Warwickshire Geological Conservation Group

| Warwickshire Local Geological Site | | | | | |
|------------------------------------|--|-----|--|--|--|
| Site No: 10 | Jee's Quarry | | | | |
| Geological Formations | Hartshill Sandstone Formation (Cambrian) Purley Shale Formation (Cambrian) | | | | |
| Criteria Form | | p 2 | | | |
| Description | | p 3 | | | |
| Photographs | | p 4 | | | |
| Location Map | | p 6 | | | |

Local Geological Sites (LGS), designated by locally developed criteria, are currently the most important places for geology and geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI). The designation of LGS is one way of recognising and protecting important Earth science and landscape features for future generations to enjoy.

WGCG is responsible for the identification of LGS in Warwickshire and the West Midlands.

Please note that designation of a site as a LGS does not confer a legal right of access. Unless the site is on a designated public right-of-way, the landowner's permission is required before visiting.

| Warwickshire Local Geological Site - Criteria Form | | | | | | | |
|---|----------------|--|------------------------------|-------------------|------------|------|--|
| Site name: Jee's Quarry | Also known as: | | | | | | |
| District: North Warwickshire | | County: Warwickshire | | | | | |
| Grid reference: SP333 940 | LGS Number: 10 | | ESCC Class: | ED | | | |
| Brief Description: A very larg 3.5kms north west of Nuneaton These are the Park Hill, Tuttle I | . Five | members of the Hartsh | ill San | dstone Formation | | | |
| This site qualifies as a Local Geological Site for the following criteria: | | | | | | | |
| A Good Example of the compl | ete Ha | rtshill Sandstone Form | nation. | | | | |
| Educational Fieldwork | | | 1 | | | | |
| 1. Educational Potential | \checkmark | 2. Physical access | ✓ | 3. Safety | | ✓ | |
| Scientific Study | | | | | | | |
| Diversity of interest | ✓ | 2. Rarity of interest | ✓ | 3. Size of featur | ·e | ✓ | |
| 4. Typicalness of feature | ✓ | ✓ 5. Geological/physiographic linkage to: Oldbury Quarry (9), Judkins Quarry (12), Midland Quarry (13), Woodlands Quarry SSSI & Boon's Quarry SSSI | | | | ✓ | |
| Historical Value | | | | | | | |
| 1. Celebrity link | | 2. Pioneering research | | 3. Historical lin | nk | | |
| Aesthetic Value In The Lands | cape | | | | | | |
| 1. Local importance in the landscape | | 2. Promotion of Eartl | . Promotion of Earth science | | | | |
| Signed | | Date first selected February 19 | | |)2 | | |
| lan Temrik | | | Reviewed by LoGS panel Oct. | | nel Oct. 2 | 2009 | |
| | | | Further survey required | | ed | | |
| I M Fenwick, Chairman, Warwickshire Geological Con | tion Group | LoGS | LoGS Confirmed | | ✓ | | |
| Endorsed by | | | | | | | |
| Warwickshire Museum Natural England LA Invites Conservation Advisor | | | | | | | |
| J Radley, Keeper of Geology J A Irving, Conservation Adviser In the count of any development or planting consultation relation to this site on its surrounds. | | | | | | | |
| In the event of any development or planning consultation relating to this site or its surrounds please inform: The LoGS Officer WGCG, c/o Keeper of Geology, Warwickshire Museum, Market Place, Warwick CV34 4SA (tel: 01926-418182) | | | | | | | |

WARWICKSHIRE GEOLOGICAL CONSERVATION GROUP LOCAL GEOLOGICAL SITE (LGS)

| Site | 10 | Jee's Quarry | | |
|-------------------|------------------|--------------------|--|--|
| Parish | • | Hartshill | | |
| District | | North Warwickshire | | |
| County | | Warwickshire | | |
| National Grid Ref | ference | SP 333 940 | | |
| Ordnance Survey | / Sheets 1:50000 | 140 | | |
| | 1:10000 | SP 39 SW | | |

Location

A very large roadstone quarry situated on the west side of the B4111 some 3.5km north west of Nuneaton.

Summary of Interest

Five members of the Hartshill Sandstone Formation are represented in extensive exposures on all faces of the quarry. These are the Park Hill, Tuttle Hill, Jee's, Home Farm and Woodlands members. Numerous trace fossils have been found in these rocks that are beneath undisputed Tommotian shelly fossils. Collectively, these provide some of the oldest Cambrian fossils to have been found in Europe. The overlying Purley Shale Formation of the Stockingford Shale Group is also exposed which yields Middle Cambrian trilobite fossils.

The succession, which dips at 30-35° to the south-west, has been disturbed by minor faulting and has been intruded by a series of spessartite sills which are often transgressive and occasionally incorporate rafts of sediment.

Woodlands Member: Grey to maroon, medium-grained glauconitic and micaceous sandstones. Faint cross-bedding but commonly appear massive and thick-bedded. Rare mudstone drapes.

Home Farm Member: Basal quartzose conglomerate and calcareous sandstone overlain by maroon sandy limestones with siltstone layers, hardground surfaces and stromatolites. Shelly faunas locally abundant.

Jee's Member: Sandstone, red to maroon fine-grained, feldspathic and glauconitic, in gently-tapering beds with bimodal tabular-planar and trough cross-bedding. Interbedded with red and green colour-variegated siltstone and mudstone.

Tuttle Hill Member: Pink to maroon, medium- to fine-grained glauconitic sandstone. Subordinate mudstone beds and near-ubiquitous mudstone drapes. Tabular-planar and compound cross-bedding common.

Park Hill Member: Grey medium-grained sandstone with thin breccia layers in basal 17m: main part in beds 0.2-0.8m thick showing herringbone cross-bedding. Very rare mudstone beds or drapes.

Features:

SE face from SP 33559390 to SP33659377 and to SP33409360

Five members of the Hartshill Sandstone Formation (Park Hill, Tuttle Hill, Jee's and Woodland) are represented here as well as the base of the Purley Shale Formation and several spessartite lamprophyre sills of the Midlands Minor Intrusive Suite.

SW face from SP33129396 to SP33209390

The face is mainly the Tuttle Hill Member with largely inaccessible sections within the younger strata above. These might include exposures within the Home Farm member which includes unusuaql limestones that have yielded primitive shelly fauna.

Face at SP3301594081

Strike section within well-bedded maroon sandstones of the Tuttle Hill Member. Numerous fallen blocks displaying a variety of sedimentary structures including clay partings and intensely burrowed surfaces.

NW face from SP32939420 to SP32969427

Display of bedding planes, dip sections, jointing and the effects of quarrying on strike faces in the Tuttle Hill Member

Face at SP32989429

Bedding planes within the sub-quartzitic Park Hill Member; the oldest unit represented at Jee's Quarry. A variety of sedimentary structures can be seen including ripples and simple burrows.

This site is of great educational value for all levels from GCSE to degree. It is also important for higher level research.









