

Rambling about Rivers



Walking and talking around and about your local river catchment



Check out these organisations for more information & advice:

Eden Rivers Trust
<http://edenriverstrust.org.uk>

Canal and Rivers Trust
<https://canalrivertrust.org.uk/enjoy-the-waterways/walking>

UK Rivers Network
<https://www.ukrivers.net/walkcycle.html>

Ramblers
ramblers.org.uk/volunteer-zone/support-and-development/volunteer-toolkits-alphabetically-sorted/walk-leader-toolkit.aspx

Walking for Health
https://www.publichealth.hscni.net/sites/default/files/Walking_for_Health_manual_01_18.pdf

BBC Bitesize - river processes/landforms/flooding
<https://www.bbc.co.uk/bitesize/topics/zqcysg8>



Footpaths near to rivers, lakes and their tributaries offer a fantastic opportunity to walk through a wonderful network of waterways across the country.

Explore the human and geological influences that have shaped our landscape; exercise in the green and blue of our outdoor environment to improve physical and mental health and discover the wealth of wildlife found in this amazing habitat.

Your local river is part of a larger river catchment that includes all the waterways of one river system and the land they drain.

There are distinct features to look out for depending on whereabouts you are in the catchment.

The **source** of the river is where it begins - often up in the hills where steeper slopes cause the water to flow fastest.

Tributaries join at **confluences** along the river multiplying the volume of water as it travels downstream.

The river slows down as it moves through smoother terrain, beginning to **meander** and loop across the **floodplain** in its lower reaches.

As it reaches its **mouth**, the river widens out over flatter land, ending as it flows into the sea.

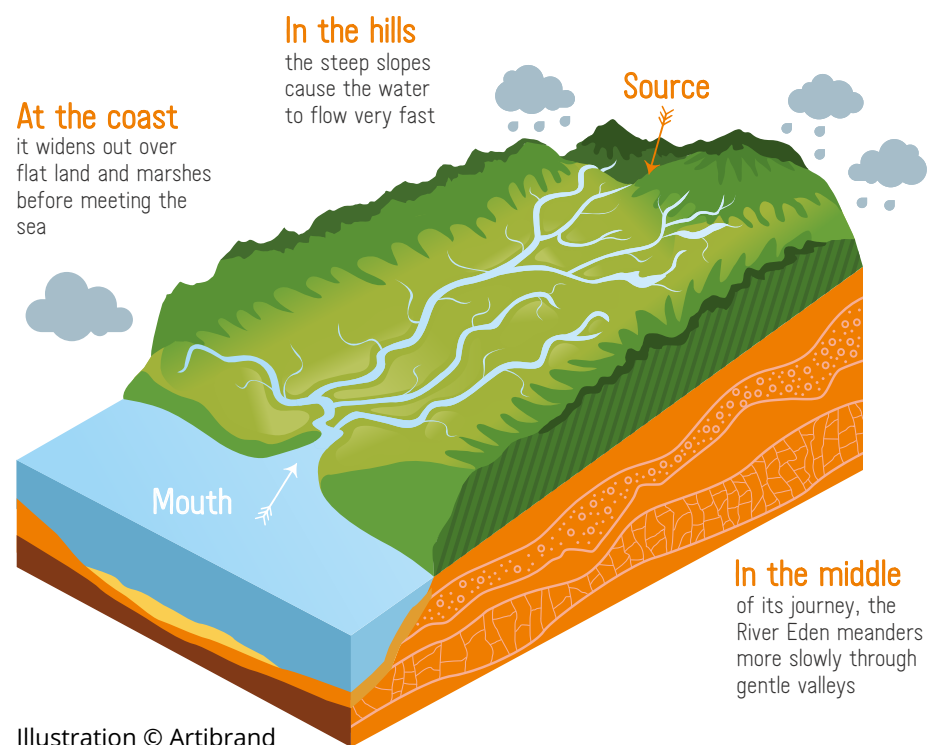
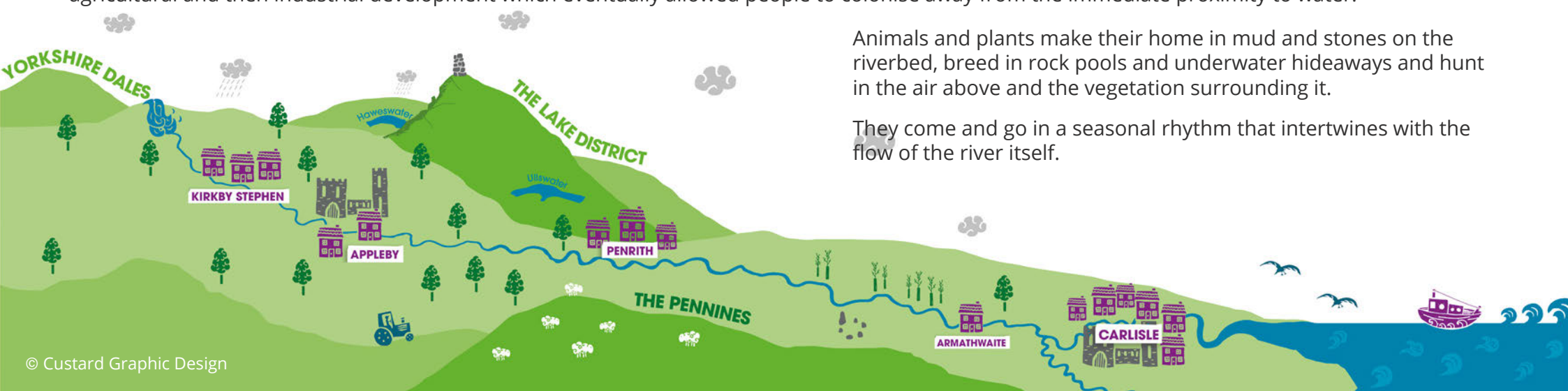


