. 1989. Factors affecting colony formation in Leach's Storm-petrel to uncolonized islands in Maine. *Auk* 106:332-336.

Podolsky, R. and S.W. Kress. 1992. Attraction of the Endangered Dark-Rumped Petrel to Recorded Vocalizations in the Galápagos Islands. *Condor* 94: 448-453.

Poepoe, K., P.K. Bartram, and A.M. Friedlander. 2003. The Use of Traditional Hawaiian Knowledge in the Contemporary Management of Marine Resources. *Putting Fishers' Knowledge to*

*Work Conference Proceedings*. Fisheries Centre, University of British Columbia, Vancouver, 27-30 August 2001. URL: [http://www.fisheries.ubc.ca/publications/reports/report11\\_1.php](http://www.fisheries.ubc.ca/publications/reports/report11_1.php).

Polovina, J. 1984. Model of a Coral Reef Ecosystem: The ECOPATH Model and its Application to French Frigate Shoals. *Coral Reefs* 3: 1-11.

Polovina, J.J., D.R. Kobayashi, D.M. Parker, M.P. Seki, G.H. Balazs. 2000. Turtles on the edge: movement of loggerhead turtles (*Caretta caretta*) along oceanic fronts, spanning longline fishing grounds in the central North Pacific, 1997-1998. *Fisheries Oceanography* 9 (1) : 71–82.

Polovina, J.J., E. Howell, D.R. Kobayashi, M.P. Seki. 2001. The transition zone chlorophyll front, a dynamic global feature defining migration and forage habitat for marine resources. *Progress in Oceanography* 49:469-483.

Polovina, J.J. and G.T. Mitchum. 1992. Variability in spiny lobster *Panulirus marginatus* recruitment and sea level in the Northwestern Hawaiian Islands. *Fish. Bull.* 90: 483-493.

Polovina, J.J, G.T. Mitchum, N.E. Graham, M.G. Craig, E.E. DeMartini, E.N. Flint. 1994. Physical and biological consequences of a climate event in the central North Pacific. *Fisheries Oceanography* 3: 15-21.

Polovina, J.J., W.R. Haight, R.B. Moffitt, and F.A. Parrish. 1995. The Role of benthic habitat, oceanography, and fishing on the population dynamics of the spiny lobster (*Panulirus marginatus*) in the Hawaiian Archipelago. *Crustaceana* 68 (2): 203-212.

Polynesian Voyaging Society, <http://pvs.kcc.hawaii.edu/migrationspart1.html>. December 3, 2007.

Pomeroy, R.S., J.E. Parks, and L.M. Watson. 2004. *How is your MPA doing? A Guidebook of Natural and Social Indicators for Evaluating Protected Area Management Effectiveness*. ICUN – World Conservation Union. Gland, Switzerland and Cambridge, U.K.

Prange, G.W. 1982. *Miracle at Midway*. New York: Penguin Books.

Pratt, H.D., P.L. Bruner, and D.G. Berrett. 1987. *A Field Guide to the Birds of Hawaii and the Tropical Pacific*. Princeton University Press, Princeton, New Jersey

Presidential Proclamation 8031. 15 June 2006. Establishment of the Northwestern Hawaiian Islands Marine National Monument (71 FR 36443).

Presidential Proclamation 8112. 28 February 2007. Establishment of the Papahānaumokuākea Marine National Monument (72 FR 10031).

Programmatic Agreement. 1996. Programmatic agreement among the Pacific Division, Naval Facilities Engineering Command; Advisory Council on Historic Preservation; and the U.S. Fish and Wildlife Service for management of historic structures on Midway Atoll National Wildlife Refuge. USFWS, Honolulu.

