

Halton Biodiversity Action Plan Habitat Review



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1. Executive Summary

Biodiversity is a core component of sustainable development, underpinning economic development and prosperity, and has an important role to play in developing locally distinctive and sustainable communities. Recent developments in Regional and Local Government have significant implications for how the natural environment is considered as part of the way places are shaped at the local level. A first step to maintaining and enhancing the biodiversity value at the local level is to assess the biodiversity resource.

This review uses existing data to begin to assess the biodiversity resource of Halton, and then identifies and prioritises further survey work required to fill data gaps.

The data shows that overall:

- The mudflat and saltmarsh resource is largely protected (tier 1).
- Approximately half of the woodland resource is protected and the quality of most of the rest still needs to be clarified (tier 3).
- Approximately a third of the grassland and wetland resource is protected (tier 1) whilst some area still needs to be clarified (tier 3). Over 50% has restoration potential; however, it may be that much of this land has already been lost to development.
- Heathland mosaic forms a small part of the BAP resource and is largely protected.

It is strongly recommended that:

- All currently protected BAP habitats are regularly monitored (every 5 years) in order to maintain a robust evidence base and followed with management advice to maintain/achieve condition.
- The condition of known BAP habitat (from the Natural England BAP habitat inventory and the phase 1 habitat survey data) that is not currently protected should be clarified by extended phase 1 surveys to better inform site designation and therefore enhance BAP habitat protection across the borough.

If resources permit:

- Potential BAP habitat (highlighted through phase 1 habitat survey data but not identified on the Natural England BAP habitat inventory) should be surveyed. Any BAP habitat identified should then be put forward for site designation.
- The phase 1 habitat data for ponds should be analysed in detail and correlated with priority pond species to indicate where the BAP priority ponds exist in Halton.
- Surveys of any undeveloped land that have been identified as historic areas of BAP habitat should be surveyed to identify BAP habitat types that could be restored.

This assessment has made the first move towards clarifying the BAP resource in Halton and its current protection. This information is vital to raise the profile and visibility of biodiversity and to make it a natural and integral part of policy and decision making.

2. Background

Biological diversity – or ‘Biodiversity’ – is the term given to the variety of life on Earth, and the natural patterns formed as a result. Biodiversity has been defined by the Convention on Biological Diversity (CBD), signed in 1992, as:

"The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." - CBD Article 2. UNEP 1992.

The UK Biodiversity Action Plan (BAP), launched in 1994, is the UK Government's response to the CBD. The Convention called for the development and enforcement of national strategies and associated action plans to identify, conserve and protect existing biological diversity, and to enhance it wherever possible. The UKBAP describes the biological resources of the UK and provides detailed plans for conservation of these resources, at national and devolved levels. Action plans for the most threatened species and habitats have been set out to aid recovery. As well as having national priorities and targets, action was also taken at a local level to create Local Biodiversity Action Plans (LBAPS).

The Cheshire region Biodiversity Action Plan (CrBAP) defines action plans for 29 habitats and 64 species. In 2007 the UK BAP list was reviewed and since then a further 5 habitats and 119 species are now listed under the CrBAP. In 2008 national and local targets were set for the pre-review habitats and species. For habitats, these are in the form of maintaining the extent of BAP habitat, achieving condition of current BAP habitat and restoring and expanding the resource where possible. Most of the targets are set for 2015.

One of the key mechanisms for reaching BAP habitat targets is through local authority planning systems. National and international statutory designations protect some of England's natural environment. Local Wildlife Sites are non-statutory areas of local importance for nature conservation that complement nationally and internationally designated geological and wildlife sites. Planning Policy Statement 9: Biodiversity and Geological Conservation recognises that Biodiversity Action Plans and designated sites (including Local Wildlife Sites) have a fundamental role to play in helping to meet national biodiversity targets and contributing to quality of life and well-being within the community and that Local Development Frameworks should identify all designated sites and BAP habitat on their proposals map. The proximity of a designated site, BAP habitat or BAP species is a key consideration in determining planning applications. PPS9 states that such decisions should be based upon up to date and robust evidence.

BAP habitat inventories mapped nationally by Natural England were used to inform the habitat action plan targets. These inventories are available to download from the Natural England website as GIS layers to be used by local conservation groups, local authorities, land managers and planners.

Biodiversity is a core component of sustainable development, underpinning economic development and prosperity, and has an important role to play in developing locally distinctive and sustainable communities. From 1st October 2006, all local authorities and

other public authorities in England and Wales have a Duty under Section 40 of the Natural Environment and Rural Communities Act (2006) (known as the NERC Duty) to have regard to the conservation of biodiversity in exercising their functions. The NERC Duty aims to raise the profile and visibility of biodiversity, to clarify existing commitments with regard to biodiversity, and to make it a natural and integral part of policy and decision making. Recent developments in Regional and Local Government have significant implications for how the natural environment is considered as part of the way places are shaped at the local level.

2.1 Rationale

A first step to maintaining and enhancing the biodiversity value at the local level is to assess the biodiversity resource. The method of assessment will depend on the type and extent of land holdings but may include undertaking surveys, seeking expert advice from the local authority ecologist, seeking advice from external experts, using the Local Record Centre and consulting the Local BAP Partnership. This should draw on previous survey work and existing data, and may identify the need for further survey work to fill data gaps. Depending upon the number of sites and area of land involved, this may require a process of prioritisation and focus first on sites considered most likely to be of high importance.

Halton Borough Council commissioned a phase 1 survey of habitats across the borough in 2005-06. This data can be analysed in conjunction with the Natural England BAP habitat inventories and current list of sites designated to protect nature conservation to assess the biodiversity resource in Halton and ensure BAP plays an integral part of policy and decision making.

2.2 Aims and Objectives

The aim is to ensure that the spatial planning system of Halton conserves and enhances the natural environment and delivers high quality, environmentally sustainable development. This review aims to assess the biodiversity resource drawing on existing mapped data and to identify and prioritise further survey work required to fill data gaps.

Outcomes include:

- A complete list of the BAP priority habitats that occur in Halton,
- The area and number of GIS polygons for the BAP priority habitats,
- GIS layers of the biodiversity resource assessed,
- A report with accompanying data which assists the local authority in having regard for biodiversity,
- An alert map to facilitate the BAP habitat resource becoming a core component of sustainable development.

