

Newbury Geology Society

Ladle Hill field trip

14 December, 2025

John Firth led a group of seven on this year's Christmas half-day trip to Ladle Hill and local chalk exposures to the south of Newbury.

We started in clear but blustery conditions with a refreshing walk up to the Iron Age fort on Ladle Hill. From various viewpoints en-route, we could admire the east-west ridge that forms the south side of the River Kennet and includes Beacon Hill to the west and Watership Down to the east. The ridge was pushed up during the Alpine orogeny and is cut by several north-south valleys, such as the one separating Beacon and Ladle Hills, incised by rivers which exploited fractures in the leading edge of the thrust. The walk up also took us through several discrete layers in the chalk, from the West Melbury marly chalk at the base to the Lewes Nodular chalk on which the fort sits at the top. The transition through the chinks is now concealed by soils and vegetation.



Above: the group on a rather windy Ladle Hill; Beacon Hill visible in the background (to the west).

At the fort, John explained the construction techniques used – trenches excavated by simple tools including antler picks and flint axes. It was never completed (so we can see how it was built) and it may have been solely ceremonial; no evidence of habitation has been found.



Above: John describes the construction, impressive considering only hand tools were used.

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We descended back to the cars and moved north across the valley floor to a small chalk pit about a mile from the ridge. Here, the Seaford chalk was exposed and shows a $\sim 25^\circ$ dip to the north, consistent with the cross-section accompanying the field notes. The pit was closed to the public, so closer examination was not possible.



Above: Duncroft Farm Chalk Pit, revealing the northern (to the left) dip in the Seaford Chalk.



We finished the short trip with a visit to All Saints Church in Old Burghclere. The construction materials reflect the local geology, with primarily chalk and flint used in the walls, with some greenstone (from north of the chalk pit we visited) evident. Use of chalk in external walls is unusual, as it's a soft rock; while there was plenty of evidence of it weathering away, it was holding up adequately considering the age of the structure (oldest parts from 11th century).

Left: chalk and flint bands used decoratively in one of the church walls. The limestone footings and cornerstones are not local to Newbury.