- Pukui, M.K. 1983. 'Ōlelo No'eau: Hawaiian Proverbs and Poetical Sayings. *Bishop Museum Special Publication No. 71*. Bishop Museum Press, Honolulu.
- Pukui, M.K. 1997. 'Ōlelo No'eau Hawaiian Proverbs & Poetical Sayings (Paperback). Bishop Museum Press, Honolulu.
- Pukui, M.K. and C. Handy. 1950. The Polynesian Family System in Ka'u Hawai'i. Polynesian Society, Wellington.
- Quackenbush, S.L., R.N. Casey, R.J. Murcek, T.A. Paul, T.M. Work, C.J. Limpus, A. Chaves, L. duToit, J. Vasconcelos, A.A. Aguirre, T.R. Spraker, J.A. Horrocks, L.A. Vermeer, G.H. Balazs, and J.W. Casey. 2001. Quantitative analysis of herpesvirus sequences from normal tissue and fibropapillomas of marine turtles with real-time PCR. *Virology* 287: 105-111.
- Ralston, S., S. Cox, M. Labelle, and C. Mees. 2004. Bottomfish Stock Assessment Workshop. Western Pacific Fishery Management Council, Honolulu.
- Randall, J.E. 1987. Introductions of marine fishes to the Hawaiian Islands. *Bulletin of Marine Science* 41: 490-502.
- Rauzon, M.J. 2001. *Isles of Refuge: Wildlife and History of the Northwestern Hawaiian Islands*. Honolulu: University of Hawai'i Press.
- Rehkemper, C. and E. Flint. 2005. Poster presentation at the Hawai'i Conservation Conference.
- Reynolds, M., M. Vekasy, L. Laniawe, J. Breeden, and J. Klavitter. 2006. Project and trip report: Laysan teal project report Laysan Island and Midway Atoll, U.S. Geological Survey Report for Project Cooperators, Hawai'i National Park, Hawai'i.
- Reynolds, M.H., J.H. Breeden, Jr., and J.L. Klavitter. 2007. Translocation of wild Laysan teal from Laysan Islands to Midway Atoll: Project Update. *Wildfowl* 57: 120-124.
- Reynolds, M.H. and J.J. Citta. 2007. Postfledging survival of Laysan ducks. *Journal of Wildlife Management* 71: 383-388.
- Roark, E.B., T.P. Guilderson, R.B. Dunbar, B.L. Ingram. 2006. Radiocarbon-based ages and growth rates of Hawaiian deep-sea corals. *Mar. Ecol. Prog. Ser.* 327: 1-14.
- Royal Society, The. 2005. Ocean Acidification due to increasing atmospheric carbon dioxide; 60 pp.
- Rudd, M.A. and M.H. Tupper. 2002. The impact of the Nassua grouper size and abundance on scuba diver site selection and MPA economics. *Coastal Management* 30 (1): 17-23.
- Ruff, T.A. 1989. Ciguatera in the Pacific: a link with military activities. *Lancet. Jan.* 28:1 (8631): 201-5.

Schofield, David. Personal Communication. Marine Mammal Response Network Coordinator; NOAA Pacific Islands Regional Office, 1601 Kapiolani Blvd, Suite 1110, Honolulu, HI 96814; 20 October 2008.

See, Kevin. Undated. Report on the Marine Invasive Species in Papahānaumokuākea Marine National Monument. 27 pp.

Seibel, B. A., and P. J. Walsh. 2001. Potential impacts of CO<sub>2</sub> injection on deep-sea biota. *Science* 294: 319-320.

Selkoe, K.A., B.S. Halpern, and R.J. Toonen. 2008. Evaluating Anthropogenic Threats to the Northwestern Hawaiian Islands. *Aquatic Conserv: Mar. Freshw. Ecosyst.* Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/aqc.961.

Selkoe K.A., B.S. Halpern, C.M. Ebert, E.C. Franklin, E.L. Selig, K.C. Casey, J. Bruno, R.J. Toonen. In review. A map of human impacts to a “pristine” coral reef ecosystem, the Papahānaumokuākea Marine National Monument. *Coral Reefs*.

Shallenberger, R.J. 1984. *Hawai‘i’s Birds*. Hawaii Audubon Society, Honolulu.

———. 2006. History of Management in the Northwestern Hawaiian Islands. Status and Conservation Issues. *Atoll Research Bulletin*. 543:23-32.

Shea, E.L., G. Dolcemascolo, C.L. Anderson, A. Barnston, C.P. Guard, M.P. Hamnett, S.T. Kubota, N. Lewis, J. Loschnigg, and G. Meehl. 2001. Preparing for a Changing Climate: The potential Consequences of Climate Variability and Change. East-West Center, Honolulu, Hawaii. 100 pp.

