2018 Activities

In 2018, a suite of activities were conducted by managers, cultural practitioners, community members, and researchers within Papahānaumokuākea Marine National Monument (PMNM or Monument) - the largest protected area under the United States that contains significant cultural and natural resources (www.papahanaumokuakea.gov). These activities continued ongoing collaborative research looking to the past for sources of knowledge and embarking on new paths to discovery. A common theme of activities conducted in the Monument in 2018 may be captured in the Hawaiian proverbs reflected on the cover: “Pule hanu nui be ali'i,” translated to mean “No task is too big when done together by all.” The following highlights of projects in 2018 illustrate a few of the many activities that involved many hands working together to explore and protect the Monument’s resources.

Journey into the Deep Unknown

On September 14, 2018, scientists embarked on a 17-day journey aboard the E/V Nautilus to explore the biological and geological features of 10 undescribed seamounts in unexplored depths of Papahānaumokuākea. Ocean Exploration Trust led the expedition along with researchers from the University of Hawaii and NOAA Deep Sea Coral Research and Technology Program. A highlight of the trip was observing a capricorn fish (Pterapogon kauderni) inflate to enormous proportions before deflating and swimming out of view. Data and samples from the cruise continue to be processed, and although the expedition covered thousands of miles of ocean, there remains much more to explore.

NOAA Partners remove 78 tons of marine debris from the Monument

From mid-September through October of 2018, a team of scientists led by NOAA Fisheries Ecosystem Science Division carried out a 41-day expedition to the Monument, conducting in-water and shoreline marine debris survey and removal operations at French Frigate Shoals, Laysan Island, Lisianski Island, Pearl and Hermes Atoll, Midway Atoll, and Kure Atoll. The team successfully removed a total of 78 tons of derelict fishing gear, plastic, and other marine debris from Papahānaumokuākea - the equivalent of 32 average compact cars.

2018 Seabird Translocation

During 2018, black-footed albatross or Kāu ika (Phoebastria nigripes), Bonin petrel (Pterodroma hypoleuca), and Tristan’s storm-petrel (Oceanodroma tristani) colonies were relocated from Papahānaumokuākea to their new home at James Campbell National Wildlife Refuge in Kauai, Oahu. These birds nesting in the low-lying islands and atolls of the Monument are at risk of losing their nesting habitat due to rising sea levels and increasing storm surges. The hope is that these efforts will help to establish new seabird colonies in the main Hawaiian Islands and reestablish cultural links to these important species.

Marine Turtle Biology and Assessment Program

NOAA National Marine Fisheries Service Marine Turtle Biology and Assessment Program’s Northwestern Hawaiian Islands green sea turtle nesting project monitors populations of turtles that migrate to the Northwestern Hawaiian Islands to breed and lay eggs. In the majority of this research, nests at French Frigate Shoals, where an estimated 56 percent of all Hawaiian green sea turtle nests (Chelonia mydas) migrate to reproduce. Biologists monitored impacts to the sea turtle population from hurricane Walaka which hit French Frigate Shoals in October 2018 with category 3 winds, and estimated approximately 20 percent of the turtle nests will still have eggs surviving on two islands (Kili and Tern). Researchers remain hopeful that green sea turtle populations will continue to thrive at French Frigate Shoals despite the impacts of Walaka.

For more information on these stories visit www.papahanaumokuakea.gov.
Papahānaumokuākea Marine National Monument Map

Locations of Permitted Activities

The map indicates the locations and numbers of permitted activities that occurred in 2018. Of the active permits, many authorized activities were conducted at multiple locations, therefore the total number of activities per site is actually greater than the number of permits issued. For a breakdown on the types and numbers of permits issued, please see the next page.

For more information visit www.papahanaumokuakea.gov
Permits Issued in 2018

Each year the Co-Trustees issue permits for a variety of activities to occur in Papahānaumokuākea. The following section provides an analysis of these permits by type, levels of use, and numbers of persons per permit.

