Rotherham Biodiversity Action Plan 2012
Hedgerow Action Plan

Contents

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Page 2 image credit: Carolyn Jones

List of habitats included

National Priority Habitats:

- Hedgerows

Habitat Descriptions

Hedgerows are an integral part of our landscape, comprising rows of closely-growing trees and shrubs and associated ground flora. They are linear features, which resemble woodland edge and scrub habitats; some have their origins in the woodland clearance of the 17th and 18th Centuries. All hedgerows in urban and rural areas are considered to be important assets; they are often highly diverse, reflect historic field boundaries and frequently form important green corridors. Hedgerows adjacent to green lanes, tracks and woods tend to be particularly rich.

The Defra Hedgerow Survey Handbook defines a hedgerow as any boundary line of trees or shrubs over 20m long and less than 5m wide at the base, provided that at one time the trees or shrubs were more or less continuous. This includes 'classic' shrubby hedgerows, lines of trees, shrubby hedgerows with trees and very gappy hedgerows (where each shrubby section may be less than 20m long, but the gaps are less than 20m) as illustrated on the following page.

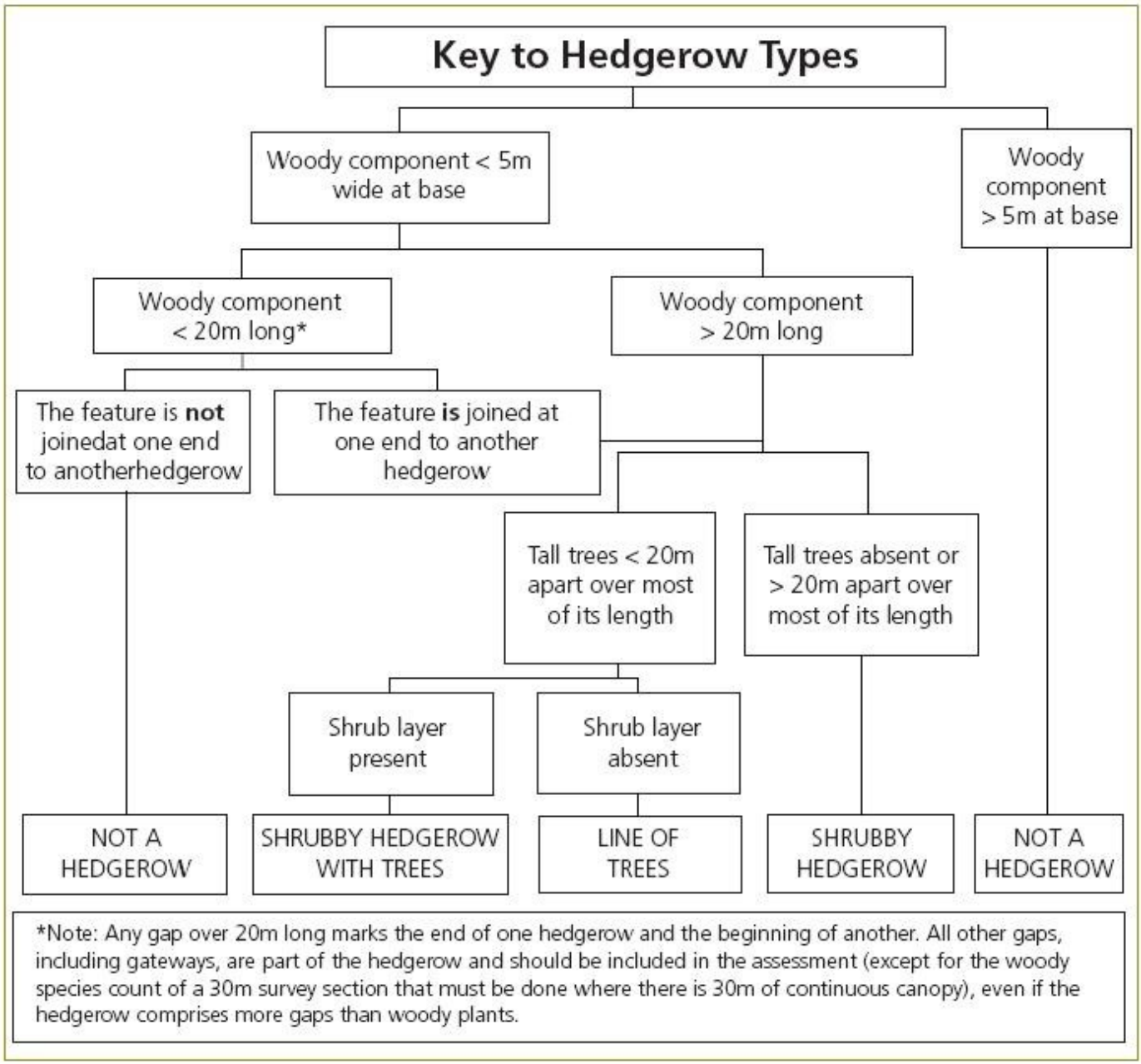
The UK Hedgerow Habitat Action Plan covers all hedgerows consisting predominantly (i.e. 80% or more cover) of at least one woody UK native species (where each UK country can define the list of woody species native to their respective country). Climbers such as honeysuckle and bramble are recognised as integral to many hedgerows, however they require other woody plants to be present to form a distinct woody boundary feature, as such they are not included in the definition of woody species. It is estimated that 84% of countryside hedgerows in Great Britain can be included under this definition.

