



Biodiversity Action Plan

Habitats

Woodland

Wet woodland

Wet woodland. A jungle of deadwood and new growth from toppled trunks in waterlogged ground, 'Willow Carr' is an impressive extreme form of Wet Woodland.

Wet and waterlogged woods provide important habitats for biodiversity with an abundance of lichens, mosses, sedges, rushes and ferns and large numbers of invertebrates which support amphibians, mammals and birds. Wet woodland can also help in flood management.



Wet woodland, well represented in Barnsley, is found near streams and hill-side flushes, and on floodplains, often in a patchwork with and replacing fens and swamps. It is found within other woodland.

It occurs on poorly drained, wet or seasonally wet soils, usually with Alder, Birch and Willows as the main tree species, but sometimes including trees like Ash where it is a little drier.

The high humidity supports rich arrays of mosses, lichens and ferns; Marsh Marigold, Opposite-leaved Golden Saxifrage, and Yellow Flag may be found alongside sedges, rushes, and reeds.

Harvest Mouse nests may be found in Reed Canary Grass (*Phalaris*) and Wet Woodland provides cover and breeding sites for more mammals, such as *Otter*, *Water Vole*, and bats such as *Noctule*.

Barnsley's scrubby wet woodland provides a stronghold for *Willow Tit*, which excavates nest holes in rotten wood; *Siskin* and *Lesser Redpoll* feed on alder catkins and birch seed; and *Lesser Spotted Woodpecker* frequents these wet woods.

For more information on Wet Woodland use these links:



Local Priority Habitat details

Wet woodland is a local priority habitat because of its national status, the plants, animals and birds it supports, and the opportunity for its conservation in Barnsley.

Wet woodland is a national priority habitat. [UK BAP priority habitats](#)

It is classed as Broadleaf Woodland or Scrub in Phase 1 habitat surveys.

Wet Woodland in Barnsley includes National Vegetation Classification categories:

- W2 Willow-Birch carr
- W4 Birch-Purple Hairgrass
- W5 Alder-Sedge woodland
- W6 Alder-Nettle woodland
- W7 Alder-Ash woodland.

W6a is a frequent category for willow carr with Crack Willow together with Grey Willow and Reed Canary Grass (*Phalaris*).

Long established wet woodlands are particularly rich in wildlife but more recently established wet woodlands are also valuable.

The best examples of the local priority habitat are:

- Ancient [wet] Woodland,
- Wet Woodland with a good range of ancient woodland indicator or notable plants, or
- Wet woodland that supports good populations of species of conservation importance eg bats, birds, invertebrates.

Features and wildlife

Sites

Conservation

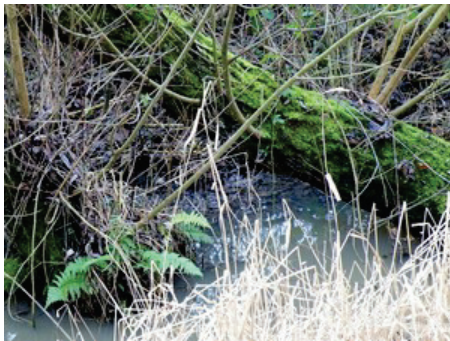
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Wet Woodland Habitat Features

The wet conditions of Wet Woodland provide specialised habitats not found in other woodland. Different species use one or more of the Wet Woodland features for food or foraging, nesting, roosting, shelter and a refuge from predators.



Wet Woodland maintains the most wildlife species if it is diverse in structure. Open wet soil, and sometimes standing or running water, leaf litter, high humidity, older and younger trees, scrub, abundant dead wood and a mosaic of vegetation, each feature adds to the range of species supported.

Dead and decayed wood, often present in large amounts, is an essential component of Wet Woodland. Standing dead trees, dead branches, snags on living trees, fallen branches and stumps, all subject to rot and decay, support a special array of beetles and other invertebrate species. Birds feed on them and some like Willow Tit excavate nest holes in rotten wood.