3. Methodology

The Joint Nature Conservation Committee (JNCC) has produced an interactive excel-based relationship tool that shows how the main UK habitat classifications relate to/correspond with each other. Therefore the phase 1 habitat survey data and Natural England BAP habitat inventories can be brought together to inform a map of current and potential priority BAP habitats in Halton.

The phase 1 habitats that relate to/correspond with each of the BAP habitats were mapped alongside the specific Natural England BAP habitat inventory. This was then compared against statutory and non-statutory designations to assess the current level of protection of the BAP resource. Site designations included Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), RAMSAR, Local Nature Reserves and Local Wildlife Sites.

As the Natural England BAP habitat inventory, corresponding phase 1 habitat survey and site designation layers were brought together, polygons were mapped into tiers representing the level of overlap between the classifications. The tier system can then be used as a proxy to indicate the certainty that BAP habitat is present. The different tiers are outlined in Table 1 and the priority actions relating to each tier outlined in Table 2. GIS layers of each of the tiers accompany this report.

Table 1. Relationship between BAP Habitat Classification and Tier Status

Tier	Habitat Classification			Site Status
	NE BAP Inventory	Phase 1 Correlation	Designated	
1	✓	✓	✓	Protected BAP habitat
1		✓	✓	Protected BAP habitat, exact type needs clarifying
1	✓		✓	Protected BAP habitat, exact type needs clarifying
2	✓	✓		BAP habitat that is not currently protected
3		✓		Potentially BAP but needs clarifying (not protected)
4	✓			Possible BAP restoration area

Table 2. Priority Actions Relating to Tier Status.

Tier	Future Action	Reason	Priority (1-High, 4-Low)
1	Monitor sites and advise on habitat management.	To sustain a robust evidence base and clarify existing BAP habitat area.	1
2	Immediate survey followed by designation where appropriate.	Protect most vulnerable BAP habitat.	2
3	Extended phase 1 survey followed by designation where appropriate.	Clarify and then protect vulnerable BAP habitat.	3
4	Extended phase 1 survey to assess BAP habitat restoration potential in undeveloped areas.	Assess potential of restoring to BAP habitat.	4

Arable field margins and ponds were not investigated as the JNCC tool does not outline any related phase 1 habitat and Natural England BAP habitat inventory data does not exist for the habitat. The Natural England habitat description for ponds relates the habitat to phase 1 G1 Standing water, but also association with species of high conservation importance. Hedgerows have not been fully reviewed as there is no Natural England BAP habitat inventory information available to compare against.

4. Results

4.1 Summary

Halton has 13 UK BAP priority habitats. The 10 habitats fully reviewed cover 1370 ha (tier 1 and 2 data) with a further 136 ha categorised as potential BAP priority habitat and an additional 157 ha as having the potential for restoring to BAP habitat where opportunities exist. According to the phase 1 habitat survey there is 73.6 km of hedgerow BAP habitat throughout Halton.

The UK BAP priority habitats that exist in Halton are:

- Arable Field Margins (not covered in this review)
- Coastal and Floodplain Grazing Marsh
- Coastal Saltmarsh
- Hedgerows (not covered in this review)
- Intertidal Mudflats
- Lowland Calcareous Grassland
- Lowland Dry Acid Grassland
- Lowland Heathland
- Lowland Meadow
- Ponds (not covered in this review)
- Reedbeds
- Traditional Orchards
- Woodland

The UK BAP priority habitats investigated in this review that occur naturally as a mosaic across an area and in some instances where the BAP habitat inventories overlap, have been brought together to form habitat groups (Table 3).

Table 3. Habitat Groups.

Habitat Group	UK BAP Habitat
Woodland and Orchards	Traditional Orchards Woodland Broad Habitat
Grassland and Wetland	Coastal and Floodplain Grazing Marsh Lowland Calcareous Grassland Lowland Meadow Reedbeds
Mudflats and Saltmarsh	Coastal Saltmarsh Intertidal Mudflat
Heathland Mosaic	Lowland Dry Acid Grassland Lowland Heathland

Table 4 represents a summary of the assessed BAP habitat resource in Halton and Figure 1 illustrates the proportions that each of the tiers make up within each habitat. Currently 87% of the known resource is protected, the mudflats and saltmarsh making up the majority of this figure. Potential BAP restoration areas (tier 4) contribute 9.4% to the total figure, the majority of which is grassland and wetland habitat potential.

Table 4. Summary of Habitat Group Details.

Habitat Group	Tier 1		Tier 2		Tier 3		Tier 4		TOTAL	
	No. Polygons	Area (ha)	No. Polygons	Area (ha)	No. Polygons	Area (ha)	No. Polygons	Area (ha)	No. Polygons	Area (ha)
Woodland and Orchards	179	209.9	45	34.9	336	126.4	17	13.3	577	384.5
Grassland and Wetland	55	80.2	23	25.1	5	7.7	23	143.1	106	256.1
Mudflats and Saltmarsh	117	1008.7	-	-	5	1.5	-	-	120	1010.2
Heathland Mosaic	9	10.8	-	-	-	-	1	1.1	10	11.8
TOTAL	358	1310	68	60	346	136	41	157	813	1663

In summary:

- The mudflat and saltmarsh resource is largely protected (tier 1).
- Approximately half of the woodland resource is protected and the quality of most of the rest still needs to be clarified (tier 3).
- Approximately a third of the grassland and wetland resource is protected (tier 1) whilst some area still needs to be clarified (tier 3). Over 50% has restoration potential; however, it may be that much of this land has already been lost to development.
- Heathland mosaic forms a small part of the BAP resource and is largely protected.

Figure 2 illustrates where the various tiers are located across Halton.

