History

Ham Hill gives its name to the golden brown stone called HAMSTONE that you can see all around you.

It is a type of limestone made under water during the JURASSIC PERIOD some 170 million years ago, when dinosaurs lived. Hamstone is made up of broken shells which sank to the sea floor and became mixed with sand and clay. Eventually this mud dried out and hardened and with added pressure over millions of years layers of stone were created. Rocks made in this way are called SEDIMENTARY rocks. There was also some iron in the mixture which gives Hamstone some of its brown colour.

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Ham Hill Country Park

We gratefully acknowledge the assistance of The Curry Fund of the Geologists' Association in the creation of this trail and production of this leaflet.

www.geologistsassociation.org.uk

This trail was set up in memory of Hugh Prudden (1929 – 2015), local teacher, lecturer and enthusiastic amateur geologist.

Ham Hill, Stoke-sub-Hamdon TA14 6RW

Welcome to the

Ham Hill Geology Trail

This self guided trail takes you to 7 locations that demonstrate particular points of interest about Hamstone or its uses.

Geology Trail Part 1

(1km in length)

START **Turn right as you leave the centre and follow the road around the front of the pub. Walk past the pub car park on the left and head straight across to go through a wooden gate near a stone bin. Follow the gravel path until you come to an open area with a stone circle.**

STOP 1 Local Geological Site (LGS)

The rock face on your right is the remains of an old quarry. At the top the vegetation grows from a thin covering of poor soil. The upper BEDS (thinner layers of rock) have eroded into small pieces of flat stone. These were the source of the stone tiles which form the roofs of many of the older buildings in the area surrounding Ham Hill. The lower thicker (massive) beds provided the building stone. The junctions between some of the beds are very uneven having been formed under fast moving water whereas the smooth junctions are from still conditions. On a sunny day you may be able to see some small shining crystals of CALCITE. These calcite crystals were formed in cracks and spaces in the limestone where the rock was slowly being dissolved by acidic rainwater.

Continue straight ahead along the path heading for the War Memorial.

STOP 2 The War Memorial

This Hamstone monument was built on the highest point of the hill 130m above sea level so that it is visible from the local villages. As you look out from the hill you can see the flat lowlands of the Somerset Levels. Although they have been drained for hundreds of years, these former marshes still flood during very wet weather. The churches and their surrounding houses were built on former "islands" just above flood level. On a clear day the Mendip Hills can be seen on the horizon to your right. They are made of an older, harder type of limestone from the CARBONIFEROUS Period (350 million years ago).

Come back down from the War Memorial. At the foot of the slope there is an information panel which describes the old methods of quarrying. Ahead of you is an area that is constantly changing as modern quarrying continues. Walk over to the Stone Circle.

STOP 3 The Millennium Stone Circle

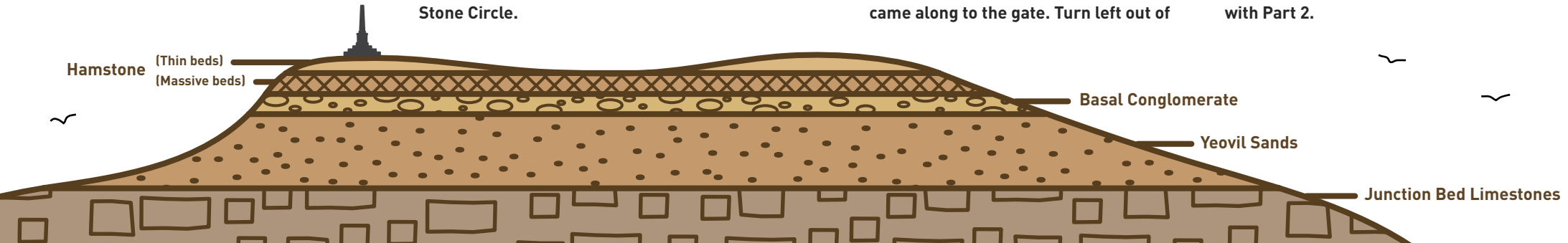
Contrary to what you might assume these stones were only put up at the end of the twentieth century. They give you an idea of how big some pieces of Hamstone can be when they are dug out of the hill. Remember that to keep them upright, quite a lot of the stone has been sunk into the ground. Their interesting shapes are the result of the stone, which was then horizontal (flat), breaking along the BEDDING PLANES (the layers of the rock). By looking up and down the stones you can follow the beds, which vary in colours, texture and thickness. This makes them of little value for building. You can also see thin layers of iron minerals (that have gone rusty), pieces of broken shell and other small FOSSILS. These are the remains of plants or animals which were buried in the Jurassic mud and have gradually become fossilised. On some of the standing stones you can see layers made up of big pebbles (Basal Conglomerate) that made up the bottom of the sea floor when the rock was forming.

Continue back along the path you first came along to the gate. Turn left out of the gate and walk around the front of the Prince of Wales Pub. Just before you reach the Ham Hill Centre, take the path to the left.

