



Permit: NMFS 22187-04, IACUC protocols 1711, 2119

Research Volunteer Application 2024

DEADLINE: May 31st, 2024 at 11:59pm

BACKGROUND

Dr. Heather Liwanag's Vertebrate Integrative Physiology (VIP) Lab is leading a population monitoring program of northern elephant seals here on the California coast. A volunteer position on Team Ellie is an extremely unique opportunity, as working hands-on with marine mammals is uncommon. Volunteers are a critical part of our program, and we are seeking students who will be either **2nd or 3rd year Cal Poly students as of Fall 2024**. However, we do make exceptions for upperclassmen with exceptional prior research experience or interest in elephant seals. Students must possess a clear interest in pursuing a biology-related career. We are looking for **highly motivated and reliable** individuals who have a passion for research, conservation, and education.

No prior experience with marine mammals is necessary. However, experience working with animals is highly recommended prior to applying. We also suggest you perform some online research on elephant seal mating, behaviors, and social structures before starting on the team. In our program, we will provide virtual and on-site training on topics including: safety, lab and field techniques, and good practices for collecting and managing data. This will be especially valuable for undergraduates considering graduate school, as volunteering in an active lab can be invaluable in helping you apply to schools successfully.

FIELDWORK DESCRIPTION

Fieldwork is conducted from the beginning of Fall Quarter to the end of Spring Quarter. A typical field day requires volunteers to meet in SLO at ~5:15-6:15am to carpool to the rookery; we will return to campus by 11:00am. Fall Quarter field days consist of surveying the population (i.e., counting the seals) and looking for tagged seals. Towards the end of the Fall Quarter, we mark the seals with hair dye to keep track of them throughout the upcoming season. Marking requires

the volunteers to be in very close contact with adult elephant seals that weigh approximately 1,500 pounds (females) and 5,000 pounds (males).

During Winter Quarter (the breeding season) fieldwork consists of weighing and tagging the weanlings, in addition to surveying and marking. Tagging the weanlings allows Team Ellie to track the seals throughout their lives. Volunteers will need to be comfortable handling weanling because they will need to either tag and/or hold the hind flippers. The weanlings weigh approximately 300 pounds, and they can bite. Due to the increased field duties during the breeding season, we will meet in SLO at ~5:15am-5:45am.

Spring Quarter fieldwork will focus primarily on surveying, and continuing to tag weanlings for the first few weeks. Once the weanlings leave the beaches, we will continue to perform surveys for the rest of the quarter. The field leads will properly train all selected volunteers in these field techniques, but we want all applicants to be aware of the field requirements of this research opportunity.

VOLUNTEER COMMITMENT

The majority of our data will be collected from December through March (Winter Quarter). However, an extensive **commitment of at least one academic year is required**. Please ensure that your schedule for the entire academic year will allow you to continue volunteering for all three quarters. It is very difficult to run a field team when people drop out mid-season, as we will not be able to take on and train new people at that time.

Volunteers will need to be available **at least one day per week, for a shift of approximately 5 hours in the early morning**. You will be **required to enroll in research units** (BIO 200, 300, or 400) for this work during fall, winter, and spring quarters, even if you are out-of-state. We ask that our volunteers try to avoid signing up for morning classes so that scheduling is easier.

Because winter (the breeding season) is the most active time for elephant seals, volunteers are required to commit to 3-4 days of field work during winter break. Field days during spring break are optional. The commitment ends in spring, but we always welcome volunteers to continue coming out for fieldwork in the summer, as their schedule allows.

TRAVEL TO SAN SIMEON

We travel to the rookery in San Simeon as a team (approximately 50 minutes north of Cal Poly), using the Cal Poly Marine Sciences vans. We meet between ~5:15am - ~6:15am, depending on the season. You will not have to drive your own car to the rookery.

PLEASE COMPLETE THIS DOC AS A FILLABLE FORM. DO NOT DOWNLOAD IT TO WORD.

Participants will be selected based on the quality and content of their applications. If you are selected for an interview, we will reach out to you to set up a time. Please check your spam/junk folder frequently in case our email was sent there.

SUBMISSION DEADLINE: May 31st, 2024 by 11:59pm PDT. Please send an email to our elephant seal email (eseal.research@gmail.com) with the subject "Team Ellie application".

Name _____

Cal Poly email _____ Cell phone _____

Major & Emphasis _____ Current year in school (*as of Fall 2024*) _____

Expected Graduation Quarter and Year _____

Please respond to the following questions concisely, thoughtfully, and honestly. There is no particular set of responses that will ensure acceptance. The field team leaders wish to put together a group representing a diversity of needs, interests, and potential contributions.

1. What are your primary interests in the area of biology? Do you have a particular field in mind (e.g., conservation, physiology, ecology, etc.)?

