



THE LONDON BOROUGH

Cudham Audio Trail: **Activity Sheet**



www.darwinatdowne.co.uk



Activities



1 Car Park

Welcome to Cudham. These activities complement the Cudham 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.

On the way, you may like to 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:

.....

.....

.....

.....

.....

.....

.....

.....

.....

2 St Peter and St Pauls Church

St Peter and St Pauls Church in Cudham is made from flint, which is comprised from silicon and is the second most common element on Earth. Amazingly fossils can be found in flint and they provide us with evidence that an organism once existed, supporting Charles Darwin's theory of evolution and giving us a glimpse into the past.

Carefully and quietly look closely at the church building. Can you see any markings on the flint that could be a fossil? Can you see any evidence in the flint of the organisms that once lived? How do you know they are fossils?



Above: Example of a Fossil in flint

3 Cudham recreation ground

Worms will eat any organic matter. Darwin estimated that an acre of fertile earth could have 2.5 million worms, producing 18 tons of waste (worm casts) each year, and once wrote.....

"...it may be doubted if there are any other animals which have played such an important part in the history of the world as these lowly organised creatures."

Why do the presence of worms = healthy soil?

.....

.....

.....

.....

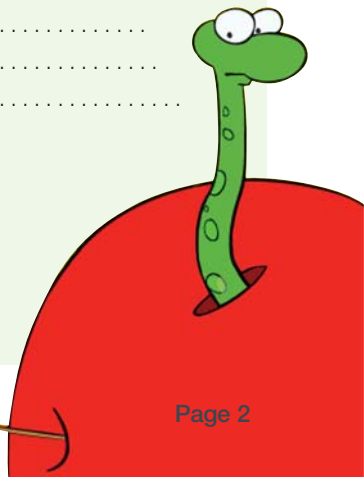
.....

.....

.....

.....

.....

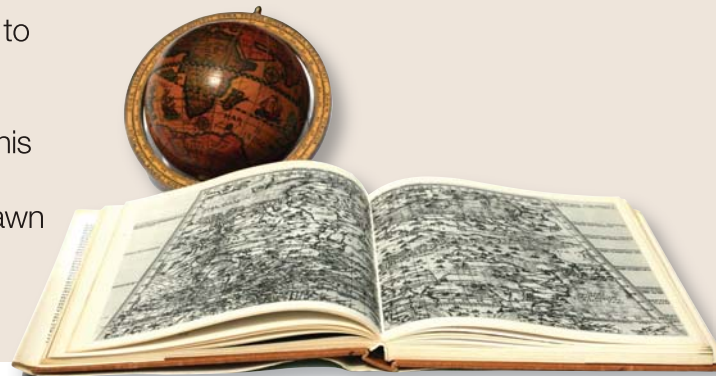


4 Blacksmiths Arms



Imagine you have been set the task of mapping the area in front of you. How would you go about it? You may like to try and draw a map.

When Darwin was just 22, he was invited to be the naturalist on a five year voyage to South America on H.M.S. Beagle. The aim of the expedition was to survey this far off land so exact distances could be measured and precise maps could be drawn of the world.



5 Valley Bottom

Look at the shape of the valley and see how the bottom is rounded and the sides steep.

What do you think created this shape. How did it happen?

6 Orchid Glade

Wild flowers such as orchids used to be found in abundance in meadows across the country, but they need 'nutrient poor' soil to grow in. What has changed over the last 100 years that has threatened their survival?

What has changed over the last 100 years that has threatened their survival? How would you manage the site to help the orchids?

7 Woodland

Charles Darwin studied and observed many species within the woods at Cudham. He enjoyed the landscape and was very familiar with the scenery. The landscape has changed little since Darwin's time, the woodlands remain a valuable habitat and conservation area and they are enjoyed recreationally by many people. Find a quiet spot within the wood.

How does the physical environment in the woodland change throughout the day? Think about light, temperature, water and noise. How do the plants and animals adapt to these changes?



Notes:

Save the Orchid!



8 Tithe barn

Hedgerows are a common sight throughout Britain's countryside. They are an important feature, providing a habitat for many plants, animals, insects and birds. They are also excellent wildlife corridors, allowing wildlife to travel across the countryside. Hedgerows that are rich in species are those that have 5 or more native, woody species on average in a 30 metre length. You can also predict the age of a wild hedge, as a rule, one species represents one century.



Can you identify how many native, woody species there are in the hedges at Cudham? Are they 'healthy hedgerows'? How old are they?



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

9 Bench

Charles Darwin was inspired by the Cudham landscape, he lived just a short distance away at Down House just outside Downe Village. The countryside around his house was his "landscape laboratory", where he experimented and observed a rich variety of species.

What would your justification be in nominating this area for World Heritage status?

