



Parish Biodiversity Audit for



Hatherleigh

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Introduction

A map of the key wildlife features and land use of the parish is shown in Appendix 1.

Hatherleigh is a large parish of 2,889 ha located approximately 20km east of Holsworthy, 10km north of Okehampton and 15km south of Great Torrington.

The river Torridge forms the northern boundary of the parish and this joins to the river Okement, which follows some of the eastern edge of the parish. The river Lew flows southwards through the parish from the river Torridge, and passes the western edge of the town. Several other tributaries pass through the parish including the Beckamoor Brook, the Merryland Stream, the Hatherleigh Moor Brook, the Pulworthy Brook and the Medland Brook.

The dominant land use of the parish is gently undulating agriculturally improved and poor semi-improved grassland, grazed by sheep and cattle. Some of the grassland is cut for hay or silage. Some of the lower lying areas are wet with a cover of rushes and could be quite wildlife-rich.

There are several small areas of coniferous plantation within the parish. The largest areas are Lewer Bottom Wood in the north-west of the parish, Furzeham Wood and Postdown Plantation in the south, and South Luggaton Wood in the east of the parish. These areas only account for approximately 50ha of land.

There are also areas of mixed plantation woodland as well as wet woodland and broadleaved woodland (approximately 300ha). Some of these are listed in the Ancient Woodland Inventory and may contain *Iowland mixed deciduous woodland*. The most significant of these areas are Bremridge Wood along the northern boundary of the parish, Smale Folly Wood to the east of Hatherleigh Moor and Great Velliford Copse just north of Smale Folly Wood. Many of the areas of woodland are 2ha or less in size.

Hatherleigh Moor occupies a large propotion of the parish (approximately 165ha) and is a large expanse of sheep-grazed semi-improved acidic grassland, with some areas that are possibly more unimproved. The moor is common land and several public footpaths cross it. The moor was said to have been given to the parish in the fourteenth centuary for grazing and to gather gorse for fuel. The Lower Moor is designated as a County Wildlife Site as it contains *Culm grassland* as well as a mosaic of other habitats including scrub, semi-improved grassland and *unimproved neutral grassland*.

There are two Sites of Special Scientific Interest and five County Wildlife Sites within the parish. These sites support habitats including *Culm grassland*, unimproved neutral grassland (*flower-rich meadows and pastures*), broadleaved woodland and *wet woodland*. Uncommon species such as the *marsh fritillary* butterfly, the *curlew* and the *barn owl* have been recorded from some of these sites.

Other biodiversity features within the parish include some fantastic road verges. These contain a diverse range of flora and support fragments of declining habitats such as *Culm grassland*, tall herb fen, *unimproved neutral grassland* and woodland flora.

There are many **species-rich hedges** within the parish as well as some interesting old hedgebanks with a diverse bank flora. Throughout the parish there are some nice mature oaks in hedgerows.

Many veteran in field trees are present on either side of the A386 north of the abbatoir, as well as south of Fishleigh House. These areas are visible on aerial photographs and may form probable *parkland and wood-pasture* habitat.

The dismantled railway running through the parish is an important wildlife corridor, containing semi-natural broadleaved woodland with lots of ferns and an attractive woodland flora.

Hatherleigh is an ancient market town nestled in the hills with views over Dartmoor National Park. The town has a lot of history and many features of interest including Hatherleigh Moor, the obelisk monument, the Belvedere, Hatherleigh Market and the famous sheep sculpture.

The town contains lots of old buildings constructed with cob and thatch and these may provide habitat for swallows, swifts and house martins.

Hatherleigh parish has a large number of public footpaths which allow people from the village of Hatherleigh access to the countryside, including Hatherleigh Moor. The Tarka Trail walking trail runs through parish.

Hatherleigh Parish falls within the North Devon Biosphere Reserve. Biosphere Reserves are places with world-class environments that are designated by the United Nations to promote and demonstrate a balanced relationship between people and nature. They are places where conservation and sustainable development go hand in hand.

http://www.northdevonbiosphere.org.uk/welcome-to-a-very-special-place/.

