

File ref:

County: Hampshire **Site Name:** Bentley Station Meadow SSSI

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

Local Planning Authority: Hampshire County Council, East Hampshire District Council

National Grid Reference: SU 794429 **Area:** 4.9 (ha) 12.1 (ac)

Ordnance Survey Sheet 1:50,000: 186 **1:10,000:** SU 74 SE

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

Date Notified (Under 1981 Act): 23 January 1992

Date of Last Revision: –

Confirmed: 6 July 1992

Other Information:

Reasons for Notification:

Bentley Station Meadow is located at the north-western corner of Alice Holt Forest, lying on Gault Clay, with an area of dry acidic soil providing local variation. The unimproved herb-rich grassland is situated in close juxtaposition to a variety of habitats including scattered scrub, a willow-lined stream forming the western boundary to the meadow and ancient semi-natural oak woodland surviving on the edge of the Forest in the east. This combination of habitats provides a sheltered environment which is both extremely uncommon in Hampshire and ideal for a remarkably rich invertebrate fauna. Many regionally scarce and local species breed and feed within the site, in particular hoverflies and butterflies. A total of 22 species of butterfly are known to breed, including both the purple emperor *Apatura iris* and the pearl-bordered fritillary *Boloria euphrosyne*; a further six species visit annually for nectaring purposes.

The grassland is dominated by cock's-foot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus* and tufted hair-grass *Deschampsia cespitosa*, with locally bracken *Pteridium aquilinum* and common nettle *Urtica dioica*. The sward is species-rich, with 15 species indicative of ancient meadowland such as sneezewort *Achillea ptarmica*, bitter-vetch *Lathyrus montanus*, spiny restharrow *Ononis spinosa*, common milkwort *Polygala vulgaris*, cowslip *Primula veris*, pepper-saxifrage *Silaum silaus*, common dog-violet *Viola riviniana* and devil's-bit scabious *Succisa pratensis*. Acidic marshy grassland is associated with the western stream and here rushes *Juncus* spp. are dominant together with common spotted-orchid *Dactylorhiza fuchsii* and common fleabane *Pulicaria dysenterica*. The meadow is rich in a variety of nectar-producing plants such as wild angelica *Angelica sylvestris* which is an important nectar source for insects and in particular the white admiral *Ladoga camilla* and silver-washed fritillary *Argynnis paphia* butterflies which breed in the adjacent woodland. Examples of two of the locally uncommon hoverflies utilising the grassland are the yellow and black *Sphaerophoria taeniata* which prefers the wetter areas and *Xanthogramma citrofasiatum* favouring the drier grassland and patches of bare ground.

Scrub is concentrated in the middle of the meadow, being dominated by hawthorn, blackthorn, pedunculate oak *Quercus robur* and rose. Willows, in particular *Salix caprea* and *S. cinerea*, are found alongside the stream and are the food plant for larvae of the purple emperor butterfly. The dense patches of scrub are also important for nesting, feeding and roosting birds such as blackcap, chiffchaff, nightingale, redstart, whitethroat and willow warbler.

The coppice-with-standards woodland is dominated by pedunculate oak and ash, with a hazel and hawthorn understorey. The ground flora is diverse being dominated in spring by wood anemone *Anemone nemorosa*, wood spurge *Euphorbia amygdaloides*, yellow pimpernel *Lysimachia nemorum*, wood-sorrel *Oxalis acetosella* and common dog-violet – the latter being the food plant of the pearl-bordered fritillary. Hoverflies which breed in dead wood are well represented and include the locally uncommon, conspicuous black and red *Brachypalpoides leuta* and the bumble bee mimics *Criorhina berberina*, *C. floccosa* and *C. ranunculi*.

Old unimproved meadows adjacent to semi-natural ancient woodlands provide an extremely diverse and ecologically rich habitat. Bentley Station Meadow is one of the richest examples of this rare habitat in Hampshire.