

East Cambridge and the Chalk

It's easy to forget that the landscape we live in has a long history. If you'd walked this route about 100 million years ago in the Cretaceous period you'd have been walking underwater: the chalk beneath your feet was formed from *coccoliths*, the skeletons of algae and other organisms that lived in the warm blue sea.



Watch for *flints* on the paths as you walk, stones with a glassy grey-brown or black interior covered by a whitish or red-brown coating. They were formed when sponge skeletons dissolved in the seawater and were redeposited as a solid mass of silica. The earliest residents of Britain used knives, axe blades and other tools *knapped* from flint. Mines produced the best-quality flint, but glaciers wore away the chalk to expose most of those we see today. The flints on the paths are too small to be worked, but their shape can tell you something about their origin. Rounded flints are water-worn, either by the sea or by glacial meltwater. Sharp-edged flints were not transported far by water after they were revealed by the ice.



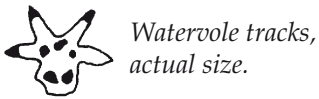
Flints from local chalk. The silica has been deposited in hollows in the chalk. Some of the hollows may have been excavated by burrowing worms and other animals.

The Chalk influences this area in many ways, and you'll see some of them as you walk. The most obvious is the shape of the landscape itself, easily appreciated as you admire the views from the top of the chalk ridge in West Pit. People have taken advantage of this height for many centuries. The 4,000-year-old Bronze Age burial mounds at the top of the hill would have been visible for a great distance. About 2,500 years ago an Iron Age fort (known as *War Ditches*, now destroyed by quarrying) was built here, above West Pit. The

remains of Roman pottery kilns were found on the fort site, as well as an Anglo-Saxon cemetery with some burials from AD700 re-using the Bronze Age mounds.

Local industries relied upon the chalk. Quarries such as Lime Kiln Close were probably begun in Roman times. In the Middle Ages they were one of the main sources of *clunch* (hard chalk used for carving) for Cambridge churches and colleges. The great gateway at Trinity College, parts of Peterhouse and the chapel at Corpus Christi are built from Cherry Hinton stone. Chalk was also heated ('burnt') in kilns to make lime for mortar, limewash, and to improve soil fertility; two or three limeburners were employed at Lime Kiln Close in the early 19th century. Chalk from the marl pits along Cherry Hinton Brook was heated to make cement until relatively recently.

Cherry Hinton Brook hints at another way the Chalk affects our lives. The porous stone is an *aquifer*; the clean water that flows through it benefits people – the pump and reservoir at the top of Lime Kiln Hill supplies drinking water – and wildlife in spring-fed streams and lakes.



Water vole tracks, actual size.



Wild Basil

And, of course there is the wildlife of the Chalk. Many of the plants and animals you may see as you walk are found primarily on chalky soils. Some are found nowhere else.

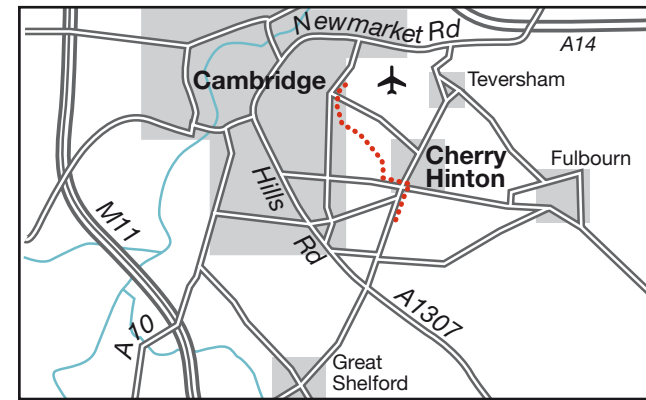


Rock Rose



The Cambridge City Greenways Project is funded by Cambridge City Council and supported by the Wildlife Trust for Cambridgeshire. We help to manage and maintain wildlife sites along and around the City Greenways. We also help people to enjoy and value the Greenways and wilder places of Cambridge.

The Cambridge Green Belt Project
The Wildlife Trust for Cambridgeshire
The Manor House, Broad Street, Great Cambourne, Cambridge CB3 6DH
Tel. 01954 713500



This is a walk between Lime Kiln Road, south of Cherry Hinton, and Barnwell Nature Reserve on Barnwell Road.

