

File ref:

**County:**                                   **Leicestershire**                                   **Site name: Bardon Hill Quarry**

**District:**                                   **North West Leicestershire**

**Status:**                                   Site of Special Scientific Interest (SSSI) notified under Section  
28 of the Wildlife and Countryside Act 1981.

**Local Planning Authority:**   North West Leicestershire District Council

**National Grid Reference:**   SK 459133                                   **Area:**                                   78.8 (ha)   194.72 (ac)

**Ordnance Survey Sheet 1: 50 000:**   129                                   **1: 10 000:**                                   SK 41 SE

**Date Notified (Under 1949 Act):**                                   **Date of Last Revision:**

**Date Notified (Under 1981 Act):**   1987                                   **Date of Last Revision:**

**Other Information:**

This is a new site identified as being of national importance by the Geological Conservation Review. The site is adjacent to Bardon Hill SSSI which is notified on biological grounds.

**Description and Reasons for Notification:**

Bardon Hill is an extensive area of active quarrying which provides important exposures of Precambrian Igneous rocks which are important for the understanding of the late Precambrian Volcanic history of the Charnwood Forest area. The quarries also provide exposures demonstrating mineralisation related to the hydrothermal modifications of an ancient lava flow, of Precambrian age.

The Precambrian Igneous rocks belong to the Charnian sequence, and consist of a variety of extrusive and possible intrusive rocks, mainly porphyritic dacites, pyroclastic breccias and eutaxitic tuffs containing well sorted blocks of dacitic material. Belts of epidotisation are related to the areas of mineralisation within the quarries. A well-developed system of quartz-filled north-west to south-east shear fractures and associated tension gashes cut right across the quarry. A unique andesite dyke cuts east-west across the pyroclastic breccias. Preliminary investigations of the hydrothermal mineralisation suggest that the mineralization is related to a gold-chloritisation mechanism unknown elsewhere in Britain.