# Carstone and Ferricrete.

**Article by Stephen Hart published in The Round Tower December 2002.**

Carstone is a ferruginous sandstone from the earliest successions of the Cretaceous Period which lasted from about 135 to 65 million years ago. As can be seen in Hunstanton cliffs, it lies below the narrow band of red chalk that underlies the white chalk above. In many shades of brown, from rich warm tans to dark purplish mahogany, it outcrops along the West Norfolk escarpment between Hunstanton and Downham Market and is still quarried at Snettisham and Middleton, though now mainly for roadstone. In the past, the carstone used in the medieval churches of the area and later in local vernacular buildings would not necessarily have all come from these quarries but from smaller ones nearer to the relevant buildings, long since abandoned and filled in.

A walk along the beach under the cliffs between Old and New Hunstanton will reveal variations in the different strata of carstone, and it will be seen that at certain levels it is in fact a conglomerate containing small pebbles. This particular kind has not been used for much building, but some can be found, with flints, in walls in Old Hunstanton.

A close up of part of the cliffs at Hunstanton showing different carstone strata. The lower rock type is a conglomerate and can be seen to contain small pebbles.

Several varieties of carstone, normally with no embedded pebbles, have been used in buildings. The Bexwell round tower has two distinct kinds: the random rubble stonework of the lower part has a fissured surface that is quite distinct from the pitted surface of the more evenly-sized roughly-coursed blocks in the upper part of the circular stage. This difference perhaps represents different building phases.

Some beds of carstone were suitable for dressing, and some examples of accurately squared and finely jointed carstone ashlar work can occasionally be seen in houses in Snettisham, a village which has examples of most varieties. One of the most striking types is that which has been squared into small ‘brickettes’: these are walling stones, not ashlar, and laid in courses they form walls of charming texture. They are found predominantly in the Sandringham area.

Of a different colour from the usual carstones, Silver Carr, also called Sandringham Sandstone occurs in small areas to the north and east of Kings Lynn. It is grey or greenish in colour, and is usually seen as large rubble, as in the lower part of Gayton Thorpe tower. An example in ashlar is the polygonal turret-like feature on the East Lodge of Hillington Hall on the Flitcham Road.

Ferricrete is the name now preferred by some geologists for the dark brown material popularly known as puddingstone that is found at scattered places in East Anglia remote from the carstone belt in West Norfolk as well as there also. It has also been called conglomerate, a term meaning a sedimentary rock having a fine or medium grained matrix that contains rounded pebbles larger than 2mm. diameter. Strictly, therefore, puddingstone is not a conglomerate because usually in East Anglia the embedded

gravel content of the material is flint fragments of irregular angular shapes. Technically, perhaps this should be classed as a Breccia.

The essential difference between this material and carstone conglomerate is the flint in its composition: this shows it to be geologically younger than carstone since flint was formed in the chalk which was deposited after the carstone. It is thought to have been laid down much later, in the late Tertiary or Quaternary Period, ie less than 7 million years ago, and to come from localised consolidated gravels naturally cemented with iron oxides. It has been found quite near the surface and some is thought to have been met during excavations for flint.

As a building stone it is very coarse, and typical materials is seen in the round tower of West Dereham. There are, however, finer-grained deposits that can be dressed, as exemplified in the west nave quoins at Little Snoring and at Yaxham.