

# REVISED PLAN APRIL 2019 MARSH & SWAMP, WET GRASSLAND & WET WOODLAND

#### 1. INTRODUCTION

There are many types of wetland in the sub-region, even though they only occupy a relatively small total area. The reed bed habitat is covered by a separate action plan but this plan deals with the various other wetlands that fall within the categories of 'swamp' and 'marsh', including springs and flushes. These are vegetated, non — woodland habitats in which the water level remains above or close to ground level for much of the year(although not necessarily all year) and water movement is predominantly lateral.



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This habitat favours specialised wetland plants such as sedges, rushes, reed mace, reed sweet-grass and common reed, and characteristic flowers such as yellow flag, ragged robin, meadowsweet, marsh marigold and great willowherb. Such habitats are rarely stable and without management will eventually revert to carr and wet woodland (subjects of other action plans). Wetlands often occur in association with these other habitats as part of larger habitat mosaics.

Some of the largest wetlands in our area are associated with gravel extraction and hard rock quarrying. The excavations produced often penetrate the local water table resulting in water bodies of varying depth. Where water is sufficiently shallow, wetlands will form and in time can acquire very diverse plant communities influenced by hydrology, topography, water and substrate chemistry, history of land use and current land use. Smaller scale wetlands can be associated with rivers and stream corridors, ditches and other drainage features, areas of impeded drainage, canals, pool and lake margins, and springs or seepages. The latter category includes a scattering of limestone springs and seepages on scarp slopes of the Lower Lias and Cotswolds (e.g. at Radway, Whichford and Larkstoke) and within certain quarries (most notably Nelsons(Stockton) Quarry, Napton Quarry and Bishops Bowl). These lime-rich wetlands support some particularly unusual insect communities containing numerous rarities, but have been poorly recognised until recently.

Wetlands of a more acidic nature are associated with base-deficient geology to the north and west and include Coleshill Bog, Bannerley Pool and Bickenhill Plantations. Characteristic plants include purple moor-grass, *Sphagnum* mosses and marsh violet. Unfortunately, little in the way of true bog survives here today and such plants are now very rare. Small amounts exist at <u>Berkswell Marsh</u> and nearby in <u>Sutton Park</u>.

Wet woodland (or carr) occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species, but sometimes including ash, oak, pine and beech on the drier riparian areas. It is found on floodplains, as successional habitat on fens, mires and bogs, along streams and hill-side flushes, and in peaty hollows. These woodlands occur on a range of soil types including nutrient-rich mineral and acid, nutrient-poor organic ones. The boundaries with dry woodland may be

sharp or gradual and may change with time through succession, depending on the hydrological conditions and the treatment of the wood and its surrounding land. Therefore wet woods frequently occur in mosaic with other woodland key habitat types (e.g. with upland mixed ash or oakwoods) and with open key habitats such as marshes. Management of individual sites needs to consider both sets of requirements (<u>JNCC</u>, 2008).

The scarce lesser spotted woodpecker (*Dryobates minor*) and willow tit (*Poecile montanus*) depend on wet woodland for both feeding and nesting, requiring decaying wood in which to excavate their nests. Damp soil conditions may influence invertebrate food availability or abundance, flies often needing moist or wet conditions for egg laying and larval development. Earthworms are active closer to the surface in damp conditions and molluscs are also more active where it is damp (Fisher et al, 2018).

The total list of plants and insects associated with these wetlands is huge, and the diversity of these and the number of scarce species can be used to evaluate wetland quality. Certain 'indicator' groups such as hoverflies and snail-killing flies are particularly good at reflecting the overall quality and character of a wetland, such as its age, hydrology and water quality. Important bird assemblages can also be present in larger wetlands which produce unusually large quantities of insects, a feature that can be vital for bats and insectivorous birds, even if they breed elsewhere. The reed warbler (*Acrocephalus scirpaceus*) is a favourite host of the increasingly scarce cuckoo (*Cuculus canorus*).

The best wetlands tend to be those exhibiting a gradient and seasonal variation of waterlogging, a range of successional stages and plant communities (including wet woodland or carr plus adjacent terrestrial habitats), more than one type of water source and a lack of pollution.