Most of the information used to create this report and land use map was secured from aerial photograph interpretation together with historical data collected with access permission. Occasionally vantage points within the parish would be used to help to map habitats and establish land use.

The fact that potential and confirmed wildlife-rich land is mapped does not imply any right of access and does not change any existing rights or use of the land.

Key species and habitats listed in the Devon and North Devon Biosphere Reserve Biodiversity Action Plans are indicated in **bold italic** text throughout the report.

Designated Sites

There are seven designated sites within Hatherleigh Parish – five County Wildlife Sites (CWS) and two Sites of Special Scientific Interest (SSSI). These sites support habitats including *Culm grassland*, unimproved neutral grassland (*flower-rich meadows and pastures*), broadleaved woodland and *wet woodland*. These sites cover 77ha which is just nearly 3% of the total area of the parish.

Site Name	Grid reference	Area (ha)	Habitat Description	BAP habitat	Status	Date of survey
Southmoor Farm*	SS564003	28.3	Herb-rich culm grassland, with marshland, scrub & woodland. Traditionally managed for hay; butterfly site.	Rhôs pasture & flower-rich meadows & pastures – Devon BAP, Culm grassland & enclosed farmland - ND Biosphere BAP	SSSI	1986 (2010 NE)
Hannaborough Quarry	SS529029	0.7	An important exposure of lamprophyric lava belonging to the poorly-exposed Exeter volcanic series.	N/a	SSSI	2009 (NE)
Hatherleigh Moor	SS550037	5.2	Mostly culm grassland with some woodland, unimproved grassland, semi- improved grassland and a small pond	Rhôs pasture & flower-rich meadows & pastures – Devon BAP, Culm grassland & enclosed farmland - ND Biosphere BAP	CWS	1991 & 2010
Hannaborough Moor	SS523027	6.5	Culm grassland with scrub	Rhôs pasture – Devon BAP, Culm grassland - ND Biosphere BAP	CWS	1990
Lock's Park Farm*	SS518019	24.6	Culm grassland, scrub & Sanguisorba officionalis	Rhôs pasture – Devon BAP, Culm grassland - ND Biosphere BAP	CWS	c1990
Waterhouse	SS542013	4.9	Culm grassland (M23 & M25) site with wet woodland (W7 & W1). <i>Marsh fritillary</i> recorded here	Rhôs pasture & alder/willow wet woodland – Devon BAP, Culm grassland & broadleaved woodland - ND Biosphere BAP	CWS	1991 & 2011
Mount Pleasant	SS564046	7.2	Culm grassland	Rhôs pasture – Devon BAP, Culm grassland - ND Biosphere BAP	CWS	1991

* Part in Hatherleigh and part in adjacent parish.

Sites of Special Scientific Interest (SSSI): these are notified by Natural England because of their plants, animals or geological features (the latter are geological SSSIs or gSSSI). Natural England needs to be consulted before any operations likely to damage the special interest are undertaken. SSSI is a statutory designation with legal implications.

County Wildlife Sites (CWS): these are sites of county importance for wildlife, designated on the basis of the habitat or the known presence of particular species. This is not a statutory designation like SSSIs, and does not have any legal status. The National Planning Policy framework requires local authorities to identify and map locally designated sites of biodiversity importance (such as County Wildlife Sites) as part of the Local Plan process and to draw up criteria based policies against which proposals for development affecting them will be judged. CWS recognition does not demand any particular actions on the part of the Landowner and does not give the public rights of access. However, it may increase eligibility for land management grants.

Wet woodland is a UK and Devon Biodiversity Action Plan habitat.

Wet woodland 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 hillside flushes, and in peaty hollows. These woodlands occur on a range of soil types including nutrient-rich mineral and acid, nutrient-poor organic ones.

Wet woodland supports a rich lichen flora as well as a rich invertebrate flora. Such an abundance of insect food attracts a rich assemblage of breeding birds including the uncommon willow tit. Wet woodland may also provide lying up areas for **otters** and suitable habitat for **dormice**.



