



# Rock pools

Some animals can live in rock pools, even though they are battered by waves, if they are adapted in the right way.

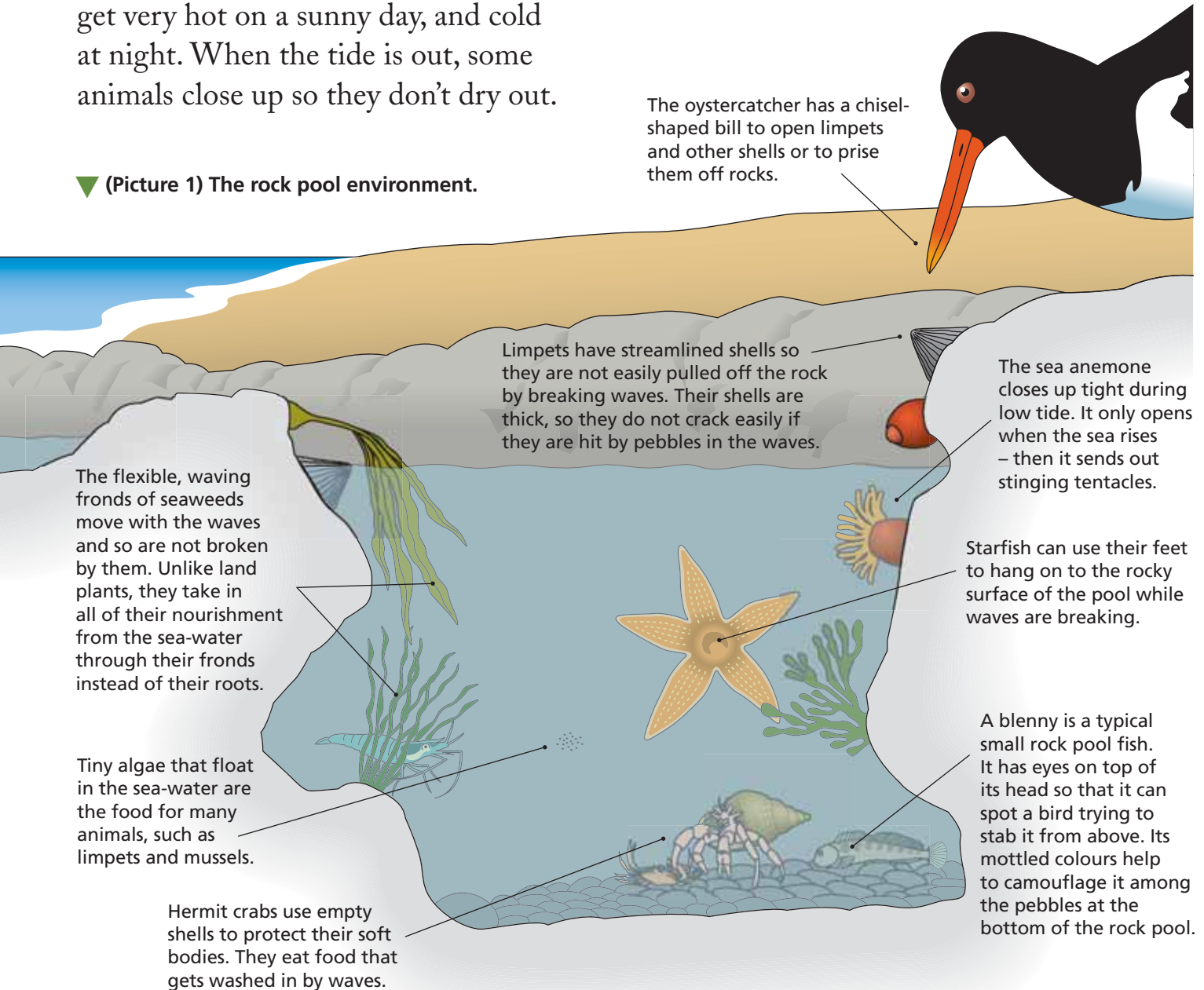
Rock pools are bowl-shaped hollows which hold sea-water when the tide goes out (Picture 1).

A rock pool is a very difficult place to live in because conditions are continually changing. For example, rock pools can get very hot on a sunny day, and cold at night. When the tide is out, some animals close up so they don't dry out.

▼ (Picture 1) The rock pool environment.

## Waves and tides

Twice a day – as the tide comes in and as it goes out – plants and animals must be able to stand up to the battering of breaking waves by holding fast to rocks or sheltering in some way. Clearly, a rock



pool is no place for large living things or those that are in any way delicate.

Animals like crabs, shrimps and small fish take shelter from waves under rocky ledges or stones. Some can burrow into the sandy bottom of the pool.

## Finding food

Rock pools do not contain much food, so animals must be able to survive by eating only when the tide comes in. With nothing to eat, many animals, such as sea anemones and limpets, close up tight and wait for a new supply of food to arrive with the next tide (Picture 2).



▲ (Picture 2) Rock pools at low tide, with waves breaking in the distance. Notice the sandy bed of the pool, and the seaweed. Colonies of mussels are clinging to the bare rock above the pool. These are shown in more detail by the picture on the right. See how they live together for added protection from the waves.

## Depending on one another

Each of the creatures in a shallow, seaweed-free rock pool is easy prey for hunters such as birds. This is why larger pools, with lots of seaweed to hide under, are home to more small animals than open pools.

The seaweed has extra benefits. It puts oxygen into the water and so helps more water-life to survive the period between tides. At the same time, the pool animals release wastes that contain the nourishment the seaweed needs. In this way, many of the living things in a rock pool depend on one another.

## Offspring

How do living things produce young in such a battering environment? Many send out huge numbers of eggs which hatch in the open sea. Only when the young are nearly fully grown do they seek a pool to live in. Others shelter their young until they are grown up enough to fend for themselves.



### Summary

- Only a small number of living things can survive the battering of a rock pool.
- When the tide is out, many animals close up so that they don't dry out.
- Many living things in rock pools have special ways of protecting themselves from the waves.