



SUMMARY OF ACTIVITIES PERMITTED IN 2020

₹2020 Activities

In 2020, a diverse but limited range of activities explored the depths of the natural and cultural resources within Papahānaumokuākea Marine National Monument, the largest marine protected area in the United States. Ongoing activities continued collaborative research while embarking on new paths of discovery. A common theme of the activities conducted in the monument this year are captured in the Hawaiian proverb "He po'i na kai uli, kai ko'o, 'a'ohe hina pūko'a," which translates to "Though the sea be deep and rough, the coral rock remains standing." Highlights of projects in 2020 illustrate the depths – both literally and figuratively – that researchers delved into to better understand and protect the monument's resources while overcoming significant challenges arising from COVID-19.

Agency Collaboration in Light of COVID-19......

2020 presented an unprecedented challenge of managing one of the most remote island chains in the world during the age of COVID-19. Agencies came together, best captured in the Hawaiian proverb "Aohe hana nui ke alu 'ia' which translates to "No task is too big when done together by all."

Agencies aligned COVID-19 protocols, pre-quarantine requirements, and testing regiments to ensure that human safety was a top priority when determining how to carry out missions critical for the protection of the monument's resources.

Monument staff successfully deployed eight cruises and maintained an average of two flights per month to Midway Atoll to support critical projects and maximize efficiency in trips.

Tern Island Debris Clean Up

In October 2020, 11 scientists from six different organizations, led by U.S. Fish and Wildlife Service and in partnership with the Papahānaumokuākea Marine Debris Project, embarked on an expedition to Tern Island, French Frigate Shoals. The goal was to continue an extensive cleanup process following storm damage caused by Hurricane Walaka. When Hurricane Walaka passed over French Frigate Shoals as a Category 3 storm in October of 2018, wind and storm surge scattered debris from relic military infrastructure across the atoll's biggest island, Tern Island. Building off of past cleanup missions, the 2020 mission successfully removed a total of 82,600 pounds of debris while mitigating countless wildlife entrapment hazards across the island.

Bonin and Tristram Petrel

Four bird species and one plant species living within the monument have been given Hawaiian names. Developed by the monument's Native Hawaiian Cultural Working Group facilitated by the Office of Hawaiian Affairs (OHA) and composed of community members, cultural practitioners, and researchers, the names reflect Hawaiian cultural perspectives of the birds and plant species, as well as their characteristics and behaviors.





The Hawaiian bird names are nunulu (Bonin petrel), 'akihike'ehi'ale (Tristam's storm-petrel), 'aoʻū (Christmas shearwater), and the hinaokū and manuohina (blue noddy). The name 'ahu'awakua has been given to Bryan's flatsedge.

Two of these birds, the 'akihike'ehi'ale and the nunulu, are actively being translocated from areas in Papahānaumokuākea to the James Campbell National Wildlife Refuge in Kahuku, O'ahu to help combat threats like sea level rise.

Rehabilitated Endangered Hawaiian Monk Seals Back in the Wild

In fall of 2019, NOAA Hawaiian Monk Seal Research Program stepped in to capture seals and transport them to Ke Kai Ola for long-term care. Two seals were rescued from Pearl and Hermes Atoll, and two seals from Lisianski Island.

After 10 months of rehabilitation, the seals learned how to forage and chase fish. Each gained between 110 and 175 pounds. They were successfully released at Midway Atoll via U.S. Coast Guard aircraft. One seal swam and made its new home on Kure Atoll.

For an endangered species where every individual is critical, the impacts of the return of the four monk seals to the ocean will be seen for generations to come.

Holaniku (Kure Atoll) Verbesina encelioides Eradication Program

For 11 years, the State of Hawai'i, Department of Land and Natural Resources (DLNR) has led an effort to eradicate the invasive plant *Verbesina encelioides* from Kure Atoll. Since first being documented on Kure in the 1950's, *Verbesina encelioides* slowly took over the native vegetation. Three formerly extinct species of plant have been reintroduced in recent years. The Verbesina seed bank is rapidly diminishing, according to island-wide Verbesina counts conducted daily by DLNR habitat restoration teams. The outcome of habitat restoration efforts and the removal of rats in 1994 resulted in Laysan albatross nests nearly doubling from 20,255 in 2011 to 42,175 in 2020.

For more information on these stories visit www.papahanaumokuakea.gov.





