



Wet Woodland Habitat Action Plan

1. Introduction

Wet Woodland was listed as a priority UK BAP habitat and subsequently listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

2. Current Status

2.1 Description of habitat

Wet woodland, sometimes called carr or carr woodland where the habitat has developed as a successional stage from what was originally swamp, occurs on poorly drained or seasonally wet soils, with alder (*Alnus glutinosa*), birch (*Betula* sp.) and willow (*Salix* sp.) as the predominant tree species. It is found on floodplains as successional habitat on fens and bogs and around water bodies, along streams and hillside flushes and in localised peaty hollows. The soils on which these woods occur range from nutrient-rich mineral soils to very acid, nutrient-poor organic soils. Boundaries with dry-land woodland may be sharp or gradual and can change over time through natural succession or as a result of human influence.

The National Vegetation Classification (NVC) lists eight woodland types as being dominated by the presence of alder, birch and willow in situations where the wetness of the ground is the overriding influence on species composition. Types occurring in Worcestershire are:

W1 *Salix cinerea-Galium palustre* woodland is occasional in Worcestershire and is a community of wet mineral soils on the margins of standing or slow-moving waters and moist hollows. This can grade into the W6 woodland communities in shallower water and waterlogged soil.

W5 *Alnus glutinosa-Carex paniculata* woodland is extremely scarce and localised in the county. It occurs on areas of fen peat and mire where there is a strong influence from base-rich ground waters.

W6 *Alnus glutinosa-Urtica dioica* woodland is found on wet, nutrient-rich soils e.g., shallow banks along brook meanders that receive a lot of sediment-rich winter flood water.

W7 *Alnus glutinosa-Fraxinus excelsior* woodland occurs on mineral-rich flushes, not necessarily associated with brooks or pools, but where there is not a high build-up of nutrients. The dominant species of the groundflora vary according to the soils and geology; pendulous sedge (*Carex pendula*) may dominate or the community may be more diverse with opposite-leaved golden-saxifrage (*Chrysosplenium oppositifolium*) prominent.

Wet woodlands frequently occur in a mosaic with other woodland and open ground habitats and management of individual sites often has both woodland and

wetland requirements. Many alder woodlands are ancient and have a long history of coppice management that has determined their structure. Other wet woodlands have developed through natural succession on open wetlands and have little forestry influence. Some are the result of the planting of osiers for basketwork and through long abandonment these have developed into semi-natural stands. For example, in the Severn and Avon Vales recent wet woodland occurs in old clay pits in the Severn Valley, often in juxtaposition with marshes as at Norton and Grimley Brickpits, and as a few small woodlands developed from former osier beds such as Ripple Lake and the Napps.

Wet woodland combines elements of many other ecosystems and as such is important for many taxa, including providing important cover and breeding sites for otter (*Lutra lutra*). The high humidity in these habitats favours mosses,

relict/abandoned osier beds. Many have a deep swamp/silt understorey and have a botanically poor flora.

The vales associated with both the River Severn and River Avon have locally significant pockets of wet woodland that have developed as secondary woodland on mainly wet soils in the river valleys and in the clay pits and marshes along the main rivers. Alder and willow carr have also developed from former osier beds or on disused brick pits. Many old osier beds are unmanaged and as they mature an abundance of deadwood and decaying stumps can provide good invertebrate and bird habitat.

Topography plays a significant role in determining the distribution

2.4 Summary of important sites

Worcestershire Wildlife Trust undertook the last comprehensive botanical survey of wetland

Habitat fragmentation resulting in small sites that are then vulnerable to the adverse effects of adjacent intensive land use and to loss of species dependent upon larger habitat units.

Artificially restrictive boundaries to wet woodland sites due to adjacent intensive land use, leading to limited structural diversity and lack of biologically-rich woodland edge habitat.

Lowering of water tables through drainage or abstraction resulting in a change to drier woodland types.

Cessation of management in formerly coppiced sites, resulting in the loss of former structure and increased shading of the herbaceous layer.

Past and ongoing flood prevention measures, river control and canalisation leading to a loss of dynamic disturbance-succession systems and invertebrate communities as well as reductions in the extent of sites.

The conversion of pools to fishing pools or the creation of new fishing pools along linear wet systems, interrupting hydrological flows and established biological ecosystems.

Lack of provision for wet woodland within agri-environmental schemes.

Damaging grazing by livestock and deer, leading to a simplification of woodland structure, ground flora impoverishment and lack of regeneration.

Poor water quality arising from eutrophication, urban effluents or rubbish dumping leading to negative changes in the composition of the ground flora and invertebrate communities.

Many blocks of woodland will have a fringe of poor vegetation where the edges of the site are damaged by spray drift and agricultural run-off. The nature of wet woodland means that the habitat often occurs in narrow linear strips and therefore the entire site is vulnerable to damage of this nature.

Invasion by non-native species such as Himalayan balsam (*Impatiens glanulifera*) and American skunk-cabbage (*Lysichiton americanus*) that can then dominate the vegetation composition, cause bankside soil erosion and lower the nature conservation value of the site. These species can cause devastating losses of habitat on many wetland sites, and in some instances this has led to complete abandonment of conservation management.

Air pollution may negatively impact on the bryophyte and lichen communities.

Diseases such as *Phytophthora* root disease of alder.

Climate change speeding succession to drier woodland types.

4. Current Action

4.1 Local protection

Statutory site protection plays a small part locally in the conservation of this habitat type. A number of SSSIs notified for wetland and other interests incorporate wet woodland features, including Hurcott and Podmore Pools and Wilden Marsh.

Other sites incorporating wet woodland habitat are identified as LWS. Some of these are within conservation ownership, including Worcestershire Wildlife Trust reserves at Ipsley Alders, Upton Warren and Spennells Valley.

Some sites are included in District Local Plans as 'third tier' sites of local importance, and thus are afforded

Water level monitoring and invertebrate surveys are carried out at Hurcott and Podmore Pools SSSI.

Survey work at Grimley Brick Pits is programmed for 2018 by Worcestershire Wildlife Trust.

Forest Research has a Riparian Woodland and Water Protection project with five main topics of study:

- The effect of riparian woodland management on the freshwater environment.

- The impact of conifer clearance from the banks of upland streams.

- The role of riparian shade in controlling stream water temperature in a

Eradication of invasive non-natives from high value sites, in particular Himalayan Balsam (*Impatiens glandulifera*) and American skunk-cabbage (*Lysichiton americanus*)

Use of coppicing and other techniques to enhance the ground flora component of wet woodland sites

References and further information

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