Wet woodland

Flower-rich meadows and pastures (or unimproved grasslands) are a habitat of conservation concern in Devon and are listed on the **Devon and UK Biodiversity Action Plan**.

Unimproved neutral grassland habitat has undergone a huge decline in the 20th century, almost entirely due to changing agricultural practice. It is estimated that by 1984 in lowland England and Wales, semi-natural grassland had declined by 97% over the previous 50 years to approximately 0.2 million ha.

Unimproved grassland is often very flower-rich and as a result of this attracts an abundance of butterflies and other invertebrates. The rich insect life in turn attracts bats such as the **greater horseshoe bat** and birds such as the green woodpecker and skylark.



Unimproved grassland

Culm grassland is listed in the North Devon Biosphere Biodiversity Action Plan, Devon Biodiversity Action Plan (Rhôs pasture) and UK Biodiversity Action Plan (purple moor-grass and rush-pasture). Culm grassland is characterised by purple moor-grass, as well as sharp-flowered rush, and various flowering species such as devil's-bit scabious, meadow thistle, heath spotted orchid, water mint and round-leaved sundew. Culm grassland may support the rare *marsh fritillary* butterfly and narrow-bordered bee hawkmoth, as well as the *barn owl* and *curlew*.



Culm grassland



Culm grassland at Waterhouse County Wildlife Site

Other habitats (identified from field visit and/or aerial photograph interpretation)

Species-rich hedges

Species rich hedges are listed on the North Devon Biosphere Reserve Biodiversity Action Plan, Devon Biodiversity Action Plan and UK Biodiversity Action Plan.

Species rich hedges are a wildlife feature of Hatherleigh parish. During the parish visit we recorded a 'species-rich' hedge as being one that has eight or more woody species in a 30 metre length.

Hedgerows are often an essential corridor for the movement of wildlife and may support many animals and plants. Berries provide an important food source for birds, and flowers and are an important nectar source for butterflies.

Hedgerows and hedgebanks represent continuity as features in the landscape and provide a significant wildlife resource at a time when the fields themselves are being more intensively used.

Most of the hedges that occur in Hatherleigh parish are 'clayland hedges' created during the 18th and 19th centuries <u>http://www.devon.gov.uk/devons-distinctive-hedges-sept-11.pdf</u> with oak (some veteran), blackthorn, hawthorn, hazel and ash being the main trees but also holly, field rose, birch, willow and beech were recorded.

An old beech hedgebank with holly, willow, hazel, honeysuckle and woodland flora including wild garlic was found near Stone Farm.



Hedgebank near Stone Farm.

To the East of Hannaborough there is a further interesting hedgebank with oak, ash, birch and hazel present.



Hedgebank east of Hannaborough

A species rich hedge was found to the south of Cross Park. Species recorded include oak, ash, hazel, hawthorn, blackthorn, greater stitchwort, vetches and bluebells.

A pretty hegebank with lots of ferns, mosses and bank flora was found to the south of Town Cleave.



Hedgebank to the south of Town Cleave.

Along Sanctuary Lane there are tall hedge banks with a diverse bank flora. Species include greater stitchwort, umbellifers, cleavers, bluebells and red campion.



Hedgebanks along Sanctuary Lane

Further hedgebanks with attractive flora were found near Risdon's Fishleigh and close to Upcott Deer Farm.

Cemetery/ churchyard

Hatherleigh parish church (St. John the Baptist) has a substantial area of very well manicured grassland. One Yew tree was present and some swallows were seen on the day of the visit.

Churchyards can often hold *unimproved flower-rich grassland* which has been protected from chemicals and ploughing, and can provide habitat for a wide range of species including bats, birds, insects, reptiles and mammals.

Having areas designated for less frequent mowing can allow longer grasses and stands of wild flowers to flourish. This not only looks attractive but it and can also provide cover and food sources for birds and insects.



