COUNTY: GLOUCESTERSHIRE SITE NAME: COTSWOLD COMMONS

AND BEECHWOODS

DISTRICT: STROUD/TEWKESBURY/COTSWOLD SITE REF: 150WA

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, Stroud District Council, Tewkesbury Borough Council, Cotswold District Council

National Grid Reference: SP 900130 Area: 665.5 (ha.) 1664.4 (ac.)

Ordnance Survey Sheet 1:50,000: 162, 163 1:10,000: SO 80 NE, SO 81 SE, SO 90 NW,

SO 91 SW

Date Notified (Under 1949 Act): 1954 Date of Last Revision: 1974

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

Other Information:

Within the Cotswold Area of Outstanding Natural Beauty.

Includes the Cotswold Commons and Beechwoods National Nature Reserve and Cooper's Hill Local Nature Reserve.

Part registered common land.

Part owned by the National Trust.

The site is listed in 'A Nature Conservation Review', edited by D A Ratcliffe, Cambridge University Press 1977.

Site boundary (extension & reduction).

Description and Reasons for Notification:

The site consists of ancient beech woodland and unimproved grassland lying over Jurassic limestones at the western edge of the Cotswolds . It includes land around the villages of Sheepscombe and Cranham and along the top of the scarp between Painswick and Birdlip. The woodlands are amongst the most diverse and species-rich of their type while the grasslands typify the unimproved calcareous pastures for which the area is famous.

The beechwoods have a long history of management for timber and have now generally developed a high forest structure. The canopy is dominated by beech *Fagus sylvatica* with some ash *Fraxinus excelsior*, pedunculate oak *Quercus robur* and some areas of sycamore *Acer pseudoplatanus*. Among associated tree species are wych elm *Ulmus glabra*, field maple *A. campestre*, and whitebeam *Sorbus aria*. Characteristic understorey species include holly *Ilex aquifolium* and yew *Taxus baccata* but regenerating ash, sycamore and beech often accounts for much of the shrub layer. The field layer consists mainly of bramble *Rubus fruticosus*, dog's mercury *Mercurialis perennis* and ivy *Hedera helix* with wood anemone *Anemone nemorosa*, sanicle *Sanicula europaea*, bluebell *Hyacinthoides non-scripta* and enchanter's-nightshade *Circaea lutetiana*. More local species include green hellebore *Helleborus viridis*, common wintergreen *Pyrola minor*, bird's-nest orchid *Neottia nidus-avis* and broad-leaved helleborine *Epipactis helleborine*. A

number of nationally rare plants also occur, including fingered sedge *Carex digitata*, wood barley *Hordelymus europaeus*, stinking hellebore *Helleborus foetidus*, yellow star-of-Bethlehem *Gagea lutea* and narrow-lipped helleborine *Epipactis leptochila*.

Other wooded habitats represented in the site include wet areas, for example near the Painswick stream, dominated by alder *Alnus glutinosa* and willow *Salix* spp. Some areas of mixed coniferous and broadleaved plantation are included where the conifer element is being removed to favour the native broadleaved species. There are a few small areas of coppice dominated by hazel *Corylus avellana*.

The fauna of the woods includes an exceptional variety of invertebrate species. Several nationally rare terrestrial snails are present and are particularly associated with areas of springs and moist vegetation containing abundant mosses and liverworts. They include *Ena montana*, *Phenocolimax major*, *Acicula fusca* and *Macrogastra rolphii*; all species restricted to ancient woodland sites. Butterflies include silver-washed fritillary *Argynnis paphia* and less commonly white admiral *Ladoga camilla* and white-letter hairstreak *Strymonidia w-album*. Breeding birds include tawny owl *Strix aluco*, sparrowhawk *Accipiter nisus*, green woodpecker *Picus viridis* and wood warbler *Phylloscopus sibilatrix* while flocks of brambling *Fringilla montifringilla* are frequent in winter. Badgers *Meles meles* and a variety of small mammals are present, and fallow deer *Cervus dama* occur in low numbers

Unimproved limestone grassland is mainly confined to the common lands at Painswick Beacon, Cranham and Sheepscombe but there are a number of smaller areas close to the woodlands. The swards are generally dominated by upright brome *Bromus erectus*, torgrass *Brachypodium pinnatum* and sheep's-fescue *Festuca ovina* with quaking grass *Briza media* and a wide range of other flowering herbs. Typical plants include cowslips *Primula veris*, common bird's-foot-trefoil *Lotus corniculatus*, common rock-rose *Helianthemum nummularium*, wild thyme *Thymus praecox* and field scabious *Knautia arvensis* while less common species include autumn gentian *Gentianella amarella*, frog orchid *Coeloglossum viride* and kidney vetch *Anthyllis vulneraria*. The very local musk orchid *Herminium monorchis* occurs at two locations.

Scrub encroachment is occurring in some ungrazed areas, with species such as hawthorn *Crataegus monogyna*, field rose *Rosa arvensis* and young tree growth. There are a few juniper *Juniperus communis* bushes. At Painswick Beacon there has been a rapid spread of self-sown Scots pine *Pinus sylvestris* in recent years which is encroaching on the species-rich grasslands.

A wide variety of butterflies is associated with the herb-rich grassland. Species such as marbled white *Melanargia galathea*, chalkhill blue *Lysandra coridon* and green hairstreak *Callophrys rubi* are widespread whilst the rare Duke of Burgundy fritillary *Hamearis lucina* is more localised. Tree pipits *Anthus trivialis* feature among the breeding birds.

Some disused limestone mines within the notified area are used as winter roosts by several bat species.