

Papahānaumokuākea Marine National Monument
NATIVE HAWAIIAN PRACTICE Permit Application

NOTE: *This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).*

ADDITIONAL IMPORTANT INFORMATION:

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED

Send Permit Applications to:

Papahānaumokuākea Marine National Monument Permit Coordinator

6600 Kalaniana'ole Hwy. # 300

Honolulu, HI 96825

nwhipermit@noaa.gov

PHONE: (808) 397-2660 FAX: (808) 397-2662

SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.

Papahānaumokuākea Marine National Monument Permit Application Cover Sheet

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

Summary Information

Applicant Name: Shauna Kēhaunani Springer

Affiliation: Nā Maka o Papahānaumokuākea & Conservation International – Hawai'i Fish Trust

Permit Category: Native Hawaiian Practices

Proposed Activity Dates: June 2014, still determining exact dates

Proposed Method of Entry (Vessel/Plane): Vessel

Proposed Locations: Nihoa, Mokumanamana, Mokupapapa (French Frigate Shoals / La Perouse Pinnacle), Puhahonu (Gardner Pinnacles)

Estimated number of individuals (including Applicant) to be covered under this permit:

Eleven (11) individuals are to be covered under this permit, co-listed under the Research application submitted by Dr. Chris Bird and Ms. Pelika Bertelmann's Native Hawaiian Practices permit #PMNM 2013-023 (Na Mo'olelo o Papahānaumokuākea) for cultural observations on Nihoa.

Estimated number of days in the Monument: 12 days

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...

The proposed activity aims to examine the basic ecology of 'opihi populations and intertidal ecosystems within the NWHI by making keen observations of the environment and interactions by understanding connections with atmospheric and seasonal cycles from a Native Hawaiian perspective and to reconnect kanaka maoli to these resources. Through a collaboration with Na Mamo o Muole'a, The Nature Conservancy, Hawai'i Institute of Marine Biology, Nā Maka o Papahānaumokuākea, Conservation International-Hawaii Fish Trust, Texas A&M and the NOAA Papahānaumokuākea Marine National Monument; a standard 'opihi monitoring protocol which is inclusive of Hawaiian methods of monitoring, has been developed (and is continuously being refined) to monitor populations within select locales on Hawai'i Island, Maui,

Kaho'olawe, Moloka'i, Kaua'i and the NWHI. This would be the sixth year collecting data at locations within the NWHI. Consistent with proclamation 8031, these activities will strengthen cultural and spiritual connections to the Northwestern Hawaiian islands and foster the expansion and perpetuation of Native Hawaiian ecological knowledge and research methodologies. This knowledge may be critical as it is observed by local Hawaii residents that 'opihi stocks are generally diminishing in size and number in the main Hawaiian islands, therefore more data in this area may help to curb the decline. In addition, comprehensive surveys of the intertidal zone within the NWHI have never been conducted. The continuation of 'opihi data collection, and comprehensive intertidal surveys (including fishes, algae and invertebrates) using Native Hawaiian ecological knowledge and methodologies coupled with western science will help to contribute to the overall health of Papahānaumokuākea.

b.) To accomplish this activity we would

To accomplish this activity we will utilize Native Hawaiian protocol and practice, based on traditional knowledge and methodologies, to assess the environment, which will be integrated with the scientific ecological data. Native Hawaiian observations include using all senses by using your “eight eyes” makawalu (Kanahele) to note activities in the sky, land, and ocean and to connect these elements to our daily lives. Not only is it important to make observations of these elements and how they relate to natural resources, it is also vitally important to reconnect to our cultural spirituality by consuming intertidal resources that are critical to the survival of kanaka maoli. Documenting activities and recording connections between these events will highlight relationships and possible dependencies between reoccurring events and activities over seasons and between years.

