

Papahānaumokuākea Marine National Monument
RESEARCH 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: Carl Meyer

Affiliation: Hawaii Institute of Marine Biology

Permit Category: Research

Proposed Activity Dates: June 1-August 31 2009

Proposed Method of Entry (Vessel/Plane): Vessel

Proposed Locations: Deep water habitat (>100m) outside State waters around French Frigate Shoals Atoll

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

6

Estimated number of days in the Monument: 90

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...

Support research quantifying the movements of sharks at French Frigate Shoals (FFS) Atoll by ensuring a bait supply for shark fishing at FFS in the event that frozen bait supplies are depleted.

b.) To accomplish this activity we would

Capture up to 5 tuna per day as needed to supplement frozen bait supplies for shark fishing. Tuna will be only be taken outside State waters.

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

Facilitating capture and tagging of sharks in order to provide Monument managers with empirical data on shark movement patterns at FFS. This information is vital for a better understanding of shark predation on Hawaiian monk seals and selecting appropriate management strategies for mitigating predation impacts on monk seals.

Other information or background: We are requesting a limited take (up to 5 fish per day) of tuna from Monument waters > 3 miles offshore (outside state waters) to supplement frozen bait supplies. This will have minimal impact on monument resources because tunas are fast growing, extremely wide-ranging, pelagic fishes and we are requesting a minimal 'as needed' take. Without this ability there may be periods when field personnel stationed at Tern Island are unable to fish for sharks because supplies of frozen bait are depleted. This will have a direct impact on the number of sharks tagged and our ability to address key questions about shark movements related to predation on critically endangered Hawaiian monk seal pups.

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Meyer, Carl, G.

Title: Assistant Researcher

1a. Intended field Principal Investigator (See instructions for more information):

TBD (Tern Island field station based activities)

2. Mailing address (street/P.O. box, city, state, country, zip):

██████████

Phone: ██████████

Fax: ██████████

Email: ██████████

For students, major professor's name, telephone and email address: Not Applicable

3. Affiliation (institution/agency/organization directly related to the proposed project):

University of Hawaii, Hawaii Institute of Marine Biology

4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Research Diver; Jane Doe, Field Technician):

Jon Dale, Research Diver & Field Technician

Austin Stankus, Field Technician

Mike Burns, Field Technician

TBD, Field Technician

TBD, Research Diver & Field Technician

Section B: Project Information

5a. Project location(s):

<input type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> French Frigate Shoals	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input checked="" type="checkbox"/> Deep water
<input type="checkbox"/> Gardner Pinnacles	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Maro Reef			
<input type="checkbox"/> Laysan Island	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Lisianski Island, Neva Shoal	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Pearl and Hermes Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Midway Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Kure Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Other			

Ocean Based

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description:

Tuna fishing will occur in deep waters >3 miles offshore (outside state waters) around FFS.

5b. Check all applicable regulated activities proposed to be conducted in the Monument:

- Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- Anchoring a vessel
- Deserting a vessel aground, at anchor, or adrift
- Discharging or depositing any material or matter into the Monument
- Touching coral, living or dead
- Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- Attracting any living Monument resource
- Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- Subsistence fishing (State waters only)
- Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

6 Purpose/Need/Scope *State purpose of proposed activities:*

(a) Purpose of proposed activities

The purpose of this activity is to support shark research at French Frigate Shoals by supplementing frozen bait supplies as needed. The goal of the shark research is to provide Monument managers with empirical data on shark movement patterns at French Frigate Shoals atoll. This information is vital for a better understanding of shark predation on Hawaiian monk seals and for selecting appropriate management strategies for mitigating predation impacts on monk seals.

(b) Need for proposed activities

We need the ability to occasionally take tuna because there may be periods when field personnel stationed at Tern Island are unable to fish for sharks because supplies of frozen bait are depleted. Without bait, we will be unable to tag sharks in order to address key questions about shark movements related to predation on critically endangered Hawaiian monk seal pups.

(c) Scope of proposed activities

We are requesting permission to take up to 5 small (10-25lb) tuna per day. We estimate that frozen bait supplies will last a minimum of 60 days (with scheduled resupplying), hence the maximum take would be 150 tuna over 30 days. We expect it to be much less.

7. Answer the Findings below by providing 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 Monument:

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?

The activity will be conducted with adequate safeguards for the resources and ecological integrity of the Monument. Tunas are fast growing, pelagic fishes that range widely across oceans and hence are transient in Monument waters. The removal of 150 tunas at a rate of 5 per day will not significantly impact the ecological integrity of the Monument. We will contact the Office of Hawaiian Affairs to seek guidance on how to mitigate potential cultural impacts associated with this activity.

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?