Ancient hedgerows support the greatest biodiversity and are defined as being those established before the Enclosure Acts were passed between 1720 and 1840. These hedgerows, and the field banks or ditches that they often grow alongside, frequently mark Parish boundaries and ancient field systems and have considerable historic interest, which probably pre-date the Enclosure hedges e.g. at St. John's Church Laughton. There are also relic hedges remaining in urban gardens in developments since 1950.

Species-rich hedgerows are defined in the UK BAP as those with four or more (in northern England) native woody plants within a 30m length and/or a rich ground flora; however, hedges with fewer plants are also important and frequently support rare and threatened species.

Hedgerows in Rotherham that occur within the Coal Measures Natural Area have hawthorn *Crataegus monogyna*, elder *Sambucus nigra* and blackthorn *Prunus spinosa* as the most common trees and shrubs. Other shrubs associated with them include hazel *Corylus avellana* and dog rose *Rosa canina*. On the more basic soils of the Southern Magnesian Limestone Natural Area hedgerows usually have more varied tree species with ash, field maple, elms and dogwood being frequent as well as those previously mentioned. Hedgerow trees left to grow as standards (especially oaks and ash) are important hedgerow features, occasionally veteran with associated interest. In Rotherham, hedgerows are usually included within NVC W21 *Crataegus monogyna – Hedera helix*, W22 *Prunus spinosa - Rubus fruticosus* and W24 *Rubus fruticosus – Holcus lanatus* scrub communities.

Defra Key to Hedgerow Types



Taken from the Defra Hedgerow Survey Handbook 2007

Current Status

Although hedgerows are one of the most significant habitats in lowland Britain, they have suffered significant neglect and loss. Since 1945 there has been a drastic loss of hedgerows throughout the UK through removal and neglect, especially in eastern counties of England. Between 1984 and 1990, the net loss of hedgerow length in England was estimated as 21%, in Scotland 27% and in Wales 25%. In England and Wales at least the loss continued between 1990 and 1993, with neglect becoming increasingly important and removal less so. Data collected for Countryside Survey 2000 in 1998 estimates that in the UK there were 814,159km of hedgerows. The breakdown for the four individual countries is shown below:

Breakdown hedgerow length per country	
England	558,150km
Wales	88,710km
Scotland	48,680km
Northern Ireland	118,619km

The Yorkshire and Humber Biodiversity Delivery Plan (2010) estimated 37,400km in the region and the 2004 Rotherham Biodiversity Action plan estimated there to be 64km of hedgerows in the borough, however, the proportion of this total that is comprised of ancient or species-rich hedgerows was unknown.

