

Papahānaumokuākea Marine National Monument
SPECIAL OCEAN USE 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:

NOAA/Inouye Regional Center
NOS/ONMS/PMNM/Attn: Permit Coordinator

1845 Wasp Blvd, Building 176

Honolulu, HI 96818

nwhipermit@noaa.gov

PHONE: (808) 725-5800 FAX: (808) 455-3093

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.

*****Please see attached additional document that includes officially reviewed/ approved dive plan, underwater risk assessment and emergency evacuation.******

Summary Information

Applicant Name: Tobias Nowlan

Affiliation: Producer, Silverback Films, Netflix Production

Permit Category: Special Ocean Use

Proposed Activity Dates: 20th May – 20th July (conservative window to include duration of 26 day shoot)

Proposed Method of Entry (Vessel/Plane):

Searcher (<http://searcherhawaii.com/>)

IMUA (under Co-Manager's permit PMNM-2021-001)

Proposed Locations: Southeast Island, Pearl & Hermes Atoll

Laysan Island

East Island, Tern Island, French Frigate Shoals

Estimated number of individuals (including Applicant) to be covered under this permit: 5

Estimated number of days in the Monument: Estimated 20 days filming + 6 days' travel

Description of proposed activities: (complete these sentences):

- a.) The proposed activity would document the development and fledging of Laysan and/ or black-footed albatross on film, as well as any possible interactions with tiger sharks, as part of a film showcasing the extraordinary journeys undertaken by these North Pacific migratory species.

- b.) To accomplish this activity, we would film the pre-fledging development and final interactions between parent and chick (before fledging) from shore using long lens and stabilized hand-held cameras. We would then film the fledging behavior from shore with powerful long lenses and capture an element of both fledging and shark-albatross

interaction from the water surface level (from the boat) and underwater. The shoot will predominantly focus on documenting the important moment where black-footed and Laysan albatrosses leave the beach on their maiden voyage (their first flight), and as such the majority of filming will be conducted from a respectful distance away from the chicks on land using the longest lenses in the industry (the use of these lenses enables us to maximize our distance from our subjects while minimizing disturbance). One lesser element of the sequence may require filming of albatross fledging behavior from within the water. This will be using closed circuit rebreather systems (currently consulting all experts closely who have worked at the location and this has been proposed as the safest, least-disturbing and most effective course of action; please see detailed underwater plan).

- c.) This activity would help the Monument by demonstrating to a huge global audience the importance of these islands as the principal outpost for the most extraordinary of all of Earth's migratory species. This series will highlight the most important locations on the planet for the world's most notable and threatened migratory animals. These two albatross species (Laysan and black-footed) and the tiger shark are three such species, and among the world's most accomplished travelers. Atolls in the Hawaiian National Monument, including Pearl & Hermes Atoll and French Frigate Shoals are unique in that they host each of these species as important breeding and/ or staging grounds, providing a rare and exceptional platform for interactions that occur nowhere else on the planet. We are eager to reveal the regional and global rarity and enormous significance of this remote and vulnerable location, as well as to feature the challenges that the colony faces in the 21st Century (including the effects of global climate change), demonstrating just what is at stake, and how important it is that outposts such as these are supported and protected. Principally, however, we wish to demonstrate the ecological significance of the Monument and to document the remarkable lives and journeys of these protected species.

Other information or background:

Our Planet on the Move is an exciting new landmark series from Netflix, and is the sequel to their globally renowned series *Our Planet*, narrated by Sir David Attenborough, released in 2019 – arguably the most ambitious environmental film impact project ever designed. *Our Planet on the Move* is the next instalment in this franchise, and in 2023 will be released in over 190 countries worldwide, with a global reach of hundreds of millions of people. The series specifically looks at animal movements and migrations – for at any given moment on our planet, billions of animals are on the move. For many it's a migration, an annual trek that will take them thousands of miles across land, sea and air; for others, survival simply depends on never staying in one place, or setting out to find a new territory. Every journey has its own challenges, not least in this modern world where our travelers' routes are blocked, impeded and boxed in, and as habitats are destroyed across ancestral migration paths.

