COUNTY: GLOUCESTERSHIRE SITE NAME: CLEEVE COMMON

DISTRICT: COTSWOLD SITE REF: 15WVV

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

Local Planning Authority: GLOUCESTERSHIRE COUNTY COUNCIL, Cotswold

District Council

National Grid Ref: SO 990260 Area: 455.0 (ha.) 1124.3 (ac.)

Ordnance Survey Sheet 1:50,000: 163 1:10,000: SO 92 NE, SP 02 NW, SO 92 SE,

SP 02 SW

Date Notified (Under 1949 Act): 1974 Date of Last Revision: 1974

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

Other Information:

Within the Cotswolds AONB.

A golf course is present on the site.

Site boundary modified (reduction).

Part of site registered as a Common.

Description and Reasons for Notification:

The site is situated on the Jurassic Limestones on top of the Cotswold scarp, to the north-east of Cheltenham. It is one of the most extensive areas of limestone grassland in the Cotswolds and is of importance both for its grassland, and for its geological and physiographical features.

Biology

Several types of grassland occur, influenced by aspect, soil, intensity of grazing and past management. Those include short species-rich turf of fescues *Festuca* spp. and bents *Agrostis* spp. and taller communities dominated by tor-grass *Brachypodium pinnatum*, upright brome *Bromus erectus* and meadow oat-grass *Avenula pratense*. Calcicole (limeloving) plants are widespread, including burnet-saxifrage *Pimpinella saxifraga*, small scabious *Scabiosa columbaria*, horseshoe vetch *Hippocrepis comosa*, and carline thistle *Carlina vulgaris*. Several orchids occur in large numbers particularly bee orchid *Ophrys apifera*, frog orchid *Coeloglossum viride*, and the nationally restricted musk orchid *Herminium monorchis*. Flea sedge *Carex pulicaris* as a local constituent of the turf is an unusual feature.

Over parts of the site limestone grassland gives way to more neutral or acidic communities whose distribution is related to the presence of acidic drift deposits or surface leaching of the soil. In part these are dominated by false oat-grass *Arrhenatherum elatius* while heather *Calluna vulgaris* occurs locally, and gorse *Ulex europaeus* scrub is extensive.

Several disused quarries with associated spoil and scree provide conditions for plants characteristic of more open habitats. These include hairy rock-cress *Arabis hirsuta* and the nationally restricted limestone polypody *Gymnocarpium robertianum*.

A spring fed stream runs through part of the site, supplying water to a small pool. This is fringed by marshy grassland, which includes the local flat-sedge *Blysmus compressus*, bristle club-rush *Isolepis setacea* and whorl-grass *Catabrosa aquatica*.

The site provides suitable conditions for a wide range of invertebrates. These include butterflies such as the dark green fritillary *Argynnis aglaia*, grayling *Hipparchia semele*, and marsh fritillary *Eurodryas aurinia* and the rare snail *Abide secale*.

Geology

In the Cotswolds the 'Bouguetia' and 'phillipsiana' beds of the upper Middle Inferior Oolite are confined to a very limited outcrop on Cleeve Common. These units, with their distinctive fossil faunas of bivalves, gastropods and brachiopods, are now only seen at Rolling Bank Quarry. This provides unique outcrops which are the only representatives of part of the Middle Jurassic, Bajocian, time interval in Britain.

The Inferior Oolite hill top of Postlip Warren shows the best example of 'ridge-and-trough' features in Great Britain. At some time the Inferior Oolite has broken up into separate blocks along the lines of pre-existing joints, and these blocks have moved valleyward over the underlying Lias Clay. The movement has probably involved both sliding, and squeezing-out of the clay. The resulting large-scale, shallow ridges and troughs on the surface are entirely characteristic, and are shown much better at Postlip Warren than at any other point along the Jurassic outcrop.