During 2006-08 a Defra funded hedgerow survey took place in Rotherham with the aim of identifying ancient and species-rich hedgerows to compile a register of important hedgerows. The survey considered 175 hedgerows, chosen as part of a random stratification method, covering a total of 42.8km. This indicates that the previous estimate of 64km hedgerow resource is a significant underestimate. Of the 175 hedgerow survey events 107 recorded 4 or more woody species, i.e. could be considered as species-rich, this calculates as 61.14%. The average number of species present in the hedgerows recorded was 4. At the time of the survey project the UK Biodiversity Action Plan for Ancient and Species-rich Hedgerows stated that nationally 42% of the British hedgerow resource was thought to be ancient or species-rich, indicating that Rotherham is above this trend.

Key Factors and Influences

The following are considered to be the key issues affecting Rotherham's hedgerow resource; they are not in any order of priority:

- Neglect leading to hedgerows changing into lines of trees and the development of gaps.
- Inappropriate management, such as too frequent and/or badly timed cutting leading to poor habitat conditions, the development of gaps and probable species changes.
- Lack of skills and resources to use historic management techniques such as hedge-laying that keep hedgerows rejuvenated and stock-proof.
- Removal for agricultural purposes such as increasing field size, for housing development and for road widening schemes.
- Changes in agricultural practices, such as reduced field margins and increased agro-chemical use, which often causing spray drift leading to nutrient enrichment and a decline in species diversity.
- Increased stocking rates, particularly of sheep, leading to hedgerow damage and the need to fence fields; the increased use of fences reduces the agricultural necessity of hedgerow management and so hastens their decline.
- Loss of hedgerow trees through old age and felling, without planting replacements.
- Lack of recognition of the importance of hedgerows.

Associated Habitats and Species

Hedgerows can be associated with any of the other priority habitats and often provide links between them; habitat mosaics will depend on ground and soil conditions, hydrology and management activity.

The list provided in Appendix Two contains England Priority species that are associated with hedgerow habitats and highlights which of these have been recorded in Rotherham. The list has been prepared by the Biodiversity Integration Groups, established to bring together habitat and associated species interests at an England level as part of Natural England led research.

Key Sites of Good Quality

Hedgerow quality is not just about age or the numbers of species present; management (recent and historic) has a significant influence as does the presence of associated features. For some purposes hedgerows could be considered to be of good quality if they are stock proof, despite having only one woody species.

The 2004 RBAP Ancient and Species-rich Hedgerow Habitat Action Plan supported the production of a Register of Important Hedgerows based on a Defra funded Hedgerow Survey Project. The project allowed a good amount of survey work to be completed and enabled a thorough review of existing data held. The survey work results has shown that Rotherham's hedgerows are slightly more species-rich than the national average, that the borough's hedgerow resource is considerable and examples exist of extremely high quality.
Further details can be found in the downloadable survey report at
http://www.rotherham.gov.uk/info/1009/wildlife/946/biodiversity_action_plan/1

Hedgerows within a designated Local Wildlife Site (LWS) boundary or hedgerows that originate from or link with a Local Wildlife Site may be assessed against the LWS Hedgerow selection guidelines to provide supplementary designation evidence.

There are 20 Local Wildlife Sites with hedgerow habitats that meet the selection guidelines for at least one of the hedgerow criteria; these are listed in Appendix One. Of these sites 7 are listed as having evidence of positive management in the 2011 national indicator assessment and could be considered to be 'of good quality'.

Sites of Concern

It is not possible to identify a comprehensive register of hedgerows that are at risk. The following are common situations where hedgerow neglect or removal may be brought to the attention of RMBC or other biodiversity forum partners and where action could be taken to protect or restore a hedgerow:

Hedgerow Removal Notice procedure
The Application for Hedgerow Removal Notice should be used by anyone proposing to remove a hedgerow, or part of a hedgerow, that has the potential to be covered by the Hedgerows Regulations 1997. The notice is used to notify the local planning authority who may refuse consent if the hedgerow is important, i.e. an important hedgerow is one which is 30 years old or more and meets at least one of the archaeological and ecological criteria set out in the regulations.

