

**BEST MANAGEMENT PRACTICES FOR ACTIVITIES ON
MOKUMANAMANA (NECKER ISLAND)**

Papahānaumokuākea Marine National Monument

Special considerations must be taken while conducting permitted activities at Mokumanamana (Necker Island). The island features an array of Native Hawaiian wahi kūpuna (sacred sites) unique in the Hawaiian archipelago, and is listed on the National Register of Historic Places. Along with its vast archaeological landscape, the island supports an in-tact coastal biological community that largely has not been subject to the anthropogenic disturbances (invasive species, resource mining, etc.) that have commonly occurred at other locations found throughout PMNM and the Hawaiian archipelago. The island and region are immensely special and significantly sacred from a Hawaiian perspective. In order to maintain this recognition, special care and proper protocols should be strictly adhered.

This document provides guidelines for conducting activities and camping in the remote, sensitive environments on Mokumanamana. For packing, please view Best Management Practice 007 Special Conditions for Moving Between Islands and Packing for Field Camps. Specific to Mokumanamana, it is highly recommended to purchase new “soft” gear for the trip.

- I. Person-use days¹, unless otherwise permitted:
 - a. Person-use days shall not exceed 100 days² cumulative per trip with the following conditions:
 - i. No more than five (5) personnel authorized to camp overnight on island for no more than one week. Specific night activities needing more personnel can be considered through the permitting process to ensure all regulatory permit criteria are met.
 - ii. No more than fourteen (14) personnel authorized to be on island at any one time.
 - b. Personnel working on land during the day in excess of the five (5) authorized to camp overnight must be off-island before sunset and sleep aboard a permitted vessel.
 - i. Example: Fourteen (14) personnel are permitted for a maximum trip duration of seven (7) days. Nine (9) personnel stay off-island

¹ Person-use days are a measure of use of one individual for one day at a site. Example: five (5) authorized personnel staying for three (3) nights = 15 total person-use days.

² The 100 person-use day limit will allow for recovery time for the ecological resources on Mokumanamana and allow multiple projects to occur on the island per year.

overnight and five (5) may camp on-island overnight.

- c. The total number of person-use days shall not exceed 300 per year for all activities³.
- d. It is recommended that activities occur between August and October, when the fewest seabird eggs and small chicks are present; vegetation is at its annual minimum, making traversing the islands easier as well as cultural sites more visible; and it is not during the average peak monk seal breeding period.

II. Landing and movement in intertidal zone

- a. Please refer to BMP #011 Disease and Introduced Species Prevention Protocol for Permitted Activities in the Marine Environment, for proper clothing and footwear protocols for intertidal activities.
- b. Personnel landing on the island shall attempt to land in an area that will minimize disturbing any resting seals. Due to safety concerns at Mokumanamana, landing locations may be limited, resulting in an unintended disturbance. If this occurs, the disturbance shall be noted and reported for recordkeeping with the Resource Monitor. For more information on wildlife interactions, please see BMP #010 Marine Wildlife Viewing Guidelines.
- c. Personnel traversing the shoreline shall do so only if it can be done without disturbance to monk seals, in particular mother-pup pairs. The most sensitive area for seals is the northeast facing side of the groin on Mokumanamana in between the two westernmost hills - Hā'ena Moe and Hā'ena A'e.

III. Activities and movement on island

- a. Personnel shall remove all equipment, supplies, and solid human waste from the island at the conclusion of the trip.
- b. Access to areas of the island by personnel beyond the campsite and landing shall be limited to periods when surveys, other data collection, and when refuge management activities are necessary.
- c. Personnel shall combine field activities whenever possible to minimize the number of times a specific area is visited.

³ The 300 person-use day annual limit is based on impacts observed in the past by researchers working for extended periods of time (120 person-use days) on Nihoa Island. Based on past observations, biological damage to the island becomes significant after 120 consecutive person-use days.

- d. Unless otherwise determined by the Monument Management Board agencies, each access trip should include at least one Monument Management Board designated Resource Monitor and have a designated cultural liaison⁴. These roles may be assigned to the same individual.
- e. Personnel shall be encouraged to participate in Hawaiian protocol as deemed appropriate by the cultural liaison or other cultural experts.
- f. Personnel shall not displace, move, remove, dig, collect, or otherwise disturb cultural sites, rocks, artifacts, or other materials. If personnel observe a cultural resource that needs attention, they shall leave it in place, map its location, describe its appearance, photograph it, file a report with the FWS Superintendent for the Monument, and notify the Office of Hawaiian Affairs for discussion with the proper cultural experts.
- g. Personnel shall be informed of known locations of iwi kūpuna (burial sites) and other sensitive cultural sites prior to access. The designated Resource Monitor will be provided with maps so that these sites can be reasonably protected to the extent possible during fieldwork (some activities may require access to such sites, proper cultural protocols are highly recommended in this instance).
- h. Personnel moving across the islands shall avoid walking on vegetation, sensitive wahi kūpuna (ancestral sites), and nesting birds to the best extent possible within the means of personal safety. Individuals are advised to use areas where these resources are not present (i.e. ridgelines and other exposed bedrock surfaces).
- i. Where travel through vegetation or nesting areas is required, personnel shall walk single file and strive to step where the ground surface is visible, and not obscured by vegetation to ensure it is not occupied by a nest.
- j. If possible, avoid large ‘ewa‘ewa/pākalakala (sooty terns and grey-back terns) colonies during the day as the entire colony may leave their egg or chick unattended and vulnerable until the disturbance has passed. Please see BMP #003 Human Hazards to Seabirds for more information.
- k. Mokumanamana is an extremely steep island, and many areas are subject to rock fall or loose footing. Tents and sleeping areas should never be sited directly adjacent to cliffs, and great care should be taken when walking beneath or on cliff faces. The rock is ancient, extremely fragile, and breakable, so all footholds and handholds should be tested before weight is placed on any rock.

⁴ A qualified cultural liaison is a person designated by Co-Managers based upon the recommendations of the Office of Hawaiian Affairs and the Papahānaumokuākea Native Hawaiian Cultural Working Group.

1. Unexploded ordinance (UXO) is a concern for Mokumanamana. Past military practices have caused severe damage including the documented destruction of several wahi kūpuna. Remnants from this portion of the islands' history may still be found in the form of bomb craters and UXOs. It is recommended that these be avoided due to remnant shrapnel, heavy metals in the soil, and/or actual UXOs. If any evidence of UXOs are found, any personnel shall leave it in place, map its location (GPS if applicable), describe its appearance, photograph it, and file a report with the Permit Coordinator or the FWS Superintendent for the Monument. **IF YOU CANNOT IDENTIFY WHAT IT IS OR DID NOT DROP IT, DO NOT PICK IT UP.**

IV. Camping on Mokumanamana

- a. Personnel shall not move, shape, or alter the surface of any wahi kūpuna for camping. Tent stakes shall only be used where they can be inserted into the ground without digging up the soil or moving rocks. Personnel shall photograph the tent area before, during, and after tent set up. Personnel shall avoid bird nests when erecting tents. All nest failures that can be attributed to human disturbance shall be documented and included in the final trip report. In addition, personnel shall adhere to whatever additional instructions are provided by archaeologists, cultural liaisons, and biologists through the Monument Management Board.
- b. All human waste shall be relieved of away from any wahi kūpuna. Additionally, wag bags should be used for solid human waste and subsequently removed off island at the end of the camp.