Sheen, Raymond, 1998. Personal communication with Lou Ann Speulda, U.S. Fish and Wildlife Service.

Sievert, P.R. and L. Sileo. 1993. The effects of ingested plastic on growth and survival of albatross chicks. In: *The status, ecology, and conservation of marine birds of the North Pacific*, K. Vermeer, K. T. Briggs, K. H. Morgan, and D. Siegal-Causey eds., pp. 212-217. Canadian Wildlife Service Special Publication. Ottawa.

Sileo L., P.R. Sievert, and M.D. Samuel. 1990. Causes of mortality of albatross chicks at Midway Atoll. *Journal of Wildlife Diseases* 26: 329-338.

Sissenwine, M. and S. Murawski. 2004. Moving beyond ‘intelligent tinkering’: advancing an ecosystem approach to fisheries. In: *Perspectives on ecosystem-based approaches to the management of marine resources*. *Marine Ecology Progress Series* 274: 269-303.

Smith, J.R., A. Baco-Taylor, C. Kelley, and E.M. Yam. 2004. Northwestern Hawaiian Island Seamount Surveys of Deep-Sea Fauna in Relation to Geological Setting. *EOS Trans. AGU*, 85 (28), West Pac. Geophys. Meet. Suppl., Abstract OS12A-04.



Smith, J.R., B. Evans, J. Miller, and J. Weirich. 2003. Volcanic Features in the Northwestern Hawaiian Islands revealed by SWATH mapping. *EOSTrans. AGU 84(46), Fall Meet. Suppl.*, Abstract V22C-0604.

Smith, S.V. and R.M. Buddemeier. 1992. Global Change and coral reef ecosystems. *Annual Review of Ecology and Systematics* 23: 89-118.

Speulda, L.A., A. Raymond, and V. Parks. 1999. *Midway Atoll National Wildlife Refuge Historic Preservation Plan*. Prepared for USDI Fish and Wildlife Service, Region 1, Sherwood, Oregon.

Stambler, N. 1999. Coral reefs and eutrophication. *Mar. Poll.* July 1999: 360-361.

Standen, R.S. 1967. An explanatory description of the sand islands of Kure, Midway, and Pearl Hermes Atolls, Hawaiian Islands. Master's Thesis, California State College at Los Angeles. 93pp. as cited in USCG 1994.

Stannard, D.E. 1989. *Before the Horror: The Population of Hawaii on the Eve of Western Contact*. Honolulu: Social Science Research Institute, University of Hawai'i, Honolulu.

Starr, F. and K. Martz. 1999. Botanical Survey of Midway Atoll. 1999 Update. Prepared for Midway Atoll National Wildlife Refuge, USFWS

Starr, F., K. Martz, and L. Loope. 2001. Botanical Inventory of Kure Atoll. Prepared for Department of Land and Natural Resources, Division of Forestry and Wildlife, Honolulu, HI

State of Hawai'i, U.S. Dept. of the Interior, and U.S. Dept of Commerce. 2006. Memorandum of Agreement among the State of Hawai'i Department of Land and Natural Resources, and the U.S. Department of Interior U.S. Fish and Wildlife Service, and the Department of Commerce National Oceanic and Atmospheric Administration, promoting the coordinated management of the Northwestern Hawaiian Islands Marine National Monument. signed 8 December 2006.

Stewart, B.S. 2004a. Foraging biogeography of Hawaiian Monk Seals in the NWHI: Relevance to considerations of marine zones for conservation and management in the NWHI Coral Reef Ecosystem. Hubbs-SeaWorld Research Institute. Technical Report 2004-354. San Diego, California.

———. 2004b. Foraging ecology of Hawaiian Monk Seals at Pearl and Hermes Reef, Northwestern Hawaiian Islands: 1997-1998. Pacific Islands Fisheries Science Center, National Marine Fisheries Service, NOAA. Honolulu.

———. 2004c. Geographic patterns of foraging dispersion of Hawaiian Monk Seals at the Northwestern Hawaiian Islands. Pacific Islands Fisheries Science Center, National Marine Fisheries Service, NOAA. Honolulu.

