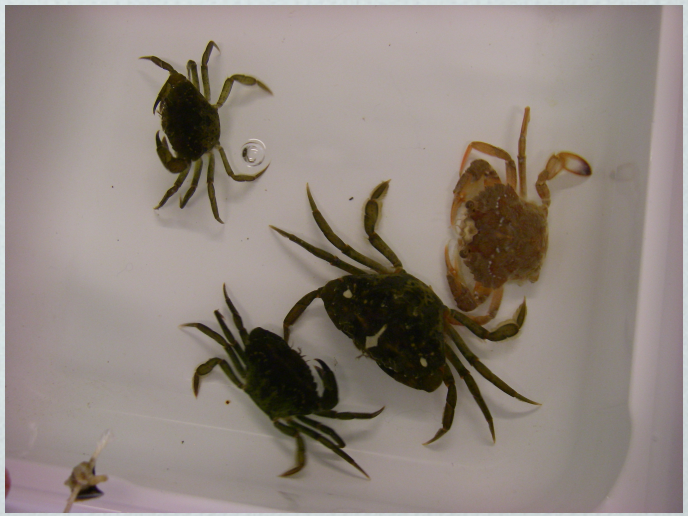
CRABS

By Alma, Bianka and Berangere

Information about Crabs:

- The crabs usually eat mussels, little dead fish, algae or crush snails.
- They like very much being in the dark. They usually live in the water deep or shallow but some species of crab can live on the ground. If the crabs live in the sea, they usually like to hide under rocks.
- When you turn a crab over and look underneath, you can tell a crab's sex by looking at its abdominal flap. A male crab has a small triangle, but a female crab has a bigger triangle.



What we observed ?

- When we looked at the swimming crabs the crabs that live in deep water, we saw that their last feet were really flat.
- When we looked at the crabs that live in shallow water, their feet were not flat as the swimming crabs but pointy.

Our explanation

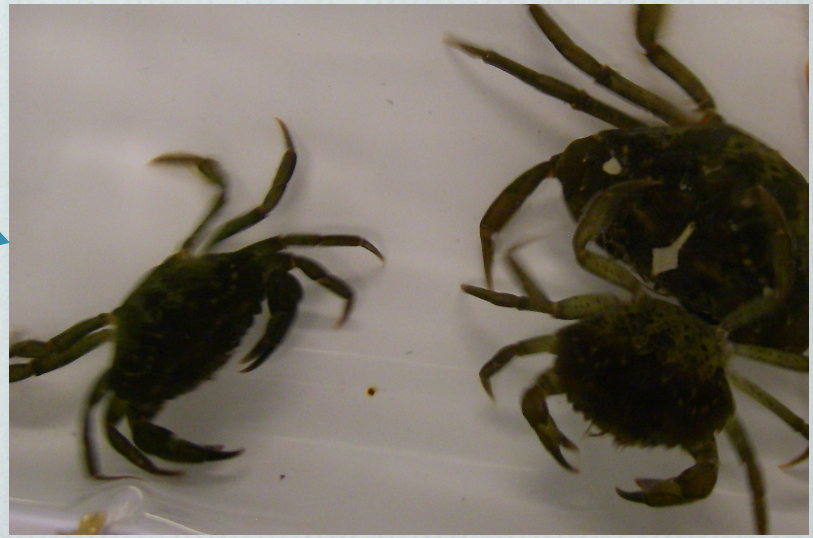
- We think that the swim crabs have more flat legs than the shallow water crabs because in the deep sea there is not so easy to catch food so they have to travel a lot and faster than normal, so they have to kind of swim.

- The shallow water crabs have more pointy legs because they are much more able to walk and they have it easier to catch food.

