The **Helford** River
shore life

The shores of the Helford River reflect the diversity and wealth of its marine life...

HELFORD
VOLUNTARY MARINE
CONSERVATION AREA

Mussels and barnacles

Helford River Shore Life

The shores of the Helford River reflect the diversity and wealth of its marine life. It is a ria, an inundated river valley, similar to an estuary but with very limited freshwater inflow.

Zonation

The shore is a dynamic place; cycles of life are determined by the twice-daily ebb and flood of the tide. The sea is a constant environment of saline, oxygen-rich, water that only slowly changes in temperature. On the exposed shore an anemone could be in a salt-encrusted pool one moment and doused in freshwater from a thunderstorm minutes later: an open rocky

Zonation patterns

The hardy plants and animals that can survive the harshness of the upper shore have few competitors for space, light and food, while those at the sheltered lower levels face constant strife with competitors, grazers and predators. Hence, a pattern of zonation develops with many organisms confined to one or a few horizontal bands along the shore. The tough brown seaweeds, the wracks, show a classic zonation on suitable rocky areas. Below the black and yellow lichens of the splash zone, small clumps of Channelled Wrack cling to the rock, further down these are replaced in turn by the Spiral Wrack, the Bladder Wrack, the Knotted Wrack, and the flattened Toothed Wrack, before these give way to the Thongweed and kelps. Each zone supports its own community of plants and animals.

Explore the shore

When going on to the shore always check the tide times and if possible follow the tide down the beach. Make sure you do not get cut off amongst gullies or by cliffs. To find the most, go slowly and look carefully.

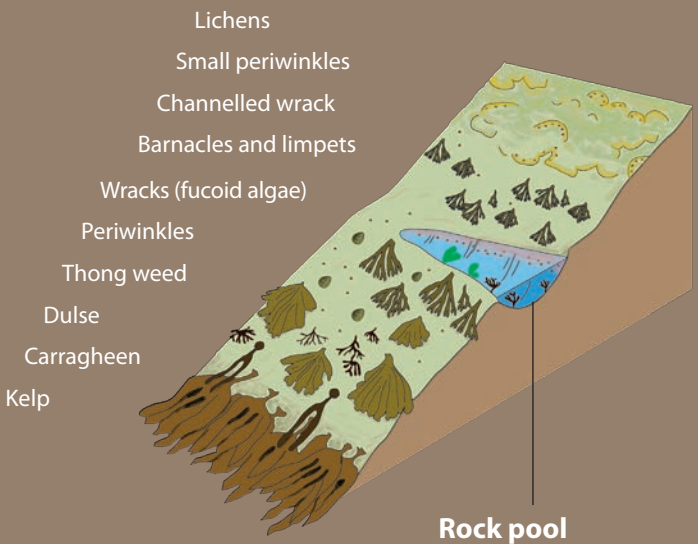
On a rocky shore gently lift the seaweed, look under and through it, you may find top shells and periwinkles or see sand-hoppers slipping away. Look out for the brown, green or yellow Flat Periwinkles and the clear jelly-like masses containing their eggs.

Carefully turn over a rock - not too big, and mind your fingers and toes! As you move it watch and then stop and look for the coiled white tubes of Posthorn Worms, tiny brittlestars or podgy little Cushion Stars. This is the realm of the crabs, the agile Shore Crab, the hairy Broad-Clawed Porcelain Crab, and the aggressive red-eyed Velvet Swimming Crab. Replace the rock gently.

Approach rockpools quietly and peer in, trails in the sediment can show where a

Star sea squirt

ridge will reach desert temperatures in the summer sun, but drop below freezing on a winter's night. Organisms at the top of the shore may have to survive such severe conditions for several days, while a seaweed near low water mark may only risk drying for a few hours in a fortnight.



Rock pool

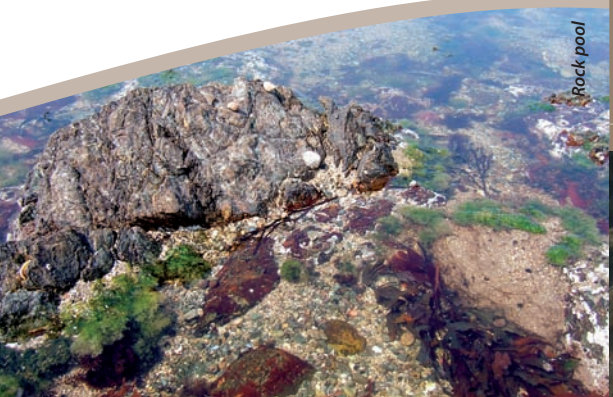
Coralline algae

Bifurcaria bifurcata (SW shores)

Periwinkles etc.

top shell or hermit crab lurks. They can be colourful gardens of algae and are also home to many sea anemones. The Beadlet withdraws its tentacles and resembles a red, green or brown wine gum; while the larger Snakelocks cannot retract its long green, brown, or grey tentacles. Both move around, but do not tolerate company, fighting other anemones with special stings.

As you move down the shore, bend low and sneak a look up into overhangs and crevices, these are the refuges of many colourful creatures – green and orange sponges, bright-red sea squirts, flat Starry Sea Squirt colonies and even patches of pink or green Jewel Anemones. Clusters of tiny cream or pink vases are the egg capsules of the Dog Whelk.


Rock pool

- Take only photos; marine life does not survive long away from the sea.
- Leave only footprints; litter is a hazard to wildlife.
- Keep it cool; animals in buckets get hot and die.
- Put it back where it came from; animals in new areas are in danger, leave them where they are safe.
- Keep it the right way up; return rocks and weed to their original position, with any weed on top.

The more you look, the more you see


Velvet swimming crab

For further information about the HVMCA and how you can become involved, look on the Helford Voluntary Marine Conservation Area website www.helfordmarineconservation.co.uk

Bladder wrack

In sheltered conditions, sand and gravel shores gather silt, making them an ideal habitat for a number of worms. Ragworms and Lugworms burrow alongside the sand covered tubes of the Sand Mason Worms and, towards the lower shore, the long tubes of the Peacock Worm. When submerged, its feathery crown of tentacles emerges to gather food from the flow of the tides.

Soft mud is deposited in the most sheltered upper reaches and creeks; the surface mud is brown, but the undisturbed mud below lacks oxygen, becoming black and smelly. The many worms and shrimps dwelling here must ventilate their tubes. You may see holes in the mud with grooves radiating out, keep still and watch as the tide comes in and the long soft siphon of the Peppery Furrow Shell will emerge and seek food. Flounders may swim in and nip off the siphons leaving the shell to grow a new tip before it can feed again.

The fascinating communities of the river's shores have evolved over millions of years, but are vulnerable and easily damaged. Only by caring for this environment can we ensure that their diversity will continue for years to come.

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Sponsors

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Muddy creek