*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. Eelgrass communities in southeast Alaska (eelgrass density and biomass, epiphytes, and epifauna)
2. **ABSTRACT**
   1. Intertidal seagrass community data were collected during summertime 2017 (May-August) on western Prince of Wales Island, Alaska. The purpose of these data was to characterize the eelgrass community 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/). Data were collected at 21 independent sites. At each site, the coordinates, sampling date + times, and tidal elevation were recorded. At each site, one 100 m transect was laid horizontally along a shoreline, along which data were collected in 8 quadrats. Data types include eelgrass shoot count and biomass per replicate shoots, flowering eelgrass shoot count, rhizome biomass paired with shoots, rhizome internode lengths, two-dimensional percent cover of epiphytes and macroalgae within a quadrat, biomass of epiphytes wiped from eelgrass shoots, and counts and biomass of epifauna collected from eelgrass shoots. Other datasets to support this work are also archived with KNB and are searchable using the identifier “APECS\_alaska”.
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

Species Zostera marina

Phylum Ochraphyta

Genus Idotea

Family Caprellidae

Family Gammaridae

Class Gastropoda

1. **METHODS & SAMPLING**
   1. Methods
      1. **Step 1:** Fieldwork: At each site (n = 21), we determined the abundance and biomass of eelgrass, epiphytes, and invertebrate epifauna. We sampled biomass of eelgrass, epiphytes, and epifauna in eight 0.5 by 0.5 m quadrats along a 100-m transect placed between -0.50 and -0.76 m MLLW tidal elevation in the eelgrass bed. The transect was at least 5 m (linear distance) below and the upper edge of the eelgrass bed. In each quadrat, we first assessed and recorded the percent cover of macroalgae and epiphytes (two-dimensional plane within quadrat), we then counted the number of eelgrass shoots and flowering eelgrass shoots so that density could later be calculated. After those data were recorded, we haphazardly collected 6-7 terminal eelgrass shoots, including at least 5 cm of their rhizome, and gently transferred them to mesh bags (500-Î¼m mesh size). Ultimately, we only used 5 individuals in our analysis but collected 6-7 to have extra shoots in case their use was necessary. It was from these collections that epifauna were quantified, so carefully placing seagrass into the mesh bags was essential; there was one mesh bag per quadrat. The collection bags were kept cool and shaded and immediately transported back to the laboratory for processing. We typically sampled one site per day.
      2. **Step 2:** Labwork: Once back at the lab, mesh bags were sequentially processed. We first carefully transferred all bag contents to a white tray and floated all materials in freshwater so that epifauna became immobilized and were easy to identify and collect. In addition, each mesh bag was inverted and the contents gently rinsed with freshwater into the white tray and picked clean using fine tweezers. All epifauna were separated into taxonomic groups; they were grouped by isopods (Idothea rascata), gammarid amphipods, caprellid amphipods, limpets (Lottia pelta), and other gastropods (primarily Littorina spp.). The fresh weight of each taxonomic group (all individuals pooled per group) was determined, then each group was transferred to a pre-weight foil and dried, after which the dry weight of each group was determined. After epifauna were processed, we finished processing the seagrass. Five terminal shoots that had at least 5-cm of attached rhizome were selected from each quadrat bag. Sequentially, all leaves from each of the five terminal shoots were then wiped of epiphytes using one pre-weighed cotton pad per shoot. Epiphyte biomass (dry weight, per plant) was determined by drying and re-weighing these cotton pads. Leaves from each of the five shoots per quadrat were individually measured for length and width. Rhizomes were standardized to 5 cm and we measured the internode distance within that 5 cm segment. The leaves, rhizomes, and epiphytes from each shoot and epifauna from each quadrat were dried for at least 18 hrs at 60Â° C and weighed to the nearest 0.0001 gram.
   2. Sampling
      1. **Sampling area and frequency**: We replicated the methods in 21 sites, each site was visited once for these sampling methods. The sampling covered about 100 m of shoreline in each site, and sites were located on the western shores of Prince of Wales Island, AK (coordinates are included in the data file). 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.