

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: George A. Antonelis

Affiliation: National Marine Fisheries Service, Pacific Islands Fisheries Science Center

Permit Category: Research

Proposed Activity Dates: May 1, 2009 to September 30, 2009

Proposed Method of Entry (Vessel/Plane): Vessel and/or plane (based on availability)

Proposed Locations: FFS

Estimated number of individuals (including Applicant) to be covered under this permit: Up to 10 but no more than 3 at any one time

Estimated number of days in the Monument: 180

Description of proposed activities: (complete these sentences):

- a.) The proposed activity would... monitor predation on Hawaiian monk seal pups by Galapagos sharks and deploy shark deterrent gear around selected FFS pupping sites.
- b.) To accomplish this activity we wouldobserve shark activity at FFS (from ground and tower) and install visual, auditory, magnetic and electromagnetic deterrent devices on island, in small boats anchored offshore, or suspended in the water column using floating tubes or floats
- c.) This activity would help the Monument by ... contributing to recovery of the Hawaiian monk seal, which is a keystone species within the Monument and is a protected species under provisions of both the ESA and MMPA. The Papahānaumokuākea Marine National Monument is home to approximately 94% of the entire population of endangered Hawaiian monk seals and is therefore critical to the future prospects of the species.

Other information or background: Predation on Hawaiian monk seals by Galapagos sharks has resulted in the loss of 15-21% of the annual cohort born at FFS in recent years. This behavior has not been observed at other breeding sites in the NWHI. This year, NMFS proposes to continue with the experiment (begun in 2008) to test the efficacy of various non-lethal alternatives for mitigating this mortality source and salvaging the reproductive potential of these pups.