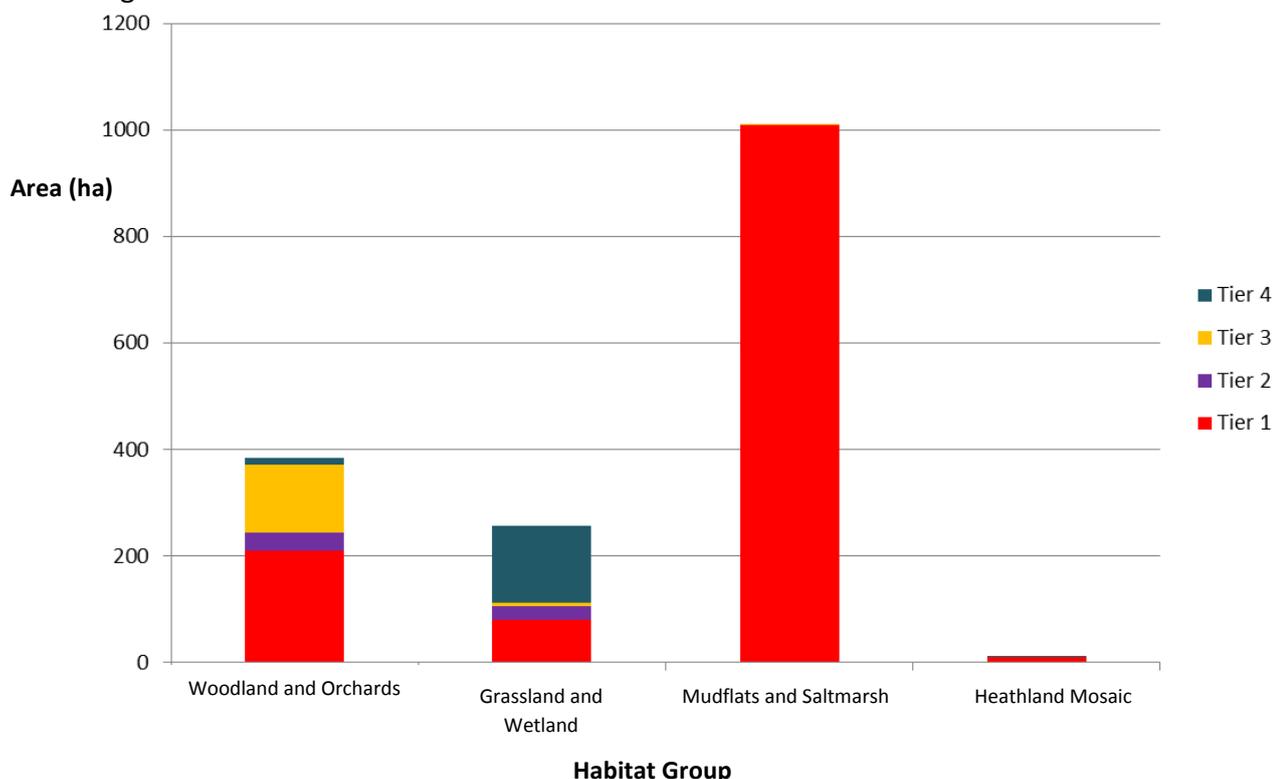


Figure 1. Summary of Reviewed Habitat Groups and Tier Status

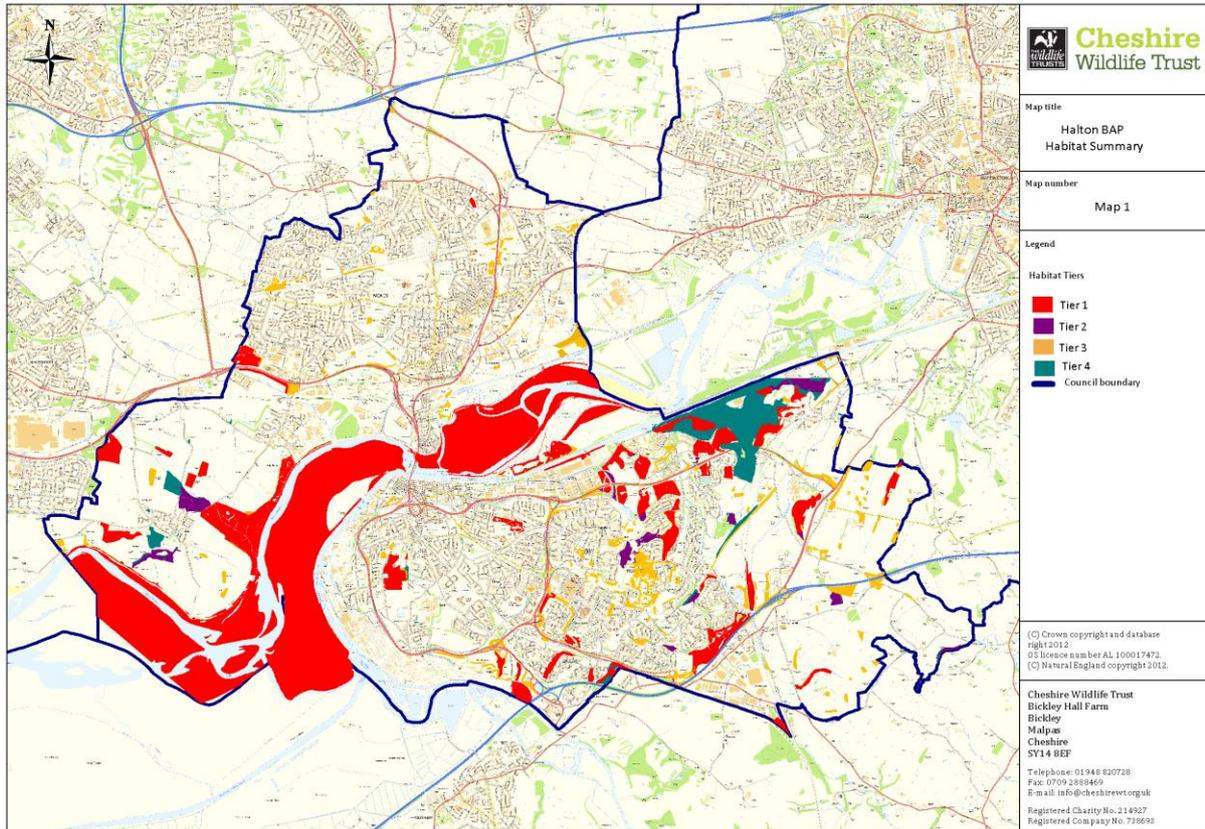


Figure 2. Summary of BAP Habitat in Halton

4.2 Woodland and Orchards

Currently 56.5% of the woodland and orchard BAP resource is protected by site designation. Table 5 shows there is a further 34.9 ha of known BAP habitat that is unprotected by designation and most of this is south of the River Mersey (Figure 3). A further 126.4 ha has been identified as potential BAP habitat and also not protected by designation.

