Methods

Various beaches are around Cape Town are divided up into 'cleared' and 'non-cleared' sections. These were sampled for POM content in the soil by collecting soil samples perpendicular to shore, the area covered was divided up into 5 sections according to the length of the transect on that particular sampling occasion. Soil samples 20cm deep were taken each time. Each sample was weighed, dried, re-weight, placed in a muffle furnace and finally re-weighed. The differences between the weights is how you get the an estimate of POM content.

Aim

To determine if the removal of kelp from beaches affected the POM content in the soil.

Ecological impact of kelp removal

Objective

What is the pom content on beaches

Is pom diff over time

Is diff between cleared and non-cleared

Length of transects diff - reason for differences

Lit uses 5g, he used 10g due to wet samples

Ave to score of metadata

Can remove strandfontein resort sites – only sampled once

Standardise data??? – all grams so not across measurements

Are lengths of transects sig different?

* Sites, area

Lubridate filters date – according to months

Total cleared and total uncleared – x= area, y = pom

Non-parametric – use boxplots

Kruskal Wallace – grpup by site

Test for between sites, area and date

Multi dimensional scales – whats driving pom (vegan)

* **Multidimensional scaling** (MDS) is a means of visualizing the level of similarity of individual cases of a dataset. It refers to a set of related ordination techniques used in information visualization, in particular to display the information contained in a distance matrix
* Use raw data, change to index
* MDS index (bray, lucient etc)

Wind data

Scores of metadata:

1 – Zero

2 – Very low

3 – Low

4 – Average

5 – Above average

Is the kelp estimates different?

% of area

Read:

Numerical ecology with r