Biodiversity Sampling: Exposed vs Sheltered

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Hypothesis

We hypothesize that there will be greater biodiversity found in the sheltered site because it experiences less hydrodynamic stress.

Data Collection

We collected data from both wave-sheltered and an wave-exposed sites at Scott's Bay, Bamfield BC, Canada. We used 10 cm by 10 cm quadrats along each transect line. Inside each quadrat we selected 10 random squares to count species richness and abundance.

Analysis

We compared Shannon-Weiner diveristy indexs (H'), species richness and, species evenness between the exposed and sheltered sites. We ran the statistical analysis ANOVA to determine the significance of our results.

Results and Conclusions

Our analysis found that there was no significant difference between the Shannon-Weiner indexes of the exposed and sheltered sites. The p-value for this anova test was 0.218. Similarly, the p value of the richness and evenness anova analysis was 0.43 and 0.78 respectively. In all these cases, we cannot reject the null hypothesis that there no relationship between site location and diversity, richness and evenness.

Index	P Value
Shannon-Weiner Diversity (H')	0.218
Species Richness	0.43
Species Evenness	0.78

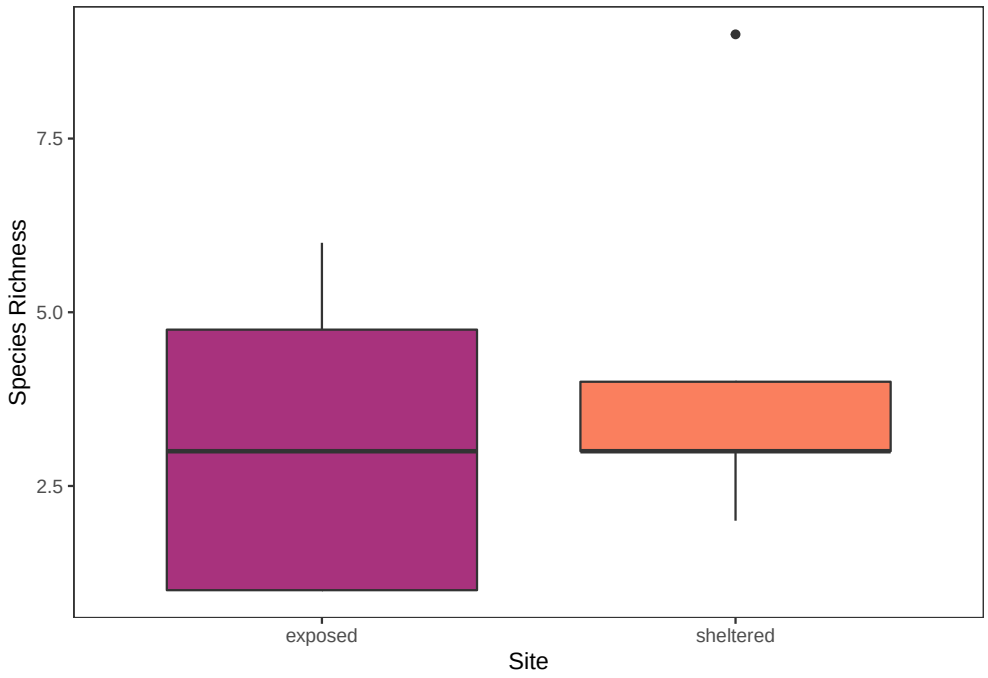

Figure 1: Hello.

