

 <p><b>SCIENTIFIC RESEARCH AND COLLECTING PERMIT</b></p> <p>Grants permission in accordance with the attached general and special conditions</p> <p><b>United States Department of the Interior National Park Service</b></p> <p><b>Point Reyes</b></p>	<p><b>Study#:</b> PORE-00673</p> <p><b>Permit#:</b> PORE-2024-SCI-0023</p> <p><b>Start Date:</b> Jul 01, 2024</p> <p><b>Expiration Date:</b> Nov 30, 2025</p> <p><b>Coop Agreement#:</b></p> <p><b>Optional Park Code:</b></p>
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<b>Name of principal investigator:</b> <b>Name:</b> Dr Peter Oboyski <b>Phone:</b> 510-847-0360 <b>Email:</b> poboyski@berkeley.edu								
<b>Name of institution represented:</b> University of California - Berkeley								
<b>Additional investigators or key field assistants:</b> <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;"><b>Name:</b> Sarah Pike</td> <td style="width: 33%;"><b>Phone:</b> 5106430804</td> <td style="width: 33%;"><b>Email:</b> sapike415@berkeley.edu</td> </tr> <tr> <td><b>Name:</b> Lauren Tham</td> <td><b>Phone:</b> 5106430804</td> <td><b>Email:</b> laurentham@berkeley.edu</td> </tr> </table>			<b>Name:</b> Sarah Pike	<b>Phone:</b> 5106430804	<b>Email:</b> sapike415@berkeley.edu	<b>Name:</b> Lauren Tham	<b>Phone:</b> 5106430804	<b>Email:</b> laurentham@berkeley.edu
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<b>Study Title:</b> California Insect Barcoding Initiative - Field Surveys								
<b>Purpose of study:</b> In collaboration with several entomology departments and museums across California, the Essig Museum is creating a DNA barcode library of all insect species across the state and conducting baseline inventory surveys for the purpose of long term monitoring of insect populations in the face of climate change, invasive species, land use change, and other environmental perturbations. DNA barcodes resulting from these collections will be publicly available and contribute to rapid identification systems, including identifying species through passive methods like environmental DNA sampling. Likewise, specimens will be available for analyses related to changes in species distributions, evolutionary relationships to similar species, and improving land management practices.								
<b>Subject/Discipline:</b> Invertebrates (Insects, Other)								
<b>Locations authorized:</b> Specific locations will be chosen after an orientation to the park's habitats and in consultation with park staff. Preferred locations will those that represent various habitats within the park, including coastal scrub, douglas fir forest, riparian forest, and strand habitats.								
<b>Transportation method to research site(s):</b> Access will be by vehicle where appropriate roads are available, and by foot otherwise.								
<b>Collection of the following specimens or materials, quantities, and any limitations on collecting:</b> <p>*** All specimens will remain in the United States for analysis and identification. If appropriate arrangement with US Fish and Wildlife Service are made, specimens collected from malaise traps may be sent to Barcode of Life Data System (BOLD) for analysis. All specimens sent out for identification will be returned to the Essig Museum of Entomology for long-term storage.</p> <ul style="list-style-type: none"> <li>- Duplicate collecting limited to 5-10 specimens per species</li> <li>- Specimens cannot be loaned outside of the Essig for more than 2 years for identification by other experts</li> <li>- The NPS must be the organization to initiate the loan paperwork for the identification loans and must be informed when specimens leave and are returned to the Essig.</li> </ul>								
<b>Name of repository for specimens or sample materials if applicable:</b> Repository type: Permanently retained in National Park Service collection, maintained in one or more non-NPS repositories identified in attached Appendix A (complete and submit an Appendix A for each proposed repository) (Essig Museum of Entomology) Objects collected: Insects, arachnids, centipedes, millipedes, and terrestrial crustaceans (no vernal pool or other aquatic crustaceans).								
<b>NPS General Conditions for Scientific Research and Collecting Permit (available at the RPRS HELP page) apply to this permit. The following specific conditions or restrictions, and any attached conditions, also apply to this permit:</b> RPRS STANDARD CONDITIONS								

