

Front Wood, Thorp Arch



STATUS: Local Geological Site

OTHER DESIGNATIONS:

COUNTY: West Yorkshire

DISTRICT: Leeds

OS GRID REF. SE 4308 4605 to SE 4313 4597

OS 1:50,000 Landranger 105 York and surrounding areas

OS 1:25,000 Explorer 289 Leeds

BGS 1:50,000 Sheet 70 Leeds

FIRST DESIGNATED West Yorkshire Geology Trust October 2012

DATE OF MOST RECENT SURVEY October 2013 by West Yorkshire Geology Trust

DESIGNATION SHEET UPDATED September 2015

SITE DESCRIPTION:

An old quarry and natural crags are exposed on the north-east side of the River Wharfe, upstream of Thorp Arch Bridge. The length of the exposure is about 50m, though much of it is obscured by vegetation during the summer. Upper Permian Cadeby Formation dolomites (Lower Magnesian Limestone) can be seen. The dolomites largely consist of laminated microbial rocks. One area of unlaminated dolomite, with vugs and large solution holes, typical of the Wetherby Member of the Cadeby Formation can be found. The highest part of the quarry face exposes the Sprotborough Member, which is covered with tufa in places. The Hampole Beds form the lowest rocks of the Sprotborough Member and comprise two thin cream-coloured clay layers with about 30cm of dolomite between, with the Hampole discontinuity shown about 60cm below as a prominent bedding-plane. About 4m of dolomites with excellent examples of microbial laminae and tepee structures are exposed below the Hampole Discontinuity.

HISTORICAL ASSOCIATIONS:

At the west end of the exposure is a quarry up to 20m long, with faces up to 6m high. Mason's chisel marks are seen and the quarry was presumably used to extract building stone for use in Thorp Arch.

EDUCATIONAL VALUE:

This site is useful for adult or research groups.

AESTHETIC CHARACTERISTICS:

Views across the River Wharfe towards Boston Spa Riverside Woods and its dolomite crags can be seen.

ACCESS AND SAFETY:

The rock faces can be reached from the footpath to the River Wharfe from the roadside at Thorp Arch village green, where there is some parking. Walk about 20m down Thorp Arch Park cul-de-sac to the gate at SE 432 459. After 100m turn right by woods to find rock exposures which continue for 100m. Permission is required from the owners at Hall Farm, Thorp Arch.