COUNTY: SHROPSHIRE SITE NAME: THE STIPERSTONES & THE HOLLIES

DISTRICT: SOUTH SHROPSHIRE SITE REF: 15OHV

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

Local Planning Authority: SHROPSHIRE COUNTY COUNCIL, South Shropshire District Council

National Grid Reference: SJ 370000 Area: 587.8 (ha.) 1452.5 (ac.)

Ordnance Survey Sheet 1:50,000: 126, 137 1:10,000: SO 39 NE, NW, SO 30 SE

Date Notified (Under 1949 Act): 1953 Date of Last Revision: 1971

Date Notified (Under 1981 Act): 1989 Date of Last Revision: –

Other Information:
Site boundary alteration (extension and deletion).
Part owned and managed as a National Nature Reserve (437 ha.) by the Nature Conservancy Council.
The site lies within the Shropshire Hills Area of Outstanding Natural Beauty.

Description and Reasons for Notification:
The Stiperstones are a series of tors which outcrop along a prominent quartzite ridge to the south west of Shrewsbury. Rising to an altitude of 536 metres, the hill supports an extensive and varied heathland vegetation showing transitions between southern lowland and northern upland heaths. The site is also important for its exposures of Ordovician sedimentary rocks and is of outstanding interest for periglacial geomorphology, in particular tors, stone circles and stone stripes.

Biology
The heathland vegetation varies with altitude and aspect. This is particularly evident in the steep sided valleys on the western side of the hill where bell heather *Erica cinerea* and western gorse *Ulex gallii* are characteristic of south facing slopes, whereas bilberry *Vaccinium myrtillus* is particularly abundant on north facing slopes. On higher ground, cowberry *Vaccinium vitis-idaea* and crowberry *Empetrum nigrum* are significant components of the heathland. Typical heathland herbs include heath bedstraw *Galium saxatile*, tormentil *Potentilla erecta* and common cow-wheat *Melampyrum pratense*. Heather *Calluna vulgaris* is abundant or dominant in all these communities.

The tors and boulders of the upper slopes provide important habitat for several species of moss and also support a diverse lichen flora. The siliceous substrate favours species such as *Parmelia multifida, P. mougeotti, P. incurva* and several species of *Lecidea*.

On both sides of the ridge there are areas of grassland most of which are the remains of abandoned small holdings. Some of these have a rich flora which includes heath bedstraw, heath speedwell *Veronica officinalis* and mouse-ear hawkweed *Hieracium pilosella*. In one field, mountain pansy *Viola lutea* is abundant. Formerly common in the south Shropshire hills this species is now scarce.

The site includes a series of wet flushes in which mosses such as *Sphagnum* spp., *Polytrichum commune* and *Aulocomnium palustre* form a significant component of the vegetation. Also present are a number of peatland plants including bog asphodel *Narthecium ossifragum*, common cottongrass *Eriophorum angustifolium*, heath spotted orchid *Dactylorhiza maculata* and bog pimpernel *Anagallis tenella* as well as a variety of sedges; in particular common yellow-sedge *Carex demissa*, carnation sedge *C. panicea*, star

sedge *C. echinata*, flea sedge *C. pulicaris* and tawny sedge *C. hostiana*. Of particular note is the presence of marsh hawk's-beard *Crepis paludosa*, at its southernmost locality in the county, and the increasingly uncommon marsh St John's wort *Hypericum elodes*.

In the western valleys and on parts of Black Rhadley Hill there are areas of birch *Betula* spp. woodland and, at Resting Hill, a sizeable area of sessile oak *Quercus petraea* coppice. Around the edges of the site are patches of gorse *Ulex europaeus* and broom *Cytisus scoparius* scrub.

One of the most remarkable features of the site is an area at the northern end of the ridge which is known as The Hollies. This is an area of 'holly parkland' of great antiquity which is considered to be unique for both its size and for the age of the holly *Ilex aquifolium* trees. These trees, which have unusually large girths, are at least 250 years old. However, many of the largest trees are likely to be over 300 years, and some possibly as old as 400 years. As well as being recognized as one of the oldest stands of holly in Europe, the hollies are considered to be amongst the oldest trees of any species in Britain. In the past the holly trees were pollarded to provide winter fodder, and as a result of this type of management they have well developed crutches in which rowans *Sorbus aucuparia* have become established.

The oak coppice at Resting Hill supports a population of the upland wood ant *Formica lugubris* which occurs here at the southernmost edge of its distribution in Britain.

Along the western edge of the site are a series of derelict mine shafts and adits. Many of these provide important winter roosts for several species of bat. The presence of the uncommon lesser horseshoe bat *Rhinolophus hipposideros* is of particular note.

Breeding birds include red grouse *Lagopus lagopus scoticus*, wheatear *Oenanthe oenanthe*, whinchat *Saxicola rubetra*, and in the wooded fringes of the site, redstart *Phoenicurus phoenicurus* and pied flycatcher *Ficedula hypoleuca.*

Geology and Geomorphology
This is a classic geological site providing exposures of Arenig sedimentary rocks formed about 475 million years ago during the early Ordovician Period. The ridge is formed of durable Stiperstones Quartzite whereas the remainder of the site is underlain by Mytton Flags and Tankerville Flags. The flagstones are of particular importance for their fossil fauna.

At a number of locations between Mytton Dingle and Snailbeach are exposures of Britain's thickest Arenig sedimentary development. Here a section through the Stiperstones Quartzite, Mytton Flags and Tankerville Flags totals over 1000 metres. The Mytton Flags yield a rich trilobite fauna which includes common species of the shallow water '*Neseuretus* community' together with other unique forms which have not yet been found at any other Arenig site.

At Bergam Quarry there are exposures of horizons which are high in the sequence of Tankerville Flags. These horizons contain an assemblage of trilobites which is known as a 'raphiophorid community'. These are mid-depth, bottom living and pelagic species which give a late '*hirundo*' Zone age for these beds. The fossils from all these sites are of great value in dating the rock sequence, reconstructing the early Ordovician environment and making comparisons with rocks of the same age elsewhere in Britain and overseas.

The Stiperstones ridge is capped by a series of quartzite tors, including The Devil's Chair, which rise to 20 metres. The tors are surrounded by block-fields of angular boulders, and fine examples of large stone circles occur on low angled slopes. The circles become elongated downslope and merge into stone stripes which cover the flanks of the ridge. The tors, circles and stripes provide an excellent assemblage of frost shattered and frost sorted

features formed under periglacial conditions probably during the last glaciation when the area lay adjacent to the ice sheet margins.