North Worcestershire Archaeology Group

Heads Mill, Shrawley, Worcestershire.

Geology Report of Millstone Fragment.

No. 105:3020

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NGR: SO 79514 64081

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Site Location

SO 79514 64081

Location of find of Millstone Fragment

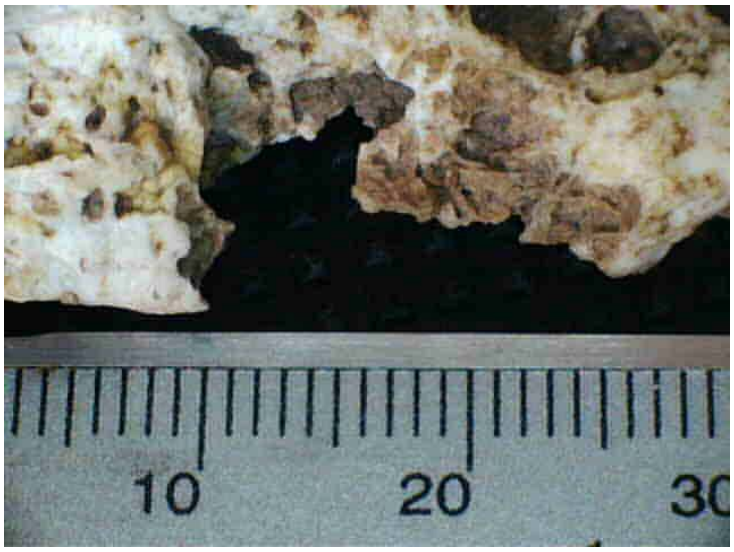
The Millstone fragment was found within the waterwheel pit of the Mill in Trench 1, at a depth of about 1metre below ground level.

Oral History

Oral history relates that two complete millstones were seen, in the farmyard, of either Eastgrove Farm or Whitehouse Farm, probably coming from Heads Mill. However with numerous “change of hands” of these farms, since the recollection, the present location of the millstones cannot be verified.

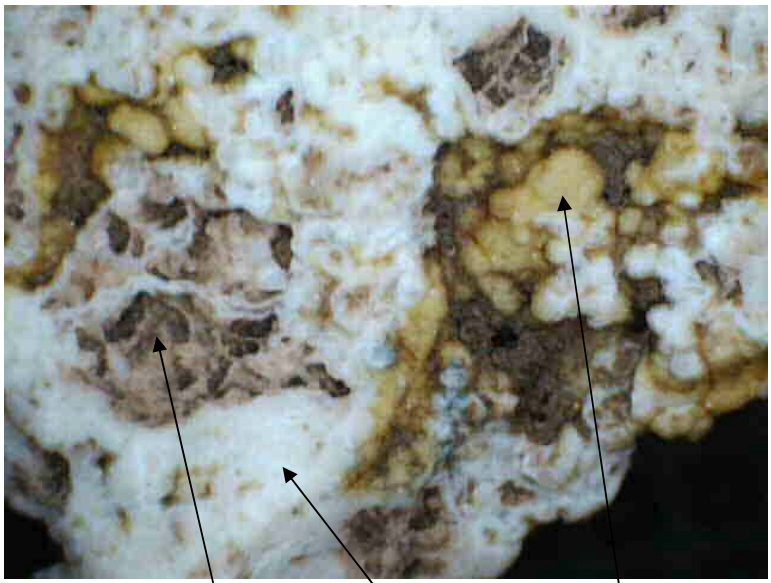
Description and Geology of the Fragment

The piece of millstone from Heads Mill has dimensions of 6 x 2.5 x 1.4 cm. It has the appearance of being chipped from the top of a millstone. One side appears to have a radial surface, but there is insufficient curvature to determine the diameter of the millstone.



Enlarged view of piece (scale rule in millimetres).

There are numbers of voids in the matrix, which have the shape of broken fragments of gastropod shell, (which form part of the cutting edge of a millstone). There are also clusters of small yellow (ferrous) nodules in the matrix. It has a flint like matrix formation which is an isosmotic replacement of organic material. Organics can mean shell and sponges which with surrounding decomposing material, is involved in the simultaneous replacement of organics with silica, (silicon dioxide), in sand material and chert, which is slightly water soluble. The colours of the nodules come from additions of various minerals during this deposition, mostly of iron salts.



Characteristics of French Burr

The two photographs below are of French Burr stone in its pure state. The top photo shows the material against a black background and reveals the jagged nature of this sample. As shown in the lower photo this piece is actually hollow so would have been useless for use in a stone and is, at its widest, approximately 16 cm. across. It is glassy and translucent as shown in the lower photo where it is bottom lit. The interior of this piece is of white burr. The physical characteristic is of a glassy and hard material with the appearance of pouring milky coloured molten glass into boiling water.

With the inclusions of fossil detritus, rock fragments, and mineral transformation, the brittleness of the silica matrix is reduced. This makes the material more useable for the application of millstones, for cutting grain, at a mill.