Bus Information

Bus number 196 stops on Barnwell Road; C1, C2, C3 and 44 stop on Cherry Hinton Road and C2 stops on Queen Ediths Road. Detailed information about buses is available at www.stagecoachbus.com/cambridge and www.cambridge.gov.uk



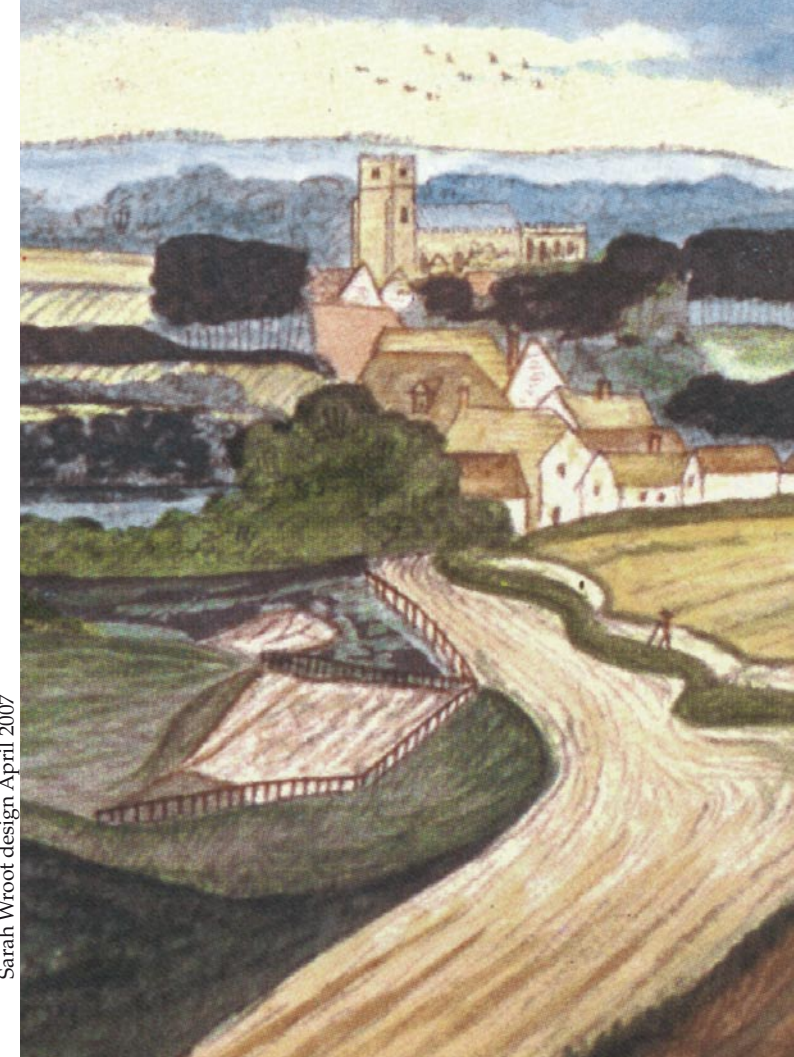
Cover illustration: *View of Cherry Hinton from Lime Kiln Hill, drawn by Richard Relhan in the early 19th C. Courtesy of the Cambridge Antiquarian Society.*

Green Cambridge
A walk from Barnwell to Cherry Hinton

About 2 miles/3.4km



Sarah Wroot design April 2007





Adder's Tongue

1. BARNWELL EAST LOCAL NATURE RESERVE. Once a piggery, then an allotment site, this is now becoming a valuable wildlife site. The site contains trees, scrub, grassland and a pond. New plant species are regularly appearing: Adder's Tongue (a fern), Wild Basil and Southern Marsh Orchid have all been found recently. In spring up to five species of warbler can be heard singing and kingfishers visit the pond.

To help with practical conservation work parties contact Ellis Selway, Community Liaison Officer at Cambridge City Council. Tel. 07919 572504

Nuttings Road: can you spot Bee Orchid and Mouse-eared Hawkweed growing in the grassed island in the centre of the estate? Regular mowing prevents them from flowering but does not kill the plants.