- Sky observations include looking at cloud formations, noting wind direction/strength and what times it changes, visibility of the horizon, bird activity, other weather related observations such as rain or rainbows, the rising and setting of the moon and sun, the moon phase, and stars.
- Land observations include looking at any plants that are flowering, seeding or fruiting, new growth, animals reproducing, precipitation and soil moisture, bird arrival and departure and any other animal behaviors. Land observations from the main Hawaiian Islands during the expedition may also be useful to help remember activities in the NWHI during that time. For example, we notice hala fruiting here on the main islands and can relate that in the Northwestern Hawaiian Islands, this is the season when juvenile iwa are still in the nest.
- Ocean observations include noting the tide (high/low and time), waves and currents, identifying and looking at the behavior of invertebrates, limu (algae) and fish in the intertidal environments, noting any spawning or aggregation of species, and noting any juveniles and newly recruited species. (see observation datasheet).

Through these types of observations, one can discover how different the intertidal zone changes between seasons (Kauwela-summer/Ho‘oilo-winter). At sites in the MHI, the limu (Crustose Coralline Algae (CCA) and macoalgae) zone expands during the winter, due to the large waves that are generated by winter storms, and decrease during the calm summer months. This allows other organisms such as ‘opihi and ha‘uke‘uke to expand their habitable zone as well. New recruits for ‘opihi and ha‘uke‘uke were observed during the winter season about 1-2 months after a peak spawning event, but wasn’t observed during the summer season. The peak spawning period was determined by conducting a gonad study for both ‘opihi and ha‘uke‘uke. These are just a few examples that demonstrate how both western and traditional knowledge can complement each other to obtain both quantitative and qualitative data.

The scientific research methods include laying belt transects to assess class size, population density, community structure, species range, distribution, and rugosity for all organisms within the intertidal zone. A minimum of 20 ‘opihi population/ intertidal surveys at each island / atoll will be conducted. Statistical analysis of the data will be analyzed at the Hawai‘i Institute of Marine Biology & Texas A&M labs. Data analyzed will be useful to local and governmental managers to make effective decisions on managing the resources. See Bird’s 2014 Research application for reference.

Consumption of intertidal resources including invertebrates, limu will further support cultural practice and relationship between participants and our islands. Consumption feeds physical, spiritual, and cultural health rooting us in our ancestral ties and customary practices. Consumption allows us to be nurtured and nourished by place and genealogy. Our islands and the resources thriving here are older siblings and customary relationships are based on the reciprocal practice of being fed and cared for by our older siblings while we care for and “feed” them in return. Our presence, activities, oli, observations, surveys, etc feed and care for place further supporting the physical, spiritual and cultural health of our islands and ourselves. Consumption also allows us to interact with place and understanding the network involved to produce a meal, which feeds a community.

Prior to departure to NWHI, the Nā Maka o Papahānaumokuākea will conduct a cultural orientation which will include the harvesting, preparation and consumption of food to introduce and ground all the participants to the importance of feeding a community and the relationship between the natural environment (genealogy) and ourselves.

The research team will work together to apply this integrated monitoring approach. The research team will be comprised of cultural researchers / practitioners, scientists, and managers. To ensure the success of these field studies, the team will conduct appropriate protocol and offer ho'okupu (cultural offerings) to maintain the spiritual integrity of the sites that are visited.

c.) This activity would help the Monument by ...

This activity will not only add to the current knowledge of the marine environment in the NWHI, it will help to gain a better understanding of the resources by looking at the resources through a Native Hawaiian cultural lens ensuring a holistic approach to interaction and care. It will also help the monument by continuing to re-establish Native Hawaiian ancestral consciousness and awareness with regard to the health and condition of the marine resources. Native Hawaiian protocol and methodology is integrated with western scientific protocol and methodology to better understand the status of intertidal marine resources and helps the Monument strengthen its management of cultural resources and ensures the strong participation of Native Hawaiians in the region's long-term protection. By providing opportunities to conduct cultural research, (cultural) researchers will assist in the recovery of important Native Hawaiian marine management practices and support the use of Native Hawaiian traditional ecological knowledge. Additionally, the permitted cultural practitioners and researchers will be key to the development of an eventual cultural access and monitoring plan for the NWHI.

Other information or background:

Additionally this project is also supported by the following activities in the Monument Management Plan, (NHCH-2.1, 2.2, 2.3, 2.5, 2.6, 3.4 and NHCI – 3.1 and 3.2) all of which call for the identification of Native Hawaiian research priorities and access opportunities.