1. **SAFETY:** Working in the field and on the coast can be dangerous. Please ensure your team has a safety and communication plan.
2. **CARRY PERMIT WHILE WORKING AND LEAVE RESEARCH PLACARD ON DASHBOARD OF VEHICLE.** PARKING AREAS ARE CLOSED FROM MIDNIGHT - 6 AM. Contact Ben Becker if you need to park overnight.
3. **ALL COLLECTIONS MUST BE MADE WITH MINIMAL IMPACT TO THE PARK'S RESOURCES AND VISITORS.** Collect as few specimens as practical; in no case should the continued survival of a population of any species be jeopardized by your activities.
4. **DO NOT WORK WITHIN 50m OF PARK RESIDENCES WITHOUT PRIOR PERMISSION.**
5. **AVOID** introducing weed seeds and propagules. Before entering the park, clean equipment, shoes and clothing that may be contaminated with non-native plants or seeds.
6. **ALL TRAPS, TAGS, ETC., WHICH ARE TEMPORARILY LEFT IN THE FIELD MUST BE MARKED WITH YOUR PERMANENT STUDY NUMBER** (for example: PORE-0019). They must be as unobtrusive as possible and must not interfere with visitor enjoyment of the park as a natural area.
7. **PLEASE CONDUCT YOUR ACTIVITIES OUT OF SIGHT OF HEAVILY USED VISITOR AREAS.** Please work on weekdays when possible.
8. **YOU ARE REQUIRED TO SUBMIT AN ONLINE REPORT OF YOUR RESEARCH ACTIVITIES EACH YEAR**, and you must mail two copies of your final research report and any publications to our office upon completion of your project.
9. **YOU MUST DELIVER GPS POINTS** (NAD83 UTM Zone 10) of any permanent or temporary research plots to [ben\\_becker@nps.gov](mailto:ben_becker@nps.gov) within 7 days of establishing plots. Please include your permit number and name with the email.
10. **PLASTIC FLAGGING SHOULD BE USED SPARINGLY AND MUST BE MARKED WITH YOUR STUDY NUMBER.** It must be out of sight of trails and roads during all seasons, and it must be removed upon completion of your research project.

#### **SPECIMEN COLLECTION:**

##### **Requirements Related to Specimens**

Researchers authorized to collect specimens for permanent retention need to contact the park's curator for instructions, via telephone or e-mail, before collecting specimens, before preparing and submitting catalog data, and before submitting specimens and associated records. Researchers must follow these steps for managing specimens and records:

1. If you are collecting specimens that will be retained permanently at an NPS or other facility, contact Museum Curator (415-464-5287, [virginia\\_bones@nps.gov](mailto:virginia_bones@nps.gov)) to receive collection information prior to conducting research in the park.
2. Identify a repository for the permanent retention of the specimens and provide contact information for the responsible collection manager. Acceptable repositories include museums, universities, and Point Reyes National Seashore (contact curator to discuss). Specimens retained at other repositories are done so as loans only and remain the property of the NPS. Loan paperwork will be required at the completion of the project.
3. Collect, identify, and properly house and label specimens. Please contact the park's curator for specific guidance regarding your specimens.
4. Catalog specimens in a standard template provided by the park using accession and catalog numbers assigned by the park's curator.
5. Submit a copy of all final reports, publications, and theses/dissertations produced as a result of the permitted project. Copies of associated data (including field notes, maps, slides, photographs, charts/graphs, tabular and GIS data with associated metadata) are also requested to be submitted to the park. These materials will be permanently archived in the park's museum collection.

#### **FOR DIGGING:**

If during excavation of the test pits any archaeological remains are observed the applicant shall cease excavation, cover the remains, and notify Paul Engel, Park Archaeologist, as soon as possible at (415) 464-5287. Archaeological remains may consist of but are not limited to: human remains, shell midden, ground or chipped stone artifacts, building foundations, and/or a concentration of historic trash that does not appear to be recent in nature. Shell midden in this area typically consists of dark, greasy, friable soil with a high concentration of whole or partial mussel and/or clam shells and may also contain whole or partial skeletal remains of birds and/or mammals.

