

STOURPORT: the rocks beneath your feet

Exercise your body and your mind on a healthy walk from the riverside in Stourport, out onto Hartlebury Common and back along the canal towpath. The walk will help towards your daily exercise routine. At the same time think about how the landscape has come to look as it does, because of the rocks on which it is built and the natural processes that have shaped the area.

The man-made landscape relies heavily on aggregates - the sand, gravel and crushed rock that goes into building foundations, concrete and roads. Nowhere is this better seen than in the regeneration of Stourport around the canal basins, and in the rapid expansion to the south of the town. Today we often make aggregate by crushing hard rock. In the past we exploited any ready-made source: in particular the sand and gravel that was laid down across the flood plains of massive rivers carrying the melt-water of glaciers after the last Ice Age.

Here at Stourport, the town's most obvious natural feature, the River Severn in its broad valley, was completely absent 100,000 years ago. The main watercourse would have been the River Stour, draining down in a shallow valley from the Birmingham Plateau. The River Severn appeared on the scene as a raging torrent when the melt-water from glaciers over the Shropshire Plain carved a new gorge through the hills at Ironbridge about 30,000 years ago.

The river has been deepening its valley ever since, but with a much-reduced volume of water. As a result the initial spreads of glacial debris: a coarse mix of sand, gravel, pebbles and small boulders, have been left as conspicuous terraces at higher levels. Today's flood plain contains much finer silt and sand. These differences are clearly seen at various points on the walk.

Keep fit along the Geopark Way

This is one of four circular Health Walks that have been devised from localities on the Geopark Way, a 110 mile long-distance footpath from Bridgnorth to Gloucester. It runs down the length of the Abberley and Malvern Hills European Geopark.



This "Walk for Health" has been researched and written by Herefordshire & Worcestershire Earth Heritage Trust. © 2008. For further information:- telephone 01905 855184 or see: www.earthheritagetrust.org



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Features along the route

At first sight you may think this route has little in the way of a geological story, because very little solid rock is exposed. However, the landscape is dominated by the cutting of the Severn Valley and the subsequent terracing of the valley sides. There is some building stone interest in the town, and a regional geological connection in so far as the River Stour was the main river, pre-Ice Age (about 30,000 years ago), draining off the Birmingham Plateau. Its course was largely paralleled by the Staffordshire and Worcestershire Canal which brought goods from the Black Country down to the burgeoning canal port of Stourport, and as recently as the early 1960s coal to Stourport Power Station.

So although perhaps rather subtle, sites of geological interest can be seen at the following points indicated by letters on the map over-leaf.

A If you use the car park below the Council Offices you will see a distinct step between the flood plain (lower parking area and playground) and the first terrace (higher parking area) with the river here towards the west side of the valley.



B The bridge abutments (*see front cover*) are of Highley Sandstone, from the quarry at Highley eight miles upstream. It shows clear lines of bedding (the layers in which it was deposited) some of which are quite coarse and pebbly. The present iron arch was built by Thomas Telford after the huge floods of 1796 had washed away much of the earlier stone structure (*see front cover print*).



C The slope up from the flood plain onto the terrace is well seen again beyond the amusement park, emphasised by the canal locks and the garden in front of the Tontine. The Tontine was originally the canal hotel, featuring in the front cover print of 1777.

D As you walk downstream note that the river has a wider flood plain to the west, as indicated by the absence of riverside housing.

E Here is the confluence of the River Stour which runs with a considerable flow into the Severn. Silting up of the Severn is reduced by a barrier to deflect the waters of the Stour. The Stour was the main river before the Ice Age, with only a tributary occupying a much more gentle valley upstream between here and Ironbridge. As the Severn enlarged its valley, so the Stour cut down more deeply to its confluence, leaving earlier terraces high up on Hartlebury Common.



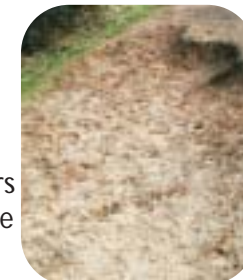
F Across the flood plain meadow the soil is seen in patches to be a grey silty sand and with very few pebbles. A new layer is deposited each time the river floods. The rise onto the first terrace is clearly marked by the step up to the new housing (*see front cover*).

G The patches of rough ground W of the Worcester Road (*right*) have been dug over for sand, leaving humps and hollows.



H To the right of the path a substantial depression is waterlogged and supports a dense growth of alder trees - an indication that material has been excavated from here down to the water-table (possibly on underlying clay) in marked contrast to the rest of the well drained sandy common.