Hedgerows present on potential development sites
Where hedgerows are at risk of removal due to development the planning application process can be used to request that hedgerows, and their root protection areas, are retained and protected; the application process can also be used to request the planting of additional or replacement hedgerows using an appropriate mix of native species. If planning approval is forthcoming conditions can be attached to enforce these actions.

LWS with hedgerows where positive management has not been demonstrated
Sites owned and managed by RMBC will be expected to demonstrate, in site-based management plans, how any hedgerows will be retained, protected and maintained. Where sites are in private ownership the LWS system can provide information to landowners and managers on habitat management best practice.

Specific Actions for Key Associated Species

The majority of species associated with hedgerow will benefit from general and regular management activity. Nesting bird species are considered to be most at risk of harm and disturbance from inappropriate hedgerow management; management plans should make clear the preference to avoid management activity during the key nesting period (March to August).

Many bat species use hedgerows, and other linear features, for commuting between roosting and foraging sites; roosts can be present in mature hedgerow trees. Natural England has produced guidelines for the restriction of certain developments, e.g. wind turbines, within certain distances of hedgerows used by bat species; these guidelines can be used as general principles to protect hedgerows used by bat species.

Scale of Potential Biodiversity Action

All hedgerows need management; the majority will be able to be assigned suitable management activities based on the following elements. Actions may be dependant on resources available but also on site specific decisions.

Hedgerow management

The most frequent management activity is trimming which is used to neaten and to thicken and in situations where there is a health and safety risk for example alongside a road. Constant, long term trimming at the same height places a hedge under stress and can lead to deterioration in condition but sympathetic trimming will thicken a hedge by creating new points from which growth can 'tiller' out. Ideally, hedgerows should be trimmed no more frequently than every other year, or preferably every third year for slow growing thorn hedges. This is because some species only flower on second year growth, so annual cutting reduces the subsequent berry crop. A rotational cutting regime should be adopted so that no more than one third of the hedges within a site, farm or local area are trimmed within the same 12 months.

Hedge Laying is thought to be the best way to revitalise a hedge. Laying the hedge will make it stock proof and encourage it to grow vigorously. Hedge laying involves stems being cut most of the way through so that they can be bent over without damaging them. Depending on the style of hedge being laid, it is frequently strengthened with vertical stakes and horizontal binders. Over many years, the laid stems, called pleachers, tend to gradually die back. However, long before then, a new hedge will have grown up from the base of the existing hedge. Older hedgerows often contain a large amount of dead wood and plant litter within the structure of the hedge. Most of this dead wood is generated from the management practice of hedge laying, where the layed stems die off as the new shoots grow. This dead wood can provide a valuable habitat for many invertebrates and cover for small mammals.

Coppicing can be used when a hedge has many gaps, is thin at the bottom and the stems are inappropriately spaced for laying. The stems are cut off at ground level and the remaining stools protected from browsing. Both coppicing and laying may reduce nesting opportunities for some birds in the few years immediately after management and should therefore be carried out on a long rotation rather than managing large sections in one year.

The Natural England Environmental Stewardship scheme includes hedgerow management options that include the following requirements:

- Maintain hedgerows to a height and width customary to the local landscape, but not less than 1.5 m in height (except when laid or coppiced as part of a regular management cycle).
- Do not cultivate or apply fertilisers, manures or pesticides to land within 2m of the centre of the hedge.
- Maintain hedge-banks in a style that is customary to the area. Where a bank is present, measure the height of the hedgerow from the top of the bank.
- Cut each hedgerow no more than once every 2 calendar years. Do not cut all hedgerows managed under this option in the same year.
- Do not cut hedgerows during the bird breeding season (1 March to 31 August).
- Where already present, you may leave saplings to grow into hedgerow trees at intervals, for example four trees randomly spaced over 200 m, where this fits in with the local landscape character.
- Take care to minimise poaching by livestock and any channelling of surface run-off along the side of the hedgerow.

