*The following prompts are directly derived from KNB. As you fill in each section, please consider that all future users will rely on the information you provide to support the data – please be clear and descriptive.*

1. **TITLE**
   1. Abiotic oceanographic parameters in coastal southeast Alaska (temperature, salinity, dissolved oxygen, nutrients, light)
2. **ABSTRACT**
   1. Abiotic parameters were collected at 21 sites across two coordinated sampling efforts. In the first set of samples (summerlong set), data were collected from 29 April through 22 August 2017, where each site was visited once during that time frame. Data from this effort include seawater temperature (C), salinity (ppt), dissolved oxygen (mg per L), light (umol per meter squared), and nutrients (umol; nitrate + nitrite, ammonium, phosphate). In the second sampling effort, data were only collected on 14 August 2017 but all 21 sites were visited within an 8-hr time frame using two independently operating boats. Data from this effort include seawater temperature (C), salinity (ppt), dissolved oxygen (mg per L) for some sites, and nutrients (umol; nitrate + nitrite, ammonium, phosphate); light data were not collected.
   2. Site name, coordinates, sampling time, sampling dates, and sampled depths for each site are included in the data file for each data point. The purpose of these data was to characterize the fish assemblage within eelgrass communities so that analysis of trophic interactions could be assessed along a gradient of sea otter occupation for an NSF-funded project: Apex Predators, Ecosystems, and Community Sustainability (APECS, http://apecs-ak.org/). Other datasets to support this work are also archived with KNB.
3. **DATES**
   1. **Begin date**: 29 April 2017
   2. **End date**: 22 August 2017
   3. **Publication date**: n/a
   4. **Alternate identifiers**: APECS\_alaska
4. **LOCATION**
   1. **Description**: The western coastline of Prince of Wales Island (Alaska, USA) and the adjacent archipelago.
   2. Bounding box coordinates
      1. **Northwest coordinates for box:** 56.4206 N, -134.4531 E
      2. **Southeast coordinates for box**: 54.5281 N, -132.0942 E

OR

* + 1. **Single point coordinates**: 55.2081 N, -132.826 W

1. **TAXA**
   1. General taxonomic coverage:
      1. All organisms were classified using the Linnean taxonomic system, and were largely clustered into larger taxonomic groupings instead of identifying to species (e.g. Family or Class).
   2. Taxonomic classification(s):

Rank Value

Genus Zostera

Genus Phyllospadix

1. **METHODS & SAMPLING**
   1. Methods
      1. **Step 1:** Sampling abiotic parameters
         1. Abiotic parameters were collected at 21 sites across two coordinated sampling efforts. In the first set of samples (summerlong set), data were collected from 29 April through 22 August 2017, where each site was visited once during that time frame.
         2. Summerlong set (29 April through 22 August 2017): All data were collected at the surface layer (approx. 0.0 m to -0.15 m) and at approx 1.0 m below the surface in waters immediately above a seagrass bed (Zostera marina). To measure temperature, salinity, and dissolved oxygen, a YSI 2030 meter equipped with a poralgraphic DO2 sensor was lowered over the side of a small boat to the appropriate depths. The readings were allowed to stabilize before values were recorded. Light was quantified using a Li-COR LI-250A portable meter with a spherical bulb, which was appropriately calibrated for each measurement in air and in water. This sensor was also lowered over the side of the boat, making sure to avoid any casted shadow. To determine seawater nutrient concentrations, seawater was collected at the surface by hand into clean, duplicate 250 mL plastic bottles and the water was immediately filtered through 25 mm Whatman GF/F (0.4 Î¼m pore size) filters and collected in clean 50 mL Falcon tubes. Seawater samples were stored inside a small cooler, on ice and in the dark, and transported back to the lab and stored in a freezer (-20 degrees) until analysis. All samples were stored for no longer than four months and were shipped, frozen, to the University of California, Santa Barbara where nutrient concentrations were analyzed using a LaChat QuickChem auto-analyzer.
         3. Single day set (14 Aug 2017): All data were collected at 1.0 m and 4.0 m depth, the water column of which was above seagrass habitat. In order to sample across such a large scale in one day, we deployed two boats to sample independently; one boat (Boat A) sampled all of the northern sites (all sites with an "H" in the "site\_code" column, i.e. "2017\_H\_01" though "2017\_H\_07") and the second boat (Boat B) sampled all of the other sites (i.e. "2017\_M\_02" through "2017\_L\_07"). Both boats were equipped with a 10 L Niskin bottle (manual weight trigger) so that seawater could be collected at targeted depths. No light measurements were recorded on this day.
         4. Boat A -- Temperature (C), salinity (ppt), and dissolved oxygen (mg per L) was quantified using a YSI 2030 meter equipped with a poralgraphic DO2 sensor. These sensors were lowered over the side of the boat to the appropriate depths; the readings were allowed to stabilize before values were recorded. Afterwards, a Niskin bottle was lowered over the side of the boat to collect seawater samples for nutrient analysis. Seawater was brought to the surface and subsampled using 50 mL lure-lock syringes and immediately filtered through 25 mm Whatman GF/F (0.4 Î¼m pore size) filters and collected in clean 50 mL Falcon tubes. Seawater samples were stored inside a small cooler, on ice and in the dark, and transported back to the lab and stored in a freezer (-20 degrees) until analysis. All samples were stored for no longer than four months and were shipped, frozen, to the University of California, Santa Barbara where nutrient concentrations (Î¼mol; nitrate + nitrite, ammonium, phosphate) were analyzed using a LaChat QuickChem auto-analyzer.
         5. Boat B -- We did not have access to two YSI meters and therefore abiotic parameters were measured using different methods in Boat B. Instead, a Niskin bottle was lowered over the side of the boat to collect seawater samples for temperature (C), salinity (ppt), and nutrients (Î¼mol; nitrate + nitrite, ammonium, phosphate). The nutrient samples were handled and processed exactly as described for Boat A. The rest of the water from each Niskin cast was transferred to a small cooler, in which seawater temperature was measured using an electronic thermometer and salinity was measured using a Milwaukee MA887 Digital Salinity Refractometer.
   2. Sampling
      1. **Sampling area and frequency**: We replicated the methods in 21 sites, each site was visited once for these sampling methods. These data were collected to compliment eelgrass community data (see other “APECS\_alaska” datasets). Sites were chosen based on the presence of intertidal access to meadows of the seagrass, Zostera marina, and whether the meadow was continuous enough to run a 100-m transect across it (parallel to shore).
      2. **Description**: Please refer to the above methods.