Table 5. Woodland and Orchards Habitat Tier Details.

Habitat Group	Tier 1		Tier 2		Tier 3		TOTAL	
	No. Polygons	Area (ha)						
Woodland and Orchards	179	209.9	45	34.9	336	126.4	560	371.2

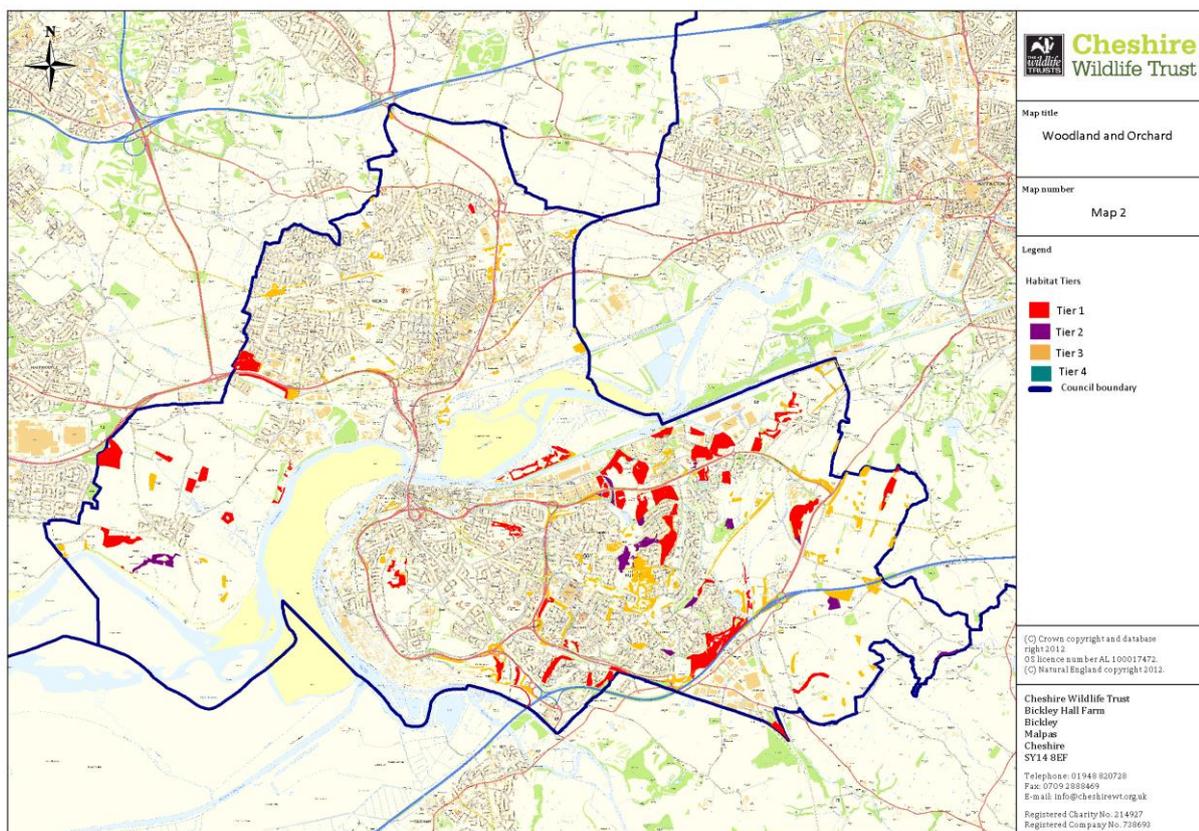


Figure 3. Distribution of Woodlands and Orchards in Halton.

4.3 Grassland and Wetland

Table 6 shows that 70.9% of the potential grassland and wetland BAP resource is protected and that 30.8% is not protected by site designation. Figure 4 illustrates that the areas classified as tier 2 (BAP habitat inventory and phase 1 correlation but not designated) are found in two distinct locations whilst the tier 3 area is mainly located north of the River Mersey.

Table 6. Grassland and Wetland Habitat Tier Details.

Habitat Group	Tier 1		Tier 2		Tier 3		TOTAL	
	No. Polygons	Area (ha)						
Grassland and Wetland	55	80.2	23	25.1	5	7.7	83	113