Our North Pacific albatrosses (we will feature black-footed and Laysan albatrosses) are perhaps the most important characters in the entire series, returning multiple times throughout the series as the world's most accomplished travelers. The Laysan albatross, as the oldest living bird on

Earth, may cumulatively travel more miles in its lifetime than any other bird (and almost any other animal), earning this title as the most impressive of all ocean travelers. We will follow our albatross characters from the reunion of their parents after a year at sea, their lonely, challenging life on the nest as young chicks, and the all-important first flights as they fledge.

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): NOWLAN, TOBIAS, E

Title: MR

1a. Intended field Principal Investigator (See instructions for more information):
PRODUCER & DIRECTOR: TOBY NOWLAN

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

Phone: [REDACTED]

Email: [REDACTED]

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

3. Affiliation (institution/agency/organization directly related to the proposed project):
SILVERBACK FILMS, PRODUCING 'OUR PLANET ON THE MOVE' FOR NETFLIX

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):

TOBY NOWLAN (Producer, Director, Dive Supervisor)

KYLE MCBURNIE (Lead underwater cinematographer)

MATTHEW ROBINSON (lead topside/ surface-based cinematographer)

SAFETY DIVER (TBC, safety diver)

2 X RESOURCE MONITORS/ AGENCY ASSISTANTS

CAPT JONATHAN LITTENBERG (Captain)

GILLIAN WY SOCK (boat crew)

JULIA HARTL (boat crew)

(1-2 extra crew, TBC)

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 checked="" type="checkbox"/> French Frigate Shoals	<input checked="" type="checkbox"/> Land-based	<input checked="" 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 checked="" type="checkbox"/> Laysan Island	<input checked="" type="checkbox"/> Land-based	<input checked="" 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 checked="" type="checkbox"/> Pearl and Hermes Atoll	<input checked="" type="checkbox"/> Land-based	<input checked="" 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			

NOTE: Shallow water is defined by water less than 100 meters in depth.

Remaining ashore on any island or atoll (with the exception of Sand Island at Midway Atoll and field camp staff on other islands/atolls) between sunset and sunrise.

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

Location Description:

South East Island, Pearl & Hermes Atoll Laysan albatross colony

Laysan Island

East Island & Tern Island albatross colony, French Frigate Shoals

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 (TBD with Searcher; see details later)
- 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-circuit SCUBA diving within any Special (currently under advisement as we best-plan the shoot)

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

The purpose of the shoot is to film the most significant segment of this newest of Netflix wildlife TV series which focusses on animal journeys (*Our Planet on the Move*). The North Pacific albatrosses are the most important characters in the series. The albatrosses feature in over half of the series across multiple films, as we follow their development from parental courtship to the challenges faced by young chicks to fledging. The migratory species that embark on the most significant journeys across the series are the tiger shark and the Laysan albatross and as such, these species are star characters. At Peal & Hermes Atoll (or French Frigate Shoals as back-up shoot) we hope to capture on film the most important chapter of these star characters' journeys; the moment of fledging for the Laysan and black-footed albatross chicks (and the moment they embark on a lifetime of being on the move), and tiger sharks which have traveled across an ocean to arrive at French Frigate Shoals and Peal & Hermes specifically for this moment. The footage we hope to capture at PH or FFS will form the most significant segment of the series, both in terms of screen-time and story, and is therefore arguably the most important shoot of the series.

*Considering the purpose of the proposed activities, do you intend to film / photograph federally protected species? XYes No

If so, please list the species you specifically intend to target.

