



Keston Audio Trail: **Activity Sheet**



www.darwinatdowne.co.uk



Keston Audio Trail: Activities



1 Car Park

Welcome to Keston. These activities complement the Keston audio trail, and it is recommended that you undertake them as you listen to each track, but they can also be done on their own.

A map and directions are also available as a separate PDF and these will help you find your way from one stop to another.

Record information or jot down any notes in the space below. Perhaps you may like to record how long it takes you to do the walk, what species you've seen on the way or any problems you encounter.

Notes:

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2 Caesar's Well

After little success with normal medicines, Charles Darwin turned to water treatment in Worcestershire to cure 4 months of constant sickness in 1849. There is a long held belief that water has healing properties and in the past a bathhouse used to exist on this very site.

If you were to build a new bathhouse here what features would you include to attract visitors? How would you ensure it fitted in with its surroundings?



3 Middle Pond

This pond is a wildlife haven and is where nearly all of the dragonfly species recorded in the borough are found. It is also a very popular recreational spot when at weekends it is not unusual for many people to be fishing here. It is an important area that requires protection and management.



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What do you think could be done to ensure the protection of the ponds and the varied wildlife whilst maintaining visitor numbers and recreational activities?

4 Bottom Pond

In recent years Terrapins have been released into this pond without permission. What impact do you think their introduction may have had on the ponds ecosystem?



5 River Ravensbourne

One of Charles Darwin's most important findings during his life was the relationship he identified between plants and the insects that pollinate them. Brightly coloured and scented flowers attract specific insects and provide nectar for them to feed on. Each flower's stamen has adapted and is perfectly positioned to attach pollen to the insect. The pollen is then transported to the next flower of the same species enabling the plants to reproduce.

During the rest of this audio trail look out for plants and the insects that visit their flowers. Can you work out how they have co-evolved together?

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6 Ornamental Gardens

During Darwin's time this area would have been part of the formal gardens of Ravensbourne Lodge. Gardening became wildly popular during the Victorian period as wealth grew and time for hobbies increased. It was in their gardens that the Victorians could show off their collection of new and exotic plants.

As you look around the area in which you stand, you will see that some of the plants are native woodland species. Can you identify which plants are not and have been introduced? Why do you think these particular species were chosen for an ornamental garden?



7 Padmall Wood

Each year in this wood a small area of Sweet Chestnut is cut down to ground level. The same area is ‘coppiced’ on rotation every 10-20 years when the wood has re-grown to a useful size again.

Why do you think this practise benefits butterflies in particular?



8 Wood Bank

When this wood bank was created the soil would have been heavily disturbed. The seeds of many plants that had lay dormant in the soil for many years would have sprung into life.

Why do you think this is so?

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9 Dry Meadow

Correct management is vital to maintain this dry meadow habitat. Meadows quickly change through the process of succession where many important species are lost to the more invasive and vigorous species.

Without man management what would this area look like in 20 years time? How about 100 years time, would it still be a meadow?



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10 Wet Meadow

If you are here at the right time of year you are likely to see the aptly named 'Ragged Robin' with its frayed flowers. Its scientific name is *Lychnis flos-cuculi*, *Lychnis* comes from the Greek for 'lamp' which is linked to its bright pink colour. Botanist (people who study plants) name many flowers after their features.



Can you find
 other flowers
 here and give
 them suitable
 names that
 describe their
 appearance?

11 Cherry Laurel

The large trees in front of you mark the northern boundary of Ravensbourne Lodge. They are estimated to be hundreds of years old. How do we know this when we haven't cut them down and counted the rings?

You can roughly measure a trees age by hugging it! The distance between the tips of your fingers when your arms are outstretched to your side is approximately the same as you height. See how many hugs you can give the tree and multiply this by your height (in cm). Multiply the answer by 2 and hey presto that is an estimate in years for the Oak trees here.



How Old?

Your height = cm
 x number of hugs =
 x 2 = age of oak tree (in years)



The country code can be found at www.countrysidescsscess.gov.uk

12 Keston Bog



The countryside officers here hope to re-introduce sundew back into this bog.

If you were responsible for this job how would you go about it? Where would the sundew come from and how could you ensure it would be successful?

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13 Heathland

As you sit on the bench why not draw a sketch of the scene that may have been before you if you were sitting here in 1870.

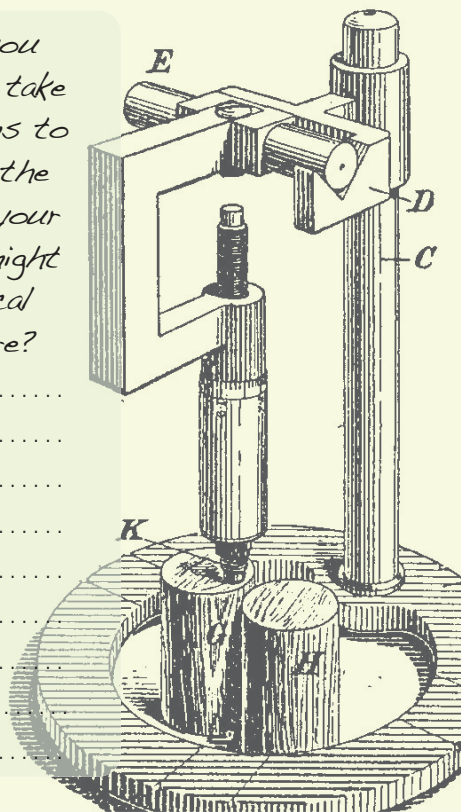


14 Earthworks

Have you ever thought about why archaeologists have to dig into the ground to find the remains of old buildings or artefacts?

Darwin discovered that archaeologists owe a lot to the humble earthworm as their castings bury artefacts and as a result preserve them. Using a device called a 'worm stone' Darwin was able to calculate that stones were buried at a rate of 2.2mm a year.

How long do you think it would take for earthworms to bury some of the stones around your feet? What might an archaeological dig unearth here?

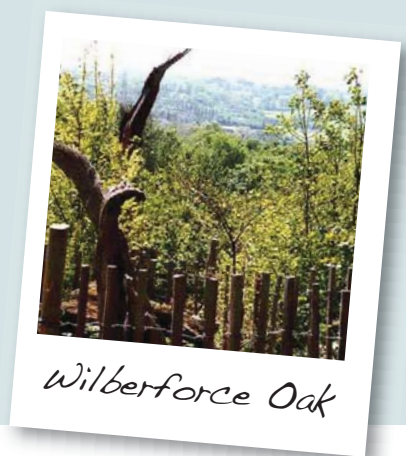


15 Wilberforce Tree

Slavery provided huge profits to the people who ran the trade at the time.

Imagine being in William Wilberforce's shoes, how would you persuade these and others why this practise must stop?

Notes:



16 Gravel Pit

Think back on the audio trail you have just completed. What was your favourite part?

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Why not e-mail us at [conservation@bromley.gov.uk] and let us know.