Stewart, B.S., and P.K. Yochem. 2004a. Use of marine habitats by Hawaiian Monk Seals from Kure Atoll: Satellite-linked monitoring in 2001-2002. Pacific Islands Fisheries Science Center, National Marine Fisheries Service, NOAA. Honolulu.

———. 2004b. Dispersion and foraging of Hawaiian Monk Seals near Lisianski and Midway Islands: 2000-2001. Pacific Islands Fisheries Science Center, National Marine Fisheries Service, NOAA. Honolulu.

———. 2004c. Use of marine habitats by Hawaiian Monk Seals from Laysan Island: Satellite-linked monitoring in 2001-2002. Pacific Islands Fisheries Science Center, National Marine Fisheries Service, NOAA. Honolulu.

Sustainable Resources Group International (SRG). 2004a. Fishing in the proposed Northwestern Hawaiian Islands National Marine Sanctuary. Prepared for the National Marine Sanctuary Program, National Oceanic and Atmospheric Administration. Honolulu.

———. 2004b. Results of the Fishing Discussion Group Process, Fall 2003: Fishing in the proposed Northwestern Hawaiian Islands National Marine Sanctuary. Prepared for the National Marine Sanctuary Program, National Oceanic Atmospheric Administration. Honolulu.

Tava, R. and M. Keale. 1989. Niihau: *The Traditions of a Hawaiian Island*. Mutual Publishing, Honolulu.

Tholke, M. 2003. Collaboration for a change: *A Practitioners Guide to Environmental Nonprofit-Industry Partnerships*. Michigan Business School and School of Natural Resources and Environment: Corporate Environmental Program.

Tibbetts, K.A. 2006. “Teach for America” and the quality of public education in target communities. Kamehameha Schools – Research & Evaluation, 05-06:30. Honolulu.

*Time Magazine*. January 30, 1939. Wart on the Pacific.

Titcomb, M., D.B. Fellows, M.K. Pukui, and D.M. Devaney. 1978. Native use of marine invertebrates in old Hawaii. *Pacific Science* 32 (4).

Titcomb, M. and M.K. Pukui. 1952. Native use of fish in Hawaii. *Polynesian Society Memoir* No.29. Avery Press, Ltd., New Plymouth, N.Z.

Tomich, P.Q. 1986. *Mammals in Hawai‘i: A synopsis and notational bibliography*. Bishop Museum Press, Honolulu. 375 pages

Tosatto, M. 2005. Personal communication with Joel Paschal, TetraTech, Inc.

Tripartite Agreement 1978. Survey and Assessment of the Living Resources of the Northwestern Hawaiian Islands. Acting Administrator, National Marine Fisheries Service; Director, U.S. Fish and Wildlife Service; Chairman, Board of Land and Natural Resources, State of Hawaii; and Member, Board of Land and Natural Resources, State of Hawaii, Approved 5/16/78, Honolulu.

UNESCO. 2005. Operational Guidelines for the Implementation of the World Heritage Convention. United Nations Educational, Scientific and Cultural Organization. Paris. World Heritage Center. Available on internet. URL: <http://whc.unesco.org/en/guidelines>

USCG (U.S. Coast Guard). 1994a. Kure Atoll Scrap Metal Dump Ecological Risk Assessment. Final Report. Woodward-Clyde Consultants Contract No. DTG86-93-D-633005.

———. 1994b. Kure Atoll LORAN remediation report. Enclosure (1). Research Management Consultants, Inc. for US Coast Guard Civil Engineering Unit, Honolulu, Hawaii. RMCI Project Number F170-001. RMCI, Lakewood, Colorado.

———. 2002. Remediation verification report. Remediation of contaminated soil Former USCG Loran Station, Tern Island, Hawaii. Chase Environmental Group, Inc. for US Coast Guard Civil Engineering Unit Honolulu, Contract No. DTG86-01-C-6XA453.

———. 2003. Tern Island ecological risk assessment addendum-Bulky Dump. Technical Memorandum. CH2MHill for US Coast Guard Civil Engineering Unit Honolulu.