Only **green sea turtle** (currently listed by the ESA (26th Oct 2020))

For a list of terrestrial species protected under the Endangered Species Act visit:

<http://www.fws.gov/endangered/>

For a list of marine species protected under the Endangered Species Act visit:

<http://www.nmfs.noaa.gov/pr/species/esa/>

For information about species protected under the Marine Mammal Protection Act visit:

<http://www.nmfs.noaa.gov/pr/laws/mmpa/>

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 crew will maintain a respectful distance from any filming subject. By using the industry's highest resolution cameras and the industry's most powerful long lenses (Canon CN20 50-

1000mm), we will be able to film intimate, natural behavior of our subjects whilst keeping our distance and minimizing disturbance. It is imperative that our series captures only natural behavior that is uninfluenced by our presence in any way. The crew are highly experienced in monitoring and observing animal behavior from afar whilst working in the field and as such would be able to quickly detect any signs of stress (in instances where subject species are particularly sensitive and prone to disturbance even when observed from afar). The crew have worked with multiple threatened seabird and shark species on many occasions and are highly experienced at filming these subjects effectively while maintaining minimal disturbance.

We will be living on-board our charter vessel for the duration of the shoot (on board which we will also charge all batteries, download media, and organize equipment), and as such our impact and footprint on shore will be almost zero. Whilst filming on land, equipment will be kept to a bare minimum – for the majority of the time we will be using the very simple but highly effective set up of a tripod, a RED camera, and a Canon CN20 lens. We will endeavor to minimize the amount of equipment and personnel on shore at all times. If we're able to access Laysan via the IMUA, we'll camp ashore with USFWS staff until the Searcher picks us up within 7 days of being dropped off.

At no point will we seek to touch an animal on shore or in the water. We will not remove anything from the island or the Monument, and will remove everything we bring with us. We will only approach animals on land under the supervision/ guidance of our Monument monitors, and will not approach any marine mammals at any time – either on land or in the water. We will follow Monument Biosecurity protocols both on land and in water.

We may wish to film a few shots of green turtles hauling up on shore to rest/ on the beach in preparation to nest. This would be under the advisement of attending Monument resource monitors and we would closely follow Monument protocols.

Using scuba diving to film the underwater segment of the sequence will be done with extensive planning, use of a safety diver and dive supervisor, with several sets of eyes above water and below on the crew and the subject at all times (see attached detailed Dive plan summary,).

The crew are the most experienced videographers in the industry, having made the highest-end wildlife films for the BBC, National Geographic and Netflix over the last 20 years (including *Planet Earth*, *Planet Earth II*, *Blue Planet* and *Our Planet*). We have extensive experience working in pristine, fragile and remote locations that are especially sensitive to disturbance. We only work with crew that show the utmost respect to any location where they film and to any species they work with or near. The purpose of the series is to educate a huge global audience about the fragility, complexity and vulnerability of the most significant migrations, locations and animal gatherings on Earth. As such, it is a key remit that the effects of our series and our output help increase protection and conservation of our natural environment, and have no negative impact on the places or species we film.

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 film only hopes to document, celebrate, and showcase the natural diversity, richness and ecological significance of the Monument.

We are greatly looking forward to the Cultural Resources briefing upon arrival, and will enjoy learning, appreciating and respecting local cultural knowledge and teachings. We consider being aware of cultural context and history an imperative aspect of working in remote locations.

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.

The remote outpost breeding locations for these two albatross species, the albatross colonies' newfound vulnerability from climate change-induced 'washover' events, and the predation behavior observed by tiger sharks make these atolls the only possible locations on the planet to film the story. The Hawaiian National Monument is unique in that it is the only location on the planet where tiger sharks have been regularly recorded preying on albatross chicks. As such, it is the only possible location where we can hope to film possible interactions between these remarkable long-distance migrants. Pearl & Hermes Atoll is currently undoubtedly the best location to observe and hope to film this predation behavior, as it occurs very close to shore there.

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

We anticipate no adverse impacts on the island's resources or ecological integrity. Indeed, we only hope to visually showcase its importance and newfound vulnerability in the face of an increased annual frequency of storms and rising sea levels.