Humid leaf litter as well as decaying wood supports a great range of invertebrate species.

Insects often require specific species of tree, shrub and ground cover as larval food plants.

The scrub condition of Wet Woodland is important for species like Willow Tit. Otter uses Wet Woodland scrub for resting places when near running water.

Species supported by woodland

Mammals found in Wet Woodland habitats include *Otter*, *Water Vole*, *Harvest Mouse* and *Bats* such as *Noctule* and *Soprano pipistrelle*.

Bird species. Woodland shelters a range of birds feeding on flies and other invertebrates. Wet woodland is particularly notable for *Willow Tit*, *Reed Bunting*, *Lesser Spotted Woodpecker*, *Lesser Redpoll* and *Siskin*.

Reptiles and amphibians. Wet woodland supports *Grass Snake*, *Common Toad* and *Great Crested Newt*

Invertebrates

Wet Woodland supports a wide range of insects and other invertebrates. Examples: From Worsbrough willow carr: *Meligramma guttatum*, scarce hoverfly

From: Gunthwaite Dam: *Bohemannia quadrimaculella* A very local and rare micro-moth, found in alder carr

More examples available.

Plants.

Although few plants depend on wet woodland, many species thrive there including Marsh Marigold, Opposite-leaved Golden Saxifrage, Yellow Flag Iris, ferns, sedges, rushes, reeds, mosses and liverworts.

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Wet woodland sites are well represented in Barnsley including 18 areas of Willow Carr with those near Worsbrough Reservoir, Elsecar Reservoir, and Gunthwaite Dam the best examples. There are also ten Wet Woodland areas within larger woods, and one site of scattered Willow.

As well as in floodplains of the rivers Don, Dearne and Dove, Wet Woodland may also be found near streams and flushes.



Map to follow

Local Wildlife Sites

Some 28 wet woodlands are included in Local Wildlife Sites. The following Local Wildlife Sites include willow carr:

- 11 Gunthwaite Dam, Clough Wood
- 24 Worsbrough Reservoir
- 46 Elsecar Reservoir
- 48 Bretton Park,
- 23 Rockley Woods
- 26 Cliffe Wood,
- 25 Barnsley Canal at Wilthorpe,
- 40 Forge & Tin Mill Rocher,

Local wildlife sites may be designated for their wet woodland ≥ 0.25 ha with National Vegetation Classifications: W4, W5, W6 and W7.

They may also be selected for being ancient woodland, having a good range of ancient woodland indicator or other notable plants, or supporting good populations of species of conservation importance eg bats, birds, invertebrates

Areas where there are sites that might be considered for Local Wildlife Site designation for the Wet Woodland priority habitat include: the River Dove north of Wombwell, Worsbrough Dale, Hermit Hill, River Don south of Thurgoland, River Don at Oxspring and Berry Moor, as well as Edderthorpe, New Park Spring, north-west of Dearne Valley Country Park, and in Standhill wood.

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Conservation

Conservation: Wet Woodland is well represented in Barnsley with many opportunities for its conservation.

Causes of loss or decline of Wet Woodland

- Clearance and conversion to other land uses
- Drainage or water abstraction resulting in change to drier woodland types, scrub invasion and loss of standing water
- Removal of old and mature trees and of deadwood
- Inappropriate grazing levels and poaching of soil, leading to a change in the woodland structure and ground flora impoverishment
- Poor water quality due to pollution from agricultural or other runoff
- Invasion by non-native species such as Himalayan balsam
- Air pollution affecting bryophyte and lichen communities and Wet woodland trees such as Alder increasingly affected by disease.



Legislation

National policies have a presumption against clearance of semi-natural woodland for other land uses.

Natural England has issued Standing Advice on protecting ancient woodland from development, on the basis that ancient woodland is irreplaceable.

Thinning or clearance of woodland requires a felling licence from the Forestry Commission. This will stipulate the type and level of restocking.

