

# KS3 Climate Studies

Sarah Davison

## About the programme

Students will investigate the science behind climate and human impact through interactive games, hands-on fieldwork, and guided discussions. They will take part in activities that bring complex processes to life: from acting out the carbon cycle to carrying out field work to measure how much carbon is stored in trees.

They will compare weather and climate, examine the greenhouse effect, and consider how climate change might impact people and locations differently, encouraging critical thinking about their environmental influence.



**Staffordshire**  
Wildlife Trust

Sarah Davison







## Climate Studies Learning activities

The day begins with an introduction to the topic and a discussion about weather and climate.

Students will then complete a series of interactive activities:

- Carbon Cycle. Become a carbon molecule and travel through Earth's systems, discovering how carbon moves and why it matters.
- Greenhouse Effect. A physical simulation illustrating how CO<sub>2</sub> traps heat in the atmosphere and how human activities can alter its levels.

Then they will enter the woodland to carry out Fieldwork to measure the carbon stored in trees.

- Using surveying equipment, students will take measurements and calculations to determine the carbon content in trees. We will discuss the importance of woodlands as carbon sinks.

The final activity will help students understand how climate change could affect us, depending on the season. [Optional: Life cycle analysis activity].

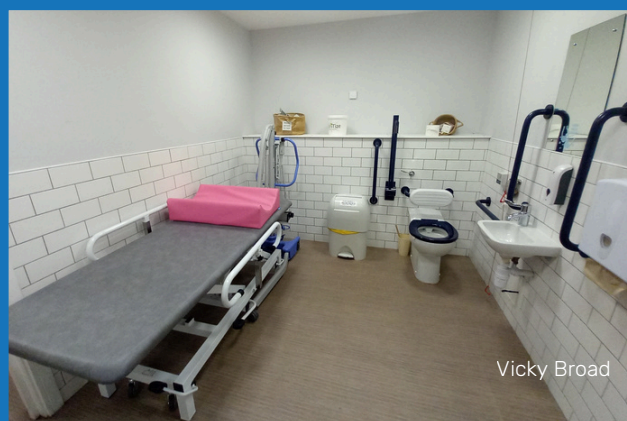
Throughout the day, students are encouraged to:

- Record and share their findings
- Reflect on human impact
- Consider actions that can reduce greenhouse gases and support a sustainable future

## Accessibility

Our Learning Hub is accessible for wheelchairs or those with limited mobility. We have child, adult, and accessible toilets. Our accessible toilet is a large space fitted out to full DDA requirements. This facility also has an adjustable bed with a powered hoist.

The centre itself has gentle, flat walkways around the lakes, providing accessible routes so that everyone can enjoy the reserve,



Vicky Broad

## Want to know more?

Contact our Bookings Assistant

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**[www.staffs-wildlife.org.uk](http://www.staffs-wildlife.org.uk)**



Susan Freeman