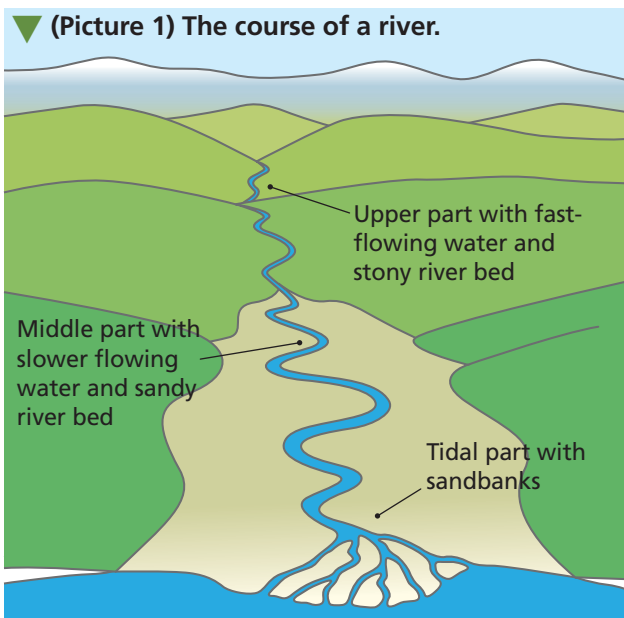




Rivers

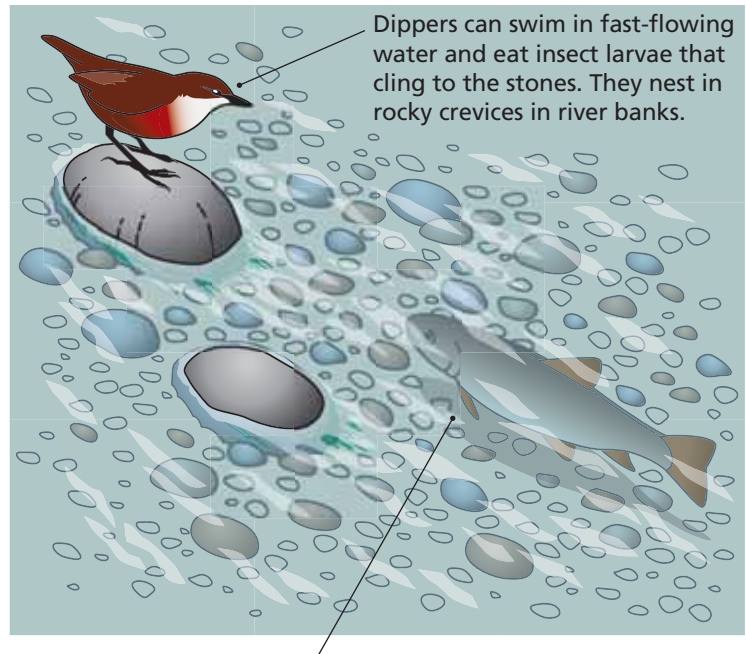
Rivers often begin as fast-flowing streams with rocky beds, then get slower and flow over muddy beds as they near the sea. As a result, rivers contain many different types of life.

Rivers flow from high land, where they have stony beds, to lowlands, where their beds are made of mud and silt, to the sea where rivers become tidal and where sandbanks and mudflats are common (Picture 1). Quite different types of plants and animals are adapted to live in each part of the river's course.



The upper part of a river

Rivers flowing quickly over stony beds would sweep many plants and animals away, so most river animals found here are strong swimmers, or can shelter between the rocks (Picture 2). Here, animals feed on leaves falling into the water, or catch insects on or in the water.



Fish such as trout swim strongly but, even so, they prefer the pools, while most smaller creatures have to live in the shelter of rocks.

▲ (Picture 2) The upper reaches of a river, where the bed is stony.

The middle part of a river

Downstream, the water flows slowly enough for sand, silt and mud to settle out (Picture 3). Many animals have made use of this soft material to protect themselves. Animals such as mussels dig deep burrows. Rooted plants can also grow here.

Most small animals feed on dead leaves that sink to the river bottom. More varieties of fish are found here, including those that are less strong swimmers. River banks are soft and provide a home for

▼ (Picture 3) The middle reaches of a river, where meanders are cut in soft banks.

Otters nest in the bank, using underwater entrances.

Some trout will still be found in this part of the river but bream, chub and barbel are the more common types of fish.

DECOMPOSERS such as snails, worms and insect larvae live on the river bed.

Otters have webbed feet, a waterproof coat and sharp claws and teeth to catch food such as fish. They can even close their ears to stop water getting in.

Kingfishers nest in holes that they dig for themselves in the outside bank of river channels.

A kingfisher catches food by sitting on a branch overhanging the river and looking for fish and other prey in the water. Then it dives down and catches its food with its strong, pointed stabbing beak before returning to its perch. Kingfishers hunt by both day and night.

Weeds have their roots in the river mud.

Kingfisher

burrowing birds such as kingfishers and **MAMMALS** such as otters and water voles.

The tidal part of a river

At the mouth of the river the water is very sluggish and the bottom muds become thick. More plants can take root and huge numbers of burrowing animals, such as worms and snails, can thrive. Wading birds of all kinds are adapted to find the food buried in the sand and mud (Picture 4).

Summary

- Habitats change as the river changes along its course.
- So that they can live together, different wading birds have different shaped beaks to find different food.

▼ (Picture 4) The tidal reaches of the river, where mudflats and sandbanks are common.

Ducks can dive into deeper water, catching fish and eating weeds.

Curlews probe with long, curling beaks deep in the mud for worms.

Rushes can tolerate salty water.

The plover picks prey off the surface.

The avocet has an upward-curving beak to skim the watery mud for small insects. Like other wading birds, it has long legs and weighs very little, so it doesn't sink into the mud.

Sand hoppers, lugworms and razor shells burrow in the sands and muds.