The Halesowen Railway and New Frankley

The Halesowen to Northfield railway opened as a passenger service in 1883 with a passing loop at Rubery station. A quarry lay immediately north of the station and a short branch line was added from Rubery to Frankley in 1896 to assist with construction of the Frankley Reservoir. Business gradually declined, but the opening of the Austin works brought a new lease of life to the railway in 1905. The railway and branch line closed permanently by the 1960s. It was recorded by Bromsgrove researcher John Humphreys in 1902, that an erratic boulder near Rubery Station was 'destroyed by blasting'. At least boulders **1a** & **1b** beside the railway cutting have been preserved ***(see front cover photo)***.

Following the railway closure, there was room for development, and from the 1970s New Frankley began to take shape. The community was initially divided between Worcestershire and Birmingham, but became unified within Birmingham in 1995. The Parish Council was established in 2000. Evidence of the railway survives in the first part of the trail route and in the remains of Rubery Station near the Arden Road shops where the trails begin.

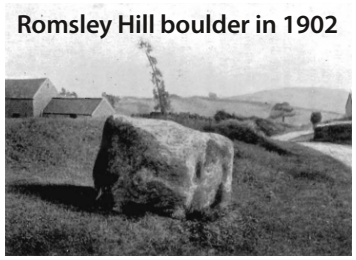
Waseley Hills Country Park (WHCP)

The WHCP lies between the Clent Hills to the NW and the Lickey Hills to the SE. Its highest point, Windmill Hill, rises to 998ft (304 m). Together these hills form part of the watershed for the West Midlands with drainage running SW to the River Severn and Bristol Channel, or NE to the River Trent and out to the North Sea. The River Rea rises in the east of WHCP and is one of Birmingham's main waterways. Water emerges at a boundary between the overlying porous Permian Clent Breccia (around 250 million years old) and an impervious Carboniferous mudstone below (around 300 million years old). From this spring the Rea heads NE for 15 miles (23km) to join the River Tame. It features in other glacial boulder trails in this series ***(see project website)***.

The WHCP has been managed by Worcestershire County Council since the early 1970s. With numerous footpaths, marked trails and the Windmill Cafe, it is a popular countryside amenity.

Romsley and Frankley Hills and Rev. H.W. Crosskey

Early attempts to explain the Ice Age assumed that the ice cover was confined to the mountains. It was thought that glacial deposits further south were caused when land was submerged under the sea or by ice-dammed lakes and that erratic stones had been dropped from melting icebergs. Erratic boulders found high on Frankley Hill (250m) and Romsley Hill (281m) in the late 19th century were too high up for these theories. The Unitarian minister and glaciologist Henry W. Crosskey recognised the importance of erratic boulders in the Ice Age story. He left a valuable archive in his reports to the 'Erratic Blocks Committee' of the British Association for the Advancement of Science. In 1887 Crosskey accompanied the young American glaciologist, Professor Carvill Lewis, to these hills. Lewis believed that all the glacial deposits were from mountain land ice, or ice dammed lakes, but there was no surrounding land high enough to have enclosed an ice-dammed lake at the height of the Romsley and Frankley hills. This convinced Lewis that the waterborne theory was wrong: glacier ice must have been thick enough to cover these hills ***(see explanation in Locality 2 overleaf)***. Though Carvill Lewis died soon after this visit, it was thanks to Crosskey that his notes and papers have survived. ***(See 'History and Heroes' on our website for more on the Rev. Crosskey's contribution to the history of the Ice Age.)***


Romsley Hill boulder in 1902

Visit our website: erraticsproject.org

Glacial Boulder Trail 5, July 2023

Birmingham Open Spaces Forum

Made possible with Heritage Fund

University of Birmingham | Lapworth Museum of Geology

The Black Country Geological Society www.bcgs.info

Herefordshire & Worcestershire Earth Heritage Trust

University of Worcester

Birmingham's Erratic Boulders
Heritage of the Ice Age

Glacial Boulder Trail 5
Three Hills Challenge
Calcot, Romsley and Frankley
Boulders by Bike or Boots

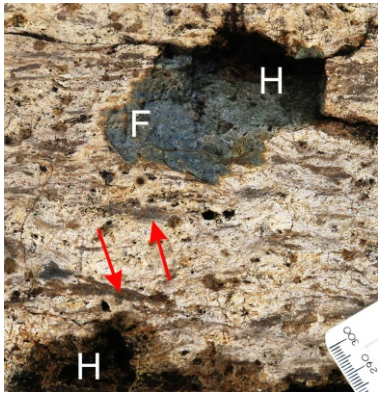
Take a trip back into deep time to discover relics from the Great Ice Age half a million years ago. Thread your way past glacial erratic boulders, mostly from the mountains of Wales and brought here by the power of ice. This trail links these little-known bastions of our prehistoric heritage.