Hatherleigh parish church

Disused railway line

The dismantled railway line running through the parish is a very good wildlife corridor. The railway line runs from Shallowford in the west of the parish to Hele Bridge in the north of the parish. It then travels northwards to Meeth (becoming the Tarka Trail cycle route) and south-west to just beyond Highampton. The railway line contains an extensive area of semi-natural habitats including semi-natural broadleaved woodland and scrub. It is likely to be an important corridor for bats.



Disused railway line near Lewer Bridge

Recreation areas and public open space

Hatherleigh parish has a large number of public footpaths which allow people from the village of Hatherleigh access to the countryside, including Hatherleigh Moor. The Tarka Trail walking route runs through parish and a Ruby Country walk also passes through the parish http://www.devon.gov.uk/walk26.pdf

Hatherleigh Moor occupies a large propotion of the parish (approximately 165ha) and is a large expanse of sheep-grazed semi-improved acidic grassland, with some areas that are possibly more unimproved. Many small streams and drains dissect the moor and surrounding some of these are areas of scrub, bracken and probable unimproved grassland. These wet areas may also support fragments of *Culm grassland* which is still present on the 'Lower Moor'.

The moor is common land and several public footpaths cross it. The moor was said to have been given to the parish in the fourteenth centuary for grazing and to gather gorse for fuel. The parish householders were known as 'potboilers' and the grazing and fuel gathering rights still exist today. The moor was cultivated during the Second World War and then re-seeded afterwards.



Hatherleigh Moor

The Lower Moor is designated as a County Wildlife Site as it contains *Culm grassland* as well as a mosaic of other habitats including scrub, semiimproved grassland and *unimproved neutral grassland*.



Hatherleigh Moor (Lower Moor) County Wildlife Site

To the north of the moor at its highest point there is an obelisk monument to one of Hatherleigh's heros, Lieutenant Colonel William Morris, who led his his regiment in the Charge of the Light Brigade.

Further information on Hatherleigh can be found here: http://www.hatherleigh.net/visiting.asp

Allotments and gardens

Gardens are a haven for wildlife and can provide links to other areas of wildlife habitat. Unfortunately DBRC does not hold any records from gardens in the parish, but there are records of several species of bat from buildings across the parish. These include a bat sp, brown long-eared bat, common pipistrelle, Natterer's bat and soprano pipistrelle.

The town contains lots of old buildings constructed with cob and thatch and these may provide habitat for swallows, swifts and house martins.

Roadside verges

Within the parish, there are some nice wide road verges where grassland species have been allowed to flower rather then cut early. These verges provide excellent habitat for butterflies, bush crickets and other invertebrates as well as small mammals. This in turn provides food for birds and bats.

Special Verge Sites are roadside verges where uncommon flora and fauna are present. These verges are protected from damaging activities, and grass cutting is limited to specific periods to avoid the destruction of attractive stands of wildflowers. For more information about Special Verges see Devon County Council's website <u>http://www.devon.gov.uk/vergesbooklet.pdf</u>

Along the lane to the north of Passaford there are pretty road verges with meadowsweet, greater stitchwort, vetches, speedwell, red campion and various ferns present.



Verges to the north of Passaford

Along Scadsbury Lane, south of Lydbridge there are wide road verges and a hedge bank with abundant flora. Species recorded include red campion, bugle, meadowsweet, hard fern, speedwell, umbellifers, primrose, ribwort plantain, greater stitchwort, hazel and willow.



Wide verges along Scadsbury Lane, south of Lydbridge

Near Lewer Farm there is a wide road verge dominated by oaks with a hazel understorey, and an old hedge bank with attractive bank flora.



Road verge near Lewer Farm

Near Bremridge Farm a species rich road verge was found with many species indicative of *unimproved grassland or Culm grassland*. These include: meadowsweet, devil's-bit scabious, bugle, betony, vetches, orchids, ribwort plantain, silverweed and sneezewort.



Species rich road verge near Bremridge Farm

A further species rich road verge with similar species to the verge above was found close to Runnon Moor.

Veteran trees

Several mature oaks are present in the hedgerows along the A3072 south of Hatherleigh. Some of these may be veterans.



