BE(OME A BSA(BEA(H(OMBER!





WEL(OME TO THE BSA(BEA(H(OMBER!

Let's learn together and discover some fascinating facts about the amazing creatures living in the rock pools along our seashore...

Who we are... the British Sub Aqua Club (BSAC) is the leading dive club and the sport's UK National Governing Body for scuba diving and snorkelling, providing an internationally-recognised training and development programme via a network of clubs and centres across the country and overseas.

Did you know... that we live in a country with 20,000 miles of coastline (that's just 5,000 miles less than a full circle around the earth!). Wherever you live in the UK you are never more than 70 miles from the seashore where there are some fantastic rock pools just waiting to be explored!

But what are rock pools? Rock pools are natural aquariums filled with seawater during high tide (when the sea comes right in up the beach), and exist as separate pools at low tide (when the sea goes out). Rock pools can be small and shallow or large and deep. Whatever their size, rock pools create miniature sea environments and form some of the most interesting seashore areas. These pools are home to many marine plants and animals which need to stay underwater when the tide goes out. So, rock pooling is a simple and fun way to discover and learn more about the many species of marine life around our shores!

However, before we start rummaging around a rock pool, you need to learn a few simple rules...



SEASHORE (ODE

The Seashore Code has been designed to keep you safe while on the seashore and to help you protect and respect the marine environment.

- Tell someone where you are going and when you are planning to come back and if you can, take a mobile phone. Always check the weather and tides before setting off.
- ★ Walk carefully over rocks, they can be slippery and you can also damage the marine life which often attaches itself to the rocks.
- Do not take any marine life home with you. You can take some photographs though.
- Always take your litter home!
- Report anything unusual that you find to an adult but do not touch anything if you are not sure it is safe.
- Respect and replace any stone or seaweed exactly how you found it it can be a home to some marine animals!

Also, don't forget to wear the right clothing to protect you, wear sunscreen if the sun is shining and always, always make sure you have good, non-slip footwear.

So now you've prepared for your Beachcombing adventure, let's go rock pooling together... you'll be amazed by the diversity of marine life you are about to discover!

TO HELP YOU IDENTIFY THE MARINE (REATURES YOU MAY FIND WHILE BEA(H(OMBING, HERE IS A FUN, FA(T-FILLED GUIDE TO THE MOST (OMMON BRITISH MARINE LIFE THAT (AN BE FOUND IN OUR RO(K POOLS. HAVE FUN!



The common starfish is perhaps the most familiar of all starfish, and can be found on almost all seashores around the UK.

Starfish are not actually fish!

Starfish are usually orange or pale yellow in colour. These starfish usually grow to between 10 – 30cm across. Most have five arms, but sometimes you may find one with four or even six! Starfish are also capable of re-growing lost arms. A single arm is also capable of re-growing into an entire new animal!

Starfish have thousands of sucker-like tube feet, which help them to walk along and grip onto surfaces.

Starfish have eyes on the end of each arm, but these are not like human eyes! They are known as eye spots, which are found underneath its skin. They can be either black or red.

Starfish are predatory, which means that they hunt and feed on small animals such as mussels and clams. When feeding, the starfish will push its entire stomach out through its mouth and into its prey's shell. Special juices then break down the prey into a soup. Its entire stomach, along with its soup dinner is then pulled back into its mouth. Yuk!







Cushion stars can be found hiding under rocks and boulders in rock pools.

They are much smaller than other starfish, (usually growing up to 5cm across), and have very short arms. Most will always have five arms. The colour of this starfish varies with habitat, but the colour is usually brown, orange or green. Cushion stars are omnivorous, and will scavenge on dead plants and animals.

The common shore crab is extremely common in rock pools around the UK. Shore crabs are usually dark green / yellow in colour, but this can vary.

Common shore crabs are considered omnivores, feeding on a wide variety of prey; including algae, sea snails, worms, shrimps, and even other Common Shore Crabs!

Usually grow to about 8cm across.





Edible crabs are usually found on the lower part of the sea shore. They like to hide, and are often found dug into sediment on the shore.

They are large, with a thick oval shaped body. They are easy to tell apart from the other crabs, as they have black-tipped claws.

They are very strong, and make short work of their prey which includes mussels and whelks.