2.	OBJECTIVES*	TARGETS*		
	Some targets have been reset in the light of progress 2011-2018	171110210		
,	Associated Action Plans are: 'Rivers & Streams', 'Quarries & Gravel Pits', 'Lakes & Reservoirs', 'Reed beds', 'Field Margins', 'Roadside Verges', 'Bats',			
'V	'Water Vole', 'Barn Owl', 'Song Thrush', 'Snipe', 'Wading Birds' and 'Farmland Birds'			
	PLEASE CONSULT THE 'GENERIC HABITATS' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL HABITAT PLANS			
Α.	To maintain favourable condition of the existing 90ha of marsh and swamp by appropriate management.	ongoing		
B.	To restore 16ha of degraded wetland, giving priority to those holding UK Priority Species* & Red Data Book species.  *The UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in July 2012. The UK list of priority species, however, remains an important reference source.	2026		
C.	To expand the area of the habitat by at least 10ha, of minimum area 1ha and ideally 5ha, excluding reed bed.	2026		
*De	*Derived from Regional Spatial Strategy Phase 3 Technical Report (2009) and based on a			

minimum mapping unit of 0.25ha. Numerical targets have been incorporated into section 6. See Generic Habitats Plan for rationale for derivation of targets and definitions of favourable and unfavourable condition ('Habitats overview' in 'State of the Natural Environment' (NE,2008, p49).

### 3. NATIONAL BAP OBJECTIVES & TARGETS

Lowland Fens are on the current UK Biodiversity Action Plan (BAP) list of Priority Habitats published in 2007(<u>Joint Nature Conservation Committee</u>). The targets and objectives for the Fens BAP, updated in 2010-11, may be seen online.

#### 4. CURRENT STATUS

Wetlands of varying size and character are found in the sub-region, the larger ones being mainly associated with sand and gravel extraction within certain river valleys (e.g. the Tame and Avon), some water-filled limestone quarries, a few mining subsidence pools and the margins of large lakes. Several hundred smaller, though nevertheless valuable, examples occur along river and stream courses, or are associated around ponds and with canals and ditches. Unfortunately, many of these are too small for inclusion in HBA statistics.

The main area of marsh and swamp remains at the former quarry sites including Brandon Marsh, with more wetland including reed beds and emergent vegetation identified along the canals. The area of wetland identified by the Habitat Biodiversity Audit (2017) covers swamp, marsh and reed beds, with no distinction made between these habitats in Phase 1 survey. The Phase 1 categories for these habitats are:

- F1 Swamp bands of tall vegetation wider than 5m
- F2.1 Marginal/inundation marginal
- F2.2 Marginal/inundation inundation

Wet grassland is a separate habitat category (B5: marsh and marshy grassland) with 115ha recorded, including 55ha at 7 discrete sites: Coombe Abbey, Whitacre Flood Meadow, Hillmorton Oxford Canal meadows (Rugby), Fishers Mill Meadow, (Kingsbury Water Park), Alderham Meadows (Barford), Stonebridge Meadows and Haseley Gathering Grounds.

Wet woodland (category B6) is recorded at 77ha, with small fragmented areas along canals and rivers and at Kingsbury Water Park and 31ha at 5 discrete sites: Heralds Way, Coombe Abbey (small corridor along Smite Brook/Top pool), Whitacre Heath, Lowsonford Alder Wood, (Stratford-on-Avon Canal) and Stonebridge Meadows alder carr.

# 4.2 Legal and Policy Status

A wide range of species and habitats are protected under international and domestic laws, including the <u>Wild Birds Directive</u> (1979), the <u>Wildlife and Countryside Act</u> (1981), the <u>Conservation Regulations</u>(1994) and <u>EC Habitats Directive</u> (1992). Protection of sites is afforded nationally through <u>Sites of Special Scientific Interest</u> (SSSI), <u>Special Areas of Conservation</u> (SAC) and <u>Local Nature Reserve</u> (LNR) statutory status. Other sites are offered recognition of their value through Local Wildlife Site status (LWS), Local Character Areas and identified Landscape Scale Areas. The <u>National Planning Policy Framework</u> (2012) chapter/section 11 states conditions with regard to any development negatively

affecting biodiversity, including protected sites, ancient woodland and other irreplaceable habitats (paragraph 118). The Wildlife & Countryside Act and schedule 2 of the Conservation of Habitats & Species Regulations 2010 make it an offence to intentionally kill, injure, take, possess, sell, buy or transport a range of species.

