

# Nudibranch Abundance by Tidal Height

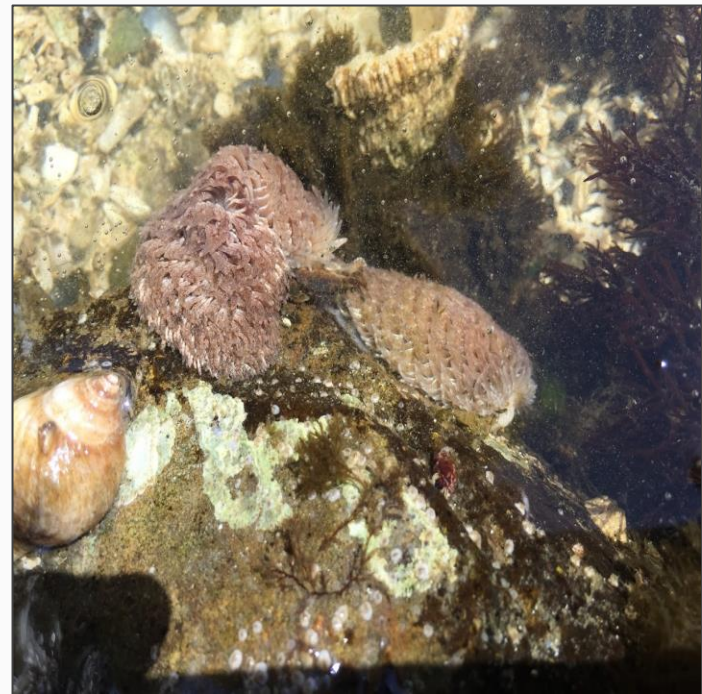
A Citizen Science Project

Andy Chin, Kahlil Siguenza, Derek Chan



# Testable Question

How does tidal height affect the amount of Nudibranchs (both Shaggy Mouse and Opalescent) found in bedrock?



# Constellation Beach

**Study Area:** Bedrock extending from high-intertidal to low-intertidal on the north part of the beach.



# Variables

Manipulative Variable: Tidal Height

Responding Variable: The amount of Nudibranchs found

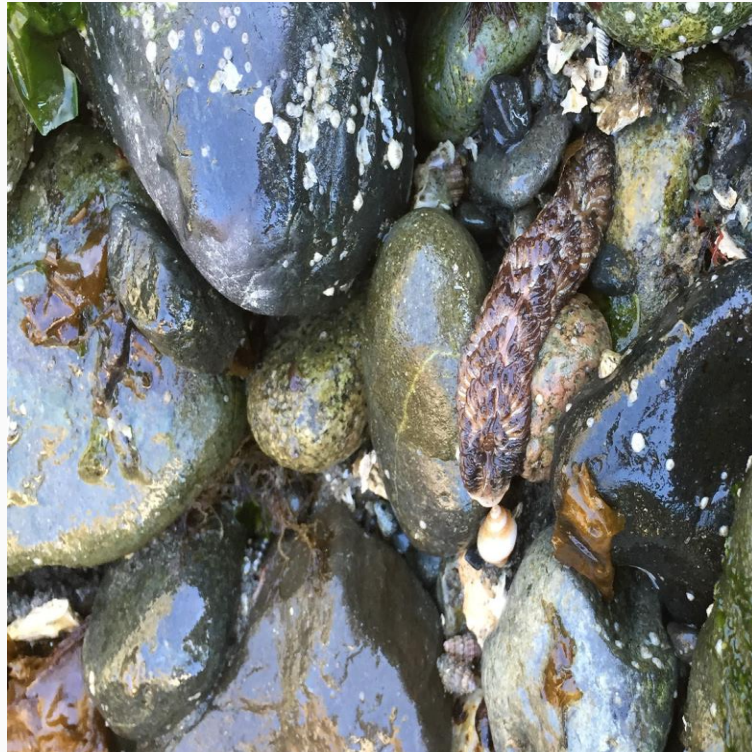
Controlled Variable: Time and Day, Substrate Type, Tidal Period