The proposed activities will have minimal impact on the resources of the region. This activity will support research conducted in concert with the priorities listed in the current draft NOAA research plan for the Monument. We will contact the Office of Hawaiian Affairs to seek guidance on how to mitigate potential cultural impacts associated with this activity.

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.

There is no practicable alternative to conducting these activities in the Monument. Tunas will be taken from waters around French Frigate Shoals if frozen bait supplies at Tern Island run out. This activity will support research that addresses questions directly relevant to management of Monument resources (we are quantifying movement patterns of sharks associated with predation on monk seal pups at FFS atoll).

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?

The management value of data produced by our research activities outweighs the relatively minor, transient impacts on Monument resources. We are asking to take a maximum of 150 individuals of an abundant, fast-growing, highly-migratory family of fishes in order to provide empirical data for mitigation of shark predation on a critically endangered marine mammal. Tunas range across entire ocean basins and removing 150 individuals from the waters around FFS at a rate of 5 fish per day will have no significant impact on the ecological integrity of the Monument.

e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.

This activity will occur only within the 90 day period of proposed shark research that it will support.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

Personnel included in this permit application have extensive experience with trolling in Monument waters and are well qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct. Our research is supported by an award to Hawaii Institute of Marine Biology from the National Marine Sanctuary Program (MOA 2005-008/6882), and we are provided access to the Monument on NOAA research vessels. These resources are adequate to conduct and complete the proposed activities and mitigate any potential impacts resulting from its conduct.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.

The methods and procedures that we are proposing are appropriate for supplementing bait supplies for shark fishing with minimal impacts to Monument resources, qualities, and ecological integrity.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?
NOAA vessels are equipped with the NOAA OLE Vessel Monitoring System

j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.

There are no other factors that would make the issuance of a permit for the activity inappropriate.

8. Procedures/Methods:

Tuna will be captured by trolling (using an artificial lure) from a small skiff. Captured fishes will be brought alongside the skiff and euthanized with sharp blows to the head. Captured tunas will be used to bait shark fishing lines.

1. What kind of by-catch is likely to occur?

By-catch includes pelagic piscivores attracted to artificial lures, primarily ono (*Acanthocybium solandri*).

2. How can by-catch be minimized or mitigated?

Non-target fishes captured by trolling are immediately released alongside the boat without removing them from the water. If by-catch becomes more than occasional then trolling is ceased in that area.

3. Are lines an entanglement hazard for seals? What mitigation measures are taken?

No. Trolled handlines (baited and trolled) are manned constantly. We have not been approached by seals while using these methods.

4. Has there been any seabird interaction with the fishing gear?

Seabirds are sporadically attracted by trolling activities. Fishing is ceased and lines retrieved whenever birds show interest in the fishing gear. By taking these precautions we have avoided any physical interactions between birds and trolling gear.

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

Common name:
Kawakawa, Ahi

Scientific name:
Euthynnus affinis, Thunnus albacares

& size of specimens:
Maximum of 150 fish of 10-25lbs

Collection location:
Deep waters (> 3 miles offshore) around FFS

Whole Organism Partial Organism

9b. What will be done with the specimens after the project has ended?
Specimens will be used for bait at FFS

9c. Will the organisms be kept alive after collection? Yes No
N/A

• General site/location for collections:
Deep waters >3 miles offshore around FFS

• Is it an open or closed system? Open Closed
N/A

• Is there an outfall? Yes No
N/A

• Will these organisms be housed with other organisms? If so, what are the other organisms?
N/A

• Will organisms be released?
N/A

10. If applicable, how will the collected samples or specimens be transported out of the Monument?

N/A

11. Describe collaborative activities to share samples, reduce duplicative sampling, or duplicative research:

We will try to resupply the field station team with enough frozen bait to minimize or avoid the need to take tuna from waters around FFS.

12a. List all specialized gear and materials to be used in this activity:

Two trolling handlines and a variety of artificial lures

12b. List all Hazardous Materials you propose to take to and use within the Monument:

N/A

13. Describe any fixed installations and instrumentation proposed to be set in the Monument:

N/A

14. Provide a time line for sample analysis, data analysis, write-up and publication of information:

A record will be kept of any tuna taken. This information will be included in the permit report.

15. List all Applicants' publications directly related to the proposed project:

N/A

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as “confidential” prior to posting the application.

Signature  Date 1/30/2009

SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE BELOW:

Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
FAX: (808) 397-2662

DID YOU INCLUDE THESE?

- Applicant CV/Resume/Biography
- Intended field Principal Investigator CV/Resume/Biography
- Electronic and Hard Copy of Application with Signature
- Statement of information you wish to be kept confidential
- Material Safety Data Sheets for Hazardous Materials