U.S. Commission on Ocean Policy. 2005. *An Ocean Blueprint for the 21st Century*. Final Report, Washington D.C.

U.S. Fish and Wildlife Service. Biological Integrity, Diversity, and Environmental Health Policy. 601 FW 310.

———. Compatibility Determinations Policy. 603 FW 1 (U.S.C. 668dd-66ee and 603 FW 2).

———. in prep. Draft Pacific Islands Rat Spill Contingency Plan.

———. 1984. Northwestern Hawaiian Islands Passerine Recovery Plan. Region 1, Portland, OR, 66pp.

———. 1998. Final Recovery Plan for Three Plant Species on Nihoa Island. Region 1, Portland, Oregon, 81 pp.

———. 1999. Recovery Plan for Multi-Island Plants. U. S. Fish and Wildlife Service, Portland, Oregon, 206 pp + appendices.

———. 2002. Birds of Conservation Concern 2002. Division of Migratory Bird Management, Arlington, Virginia. 99 pp. <http://migratorybirds.fws.gov/reports/bcc2002.pdf>.

———. 2004. Draft Revised Recovery Plan for the Laysan Duck (*Anas laysanensis*). Portland, Oregon. vii + 94 pp.

———. 2005a. Regional Seabird Conservation Plan, Pacific Region. U.S. Fish and Wildlife Service, Migratory Birds and Habitat Programs, Pacific Region, Portland, Oregon.

———. 2005b. Short-tailed Albatross Draft Recovery Plan. Anchorage, AK, 62 pp., [http://ecos.fws.gov/tess\\_public/SpeciesRecovery.do?sort=1](http://ecos.fws.gov/tess_public/SpeciesRecovery.do?sort=1)

U.S. Fish and Wildlife Service, National Marine Fisheries Service, Department of Land and Natural Resources. 2000. Press release. 3 October.

U.S. Navy, Bureau of Yards and Docks. 1947. Building the Navy's Bases in World War II, 2 vols. Washington Government Printing Office.

U.S. Navy. 1995. Technical memorandum for evaluation of remedial alternatives Naval Air Force (NAF) Midway Island. Ogden Environmental and Energy Services Co., Inc Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract No. N62742-90-D-0019 Cto. No. 0136.

———. 1996. Site Inspection (SI) Report for Naval Air Force (NAF) Midway Island. Ogden Environmental and Energy Services Co., Inc Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract No. N62742-90-D-0019 Cto No. 0136.

———. 2001. Action memorandum for time-critical removal action of abandoned tug and barge, LCM, Boiler, and PCB-contaminated marine sediment Bulky Waste Landfill, Midway Atoll. October 2001.

Usinger, R.L. 1942. The Genus *Nysius* and Its Allies in the Hawaiian Islands (Hemiptera, Lygaeidae, Orsillini). *Bernice P. Bishop Museum Bulletin* 173. Bishop Museum Press, Honolulu. pp 1–167.

Valiela, I. 1995. *Marine Ecological Processes*. Springer-Verlag, New York.

Van Dolah, F.M. 2000. Marine algal toxins: Origins, health effects, and their increased occurrence. *Environ. Health. Perspect.* 108 (Supplement 1): 133-141.

Van Tilburg, H. 2002. Maritime cultural resources survey: Northwestern Hawaiian Islands. Report to the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve.

———. 2003a. Kure and Midway Atoll maritime heritage survey 2003. Report to the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. December.

———. 2003b. U.S. Navy shipwrecks in Hawaiian waters: an inventory of submerged Naval property. Report to Naval Historical Center (UH Grant No. UH01495). December.

Van Tilburg, H. and K. Gleason. In prep. Maritime heritage survey NWHI 2005. Report for the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve.

Vatter, A. 2003. Bottom longline fishing for sharks in the Northwestern Hawaiian Islands. National Marine Fisheries Service Pacific Islands Region Administrative Report ARPIR-03-01.

Vitousek, P.M. 1994. Beyond global warming: ecology and global change. *Ecology* 75: 1861-1876.

Vroom, P.S. and K.N. Page. 2006. Relative abundance of macroalgae (RAM) on Northwestern Hawaiian Island reefs. *Atoll Research Bulletin* 543: 533-548.

