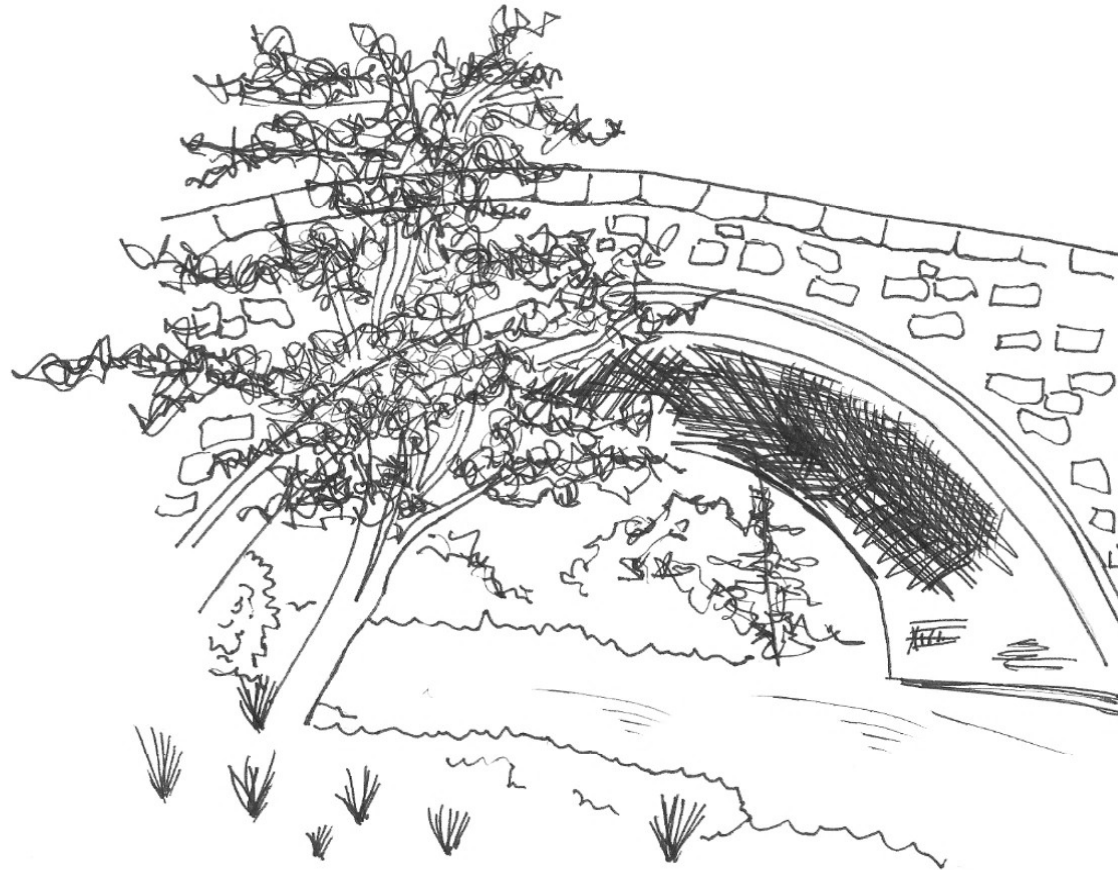


# The River Gaunless

GEOGRAPHY, SCIENCE & HISTORY – Educational Pack



Photocopy masters for classroom and fieldwork activities

PROJECT FUNDER:



PROJECT FUNDER:



# The River Gaunless

**Source of the River Gaunless:** Hindon Beck in the North Pennines

Coordinates: [NZ 01974 24527](#) – elevation 424m

**The River becomes the Gaunless:** Copley

Coordinates: [NZ 08458 24968](#) – elevation 230m

**Confluence with the River Wear:** River Wear, Auckland Castle Grounds, Bishop Auckland

Coordinates: [NZ 21427 30707](#) – elevation 70m



## Welcome to the Gaunless Valley

The River Gaunless is formed from two tributaries: Hindon Beck and Arn Gill which start on the edge of the North Pennines near Woodland. At Copley they join together to form the River Gaunless! From Copley the Gaunless flows through Butterknowle, Cockfield and Evenwood, then on through West Auckland and St. Helens Auckland, to finally join the River Wear in the grounds of the Prince Bishop's Palace at Bishop Auckland. The Gaunless Valley has been inhabited by humans since the end of the last Ice Age, and has been a centre for farming from pre-Norman times right up to the 21<sup>st</sup> Century. Industry flourished in the 19<sup>th</sup> and into the 20<sup>th</sup> centuries, declining as the latter progressed.