Veteran oaks along A3072

Many veteran in field trees are present either side of the A386 north of the abbatoir, as well as south of Fishleigh House. These form probable *parkland and wood-pasture* habitat and are visible on aerial photos as well as Google maps and Google streetview. <u>http://goo.gl/maps/GUxmp</u>

English Nature (now Natural England) have defined veteran trees as: "trees that are of interest biologically, culturally or aesthetically because of their age, size or condition". In relation to oak it has been taken that trees with a diameter of more than:

- 1.0m are potentially interesting
- 1.5m are valuable in terms of conservation
- 2.00m are truly ancient.

Veteran trees will be at least as big as these measurements:

• 1 metre - Hawthorn, blackthorn

- 2.5 metres Field maple, rowan, yew, birch, holly
- 3 metres Oak, ash, scot's pine, alder
- 4.5 metres Sycamore, limes, chestnuts, elms, poplars, beech, willows, pines, non-native trees.

It has been estimated that Britain may be home to around 80% of Europe's ancient trees. Veteran trees are large old trees found in wood-pasture and parkland, but also in a number of other locations: ancient yews in churchyards; mature oaks in hedgerows; black poplars along stream-sides; and many noble trees in ancient woodlands.

Ancient trees support particularly rich assemblages of invertebrates, fungi, mosses and lichens. Several species of bat may use hollow trees as roosting sites and birds such as tree creepers and woodpeckers feed on the insects living in the bark. Insects such as stag beetles and hornets are associated with old trees.

Parklands and wood pasture are habitats listed on the **Devon Biodiversity Action Plan** and the **North Devon Biosphere Reserve Biodiversity Action Plan.** The parklands and wood pastures of Devon are ancient places, some of which date back to mediaeval times or even further.

The main interest of parklands and wood pastures are the trees - often several centuries old and mainly oak, but also beech, ash and other long-lived species. It is thought that the oak supports more species of organism that any other tree in Britain. The parkland trees may provide habitat for invertebrates, lichens, and mosses and fungi. Dead and fallen limbs of trees are the habitat to a specialised invertebrate fauna which feed on decaying wood.

Mammals, such as bats may roost in old trees and a variety of birds use parklands and wood pastures for nesting and feeding.



Parkland and wood-pasture

Orchards

Five possible *traditional orchards* have been identified from looking at aerial photographs. These are at Pynda (x2), Seldon, Deckport Farm and Arnold's Fishleigh.

Traditional orchards are listed on the North Devon Biosphere Reserve Biodiversity Action Plan and Devon Biodiversity Action Plan.

Traditional orchards have great cultural and landscape importance and can be really valuable habitats for a wide range of species from fungi and lichens, through to insects and other invertebrates, to birds and mammals. As there is no herbicide use in most old orchards, the range of species will be even greater.

The trees themselves play host to a variety of mosses, lichens and often mistletoe. The old trees can be fantastic for hole-nesting birds. The large amount of deadwood in the trees provides an important habitat for insects and fungi including some very rare ones. For example, the Noble Chafer, *Gnorimus nobilis*, is a **UK Biodiversity Action Plan** priority beetle associated with old orchards.

Fruit and insects available in old orchards, provide food for birds and mammals. Birds such as woodpeckers (green and great-spotted), nuthatches,

tree creepers and tits may be seen on tree trunks and hollow branches. Fieldfares, starlings, redwings, thrushes, blackbirds and jays will be feeding on the fruit (on or off the tree). Orchards are also home to a number of declining bird species, including tree sparrow and spotted flycatcher.

If it has escaped sprays and fertilisers, and particularly if traditional management such as a hay cut or grazing has been kept up, the ground beneath can be covered with wild flowers such as cowslips, daisies, knapweed and trefoils.

Losses of traditional orchards have been severe in recent decades, with estimates ranging from 40 per cent to 95 per cent loss. Orchards have been grubbed up to make way for other crops or for urban development.



