We don't have any nature in our school... or do we?

Simon Colderley and **Jenny Lobo,** from the National Education Nature Park, reflect on hosting their first GSSfS share event within a botanic garden run by the Royal Horticultural Society. They review the experience and activities that inspired teachers and pupils to connect to their local nature and develop fundamental close observation skills as part of scientific enquiry.

Ask your class about the nature in your school. What answers do you get? Nothing? Seagulls? Spiders? Dandelions? The neighbourhood cat? The chances are that some pupils in your class might not have noticed or thought about other aspects of nature in your school grounds. The truth is, we can all be a bit 'blind' to nature and may feel that it is something separate from our lives. The reality is that we are all part of nature, and our school grounds hold a unique mix of habitats and biodiversity, which we should be proud of.

Even in schools with only a small outdoor space, there is biodiversity ready to be explored! In our work, we recognise how school sites hold exciting potential for pupil-led scientific enquiry and collaboration, as well as opportunities to share experiences, knowledge and observations with each other.

Why is involving pupils in exploring nature and biodiversity in their schools important?

Since the 1970s, the UK, like many countries across the world, has seen a decline in biodiversity and nature. The UK is now one of the most nature-depleted countries in the world. Nationally, we have seen an 18% decline in pollinators such as bees, hoverflies and moths. Across the country, there has been declines in different species. For example, in Greater Manchester there has been a 24% decline in hedgehogs since 1995, while in Surrey there has been a 51% decline in ground beetles - an important predator in the food chains of gardens, woodlands and meadow habitats.

But it's not all doom and gloom! Organisations, local authorities, individuals and the government are coming together to support biodiversity to recover and thrive. For example, conservation management has supported the population of Natterjack Toads to stabilise and expand in specific areas. In England, the Environment Act 2021 commits to conserve at least 30% of land and sea for biodiversity by 2030 and across the country

The National Education Nature Park is an England-wide programme which helps young people to connect to nature through exploring their local environment, providing the opportunity for pupils to take hands-on action to improve biodiversity and tackle climate change. By the end of the 2024-25 academic year, over 7,500 schools (NENP annual report, 2025) in England had joined the Nature Park and have collectively worked together to map 13 million square metres of habitats, 75km of hedges and 865 bird boxes, as well as over 940 individual trees and 74 log piles. Using free tools and resources, teachers and pupils have collected data that led to this huge achievement, marking a significant change from October 2023 when there was little understanding of the biodiversity present in England's school grounds.

The Nature Park can support pupils to spark their curiosity and ask scientific questions about local nature.

plans are being made to support nature to recover. So, what can we do in schools to help?

The school grounds of primary and secondary schools in England make up a large proportion of the natural ecology; however, they are rarely or never included in national ecology surveys. As a result, little is known about the biodiversity and nature hidden in schools!

Since September 2024, there has been an increased emphasis on schools in England to develop a Climate Action Plan. This raises the profile of sustainability and inspires us to find ways that pupils can drive forward actions for biodiversity by themselves, dovetailing really well with the development of their scientific skills. Scientists and ecologists don't know what habitats are on your school site, and they don't know about the species that call your school home. By encouraging teachers and pupils to explore the biodiversity on school sites and then submit their findings through community science projects, we can help to monitor biodiversity, contributing to an increase in knowledge about how nature is adapting to a changing climate.

Using GSSfS to structure first steps for pupils to explore the biodiversity in their school

Getting started

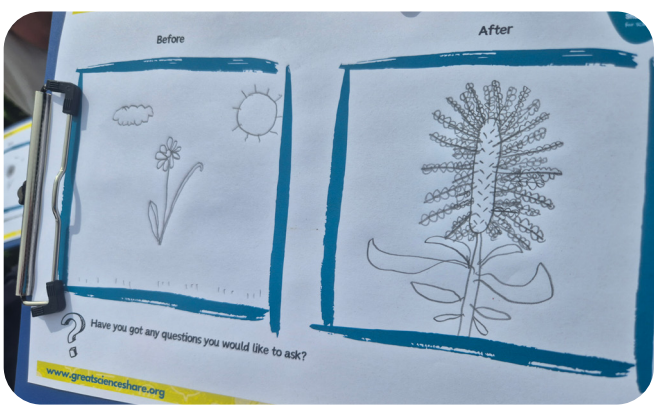
Hosting our first GSSfS event with five local primary schools at RHS Garden Bridgewater enabled us to bring GSSfS and Nature Park activities together. Pupils shared their scientific questions and investigations, and took part in activities to spark curiosity, enquiry, discovery which also provided an opportunity to share experiences.

