Ecological Site Report

Staffordshire Ecological Record

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Administrative Areas based on the National Biodiversity Network Dictionary © NBN, 1999-2002

Site Key: **63/92/33**

Site Type: Broadleaved, mixed and

yew woodland {B}

Site Name: Tyrley Spoil Banks, Shropshire Union Canal

Grid Ref: SJ693323

Civil Parish Loggerheads, Newcastle-under-Lyme, Staffordshire, England

GB Vice-County Staffordshire,

Keywords		
Keyword	Details	Date
associated information		
amendments	File Code - changed from '63/91/33'	2004
site integrity		
condition	Site OK	Apr 93
Local Site Status		
Site of Biological	previously Grade 1 in 1980	27/4/00
Importance		
uncategorised local keywor	ds	
Original Recorder Code	250001	no date

Site Designation Criteria

General 27/4/00 Chair of Designation: Stanford, Ms Sally

Designation Cmttee: RNH, SDL, JRW, AJ, JS, JB, ER

Conservation Status

Status	Details	Date
Local Wildlife Site	previously Grade 1 in 1980	27/4/00

Biotopes (Habitats)

A111	Woodland: broadleaved, semi-natural	3.69
A122	Woodland: coniferous, plantation	0.14
A21	Scrub: dense/continuous	0.03
B22	Grassland: neutral, semi-improved	0.31
C31	Tall herb and fern: other, tall ruderal	0.25
I	Rock exposure and waste	0.07
J13	Cultivated/disturbed land: ephemeral/short perennial	0.49
J222	Boundaries, defunct hedge, species-poor	
J232	Boundaries, hedge with trees, species-poor	
J24	Boundaries, fence	

Dimensions

Dimension	Value/units
altitude	99m
area	6.0ha

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Contacts				
field surveyor (staff)	17/7/08	Weightman, Judith		
landowner	17/7/08	British Waterways		
field surveyor	21/3/00	Stanford, Sally		
field surveyor	21/3/00	Bowler, Josh		
field surveyor	21/3/00	Smith, John R.		
field surveyor	21/3/00	Jukes, Andy		
field surveyor	Apr 93	Stratton, Megan D.		
species added to rec	cord card			
field surveyor	25/6/80	Hayes, Colin J.		

Site Description

Source: Cadman & Weightman, 2008

Summary: Tyrley Spoil Banks is approximately two kilometres in length and runs from Tyrley Wharf in the north to a stone bridge over the canal to the south. The site includes species-rich grassland along the tow path, marginal vegetation found growing along the canal edge and woodland parcels located either side of the canal for the length of the site. This section of the canal supports a rich-diversity of plant species, some of which are not particularly common within the County, across a range of habitats. Management of the site for the most appears to be sympathetic to the site enabling the assemblage of plants to flourish. This site is important both in terms of the quality of habitats present and the diversity of species which is relatively unique for canal sites which tend to be heavily managed to the detriment of the site. This has lead to its designation as a Site of Biological Importance.

The canal tow path is bounded by a relatively species-poor hedge dominated by hawthorn. However, dog's mercury and yellow archangel grow frequently in the hedge bottom, with primroses found growing on the steeper hedge bank further south. A tall dense stand of ruderals prevail where the towpath is not mown, running parallel with the hedgerow, providing a nectar source for a variety of invertebrates and adding to the diversity of the site. To the extreme north of the site the tow path itself supports species-poor semi-improved grassland, as the area is heavily used and disturbed by boaters. There is also an absence of marginal vegetation as this is a mooring area for boats. Further south the diversity of plant species greatly increases with species-poor semi-improved grassland being replaced by a more diverse neutral grassland sward. The tow path is actively managed and at the time of the survey the grassland had been mown up to the edge of the canal, however many of the species had began to regenerate and the grasslands diversity was still in evidence.

The steep wooded slopes of the canal banks cast heavy shade over the tow path maintaining damp conditions, this exerts an influence over the flora that grows here. Hart's tongue fern (uncommon to Staffordshire) can frequently be seen growing out of the canal side overhanging the water. A number of species more typical of shaded or wooded environments are also present along the edge of the canal including enchanter's nightshade, wild strawberry, wood mellick, common dog violet, yellow archangel, wood sorrel and dog's mercury. These are interspersed along the canal with species which thrive in wetter conditions. Meadowsweet is among the most frequent, along with lesser pond sedge, more

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low growing species include opposite-leaved golden saxifrage and frequent bugle. In places common yellow sedge is abundant forming sedge lawns in a tight low growing grassland sward, with remote and hairy sedge also conspicuous. More occasional in their presence are the aquatic macrophytes wild anglica, common figwort, common valerian and reed canarygrass, along with water-cress. These species are all interspersed with more common herbs and ruderal species, in particular small stands of nettle are frequent along the length of the site.

The woodland on the eastern bank of the canal has a canopy dominated by sycamore to the north which is replaced by more frequent ash to the south, with some pedunculate oak. A well developed understorey prevails comprising of a mixture of shrubs including holly, hawthorn, hazel, elder and rowan. Cherry is also frequent in places, with guelder rose frequenting the damper soils. The shrub layer supports abundant stands of bramble and occasional currant and gooseberry amongst which are swathes of the ancient woodland indicators dog's mercury, yellow archangel, wood anemone, enchanter's nightshade, wood mellick, bluebell and hart's-tongue fern along with a small amount of wild garlic, soft shield fern and pendulous sedge. Sandstone outcrops on the steep bank through which a small stream of water has carved a route through, polypody (uncommon to Staffordshire) grows in abundance out of the outcrop leading down to the canal.