- **We used 2 different species of crabs:**

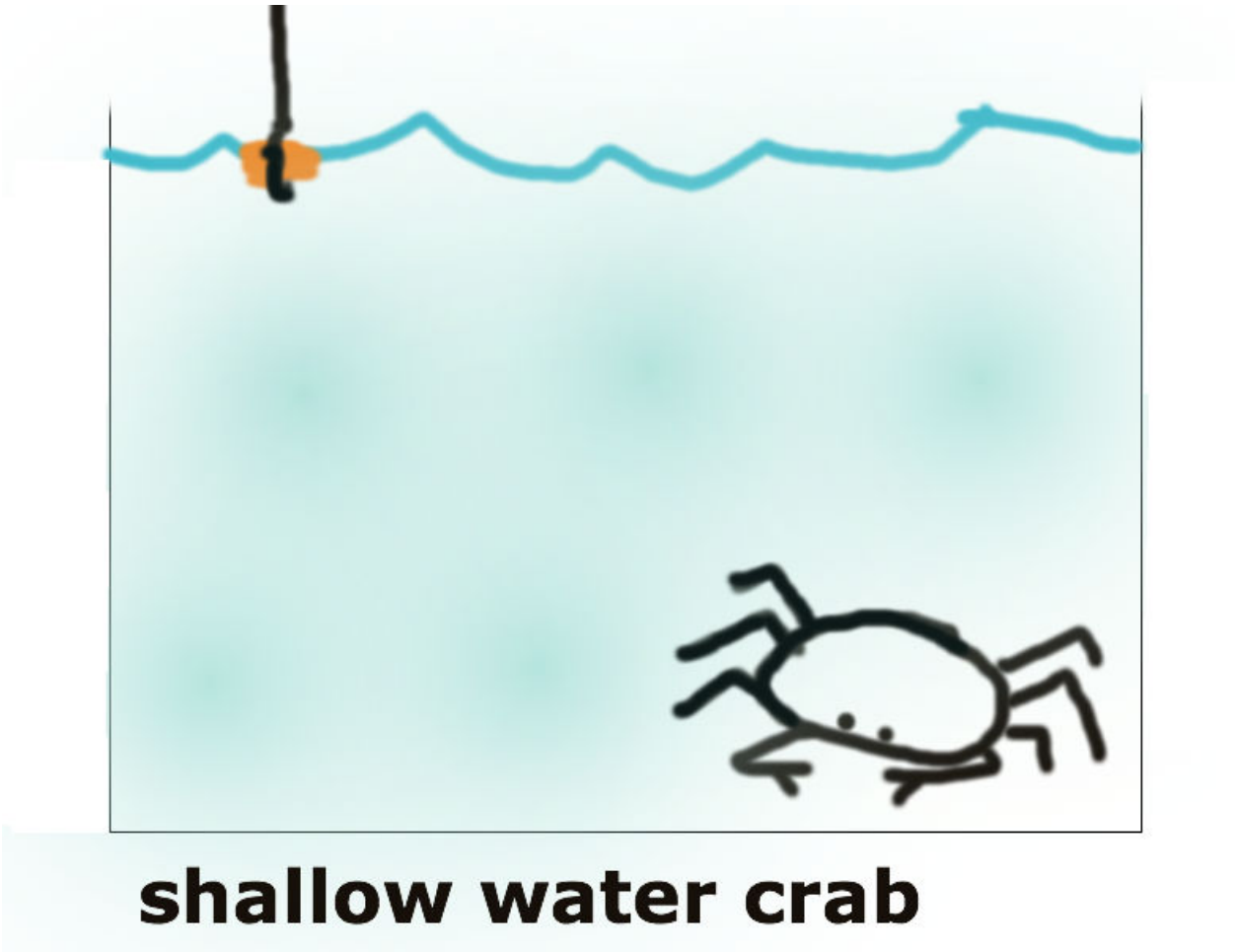
- The deep sea crabs.

- The shallow water crabs.



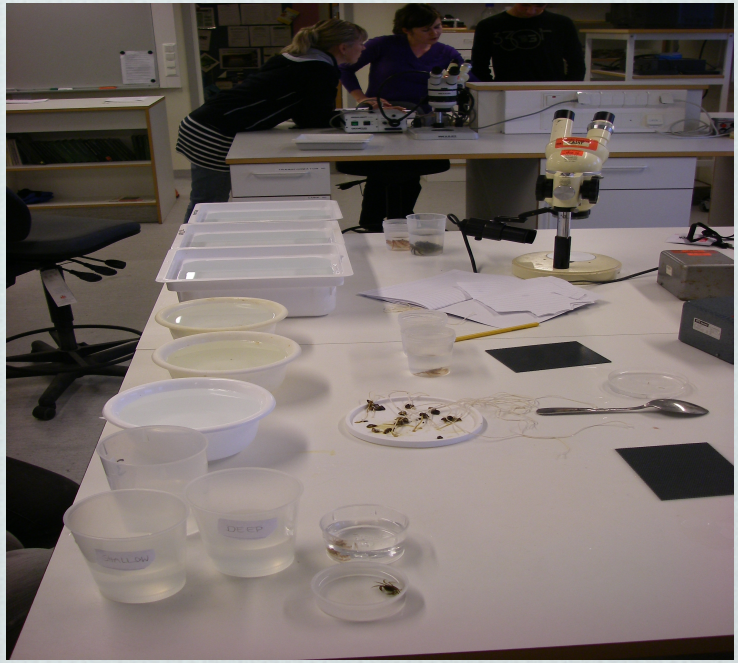
Hypothesis 1:

We think that shallow water crabs will not catch the food on the top because they are not able to swim.