There are currently no woodland SSSIs in Barnsley.

Wet Woodland in Local Wildlife Sites has a presumption against permission for change of use.

Individual or groups of trees may be protected by Tree Preservation Orders.

Felling and woodland management where protected species are present may commit offences under the Wildlife and Countryside Act, 1981. Protected species include all breeding birds and all species of bats. Licences may be needed from Natural England.

Links for Information and Advice

Natural England [Standing Advice](#)
Forestry Commission: [Practice Guide](#)
Buglife: [Managing wet woodland](#)



Good management practice:

Wet woodlands are well-suited to a low-intervention approach. Positive conservation management over time includes:

- Avoiding drainage /drying out and retaining standing water and water courses where present.
- Maintaining or restoring a varied structure including older trees and younger growth.
- Retaining old, dead and dying trees and dead wood
- Creating and maintaining open areas.
- Removing invasive species.

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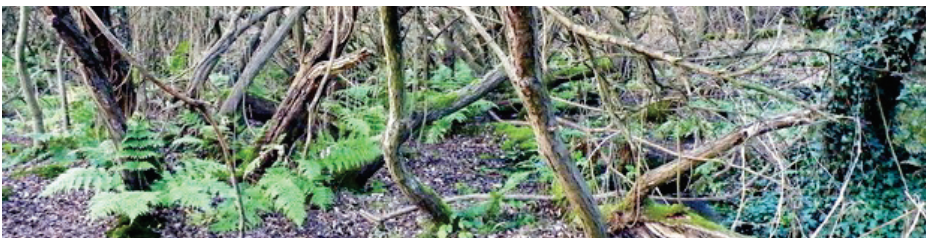
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Actions

Wet Woodland: Key objectives for biodiversity

- Raise awareness of the importance of Wet Woodland for biodiversity
- Collect and analyse records of populations and assemblages of wildlife species in Wet Woodlands across Barnsley, examples of particular species include *Willow Tit*, *Lesser Spotted Woodpecker*
- Review the extent, type and condition of Wet Woodland habitats.
- Improve the conservation value of existing Wet Woodland through appropriate management and seek to maintain its extent.
- Encourage the creation of new Wet Woodland habitat especially where this would reduce the risk of flooding elsewhere by slowing down and storing water. This should not be at the expense of the removal of other valuable habitats.
- Seek to create links & corridors between Wet Woodland sites.
- Designate notable Wet Woodland as local wildlife sites.



Roles:

Land owners and managers: follow best practice in managing their Wet Woodlands for wildlife; take up opportunities to restore or create Wet Woodlands where this does not damage other habitats.

Natural England: administers [countryside stewardship](#) grant schemes for woodland creation or improvement, tree health support, or for preparing a woodland management plan.

Forestry Commission: licenses felling and approves woodland management plans; provides guidelines and sets conditions to protect biodiversity.

Woodland Trust: offers advice.

Environment Agency has identified areas in which new woodland creation would reduce flood risk.

Barnsley Council as planning authority: sets conditions in relevant planning applications to ensure that the biodiversity value of woodlands are maintained and enhanced; issues Tree Preservation Orders where appropriate.

Voluntary groups and volunteers: help with woodland management and planting; help with information about the condition of woodlands and provide records of the wildlife in them.

Marking progress

- Wet Woodland created
- No reduction in extent of Willow Carr or other Wet Woodland
- Wet Woodland sites cleared of invasive Himalayan Balsam
- Wet Woodland sites under positive conservation management

What is being done

- Woodland planting by BMBC & VAB in NIA included Wet Woodland.
- Management plans for Worsbrough and Elsecar country parks.
- Wet Woodland creation at Houghton washland by RSPB.
- Back from the Brink project managing Wet Woodland sites to support [Willow Tit](#). [YWT; RSPB]
- ...

Proposed actions

- Further wet woodland planting and conservation management.

Comment

Wet Woodland