



Rockpool adaptations transcript

Living things must adapt to the places and environment they live in so that they can survive.

This means that they develop special features which help them to survive in their particular habitat.

In rockpools, animals and plants must cope with extreme conditions like being exposed to the hot sun when the tide is out, being dislodged by waves and being exposed to different predators.

Today we are going to focus on three animals and plants that we commonly find in Yorkshire rockpools, and look at what they adaptations they have developed to survive:

Shore crabs

Shore crabs have a hard exoskeleton shell that offers it protection from the pounding waves when the tide comes back in.

This also offers them protection from predators that want to eat them like other crabs, fish and birds.

Shore crabs vary considerably in colour from greens to reds and this is dependent on where they are found, to better blend with their surroundings

This particular shore crab is a green colour to camouflage amongst the seaweed, making it difficult for predators to find them.

Sometimes you will find a crab with a missing claw or leg. This is usually an escape strategy where they can drop their limbs if a predator has got hold of them and escape. They also have the amazing ability to re-grow these missing limbs!

Limpet

Another common animal you will find in the rockpools are limpets.

Like crabs, they also have a hard shell for protection from predators.

The bottom of the limpet is called a 'foot' and it can stick to rocks using a sticky substance. This is so they don't get eaten by predators, dislodged from rocks by waves and can means they can capture a bubble of sea water within the shell which enables the creature to breathe whilst exposed.

The limpet will stay safe, firmly attached to its rock when the tide is out. But when the tide comes back in and they are covered in water again, they actually move around freely to feed on algae. They feed using a rough, raspy tongue called a radula, to scrape of the algae and you can sometimes spot these markings on rocks. When the tide eventually goes back out, the limpet will find its way back to

exactly the same spot and position as before, scientists aren't exactly sure how they do this! This spot is called a home scar, and over time the limpet will keep grinding down on the rock to get a perfect fit. You can often find evidence of home scars like this one when you are out exploring.

Bladder wrack

It's not just creatures that have adapted to live in rockpools, but plants as well. They have also developed special features to help them survive in these tough conditions.

This is a seaweed called 'bladderwrack'.

Like the limpet, it needs to attach itself to rocks using a root system called a 'holdfast' to stop it being washed away.

As you can see, it is covered in bubbled which make it look and sound a bit like bubble wrap.

These bubbles are pockets of air which help the seaweed to float when it is covered in water. This allows it to be closer to sunlight, allowing it to photosynthesise to make its food.