I The paths on this lower part of Hartlebury Common often expose a very 'soft' sand. This is wind-blown sand with well rounded and polished grains in contrast to the 'sharp' of rivers or sea shore where the grains are more chipped and angular.



J There is a marked change from the uniform brown sand at (I) to pebbly red sand as the path goes up another 'step' here. This is a feature which persists up onto the higher parts of the common. Many of the pebbles are of pink or white quartz and very smoothly rounded. Most of these will be derived from erosion of the nearby solid rock of the so called Kidderminster Conglomerate. Other pebbles are more angular, often darker and may be crystalline. These have been brought by glaciers in the last Ice Age (some 25,000 years ago) and were deposited as the ice melted on the flat plateau top of the Common.



K The River Stour is flowing rapidly at this point by the Mill - it was originally dammed here to create a mill leat to power the mill.

L The Staffordshire and Worcestershire Canal was built in 1772 as a contour canal i.e. following the level ground as far as possible. It paralleled the River Stour and brought to Stourport the mineral wealth (predominantly coal) from the Birmingham Plateau.

M Note the new capping stones on the walls at the bridge between the old and the re-excavated canal basins. These give a good indication of the three dimensional nature of the cross-bedding in the sandstone, though the curved surface does lead to problems of interpretation. When you have reached this point in the walk you deserve a rest while you puzzle it out!



STOURPORT



Walk through the past for a healthy future



See how rocks have shaped the landscape



A Healthy Lifestyle

Regular exercise of at least 30 minutes five times a week is recommended. This walk can be part of your routine. Before significantly increasing your normal physical activity it is recommended that you seek your doctor's advice. **We suggest** you familiarise yourself with the route of the walk first, and take in the points of geological interest a few at a time each time you follow it. Otherwise you might find yourself stopping more than you are walking - with little benefit to your physical health!

The Walk

Distance - 4.8km or 3 miles for the full circuit shown

Time - at a fairly brisk pace you should aim eventually for 1 hour for this walk.

Surface - Walking is mostly on pavements or well surfaced paths. Only across Hartlebury Common are the footpaths rougher and occasionally muddy.

Short Cuts - To avoid the short climb and rougher path on Hartlebury Common leave the full route at 10 to go along the footpath into The Grove.

Gradient - Apart from slight rises between the flood plain and lower terrace, a gentle but steady gradient between 14 and 15, and a short steep slope on the side of Hartlebury Common, the majority of this walk is on level ground, including the canal towpath.

Public Transport

Buses - come into the centre of town from Worcester, Birmingham and Kidderminster.

Rail - Stourport has lost its railway station but Kidderminster and Hartlebury are not far away, both with bus connections.

For bus and train times phone Travelline: 0870 608 2 608

Further information

Tourist Information - there is currently no dedicated Tourist Information Centre in Stourport, but some leaflets and information may be obtained from the Library or the British Waterways Office by the main canal basin. There is a useful website at www.stourporttown.co.uk

Maps - OS Landranger 138, OS Explorer 218
Geological Survey 1:50,000, sheet 182

Other Trails - *The Severn Way* is a long distance footpath which follows the river towpath through Stourport.

The Abberley and Malvern Hills Geopark embraces the western side of the Severn Valley and the Malvern Hills axis from Bridgnorth in the north to May Hill and Gloucester in the south. For details of the Geopark and the *Geopark Way* see www.geopark.org.uk.



Designed by Scenesetters (01938 820 777)

The diagrammatic route plan is based on various out-of-copyright maps and original survey

Walking the Way to Health is a joint initiative between Natural England and the British Heart Foundation to encourage people to take short walks in their local area as part of a healthy life style. For more information see www.whi.org.uk on the Internet



Kidderminster Stride and Stroll is a recognised Walking for Health group, organising regular led walks in this area. For the programme see www.strideandstroll.org.uk