Wagner, W.L., D. Herbst, and S.H. Sohmer. 1990. Manual of the Flowering Plants of Hawai'i, Revised Edition. University of Hawai'i Press, Bishop Museum Press, Special Publication. 83: 1-1853.

- Wagner, W.L., D. Herbst, and S.H. Sohmer. 1999. Manual of the Flowering Plants of Hawai'i, Revised Edition. University of Hawai'i Press, Bishop Museum Press, Special Publication. 97: 1-1918.
- Wallace, G. and S. Pierce. 1996. An Evaluation of Ecotourism in Amazonas, Brazil. *Annals of Tourism Research* 23 (4).
- Walters, C.J. 1986. *Adaptive Management of Renewable Resources*. McMillan New York.
- Wanless, R.M., A. Angel, R.J. Cuthbert, G.M. Hilton, and P.G. Ryan. 2007. Can predation by invasive mice drive seabird extinctions? *Biology Letters*  
[http://issg.org/database/species/reference\\_files/musmus/Wanless\\_etal\\_2007.pdf](http://issg.org/database/species/reference_files/musmus/Wanless_etal_2007.pdf) (Published Online)
- Ward Research. 2006. Tracking Attitudes Toward Protecting the Northwestern Hawaiian Islands. Prepared for: The National Marine Sanctuary Foundation, Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve.
- Weihe, P., P. Granjean, F. Debes, and R. White. 1996. Health implications for Faroe Islanders of heavy metals and PCBs from pilot whales. *Sci. Total. Environ.* 186: 141-148. as cited in Miao et al. 2000.
- Western Pacific Fisheries Management Council (WPFMC). 1982. Final combined Fishery Management Plan, Environmental Impact Statement, Regulatory Analysis, and Draft Regulations for the Spiny Lobster Fisheries of the Western Pacific Region, volumes I & II. Honolulu.
- . 2001. Final Fishery Management Plan for the Coral Reef Ecosystems of the Western Pacific Region, vol.1. Honolulu.
- . 2003a. Managing U.S. Fisheries of the U.S. Pacific Islands: Past, Present and Future. Honolulu.
- . 2003b. History of the Fisheries in the Northwestern Hawaiian Islands. Honolulu.
- . 2004a. Bottomfish and seamount groundfish fisheries of the Western Pacific Region. 2002 Annual Report. Honolulu.
- . 2004b. *Pelagic Fisheries of the Western Pacific Region*. 2002 Annual Report. Honolulu.
- Wilderness Act, 1964. 16 U.S.C. 1132-1136.
- Wise, J. 1924. Ka huakai i na mokupuni ma ka akau-komohana [A journey to the islands in the north-west]. *Ka Nūpepa Kū'okoa* 62 (29), July 19.
- Wood, Bill, 2001. Personal communication with L.A. Woodward
- Woodbury, D.O. 1946. *Builders for Battle. How the Pacific Naval Air Bases were Constructed*. E.P. Dutton and Company, NY, 415p.

Woodward, P.W. 1972. The Natural History of Kure Atoll, Northwestern Hawaiian Islands. *Atoll Research Bulletin* 164: 1-318.

Work, T., G. Balazs, R. Rameyer, and R. Morris. 2004. Retrospective pathology survey of green turtles (*Chelonia mydas*) with fibropapillomatosis from the Hawaiian Islands, 1993-2003. *Diseases of Aquatic Organisms* 62: 163-176.

Yoklavich, A. 1993. Cultural Resources Overview Survey at Naval Air Facility, Midway Island. Prepared by Spencer Mason Architects, Inc. Submitted to Department of the Navy, Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii.

Zabin, J.Z., J.T. Carlton, and L.S. Godwin. 2003. First report of the Asian sea anemone *Diadumene lineata* from the Hawaiian Islands. *Bishop Museum Occasional Papers*. Bishop Museum Press. Honolulu.

Ziegler, A. 1990. Search for Evidence of Early Hawaiian Presence on Lisianski Islands, NWHI, Summer 1990. A Report prepared for State of Hawaii and Office of Hawaiian Affairs.