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The RockWATCH Puddingstone Survey:

Puddingstone is a fascinating type of conglomerate rock deposited in the early Tertiary period, during the late Palaeocene, around 54 million years ago.

Conglomerate is a type of sedimentary rock. Sedimentary rocks are those which are made up of fragments of other, older rocks. Conglomerate is composed of large, rounded chunks of rock known as pebbles (see RockWATCH Issue 2) which are held together by finer material known as matrix.

Puddingstone is composed of flint pebbles derived from the Chalk which are held in a matrix of silica which is unusually just as hard as the flint pebbles it contains.

The name puddingstone derives from the resemblance it has to an old-fashioned plum pudding, the buff coloured matrix being the dough and the dark pebbles being the plums.

Unlike most conglomerates which tend to break around the pebbles, puddingstone breaks cleanly through matrix and pebbles alike. This is because the matrix and the pebbles are composed of the same substance, silica.

Puddingstones are most likely to be found in Hertfordshire, but also occur in western Essex, parts of Middlesex, Bedfordshire and Buckinghamshire, large boulders have been moved by both man and glacial ice to areas many miles from its origin. Any records from further afield will be very interesting.

Because puddingstone is very hard it makes a durable building stone, but its hardness makes it difficult to work. It can take a good polish and makes an attractive ornamental stone. It has also been used from Roman times, when there was probably an important local industry, until relatively recently to make hand mills for grinding corn, known as querns. These can be seen in some museums.

It was once believed (and one or two people may still believe it) that puddingstones grew underground like living things, giving rise to the terms "growing-stone" and "breeding-stone".

Nowadays puddingstones are quite hard to find as many of the small quarries where they were once dug are exhausted and overgrown, many were worked out to supply stones for rockeries.

Lumps of concrete can look like puddingstones, but can be told apart by the fact that the matrix is full of sand and different sized pebbles and grit and is softer than the pebbles it contains.

Do not hammer any exposures or large boulders you may find, and only visit a site to collect if you have the landowners permission. Never do more than look at and measure specimens in walls and other man-made structures.

Don't worry too much about getting all the details down on the recording form, anything will be helpful. All the information gathered will be compiled to form a reference database about this interesting rock.

Glossary of terms:

Chalk: a pure white soft limestone common in England and worldwide.

Flint: A form of silica (SiO_2) formed as nodules in the Chalk.

Glacial: during the ice-ages great sheets of ice known as glaciers covered the British Isles as far south as the River Thames. These glaciers flowed like rivers, but much more slowly, moving with them millions of tons of rock and sediments from far and wide.