



As the tide goes out along this rocky coastline it reveals submerged worlds, teeming with life. These natural aquariums allow you to encounter many strange and beautiful creatures hidden below the tide line.

Experience these creatures for yourself using this leaflet as a guide. Identify, record and compare them, and share some fascinating facts.

With support and financial assistance from



**Want to learn more?** Come on a ranger-led seashore safari. Visit [www.marine-reserve.co.uk](http://www.marine-reserve.co.uk) for dates or look out for event posters locally.

The Voluntary Marine Reserve is a charity which aims to conserve marine wildlife, raise awareness and promote responsible recreation. We depend on grants and donations to enable us to carry out our work. Our current main funders are the Crown Estate, the Esmée Fairbairn Foundation, the National Trust for Scotland and Scottish Natural Heritage.

A committee made up of local people, statutory bodies and non-government organisations manage the reserve. The National Trust for Scotland is an independent charity with the aim of conserving, managing and promoting Scotland's cultural and natural heritage. We depend on our members and visitors to enable us to continue our work, both now and in the future.

Please support the Trust by becoming a member today and help to protect Scotland's heritage for future generations to enjoy.

**Tel:** 0844 493 2100 or 0844 493 2256 (St Abbs)

The National Trust for Scotland Ranger Service organises events and conservation work throughout Scotland. Get involved at [www.nts.org.uk](http://www.nts.org.uk)

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## St Abbs & Eyemouth

VOLUNTARY MARINE RESERVE



the National Trust  
for Scotland  
a place for everyone



### The rockpool explorer's guide

## Life on the rocky shore

All life on the seashore is affected by the rise and fall of the water, or tides. Many creatures would die if they weren't covered by water once a day.

Creatures living higher up the shore are exposed to the air for longer when the tide is out. It is in these dry, stressful conditions that the seashore's real tough nuts – such as the periwinkle – hang out.

Further down, rockpools are isolated from the sea for less of the time. Here, conditions are more stable, resulting in a greater variety of life. But competition for food and space is fierce.



Periwinkles can survive in the highest rockpools up the shore. This is because they have their own trapdoor, or operculum, which seals water inside their shells at low tide.



Dahlia anemones live on the lower shore because they can't cope with being out of water for long. At low tide, they retract their tentacles to help keep moisture in.



In the very last pools to be exposed at the lowest tides you may find true ocean-going creatures that simply got caught out.

## Before you go...

- Plan your visit at low tide, or better, as the tide is still going out. That way you'll have more time to explore, and you'll be safer.
- You don't need special equipment but a net and bucket can be useful. Wear wellies, or shoes you don't mind getting wet.
- Don't go alone and keep back from cliff edges.

