

COUNTY: WEST MIDLANDS & WARWICKSHIRE SITE NAME: RIVER
BLYTHE

DISTRICT: SOLIHULL, NORTH WARWICKSHIRE, SITE REF: 15WF5
STRATFORD-UPON-AVON

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

Local Planning Authority: WARWICKSHIRE COUNTY COUNCIL, Solihull
Metropolitan Borough Council, North Warwickshire Borough Council, Stratford-upon-Avon District Council

National Grid Reference: SP 109729 to SP 212916 Area: 102.2 (ha.) 252.5 (ac.)

Ordnance Survey Sheet 1:50,000: 139 1:10,000: SP 17 SW, NW, NE, SP 27 NW,
SP 28 SW, NW, SP 29 SW

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

Date Notified (Under 1981 Act): 1989 Date of Last Revision: –

Other Information:

A new site.

Description and Reasons for Notification:

The 39 kilometre stretch of the River Blythe, from the point at which Spring Brook exits from under the Stratford-upon-Avon to Birmingham railway line to its confluence with the River Tame, is a particularly fine example of a lowland river on clay.

The Blythe has a wide range of natural structural features such as riffles, pools, small cliffs and meanders. These features are combined with a high diversity of substrate types ranging from fine silt and clay in the lower reaches to sands and gravels in the upper and middle reaches and in the riffles. The structure of this river is very variable and its importance is increased because of the rarity of such examples in lowland Britain.

The diverse physical features of the Blythe are mirrored by its diverse plant communities. The mean number of plant species found in any 1 km stretch is above average for a lowland river, as is the number of species recorded for the whole length of the river. Botanically, the Blythe is one of the richest rivers in lowland England with the most species-rich sections containing as many species as the very richest chalk streams.

Unlike many lowland rivers, the Blythe shows a clear succession of plant communities from its source to its confluence with the Tame. The substratum in the upper reaches is frequently composed of loose gravel and the margins still retain a high density of trees and shrubs. The vegetation in the channel is, therefore, shade-impooverished but algae and some flowering plants such as waterweeds *Elodea* spp. and water-starworts *Callitriche* spp. provide seasonal cover. The habitats in these upper reaches are important for their invertebrates.

Downstream, the trees and shrubs on the margins become fewer but still remain at a higher density than most lowland rivers. As the river becomes deeper and wider and the shading from trees is reduced, the flora becomes rich and varied. In the shallow, fast-running stretches with gravel beds, water-crowfoots *Ranunculus fluitans* and *R. penicillatus* var. *calcareus* grow in profusion with 'blanket-weed' algae which are abundant through the summer months. Where larger stones are present a rich encrusting algal flora develops along with the fresh water sponge *Ephydatia fluviatilis*.

There is a rich flora in stretches with a moderate rate of flow over a clay bottom. The emergent common clubrush *Schoenoplectus lacustris* and branched bur-reed *Sparganium erectum* occur here alongside submerged species of pondweed *Potamogeton pectinatus*, *P. perfoliatus* and *P. crispus*, lesser bur-reed *Sparganium emersum*, spiked water-milfoil *Myriophyllum spicatum* and many other less common species. On the margins, sedges *Carex* spp. are frequent alongside species of sweet-grass *Glyceria* spp., reed canary-grass *Phalaris arundinacea* and many other flowering plants.

In the lower reaches where shallow stretches alternate with deeper, slower sections, the flora is diverse. Alongside many of the species recorded upstream are flowering rush *Butomus umbellatus*, arrowhead *Sagittaria sagittifolia* and yellow water-lily *Nuphar lutea*. The marginal flora is rich with mats of aquatic vegetation encroaching from the banks into the water. Amphibious bistort *Polygonum amphibium*, great yellow-cress *Rorippa amphibia* and reed sweet-grass *Glyceria maxima* are typical constituents of this community.

Several damp, unimproved meadows occur along the length of the river. They receive some of their water from annual flooding and are largely dependent upon the river for the maintenance of a high water-table. Rushes *Juncus* spp., sedges and tufted hair-grass *Deschampsia cespitosa* are usually the dominant species along with moisture-loving herbs such as meadowsweet *Filipendula ulmaria*, marsh marigold *Caltha palustris* and wild angelica *Angelica sylvestris*. There are several small areas of wet alder *Alnus glutinosa* and willow *Salix* spp. woodland which have a varied ground flora and are an integral part of the river system.

The river supports a diverse invertebrate community with a wide range of molluscs, oligochaetes and caddisflies. The most notable species is the pea-shell cockle *Pisidium moitessierianum* which is at the western edge of its range here. The dragonflies are also well represented with the beautiful demoiselle *Calopteryx virgo* being the least common of the species found.