- Hedge laying and coppicing are permitted in a style customary to the local landscape, but should be completed before 1 March. However, in exceptional circumstances, work may continue up to 1 April, provided you conduct a survey to ensure that there are no nesting birds present.

Gapping up
Over time hedges can become gappy as a result of stock pushing their way through the hedge, roots being ploughed up, spray drift or just old age. Gaps should either be planted, which is an opportunity to increase the botanical diversity of the hedge and add trees to the hedge line, or can be left to regenerate naturally. Any new planting will need to be protected from stock, rabbits and deer for approximately 3-4 years. Initially the surrounding hedge may need cutting back to ensure the new plants receive sufficient light. Regular trimming in the early years of a hedgerow's life will help make it dense.

Hedgerow Planting
New hedgerows are usually best planted where they complement or fill the gaps in any existing hedgerow network or where they can help to re-create former historical hedgerow patterns, or join up other woody and scrub habitats. They can also be planted to screen development or to provide windbreaks. Generally, the more woody species a hedgerow has, the more valuable it will be for wildlife, so it is usually best to plant a mix of different plants. The Rotherham hedgerow survey identified that the majority of hedgerows are dominated by hawthorn, where hawthorn is not the dominant species field maple, blackthorn and holly are equally likely to be the most dominant species. Newly planted hedgerows should contain these four species as a minimum but hazel, dogwood, gueldar-rose, dog rose, ash, wych elm and oak can also be considered as additional species.

It is easier to plant hedgerow trees at the same time as the hedgerow rather than leaving it until later. Most native species of tree are suitable, including oak, ash, beech, field maple, wild cherry, hornbeam and holly. A strip of grassland at least 2m wide on either side of the newly planted hedgerow will greatly increased its value for wildlife, particularly if it contains a good range of herbs and other plants. New hedgerows may be vulnerable to damage by grazing stock, rabbit, hare or deer and so will need protection.

Ground flora / herbaceous vegetation
Hedge bases are an important habitat for all wildlife and a buffer zone of at least 2m should be maintained on both sides being cut no more frequently than every three years. Shrubs and trees have roots within the topsoil and continued ploughing, fencing or development close to the hedge can damage these roots and weaken or kill parts of the hedgerow so cutting the base vegetation, particularly in autumn, should be avoided where possible. Similarly spray drift from fields can have a detrimental effect on the shrubs and invertebrates living within it. Farmers in receipt of Environmental Stewardship payments should not cultivate, spray or fertilise within 2m of the centre line. Leaf litter should be allowed to accumulate at the base of a hedge as this provides an excellent habitat for a variety of invertebrates and nutrients for wildflowers. Although they are a food resource for a wide range of insects including the larvae of many of our favourite butterflies, large stands of stinging nettle, cleavers and docks may be indicative of excess soil enrichment. Eutrophication is one of the major causes of unfavourable condition in England's hedgerows.

Hedgerow Trees
Standard trees within the hedgerow should be encouraged but not in such numbers or to such a large size that they will shade out the hedgerow plants Where hedgerow trees are a feature of the hedge, it is possible to plan to replace mature or dead trees by allowing saplings of native species to be left untouched during trimming or by planting new trees. However, it is beneficial to retain old, dying and dead trees where they are not a hazard, as they support important insect communities and may be used by hole-nesting birds. Where a hedge includes several hedgerow trees, establish buffer strips at least 6 m wide on either side of the hedge to protect the roots from damage.

Objectives and Targets

The England Biodiversity Strategy (2011) includes the priority to establish more coherent and resilient ecological networks on land that safeguard ecosystem services for the benefit of wildlife and people. Hedgerows have a significant part to play in this in their own right and by creating physical links between sites and features of nature conservation value.

