

# + Starfish



- Diet - starfish eat clams, oysters, or any animals, some are detritivores. Some consume coral polyps, sponges, and planktons.
- Predators- Triton Trumpet- *Charonia tritonis*, some puffer fish, Harlequin Shrimp-*Hymenocera elegans*, Reef Crab-*Trapezia*.
- Latin name- Echinodermata
- Habitat- The greatest variety of starfish is found in the tropical Indo-Pacific, tropical-temperate regions around Australia as well as the tropical East Pacific, cold-temperate water of the North Pacific, also found in European waters on the eastern coast of the United States.

## + Observation



**Sea stars** are found more on bladder wrack.

# + Model

- Sea stars prefer bladder wrack. Do they eat it? Is it Healthy? Good Protection? Support surfaces?



## + Hypothesis

- More Seastars will be found on bladder wrack than on any other wrack such as serrated wrack or twisted wrack.





## + Null Hypothesis

- Sea stars don't prefer bladder wrack to the others. No more sea stars are found on bladder wrack.



# Experiment

- We took two different types of wracks and put them on opposite sides and tied a rock to their roots.
- We put 11 sea stars in the middle of the aquarium.
- We left it for half a day.
- We waited for the sea stars to spread out.
- Counted how many were on each plant, rock and glass.
- Looked and wrote down the results.

# + Results

- We found:
- 4 on the glass,
- 1 on the rock,
- 6 on the serrated wrack
- 0 on the twisted wrack





## + 2nd Day

- We found:
- 3 on the glass
- 1 on the rock
- 3 on the serrated wrack
- 4 on the bladder wrack



+ ...3<sup>rd</sup> day

- We found:
- 3 on the glass
- 0 on the rock
- 5 on the twisted wrack
- 3 on the bladder wrack



# + Evaluation

- Fake environment
- Bladder were collected after the two other wracks, fresher
- Couldn't control the amount of each wrack put in the aquarium
- Starfish might have found it more difficult to get to the wrack with the rock than the one without the rock.
- The serrated wrack had animals on it therefore extra food



# Improvements

- Weight and measure the amount of each wrack
- Find out before the experiment what starfish eat
- Make sure the wrack is collected on the same day
- Make sure none of the wracks have animals on them
- We could add extra sand ext so the starfish are more in their natural environment
- Put weed in the middle of the aquarium so the sea stars don't stick to the glass
- Do the experiment a second time