In 2018, of the 35 permit applications received, 21 permits were issued (Figure 1) and one authorization was granted for activities solely within the Monument Expanded Area (MEA). 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 2018, 11 applications were withdrawn and one processed in 2019.

![Figure 1. Number of Monument permits issued in 2018 by permit type.](image)

The number of permits issued, both new and renewal, is reported and tracked by the Monument Management Board (MMB). In 2018, there were 12 new permits and nine renewal permits issued. 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 (NWHI). 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.

The Monument Co-Trustees grant both single- and multi-year permits. In calendar year 2018, the Monument Permitting Team processed 42 permits, 20 of which were issued and active prior to 2018. All active permits, regardless of year issued, were monitored for permitting and reporting requirements in 2018. Multi-year permits are issued specifically for projects that span two or more calendar years. In accordance with Hawaii’s Administrative Rules, the duration for a Monument permit in State of Hawaii waters is limited to one year from the date of issuance (HAR Title 13 § 605.5-6). Multi-year permits may be issued for activities that occur outside State of Hawaii waters (defined as 0-3 nautical miles from emergent land, excluding Midway Atoll) for up to five years.

Levels of Human Presence

Human presence is necessary to carry out resource management objectives and conduct necessary scientific and cultural research. Effectively tracking Monument permits and the associated number of permitted vessel and permit-related aircraft entries within the Monument allows for accurate reporting of levels of human presence. The level of human presence in the Monument is strictly managed and continuously evaluated to monitor and mitigate for cumulative impacts.

The only location equipped to accept aircraft within the Monument is Midway Atoll. In 2018 there was a total number of 38 permitted flights to and from the Monument which is a 7 percent decrease from 2017.

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 2018 there were a total number of 14 permitted vessel entries into the Monument done by a total of five permitted vessels.

Permitted Versus Actual Visitation Records

The number of individuals permitted to access the Monument and conduct activities is often not reflective of the actual number of people who conducted work in the Monument. For example, PMNM permits authorize limited access to personnel qualified to conduct specific activities however, the actual number of individuals who access the Monument is often less than the number permitted due to scheduling conflicts and other logistical complications that necessitate flexibility when selecting a team to conduct permitted activities. In other instances, permits that are active for more than one calendar year are included in the total count of permitted individuals but may not utilize their permit each year due to scheduling conflicts, lack of funding, or focus on other priorities. Table 2 shows the difference in the number of permitted individuals compared to the actual number of individuals who took part in a permitted activity.

![Table 2. Number of individuals permitted in 2018, compared to the actual number of people who conducted permitted activities in the Monument by permit type.](image)

<table>
<thead>
<tr>
<th>Permit Type</th>
<th>Number of People Permitted</th>
<th>Actual Number of People Who Performed Permitted Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>74</td>
<td>24</td>
</tr>
<tr>
<td>Education</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Conservation &amp; Management</td>
<td>122</td>
<td>86</td>
</tr>
<tr>
<td>Native Hawaiian Practices</td>
<td>90</td>
<td>84</td>
</tr>
<tr>
<td>Special Ocean Use</td>
<td>35</td>
<td>44</td>
</tr>
<tr>
<td>Recreation</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>575</strong></td>
<td><strong>774</strong></td>
</tr>
</tbody>
</table>

*Data presented in all tables and figures reflect only information from permit reports submitted in a timely manner, completion of a permit review, and a successful permit application is received by the MMB in 2018 at the date of publication.
Papahānaumokuākea is cooperatively managed to ensure ecological integrity and achieve strong, long-term protection of Northwestern Hawaiian Island ecosystems, as well as the perpetuation of Native Hawaiian culture and heritage resources for current and future generations. Four co-trustees – the Department of Commerce, Department of the Interior, State of Hawai‘i, and the Office of Hawaiian Affairs – protect this special place. Papahānaumokuākea Marine National Monument was inscribed as the first mixed (natural and cultural) UNESCO World Heritage Site in the United States in July 2010.

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

Front cover photo by Mark Sellke/NOAA Fisheries and back cover photo by Koa Matsui/NOAA Fisheries.