#### **Summary of permitted field methods and activities:**

A complement of several collection methods will be used that target the specific behaviors of various species (eg. crawling, flying, night active, etc.). Principal methods include malaise (tent) traps, pitfall traps, UV lights, and netting. Some traps are in place for several days (eg. malaise, pitfall), while other methods are immediate, short term methods (eg. UV lights, netting, hand collecting). Each of these methods will be employed judiciously with sensitivity to habitat fragility and disturbance, and the rarity of the targeted species, so as not to impact ecosystem and population dynamics. Sampling will occur within a few days each month during the activity

period of the insects (generally late February through early November).

**Recommended by park staff(name and title):**

**Reviewed by Collections Manager:**

Yes \_\_\_\_\_ No \_\_\_\_\_

**Approved by park official:**

**Date Approved:**

**Title:**

Superintendent

**I Agree To All Conditions And Restrictions Of this Permit As Specified**  
(Not valid unless signed and dated by the principal investigator)

\_\_\_\_\_  
(Principal investigator's signature)

\_\_\_\_\_  
(Date)

**THIS PERMIT AND ATTACHED CONDITIONS AND RESTRICTIONS MUST BE CARRIED AT ALL TIMES WHILE  
CONDUCTING RESEARCH ACTIVITIES IN THE DESIGNATED PARK(S)**



# GENERAL CONDITIONS For SCIENTIFIC RESEARCH AND COLLECTING PERMIT

United States Department of the Interior  
National Park Service

1. **Authority** - The permittee is granted privileges covered under this permit subject to the supervision of the superintendent or a designee, and shall comply with all applicable laws and regulations of the National Park System area and other federal and state laws. A National Park Service (NPS) representative may accompany the permittee in the field to ensure compliance with regulations.
2. **Responsibility** - The permittee is responsible for ensuring that all persons working on the project adhere to permit conditions and applicable NPS regulations.
3. **False information** - The permittee is prohibited from giving false information that is used to issue this permit. To do so will be considered a breach of conditions and be grounds for revocation of this permit and other applicable penalties.
4. **Assignment** - This permit may not be transferred or assigned. Additional investigators and field assistants are to be coordinated by the person(s) named in the permit and should carry a copy of the permit while they are working in the park. The principal investigator shall notify the park's Research and Collecting Permit Office when there are desired changes in the approved study protocols or methods, changes in the affiliation or status of the principal investigator, or modification of the name of any project member.
5. **Revocation** - This permit may be terminated for breach of any condition. The permittee may consult with park employees to clarify issues resulting in a revoked permit and the potential for reinstatement.
6. **Collection of specimens (including materials)** - No specimens (including materials) may be collected unless authorized on the Scientific Research and Collecting permit.

The general conditions for specimen collections are:

- Collection of archeological materials without a valid Federal Archeology Permit is prohibited.
- Collection of federally listed threatened or endangered species without a valid U.S. Fish and Wildlife Service endangered species permit is prohibited.
- Collection methods shall not attract undue attention or cause unapproved damage, depletion, or disturbance to the environment and other park resources, such as historic sites.
- New specimens must be reported to the NPS annually or more frequently if required by the park issuing the permit. Minimum information for annual reporting includes specimen classification, number of specimens collected, location collected, specimen status (e.g., herbarium sheet, preserved in alcohol / formalin, tanned and mounted, dried and boxed, etc.), and current location.
- Collected specimens that are not consumed in analysis or discarded after scientific analysis remain federal property. The NPS reserves the right to designate the repositories of all specimens removed from the park and to approve or restrict reassignment of specimens from one repository to another. Because specimens are Federal property, they shall not be destroyed or discarded without prior NPS authorization.
- Each specimen (or groups of specimens labeled as a group) that is retained permanently must bear NPS labels and must be accessioned and cataloged in the NPS National Catalog. Unless exempted by additional park - specific stipulations, the permittee will complete the labels and catalog records and will provide accession information. It is the permittee's responsibility to contact the park for cataloging instructions and specimen labels as well as instructions on repository designation for the specimens.
- Collected specimens may be used for scientific or educational purposes only, and shall be dedicated to public benefit and be accessible to the public in accordance with NPS policies and procedures.
- Any specimens collected under this permit, any components of any specimens (including but not limited to natural organisms, enzymes or other bioactive molecules, genetic materials, or seeds), and research results derived from collected specimens are to be used for