2. CHERRY HINTON BROOK. This is the clear, clean water of a chalk stream. Watch for Water Voles, Kingfishers, Water Starwort, Moorhens, dragonflies, Whitethroat, sticklebacks, Reed Warblers and butterflies as you walk beside the brook. This quiet area bounded by playing fields to the south and water-filled chalk pits to the north is a *wildlife corridor*, a route for animals and plants to find their way into and out of the city.



Kingfisher

3. OLD CHALK PITS. It was relatively recently recognised that post-industrial or *brown field sites* may be important to wildlife, especially in urban areas. These worked-out *marl** pits are now a mosaic of different habitats including scrub and trees, open water, bare chalk, short grass, and long grass. Each

* marl is a type of soft chalk.



Bee Orchid

of these is home to a different range of plants and animals that thrive on chalky soils. Although part of the site has been redeveloped, the area is so large it is still a very significant place for wildlife in Cambridge.



Moorhen and chick

4. CHERRY HINTON HALL. Sunny lawns and shaded avenues of trees; a pleasant place for wildlife as well as people!

5. The pond across the road from the Robin Hood and Little John Pub is an 'accidental' well, a chalk pit that reached one of the spring lines in the Chalk. This is the source of Cherry Hinton Brook.

6. LIME KILN CLOSE LOCAL NATURE RESERVE was a medieval chalk quarry. Much of the chalk was probably heated to make lime for mortar to build houses in Cherry Hinton and Cambridge, or spread on the fields to increase fertility. Nature has had more time to reclaim this pit; secondary woodland of Ash, Field Maple and Wild Cherry festooned with Traveller's Joy (wild clematis) covers much of the ground, and chalk grassland survives in sunny, open areas. There are



Ash leaf and seeds

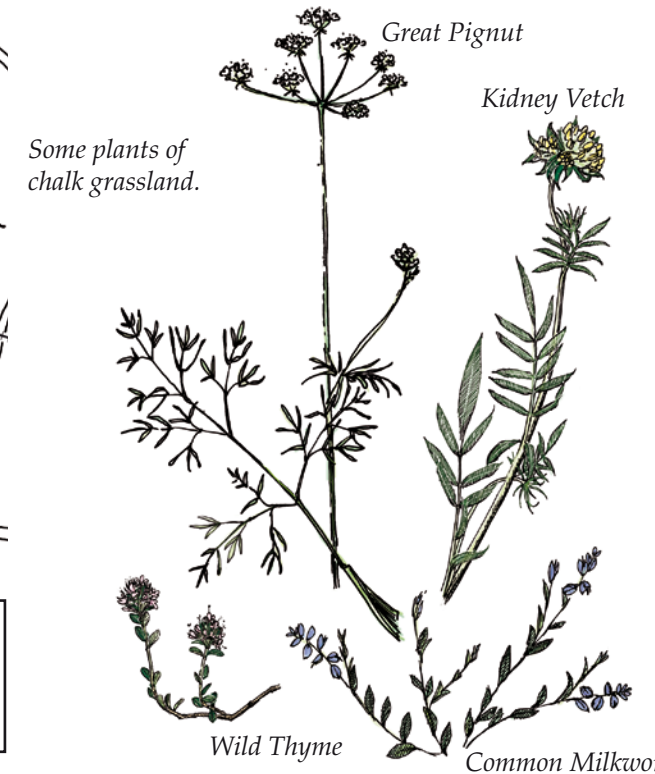
Field Maple leaf and seeds



no large ponds in this pit because it lies above the spring line.

7. WEST PIT is a Site of Special Scientific Interest (SSSI). Yet another old quarry, but not as old as Lime Kiln Close. Again trees with winged seeds spread by the wind (such as Ash and Field Maple) have taken over much of the pit, but an area of species-rich chalk grassland has survived at the very top. Here you may see Great Pignut, Perennial Flax, and Moon Carrot, which is found in only three places in Britain. An area of chalk has been scraped clean to encourage this grassland to spread. Stand here on a clear day and you may see Ely Cathedral, as well as the starting point of the walk, just in front of the large aircraft hanger.

Please take great care when near the edge of the cliff face.



Some plants of chalk grassland.

Great Pignut

Kidney Vetch

Wild Thyme

Common Milkwort