**EEMB 5525 - Advanced Methods in Marine Biology**

Term Paper Dataset Descriptions

Datasets appropriate for everyone

1. Kelp Ecosystem Ecology Network Observational Data

Observational data for the Kelp Ecosystem Ecology Network. These data come from transects of rocky reefs taken around the world using the KEEN observational data protocol (see http://kelpecosystems.org for full description of methods and handbook). See “How” for methods. Briefly, the observational data consists of the following components, all included here: site information, fish observations, quadrat sampling, band transect sampling, percent cover from uniform point counts, and kelp morphometrics.

Data Files

Data files included and what they contain are as follows:

* keen\_sites.csv - Physical and locational data for all KEEN sites and transect.
* keen\_cover.csv - Percent cover of sessile algae and invertebrates.
* keen\_fish.csv - Counts of fish by size class along a transect.
* keen\_quads.csv - Counts of common algae, sessile invertebrates, and demersal fish that can be individuated.
* keen\_swath.csv - Counts of rarer algae, sessile invertebrates, and demersal fish that can be individuated.

2. National Park Service Rocky Intertidal Community Monitoring in Northeast Temperature Parks Observational Data

The popularity of rocky shores with park visitors can lead to adverse impacts on intertidal species. The [NETN programme](https://www.nps.gov/im/netn/rocky-intertidal-community.htm) monitors intertidal habitats in Acadia National Park and Boston Harbor Islands National Recreation Area. The primary objectives of this program are to:

* Determine long-term changes of target invertebrate and macroalgal species
* Evaluate long-term changes in the intertidal community to long-term changes in environmental factors (e.g., sea level rise, human trampling, etc).

Data Files:

Data files included and what they contain are as follows

* Motile invert dataset
  + MotileInvert\_Counts\_PROVISIONAL.xlxs - Counts of motile invertebrates within quadrats
  + MotileInvert\_Measurements\_PROVISIONAL.xlxs - Shell measurements of enumerated motile invertebrates within quadrats across habitat types
* Echinoderm dataset
  + Echinoderm\_Measurements\_PROVISIONAL.xlsx - Counts of echinoderms within quadrats
  + Echinoderm\_Counts\_tall\_PROVISIONAL.xlxs - Arm (sea star) and diameter (urchin) measurements of enumerated echinoderms
* Surface cover dataset-A
  + PhotoQuadrats\_Cover\_PROVISIONAL.xlxs - Percent cover using fixed photo plots
* Surface cover dataset-B
  + PointIntercept\_SppDetections\_PROVISIONAL.xlxs - Percent cover along fixed-point intercept transects
* Locations\_PROVISIONAL.xlsx – Site locationstime
* RockyIntertidal\_DB\_metadata\_20200316.xlxs - survey metadata
* Layout of intertidal site (at each site).png – sampling layout
* Rocky\_Intertidal\_Protocol\_2015\_FINAL.pdf – survey protocol
* RockyIntertidal\_SiteGuide\_Summary.pdf – site guide
* RockyIntertidal\_SiteGuide\_ACAD\_BassHarbor\_20140819.pdf – Bass Harbor site description
* RockyIntertidal\_SiteGuide\_ACAD\_LittleHunter\_20140819.pdf – Little Hunter site description
* RockyIntertidal\_SiteGuide\_ACAD\_LittleMouse\_20140819.pdf – Little Moose site description
* RockyIntertidal\_SiteGuide\_ACAD\_OtterPoint\_20140819.pdf – Otter Point site description
* RockyIntertidal\_SiteGuide\_ACAD\_SchoodicPoint\_20140819.pdf – Schoodic Point site description
* RockyIntertidal\_SiteGuide\_ACAD\_ShipHarbor\_20140819.pdf – Ship Harbor site description
* RockyIntertidal\_SiteGuide\_ACAD\_CalfIsland\_20140819.pdf – Calf Island site description
* RockyIntertidal\_SiteGuide\_ACAD\_GreenIsland\_20140819.pdf – Green Island site description
* RockyIntertidal\_SiteGuide\_ACAD\_OuterBrewster\_20140819.pdf – Outer Brewster site description

3. Coral Community structure

Dataset consists of annual photo quadrat surveys collected on the shallow reefs (<14m depth) of St. John since 1987. This data is used to assess the impact of three hurricanes on the dominant coral genera and benthic cover.

Data Files:

Data files included and what they contain are as follows

* Coral community.tsv - percent benthic cover by genus and benthic category before and after hurricane impact