Traditional orchard

Unconfirmed Wildlife Sites

There are 28 Unconfirmed Wildlife Sites in Hatherleigh parish. These are sites identified as having possible interest but not fully surveyed. Some of these sites will be areas of significant wildlife interest. Several other areas of potential wildlife-rich land have been identified from looking at aerial photographs. These include: ancient woodland, *lowland mixed deciduous woodland*, possible *unimproved neutral grassland* and *Culm grassland*.

Site Name	Grid	Area	Site Description
	Reference	(ha)	•
Becka Field	SS566033	1.9	Semi-improved neutral grassland
Beckamoor Marsh	SS554027	1.0	Marshy Grassland
Bremridge Wood	SS250060	9.2	Ancient semi-natural woodland
Crosspark Wood	SS565033	2.8	Ancient semi-natural woodland
Dally's Copse	SS550009	1.7	Possible Culm grassland
Deckport Wood	SS559049	4.7	Semi-natural broadleaved woodland
Essworthy Meadows	SS543021	17.2	Series of fields supporting possible Culm grassland and broadleaved woodland with thick hedges
Great Copse	SS571032	4.5	Ancient semi-natural woodland
Great Veriford Copse	SS566050	2.4	Ancient semi-natural woodland
Grudgeworthy Meadows	SS568042	25.1	Semi-improved neutral grassland
Hannaborough Moor (S)	SS524025	17.3	Broadleaved woodland, conifer
			plantation, possible remnant Culm
			grassland and semi-improved grassland
Hatherleigh Moor	SS555040	165.4	Semi-improved acid grassland
Langabear	SS556011	9.3	Semi-improved neutral grassland & scrub
Langabear Moor	SS554005	10.9	Possible Culm grassland and
			broadleaved woodland
Langabear Patch	SS563008	0.8	Semi-improved neutral grassland
Langabear Plantation	SS559018	1.9	Semi-natural broadleaved woodland
New England Marsh	SS577032	1.0	Marshy Grassland
North & South Langston Wood	SS588035	5.0	Semi-natural broadleaved woodland
North Luggaton Fields		10.0	Possible Culm grassland
Pennylands Wood	SS525024	2.5	Ancient semi-natural woodland
Pressland Fields	SS557022	19.7	Semi-improved neutral grassland
Seldon Copse	SS580048	1.5	Semi-natural broadleaved woodland
Seldon Fields	SS572040	33.7	Marshy grassland
Seldon Fields (N)	SS576047	3.2	Semi-improved neutral grassland
Smale Folly Wood	SS564043	12.8	Ancient semi-natural woodland
Strawbridge	SS534049	2.1	Woodland culm grassland
Woodhall Woods	SS583037	1.9	Semi-natural broadleaved woodland
Woodhouse Wood	SS554051	6.3	Ancient semi-natural woodland

Some of these Unconfirmed Wildlife Sites are listed on the Ancient Woodland Inventory and may contain *Iowland mixed deciduous woodland*. The most significant of these areas are Bremridge Wood along the northern boundary of the parish, Smale Folly Wood to the east of Hatherleigh Moor and Great Velliford Copse just north of Smale Folly Wood. These woodlands are likely to be of County Wildlife Site standard if they were surveyed.

Ancient Woodland Inventory (AWI) Ancient Woodland is a term applied to woodlands which have existed from at least Medieval times to the present day without ever having been cleared for uses other than wood or timber production. A convenient date used to separate ancient and secondary woodland is about the year 1600. In special circumstances semi-natural woods of post-1600 but pre-1900 origin are also included. The Devon Ancient Woodland Inventory was prepared in 1986 by the Nature Conservancy Council. There are two types of ancient woodland, both of which should be

treated equally in terms of the protection afforded to ancient woodland in Planning Policy Statement note nine (PPS9):

- Ancient semi-natural woodland (ASNW): where the stands are composed predominantly of trees and shrubs native to the site that do not obviously originate from planting. The stands may have been managed by coppicing or pollarding in the past, or the tree and shrub layer may have grown up by natural regeneration.
- Plantations on ancient woodland sites (or PAWS, also known as ancient replanted woodland): areas of ancient woodland where the former native tree cover has been felled and replaced by planted stock, most commonly of a species not native to the site. These will include conifers such as Norway spruce or Corsican pine, but also broadleaves such as sycamore or sweet chestnut.