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

We will be present for a section of pre-fledging development and the duration of the peak albatross chick fledging window, as advised by biologists and experts from the Monument, and as informed by a small team that was present at the island this year. We will not stay longer than is necessary to capture this behavior on film. We can gladly adjust the filming dates of the shoot if need be following further discussions with the PMNM, though we are closely planning the dates by consulting with biologists Beth Flint, Jon Plissner, Jon Brack and Hope Ronco, other ornithologists and Monument staff (including Daniel Link and Amanda Boyd), and with other filmmakers, captains, and divers who have worked in the area.

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

Please see attached CV (resume). The crew have over 50 years' combined experienced filming wildlife in remote and pristine locations, including working with both Endangered seabird and shark species. Our award-winning cameraman has spent his life filming sharks underwater (as well as running a successful shark-diving company) and is based in Hawaii (see further details on Kyle's experience below). The producer has worked with Endangered albatross and shark species in many locations around the globe. We have filmed rare and threatened species in remote locations for the highest-end landmark wildlife TV series that have been broadcasted over the last 10 years, including *Planet Earth II*, *Our Planet*, and most recently Sir David Attenborough's *A Perfect Planet* (to be broadcasted in January 2021). Our teams have filmed tiger sharks and albatrosses at French Frigate Shoals several times for some of the major series over the past 15 years, including the BBC's *South Pacific* and the *Blue Planet* (though we anticipate this series will have an even greater global reach and effect than all of these series). The producer also leads research expeditions in search of the planet's most Endangered and threatened species and is used to working in remote locations with conservation and low-impact research as top priorities.

Please see attached detailed Dive Plan and Underwater Risk Assessment for further information.

Kyle McBurnie (underwater cameraman) further info:

Kyle McBurnie is an underwater wildlife cameraman with ten years of experience filming and running marine expeditions specializing in shark-diving. For five years Kyle co-owned and operated a vessel running blue and mako shark diving trips in San Diego (2013-2018) during which he operated as a USCG certified captain to responsibly and respectfully view blue and mako sharks in the water off the California coast. Recent work includes National Geographic's America Series, Netflix's *Our Planet*, BBC's *Planet Earth 3* and *Life of Mammals 2*, and *Serengeti Rules*.

Kyle worked underwater with large pelagic sharks hundreds of times over the course of the past 10 years. This experience includes blue and mako sharks off San Diego, bull sharks in Fiji, bull sharks in Mexico, Galapagos sharks in Hawaii, tiger sharks in Hawaii and extensively with great white sharks in Guadalupe and California (all of these examples were with a camera and without a cage). During these shark-diving experiences, Kyle was either the primary camera operator (most instances) or lead in-water safety diver (for white sharks at Guadalupe, makos and pelagic hammerheads off San Diego, and tigers in Hawaii). Kyle used chain mail suits during specific instances, principally with large blue and mako sharks during large feeding events. He is a PADI certified Open Water Scuba Instructor, a rEvo certified rebreather diver with 150+ hours logged underwater, an AAUS certified scientific diver (currently with Scripps Institution of Oceanography), and has acted as DSO for various productions and has helped manage safety for diving expeditions in tropical areas, as well as temperate California waters all the way to managing dive plans and safety in the Aleutian Islands on a REMUS-oriented scientific

expedition. Kyle is incredibly experienced not only at filming large, pelagic sharks underwater, but in training people how to safely interact with these shark species underwater. Kyle has over 500 hours filming marine animals underwater, and has spent his career learning and understanding shark behavior in order to operate safely within their presence, and has never had an incident in the water.

Please see attached detailed Dive Plan and Underwater Risk Assessment for further information.

Matthew Robinson (Topside/ surface cameraman): Matthew is a highly experienced wildlife cameraman who has recently specialized in filming seabirds. His work has been included in multiple high-end BBC productions including *Springwatch*, *Autumnwatch*, and National Geographic productions including *Okavango: A flood of life*. Other specialties include aerial, timelapse, motion-controlled and stills photography. Matthew will be filming the topside predation behavior and pre-fledging portraiture of the albatross chick (as well as parental visits for the final feeds).

