

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: Amy Baco-Taylor

Affiliation: Florida State University

Permit Category: Research

Proposed Activity Dates: October 2011

Proposed Method of Entry (Vessel/Plane): Research Ship Ka`Imikai-O-Kanaloa

Proposed Locations: Gardner Pinnacles region to Necker Ridge

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

4-5

Estimated number of days in the Monument: 22

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...

Opportunistically obtain samples of deep-sea corals and sponges through piggybacking on dives of geologist David Clague. Coral and sponge specimens would be used for comparison to collections made by Baco-Taylor previously in the Main and NWHI. Previous studies within the Archipelago by Baco-Taylor addressed distribution of deep-sea corals, genetic connectivity of precious corals, association of corals with specific substrate types, and association of invertebrates with deep-sea corals and sponges. The Baco-Taylor lab is also working on using DNA barcoding methods to aid in identification of deep-sea corals and has built up a large database of coral sequences from the Archipelago. Currently there are no samples from Gardner Pinnacles in the sample set, so any collections at this location would not only provide insights into the coral communities on this feature, but would also be a significant addition to our previous studies.

b.) To accomplish this activity we would

Opportunistically collect samples of corals and sponges during Dave Clague's submersible dives on Gardner Pinnacles, as dive time permits. One sample is returned to the surface, they will be processed for morphological identification and genetic studies.

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

Providing insights into the presence of deep-sea coral and sponge beds on Gardner Pinnacles and the degree to which the species found at this site overlap with other sampled locations in the Archipelago.

Other information or background: The PI is funded for a cruise to Necker Ridge, the diveable portion of which falls outside the monument. However, to reach Necker Ridge, the PI will be sharing the same leg of the KOK cruise with David Clague, who will be conducting geological sampling at Gardner Pinnacles. We hope to share samples with the Clague team from Gardner and thus are requesting this permit. We may also do some mapping on the NE end of Necker Ridge, which does fall into the Monument, but is covered on other permits already processed.