What are glacial erratic boulders?

These are boulders moved by a glacier to a different place and left there when the ice melts. The boulders can often be matched with their source, allowing the flow of the glacier to be reconstructed. The photo shows the eroded east face of Arenig Fawr, the source of most local erratics.

What is distinctive about the Arenig rocks?

The volcanic rocks from Arenig in North Wales display features showing they formed as pyroclastic flows which are very hot, ground-hugging flows of rock debris and gas such as those which buried the Roman city of Pompeii. The photo (right) shows a clear example of a cleaned rock. The weathered surface of the rock is cream-coloured, but where the surface has chipped away **(F)** the dark green colour of the fresh rock is seen. Larger rock fragments in the deposit often weather out as holes **(H)**. Elongated black fragments (indicated by the red arrows) were originally blocks of pumice (volcanic glass full of gas holes) which became flattened by the weight of overlying deposits whilst they were still hot. Geologists call this a welded tuff.



What is special about the Birmingham boulders?

The boulders on the trails originated not in the last ice age, but in a more severe, older one, probably 450,000 years ago. Most of these erratics are volcanic rocks from the Arenig area of North Wales - around 80 miles (130km) to the west of Birmingham, but a few are basalts and sandstones from the Midlands. The rocks are exceptionally tough, resulting in unusually large erratics up to three metres across. The photo (top right) shows one of the largest in the area, which is on private land.

What have these boulders meant to local people?

In ancient times the size of the boulders was an obstacle to movement, so many were used to mark district or property boundaries just where they were left by the ice, or moved short distances. But where had they come from? They were unlike the local sandstone, which was relatively easy to work for building stones. Theories abounded: were they brought with the Biblical Flood? by giants? or were they meteorites?

Through the 19th century scientists began to unravel the real story of their glacial origins. As more were unearthed during building works from the late 19th century, they became celebrated as curiosities to be preserved.

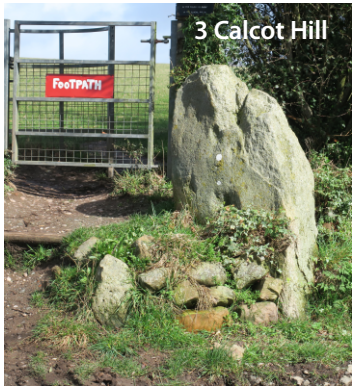
The photo below shows a large boulder in Cannon Hill Park at the turn of the 20th century, preserved with metal railings and later accompanied by an explanatory notice. The original notice and metal railings are gone, but the boulder is still there and is included in Glacial Boulder Trail 7, 'Boulders by Bike'. The smaller boulder in the photo is now missing.

Photo by W.J. Harrison. British Geological Survey, P236744

The walking and cycling trails in this series show some of the ways in which these boulders have captured the interest and imagination of scientists, historians and local people.

Trail 5 Route Details

This leaflet describes a challenging circuit for cyclists, visiting 3 hills and 7 boulder sites. A shorter circuit for walkers includes Frankley Hill and 3 boulder sites. Both trails are described clockwise from the shopping precinct at Arden Road, New Frankley, B45 0JA. This has a car park and is on a bus route. **Cyclists** will head NW along an old railway track to Locality **1**, then through Waseley Hills Country Park (WHCP) and over the M5 to Calcot Hill. The route continues on country lanes with some steep sections to Romsley Hill, then down towards the motorway, crossing to the NE at Yew Tree Lane. Over Frankley Hill the trail heads down and back past the Dingle Social Club on New Street, then through Balaam's Wood to the start. **Walkers** follow the cycle route to Locality **1**, then climb gently through a field to the summit of Frankley Hill with an important erratic and splendid views. The route returns down through fields and a housing estate and rejoins the cycle route to Locality **7** and the finish.



The description overleaf follows the cycle route. A separate box on the map page describes the walking part of the trail.