Toby Nowlan (Producer/ Director): For the last 10 years Toby has worked on the most successful and widely seen landmark natural history productions, including BBC *Planet Earth 2*, Netflix *Our Planet*, and most recently the BBC's *A Perfect Planet* (currently being broadcasted). Before working in natural history television Toby led research expeditions around the planet, focusing on conservation of the world's most Endangered species, including award-winning expeditions to photograph the Critically Endangered Javan rhino and the vaquita porpoise. He was shortlisted for the Rolex Young Laureates Award for his conservation work on Indonesian coral reefs, and was awarded the BBC Young Environmental Journalist of the Year. Toby is a passionate diver, conservationist, and film-maker.

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 Netflix series is very well financed; we have appropriately high budgets in order to allow us to achieve the most ambitious natural history filming in the industry. This allows us to use the very best resources and to devote adequate time to being in the field in order to capture unique and entirely natural behavior.

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.

As discussed above we will minimize the amount of filming equipment taken ashore. We will film from the boat as well as on land and in the water. We will use the highest calibre equipment in the industry that we currently employ to film wildlife across the globe in a very wide range of habitats. Both by using the latest, lightest weight technology and by thinking carefully about minimizing our equipment (keeping it appropriate to the scale of the shoot given the small crew size and sensitivity of the location), we will further reduce any impact of our presence during the

shoot. All filming will strictly avoid all contact and interference with natural subjects or processes.

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

Yes

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

We have not been refused any other permits for any other sequence in the series, and I can gladly demonstrate many other instances in similar locations around the globe where we have filmed our natural history subjects with the highest level of ethical adherence, cooperation with local partners, strict planning and adherence to safety protocols, benefits to local conservation projects/ partners.

8. Procedures/Methods:

We would typically film from the boat (with a small, gyro-stabilized gimbal), from the shore (with a RED 8K cinema camera, a CN20 (Canon 50-1000mm) lens and a tripod), and from within the water using rEvo diving with a smaller cinema camera (Possibly Panasonic S1H) in a waterproof housing. When filming from the small boat or Zodiac, a small-stabilized arm will be used as the Zodiac is drifting or moored to a single spot (no motor running).

The camera and underwater housing system used will be a RED Gemini with Nauticam housing. Additionally, we plan to bring a small Panasonic S1H camera system to use on a pole-cam. This would be operated from the RIB and would provide us the option of obtaining some of the underwater footage without entering the water.

The crew plans to stay on The Searcher overnight (using the vessel as a liveaboard) for the duration of the shoot, with the exception if a small crew is able access Laysan via the Imua or a small crew will camp on Southeast Island at P&H with the Resource Monitors if wildlife activity takes place just after sunrise. If camping is required at Laysan and Pearl & Hermes, only the minimal number of people needed for the shoot will stay ashore at night. Camping crews will follow strict biosecurity measures. All crewmembers listed request permission to come ashore each day for a short period in consulting with the Monument resource monitor.

Please see attached detailed Dive Plan and Underwater Risk Assessment for further, detailed information.

Topside filming:

This will be combined from onshore filming and filming from the Zodiac. This will allow our topside cameraman to film (using RED 8k camera on Atlas 40 head and Carbon Fibre tripod) the

albatrosses fledging and the tiger shark predation from above the surface. This methodology was used on all major BBC filming shoots; these crews have advised us that this is by far the most effective and least disturbing way of filming the behavior from above the surface.

We have consulted extensively with all of the BBC film crews that previously filmed the same behavior at French Frigate Shoals for major BBC wildlife landmark series. We have taken the learning and knowledge gained from their experiences [with the tiger sharks and albatrosses at FFS] and used them to construct what we believe to be the most well-informed shoot plan, built on their years of learning and experience.

We would like to also film a small amount of footage of green turtles hauled out on shore with our long lenses from a respectable distance for another segment of the series (in which green turtles are another ‘star travelling character’) whilst working on shore on Southeast Island, Pearl & Hermes (under advisement of Monument staff and protocols).

In addition to principle set up (tripod and long lens), Matthew and Kyle may use one of several very compact stabilized systems (e.g. handheld Ronin S or slider) to film some details on shore.

