

**Site name:** Besthorpe Warren **County:** Nottinghamshire

**District:** Newark and Sherwood

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 substituted by Schedule 9 to the Countryside and Rights of Way Act 2000

**Local Planning Authority:** Newark and Sherwood District Council  
Nottinghamshire County Council

**National grid reference:** SK 829654 **Area:** 8.83 (ha)

**Ordnance Survey sheet:** **1:50,000:** 121 **1:10,000:** SK86NW,  
SK86SW

**Date of notification:** 19 March 2004

### **Reasons for notification:**

Besthorpe Warren supports an important mosaic of dry acid grassland vegetation including nationally uncommon types of parched acid grassland and an inland example of dune grassland, dominated by sand sedge *Carex arenaria*. Formerly characteristic of active inland dunes associated with the north Lincolnshire and east Nottinghamshire Coversands, this type of vegetation is now rare in the East Midlands and very restricted in its distribution across England.

### **General description:**

Located on the wind-blown cover sands of the lower Trent floodplain overlying Triassic Mercia Mudstones, Besthorpe Warren represents one of the few remaining localities in the county where extensive species-rich stands of dry acid grassland occur. Grazing by rabbits produces a diverse mosaic of both short and tall stands of acid grassland across the site. Central areas of short, well-grazed turf consist of parched acid grassland largely composed of sheep's sorrel *Rumex acetosella*, sheep's fescue *Festuca ovina*, early hair-grass *Aira praecox*, and common bent *Agrostis capillaris*, with less frequent amounts of sand sedge *Carex arenaria*, parsley piert *Aphanes arvensis*, bird's-foot *Ornithopus perpusillus*, field wood-rush *Luzula campestris*, common mouse-ear *Cerastium fontanum*, smooth hawk's-beard *Crepis capillaris*, ladies bedstraw *Galium verum* and heath bedstraw *Galium saxatile*. Areas of more mobile bare sand, where ground disturbance is greater, support a wider range of ephemeral herbs such as field mouse-ear *Cerastium arvense*, early forget-me-not *Myosotis ramosissima*, little mouse-ear *Cerastium semidecandrum*, wall speedwell *Veronica arvensis* and common stork's-bill *Erodium cicutarium*. This grassland community is also distinguished by a characteristically rich assemblage of lower plants, most notably a diverse range of *Cladonia* lichens including *Cladonia squamosa*, *C. uncialis*, *C. impexa*, *C. furcata*, *C. fimbriata*, *C. chlorophaea* and *C. arbuscula*, together with mosses such as *Dicranum scoparium*, *Polytrichum juniperinum* and *Ceratodon purpureus*. These communities grade into coarser, lightly grazed vegetation characterized by grasses such as wavy hair-grass *Deschampsia flexuosa* and Yorkshire fog *Holcus lanatus*.

Where rabbit grazing is less intensive, grassland with sand sedge as the most abundant plant predominates, occurring here in abundance at one of its few localities in the county. Associated with the typically coarse swards of sand sedge are a range of herbs that include heath groundsel *Senecio sylvatica*, ragwort *S. jacobaea*, sheep's fescue,

heath bedstraw and sheep's sorrel. In places, the grassland grades into more mesotrophic grassland, tall-herb vegetation dominated by bracken *Pteridium aquilinum* and scattered stands of scrub composed of hawthorn *Crataegus monogyna* and elder *Sambucus nigra*.