Can grow much larger than the common shore crab, usually to about 20cm across!



Common prawns are found in most rocky areas of the seashore, including rock pools. They appear almost transparent, apart from the brown lines on their body and yellow bands on their legs.

Common prawns are scavengers, and feed on just about anything!

Usually grow to about 11cm long!

The Beadlet Anemone can be found on UK rocky shores, and tends to live in rock pools or in very shallow water.

These anemones usually attach themselves to a hard surface on the shore. Like all anemones, Beadlets have tentacles which are used to catch prey, and you can see the tentacles clearly when they are underwater. However, when exposed to air, the anemone retracts its tentacles and often looks just like a blob of jelly attached to a rock on the shore. Beadlet anemones usually have up to 192 tentacles in total!

Beadlets are usually a deep red colour, so they are easy to spot on the shore. Sometimes they are green, brown or orange.





The Snakelocks Anemone is found in shallow water, and in rock pools on the seashore.

They can have slightly more tentacles than beadlet anemones, with up to 200! These tentacles are usually a rich green colour with purple ends.

Tentacles are long and sticky, and are used for catching passing prey.

The Common Sea Urchin is a slow-moving, rounded creature that can be found in rocky areas around the

The skeleton of this animal is usually bright red; however, the white spines that cover the urchin's body usually make them appear pink. These spines are used for defence. Like starfish, Sea Urchins are also covered in tube-feet which help them move along. Sea Urchins feed on a variety of prey, including barnacles and algae.



UK coast.



Barnacles are crustaceans, and are related to shrimps, crabs and lobsters!

Most barnacles are very small, and can be found all over the UK coast. They live in huge populations on the shore, often with many thousands found on a single rock! The barnacle's body is made up of plates that form a hard shell.

Barnacles will typically grow up to 1.5 – 2cm across.

They feed by extending their long, feather-like legs that will trap any food passing by in the water.

Limpets are some of the most common animals found on the rocky shores of the UK. They are molluscs, and are related to snails.

They have a very strong, cone-shaped shell that is most often firmly attached to rocks on the seashore. These shells can grow up to 6cm across. Their shells are a good defence from predators such as starfish, who may try to pull the limpets from the rocks.

Limpets are herbivores - that means they feed on algae growing on the rocks. To do this, they move slowly over the rocks surface, scraping algae from the rocks.





The common mussel is a very well-known marine animal that can sometimes be found on the seashore, or in shallow water.

Shell colouration is usually blue-black. Mussels are known as bivalves (Pronounced: bi-valves), as they have two shells covering their soft body.

Mussels mostly live in large groups, attaching themselves to each other and to rocks with sticky threads. Mussels have a strong muscular foot that is used for digging into the seabed.

Mussels are filter-feeders, and feed on tiny animals that live in the water.

Lots of different animals like to eat mussels, including starfish, crabs and whelks.



Dog-whelks are a common sight on UK seashores. Dog-whelks are carnivores, and are most often found amongst groups of their favourite prey items. These include barnacles, mussels and other varieties of sea snail.

To feed, the dog-whelk will use a special tool to break a hole into the shell of its prey. It will then release special juices into its prey that break it down into a soup, which can be easily sucked up. Shell colour is generally pale white or grey.

Hermit crabs are very common on rocky shores, and are often found in rock pools. Most are very small, but large ones can be found.

They are different from other crabs, as they protect their soft bodies using an old snail shell. When it feels threatened, the crab can hide inside its shell to protect itself. As hermit crabs grow and get bigger, they have to find bigger shells!

Hermit crabs are omnivores, eating almost anything! They can also filter feed small particles from the water.





The common lobster is an iconic sea creature, but is not often seen on the seashore. They like to hide in rocky areas. The common lobster is a dark blue colour – they only go red when cooked!

They are active predators, and eat lots of different seashore animals, including mussels, snails, crabs and small fish. Animals found are usually up to around 30cm in length!

Although Octopus are more commonly seen underwater by divers, occasionally they can be found in large rock/tide pools on the seashore.

If ever found, they are usually easy to identify, with their soft bag-like body and eight flexible arms.

Crabs are one of their favourite things to eat. Their arm span can reach up to 70cm!