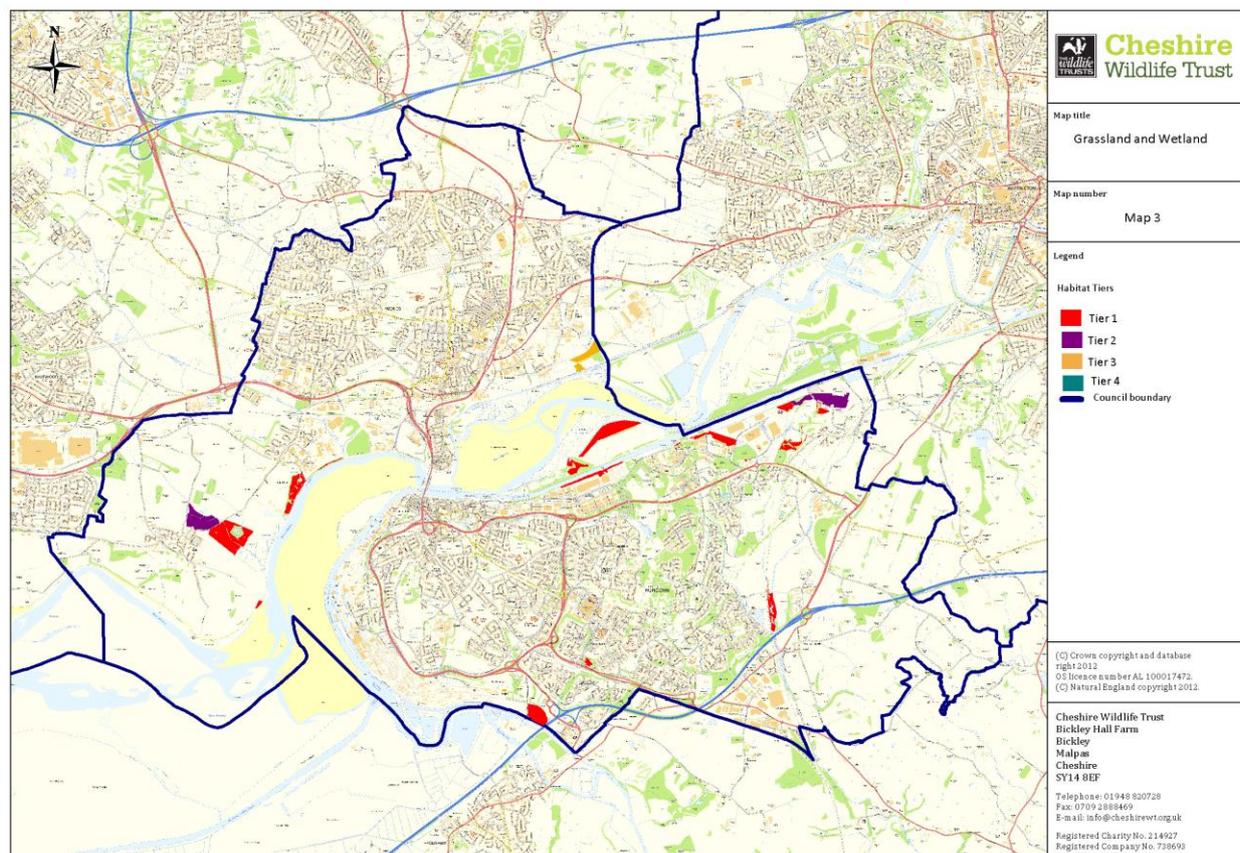


Figure 4. Distribution of Grassland and Wetland in Halton.

4.4 Mudflats and Saltmarsh

Currently 1008.7 ha (99.8%) of the mudflats and saltmarsh is SSSI. Only a very small percentage (0.2%) of potential mudflat and saltmarsh BAP habitat lies outside of the statutory designated area (Table 7). Tier 3 areas are difficult to see in Figure 5 as they sit adjacent to the tier 1 area. A boundary change of the adjacent designated sites should be investigated to protect the tier 3 area.

Table 7. Mudflats and Saltmarsh Habitat Tier Details.

Habitat Group	Tier 1		Tier 2		Tier 3		TOTAL	
	No. Polygons	Area (ha)						
Mudflats and Saltmarsh	115	1008.7	-	-	5	1.5	120	1010.2

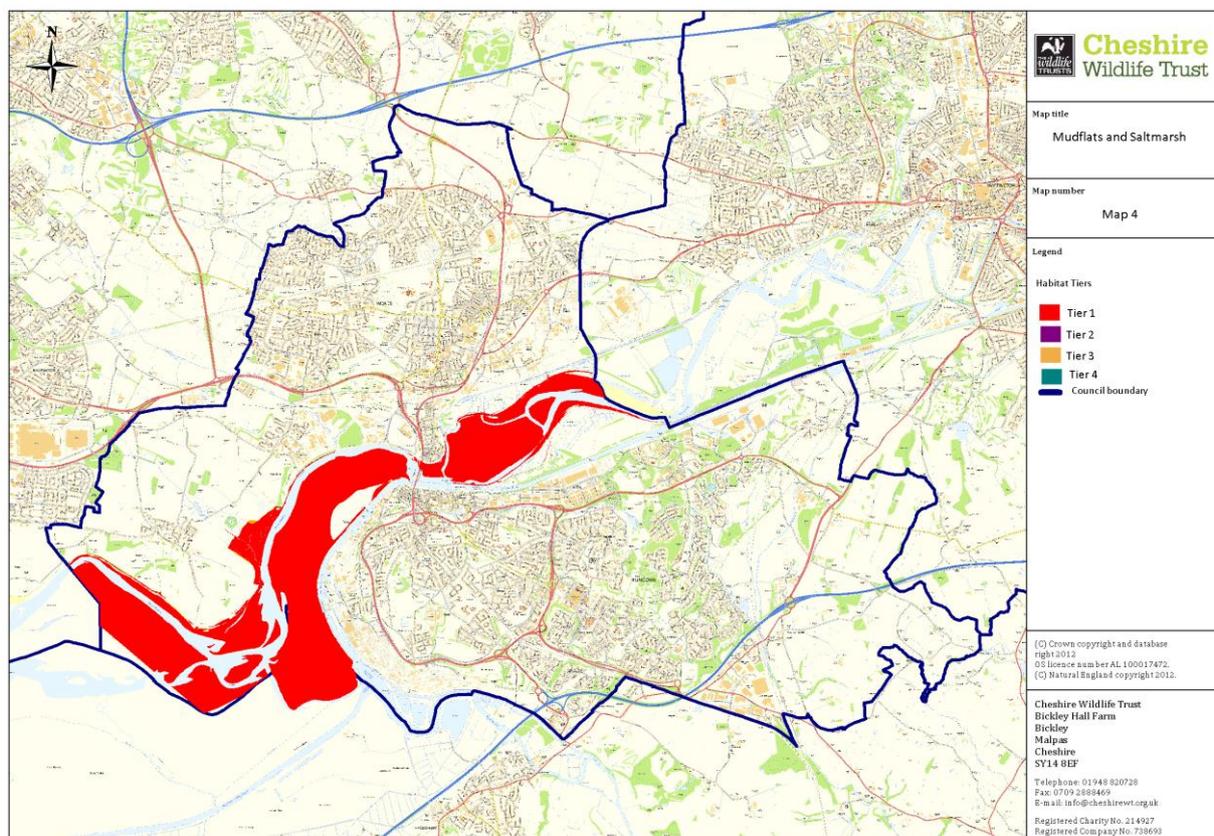


Figure 5. Distribution of Mudflats and Saltmarsh in Halton.

4.5 Heathland Mosaic

Table 8 specifies how the BAP habitat is protected. Figure 6 illustrates how the BAP resource is located around Runcorn Hill.

Table 8. Heathland Mosaic Tier Details.