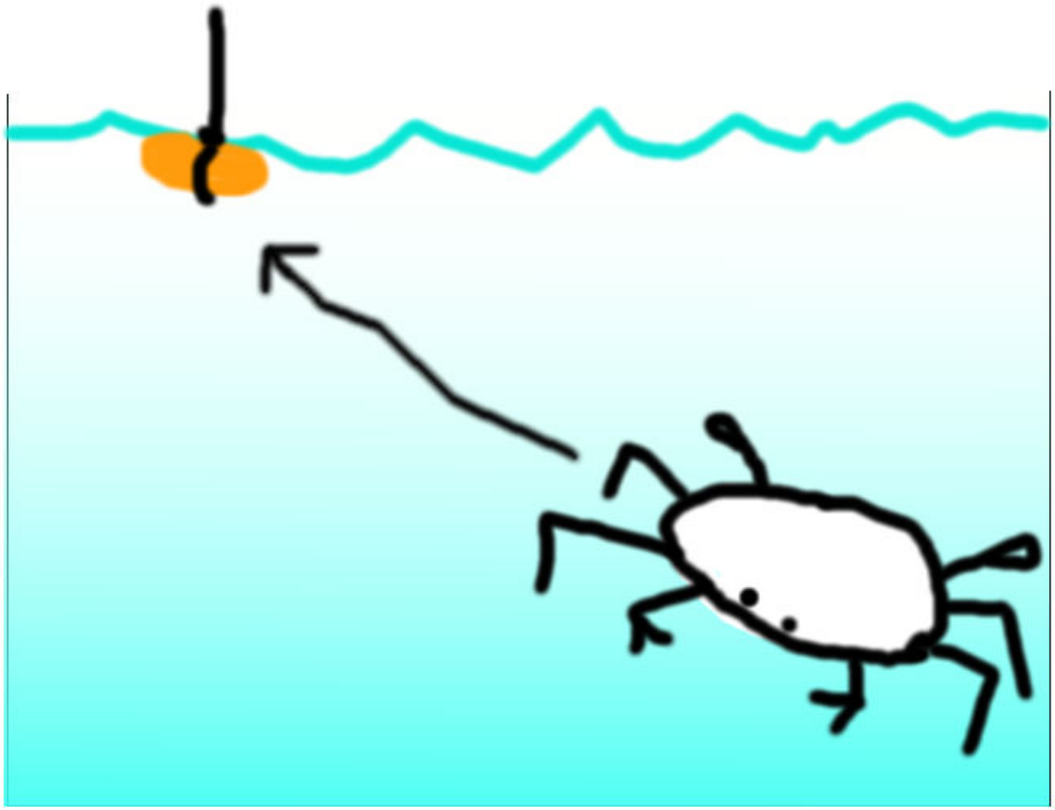
Null Hypothesis 1:

- The shallow water crab will swim to the food, catch it and he will succeed to eat it.



Hypothesis 2:

We think the the deep water crab will manage to swim to take the food.



Deep water swim crab

Null Hypothesis 2:

- The deep water swim crabs, will try to catch the food, but they will not succeed to take it because they don't know how to swim or how to jump.

For our experiment we used this:

- 3 swimming and 3 shallow water crabs of different sizes.
- Buckets or bowls in different sizes.
- Sea saltwater.
- Crab food, as crossed snails and a little blue sea mussel.

The crab food:

Test 1:
Little crab

Test 2:
Medium crab

Test 3:
Large crab

We used bigger buckets for this experiment.

