

SGI 9 Hanwell Sarsen

London Borough of Ealing
Hanwell Sarsen, Elthorne Park, Ealing
Grid reference: TQ 158 794

It is unusual to find sarsen stones in London. Sarsens are rather rare and mysterious. The name is derived from the Anglo-Saxon words 'sar' meaning 'troublesome' and stan meaning 'stone' and there are a number of myths surrounding their origin including that of 'growth' or 'breeding' stone as they would just appear at the surface of a ploughed field. The big stones of Stonehenge are sarsen stones and they are often found scattered over the chalk Downs or in valley bottoms, having descended slowly from the high ground above. They often contain holes where roots have plants went through the sand before it hardened and in these cases it is probable that they formed near the surface where circulating groundwater extracted silica from the sand and then redeposited it as a cement. In this area it is likely that origin of the sand is the Upnor Formation within the Lambeth Group, dated at about 55 million years old, and that it was cemented in an exceptionally warm period less than a million years later, during the times of the overlying Reading Formation. Being harder than the sediments above and below these layers resisted erosion and are usually found as isolated blocks long after their encasing sediments have been washed away. There are younger sarsens as well. For example the ones found on Bagshot Common that must be younger than the 50-million year old Bagshot Sand that they rest on top of and may have been cemented during a warm period in the Miocene some 35 million years later between about 17 million and 15 million years ago. Blocks from these sarsens were used to build Windsor Castle.

So, how did a sarsen end up in Elthorne Park, Hanwell? The most likely answer is that it was transported to somewhere local by water in a fast flowing river at the end of one of the glaciations that typify the last 2 million years. The gravel underlying Hanwell is the Taplow Gravel, dated at about 200,000 years old. Ice did not reach London during the preceding glaciation but thawing of permafrost would have released large amounts of water that may have been able to move a boulder of this size (approximately 1½ m across and ¾ m high). One theory is that it was found by workmen in the 1930s in a gravel pit near Hanwell Station not far from Elthorne Park. Another is that it was found in the early 1900s in the adjacent Townholm Crescent when it was being excavated. Apparently the stone was discovered just below the surface in a layer of gravel in association with Saxon artefacts. Sarsens are not usually found within the Taplow Gravel but it is not so uncommon to find them in the older Black Park Gravel. Hanger Hill is not very far away and that is capped by Black Park Gravel and indeed contemporary descriptions of boulders found when excavating for a reservoir report sarsen stones amongst the rather exotic boulders found there (see SGI 8). The Black Park Gravel was the first gravel to be deposited at the end of the most extensive of the ice ages, the Anglian, which ended about 400,000 years ago, and it commonly contains exotic boulders that were transported by the ice from far afield. Proof of the most southerly extent of the Anglian ice sheet lies in Finchley and Hornchurch to the east where glacial till is found overlain at Hornchurch by the Black Park Gravel. As the ice melted and the till was eroded some of the boulders ended up in this gravel. A more likely explanation is that the boulder was then transported to Elthorne Park from the Hanger Hill area by humans, possibly in Saxon times or much later. The reservoir was being dug on Hangar Hill in the late 1880s but there may also have been quarries close by.

The Hanwell Sarsen is a feature just inside the entrance to Elthorne Park from Boston Road. It is described as 'worn' and it appears that large pieces have broken off three sides. Some of the rounding is likely to be an original feature from the way the sand was cemented and the breakage could be a natural process when soft material was eroded around hardened block so that lumps broke off. The pitting and ridges are probably related to roots. It has also been described as an 'erratic' but it is not in the strict sense of the term. It may have been moved by a glacier for some of its journey but true erratics are boulders actually found within glacial till. Although the Anglian ice-sheet came to North London, there is no evidence that it came as far as Elthorne Park.

Access

Elthorne Park is on the A3002 Boston Road. Buses E8 and 195 pass by the entrance to the park. The nearest tube station is Boston Manor on the Piccadilly line towards Heathrow. A sign outside the station says it is 940 yards to the park. There was some on-street parking in 2015. There is an information board adjacent to the sarsen and it is the topic for an Earthcache.



Photos: Theresa Ball

The Hanwell Sarsen in 2015



Photo: Ann Davidson

References

- Allen-Brown, J.1883. On probable glacial deposits, or evidence of the action of ice near Ealing, Middlesex. *Proceedings of the Geologists' Association* **8**:173-181.
- Allen-Brown, J.1887. Excursion to the Mount, Ealing and Horsington Hill. *Proceedings of the Geologists' Association* **10**:172-181.

More on the Hanwell sarsen (not all geologically accurate) at: http://www.mazefind.co.uk/cgi-in/cms/ohra.pl?content_id=1239790124

Earthcache details: www.geocaching.com/geocache/GC1JY65_the-hanwell-sarsen-stone?guid=a6161889-19ae-4a53-b480-19b041aa7cd2

See also SGI 5, the Gordon Square Sarsen