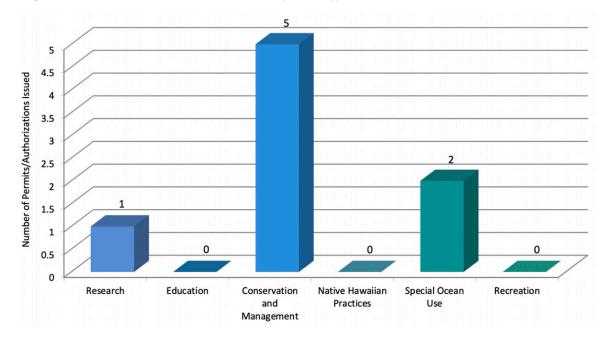


Background image: A bait ball of fish in Papahānaumokuākea Marine National Monument. Bait balls occur when fish swim in a very tightly packed formation often used by large schools of small fish to defend themselves against predators (Photo by NOAA). Overlaid images from left to right: A Hawaiian monk seal or 'ilioholoikauaua (Monachus schauinslandi) enjoys the freedom of strategic holes cut into the finger-like remnants of Tern Island's rusting corrugated steel sea-wall. Hurricane Walaka exaserbated erosion of Tern Island's shoreline areas, further exposing the sea-wall which had routinely trapped monk seals and sea turtles during tidal shifts (Photo by James Morioka/NOAA). Mahie Wilhelm and Ka'ehukai Goin lead the crew of the first major expedition in 2020 in oli (Hawaiian chant) just prior to departure (Photo by Ali Bayless/NOAA). Bonin petrel or nunulu (Pterodroma hypoleuca) (Photo by Megan Dalton/Pacific Rim Conservation). Hilina'i, one of two malnourished Hawaiian monk seal pups at Pearl and Hermes in 2019, resting on a rocky ledge prior to her capture and rehabilitation (Photo by H Ronco/NOAA). Laysan albatross or molī (Phoebastria immutabilis) nesting at Kure Atoll post-eradication of Verbesina encelioides (Photo by Matthew Kanoa Saunter/DLNR DOFAW).

Permits Issued in 2020

Each year the co-trustees issue a number of permits for a variety of activities to occur in Papahānaumokuākea. All permit applications must complete a rigorous process of environmental and cultural review and documentation of meeting the applicable permitting criteria, which include the Findings in Proclamation 8031 and federal regulations 50 CFR Part 404. As permit applications are reviewed and processed, individual applicants may elect to withdraw a permit application. In 2020, 19 permit applications were received and eight permits were issued (Figure 1). All permits issued were for activities within the original monument boundaries, no permits were issued for activities within the Monument Expansion Area. No permits were withdrawn in 2020. The remaining 11 permits that were not issued in 2020 were carried over for consideration and issuance in 2021 due to the impacts from COVID-19.

>>> Figure 1. Number of PMNM Permits Issued in 2020 by Permit Type.



The monument co-trustees grant both single and multi-year permits, in accordance with Hawai'i Administrative Rules (HAR). The duration for a monument permit in the state of Hawai'i waters is limited to no longer than one year from the date of issuance (HAR Title 13 § 60.5-6). Multi-year permits may be issued for activities that occur outside the state of Hawai'i waters (defined as 0-3 nautical miles from emergent land, excluding Midway Atoll) for up to five years. Two permits issued in 2020 were multi-year permits and five permits from subsequent years were valid for authorized permit activities to occur in 2020. In addition, the number of new and renewal activities authorized is reported and tracked by the Monument Management Board. In order for a permit application to be considered a renewal, the proposed activity must have been a previously permitted project activity in the Northwestern Hawaiian Islands. This metric provides a quick estimate of the number of new projects permitted (note that permits requesting renewal of activities with a new principal investigator

are counted as "new" permits). Both new and renewal applications undergo the same rigorous joint-permitting review process. Of the eight permits issued in 2020, two permits issued were renewals and six were new activities.

All active permits, regardless of year issued, were monitored for permitting and reporting requirements. The map on pages 4-5 indicates locations at which permitted activities occurred. Of the active permits, many authorized activities at multiple locations; therefore, the total number of activities per site is actually greater than the number of permits issued.

To support permitted activities, authorized individuals may either enter the monument on permitted vessels or aircraft to Midway Atoll. There were a total of 30 permitted flights to and from the monument, a 12% reduction from 2019. Permitted vessel entries and exits are defined as any instance in which a vessel is permitted to enter the monument to conduct authorized activities and subsequently exits the monument. For reporting purposes, any further authorized entry of the same vessel is counted as a second vessel entry. In 2020, there were eight permitted vessel entries into the monument done by seven permitted vessels.



The 11 person crew poses with collected debris prior to being loaded onto the M/V *Imua*. Debris ranged from scrap wood, plastics, and fishing nets to metal, boat hulls, and roofing materials. Photo by Dan Link/USFWS











Papahānaumokuākea Marine National Monument is administered jointly by four co-trustees – the Department of Commerce, the Department of the Interior, the State of Hawai'i, and the Office of Hawaiian Affairs. The day-to-day management of the monument is overseen by a seven-member management board: NOAA's Office of National Marine Sanctuaries, NOAA Fisheries, U.S. Fish and Wildlife Service National Wildlife Refuges and Ecological Services, State of Hawai'i Division of Aquatic Resources and Division of Forestry and Wildlife, and the Office of Hawaiian Affairs. Co-management takes all agencies working together, and all have unique expertise to bring to the table. Papahānaumokuākea celebrated 10 years as the first mixed (natural and cultural) UNESCO World Heritage Site in the United States in July 2020.

For more information about the stories and activities of Papahānaumokuākea, please visit www.papahanaumokuakea.gov.