

Site name: Cowslip Meadow

Unitary Authority/County: Luton

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

Local Planning Authority: Luton Borough Council

National Grid reference: TL082247 **Area:** 6.36 ha

Ordnance Survey Sheets: 1:50,000: 166 **Notification date:** 13 October 2020

Reasons for notification:

Cowslip Meadow is of special interest for its nationally important species-rich lowland meadow and population of great pignut *Bunium bulbocastanum*.

General description:

Cowslip Meadow is a floristically-diverse lowland meadow supporting unimproved neutral grassland on river alluvium soils. Unimproved neutral grasslands have suffered substantial declines nationally due to agricultural intensification and Cowslip Meadow represents a rare surviving example.

The species-rich lowland meadow communities form a mosaic with other neutral grassland communities and tall-herb fen. The precise distribution and juxtaposition of the communities is determined by a range of factors, including land management practices, topography, underlying soil conditions, drainage, nutrient enrichment, and the pattern and frequency of flooding.

Much of the grassland is characterised by a diverse range of grasses and flowering plants. Fine leaved grasses such as red fescue *Festuca rubra* are found amongst meadow species including yellow-rattle *Rhinanthus minor*, cowslip *Primula veris*, common knapweed *Centaurea nigra* and meadowsweet *Filipendula ulmaria*. Additional interest is found through presence of lady's bedstraw *Galium verum*, meadow vetchling *Lathyrus pratensis*, eyebright *Euphrasia nemorosa*, field scabious *Knautia arvensis*, goat's-beard *Tragopogon pratensis*, common bird's-foot-trefoil *Lotus corniculatus*, agrimony *Agrimonia eupatoria*, common sorrel *Rumex acetosa*, pyramidal orchid *Anacamptis pyramidalis* and southern marsh-orchid *Dactylorhiza praetermissa*.

In one small area of the site the grassland exhibits more of a calcareous influence, with abundant upright brome, *Bromus erectus*, and a range of more calcicolous species including wild carrot *Daucus carota*, fairy flax *Linum catharticum*, and small scabious, *Scabiosa columaria*. It is in this area that the Nationally Rare great pignut *Bunium bulbocastanum* is most common. Great pignut is an umbelliferous plant of base-rich soils that has declined in Great Britain but has a stronghold in the Luton area with a particularly large population at Cowslip Meadow. Additional diversity is found within wetter fen and swamp habitats where a mosaic of communities can be found. The wetter grassland/fen is dominated by glaucous sedge *Carex flacca* with lesser amounts of carnation sedge *C. panicea*, brown sedge *C. disticha*, common yellow-sedge *C. demissa* and hairy sedge *C. hirta*. Fen species are frequent, including marsh horsetail *Equisetum palustre* and yellow iris *Iris pseudacorus*. The reed canary-grass *Phalaris arundinacea* swamp bordering the water course contains patches of great willowherb *Epilobium hirsutum*, yellow iris, bulrush *Typha latifolia* and rough meadow-grass *Poa trivialis*.

Less varied communities, especially around the peripheries of the site, are characterised by false oat-grass *Arrhenatherum elatius*, cock's-foot *Dactylis glomerata* and Yorkshire-fog *Holcus lanatus*.

Cowslip Meadow also benefits from the presence of ponds, scattered willow *Salix* spp., hawthorn *Crataegus monogyna* and elder *Sambucus nigra* stands, and scrubby, predominantly hawthorn, hedgerows. The site contains a spring, forming a small well-vegetated pool, which feeds a stream that flows into the River Lea.