Adjustment

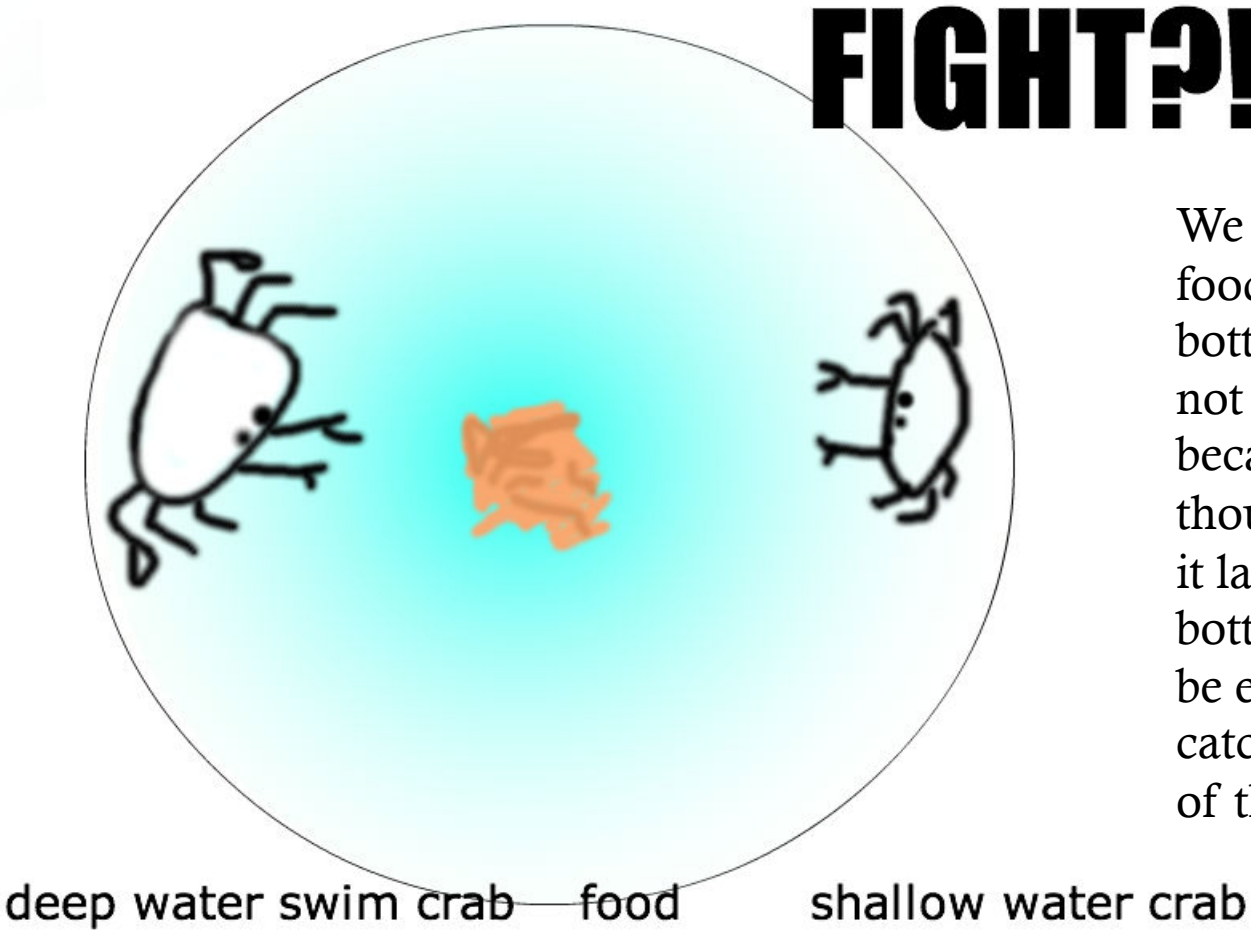
- First we had the food more in the middle, but it was to far away to catch it for all of the crabs.
- So we changed the experiment a little bit and moved the food for all crabs closer to the edge and then something happened.

The Results:

- So, we saw that the deep water sea crab didn't swim to the food. So we succeeded on our null hypothesis.
- We saw that the shallow water crabs tried a lot to take the food, and they finally succeeded !

Hypothesis 3:

We think that they will fight for the food.

