



## **HMWT Chalk Stream Challenge Information for leaders**

Embark on an adventure with our Chalk Stream Challenge and explore the wonders of these rare, precious places teeming with incredible wildlife and rich heritage!

This challenge is perfect for Scouts, Guides, and similar groups, as well as passionate individuals. The activities are easily customizable to suit various age ranges, and a suggested route is provided, filled with fascinating information along the way.

Once you have completed the challenge visit <https://www.hertswildlifetrust.org.uk/shop#!/Chalk-Stream-Challenge-Badge/p/751209805> to order your badge!

The Chalk Stream Challenge was originally created by two volunteers as part of the Watercress and Winterbournes Landscape Partnership Scheme. The scheme, funded by the National Lottery Heritage Fund, focuses on the headwaters of the Rivers Test and Itchen in Hampshire, and encourages children and young people to explore and learn about their local chalk stream. The Chess Chalk Stream Challenge was adapted for The River Chess by the Chilterns Chalk Streams Project (CCSP) with funding from Smarter Water Catchment.

With permission, Herts and Middlesex Wildlife Trust have adapted The Chalk Stream Challenge for rivers within the River Lea Catchment with funding from the Environment Agency and Species Survival Fund and support from local landholders.

### **Important background information**

Did you know that there are only 250 chalk streams in the world? Here in Hertfordshire, we're lucky to care for around 10% of these rare and precious habitats. These unique river systems are incredibly rare and support some of our most endangered species—making them the UK's equivalent of tropical rainforests.

Chalk streams offer vital homes for a wide range of fascinating creatures and plants. Think water voles, brown trout, damsel and dragonflies, water crowfoot, and mayflies.

Most of Hertfordshire's rivers begin as chalk streams in the valleys of the Chilterns. They flow into two main catchment areas—the Lea and the Colne—both of which eventually reach the River Thames and flow out to the sea.

Some parts of these rivers only flow in the winter, and these are known as 'Winterbournes'. What all chalk streams have in common, though, is that the water feeding them comes from the ground where the bedrock is made of chalk.

Chalk, which formed over 100 million years ago from shells and tiny sea creatures called coccoliths, is porous—like a natural sponge—that can hold rainwater (called an aquifer). Because of this, water levels in chalk streams change much more slowly than those in rivers formed on non-porous surfaces like clay. The water is rich in minerals, thanks to its natural filtration through the chalk, and emerges from the ground as springs, staying at a constant temperature all year long. This creates the perfect conditions for a wide variety of aquatic plants to thrive, and, combined with excellent water quality, it supports healthy populations of invertebrates and fish species.

Chalk streams and rivers have played a vital role throughout history, supporting our water supply, agriculture, industries like mills and watercress beds, transportation, and fishing.

However, one of the biggest challenges these rivers face today is global warming. It's impacting rainfall patterns and recharge rates, meaning some rivers might experience longer dry spells or even dry up in places where they never have before. For generations, chalk streams have been modified to meet our needs—whether for farming, industry, transportation, or fishing. But one major threat they face now is over-abstraction, which is when we take too much water from these rivers. When this happens, the river is left with too little water to sustain a healthy ecosystem.

We all rely on water for so many things—drinking, flushing toilets, brushing our teeth, showering, cleaning clothes, washing our cars, or watering our gardens. If we can reduce the amount of water we use, like turning off the tap while brushing our teeth or taking shorter showers, we can help lower overall consumption and protect these rivers from over-abstraction.

Pollution is another serious issue for chalk streams and rivers. It can come from many sources, like tiny sediment particles from fields, road runoff, and litter, all of which can harm the water quality and the creatures living there.

By being mindful of our water usage and keeping our rivers clean, we can all do our part to help protect these precious ecosystems.

## **Route guides**

We offer suggested routes along several of our Hertfordshire rivers, with more being added in the upcoming months. But you can of course choose your own route to explore your local chalk stream.

Each route guide also contains useful websites relevant to the area. Public spaces, roads and rights of way are used throughout and most routes have access to public transport.

An OS Explorer map would be useful for looking for local industry and heritage features and expanding the trails. Field guides on flowers, birds, plants and water life are useful but not necessary.

Spotter sheets can be downloaded on the following:

Chalk stream animals

Chalk stream plants

Chalk stream river features

Chalk stream invertebrates and small fish

### **Chalk Stream Challenge Disclaimer**

We hope you enjoy using our challenge pack of ideas. Please read and take note of the following advice:

Remember walking by streams and rivers can be dangerous and hazards can change all the time. We suggest the challenge is completed as a group activity and feel it is particularly suited to uniform (e.g. Scouting and Guiding) and other youth groups. As a group activity, you are advised to take part in the challenge (the activities and the walk) with responsible adults. Our suggested ratio for working with groups by water is 1 adult to 6 children, please adhere to the guidelines set out by your governing body.

We strongly advise group leaders walk their routes two to three times in total: once to plan their session thoroughly and decide which activities to incorporate into their group earning the badge (some activities could be carried out in your normal meeting place); and the second/third time to undertake the activities. We also advise a risk assessment is completed prior to the activity, in line with your governing body guidelines, we have highlighted some of the main hazards in the table below.

We have provided some ideas of walking routes - these are suggestions only. Alternatives can be used if they are checked beforehand, risk assessed and are suitable for the completion of the badge. When planning your own route, we advise you seek permission from the relevant landowner(s) beforehand, to let them know when you will be onsite and to check they are happy for you to use the site as a group. We have already asked the permission of landowners featured in Route Guides.

If using one of our suggested walking routes, we have checked these and consider them to be suitable for this activity. However, we cannot be responsible for a change in a footpath or road, whether the local facilities are available when you visit, the conditions, the car parking options and charges or traffic.

## Helping you stay safe

When learning in nature we need to be aware of natural risks such as:

Weil's disease	Sanitise or wash hands thoroughly before eating or leaving the site. Go to doctors immediately if you become unwell two weeks after being around water. Note: Weil's disease is a serious water born disease that can kill if not treated. Presents as flu like symptoms up to 2 weeks after being near water.
Deep water	Adult supervision at all times, and a throw rope available. Note: risk of drowning can occur in shallow water as well as deep water.
Stings and bites including ticks	Wear long trousers and be vigilant when walking around on site. For further information on ticks and Lyme disease please visit <a href="#">Lyme Disease Action</a> .
Slips and trips	Take care when moving around the site and accessing the river (if you choose to do so) and wear sturdy, sensible footwear - flip flops are not ideal for river dipping, welly boots, water shoes or old trainers are better.
Other members of the public	Adult supervision at all time and keep together as a group.
Dogs	If dogs approach, keep together as a group, keep still, and adults will move the dog away
Weather	Always check the weather forecast ahead of going out and avoid wooded areas in strong winds. Make sure everyone is suitably dressed for the weather/activity and has plenty of drinking water/protection as needed.