Habitat Group	Tier 1		Tier 2		Tier 3		TOTAL	
	No. Polygons	Area (ha)						
Heathland Mosaic	9	10.8	-	-	-	-	9	10.8

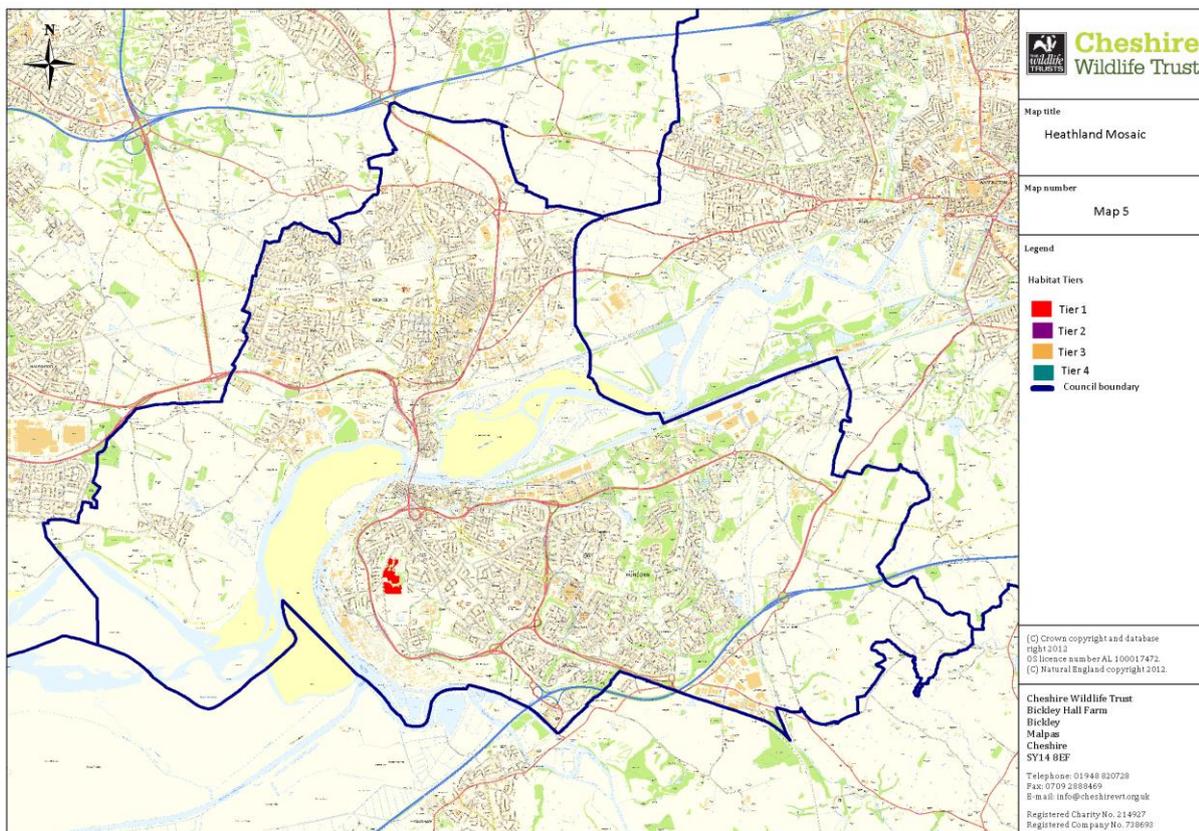


Figure 6. Distribution of the Heathland Mosaic in Halton.

4.6 Unsupported non-designated BAP Habitat Inventory Sites

Based upon the Natural England BAP habitat inventory there is approximately 157.4 ha of potential BAP habitat restoration area (Table 9). The majority of the BAP restoration potential area is located around Halton Moss and Sandymoor south of the River Mersey, with two further large areas around Hale (Figure 7). This data is likely to represent the historical distribution of habitats, however, as much of the land around Sandymoor in particular, may already be lost to development.

Table 9. Non-designated BAP Habitat Details.

Habitat Group	Tier 4	
	No. Polygons	Area (ha)
Woodland and Orchards	17	13.3
Grassland and Wetland	23	143.1
Mudflats and Saltmarsh	-	-
Heathland Mosaic	1	1.1
TOTAL	41	157.4