The UK habitat targets for hedgerows (2006) are summarised below:

1. Maintain the net extent of hedgerows across the UK
2. Maintain the overall number of individual hedgerow trees and the net number of isolated veteran trees
3. Ensure that hedgerows remain, on average, at least as rich in native woody species
4. Achieve favourable condition (see below) of 348,000km (50%) of hedgerows by 2015
5. Reverse the unfavourable condition of over-managed hedgerows across the UK by reducing the proportion of land managers who trim most of their hedges annually
6. Halt further decline in the condition of herbaceous hedgerow flora in Great Britain
7. Improve the condition of the hedgerow tree population by increasing numbers of young trees in Great Britain to 80,000 by 2015

Favourable Condition		
Attribute	**Threshold**	**Explanation**
Integrity / continuity	‹10% gaps	Estimate of total length of gaps present as a percentage of total hedgerow length or 30m section (as appropriate)
	No gaps ›5m wide	Excludes access points
	Base of canopy less than 0.5m above the ground for shrubby hedgerows	Estimate of 'average' height from base of the hedgerow to the lowest leafy growth
Size	Height at least 1m	Measure of 'average' height excluding the bank
	Width at least 1m	Measure of 'average' width at widest point of the hedgerow canopy, shoot tip to shoot tip
	Cross sectional area at least $3m^2$	Multiplication of the 'average' height and width for the hedgerow
Recently introduced species	Non-native herbaceous species (Max 10%)	Estimate of the cover of all non-native herbaceous species as a percentage of area of the 2m band extending from the centre line of the hedgerow
	Non-native woody species (Max 10%)	Estimate cover of all non-native woody species as percentage of area of vertical face of hedgerow
Nutrient enrichment	Less than 20% combined cover of nettles, cleavers and docks	Estimate of percentage cover of nettles, cleavers and docks within a 2m wide band alongside a hedgerow
Undisturbed ground & perennial herbaceous vegetation cover	Width of undisturbed ground must be at least 2m Width of perennial herbaceous vegetation must be at least 1m	Estimate average width of undisturbed (uncultivated) ground from the centre-line of the hedgerow Estimate average width of perennial herbaceous vegetation between the centre-line of the hedgerow and the adjacent disturbed ground

The Yorkshire & Humber Regional Biodiversity Strategy contains no specific objectives or targets for hedgerows; the following are more general objectives from the agricultural sector of the strategy that have relevance for hedgerows:

- Communicate more effectively with the farming community, particularly with regards to the scale and loss of biodiversity from agricultural land use, and about the need to work in partnership to restore the region's biodiversity resource and the ecosystem services it supports.

- Target resources, particularly environmental stewardship, to restoring and enhancing priority habitats and species, meeting the target to halt biodiversity loss by 2010 and halting the decline of farmland birds by 2020.
- Work with the farming community and other land managers to implement habitat restoration to create functional ecological networks at the strategic regional level. Develop and deliver biodiversity at a landscape scale through effective partnerships between the farming and biodiversity sectors.

In order to support the delivery of national and regional targets the following are the proposed objectives for the Rotherham Hedgerow Biodiversity Action Plan:

Conserve the existing hedgerow resource by:
- No loss of 'Important' hedgerows
- No net loss of species-rich hedgerow
- Undertake management actions that will achieve favourable condition for hedgerows that are in the control of Rotherham BAP partners
- Provide support and advice to other landowners to encourage suitable hedgerow management
- Consider the potential for traditional management training, especially hedge laying

Expand the existing hedgerow resource by:
- Encourage all new development to incorporate mixed native species hedgerows as boundary treatments
- Identify sites where new hedgerow planting or gapping up would increase the hedgerow resource
- Request that agreed hedgerow losses are mitigated by a minimum of 125% new hedgerow planting

Connect the hedgerow resource by:
- Identify opportunities to connect existing hedgerows with new planting
- Identify opportunities to link other habitats by the creation of hedgerows

Promote the special interest of hedgerows by:
- Undertaking hedgerow survey to maintain the Register of Important Hedgerows and to monitor change in condition
- Survey designated Local Wildlife Sites with hedgerows to identify those that meet the selection criteria
- Producing and sharing habitat management guidance and using this information within site-based management plans
- Collate historical information about Rotherham's hedgerow resource to support the identification of 'important' hedgerows

Rotherham Biodiversity Forum, and other partners, will prepare a prioritised programme of action that will guide delivery across Rotherham over the plan period, i.e. to 2020.