2. What do you hope to gain from this volunteer opportunity? Towards what is this experience likely to lead you (e.g. career goals, graduate school)?

3. Please describe all of your relevant field research and classes. Include any fellowships, internships, animal handling experience, or volunteer work.

4. We deal with many people from Friends of the Elephant Seal, CA State Parks rangers, and members of the public during our fieldwork. How would you describe your science communication skills? Would you feel comfortable and confident explaining our research to the general public, including curious onlookers?

5. Please describe an event or situation that demonstrates your ability to work well on a team. What steps were taken to ensure its success?

6. Elephant seals are large, wild animals that we work directly with (and in close proximity to). To minimize seal disturbance and maximize volunteer safety, we must be adept at reading the seals' behavior and noting their movements. Please describe any experience you have working with large and/or wild animals. If you do not have experience with large and/or wild animals, please describe any other animal-related experiences you may possess (i.e., encounters with wild animals, domestic animals, etc.)

7. Team Ellie fieldwork is physically challenging. Each member of this team must be physically fit, for the safety of the seals and other team members. Please describe your physical fitness and ability to perform the described activities below:

During the Fall and Spring Quarters, volunteers must be able to walk/hike to and from the beaches to assist in surveying and collecting data. During the Winter Quarter, physical activity increases exponentially. Heavy equipment will need to be carried to and from the beaches. Volunteers should be able to carry up to 50 lbs while hiking to and from the beaches. Marking a seal involves quick movements in close contact with the seals, and volunteers should be able to move quickly in sand. Tagging involves inserting sheep ear tags into the weaned pups' flippers, which requires excellent grip strength. Weighing involves placing the weaned pups in a bag and lifting them up with a tripod and chain hoist. To place the weanling in the bag, volunteers will work together to push and lift up to 300 lbs. This requires a strong lower body, back, and core.

8. Fitness is a key component of this work and it is very important to keep all volunteers safe. If you have any physical or medical conditions that may prevent you from performing the activities described in Question 7, please describe them below. This will not disqualify your application if you have any medical conditions. In the past we have been uninformed of volunteers' limitations and it has occasionally led to injuries in the field. For our safety and yours, we need to know about physical capabilities when forming our research team, so that you can be assigned appropriate tasks. Examples include: carpal tunnel, recovering from ACL tear, prone to injury, knee problems, etc.

9. Additional opportunity:

Our lab has an Instagram (@theviplab) that is run by a mix of graduate students and field team leads. We would like to increase our social media team, and are gauging potential interest. Please check yes or no if you are interested in assisting with our account. If you wish to share any information about social media experience, please do so below (this is not required).

Yes **No**

10. Please provide an email and/or phone number for one reference, either a Cal Poly instructor with whom you took a relevant class, a research advisor, or supervisor of any relevant job/internship/etc. **Do not leave this blank.**

Name _____

Position _____

Contact information _____

Relationship to applicant (instructor, research advisor, etc.) _____

TEAM ELLIE POLICIES

The volunteer positions on this research team are highly competitive with a long waitlist. Each quarter, you are allowed 1 excused absence. Accepted excuses include doctor appointments, COVID-19 exposure, and family emergencies. However, if you are unable to attend your field day due to illness, you must coordinate with another volunteer to cover/switch for that week in order to ensure the team has enough field members. Tests and schoolwork are NOT acceptable reasons to miss fieldwork.

Additionally, **you MUST be available during winter break.** This is the time that the female and male seals begin to arrive at the beach. You are required to stay for at least 3-4 field days during break, and we will schedule these days in advance so you can plan around the required field days. ***This is a requirement.***

We also require all volunteers to have proper fieldwork attire for your safety. We require hiking boots (not tennis shoes) and appropriate water-resistant or quick-dry hiking pants (no leggings, jeans, or shorts). There is an opportunity to apply for a small grant from CSU COAST for you to purchase these items if you do not already own them, which we will send to accepted volunteers. We will provide you with a water resistant jacket, and there will be an option to purchase a t-shirt with our Cal Poly Team Ellie logo on it.

We ask that all of our volunteers are dedicated to Team Ellie and are determined to help us succeed with our research goals. If the field team leaders and/or the PI find you are not performing adequately compared to your fellow volunteers, we retain the right to terminate your position at any point during the year. This ensures that Team Ellie has a strong and efficient team, with an equal spread of strength and skills across all the volunteers. Accepted volunteers will be expected to sign a document outlining our lab policies regarding respect, inclusion, and performance. If you read and understand this, please sign your name below.

Signature _____ Date _____

Please don't hesitate to email us with any questions (email: eseal.research@gmail.com.) We look forward to receiving your application.

Best of luck!

Sincerely,

Team Ellie field team leaders & Dr. Heather Liwanag

[Click here to visit our website](#)