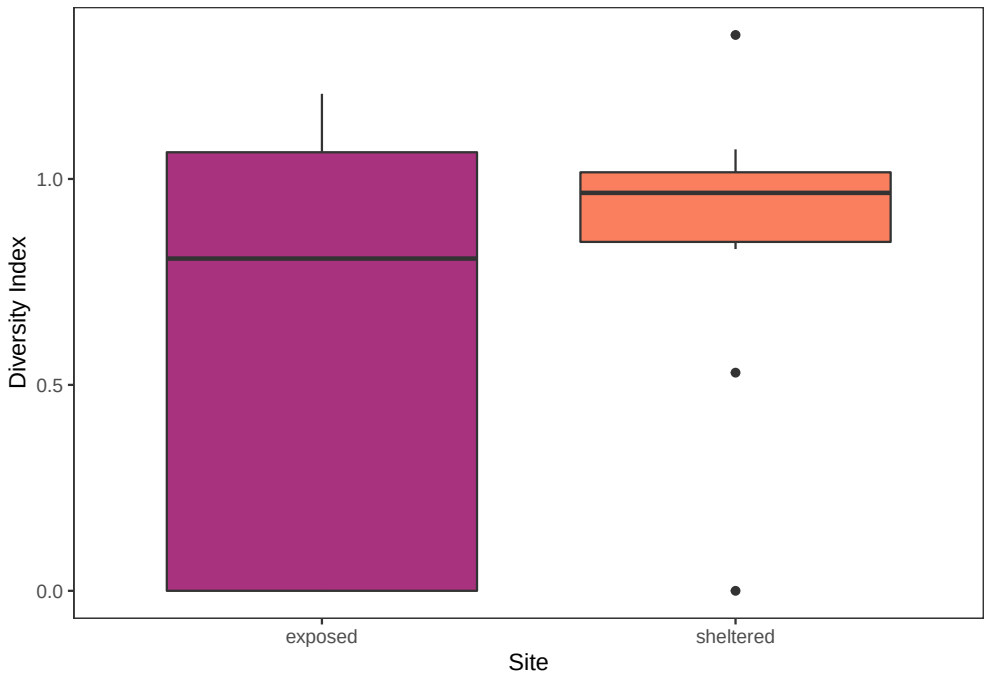

Figure 2: Hello.

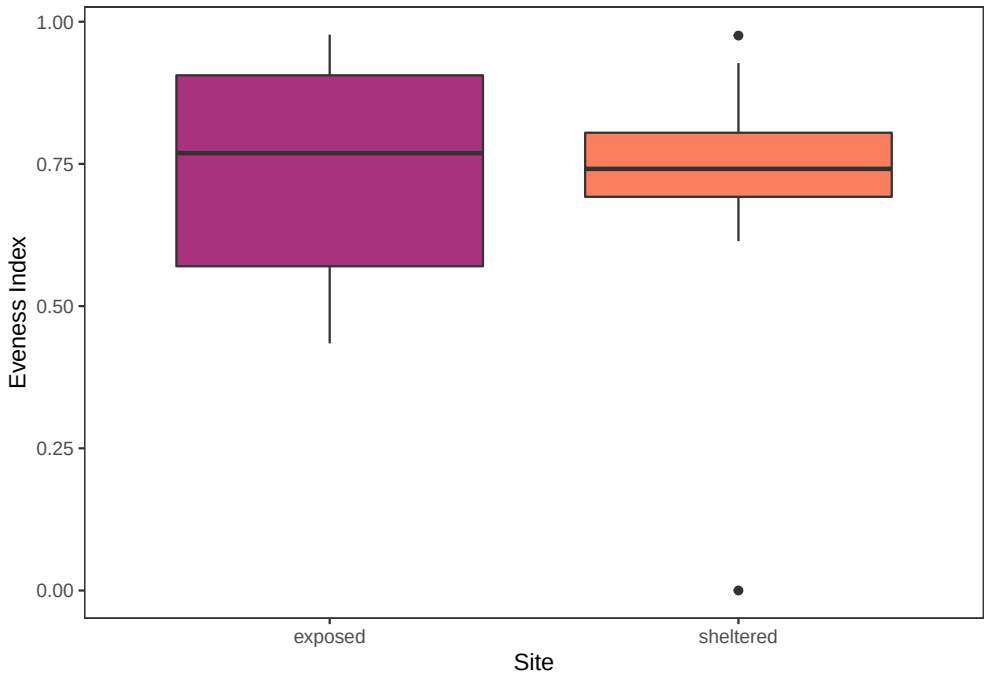

Figure 3: Hello.