Illustration © Artibrand

Individual features of geology, climate and landscape combine to give different characteristics to discrete areas through the catchment and produce a variety of opportunities for humans and for wildlife.

Towns and cities are still found where rivers provided food and water for the first human settlements. They acted as transport routes and supported agricultural and then industrial development which eventually allowed people to colonise away from the immediate proximity to water.



Animals and plants make their home in mud and stones on the riverbed, breed in rock pools and underwater hideaways and hunt in the air above and the vegetation surrounding it.

They come and go in a seasonal rhythm that intertwines with the flow of the river itself.

Look out for ...

Fish

The Eden is one of the best salmon rivers in the north of England and holds the record for the largest fly-caught salmon in the country.

This iconic fish travels nearly 4000 miles from the spawning sites in the clear, gravelly headwaters of our local rivers to feeding grounds in the North Atlantic ... and back again!

Also keep an eye out for other species, such as brown trout, grayling, chub, loach, minnows eels and lampreys.



Mammals

All our native mammal species need water to survive but some depend on a much closer relationship with rivers.

Droppings along the water's edge, burrows in the bank or footprints in the mud can be used to identify different creatures.

Look out for rocks used by otters or piles of stems nibbled off at a 45° angle where water voles have been feeding.



Birds

Hérons, ducks, geese, moorhens and dippers (pictured) are all relatively common sights on our waterways but if you are lucky you might also spot the azure flash of a kingfisher.

They feed on fish and aquatic insects, hunting between riverside perches by slow or still water.

They are very vulnerable to hard winters and habitat degradation.



Invasives

Japanese Knotweed and Himalayan balsam (pictured) are easy to spot once you know what they look like but there are other invaders threatening our river habitats, such as the American signal crayfish, Mink, New Zealand pigmyweed and Giant hogweed.



White-clawed crayfish

Our only native crayfish species, this crustacean hides under rocks on the riverbed during the day and comes out at night to feed on plants, small fish & invertebrates.

They can live for up to 12 years and grow up to 12cm.

They live in mineral-rich water to grow and strengthen their protective shell. This shell re-grows every year after moulting.



Invertebrates

There is a huge diversity of other invertebrates in our freshwater ecosystems.

Many species of flatworms, beetles, flies and crustaceans spend at least part of their lifecycle in the water.

The presence or absence of different species such as dragonfly larvae can be used as a guide to the status and health of the river.



Connectivity

Rivers are one of the most visible examples of connectivity in the landscape, linking together people, plants, animals, nutrients, sediments, and more.

The spaces and corridors created by rivers and riparian habitats help species move through the landscape and are essential to allow them to survive and thrive.

Upper reaches

Steeper valley sides are found near the **source** of river or tributary, often with **interlocking spurs** (a hill that a river meanders around in a V-shaped valley). Viewed from downstream, these spurs appear to be locked together.

You might also find **rapids** or **waterfalls**.

Middle reaches

The river channel is deeper and holds more water in the middle of its course.

The gradient is softer and the river begins to slow down.

Lateral erosion (the wearing away of a landscape when a river erodes sideways) widens the channel and forms large bends, meanders and oxbow lakes.

Lower reaches

The river channel is deep and wide in its lower reaches and the surrounding landscape is flat.

The water slows down as it reaches the end of its journey and flows into the sea. As it slows, it deposits silt to form mudflats which are an important habitat for wildlife.

Meanders

Created by **erosion** of the outer bank where the water flows faster and **deposition** (dropping of material) by slower water on the inner bank.

Over time, meanders gradually migrate downstream.

Vegetation

Riparian (on riverbanks and margins) and **aquatic** (growing in the river) plants are an important feature of healthy rivers.

They help to support wildlife, influence water flow and deposition in the river and help to regulate erosion and runoff on the riverbanks.

Trees such as willow and alder provide shade, food and shelter while their roots stabilise the bank sides.

As well as this, shrubs and herbaceous plants also provide further habitats - increasing the diversity of the river community.