# Procedures

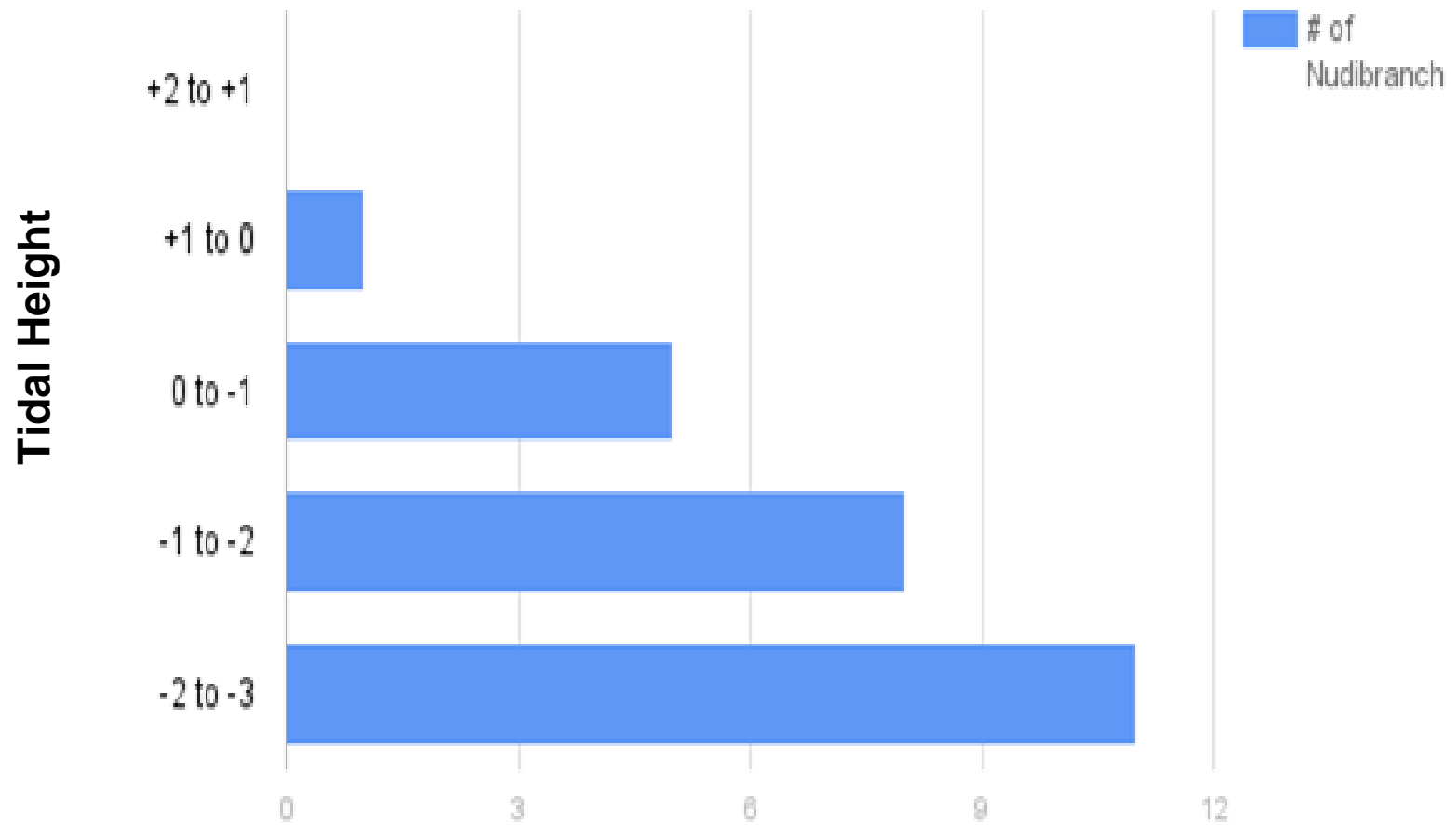
1. We started at a +2 tidal height in the bedrock habitat on the north side of the beach in view of the CS transect line
2. Randomly, we searched down beach through the bedrock habitat, moving roughly parallel the tidal height posted on CS transect line, recording any Nudibranchs present
3. The tidal zones we searched concluded at a beach tidal height from of a approximately -3 based on the final CS tidal height recorded.

# Data

Tidal Height	+2 to +1	+1 to 0	0 to -1	-1 to -2	-2 to -3
Amount	0	1	5	8	11



# Graph



# Conclusions

The abundance of Nudibranchs in the bedrock habitat appeared to be greatest in the low to subtidal zone of -2 to -3. Also our data indicates nudibranch population increased at a steady proportional rate relative to the tidal depth.

The areas of bedrock that were submerged for longer periods of time underwater appeared to be home to more nudibranchs than areas of bedrock that were out of the water for longer periods of time.