# The River Gaunless

Pack developed by:

**Daisy Arts CIC** | creating work through public participation and neighbourhood engagement to reflect and challenge the lives of participants and audience. Using freelance artists, who are leaders in their field and experienced in public engagement, we are known for our vibrant and innovative approach to engagement. Our work is based on connecting with our community, an approach we have sustained for many years, giving support to all-ages and abilities; projects that inspire and help growth of individuals and communities as a whole.

*"Creativity is at work in all of us. It is the job of an artist to help that creativity find form and function and bring it to the notice of a wider public."*



[www.daisyarts.org](http://www.daisyarts.org)

Supported by:

**Wear Rivers Trust** mission is to conserve, protect, rehabilitate and improve the landscape and watercourses of the whole River Wear catchment, from the watershed to the estuarine and adjacent coastal areas. We work with individuals, local communities, government agencies and public bodies to undertake improvement works and monitoring; increase awareness and understanding of the environmental factors that influence the river and its associated wildlife and promote the river as a recreational feature for the enjoyment of all.



[www.wear-rivers-trust.org.uk](http://www.wear-rivers-trust.org.uk)

# The River Gaunless

## TEACHERS' NOTES

### THE RIVER GAUNLESS PACK

This education pack is designed for Key Stage 2, though can be used for younger or older children where appropriate. It is for use during Science and Geography Schemes of Work, as well as encouraging basic numeracy, literacy and personal, social and health education. The exercises are particularly useful when designing lesson plans that cover Schemes of Work such as:

**GEOGRAPHY UNITS** – Investigating the local environment

- Looking after the river – improving the environment
- Investigating the river
- The water-cycle

**SCIENCE UNITS** – Plants and animals in the local environment

- Habitats
- Life cycles
- Food chains

**HISTORY UNITS** – Investigating our local heritage

- Timeline of the Valley
- General History, including:
  - Social and Economic History from the 19<sup>th</sup> Century onwards

**RIVER SAFETY** – within the Geography Unit

**ACTIVITIES and FACT-FILES** – at the end of each Unit

# The River Gaunless

## THE WEAR RIVERS TRUST

### **WHO WE ARE AND WHAT WE DO. . .**

The Wear Rivers Trust is an environmental charity looking after the River Wear and its tributaries. Our mission is to work throughout the Wear catchment to conserve and improve the rivers and surrounding environment for the benefit of people and wildlife.

Some of the things we do to conserve and improve our rivers include:

#### **Wildlife Surveys:**

Fish and river invertebrate surveys to find out what lives in our rivers, helping us work out how healthy the river is.

#### **River restoration:**

Restoring the river to how it would have been naturally. In the past people have changed the river – straightened it, put in weirs (barriers across the river to change the water level) or made the river flow through pipes, called culverts. They may have done this for flood management, to change water levels, to move water to places where it was needed for industries, such as mining, or to build over the top of a river. Over the years many riverside trees have been removed to make way for farming, villages and towns. Without the shade provided by these trees, the rivers heat up, becoming too warm for species such as trout and salmon to live in. All these changes can be harmful to wildlife, so the Wear Rivers Trust works to make our river channels more natural again and to restore bankside trees and vegetation, making our rivers better places for wildlife.

#### **Building fish passes:**

Barriers across the river such as weirs and other artificial blockages can be bad news for fish. Even smaller fish like to travel up and down the river looking for the best places to hide but for some fish, such as salmon, these blockages can prevent them making their life journey from the sea up the river to lay their eggs. We build structures called fish passes or fish ladders to help fish get past these blockages.

# The River Gaunless

## Protecting our water resources:

The Trust currently works with local partners, including Northumbrian Water, Durham University and the Environment Agency to target protective interventions while raising awareness of groundwater, an often-overlooked public source of drinking water. Through the Trust's farming network, we are working with farmers to advise best practice with the aim of keeping agricultural pollutants out of watercourses and on the farmer's land. We are also involved in an EU-funded 'TOPSOIL' project which looks at the connections between our surface and groundwaters and how we can protect these precious resources.