Trail Lengths and Navigation: Cycle trail: 10 miles (16 km). Walking trail: 2.8 miles (4.5km). Where possible the **cycle trail** uses dedicated cycle/footpaths. Steep uphill sections are on quiet roads where, with care, you can push your bike. The **walking trail** is mostly on hard surfaces, but with rough inclined sections up and down Frankley Hill (shown by the dashed lines on the map), and two stiles to cross.

Accessibility: From Arden Road through Balaam's Wood to Locality **7a** is easily navigable and traffic free. This section is suitable for all cyclists and walkers including wheelchair users. Boulder **7a** is visible from the path.

Facilities: Shops and car park at Arden Road, New Frankley; Cafe and toilets at Waseley Hills Country Park, B45 9AT (parking charge, check opening times); Dingle Social Club, B45 0BP (open daily, check times).

Locality 4 - Calcot Hill

This boulder has also had a plaque explaining its origins for several decades. The caption bears the same text as that on boulder **3**, indicating their joint recognition, but research so far has not found the origins of these plaques. The boulder stands 1.8m tall and bears the usual Arenig ash hallmarks, with a pitted surface and faint layering. Here it has been used as part of a boundary. Two small erratics are embeded in the wall. Can you find them? Across the field opposite there are distant views towards the Abberley and Malvern Hills.

Return to the cross-roads and turn left on Shut Mill Lane. In 400m turn sharp right into Winwood Heath Road. This is mostly uphill, but the lane is quiet, passing through woodland and the effort is rewarded by splendid views from the top of Romsley Hill (275m). Turn left at the junction with Farley Lane, and after 500m stop beside the green on the right where two boulders are mounted on a plinth (Locality 5).

Locality 5 - Romsley Hill

Walk to the boulders (**5b** and **5c**) but do not be deceived - these are not genuine erratics! They are made of the igneous rock known as basalt, which is formed from flowing lava rather than the explosive material of the Arenig ash rocks. These came from a basalt intrusion in Rowley Regis and were reputedly installed here in the early 1980s. In the late 19th century it was noted by Ice Age researcher Rev. H.W. Crosskey that there were 3 large Arenig boulders on this hill. These are no longer here, but at the base of a nearby tree is a small example of a genuine Arenig ash erratic (**5a**). The photo overleaf shows one of those originally recorded in the late 19th century. ***(For more on Crosskey see overleaf.)***

Continue along Farley Lane to the junction with the B4551 Bromsgrove Road. Cross to the pavement opposite and continue 50m north to a gate where there are expansive views. The masts to the north mark the site of the Rowley Regis quarries. In the late 19th century glacial erratic basalt boulders from there were noted on Frankley Hill (NE from here) and in parts of Birmingham. To the east, Birmingham dominates the view with the Queen Elizabeth Hospital and University Clock Tower. **Turn back and head south down the B4551, turning left at Putney Lane, and on to a T junction at Old House Lane. Turn left, then left again onto Newtown Lane. Turn right onto Yew Tree Lane, then go over the M5 and take the first right turn onto Pound Lane. After 300m the road forks. Cross carefully to see a large boulder at the junction (Locality 6).**

Plaque on boulder 3

Locality 3 - Bell Heath

This boulder bears a neatly inscribed plaque which has been there for many years ***(see photo above)***. This is one of very few surviving erratic boulders to have been identified and labelled in the past. The plaque may have helped to ensure its survival, and we hope that many more erratics will survive as a result of the 2021-2023 erratic boulders project covering SW Birmingham.

Cross Farley Lane to Woodfield Lane and proceed for 750m to a T-junction. Turn left, go straight on at cross roads, then right up the steep slope of Calcot Hill (bridleway, no cars). After 200m the fields on either side were quarried for sand and gravel. Permian and Triassic exposures are visible in the remnant quarry faces. These are protected as Sling Common Site of Special Scientific Interest. Permission is needed from Calcot Hill Farm to enter the fields. **Continue uphill to the farm entrance. To the left is a wall including a sentinel-like boulder beside a kissing gate into a field (Locality 4).**

Locality 2 - Chapmans Hill

This Arenig ash rock is sometimes obscured by vegetation. At 250m elevation, it lies well above the lowland areas along the ice route from Wales, but it is a feature of glaciers originating from mountains that they can move uphill, propelled by the mass of ice behind. The rock was created by an explosive eruption, and pits on the surface, some more than 2cm across, show where rock fragments flung from the volcano have eroded out ***(see photo overleaf)***.

