

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: Carl Meyer

Affiliation: Hawaii Insitute of Marine Biology

Permit Category: Research

Proposed Activity Dates: May 1 - September 30 2009

Proposed Method of Entry (Vessel/Plane): Vessel

Proposed Locations: Shallow water habitat (<100m) around French Frigate Shoals and Pearl & Hermes Reef

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

12

Estimated number of days in the Monument: 30

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...

Quantify the population sizes of top predators (sharks and large fishes such as ulua) at French Frigate Shoals (FFS) and Pearl & Hermes Reef (PHR).

b.) To accomplish this activity we would

Conduct mark-release-recapture experiments at FFS and PHR. Sharks and fishes would be captured using handlines and 10 hook bottom-set lines, restrained alongside a small boat, externally tagged with numbered identification tags and then released. A second round of fishing would yield samples containing both tagged and untagged individuals that will allow calculation of predator population sizes.

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

Providing the first empirical estimates of top predator population sizes at these locations. These data will help managers to better understand the ecosystems at these atolls, and can be used to improve ecosystem modeling and management using simulation models such as ECOPATH.

Other information or background: Our research has minimal impact on Monument resources. Top predators are captured, tagged and released at their capture locations. No fish or sharks are removed from the Monument.