COUNTY: LEICESTERSHIRE SITE NAME: GRACE DIEU AND HIGH SHARPLEY

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 437170 Area: 89.3 (ha.) 220.6 (ac.)

Ordnance Survey Sheet 1:50,000: 129 1:10,000: SK 41 NW, SK 41 NE

Date Notified (Under 1949 Act): 1956 Date of Last Revision: 1981

Date Notified (Under 1981 Act): 1983 Date of Last Revision: –

Other Information:
The site boundary has been amended.

Reasons for Notification:
The site comprises one of the best remaining examples of the formerly extensive Charnwood Forest heaths. It also includes a key geological exposure of the Carboniferous limestone.

Biology
The site is a complex of woodland, scrub, heath, acid grassland and rock. The semi-natural vegetation has developed on soils derived principally from igneous Pre-Cambrian rocks but also from Carboniferous limestones and from strata of the Triassic Keuper Sandstones series. Grace Dieu Wood is characterised by the dominance of pedunculate oak *Quercus robur* which occurs together with sessile oak *Q. petraea*, silver birch *B. verrucosa*, downy birch *B. pubescens* and holly *Ilex aquifolium*, over a field layer dominated by bramble *Rubus fruticosus* and bracken *Pteridium aquilinum*. Locally, base-enrichment of the soil results in a change to wych-elm *Ulmus glabra* dominated woodland, while on wet soils alder *Alnus glutinosa* becomes abundant and is associated with bird cherry *Prunus padus*. In these wet woodland areas the ground flora includes such localised species as Dutch rush *Equisetum hyemale*, wood horsetail *E. sylvaticum* and smooth-stalked sedge *Carex laevigata*. The slopes of High Sharpley are covered by a mosaic of dry heath and acidic grassland characterised by the abundance of wavy-hair grass *Deschampsia flexuosa*, heather *Calluna vulgaris* and *Vaccinium myrtillus*. On flatter ground adjacent acidic marshy grassland has developed which is dominated by *D. flexuosa*, purple moor-grass *Molinia caerulea*, and compact rush *Juncus conglomeratus*, which occur together with frequent heath rush *Juncus squarrosus*. Cademan Moor comprises an extensive area of acid grassland dominated by *D. flexuosa*, sheep's fescue *Festuca ovina*, mat grass *Nardus stricta*, creeping soft grass *Holcus mollis*, and heath bedstraw *Galium saxatile*. In some areas acidic flushes occur characterised by the abundance of soft rush *Juncus effusus*, lesser spearwort *Ranunculus flammula* and Lenormand's water crowfoot *Ranunculus omiophyllus*. Scattered throughout the site are areas of scrub variously dominated by western gorse *Ulex gallii*, birch *Betula pendula*, elder *Sambucus nigra* and hawthorn *Crataegus monogyna*. The rocky outcrops, especially around High Sharpley, are noted for their saxicolous lichen flora.

Geology
To the north-west of the site lies Grace Dieu Quarry. The significance of this site lies in its palaeogeographic position, as the most southerly section within the

Carboniferous Limestone ‘Central Province’ and in its extreme proximity to the shoreline of the Midland landmass. Here, as would be expected in such a marginal marine situation a very thin Dinantian sequence was deposited. A wide variety of carbonate and clastic lithologies is seen overlying an erosive Karstic surface. The precise age, sedimentology and diagenesis of this latter feature has yet to be fully elucidated. A critical research and reference site for studies of palaegeography, sedimentology and palaeontology.