Chick development filming:

We would like to also film the earlier chapter of the Laysan albatross chick's story. This will include filming of the albatross chick on or near the nest for several weeks once or at several points between March and July (depending on the advice of lead albatross researchers). Currently the most likely location for us to film this part of the story is Laysan Island, as part of the same shoot to film fledging and predation. The focus would be to film the chick on its own while its parents are out at sea foraging, the chick as part of the entire colony of many chicks, and final parental interactions with the chick (when the parents return with food). Filming of this part of the story will be achieved using a principle topside long lens camera work (to cover most of the behavior and interaction with parents from a distance) and stabilized tracking techniques using compact handheld systems for details on shore. Filming near the chicks would at all times be under the advisement of the official Park Monitors with whom we will be supervised throughout the shoot, and will welcome their guidance throughout. This section of the film will be very likely filmed at Laysan Island, and possibly again at a later date (perhaps in 2022) at other Laysan colonies in the monument (such as Midway Atoll or Kae’na Point under separate permits).

Transit and Access to Laysan Island & Pearl & Hermes atoll:

We aim to travel with our crew on The Searcher from Honolulu to Laysan Island in late May/early June 2021 (unless the IMUA is able to drop off on Laysan with USFWS staff on the June 17th Imua trip). We hope to then be stationed there for 4 -14 days to film the pre-fledging behavior of the Laysan albatross chicks, including the final visits from the parents to feed their chicks and all challenges that the chicks face during this period. The filming during this period will only be topside, with no diving filming. (If the IMUA drops off 2-3 crew to film at Laysan, the Searcher will pick up the crew on the way to Pearl and Hermes). We then aim to travel on to Pearl & Hermes Atoll to film the fledging behavior of the chicks and predation of the chicks by

tiger sharks, with both a topside team and an underwater team. We hope to be stationed off Pearl & Hermes atoll for 5-25 days' filming. During this time, the crew will be staying on board The Searcher, using it as a liveaboard vessel, and using a RIB to come ashore each day to film the albatrosses and tiger sharks.

Anchoring & mooring at Pearl & Hermes:

Captain Jon Littenberg has spoken to other boat operators who are very familiar with anchoring in the area. They are confident that The Searcher will be able to access the lagoon at Pearl & Hermes (through the ship channel) where we can drop anchor. Depending upon what a visual inspection determines upon entry to the lagoon, we would either take a hard right or left immediately upon entering the lagoon, and then once out of the current flow of the channel, find a suitable spot for anchoring. We would go the minimal safe distance into the lagoon. Jon anticipates this would be probably just northwest of bird island. We would also like to request permission to set up a temporary mooring in the event that we are unable to access the lagoon and anchor. Jon has done this at other locations throughout the moment, whereby he locates a suitable site (ideally a large rock or volcanic protrusion, that has no coral growth on it, in an area clear of other coral, in relatively shallow water), then ensnare the rock with a cable that leads to our anchor line. It is often a less disruptive method to anchor the vessel as we can get a precise placement (compared to using the traditional anchor method, which can potentially drag in shifting winds or currents).

Possible shared access to Laysan/ Pearl & Hermes:

There is a National Monument/ FWS/ NOAA expedition going from Honolulu to Midway Atoll on June 17th, returning June 28th. It may be that we are able to collaborate with the expedition and coordinate the sharing of transport for our outbound journey as this expedition passes Laysan Island and Pearl & Hermes Atoll; discussions are ongoing with Monument officials and biologists as to whether this may be a possibility.

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):
NONE/ NA

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?

N/A

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

No

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

We will be using a local camera operator and working with a local charter vessel with local crew. We are combining the filming of multiple sequences on a single shoot (story of albatross fledging and albatross development/ parental interactions to economize and make the most of our presence in this remote location) and avoid the necessity for an entire second return shoot.

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:

The series will be filmed throughout 2021 and early 2022. It will be edited in the summer of 2022 and broadcasted on Netflix in 2023.