SSSIs containing significant wetlands are: <u>Alvecote Pools</u>, <u>Berkswell Marsh</u>, <u>Brandon Marsh</u>, <u>Claybrookes Marsh</u> (Heralds Way), <u>Coleshill and Bannerley Pools</u>, <u>Coombe Pool</u>, Ufton Fields, Ladywalk Reserve and Whitacre Heath.

By 2018 28 Local Wildlife Sites (LWSs) with significant wetlands had been designated:

In Warwick District:	In Solihull District:		
<ul> <li>Abbey Fields Marsh, Kenilworth</li> </ul>	<ul> <li>Dickens Heath Marsh and Hawkshaw</li> </ul>		
<ul> <li>Haselely Gathering Grounds</li> </ul>	Brook		
Alderman Pastures	Southern Arm Blythe Valley Country		
<ul> <li>Weston Hall Farm (also small area of wet</li> </ul>	Park		
woodland)	Berkswell Marsh Meadow		
High Chimneys Canal meadows (includes)	Springfield Farm Meadows		
areas of wet grassland and woodland	Floodgate Meadows		
along Stratford-on-Avon Canal)	Widney Manor Golf Club		
	Knowle Wet Meadow		
In Stratford District:	In Rugby District:		
<ul><li>Langley Farm Marsh</li></ul>	<ul> <li>Wolvey Wetlands Reserve (Rugby)</li> </ul>		
Whichford Mill Meadow	<ul><li>Burton Mill Meadows (Rugby)</li></ul>		
Moat House			
In Coventry District:	In Nuneaton & Bedworth District:		
<ul> <li>Wyken Slough, Stoke Floods</li> </ul>	Smorrall Lane Pool		
Stonebridge Meadows			
●Lenton's Lane Swamp			
In North Warwickshire District:	<ul> <li>Coton Park Pool, Tame Valley</li> </ul>		
Hoggrills End Marsh	Coleshill Sewage Works		
Tame Valley Wetlands	<ul> <li>Marsh Lane Grassland</li> </ul>		
Whitacre Flood meadow	Duns Lane Pool		

LWS designation is incomplete and significant wetland sites may only be subject to potential LWS (pLWS) or 'ecosite' designation which confers similar protection in planning terms. Finham Brook on A46, where otters are present, is one such example.

Local Nature Reserves (LNRs) containing significant wetlands include Wyken Slough and <u>Stoke Floods</u> (LWS). Country Parks similarly endowed include <u>Kingsbury Water Park</u> and <u>Coombe Country Park</u>.

# 4.3 Current Factors Affecting the Habitat

- **Small total area of habitat** and small population sizes of several key species dependent on the habitat.
- Small size and often isolated nature of individual wetlands can limit the number of unusual and specialist species present and reduce their ability to colonise other wetlands or survive adverse conditions such as drought (many of which require larger wetlands).

- Lack of, or inappropriate, management of some of the existing wetlands leading to drying out, scrub encroachment and succession to woodland.
- Recreational pressure can reduce bird populations, either through noise or physical disturbance; litter and arson have also been problems at some sites.
- **Development pressure** and land use change.
- Pollution from agricultural run-off or from local industry.
- Climate change has the potential to bring drawbacks such as extreme drought and also benefits through the creation of climate change adaptation measures such as <u>Sustainable Urban Drainage Schemes</u> (SUDS).

### 5. LOCAL ACTION

- An accurate digitised database on the county's wetland sites has been established and is updated annually.
- Statutory conservation agencies, <u>Warwickshire Wildlife Trust</u> (WWT) and the <u>Royal Society for the Protection of Birds</u> (RSPB) provide advice on appropriate management, rehabilitation, extension and creation of wetlands.
- The records of various invertebrate groups and birds collected at many reedbed sites through the activities of <u>Warwickshire Museum</u>, and <u>Herbert Art</u> <u>Gallery & Museum</u>, Coventry and amateur naturalists, especially ornithologists are held by <u>Warwickshire Biological Record Centre.</u>
- Agri-environment schemes administered by Natural England support:
  - in the past, the management of Alderham osier beds, Barford; the osier bed is now derelict.
  - the maintenance/restoration/creation of wet grassland for breeding waders: Higher Level (HLS) and Organic HLS options HK9/HK11/HK13
  - the maintenance/restoration/creation of wet grassland for wintering waders: Higher Level (HLS) and Organic HLS options HK10/HK12/HK14.