The woodland occupying the westerly bank of the canal is not so diverse in character, with ancient woodland indicators though present, at a lower cover. Ash and pedunculate oak codominate the canopy with some silver birch present within the canopy in places. The understorey is represented by a mixture of hazel and rowan and dead standing and fallen wood litters the woodland providing an important habitat. Access into and through the woodland is made difficult in places by impenetrable stands of bramble scrub and nettles. Throughout the woodland small stands of dog's mercury, yellow archangel and enchanter's nightshade frequent the ground flora. Carpets of bluebells also occur, with male fern a frequent associate. Within the vicinity of a small stream which flows through the wood opposite-leaved golden saxifrage also forms carpets, with a little moschatel present in the wet soils. A small proportion of the woodland occupies a very steep slope leading down to the canal, it's here that hart's tongue fern grows in a abundance. At the far southern end of the woodland following the 2000 survey a small pond was recorded. This pond is no longer in evidence and a small stream flows through the area whose channel has been recently modified and deepened resulting in very steep sides. Some vegetation has colonised in and around the stream channel including a small number of marsh marigold and common figwort plants, some marsh bedstraw, creeping buttercup and bugle. Soft rush and tufted-hair grass are also frequent, with common water starwort floating over the surface of the water.

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Source: Smith, Jukes, Bowler & Stanford, 2000

Summary: The area surveyed is situated approximately 2 kilometres southeast of Market Drayton, beginning at Tyrley Locks and running for 1.2 kilometres southeast along the Shropshire Union Canal.

The site comprises of the towpath on the west side of the canal, and the adjacent embankment. A hawthorn hedgerow runs along the majority of this embankment, separating the site from the neighbouring semi- improved fields. Mature trees are interspersed along the hedgerow, these are mainly ash and oak. A crack willow and a Scot's pine are present. Holly, elder and dog rose are occasional throughout the hedge.

Red campion and dog's mercury are frequent at the base of the hedge.

From the locks up to the first bridge, the embankment is disturbed due to work being carried out on the towpath. Frequent species include nettles, cleavers, cow parsley, bracken, garlic mustard, cock`s-foot and Yorkshire fog. Occasional species are creeping cinquefoil, lords-and-ladies, herb Robert and broad-leaved dock. Bluebell and bush vetch are also present.

After the first bridge, the embankment is less disturbed. Herb Bennet, honeysuckle, germander speedwell, primrose, tufted hair- grass, male fern and common dog- violet are frequent. Occasional species include wavy hair- grass, angelica, common figwort, spear thistle and greater stitchwort.

At the bottom of the embankment, along the towpath edges, the ground is extremely wet. Species here are indicative of this, meadowsweet, reed canary- grass and creeping buttercup are frequent, with abundant brooklime and lesser celandine. No marginal vegetation is present in the canal.

Woodland on west embankment of Tyrley Spoil Banks

The embankment along the towpath on the west side of the canal becomes wider as it nears the second bridge. Here, the bank is semi-natural woodland. The most frequent tree species are oak and cherry. Occasional hazel, elder and hawthorn are present. The hawthorn hedge is still present on the boundary, but is defunct in places.

Wood anemone, hart's-tongue fern, dog's mercury, pignut and ground ivy are locally abundant. Abundant throughout the woodland are lords- and- ladies, lesser celandine, cleavers and herb robert. Yellow archangel, tufted hair- grass, nettles, ivy and bramble are frequent. Locally frequent are common polypody, honeysuckle and cow parsley, whilst wild strawberry and dandelion are occasional. Scarlet elf cap is also present within the wood.

A steep sandstone outcrop runs along the embankment beneath the woodland. Opposite-leaved golden-saxifrage and hart`s-tongue fern are in abundance here.

On the embankment above the sandstone outcrop, the trees become smaller and the woodland degenerates into scrub.

The woodland continues above the towpath over the bridge. Here it becomes quite wet and

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has a small pond within it. The dominant tree species are alder, willow spp., and sycamore.

The woodland has abundant wood anemone, dog's mercury, lesser celandine and bluebell. Common dog- violet, lords- and- ladies and moschatel are frequent.

Around the pond, marsh marigold and common water- starwort are locally abundant.

Source: *Hayes*, 25/6/80

Summary: Mature canalside woodland developed on low spoil banks. Parts (towards north-west end) dominated by ash and sycamore, but oaks increasing towards the NGR, where they become dominant with many splendid specimens. Unfortunately there is little oak regeneration throughout the wood. The section south-east of the bridge at the NGR appears to be slightly older than the remainder with a moderately diverse ground flora. (There are old records for spindle tree from this area - 1957).

Bibliography

described Cadman & Weightman (2008)

Sites of Biological Importance Survey, Staffordshire Wildlife Trust (The Wolseley Centre)

described Radford, E., et al (2000)

The SBI Resurvey of Newcastle-under-Lyme Borough 1998-2000, Staffordshire Wildlife Trust (Sandon, Stafford)

described SNCT (County Survey) (1984)

The Phase 1 Survey of Staffordshire - 1978-1984, Staffordshire Nature Conservation Trust (Sandon, Staffs.)

field note **SWT (1989-93 checking) (1993)**

Re-checking of SBI conditions, Staffordshire Wildlife Trust (Sandon, Stafford)

End of Report