Audience viewing figures for the prequel to this series achieved a global reach of hundreds of millions worldwide, and the series was streamed in 190 countries. It is hoped and anticipated that this series will achieve a similar global reach.

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

This list will be subject to change, but a likely basic list of the main equipment would be as follows:

RED 8K camera with media
V-Lock batteries (8)
GATES underwater housing
Canon CN20 lens
Several wide Canon EF lenses (e.g. Canon 24mm, 16-35mm)
Panasonic S1H (with Salty Surf underwater housing)
Batteries and charging stations for each camera
Carbon fibre medium length tripod
Small Manfrotto video tripod
Atlas 40 tripod head
Small gimbal (e.g. Ronin S)
Small slider (e.g. Edelkrone Pro)
Mavic Pro 2
CCR rebreather dive gear x 2
Laptop and drives (to download media)

Vessel details:

Searcher
Captains' name: Jonathan Littenberg, Gillian Wysock
IMO#:8981884
Vessel ID#: 1103056
Flag: USA
Vessel type: steel trawler
Call sign: WDA6100
Embarkation port: Kewalo Basin, HNL, Hawaii
Last port vessel will have been at prior to this embarkation: Kewalo Basin, HNL HAWAII
Length: 96'
Gross tonnage: 105
Total ballast water capacity volume (m3): n/a
Total number of ballast water tanks on ship: n/a
Total fuel capacity: 9600 gal
Total number of fuel tanks on ship: 6
Marine Sanitation Device: MSD Headhunter marine
Type: II

Total ballast water capacity volume (m3): n/a
Total number of ballast water tanks on ship: 0
Total fuel capacity: 9600 us gal
Total number of fuel tanks on ship: 6
Marine Sanitation Device: Yes, headhunter marine
Type: II

National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS) name, type and number:

thrane and thrane sailor

VMS Email

Inmarsat ID#

Personnel, gear and materials will be transported to shore using the following tenders/skiffs and specific types of motors:

Zodiac mark v (90 horsepower honda), Zodiac Mark V (60 horsepower evinrude)

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

All black and grey waters shall be stored in holding tanks until our departure from Monument waters. All rubbish and recycling shall be securely stored aboard for proper disposal upon our return to Honolulu.

Other fuel/hazardous materials to be carried on board and amounts: small amounts of gasoline for the outboards on the skiffs, approximately 30 gal.

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

N/A

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

Relevant series the crew have worked on or are currently working on and are yet to be broadcasted:

Our Planet (Netflix)
Explorers in the Field (National Geographic)
Queens (National Geographic)
America (National Geographic)
Planet Earth II (BBC)
Blue Planet II (BBC)
A Perfect Planet (BBC)
South Pacific (BBC)
Castaways (DCI)
North America (DCI)
Dancing with the Birds (Netflix)
Planet Earth (BBC)
Wild Arabia (BBC)

Pole to Pole (BBC)
Shark Week (DCI)

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.



21st January 2021

Signature

Date

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

NOAA/Inouye Regional Center
NOS/ONMS/PMNM/Attn: Permit Coordinator
1845 Wasp Blvd, Building 176
Honolulu, HI 96818
FAX: (808) 455-3093

DID YOU INCLUDE THESE?

- X Applicant CV/Resume/Biography
- X Intended field Principal Investigator CV/Resume/Biography
- X Electronic ~~and Hard Copy~~ of Application with Signature
- X Statement of information you wish to be kept confidential (**included below**)
- N/A Material Safety Data Sheets for Hazardous Materials

STATEMENT OF INFORMATION REQUESTED TO BE KEPT CONFIDENTIAL:

The broadcaster (Netflix) would be grateful if all information regarding the mention of Netflix, of the series name/ title, any of the series’ intentions with regards to this shoot and the locations we hope to film, broadcast dates, mentions of budgets, are kept confidential if possible. The series is confidential, and Netflix would gratefully appreciate it if this could be respected. If possible, please also keep the ‘More info/ background’ section confidential. Thank you.