

COUNTY: AVON

SITE NAME: BROWN'S FOLLY

DISTRICT: WANSDYKE

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

Local Planning Authority: Avon County Council, Wansdyke District Council

National Grid Reference: ST 793662 Area: 39.9 (ha.) 98.5 (ac.)

Ordnance Survey Sheet 1:500,000: 172 1:10,000: ST 76 NE

Date Notified (Under 1949 Act): 1974 Date of Last Revision: –

Date Notified (Under 1981 Act): 1986 Date of Last Revision: –

Other Information:

The majority of the site is owned and managed by the Avon Wildlife Trust.

Description and Reasons for Notification:

Biological

Brown's Folly is a nationally important wintering roost for bats and supports a calcareous grassland community with a restricted distribution in England. Semi-natural broadleaved woodland and calcareous scrub with a flora and fauna of local interest, also occur.

Brown's folly is situated on steep west facing slopes which overlook the River Avon. Calcareous soils of the Elnton 2 and Evesham 1 soil associations have developed on Lower Lias clays, Fuller's Earth and Oolitic Limestone strata of Jurassic age.

Much of the western half of Brown's Folly is an ancient woodland site supporting an immature stand of the dry ash-field maple type. Ash *Fraxinus excelsior* is dominant but pedunculate oak *Quercus robur*, wych elm *Ulmus glabra*, common whitebeam *Sorbus aria*, field maple *Acer campestre* and hazel *Corylus avellana* also occur. Ground flora species normally restricted to ancient woodland sites include spurge-laurel *Daphne laureola*, wood anemone *Anemone nemorosa*, wood spurge *Euphorbia amygdaloides*, wood-sorrel *Oxalis acetosella*, woodruff *Galium odoratum* and yellow archangel *Lamiastrum galeobdolon*. The local spiked Star-of-Bethlehem *Ornithogalum pyrenaicum* and white helleborine *Cephalanthera demasonium* are of interest.

Species-rich calcareous scrub is widespread on grassy banks and many of the disused quarries. Dogwood *Cornus sanguinea*, spindle *Euonymus europaeus*, wild privet *Ligustrum vulgare*, wayfaring tree *Viburnum lantana* and yew *Taxus baccata* are common. The scrub grades into unimproved calcareous grassland dominated by upright brome *Bromus erectus*, sheep's fescue *Festuca ovina* and meadow oat-grass *Avenula pratensis*. Glaucous sedge *Carex flacca* and spring sedge *C. caryophylla* are widespread. Herbs of interest include musk thistle *Carduus nutans*, woolly thistle *Cirsium eriophorum*, field scabious *Knautia arvensis*, burnet-saxifrage *Pimpinella saxifraga* and common rock-rose *Helianthemum nummularium*. Orchids are well represented: the local fragrant orchid *Gymnadenia conopsea*, musk orchid *Herminium monorchis* and fly orchid *Ophrys insectifera* are of particular interest.

The scrub margins provide ideal conditions for butterflies. Duke of Burgundy *Hamearis lucina*, green hairstreak *Callophrys rubi*, purple hairstreak *Quercusia quercus* and white-letter hairstreak *Strymonidia w-album* which have a restricted distribution in Avon are present. Brown's Folly supports 6 species of bat: Natterer's bat *Myotis*

nattereri, whiskered bat *M. mystacinus*, Brandt's bat *M. brandti*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *R. hipposideros*.

Geological

A composite section through the Middle Jurassic Great Oolite and the lower part of the Forest Marble is exposed on the escarpment beneath Brown's Folly and to the north, towards Bathford. The section is entirely of Upper Bathonian age, ranging from the *hodsoni* Zone up into the lower *discus* Zone. The succession exposed, consisting of a mixture of limestone and subordinate clays, illustrates the development of the Great Oolite and Upper Rags of the Bath area. It was for these rock units in the Bath area that William Smith originally coined the name 'Great Oolite', and after which the 'Bathonian' was named. The succession is of considerable sedimentological interest. Parts of the succession are fossiliferous; in particular, a thin clay, resting on an oyster-encrusted hardground at the top of the Upper Rags, has yielded elements of Bradfordian fauna (including *Digonella*, *Apiocrinus* and rhynchonellids). The upper bed of the Upper Rags is also locally fossiliferous. The section is of major importance in the context of the British Bathonian stratigraphy.