

Stories in stone

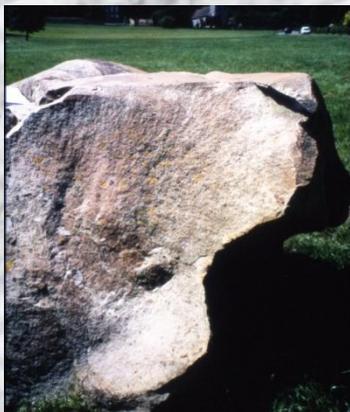
Sarsens



Sarsens – one of the most mysterious types of stone to be found in the Chilterns. It has fascinated people for thousands of years and has been the subject of many a legend and superstition.

Superstitions: At one time puddingstone was highly prized for its magical properties. It was said to ward off evil spirits and perhaps this is why it is often found as a single block built into the walls of churches or important buildings. The Saxons often used them as boundary markers (many still mark today's parish boundaries) and they also form markers in church graveyards.

A **legend** developed in southeast England that the puddingstones had the ability to reproduce themselves underground. Old terms for the rock were 'breeding stone' and 'mother stone'. In East Anglia it was strongly thought that these stones grew in the soil. In 1887 a clergyman was told by a farmer that it was a waste of time picking the stones off the land as more would grow there. This was also a commonly held view in all parts of Oxfordshire and Buckinghamshire – any farmer would tell you how stones just 'appear' from the soil and damage their farm machinery, such as ploughs.



Left. Sarsen on the Green at Bradenham (having been dragged out of the neighbouring farmer's field, as the plough kept hitting it!)

You will have seen sarsen as loose blocks in farmer's fields or moved to the edge of commons or placed at the entrance of driveways. This has always been the case in human memory – loose blocks scattered naturally in the landscape, but then moved and used by people. Their name reflects this – as sarsen is a corruption of the original name 'saracen' which means a stranger in a field. In some counties they are also more recently called 'greywethers' which reflects the fact that they look like sheep in the field.

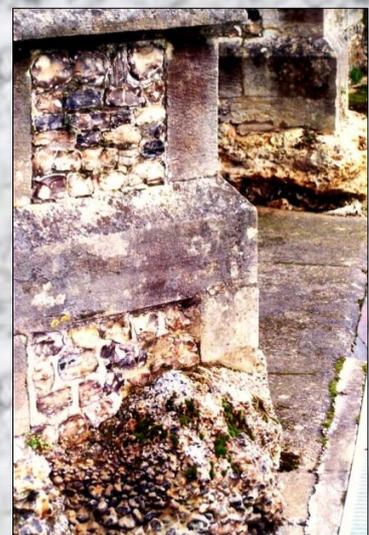
Uses: Over the millennia sarsens have been very useful - such as the puddingstone quern below used by the Romans in Hambleden for grinding grain. They have also been used as marker stones (from Saxon times onwards) and used as a building material either as setts in pavements (e.g. Denner Hill stone) or as occasional building blocks



in a structure, or even as shown on the right, as a strong foundation to a church!

← **Puddingstone quern**

Chesham church foundation →



When did they form? Sarsen can be found in situ only on top of the Chalk hills – it is therefore younger than the Chalk. Until the recent *Chilterns Commons Project* the exact age of the sarsen could not be directly proved. However, during this project a vital site was discovered near High Wycombe which proved the sarsen to be 50 million years old and this is currently being further researched and written up – keep an eye on Chiltern Archaeology’s website!

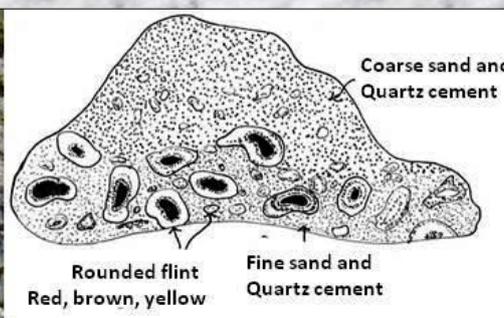
How did they form? To work this out you need to be a bit of a detective and you need to know that there are two varieties. One is a pale-grey sandy sarsen and the other is full of pebbles and called ‘puddingstone’. The first record of the name ‘puddingstone’ appears in 1752 by J. Armstrong and came into more common usage during the Victorian era as a result of its resemblance to the traditional plum pudding served up at Christmas time. When you look at a puddingstone you can see that the fine material surrounding the pebbles is just the same as the sandy type. They were formed at the same time, by the same process – that is, by rivers in a desert!

Stone from a desert: Rocks similar to puddingstone form today only in semi-arid regions such as central Australia - this was the climate of the Chilterns 50 million years ago. Sudden, but rare, rainfall carried pebbles and sand in broad rivers. When water was flowing rapidly the heavier pebbles could be carried with the sand, but as the flow slowed down, only sands were transported. The water energy therefore makes the difference between the pure sand and the pebbly types of sarsen.



Water quickly drains away in these semi-arid environments and hot winds then blow quartz dust around, some penetrating between the grains. At night dew moistens the quartz dust encouraging

crystals to grow as it dries with the heat the next morning. The result is the toughest natural cement known - quartz crystals. Sarsens are therefore extremely hard rocks.



Broken up during the Ice Age: there was then a 48 million year gap in the sarsen story – and then the Ice Age struck 2.6 million years ago. The intense cold caused stresses as freeze and thawing on exposed rock created fractures, breaking to form loose blocks of rock. As thawing snow then cut into the Chalk forming valleys (now our dry valleys) the result was sarsen stone originally in beds lying on the hill tops started moving down the newly cut slopes and became scattered all over the landscape from hill tops to valley slopes and bottoms.

Tundra →



Sarsens of the Chilterns: just like today, every river channel forming the sarsen rock was different. Different sources of flint, different exposure and different current speeds, amongst other factors, all create a slightly different rock. Note where some of the pebbles (such as the Bradenham sarsen) have very dark rings around the edge – this is a discolouration that comes of sitting in a hot desert for considerable time.

The evidence of our past is there for you to find – in our valleys, soils and rocks. Go out and find some for yourselves to see the evidence firsthand and discover some stories in stone.

Here are just a few sarsens from the Chilterns:



'Stories in stone' was made possible with financial assistance from the Chilterns Conservation Board and thanks to Chiltern Archaeology's sarsen hunting volunteers too! www.chilternarchaeology.com