# Management of wetland/wet grassland:

- Coventry City Council (CCC) has achieved favourable condition of existing marsh & swamp communities (that then grade into reed bed & carr) at Coombe Country Park and of marshy grassland at Stonebridge Meadow.
- WWT manages wetland at Leam Valley Local Nature Reserve (with Warwick District Council), Welches flood meadow and Whitacre Heath flood meadow, in the Tame Valley:
- Severn Trent manages wet grassland at Haseley Gathering Grounds
- Alderham Flood Meadow at Barford is managed by grazing.

## Restoration of wetland/wet grassland:

• **CCC** has restored degraded marsh at Coombe Country Park by scrub control & work with a local grazier to create tussocky wet grassland. Since coppicing, stubbing & pollarding the willows, the area of sedge beds has gradually extended, due to letting in more light and less water being drawn from the water table by the trees & shrubs.

• Warwickshire County Council (WCC) has improved community wetland at Kingsbury Water Park with the restoration of bog around Leys Brook.

# **Creation of wetland/wet grassland:**

- WCC has created new wetlands at Kingsbury Water Park as part of the enhancement of its nature reserve.
- **WWT** has created wet meadow at Guphill Brook, Coventry and wet grassland at Wolston Fields increasing over 4 years.
- The **RSPB** has created some 23ha of wetland habitat, <u>Middleton Lakes</u>, resulting from restoration following sand and gravel extraction by Hanson Aggregates (2013) on the Warwickshire/ Staffordshire county border; this includes open water and more than 10ha of reed bed. RSPB also manages the grazing of Fishers Mill Meadow.
  - On the Packington Estate the scrapes created to wet up some grassland did not hold water due to gravel veins in the clay; the water levels go up and down with the ground water which is often too low to tap into without much deeper pools (pers.comm. Nick Barlow 2018). Although breeding waders feed there they have not so far nested.

# Management of wet woodland:

- At Coombe Country Park a conservation area with no public access allows the retention of dead standing & fallen trees, a favoured areas for 2-3 pairs of willow tits (*Poecile montanus*) & 6-8 pairs of marsh tits (*Poecile palustris*); an area of willow & alder carr bordering the lake on the edge of the wild flower meadow is managed for lesser spotted woodpeckers (*Dryobates minor*) to nest; there are only 3-4 pairs on the whole site.
- <u>Agri-environment schemes</u> administered by Natural England support 75
  agreements for the carr option, including at Ufton Fields where 2695
  willows were pollarded and the management of Stonebridge meadows
  alder carr by WWT.
- Management of wet woodland for birds is also carried out at Middleton Lakes and Ladywalk Reserve.

#### 6. PROPOSED LOCAL ACTIONS

ACTION Some targets have been reset in the light of progress 2011-2018	Lead	Partners	Ву
PLEASE CONSULT THE 'GENERIC HABITATS' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL HABITAT PLANS			
Policy, Legislation & Protection			
<b>PL1.</b> Ensure that any site meeting the relevant criteria is considered for designation as an SSSI.	NE	WWT BC EA WMBC ACs LWSP RSPB HBA STW WCC LAs	ongoing