Continue, turning sharp right after farm buildings. Follow the route over the M5 to the B4551. Turn left and then right onto Quantry Lane, with views to the Malvern and Abberley Hills. Proceed for 1.3km to a 5 way junction in Bell Heath. Cross Quantry Lane before the junction where a large Arenig ash boulder lies by the hedge at Locality 3.

Locality 6 - Frankley Hill

The boulder here is important to the history of glaciology. In the late 19th century Rev. H.W. Crosskey reported finding numerous 'felsite' (Arenig ash) boulders on Frankley Hill. They were unusually high up for Midlands erratics, and puzzled visiting glaciologists of the time. ***(For more on Crosskey see overleaf.)*** This coarse, angular specimen seems now to be the only survivor from those days. ***(See front cover photo of enthusiastic cyclists at boulder 6.)***

From Locality 6, take the left fork to the junction with Frankley Hill Lane, cross over and pause for the view southwards to the Lickey Hills. Turn right and descend Frankley Hill Lane to New Street. Turn left and continue to the junction with Frogmill Road. Cross over New Street, passing the Dingle Club on your right, and continue on the cycle/footpath alongside Rubery Lane. In 150m turn right at a gate into Balaam's Wood Nature Reserve, and proceed 100m to a flat-topped boulder on the right, Locality 7.

Locality 7 - Balaam's Wood

Here in this ancient woodland you come close to the infant River Rea. This Arenig ash erratic **(7a)** was unearthed and moved from the opposite bank of the river in 2021. It was cleaned to reveal volcanic features common to most Arenig boulders, but seen here with spectacular clarity ***(see photo detail below)***. The orange staining comes from iron, the small cavities show where fragments in the ash have weathered out, and the parallel black linear features result from molten pumice flattening into volcanic glass as it cooled. Retrace your steps for 20m and go down towards the river. Can you find a small Arenig rock **(7b)** in the roots of a tree on the right?

Continue on the track for 325m, veering right then left between railings. To the left, remains of the old station platform can be explored. Continue to Arden Road and cross over to return to the start.

Locality 1 - The Railway Cutting Boulders

The trail starts at the Arden Road shops, Arden Rd, New Frankley, B45 0JA. From the shopping centre car park, head along Princess Diana Way which follows the line of the old Halesowen to Northfield railway *(see overleaf for more on the railway and New Frankley)*. Go left at a fork and carry on to Boleyn Road. Cross Boleyn Road and head down the path to the right of Queen Elizabeth Road. Continue on Princess Diana Way for 50m. Climb the bank on the right to view boulders 1a and 1b.

Both of these magnificent boulders are typical Arenig ash erratics displaying layering as the ash settled and cooled during a volcanic eruption ***(see front cover photo)***. The rock they are made of is very hard which preserved them as they were carried on a glacier from Wales during the Ice Age. They were presumably found during construction of the railway, and their great size and weight meant that they were not moved far. Numerous erratic boulders were found in this area in the late 19th century, but few have survived.

Return to Boleyn Road and turn right. Use the cycle/footpath beyond Skomer Close and cross Gannow Green Lane at the crossing. Turn right and then left to enter Waseley Hills Country Park (WHCP). After 1km pause at a junction. An optional walk of 150m to the left will take you to the source of the River Rea *(see overleaf for more on WHCP)*. To continue the trail, turn right, go through the WHCP car park and exit onto Gannow Green Lane. Turn left and left again at Chapmans Hill. After 350m the road widens and a small boulder lies close to a finger post on the left (Locality 2).

Frankley Hill Walk Directions

Dashed lines on the map show where the walk diverges from the cycle trail. Follow the cycle route to Locality 1, then continue 200m and go up steps on the left. Take a rough path to the right then right again over a bridge to a kissing gate. Through the gate the right of way is marked straight on, but is not evident on the ground. Keep right and follow the hedge up and round the edge of the field, then through a gap in another hedge and follow the path to exit on Pound Lane. Turn right and follow the cycle route to Locality 6. After looking at the boulder continue up to Frankley Hill Lane.

Leaving the cycle route, cross the stile, turn left and continue round the edge of the field to a kissing gate. Go through the gate and over a stile. Go straight ahead and follow a path down through the field to emerge at Miranda Close in New Frankley. Continue down Lysander Road to Holly Hill Road. Turn left then immediately cross and continue on a zigzag route down through the housing estate to join the cycle route on New Street. Follow the cycle route from here to Locality 7 and back to the start at the Arden Road shops.