One such activity was the Nature Park *Sound Mapping* activity. Sound Mapping sparks a curiosity in the local environment by providing time to notice and observe, as well as the opportunity to connect with nature to support wellbeing. This short activity challenged pupils to listen for five minutes and record their observations. At the GSSfS event, pupils heard crickets, bees and different bird songs; they noticed the wind in the trees and the tall grass around them, as well as picking up on distant sounds of talking and cars. These observations started conversations about their surrounding environment and sparked curiosity – one pupil commented, '*I heard a bird, I wonder what it is?*'.

The *Great Observation Share* from GSSfS inspires pupils to explore biodiversity and life on land by developing the scientific skill of close observational drawing. Using scientific equipment including hand lenses, magnifiers and microscopes, pupils explore the fascinating features of plants, insects and leaf structures. This activity challenged pupils to take a closer, more 'scientific' look at plants. When observing cornflowers, marigolds and harebells, pupils used hand lenses to note shape, colour, size and patterns, and they took time to create accurate botanical drawings. As pupils were making their observations, they were asking questions about why the same type of plants had different coloured flowers and were interested in the pollinators which were visiting their flowers. This guided enquiry worked well as a first step to exploring plant biodiversity, as it provided inspiration and tools for pupils to notice and be curious about the nature which they were observing.

Next steps – going beyond observation to authentic data collection

Once your pupils have started observing biodiversity, progression and challenge can be provided through opportunities to collect and interpret data – and it can be as easy as counting pollinators or recording species on the playground!



The Nature Park's *Pollinator Count* activity is a great next step. It includes scaffolded resources designed specifically for pupils to submit data via the Nature Park, which is then added to the bigger picture of the biodiversity data collected on a school site.

During GSSfS 2025, 16 schools took part in the first year of the Nature Park's Pollinator Count activity – between the schools they completed 61 pollinator counts and recorded: 141 tiny insects; 127 bees, flies and wasps; 72 bumblebees; 10 butterflies and 48 other insects. These observations of pollinators fed into the FIT Count, a national community science project focused on monitoring pollinators. Pupils used the data they'd collected to compare findings to work out the best flowers for specific types of insect, and could use these results to help them to select the plants they would like to have more of within the school.

Another option for collecting biodiversity data, leading to scientific question asking, is *BioBlitz*, where pupils collaborate in recording as many species as possible in a short amount of time. The City Nature Challenge is a global *BioBlitz* event and uses *iNaturalist*. This is a way for schools to create a biodiversity baseline as you contribute to a global citizen science project. The data your pupils collect via *iNaturalist* or the City Nature Challenge is visualised on an aerial map of your school which can be downloaded and used to create graphs or charts from which authentic data analysis and conclusion building can take place. Biodiversity bar charts offers opportunities for pupils to interpret and identify trends and opportunities for further enquiry by using coloured cards to visualise species data. We found this to be a powerful way of working with 9–10-year-olds using their bar charts to identify the lack of, and therefore opportunity to add, a pond in their school as a habitat to support dragonflies.

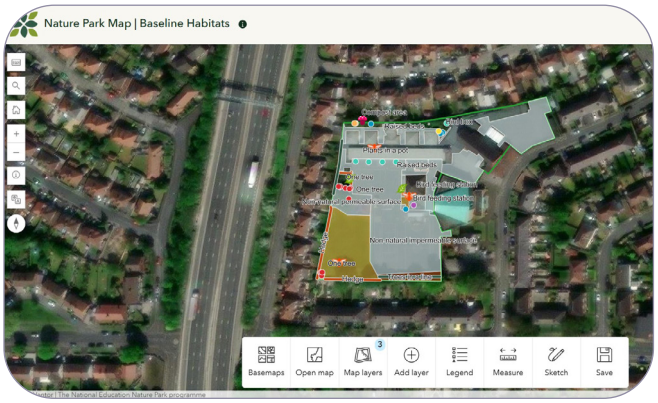


Image credit: St Hugh of Lincoln RC Primary School, Manchester

Time for you to take the next step into asking scientific questions about biodiversity in your schools

Every school has nature to explore – from dandelions growing along the edge of the playground to bumblebees visiting in early spring in search of nectar. The Nature Park's activities brought together within the framework of the GSSfS campaign inspired pupils to ask, investigate and share scientific questions outdoors, closely observing and noticing nature together.

By joining forces, both Great Science Share for Schools and National Education Nature Park were better off for it – there were authentic parallel goals related to inclusion and collaboration and a core purpose of improving young people's understanding of the world around them.

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