ACTION Some targets have been reset in the light of progress 2011-2018	Lead	Partners	Ву	
PLEASE CONSULT THE ' <i>GENERIC HABITATS</i> ' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL HABITAT PLANS				
<b>PL2.</b> Continue to select all qualifying wetland sites as LWSs and enter onto database.	LWSP	WWT HBA LAs	ongoing	
PL3. Ensure that the protection of all LWS - designated marsh and swamp is included in Local Development Plans, Neighbourhood Plans and any other relevant strategies.	WCC	NE WWT LAs	ongoing	
<b>PL4.</b> Ensure that new minor or major developments aim for net biodiversity gain through adherence to the mitigation hierarchy, including assessing the impact of development on the hydrology.	WCC	NE WWT LPAs NWBC NBBC	ongoing	
Site / Species Safeguard & Management				
<b>SM1</b> . Maintain favourable condition of the existing 90ha of marsh and swamp by appropriate management.	CSG	NE EA WWT STW WMBC NAM RSPB WCC LAS CCP	ongoing	
<b>SM2.</b> Restore at least 5ha of degraded marsh and swamp by 2015 and a further 11ha by 2026.	CSG	NE NAM WWT WCC STW EA WMBC RSPB LAs	2015- 2026	
SM3. If suitable sites are identified (see RM1) expand the area of the habitat by at least a further 10ha by 2026, of minimum area 1ha and ideally 5ha.	CSG	WMBC WCC WWT RSPB LAs HoEF LOs	2015- 2026	
<b>SM4.</b> Retain old dead wet wood for nesting sites for lesser spotted woodpecker and willow and marsh tit; supplement with rotten logs with sawdust-filled holes for willow tit nests and check nests.	WWT	WMBC RSPB CCC WCC LAs	ongoing	
<b>SM5.</b> Ensure that water level management plans prepared for all SSSIs containing marshland are designed to provide optimal water, including the water table and management conditions, and implement fully.	NE	EA WWT LAs	ongoing	
<b>SM6.</b> Implement the national requirement for SUDS in all new housing schemes of more than 10 dwellings as well as commercial and industrial developments,	WCC	NE EA WWT LAs	ongoing	

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Lead	Partners	Ву
wcc	NE WWT HBA WCC EA WMBC MOs LAs	ongoing
WWT	NE EA CCC WCC RSPB WMBC NAM SRT LOs LAs	ongoing
LWSP	RSPB NE EA WCC WWT	ongoing
NE	WWT	ongoing
WWT	WCC RSPB EA NAM LWSP LAs	ongoing
NE	WWT RSPB WCC LOs	ongoing
НВА	WWT WBRC LAS LOs	ongoing
RSPB	EA WWT NAM LOs	ongoing
	WCC  WWT  LWSP  NE  NE  HBA  RSPB	ATS' ACTION PLAN IN CONJUCOMMON TO ALL HABITAT PI  WCC NE WWT HBA WCC EA WMBC MOS LAS  WWT NE EA CCC WCC RSPB WMBC NAM SRT LOS LAS  LWSP RSPB NE EA WCC WWT  NE WWT  WWT WCC RSPB EA NAM LWSP LAS  NE WWT RSPB WCC LOS  HBA WWT WBRC LAS  RSPB EA WWT NAM

Abbreviations: ACs – Aggregate Companies, BC – Butterfly Conservation, CCP – Coombe Country Park, CSG – LBAP Core Steering Group, EA - Environment Agency, HBA – Habitat Biodiversity Audit partnership, HoEF – Heart of England Forest, LAs – Local Authorities, LOs – Landowners, LPAs – Local Planning Authorities, LWSP – Local Wildlife Sites Project, MOs – Mineral Operators, NAM – Nature after Minerals, NE – Natural England, RSPB – Royal Society for the Protection of Birds, STW - Severn Trent Water, WCC – Warwickshire County Council, WMBC – West Midland Bird Club, WWT – Warwickshire Wildlife Trust.

### 7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Progress with this plan up to 2018 can be seen at https://www.warwickshirewildlifetrust.org.uk/LBAP.

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Natural England (2016) Conservation Strategy for the 21<sup>st</sup> Century. Sets out how NE will help deliver DEFRA's ambitions for the environment to reverse biodiversity loss, sustain distinctive landscapes and enhance engagement with nature.

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### 9. FURTHER INFORMATION

Biodiversity Planning Toolkit - a new online resource to help incorporate biodiversity and geodiversity into the planning system and new development.

<u>Plantlife</u> - a charity which carries out plant species and habitat conservation, owns and manages nature reserves, campaigns, and raises awareness through education.

Wildfowl & Wetlands Trust (2015) – the Wetland Manifesto is a 10 point plan to look after the UK's remaining wetlands.

#### 10. CONTACT

Tim Precious, Wetland Project Officer, Warwickshire Wildlife Trust. Tel. 024 7630 2912