Lowland mixed deciduous woodland is on the North Devon Biosphere Biodiversity Action Plan and the UK Biodiversity Action Plan.

Lowland mixed deciduous woodland includes woodland growing on the full range of soil conditions, from very acidic to base-rich, and takes in most seminatural woodland in southern and eastern England, and in parts of lowland Wales and Scotland. It occurs largely within enclosed landscapes, usually on sites with well-defined boundaries, at relatively low altitudes, although altitude is not a defining feature.

Many are ancient woods and they include the classic examples of ancient woodland studied by Rackham (1980) and Peterken (1981) in East Anglia and the East Midlands. The woods tend to be small, less than 20 ha. Often there is evidence of past coppicing, particularly on moderately acid to base-rich soils; on very acid sands the type may be represented by former wood-pastures of oak and birch.

There is great variety in the species composition of the canopy layer and the ground flora. *Quercus robur* is generally the commoner oak (although *Quercus petraea* may be abundant locally) and may occur with virtually all combinations of other locally native tree species. Lowland mixed deciduous woodland may form a mosaic with other woodland types, including patches of beech woodlands and small wet areas. Rides and edges may grade into grassland and scrub types.

There are no precise data on the total extent of lowland mixed deciduous woodland in the UK, but in the late 1980s the Nature Conservancy Council estimated the total extent of this type to be about 250,000ha. There is however no doubt that the area of this priority type on ancient woodland sites has declined in area by clearance, overgrazing and replanting with non-native species, by about 30-40% over the last 50 years.



Lowland mixed deciduous woodland

Important Species

The DBRC database was checked to see what legally protected, locally notable or noteworthy species are known to be present in and around Hatherleigh parish. These are listed in Appendix 2 along with any species recorded on the day.

Birds

Jay, swallow and swift were recorded during the parish visit.

There are many records of birds recorded from the Fishleigh Estate, north of Hatherleigh town. The farm at the Fishleigh estate has previously hosted Springwatch from 2003 to 2007 and there is a wealth of wildlife present.

Species recorded from the estate include **Barn owl**, bullfinch, cuckoo, kestrel, linnet, starling, cormorant, grey partridge, house sparrow, lesser spotted woodpecker, marsh tit, pied flycatcher, reed bunting, skylark, song thrush, spotted flycatcher, stock dove and yellowhammer.

Hatherleigh Moor County Wildlife Site is also an important site for birds with snipe, *curlew*, kingfisher, *barn owl*, meadow pipit, Northern wheatear, skylark and willow warbler recorded.

Other bird species recorded from Hatherleigh parish incude cuckoo from woods south of Hatherleigh, swifts over Hatherleigh town, Kingfisher at Crocker's Hele and willow tit from Mount Pleasant and Waterhouse County Wildlife sites.

The *barn owl* is listed on the **Devon Biodiversity Action Plan**.

The barn owl has undergone a major decline in the last century due to changes in agricultural practice, as well as loss of nesting sites such as old barns and hollow trees.

The barn owl requires areas of open, rough grassland where its preferred food of mice and voles are found. It is largely nocturnal and feeds almost exclusively on small mammals, particularly voles, but also takes shrews, mice, rats and very occasionally, birds.

Encouragingly, barn owl numbers are now on the increase in much of Devon.

The *curlew* is a large wader found on heaths and moors as well as estuaries and the coast. It is listed on the **Devon Biodiversity Action Plan** because of the loss of breeding birds over the last 30-40 years. This is mainly to do with the fragmentation of suitable habitats due to agricultural change, and the fact that curlew are quite specific in their preferred breeding habitats. Curlews breed from mid February on moors and heaths and then return to the coasts from July onwards after breeding, where they overwinter. According to the 2011 Devon Bird Report there was only confirmed breeding at one site and pairs present at two others. The maximum winter site count was for the Exe Estuary at 1,234 birds in October.

