

Chalk Stream Challenge: Spotter Sheet

Name:

I have seen...



Bridge



Sluice



Mill



Stream



Gravelly bed



Water flowers



Water plants



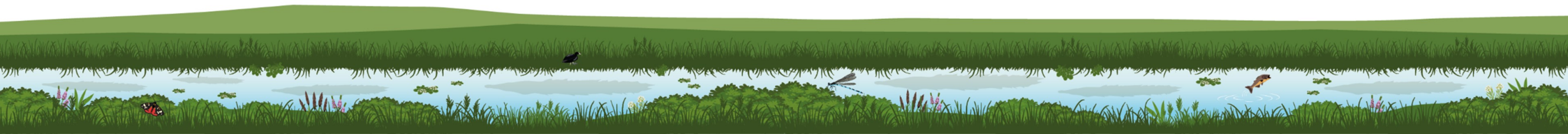
Water birds



Fish



Insect



Top row from left to right

Bridge: Older chalk stream bridges are usually made of brick. This is because, in the past, clay was the most hardwearing material that was easily available. Chalk cannot be used because it is a soft rock with lots of tiny holes that fill with water; this makes it wear out more quickly. These bridges often have very shallow arches because the water level in chalk streams varies less than the water level in other types of rivers.

Sluice: A sluice is a vertical gate that can be raised and lowered, in order to let water in and out of rivers. Old sluices are common on chalk streams, where they were built to move water around for use for mills, drains, and water meadows.

Mill: Mills are like small factories that are used to make different things, such as grinding flour, processing woollen cloth (known as ‘fulling’), weaving silk, making paper, and making anchor chains and mast bands for naval dockyards. Some mills are water mills, meaning that a water wheel powers their machinery. Today, some water mills use water to turn turbines, which produces electricity.

Stream: A stream is a small river. In chalk meadows, it might also be a small channel of moving water.

Stream bed: The stream bed is made of gravel and stones. Because chalk is so porous (full of holes that catch water), most of the rain soaks into the landscape instead of flowing over it – this helps to keep mud and soil out of the stream. However, soil can get in washed in from drains and nearby fields, or fall in if the banks are being eroded.

Bottom row from left to right

Water plants and flowers: The plants that grow in chalk streams often have leaves that are different shapes depending on whether they grow above or below the water. Their leaves and flowers create shelter for small fish, and when they grow along the stream banks they are good hiding places for water voles. Some plants, called reeds, provide nest sites for birds and roosts for dragonflies.

Water birds: Many kinds of bird live around chalk streams. Some are birds that swim, such as swans, coots, and moorhens. Some are birds that wade to catch their food, such as herons. Others are insect-loving birds that dart above the water to catch their food, like grey wagtails.

Fish: Chalk stream fish are a food source for animals like kingfishers and otters, and they are also eaten by bigger fish. You are most likely to spot larger species like brown trout, pike, and grayling. If you take a close look or use a dipping net, you might also see smaller species like minnows, bullheads, and sticklebacks.

Insects: Lots of different insects live around chalk streams. They are very important for many food chains, as they are eaten by bats, birds, fish, amphibians, and bigger insects. You are mostly likely to see dragonflies and damselflies flying along the banks or over the water. If you use a dipping net, you might see the larvae of mayflies, stoneflies, and caddisflies. Some caddisflies live in tubes made from stones, sand, or leaves, and you might find these in your net too.