## Activity sessions with the Wear Rivers Trust

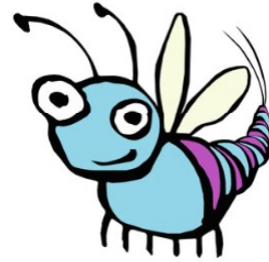
If you would like to get out and explore your local river the Wear Rivers Trust runs lots of school activities aimed at discovering more about rivers whilst supporting the National Curriculum. These activities are aimed primarily at Key Stage 2 pupils but we are happy to discuss activities to suit other age groups:

- **Field Trips:** All our field trips offer hands-on activities in and around the river covering topics such as the 'Journey of a River', 'River Habitats and Food Chains' and Flooding. These can be run at a suitable river near your school or at other sites across the Wear catchment to suit your school. We can also offer field trips on the 'Changing Use of the River Gaunless' looking at the mining and railway heritage of the Gaunless Valley.
- **Mayfly in the Classroom:** A fantastic way to study life-cycles, children visit the river to search for and collect mayfly nymphs before caring for them in the classroom and watching them hatch into adult mayflies.
- **Riverfly for Schools:** Help us monitor the health of your local river by monthly monitoring of river invertebrates. This activity is free but spaces on the project are limited.
- **John Muir Award:** The Wear Rivers Trust is a recognised John Muir Award provider. This Award is all about exploring wild spaces and involves spending a week undertaking activities aimed at Discovering, Exploring, Conserving and Sharing a wild space. Further details about the John Muir Award can be found here <https://www.johnmuirtrust.org/john-muir-award> We can deliver the John Muir Award based around the River Gaunless or would be happy to discuss basing it around other rivers in the Wear catchment. This project is dependent on funding.

# The River Gaunless

- **Classroom sessions:** we can also offer classroom sessions for those schools unable to get to a river. These can be adapted to suit any river-based topic that you are studying and can include practical activities and information about the work of the Wear Rivers Trust.

Please contact the WRT Education Officer at [education.team@wear-rivers-trust.org.uk](mailto:education.team@wear-rivers-trust.org.uk) for prices and further details



## Schools and community work:

Partnering with **DAISY ARTS**, in offering additional schools and community projects:

- **'In the river for the day without getting wet'** – a Primary school project; students spend the day in an immersive, sensory space to inspire and support their own creativity. Two artists install a multi-sensory art installation for the students to inhabit for the whole day; the space becomes an area for creative storytelling and music-making.
- **Art and craft workshops** – including willow structures and foraging art; bring the outdoor to indoor, plus field trips where possible.



Please contact Jane Crawford, Director; Daisy Arts at [info@daisyarts.org](mailto:info@daisyarts.org) for prices and further details



# The River Gaunless

## **Further information and online learning**

### Environmental and Water Resource Organisations:

Wear Rivers Trust	<a href="https://wear-rivers-trust.org.uk/">https://wear-rivers-trust.org.uk/</a>
The Rivers Trust	<a href="https://www.theriverstrust.org/">https://www.theriverstrust.org/</a>
Tees Rivers Trust	<a href="http://teesriverstrust.org/">http://teesriverstrust.org/</a>
Tyne Rivers Trust	<a href="https://www.tyneriverstrust.org">https://www.tyneriverstrust.org</a>
Wild Trout Trust	<a href="https://www.wildtrout.org/">https://www.wildtrout.org/</a>
Salmon and Trout Conservation	<a href="https://salmon-trout.org/">https://salmon-trout.org/</a>
The Wildfowl and Wetlands Trust	<a href="https://www.wwt.org.uk/">https://www.wwt.org.uk/</a>
Freshwater Habitats Trust	<a href="https://freshwaterhabitats.org.uk/">https://freshwaterhabitats.org.uk/</a>
Canal and River Trust	<a href="https://canalrivertrust.org.uk/">https://canalrivertrust.org.uk/</a>
North Pennines AONB	<a href="https://www.northpennines.org.uk/">https://www.northpennines.org.uk/</a>
Durham Wildlife Trust	<a href="https://www.durhamwt.com/">https://www.durhamwt.com/</a>
Environment Agency	<a href="https://www.gov.uk/government/organisations/environment-agency">https://www.gov.uk/government/organisations/environment-agency</a>
Northumbrian Water	<a href="https://www.nwl.co.uk/">https://www.nwl.co.uk/</a>

### Resources and activities:

<https://schools.theriverstrust.org/>  
<https://www.johnmuirtrust.org/>  
<https://lessons4littleones.com/2015/04/15/water-cycle-rain-cycle-science-experiments/>  
[https://www.rgs.org/schools/teaching-resources/rivers-\(1\)/](https://www.rgs.org/schools/teaching-resources/rivers-(1)/)  
<https://www.3dgeography.co.uk/river-worksheets>  
[http://www.cornwallriversproject.org.uk/education/ed\\_cd/index.htm](http://www.cornwallriversproject.org.uk/education/ed_cd/index.htm)  
<https://www.wildlifebcn.org/wildlife-explorer/freshwater-fish>  
<https://flood-warning-information.service.gov.uk/river-and-sea-levels>  
<http://www.somethingfishy.ie/resources.html>  
<https://www.rospe.com/leisure-safety/water/advice/children-young-people>  
<https://www.kidsagainstplastic.co.uk/>