scientific or educational purposes only, and may not be used for commercial or other revenue - generating purposes unless the permittee has entered into a Cooperative Research And Development Agreement (CRADA) or other approved benefit - sharing agreement with the NPS. The sale of collected research specimens or other unauthorized transfers to third parties is prohibited. Furthermore, if the permittee sells or otherwise transfers collected specimens, any components thereof, or any products or research results developed from such specimens or their components without a CRADA or other approved benefit-sharing agreement with NPS, permittee will pay the NPS a royalty rate of twenty percent (20 %) of gross revenue from such sales or other revenues. In addition to such royalty, the NPS may seek other damages to which the NPS may be entitled including but not limited to injunctive relief against the permittee.

**7. Reports** - - The permittee is required to submit an Investigator's Annual Report and copies of final reports, publications, and other materials resulting from the study. Instructions for how and when to submit an annual report will be provided by NPS staff. Park research coordinators will analyze study proposals to determine whether copies of field notes, databases, maps, photos, and / or other materials may also be requested. The permittee is responsible for the content of reports and data provided to the National Park Service

**8. Confidentiality** - - The permittee agrees to keep the specific location of sensitive park resources confidential. Sensitive resources include threatened species, endangered species, and rare species, archeological sites, caves, fossil sites, minerals, commercially valuable resources, and sacred ceremonial sites.

**9. Methods of travel** - Travel within the park is restricted to only those methods that are available to the general public unless otherwise specified in additional stipulations associated with this permit.

**10. Other permits** - The permittee must obtain all other required permit(s) to conduct the specified project.

**11. Insurance** - If liability insurance is required by the NPS for this project, then documentation must be provided that it has been obtained and is current in all respects before this permit is considered valid.

**12. Mechanized equipment** - No use of mechanized equipment in designated, proposed, or potential wilderness areas is allowed unless authorized by the superintendent or a designee in additional specific conditions associated with this permit.

**13. NPS participation** - The permittee should not anticipate assistance from the NPS unless specific arrangements are made and documented in either an additional stipulation attached to this permit or in other separate written agreements.

**14. Permanent markers and field equipment** - The permittee is required to remove all markers or equipment from the field after the completion of the study or prior to the expiration date of this permit. The superintendent or a designee may modify this requirement through additional park specific conditions that may be attached to this permit. Additional conditions regarding the positioning and identification of markers and field equipment may be issued by staff at individual parks.

**15. Access to park and restricted areas** - Approval for any activity is contingent on the park being open and staffed for required operations. No entry into restricted areas is allowed unless authorized in additional park specific stipulations attached to this permit.

**16. Notification** - The permittee is required to contact the park's Research and Collecting Permit Office (or other offices if indicated in the stipulations associated with this permit) prior to initiating any fieldwork authorized by this permit. Ideally this contact should occur at least one week prior to the initial visit to the park.

**17. Expiration date** - Permits expire on the date listed. Nothing in this permit shall be construed as granting any exclusive research privileges or automatic right to continue, extend, or renew this or any other line of research under new permit(s).

**18. Other stipulations** - This permit includes by reference all stipulations listed in the application materials or in additional attachments to this permit provided by the superintendent or a designee. Breach of any of the terms of this permit will be grounds for revocation of this permit and denial of future permits.