STOP 4 The Victorian Spoil Heaps

The banks and ditches (ramparts) which you will have seen as you travelled up to Ham Hill date back some 3000 years to the early Iron Age. They extend right around the hill fort and were constructed to protect the hill top. The smaller humps and bumps inside the ramparts, which are much more recent, are known as SPOIL HEAPS. They are only 150 years old and are the waste from quarrying. To reach the good quality of stone the OVERBURDEN (top layers of soil and small pieces of stone) had to be removed. It was piled up in areas which, the quarry men hoped, did not contain valuable stone. Over the years the weather, vegetation and feet have smoothed them into their present shapes. Where the soil and vegetation has been ERODED (worn away) by too many feet you can see the spoil showing through.

Return to Ham Hill Centre, or continue with Part 2.



Geology Trail Part 2

(1.5km in length)

START **For the second part of this trail continue from the BBQ and picnic area and then immediately take the left fork. Follow this broad track up an incline and then descend and continue straight until you reach two large Hamstone sculptures, The Time Stones.**

STOP 5 The Time Stones

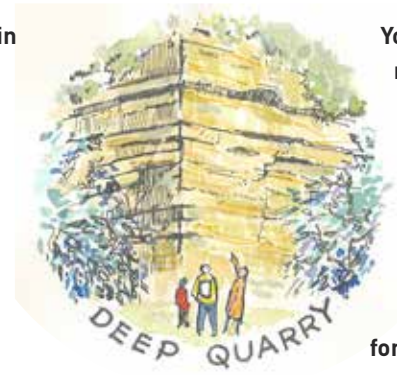
The Time Stones mark the route of the River Parrett Trail over Ham Hill. They were carved in 1996 by Evelyn Body. The design of the tall stone was inspired by Bronze Age axe heads found on the Hill, while the round stone is modelled on part of an Iron Age bucket handle. Hamstone is popular with masons because it is soft – as stones go – which makes it easy to DRESS (cut to shape) and carve. Important buildings in this area were made entirely of dressed hamstone with elaborate carvings. The walls of barns and cheaper houses were more often made of roughly shaped stone with dressed stone only used for the QUOINS (corner stones), door and window surrounds. On the Time Stones you can find examples of the masons' skills including smooth surfaces, straight edges, corners, curves and carving.

Looking downslope and facing the Timestones take the footpath on the left that heads down hill. Follow it until you reach a small opening amongst trees on the left. Take the path on the left down a short but steep bank to the foot of a tall quarry face.

STOP 6 Deep Quarry

As with the quarry face by the stone circle the beds are a mixture of different widths, colours and textures. The grooves, which are roughly horizontal, have been gradually eroded by the weather ever since the face was exposed by quarrying. The sharper, vertical cracks are much older and deeper. They were probably formed when the Ice Age was coming to its end. In summer water from the melting ice seeped down into tiny cracks. During the winter this water expanded as it froze, gradually forcing the sides of the cracks apart. The quarry men called these cracks GULLS and found them very useful when breaking lumps of stone away from the rock face. This fabulous rock face is a designated geological Site of Special Scientific Interest (SSSI).

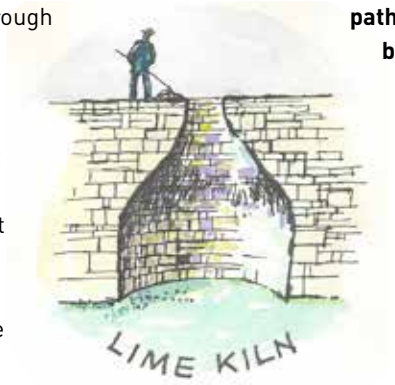
Ascend back to the main path and turn left towards the road. Cross the road and take the path straight head, then fork right. The remains of a Limekiln can be found on your right.



You have 2 options for your return to the Ham Hill Centre. You can retrace your steps OR take the rampart paths using the following directions. Please note the rampart paths are narrow in places and are not suitable for pushchairs.

STOP 7 Limekiln

Most of the lime made in this kiln was used by local farmers to improve the poor soil, though some would have gone to make building mortar, whitewash or soap as well as to dye cloth. Layers of broken Hamstone and wood (or coal if it could be obtained cheaply) were tipped into the top of the kiln and a fire lit underneath. The heat converted the limestone into lime which was raked through the hole at the base. You have probably noticed that the stone used for the front of the kiln is not hamstone. It is a harder type of limestone brought in from Portland. Bricks have also been brought in to make a lining for the burning chamber.



Take the short steep path up from the limekiln into Limekiln Car Park. Follow the line of boulders and turn left on the gravel path walking away from the car park. Before the gate take the right hand path and walk along the fence line. At the path junction take the right hand fork. Follow this path until it emerges in Norton Car Park. Take the small path at the end of the row of boulders that climbs up hill. At the path junction take the right hand fork and cross straight over the road, head downhill and enter the picnic / BBQ area near to the Centre.

We hope that you have enjoyed this trail. There are many other aspects of Ham Hill for you to explore, either on your own or as part of a ranger led group. Visit our website for more information.

Map

As you can see from the map this trail is in two parts. The first four stops are on a circuit just over 1km in length on mainly hard surface paths suitable for wheelchairs and pushchairs. The second section of 1.5km involves crossing the public road and some steep and uneven paths which can be muddy. Start outside the Ham Hill Centre TA14 6RW.

Suitable for wheelchairs and pushchairs

Steep and uneven paths

Optional return route

This trail starts & finishes at the Ham Hill Centre.

Keep an eye out...

At each stop you will find a waymarker disc with an ammonite symbol.