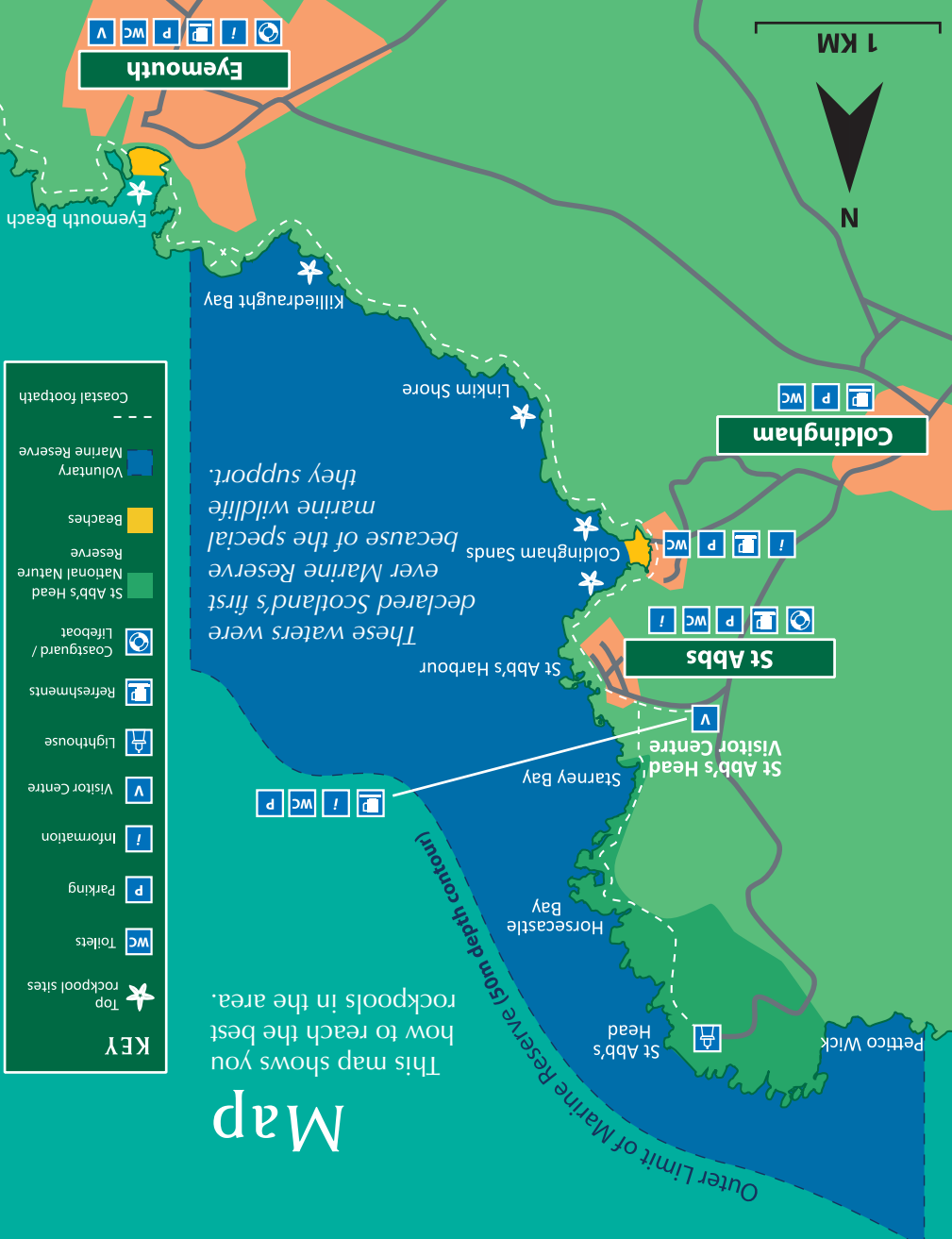
## When exploring...

- Handle rock pool creatures gently – poking or squeezing soft-bodied animals can kill them.
- Replace animals, rocks and seaweed as you found them. Check seashells are empty and only take a few home.
- Take care when walking on the rocks – they're slippery, and it's easy to crush and dislodge delicate creatures.
- Take your rubbish home with you.



## Map

This map shows you how to reach the best rockpools in the area.





# Seashore Safari

See if you can find the creatures shown here. Look on rock faces, in cracks and crevices, under stones, on and under seaweed, and in the water.

Can you find the five most abundant creatures?

BARNACLE




|                |     |  |
|----------------|-----|--|
| Sticking power | 100 |  |
| Abundance      | 98  |  |
| Stealth        | 45  |  |

*What is it?* A relative of the crab that forms crusts over rocks

*Did you know:* When covered by water, barnacles kick food into their mouths with their feathery legs.

SHORE URCHIN




|                |    |  |
|----------------|----|--|
| Sticking power | 98 |  |
| Abundance      | 5  |  |
| Stealth        | 87 |  |

*What is it?* A spiky relative of starfish

*Did you know:* This small urchin has a green shell and purple-tipped spines to protect its soft body.

MUSSEL



|                |    |  |
|----------------|----|--|
| Sticking power | 87 |  |
| Abundance      | 65 |  |
| Stealth        | 10 |  |

*What is it?* A blue-black bivalve (2 shells)

*Did you know:* Mussels throw out tiny ropes called **byssus threads**. They use the threads to anchor themselves to the wave-washed rocks, and to other mussels.

SHANNY (COMMON BLENNY)




|                |    |  |
|----------------|----|--|
| Sticking power | 15 |  |
| Abundance      | 40 |  |
| Stealth        | 80 |  |

*What is it?* Britain's commonest reef fish

*Did you know:* Its eyes are close to the top of its head so it can see predators attacking from above.