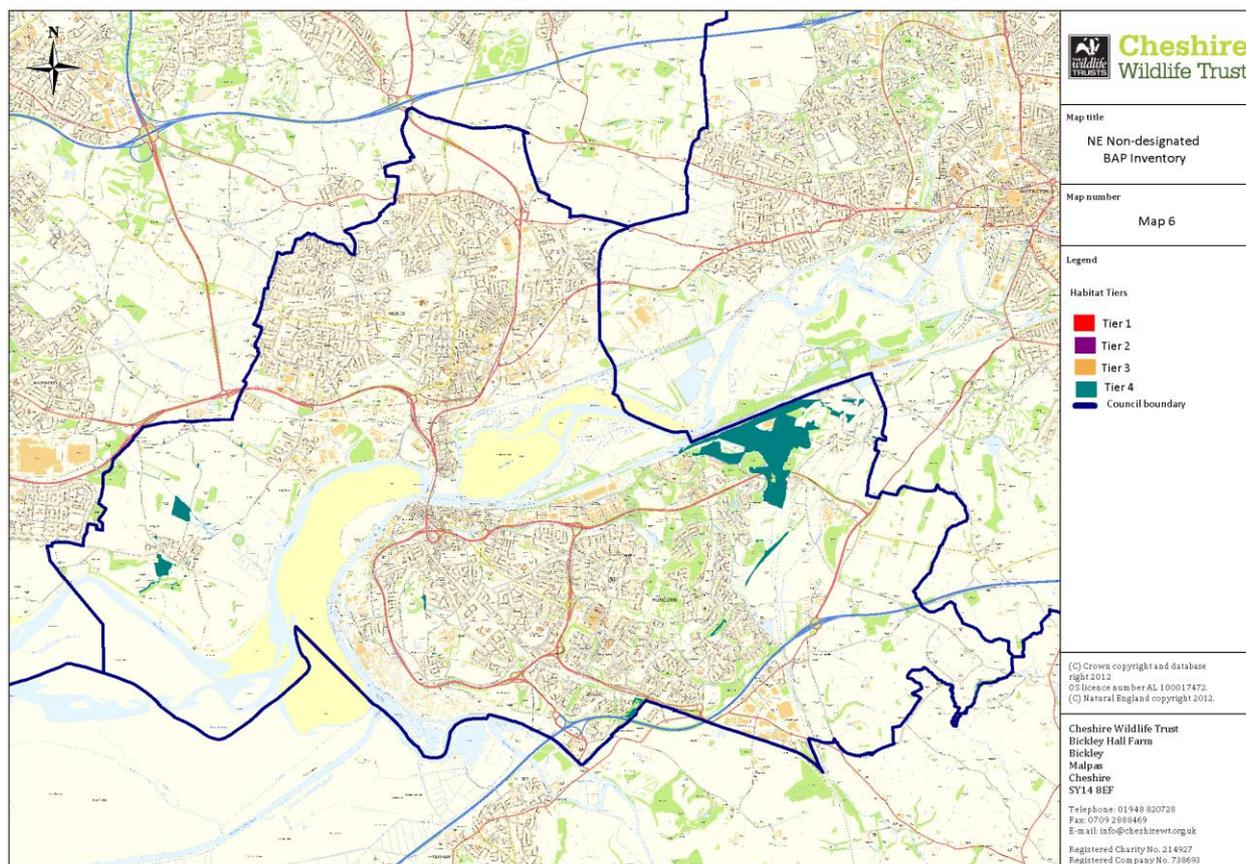


Figure 7. Distribution of the non-designated NE BAP Habitat Inventory in Halton.

5. Future Actions

There are a number of next steps arising from this review, however, this assessment has made the first move towards confirming the BAP resource in Halton and its current protection. This information is vital to raise the profile and visibility of biodiversity and to make it a natural and integral part of policy and decision making.

A number of next steps have been identified to fill in data gaps. The following actions are strongly recommended:

1. Tier 1 Monitoring and Management Advice

Tier 1 areas highlight BAP habitat that is currently protected. These areas should be regularly monitored and followed with management advice in order to maintain a robust evidence base and maintain/achieve condition of current BAP habitat. This should be undertaken ideally once every 5 years for any given site. Monitoring will also clarify the type and condition of the existing BAP resource in the tier 1 areas which were only supported by the Natural England BAP habitat inventory.

2. Tier 2 Surveying and Site Designation

Tier 2 areas highlight BAP habitat that is vulnerable. Both the Natural England BAP habitat inventory and the phase 1 habitat survey data identify the site as BAP habitat which means it should be suitable for designation, at least as a local wildlife site, to give protection to the BAP resource. Extended phase 1 surveys will expand upon current knowledge in order to better inform site designation and therefore enhance BAP habitat protection across the borough.

The following actions should be pursued if resources permit:

3. Tier 3 Extended Phase 1 Habitat Surveys

Tier 3 areas draw attention to where the phase 1 habitat survey has indicated potential BAP habitat but this evidence is not supported by the Natural England BAP habitat inventory or site designation. These areas therefore need surveying in further detail to clarify if any BAP habitat is present. If BAP habitat is identified it should then be considered against the local wildlife site designation criteria.

4. Analysis of Pond Habitats

The phase 1 habitat data for ponds should be analysed in detail and correlated with priority pond species to indicate where the BAP priority ponds exist in Halton. This could be based upon tiers relating to the current status and possible future status of the ponds, if managed appropriately.

5. Tier 4 Assessment of Restoration Potential

Areas that are identified on the BAP habitat inventories but have no supporting phase 1 data and are not designated have been put into tier 4. Representing possible historic areas of BAP habitat, there may be potential to restore these areas should opportunities arise. Surveys of any undeveloped land within this tier will specify the exact BAP habitat types that could be restored.

6. Appendices

6.1 Data Analysis Process

A number of the BAP habitat inventories are not wholly supported by their related phase 1 habitat. Some are supported on a proportion of the sites, whilst some are not supported at all, in both instances the related phase 1 habitat can be found elsewhere in the borough. The BAP habitat inventories that are not supported at all are reedbed, lowland calcareous grassland and lowland dry acid grassland.

Woodland, undetermined grassland, littoral sediment, and coastal and floodplain grazing marsh BAP habitat inventories lacked any underlying phase 1 habitat data in some locations which means that the accuracy of the inventory cannot be determined at this stage. Surveys need to be undertaken in these areas to determine the type of phase 1 habitat and investigate whether the BAP habitat inventory data is supported on the ground.

The ancient woodland and deciduous woodland BAP habitat inventories were used as part of the woodland BAP habitat review. The associated phase 1 for the traditional orchard BAP habitat was not outlined in the JNCC excel-based tool. Investigation of the Phase 1 Handbook revealed that traditional orchards should be mapped as A112 Woodland: Broadleaved plantation when undertaking a phase 1 habitat survey. The A112 Woodland: Broadleaved plantation phase 1 habitat was therefore compared against the traditional orchard BAP habitat inventory.

Some areas were overlain by both the reedbed and coastal and floodplain grazing marsh BAP habitat inventories. These areas are designated but the exact habitat cannot be determined as the phase 1 data supports neither habitat. The same situation exists for the overlap between the lowland meadow and coastal and floodplain grazing marsh BAP habitat inventories. Coastal and floodplain grazing marsh BAP habitat according to the JNCC habitat classification tool potentially overlaps with B4 Improved grassland and B5 Marsh/Marshy grassland phase 1 habitats. The B4 sites that are neither designated or overlain by the coastal and floodplain grazing marsh BAP habitat inventory have not been included under tier 3 in the Grassland and Wetland group. The B4 phase 1 habitat classification typically includes sites that are not BAP habitat such as heavily fertilised and grazed grassland sites, it would therefore not be appropriate to suggest readily that they are potential BAP habitat sites. The coastal and floodplain grazing marsh inventory, although supported by B4 Improved grassland in some areas was not supported by the more appropriate B5 Marsh/marshy grassland, instead this phase 1 habitat had been mapped at other sites. According to the JNCC excel-based tool B5 Marsh/marshy grassland could also be lowland meadow BAP priority habitat.

The littoral sediment broad habitat was used from the JNCC excel-based tool to find out which phase 1 habitat relate to intertidal mudflat and coastal saltmarsh BAP habitat. The mudflat BAP habitat inventory was compared against the littoral sediment phase 1 habitats. The mudflat BAP habitat inventory correlated with the mudflat phase 1 habitats listed under the littoral sediment broad habitat but not the saltmarsh phase 1 habitat. The review of the coastal saltmarsh BAP habitat has therefore been solely undertaken on the phase 1 information.