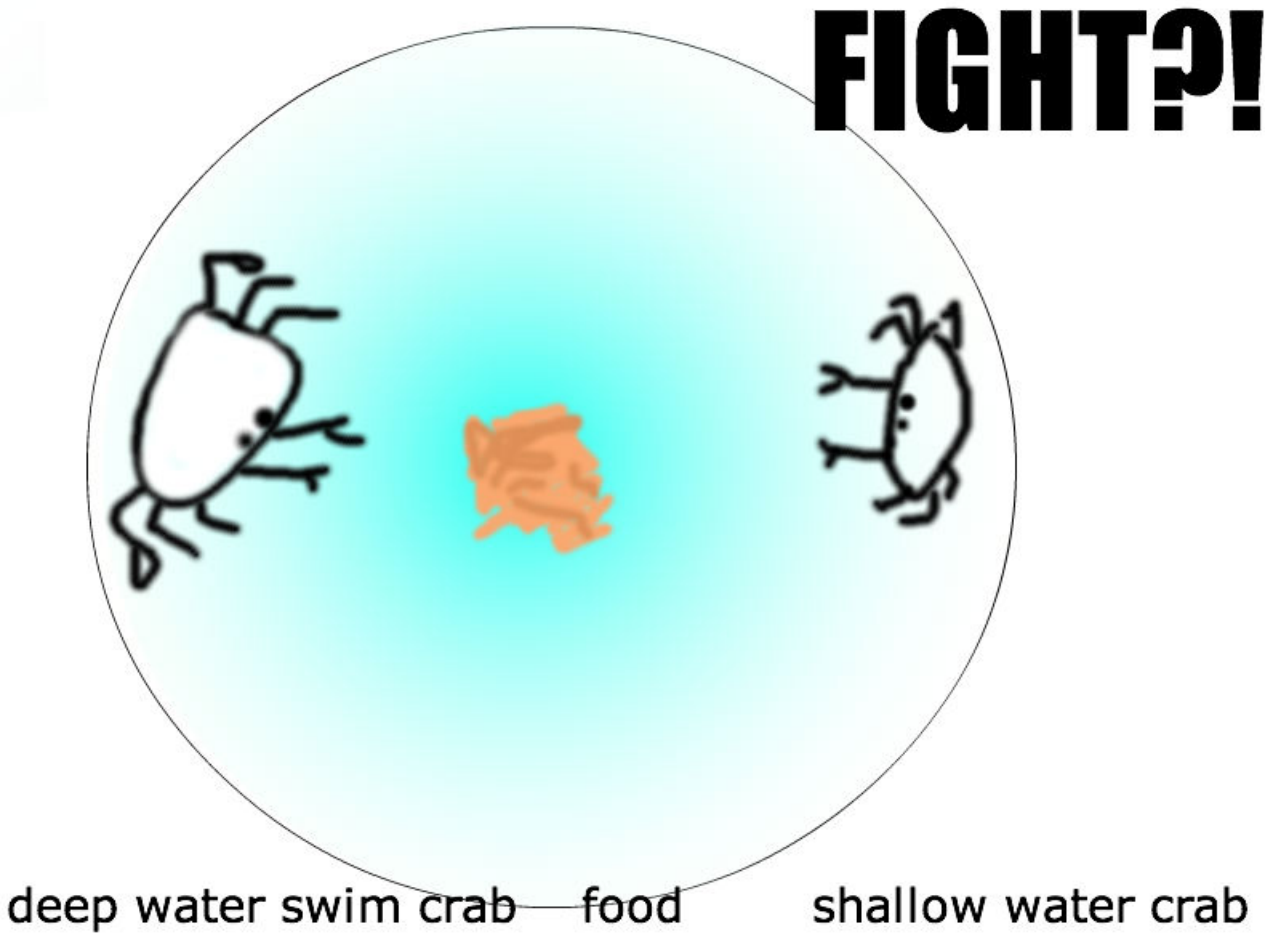


We put the food on the bottom and not the surface because we thought that if it lays on the bottom it will be easy to catch for both of the crabs.

Null Hypothesis 3:

- They will not fight for the food.

The fight!



The Results:

- On our fight the deep sea swimming crab just backed off trying to escape when our shallow water crab walked straight to the food and begun to eat.

Conclusion:

- We think that the deep sea swimming crabs prefer to eat when it's dark. Like in the deep water sea where they live.
- The shallow water crabs are more used to hunt and to catch food. Because in their environment there are more rocks so they are able to jump and get what they want.
- If we should continue this work we would like to try and test how their eating behavior changes in darkness. *If* it changes.

We think…

- …that on our experiment this deep sea swimming crab didn't eat the food because the crabs didn't like the light.
- …that the shallow water crabs are very clever because they took the food very fast, and on a very smart way. And they don't mind to eat in light.
- …that deep sea swimming crabs was shallow water crabs from the beginning, but there was the competition about the food on the shallow water area. So they had to go down the sea searching for the food there, so they haven't to fight about it. And then there was born new crabs with more flat back-legs. And that's the evolution.
- …that in our fight experiment the deep sea water crab backed off because the other crab was stronger. And because he's not made for fighting.

This is our working place and where we found all the crabs that we used for the experiment.

Presentation made by:

Cute pies themselves

Presentation made by: