

Do *Asterias rubens* prefer *Mytilus edulis* over *Crassostrea gigas*?

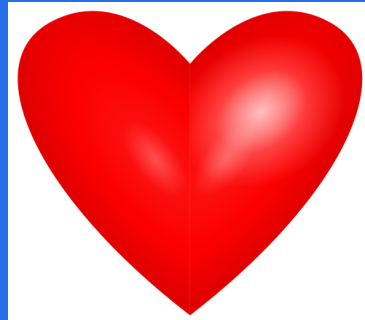


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Observations

- The crab annoyed the starfish but was ignored
- The starfish appeared to communicate with each other
- Immediately following the apparent communication the starfish moved away from each other
- All four starfish passed by all the organisms but the mussels, which they climbed onto
- The starfish seemed to be exploring their environment on their way to the blue mussels

Explanation / Model



Where did the *Crassostrea gigas* come from?

- Pacific coast of Asia



Hypothesis

- The *Asterias rubens* will go towards the *Mytilus edulis* instead of the *Crassostrea gigas*. This is because the *Asterias rubens* knows how to open the *Mytilus edulis* and how to eat it, as it is native to their environment.



Null Hypothesis

- The *Asterias rubens* does not show any preference for the *Mytilus edulis*.



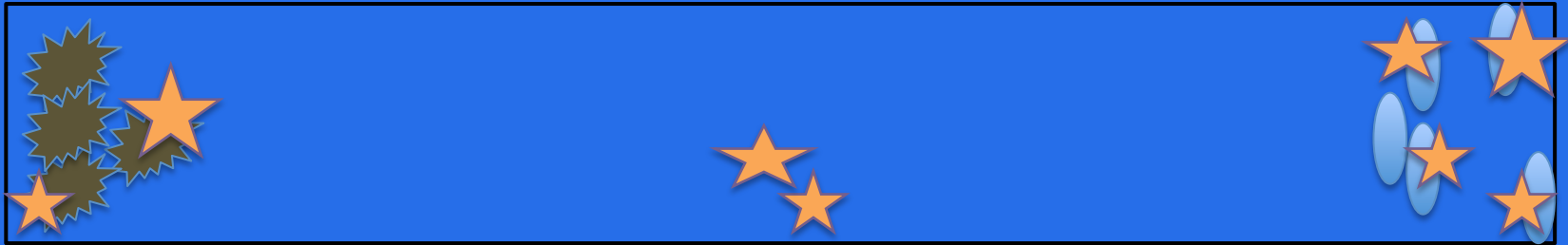
Controls / Setup

- Experimented three times
- Each time took two hours



Data

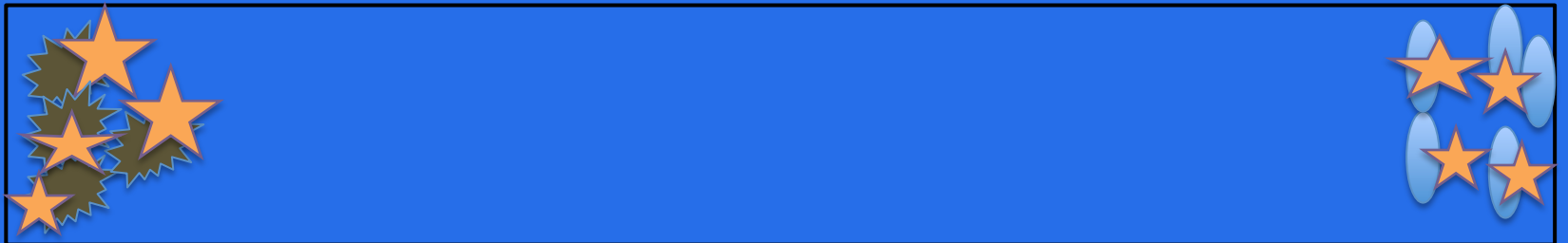
Trial 1



Trial 2



Trial 3



Starfish Locations after each Trial

Trial	Blue Mussel	Japanese Oysters	No Preference
1	4	2	2
2	4	3	1
3	4	4	0



Qualitative Data

- The size of the starfish did not matter.
- They all went separate ways, some to the blue mussels and some on the Japanese oysters.

Conclusion

- The starfish went over to both the Japanese oysters and the blue mussels but did not eat any of them.
- Hypothesis was incorrect; data supported null hypothesis
- Significance is that the starfish went over to the Japanese oysters who are new in the Swedish seas.
- This proves that even though the Japanese oyster is an invasive species the starfish could keep the population at a balanced level since they are apparently to eat them.



THE END!



Work Cited

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