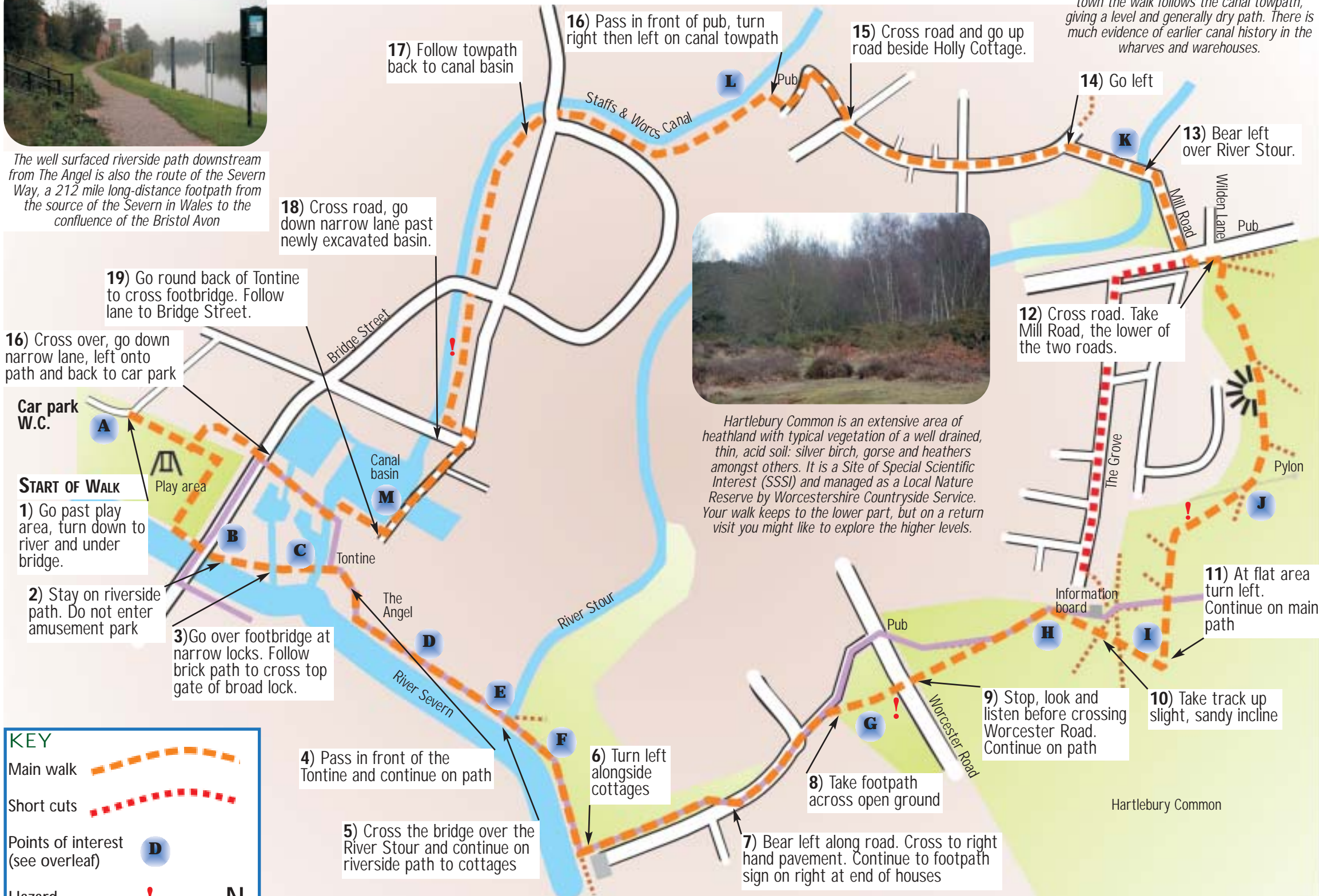
A reminder that before the canal came, Stourport didn't exist. It was only the hamlet of Lower Mitton



From the Bird in Hand pub (16) back into the town the walk follows the canal towpath, giving a level and generally dry path. There is much evidence of earlier canal history in the wharves and warehouses.



The well surfaced riverside path downstream from The Angel is also the route of the Severn Way, a 212 mile long-distance footpath from the source of the Severn in Wales to the confluence of the Bristol Avon



Hartlebury Common is an extensive area of heathland with typical vegetation of a well drained, thin, acid soil: silver birch, gorse and heathers amongst others. It is a Site of Special Scientific Interest (SSSI) and managed as a Local Nature Reserve by Worcestershire Countryside Service. Your walk keeps to the lower part, but on a return visit you might like to explore the higher levels.

Disclaimer

This Walk is a suggested activity to add interest to a publicly accessible route. Herefordshire & Worcestershire Earth Heritage Trust is not responsible for the state of any land or paths used. Walkers follow the routes entirely at their own risk and should take due care at all times. Whilst every effort has been made to ensure that this leaflet is accurate at the time of printing, no liability can be accepted by the authors or publishers for any errors, omissions or misrepresentations of fact contained herein, nor subsequent changes to condition or status of any of the route.