

Papahānaumokuākea Marine National Monument
EDUCATION 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: Dr. David Johnston

Affiliation: Research Scientist, Division of Marine Science and Conservation, Nicholas School of the Environment, Duke University

Permit Category: Education

Proposed Activity Dates: January 19 to 29, 2010

Proposed Method of Entry (Vessel/Plane): Plane

Proposed Locations: Midway Atoll

Estimated number of individuals (including Applicant) to be covered under this permit: 17

Estimated number of days in the Monument: 10

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...
provide valuable education experiences for Duke University students enrolled in the Coastal Environmental Management Master's program regarding the numerous conservation challenges faced by the agencies charged with ensuring the protection of the Monument.

b.) To accomplish this activity we would
bring 14 students plus 3 instructors to Midway Atoll for 10 days to study marine debris, protected species issues, invasive species problems and the long history of human effects in the Northwestern Hawaiian Islands

c.) This activity would help the Monument by ...
educating the next generation of resources managers of marine systems in the US, many of whom will likely end up working for NOAA. Several NOAA employees in Hawaii at PIFSC, PIRO and the NOS Monument Office have graduated from this program. We will also contribute actively to ongoing conservation programs at Midway including debris removal, removal of invasive species and planting of native plants.

Other information or background: For the past two years, Duke has been bringing students to Midway to study marine conservation issues as they relate to the Papahānaumokuākea Marine National Monument. This program trains the next generation of resources managers who will be charged with protecting marine resources in the United States, including the Monument. Some details on our previous courses can be found here:

<http://www.nicholas.duke.edu/hawaii09>
& here:
<http://nicholas.duke.edu/midway08/>

Marine Conservation Biology - Midway.

In this course we examine the challenges associated with managing and conserving marine biodiversity using aspects of the Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands (NWHI) as the focus of several case studies (see <http://hawaiireef.noaa.gov/welcome.html>).

The case studies include the conservation of endangered species at Midway, including monk seals, sea turtles and breeding seabirds. We also address other important conservation issues that face the Monument, including marine debris and climate change. The Monument, established in June 2006, is the largest marine conservation area in the world, encompassing an area larger than all the country's national parks combined.

The course is taught entirely in Hawaii. The first three days of the class are spent on Oahu, meeting with various stakeholders together with scientists and managers who work for the three agencies that co-manage the Monument (NOAA, USFWS and the state of Hawaii). The next 10 days are spent on Midway Atoll, part of the Papahānaumokuākea Marine National Monument, where we will work with biologists and managers from the U.S. Fish & Wildlife Service and see first-hand the challenges of implementing the Monument.

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Johnston, David W.

Title: Research Scientist, Division of Marine Science and Conservation, Nicholas School of the Environment, Duke University

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

Dr. Andrew J. Read & Dr. David W. Johnston

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

[REDACTED]

Phone:

[REDACTED]

Fax:

[REDACTED]

Email:

[REDACTED]

For students, major professor's name, telephone and email address:

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

Duke University

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, Teacher; Jane Doe, Videographer):

Instructor - Johnston, Instructor - Read, Instructor - TBN + 14 students TBN

Section B: Project Information

5a. Project location(s):

<input type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<u>Ocean Based</u>	
<input type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> French Frigate Shoals	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input 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 checked="" type="checkbox"/> Midway Atoll	<input checked="" type="checkbox"/> Land-based	<input checked="" 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			

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

Location Description:

All of our work in the Monument occurs at Midway Atoll.

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:*

The purpose of the activities is to train students to recognize and address marine conservation issues as they relate to the Papahānaumokuākea Marine National Monument and other managed marine systems in the U.S. This program currently helps train the next generation of managers who will be charged with protecting marine resources in the U.S., including the Monument. The course address the major marine conservation issues faced by resource managers in the U.S., including bycatch, marine debris, climate change, invasive species and human disturbance. The need for hands-on training in these issues is great. At present there are no other courses like this in the U.S., and direct exposure to Midway and the Monument are the best ways to educate students seeking to enter the workforce as natural resource managers - they get to witness the challenges and success of marine conservation first-hand.

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?

This course is largely observational in nature, and as such we do not remove, disturb or harass any Monument resources. Both primary instructors are very familiar with the Monument and with Midway Atoll, and can ensure that no adverse effects on the cultural, natural and historic resources occur.

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 activity aims to educate students on the mangement of cultural, natural and historic resources of the Monument, and therefore will fit entirely with the educational mandates and management philosophy of the Monument. Our students also contribute to conservation efforts directly on Midway, as we work with the FWS to remove marine

debris, plant native vegetation and eradicate invasive species. Future enhancement will occur as students enrolled in this class will value the Monument when moving into management positions in federal and state natural resources agencies.

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 are no practical alternatives; our course is designed to provide hands-on experience.

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

There will be no adverse impacts on Monument resources, and educational values are large. There are currently no other courses available to train students in this manner.

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

The duration of the activity corresponds with available flights to and from Midway and provides enough time to thoroughly address each case study covered.

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

Both instructors are established conservation biologists and have spent many hours in the field conducting research and leading direct conservation actions. Furthermore, both instructors are very familiar with the Monument and have already taught this course at Midway for the past two years. Instructor Johnston has conducted research in the Monument previously, and has published on findings from this research in the primary scientific literature (see publications list below). As such, Johnston has a great understanding of, and appreciation for the cultural, natural and historic resources of the Monument and is especially well prepared for addressing any issues that may occur during the course.

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.

All course costs are covered by Duke University.

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.

We conduct lessons in the field, providing opportunities for students to see, assess and discuss conservation case studies.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?

n/a

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

This activity is fully consistent with the educational mandates of the Monument.

8. Procedures/Methods:

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:

Scientific name:

& size of specimens:

Collection location:

Whole Organism Partial Organism

9b. What will be done with the specimens after the project has ended?

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

• Specific site/location:

• Is it an open or closed system? Open Closed

• Is there an outfall? Yes No

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

• Will organisms be released?

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

11. Is your proposed activity based on a State Department of Education Standards Based Curriculum? If so, describe:

12. If applicable, describe how you are collaborating with others in any way to reduce duplicative activities in the Monument or elsewhere?

There are currently no other courses of this type that occur within the Monument.

13. What materials, products or deliverables will be developed as a result of your proposed activity? Provide a time line for write-up and publication of information or production of educational materials:

We will maintain a weblog of the trip that students are required to write entries in daily. We will also provide a final report to the monument reporting our activities at Midway. All educational material (videos, pictures) will be made available to the Monument if requested.

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

No specialized gear will be used.

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

none

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

none

17. List all Applicants' publications/references directly related to the proposed project:

Baker et al. Potential effects of sea level rise on the terrestrial habitats of endangered and endemic megafauna *Endang Species Res* (2006) vol. 2 pp. 21-30

Johnston et al. Identification of humpback whale *Megaptera novaeangliae* wintering habitat in the Northwestern *Endang Species Res* (2007) vol. 3 pp. 249-257

Johnston. A Hard Days' Night. Spinner dolphins also need their rest. *Ka Pili Kai* (2006) vol. 28 (2) pp. 9-11

Chapla, M. E., D. W. Johnston and K. Urian. 2007. Pacific Islands Photo-Identification Network Workshop Report. Pacific Islands Fisheries Science Center Administrative Report. H-07-02, 28pp

Reeves, R. R., A. J. Read and D. W. Johnston. 2006. Report: Workshop on Research Needs for the Conservation and Management of Cetaceans in the Pacific Islands Region. Pacific Islands Fisheries Science Center, PIFSC Special Publication, SP-06-002

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

**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