**COUNTY:** BEDFORDSHIRE **SITE NAME:** TOTTERNHOE KNOLLS

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

**Local Planning Authorities:** South Bedfordshire District Council
Bedfordshire County Council

**National Grid Reference:** SP 979220

**Ordnance Survey Sheet 1:50,000:** 165 **1:10,000:** SP 92 SE

**Date Notified (Under 1949 Act):** 1951 **Date of Last Revision:**

**Date Notified (Under 1981 Act):** 1985 **Date of Last Revision:**

**Area:** 13.08 ha 32.32 ac

**Other information:** The site is a Local Nature Reserve. The Norman motte and bailey earthworks are a Scheduled Ancient Monument.

## Description and Reasons for Notification

Totternhoe Knolls is a remnant of a chalk downland with characteristic species-rich calcareous grassland flora. Situated on a bluff of the lower chalk the site incorporates a Norman earthworks and old stone quarry workings. Chalk grassland has become greatly reduced in extent both locally and nationally. Within Bedfordshire extensive areas of the downland have been lost through agricultural reclamation and changes in management practice.

The grassland has a mosaic of plant associations related to the uneven terrain and variety of aspects. They support a rich assemblage of characteristic chalk grassland plants including species now uncommon or rare in the county. In parts the site grades into scrub and woodland; management is controlling further scrub invasion.

The steepest slopes are dominated by sheep's fescue *Festuca ovina* with other grasses including crested hare grass *Koeleria macrantha*, quaking grass *Briza media* and crested dog's tail *Cynosurus cristatus*. Elsewhere upright brome *Bromus erectus* becomes the dominant grass. Flowering plants characteristic of chalk grassland are abundant and include kidney vetch *Anthyllis vulneraria*, horseshoe vetch *Hippocrepis comosa*, large thyme *Thymus pulegioides*, squinancywort *Asperula cynanchica*, autumn gentian *Gentianella amarella*, clustered bellflower *Campanula glomerata*, sainfoin *Onobrychis viciifolia* and dwarf thistle *Cirsium acaule*.

Orchid species are well represented, including common spotted orchid *Dactylorhiza fuchsii*, bee orchid *Ophrys apifera*, twayblade *Listera ovata* and several county rarities.

Characteristically the grassland supports a rich invertebrate fauna including butterflies such as the common blue and chalkhill blue.

Re-presentation of details approved by Council. Re-typed December 1998.
Site Area calculated by GIS 19 April 1998.

Additional habitat is provided by mixed scrub and small areas of beech plantation with ash.

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