BEADLET ANEMONE




|                |    |  |
|----------------|----|--|
| Sticking power | 70 |  |
| Abundance      | 90 |  |
| Stealth        | 30 |  |

*What is it?* A jelly-like animal that attaches to rocks

*Did you know:* Beadlet anemones paralyse their prey with poisoned stinging cells hidden in their tentacles.

SHORE CRAB



|                |    |  |
|----------------|----|--|
| Sticking power | 18 |  |
| Abundance      | 79 |  |
| Stealth        | 65 |  |

*What is it?* Our shores' commonest crab

*Did you know:* Think you've found a dead crab? It could just be that it grew too big for its shell, and left it behind.

BREADCRUMB SPONGE

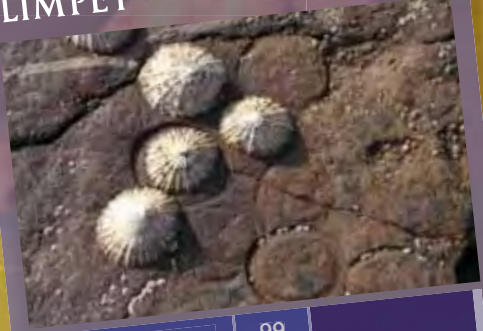


|                |    |  |
|----------------|----|--|
| Sticking power | 95 |  |
| Abundance      | 39 |  |
| Stealth        | 0  |  |

*What is it?* A colourful encrusting sponge

*Did you know:* Looking like a section of the moon's surface, this amazing animal forms yellow, green and orange encrustations on rocks and in crevices.

LIMPET



|                |    |  |
|----------------|----|--|
| Sticking power | 99 |  |
| Abundance      | 99 |  |
| Stealth        | 45 |  |

*What is it?* A cone-shaped sea snail

*Did you know:* Look out for **home scars** – circular marks on the rocks. Limpets return to the same scar each time the tide goes out.

BROWN CRAB



|                |    |  |
|----------------|----|--|
| Sticking power | 20 |  |
| Abundance      | 18 |  |
| Stealth        | 97 |  |

*What is it?* A crab with a 'pie crust' shell

*Did you know:* They often 'play dead' when you pick them up. This is so predators looking for a fresh, live meal might leave them alone.

SCORPION FISH



|                |     |  |
|----------------|-----|--|
| Sticking power | 10  |  |
| Abundance      | 1   |  |
| Stealth        | 100 |  |

*What is it?* A reef fish

*Did you know:* This hunter is camouflaged to merge with its habitat. This means it can lie in wait for prey without being seen.

BUTTERFISH




|                |    |  |
|----------------|----|--|
| Sticking power | 8  |  |
| Abundance      | 5  |  |
| Stealth        | 92 |  |

*What is it?* An eel-like fish

*Did you know:* Slippery and difficult to catch, this slender fish slips into crevices between rocks to shelter from predators.

KELP




|                |    |  |
|----------------|----|--|
| Sticking power | 89 |  |
| Abundance      | 53 |  |
| Stealth        | 0  |  |

*What is it?* A large, brown seaweed

*Did you know:* Kelp clamps itself to rocks using a 'holdfast' to prevent it being swept away by rough seas.

HERMIT CRAB



|                |    |  |
|----------------|----|--|
| Sticking power | 5  |  |
| Abundance      | 43 |  |
| Stealth        | 78 |  |

*What is it?* A soft-bodied crab that inhabits empty shells

*Did you know:* If you see a shell scuttling along the bottom of a rockpool, the chances are it has a hermit crab living inside.

PRAWN




|                |    |  |
|----------------|----|--|
| Sticking power | 5  |  |
| Abundance      | 45 |  |
| Stealth        | 60 |  |

*What is it?* A transparent relative of the crab

*Did you know:* Prawns will dart backwards and forwards to avoid your net, paddling with their fan tails.

DOG WHELK



|                |    |  |
|----------------|----|--|
| Sticking power | 55 |  |
| Abundance      | 86 |  |
| Stealth        | 54 |  |

*What is it?* A sea snail with a pointed shell

*Did you know:* This carnivorous snail's favourite food is mussels and barnacles.

STARFISH



|                |    |  |
|----------------|----|--|
| Sticking power | 97 |  |
| Abundance      | 20 |  |
| Stealth        | 78 |  |

*What is it?* A five-armed, spiny-skinned sea animal

*Did you know:* Common starfish force their stomachs through their small beak-like mouths to digest food.