Port Orford gray whale foraging ecology internship

Project team:
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Project description:
During the summers of 2015, 2016 and 2017, the GEMM Lab at OSU has conducted research to understand the foraging ecology of gray whales in Port Orford, and we are planning to do it again in 2018. Our research goals are to understand how and where whales find food. We are looking for a motivated, interested and outgoing OSU undergraduate student to help us with this project from July 24 through September 1. The OSU undergrad will join a team lead by an OSU graduate student, and two high school student interns. The OSU undergrad will help will all aspects of data collection and management, field logistics, and leadership and teaching of the high school interns. Interested students should be comfortable working in a kayak and at heights (on a cliff side), be happy to start the day early to collect data, be able to work as part of a team, be willing to work long days occasionally, be eager to learn new ideas and skills, be ready to contribute ideas and communicate thoughts, and be excited to learn about marine ecology in coastal Oregon. Through this 6-week internship, students will learn scientific methodology, sampling and data collection protocols, ecological principles, leadership skills, quantitative data analysis methods, and science communication skills.

Field work methods: On all good weather days (low winds, low swell, no fog) part of the field team (2 people) tracks whales from a cliff-top location above the port while the other part of the field team (2 people) navigate a research kayak to sampling locations to deploy a Go-Pro camera system and/or conduct zooplankton net tows to assess prey availability. To get a sense of what this internship entails please watch this video made by an intern in 2017: http://blogs.oregonstate.edu/gemmlab/2017/09/12/interns-eyes-video-log-2017-gray-whale-foraging-ecology-project/

Internship schedule:
July 1 - 6: During this week, the OSU undergrad intern will undergo training with graduate students on technical aspects of the project including use of the theodolite, GoPros, cameras, and zooplankton sampling, and data management.
July 24 – Aug 3: These two weeks of the internship will be a training period for the whole field team, where the grad and undergrad students will teach the high school students the methods.
Additionally, the whole team will participate in a 2-day kayak training course, become familiar with a safety protocols, take a first aid course, and become comfortable with all data collection and management methods. It is critical that all field interns attend this training period.

Aug. 4 - Aug. 31: After the training period, the field team will collect data over a 4-week period on whale movements, behavior and prey availability. Interns will operate theodolites, cameras, computers, GoPros, zooplankton sampling gear, GPS, a time-depth recorder, a secchi disk, and a research kayak. After all days collecting data, all interns will assist in data entry and preliminary data analysis.

Aug. 31: At the conclusion of the project, the field team will facilitate a public presentation at the Port Orford Field Station to present the project and results, and discuss their experience.

**Expectations on interns:**

- Interns should be prepared to be a part of the research team for the full 6-week period, including weekends. Days off will be dictated by weather patterns and data collection needs, with rest days allocated regularly but unpredictably.
- Many days will start early in the morning (6 am) to take advantage of calm weather in the early mornings. End time of work days will be variable and based on field logistics and data management.
- Interns are expected to assist with data entry and sample processing back in the lab after a day in the field, or on days when not field work is conducted.
- Each field team participant will contribute to the GEMM Lab blog at least once, regarding their experience.

**Examples of previous intern blog posts:**

**http://blogs.oregonstate.edu/gemmlab/2017/08/02/little-slice-heaven/**
**http://blogs.oregonstate.edu/gemmlab/2017/08/15/the-passion-of-a-researcher/**

- Interns should have open communication with project leaders and high school interns.
- Completion of OSU Internship Learning Contract
- Interns are encouraged to attend the annual State of the Coast Conference in Coos Bay, Oregon in October 2018. Expenses for attendance will be covered by the project.

**Compensation:** The intern will receive a salary or stipend compensation to support their time and costs associated with participation in this research project. Housing at the Port Orford field station will also be provided. (If needed, wetsuit, booties and PFDs for kayak work will be provided.)

**Applications:** OSU undergrads entering their junior or senior years are eligible to apply. All materials requested below should submitted by June 22, 2018 to: Leigh.Torres@oregonstate.edu

1. A one or two page résumé that includes your name, contact information (including phone and email address), GPA, and educational history. The résumé should also detail your work and volunteer experience, particularly as it relates to marine science.
2. A personal statement in essay style not to exceed 1,000 words which includes:
   - one or two paragraphs that describes your personal/professional/academic background including your interests and activities as they relate to marine science
• one or two paragraphs about your academic and professional goals, including your plans following graduation
• one paragraph on how you think this experience would help you reach these goals

3. One letter of recommendation from an academic advisor/professor who know you and your work well.

Applications will be reviewed by a committee and notifications made by June 29, 2018.
Photo gallery:

Early morning kayak launch in Port Orford.

Intern collects data from the research kayak.

Interns receive kayak safety training.

Theodolite data collection of whale movements.
2017 Port Orford research team

2017 Interns ponder data analysis

The spectacular Fort Point vantage point that enables long-term, non-invasive whale tracking

2017 High school interns present their work at the AGU Ocean Science conference

2017 Interns conduct fieldwork

2017 Interns deliver their community presentation at Port Orford field station

2017 Intern conducts labwork