Appendix One - Rotherham Local Wildlife Sites with Hedgerow Interest 2011

Site	Site Name	H1	H2	2011 +ve Management
4	Chesterfield Canal	T	F	No
6	Rother Valley Country Park	T	T	No
8	Todwick Common	T	F	No
12	Dewidales Wood	T	F	No
13	Cross Lane Meadow	T	F	No
26	Dinnington Marsh	T	F	No
27	Brampton Common	T	F	No
32	Treeton Dyke	T	F	Yes
55	Maltby Commons & Woodlands	T	F	Yes
57	Greenland Plantation	T	F	No
68	Grange Park	T	F	Yes
75	New Stubbin Colliery & Stubbin Incline	T	F	No
76	Warren Vale Local Nature Reserve	T	F	No
80	Thrybergh Country Park	T	F	Yes
81	Ravenfield Park & Firsby Reservoirs	T	F	Yes
83	Back Lane	T	F	No
89	Hoober Plantation	T	F	Yes
99	Austen Park	T	F	No
105	St Martin's Church, Firbeck	T	F	No
108	Sheffield & South Yorkshire Navigation	T	F	No

Rotherham Local Wildlife Site Selection – Criteria Summary

(For full details please see Rotherham Local Wildlife Site System: Part 2 Site Selection Guidelines for Rotherham 2010)

Hedgerow Selection Guidelines

Hedgerows within an existing Local Wildlife Site boundary or hedgerows that originate from or link with a designated Local Wildlife Site may be assessed against the following selection guidelines to provide supplementary designation evidence.

H1 Any hedgerow that is at least 50metres in length originates from the pre- Enclosure Acts period and supports:

- 10 or more species of native trees and/or shrubs, or
- 8 or more native tree and shrubs species and has a score of 5 or more for non-woody species listed in Table 11, or
- Supports 5 or more veteran trees, or
- Ghost hedgerows associated with former ancient woodlands

H2 Any hedgerow that is at least 50meters in length has a minimum of five native woody species and which would qualify as an important hedgerow under the most recent Hedgerow Regulations.

Appendix Two - List of those England Priority Species that are associated with Hedgerows

(Showing where these have been recorded in Rotherham)