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The lowland heathland BAP habitat inventory is well supported by the related D5 Dry heath/acid grassland phase 1 habitat, although it does overlap in some areas with phase 1 woodland habitat. The woodland phase 1 areas could indicate either potential heathland restoration areas or woodland BAP habitat.

According to the BAP habitat inventory purple moor grass and rush pasture BAP priority habitat also occurs in Halton. However, analysis under this review has dismissed this habitat as existing in Halton. The purple moor grass and rush pasture BAP habitat inventory overlaps with the lowland heathland BAP habitat inventory. Analysis of the underlying phase 1 habitats showed D5 Dry heath/acid grassland present, supporting the lowland heathland BAP habitat inventory and not the purple moor grass and rush pasture BAP habitat inventory. The phase 1 habitat codes that relate to purple moor grass and rush pasture BAP priority habitat also relate to a number of other BAP habitats that are more likely to exist in Halton such as woodland, lowland meadow and coastal and floodplain grazing marsh.

6.2 Correlation Table

Table 10. Summary of the Relationship between BAP and Phase 1 Habitats (taken from JNCC excel-based relationship tool).

BAP Habitat	Phase 1 Habitat		
	RELATIONSHIP	CODE	DESCRIPTION
Broadleaved, mixed and yew woodland broad habitat			
Lowland beech and yew woodland priority habitat	potentially overlaps with	A111	Woodland: broadleaved, semi-natural
		A112	Woodland: broadleaved, plantation
		A131	Woodland: mixed, semi-natural
		A132	Woodland: mixed, plantation
		A21	Scrub: dense/continuous
		A31	Parkland and scattered trees: broadleaved
		A33	Parkland and scattered trees: mixed
		A41	Recently felled woodland: broadleaved
Lowland mixed deciduous woodland priority habitat	potentially overlaps with	A111	Woodland: broadleaved, semi-natural
		A112	Woodland: broadleaved, plantation
		A131	Woodland: mixed, semi-natural
		A132	Woodland: mixed, plantation
		A21	Scrub: dense/continuous
		A31	Parkland and scattered trees: broadleaved
		A33	Parkland and scattered trees: mixed
		A41	Recently felled woodland: broadleaved
Wet woodland priority habitat	potentially overlaps with	A111	Woodland: broadleaved, semi-natural
		A112	Woodland: broadleaved, plantation
		A131	Woodland: mixed, semi-natural
		A132	Woodland: mixed, plantation
		A21	Scrub: dense/continuous

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		A31	Parkland and scattered trees: broadleaved
		A33	Parkland and scattered trees: mixed
		A41	Recently felled woodland: broadleaved
		A43	Recently felled woodland: mixed
Lowland wood-pastures and parkland priority habitat	potentially overlaps with	A111	Woodland: broadleaved, semi-natural
		A112	Woodland: broadleaved, plantation
		A131	Woodland: mixed, semi-natural
		A132	Woodland: mixed, plantation
		A21	Scrub: dense/continuous
		A31	Parkland and scattered trees: broadleaved
		A33	Parkland and scattered trees: mixed
		A41	Recently felled woodland: broadleaved
		A43	Recently felled woodland: mixed
Ancient and/or species rich hedgerows priority habitat	potentially overlaps with	J211	Boundaries: intact hedge, species-rich
		J212	Boundaries: intact hedges, species-poor
		J221	Boundaries: defunct hedge, species-rich
		J222	Boundaries: defunct hedge, species-poor
		J231	Boundaries: hedge with trees, species-rich
		J232	Boundaries: hedge with trees, species-poor
Arable and horticultural broad habitat	contains	J11	Cultivated/disturbed land: arable
Cereal field margins priority habitat			Priority habitat not specified
Improved grassland broad habitat			
Coastal and floodplain grazing marsh priority habitat	potentially overlaps with	B2	Neutral grassland
		B4	Improved grassland
		B5	Marsh/marshy grassland
Neutral grassland broad habitat			
Lowland meadows priority habitat	potentially overlaps with	B21	Neutral grassland: unimproved
		B5	Marsh/marshy grassland
Calcareous grassland broad habitat			

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Lowland calcareous grassland priority habitat	potentially overlaps with	B21	Neutral grassland: unimproved
		B3	Calcareous grassland
		B31	Calcareous grassland: unimproved
		B32	Calcareous grassland: semi-improved
Acid grassland broad habitat			
Lowland dry acid grassland priority habitat	potentially overlaps with	B1	Acid grassland
		B11	Acid grassland: unimproved
		B12	Acid grassland: semi-improved
		C1	Bracken
		D5	Dry heath/acid grassland
		D6	Wet heath/acid grassland
		H65	Sand-dune: dune grassland
Dwarf shrub heath broad habitat			
Lowland heathland priority habitat	potentially overlaps with	D1	Dry dwarf shrub heath
		D2	Wet dwarf shrub heath
		D3	Lichen/bryophyte heath
		D5	Dry heath/acid grassland
		D6	Wet heath/acid grassland
		H66	Sand-dune: dune heath
		H85	Maritime cliff and slope: coastal heathland
Fen, marsh and swamp broad habitat			
Fen priority habitat	potentially overlaps with	E2	Flush and spring
		E3	Fen
		F1	Swamp
Purple moor grass and rush pasture priority habitat	potentially overlaps with	A21	Scrub
		B5	Marsh/marshy grassland
		E31	Fen: valley mire
		E32	Fen: basin mire
		F1	Swamp

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Reedbed priority habitat	potentially overlaps with	F1	Swamp
Eutrophic standing waters priority habitat	potentially overlaps with	G11	Standing water: eutrophic
Littoral sediment broad habitat	contains	H11	Intertidal: mud/sand
		H12	Intertidal: shingle/cobbles
		H2	Saltmarsh
		H23	Saltmarsh: saltmarsh/dune interface
		H24	Saltmarsh: scattered plants
		H26	Saltmarsh: dense/continuous
	overlaps with	H1	Intertidal
Coastal saltmarsh priority habitat			No Phase 1 Habitat Specified
Mudflat priority habitat			No Phase 1 Habitat Specified