Periwinkles are marine snails. They are typically found in rock pools on the seashore.

There are many different kinds of periwinkle, and the most likely to be found include the common periwinkle, rough periwinkle and the flat periwinkle.

Their colours vary. All periwinkles are herbivorous and graze seaweeds and algae growing on rocks.

Tompot blennies are unusual looking fish, with long bodies and a large head. Although adult fish are not commonly found on the shore, young tompots can sometimes be found in rock pools.

Colour is usually reddish brown, with dark bands down the body. They usually grow up to a maximum of around 30cm long! They eat a wide variety of other sea shore animals, including crabs, sea snails and sea anemones.





The shanny is also known as the common blenny. They are widespread across UK seashores, and are commonly found in rock pools hiding under large rocks. They have a long body, which is often a greeny-brown colour. They grow up to around 16cm long.

Like the famous chameleon, the shanny can also change its body colour to match the colour of its surroundings!

Shannies are not fussy eaters, and will eat anything, including worms, snails, shrimps, barnacles and seaweed!

Corkwing wrasse are often found hiding in algaecovered rock pools on the lower part of the shore.

Males (boys) and Females (girls) are different colours. Males are usually more brightly coloured, with hints of bright blue or dark red. Females are usually pale brown. They grow up to around 25cm long!

A dark spot on their tails may also help to identify this species, but this can sometimes be difficult to see!

These fish usually eat crabs, shrimps and snails.



SEAWEEDS ...

SEAWEEDS ARE NOT PLANTS. THEY ARE ALGAE. THEY DO NOT HAVE ROOTS OR LEAFY TISSUES LIKE MOST LAND-GROWING PLANTS.



Bladder wrack is a large, brown seaweed. It is found in large numbers on rocky shores.



Knotted wrack is usually found on the middle of the seashore. It is very common, and looks just like string!

Fronds have large 'bubbles' which contain air. This allows the seaweed to float in the water! Some fronds can grow huge, up to 2 metres in length!



Toothed wrack is similar to bladder wrack, usually an olive-brown colour and at first glance may look similar to bladder wrack. However, this seaweed is easily told apart as the fronds are jagged. It is very common all around the UK coast.



Sea lettuce is very easy to spot. It is completely green, and looks just like the lettuce we would eat! It is common around all shores of the UK, where it grows on rocks or other seaweeds.

Lots of marine animals like to eat this seaweed!

CONGRATULATIONS ON BECOMING A BSAC BEACH COMBERI

WE HOPE YOU HAD FUN WHILE DISCOVERING THE SECRETS OF BRITAIN'S ROCK POOLS.

Whenever you beachcomb don't forget to always follow the Seashore Code so that your rock pooling is always safe and fun. Rock pooling is a great way to spend time on the beach and you can discover new creatures at different times of the day or even year so do keep beachcombing!



WHAT YOU (AN DO NEXT...



We hope you had loads of fun as a BSAC Beachcomber and have seen many amazing marine creatures. Now you've tried it, keep beachcombing...it's a great thing to do at any time of the year – just don't forget to follow the Seashore Code.

And if you enjoyed rock pooling, then imagine what more you could see underwater!

INTERESTED? IF SO, THERE ARE A FEW THINGS YOU (AN DO:

LEARN To SNORKEL. You can learn to snorkel with BSAC from the age of six, it's great fun, easy to learn and a really enjoyable way to get the whole family involved. You can snorkel on holiday or in the UK, where there are many excellent snorkelling sites. For more information on learn to snorkel visit **bsac.com/snorkelling**

If you want to learn to snorkel then why not join a BSAC Club. BSAC has a diverse network of social, family-friendly clubs around the UK and overseas, providing the ideal environment for families and young people to learn to snorkel. Find a BSAC club near you: bsac.com/findclub

WANT MORE? Don't forget that you can learn to scuba dive from the age of 12! From beginner to experienced, BSAC provides a full training programme. Diving skills are taught progressively so that each new experience is built upon step by step. For more information on learn to dive visit **bsac.com/trydive**

If you would like to learn more about marine life and the sea environment, visit the BSAC Shop bsac.com/shop, where there's a great selection of marine books and DVDs. You can also visit the Marine Conservation Society website mcsuk.org

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