Scientific Name	Common name	Classification	Rotherham
Battarrea phalloides	Sandy Stilt Puffball	fungus (non lichenised)	
Geastrum corollinum	Weathered Earthstar	fungus (non lichenised)	
Hypocreopsis rhododendri	Hazel Gloves	fungus (non lichenised)	
Myriostoma coliforme	Pepper Pot	fungus (non lichenised)	
Anaptychia ciliaris subsp. ciliaris	a lichen	lichen	
Bacidia incompta	a lichen	lichen	
Caloplaca flavorubescens	a lichen	lichen	
Caloplaca luteoalba	Orange-Fruited Elm-lichen	lichen	
Caloplaca virescens	a lichen	lichen	
Cryptolechia carneolutea	a lichen	lichen	
Parmelina quercina	a lichen	lichen	
Physcia tribacioides	Southern grey physcia (a Lichen)	lichen	
Teloschistes flavicans	Golden Hair-lichen	lichen	
Usnea articulata	String-of-sausages Lichen	lichen	
Usnea florida	a lichen	lichen	Yes
Wadeana dendrographa	a lichen	lichen	
Wadeana minuta	a lichen	lichen	
Orthotrichum pallens	Pale Bristle-moss	bryophyte	
Rhynchostegium rotundifolium	Round-leaved Feather-moss	bryophyte	
Bombus humilis	Brown-banded Carder-bee	bee	
Bombus muscorum	Moss Carder-bee	bee	Yes
Bombus ruderarius	Red-shanked Carder-bee	bee	Yes
Bombus ruderatus	Large Garden Bumblebee	bee	
Bombus sylvarum	Shrill Carder Bee	bee	
Ampedus rufipennis	a click-beetle	beetle	
Cryptocephalus coryli	Hazel Pot Beetle	beetle	
Cryptocephalus sexpunctatus	Six-spotted Pot Beetle	beetle	
Lucanus cervus	Stag Beetle	beetle	
Malachius aeneus	Scarlet Malachite Beetle	beetle	
Orchestes testaceus	Alder Flea Weevil	beetle	
Satyrium w-album	White Letter Hairstreak	butterfly	Yes
Thecla betulae	Brown Hairstreak	butterfly	
Callicera spinolae	Golden Hoverfly	fly	
Aleucis distinctata	Sloe Carpet	moth	
Cosmia diffinis	White-spotted Pinion	moth	
Cossus cossus	Goat Moth	moth	Yes
Dicycla oo	Heart Moth	moth	
Grapholita pallifrontana	Liquorice Piercer	moth	
Orgyia recens	Scarce Vapourer	moth	
Pareulype berberata	Barberry Carpet	moth	
Polia bombycina	Pale Shining Brown	moth	
Carex depauperata	Starved Wood-sedge	vascular plant	
Fallopia dumetorum	Copse-bindweed	vascular plant	Yes
Fumaria purpurea	Purple Ramping-fumitory	vascular plant	
Melampyrum cristatum	Crested Cow-wheat	vascular plant	
Melittis melissophyllum	Bastard Balm	vascular plant	
Muscari neglectum	Grape-hyacinth	vascular plant	Yes
Pyrus cordata	Plymouth Pear	vascular plant	
Bufo bufo	Common Toad	amphibian	Yes
Triturus cristatus	Great Crested Newt	amphibian	Yes
Anthus trivialis trivialis	Tree Pipit	bird	Yes

Carduelis cabaret	Lesser Redpoll	bird	Yes
Carduelis cannabina autochthona/cannabina	Linnet	bird	Yes
Cuculus canorus canorus	Common Cuckoo	bird	Yes
Dendrocopos minor comminutus	Lesser Spotted Woodpecker	bird	
Emberiza cirlus	Cirl Bunting	bird	
Emberiza citrinella citrinella	Yellowhammer	bird	Yes
Emberiza schoeniclus schoeniclus	Reed Bunting	bird	Yes
Muscicapa striata striata	Spotted Flycatcher	bird	Yes
Parus montanus kleinschimdti	Willow Tit	bird	
Parus palustris palustris/dresseri	Marsh Tit	bird	
Passer domesticus domesticus	House Sparrow	bird	Yes
Passer montanus montanus	Tree Sparrow	bird	Yes
Perdix perdix perdix	Grey Partridge	bird	Yes
Prunella modularis occidentalis	Dunnock (Hedge Accentor)	bird	Yes
Pyrrhula pyrrhula pileata	Bullfinch	bird	Yes
Streptopelia turtur turtur	Turtle Dove	bird	Yes
Sturnus vulgaris vulgaris	Starling	bird	Yes
Turdus philomelos clarkei	Song Thrush	bird	Yes
Barbastella barbastellus	Barbastelle Bat	mammal	
Erinaceus europaeus	Hedgehog	mammal	Yes
Micromys minutus	Harvest Mouse	mammal	Yes
Muscardinus avellanarius	Dormouse	mammal	
Mustela putorius	Polecat	mammal	Yes
Myotis bechsteinii	Bechstein`s Bat	mammal	
Nyctalus noctula	Noctule	mammal	Yes
Pipistrellus pygmaeus	Soprano Pipistrelle	mammal	Yes
Plecotus auritus	Brown Long-eared bat	mammal	Yes
Rhinolophus ferrumequinum	Greater Horseshoe Bat	mammal	
Rhinolophus hipposideros	Lesser Horseshoe Bat	mammal	
Anguis fragilis	Slow-worm	reptile	Yes
Natrix natrix	Grass Snake	reptile	Yes
Zootoca vivipara	Common Lizard	reptile	Yes

Notes: