

COUNTY: NORFOLK

SITE NAME: EAST WALTON COMMON AND
ADCOCK'S COMMON

DISTRICT: WEST NORFOLK

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

Local Planning Authority: King's Lynn and West Norfolk Borough Council

National Grid Reference: TF 734164 Area: 62.9 (ha.) 155.4 (ac.)

Ordnance Survey Sheet 1:50,000: 132 1:10,000: TF 71 NW

Date Notified (Under 1949 Act): – Date of Last Revision: –

Date Notified (Under 1981 Act): 1985 Date of Last Revision: 1994

Other Information:

Reasons for Notification:

East Walton Common and Adcock's Common SSSI.

These two commons though lying about one kilometre apart have a similar topography, vegetation and management. Both are notable for a complex set of basin-shaped depressions separated by chalky ridges which were formed under periglacial conditions. Active springs are also a feature. This varied topography has resulted in a mosaic of habitats ranging from fen or occasionally open water in the depressions to chalk grassland or scrub on the intervening ridges. The two commons have traditionally been grazed by cattle.

The topography of the area is of considerable geomorphological interest as the hollows and associated ridges are considered to be ground-ice depressions. These features are developed over chalk and superficial deposits of sandy chalk rubble and are the best developed in East Anglia and are among the finest in Britain. They are believed to have formed by differential thaw rates in ground ice during periglacial conditions in the Devensian glaciation. During this time East Anglia lay outside the limits of glaciation but was probably in a zone of permafrost. An alternative interpretation is that some of the features may represent fossil pingos. These are large perennial ice-cored mounds formed by the progressive growth of an ice-core where freezing water from springs is forced up at pressure; again these are indications of permafrost conditions. Both fresh and subdued examples of these features are found, implying two separate phases of formation.

The site is also of great botanical interest containing some of the finest unimproved grassland remaining in Norfolk. Chalk grassland occurs on the tops of the ridges as a very species-rich sward closely grazed by cattle and rabbits. It supports a rich mix of herbs and grasses including 7 locally rare species with as many as 32 species per metre. Dominant grasses include red fescue *Festuca rubra*, sheep's fescue *F. ovina*, common bent *Agrostis capillaris*, crested hair-grass *Koeleria macrantha* with smaller amounts of quaking grass *Briza media*, downy oat-grass *Helictotrichon pubescens* and heath-grass *Danthonia decumbens*. The glaucous sedge *Carex flacca* is frequent. Many herbs are present in the

sward including salad burnet *Sanguisorba minor*, stemless thistle *Cirsium acaule*. Cowslip *Primula veris*, common rockrose *Helianthemum nummularium*, dropwort *Filipendula vulgaris*, small scabious *Scabiosa columbaria*, horseshoe vetch *Hippocrepis comosa*, squinancy wort *Asperula cynanchica*, thyme *Thymus pulegoides*, felwort *Gentianella amarella* and the locally rare field gentian *G. campestris*. In places the soils are deeper and less calcareous giving rise to a more mesotrophic vegetation and locally acid grassland characterised by patches of heather *Calluna vulgaris* with harebell *Campanula rotundifolia* and tormentil *Potentilla erecta*.

The majority of the hollows contain little or no open water but where standing water occurs there is a discrete community that includes bog bean *Menyanthes trifoliata*, marsh cinquefoil *Potentilla palustris* and jointed rush *Juncus articulatus*. Further stages in the succession are represented by swamp and semi-swamp communities dominated by common reed *Phragmites australis*, saw sedge *Cladium mariscus* and tufted sedge *Carex elator*. In some of the depressions, especially on Adcock's Common, a nationally rare plant community dominated by the lesser tussock-sedge *Carex diandra* and the bottle sedge *Carex rostrata* forms a semi-floating mat. Other hollows have a fen meadow community with purple moor-grass *Molinia caerulea* and meadow thistle *Cirsium dissectum* as characteristic species.

Springs emerge at a number of places on both commons and here small areas of short-sward, flushed calcareous fen have developed dominated by black bog-rush *Schoenus nigricans* and blunt-flowered rush *Juncus subnodulosus*. This community shows a remarkable diversity of fen species including butterwort *Pinguicula vulgaris*, fragrant orchid *Gymnadenia conopsea* ssp. *densiflora*, marsh helleborine *Epipactis palustris*, meadow thistle *Cirsium dissectum*, tawny sedge *Carex hostiana* and the rare moss *Drepanocladus vernicosus*.

There are also two fields adjacent to Adcock's Common with a fen meadow community and active springs which add diversity, together with areas of carr, woodland and scrub developed elsewhere on the site.

The two commons have a very rich invertebrate fauna with 28 Red Data Book and 79 nationally scarce species recorded since 1981. Almost all of the Red Data Book Species and most of the scarce species are associated with the fen or aquatic habitat; a few are associated with the dry grassland or scrub. The fauna includes an outstanding assemblage of water beetles which are considered to be fen relict species including *Haliplus furcatus*, *Hydroporus scalesianus* and *Hydraena palustris*. The site is also one of the most important for soldier and snail-killing flies in Britain, both families with predominately wetland species and regarded as useful indicators of habitat quality. There is also a large population of the Red Data Book hoverfly, *Cheilosia pubera*, which is dependent on marsh marigold *Caltha palustris*. The rare snail, *Vertigo moulinsiana* is also recorded from the fen areas.

The wide range of habitats is attractive to many breeding birds which include snipe, woodcock, green woodpecker, nightingale and reed warbler.