

PLACES TO EXPLORE

Shore platforms are not always made of chalk. The sandstone reefs off Eastbourne and Wissant, for example, are just as rich in life. The best way to find out more is to explore for yourself. The Seven Sisters Voluntary Marine Conservation Area is easily accessible from several places, or why not visit the magnificent platforms at Étretat in Normandy.



KC

TAKE CARE AND BE SAFE

- Always check the tide and don't go alone – it's safer and more fun to explore together.
- Wear sturdy shoes that you don't mind getting wet.
- Cliffs can be dangerous – stay away from their foot and edge.
- Take care on slippery rocks.
- Take photos not live specimens and carefully return overturned rocks to their original position.

FURTHER INFORMATION

For more information about **BEACHES AT RISK**, please contact:

BAR Project
c/o Department of Geography
Chichester Building
University of Sussex
Falmer
Brighton BN1 9QJ
Website: www.geog.sussex.ac.uk/BAR

Email: bar-project@sussex.ac.uk

PARTNERS

BEACHES AT RISK is a partnership between the University of Sussex (Project Leader), East Sussex County Council, Université de Rouen, Université de Caen and Université du Littoral.

Other funders include Brighton and Hove City Council, Conseil Régional de Haute-Normandie, Conseil Général de la Seine-Maritime, the Environment Agency, Pevensey Coastal Defence Ltd and Posford Haskoning Ltd.

Picture credits: Cover - Alex Tait
Bryony Chapman (BC), Kate Cole (KC), Rohan Holt (RH), Gerald Legg (GL), Tracey Youngusband (TY)



KC

Printed on recycled paper, chlorine free.
© East Sussex County Council 2004

LIVING ON THE SHELF



This project is part-financed
by the European Union.

A HIDDEN WONDER

At the foot of the impressive cliffs of the Channel coasts, narrow beaches rest on wide shore platforms. These gently sloping rocky shores, which can only be seen at low tide, play an important role for wildlife and our beaches. Natural erosion of chalk cliffs and platforms adds new flint pebbles to our beaches.

Chalk cliffs with bands of flint

Cliff falls add flints to the beach that are rounded into pebbles by the waves

As the sea erodes the cliffs, the shore platform is extended landwards

Waves wear down the platform, releasing flints onto the beach

Shingle beach

Shore Platform

Waves move pebbles along the coast mainly west to east; a process called longshore drift

Rockpools

Pools and gullies are carved out as water sweeps back and forth across the platform



Chalk: Chalk is a soft rock, so things can live inside it as well as attaching to it. Seaweeds beneath the surface give a blue-green tinge, and animals like sponges and worms burrow into it, helping to break it up. You may find rocks with pin-sized holes; these are the ends of the U-shaped burrow of a worm. (KC)



Barnacles: Relatives of crabs, barnacles attach themselves to rock, within a fortress of hard plates. These can be shut tight to keep the animals from drying out, then opened when the tide is in. They use their feathery legs to sieve food from the water. (RH)



Edible crabs: Crabs are often found sheltering under rocks and weed. The pie-crust edge to their shells makes edible crabs easy to identify. (RH)



Chitons: The chiton or coat-of-mail shell is often overlooked, tending to hide on the underside of rocks. It looks like a woodlouse but is actually a primitive snail with eight overlapping plates. (RH)



Limpets: Limpets stop themselves from drying out by clamping themselves down tight, eroding the rock around them to make a perfect fit for their shells. Look closely and you may spot round dents in the rock where limpets used to live. (KC)



Piddocks: These animals use sharp ridges on their shells to bore into the chalk, extending tubes called siphons to feed at high tide. The holes they leave behind when they die are perfect for other creatures to move into. (GL)



Keelworms: These worms live inside tough chalky tubes which they build on rocks and pebbles. Being armour plated, keelworms can live on even the roughest parts of the shore. (BC)



Squat lobster: Shore platforms are ideal nursery areas for many young animals before they are ready to live in the open sea. If you are lucky you may find tiny squat lobsters or even miniature brittle stars. (RH)



Scorpion Fish: Small fish shelter in pools and amongst seaweeds. They are often highly camouflaged to blend in and stay hidden from predators. (TY)



Dog whelks: These snails may look harmless but they are ferocious predators, feeding on barnacles and mussels. They drill through their shells and suck out the insides. (GL)

AN OASIS FOR LIFE

Shore platforms provide an oasis for wildlife amongst an otherwise moving seabed of sand and shingle, and allow us to glimpse the wealth of wildlife found in our seas. Rockpools provide shelter and the rock itself something solid to cling on to.