Plants

Most of the plant records are from designated sites within the parish.

Hatherleigh Moor County Wildlife Site:

- Corky-Fruited Water-Dropwort Devon Notable 3 species
- Fringed Water-Lily Devon Notable 1 species, Devon Rarity and Nationally Scarce
- Great Burnet Devon Notable 3 species
- o Whorled Caraway Devon Notable 2 species
- Wavy St John's-wort Devon Notable 2 species and Nationally Scarce
- Primrose

Waterhouse County Wildlife Site:

- o Great Burnet Devon Notable species
- Petty Whin Devon Notable 3 species
- o Wavy St John's-wort Devon Notable 2 species and Nationally Scarce
- o **Primrose**

Mount Pleasant County Wildlife Site:

- Great Burnet Devon Notable 3 species
- o **Primrose**

Hannaborough Moor County Wildlife Site:

• Petty Whin – Devon Notable 3 species

Lower Bottom Wood, Nr Hatherleigh:

- o Lesser butterfly orchid Devon Notable 3 species, UK BAP species
- Devon rarity: Native species recorded from 3 or fewer localities within Devon
- Devon notable 1: 1-25 2km squares (tetrads) in the Atlas of Devon Flora, 1984
- Devon notable 2: 26-50 2km squares (tetrads) in the Atlas of Devon Flora, 1984
- Devon notable 3: Selected species recorded from over 50 2km squares (tetrads) in the Atlas of Devon Flora, 1984
- Nationally scarce: 15-100 10km squares in the Atlas of British Flora, 1962

The *Primrose* is listed on the **Devon Biodiversity Action Plan** as it is intended to help to raise public awareness of the need to conserve commonplace and characteristic elements of Devon's countryside. The primrose is not rare in Devon, but it may act as an indicator species to the health of Devon's environment, and by conserving the primrose, we may help to conserve some of the habitats in which it is found. These include woodlands, hedges, road verges and churchyards.



Mammals

Mammal records from the parish include badger, red deer, *otter* and *dormouse*.

Sadly, most of the badger records are road traffic accidents from the A3072 & A386.

There are many **otter** records from the parish. These include records from the river Okement, the river Lew at Hatherleigh Bridge and Lewer Bridge, the river Torridge at Hele Bridge and the Hatherleigh Moor Brook.

The *otter* is listed on the **Devon Biodiversity Action Plan** and the **North Devon Biosphere Reserve BAP**. Formerly widespread throughout the UK, the otter underwent a rapid decline in numbers from the 1950s to 1970s and was effectively lost from midland and south-eastern counties of England by the 1980s. Populations remain in Wales, south-west England and much of Scotland, where sea loch and coastal colonies comprise one of the largest populations in Europe. There is also a significant population of otters in Northern Ireland. The decline now appears to have halted and sightings are being reported in former habitats.

Devon has an internationally important otter population and otters are now found on most watercourses and wetlands throughout the County. Otters are even now recolonising areas where they were thought to have been lost during the 60's and 70's. The main serious threat to otters today is from road kills, with many animals sadly reported dead each year.



Photo: Andrew Taylor

Dormice have been recorded from a hedge near Bremridge Wood and red deer from Waterhouse County Wildlife Site.

The *dormouse* is listed on the **Devon Biodiversity Action Plan** and the **North Devon Biosphere Reserve BAP**. Nationally, it has experienced a marked contraction in range in recent decades, and has become extinct in up to seven counties where it occurred in the last century, representing about half of its former range.

In Devon, the dormouse appears to be holding its own, and the County is now a major stronghold of the species. However, no detailed quantification of population change has been possible, due to lack of comparable data over time. Having said this, indirect evidence, from the losses of hedgerow length and declines in quality of hedgerows and woodlands that have occurred in the county over the past few decades, indicates that dormice have probably declined in a similar fashion.



Bats

Several species of bat have been recorded from buildings in the parish. These include a bat sp, brown long-eared bat, common pipistrelle, Natterer's bat and soprano pipistrelle.

All species of British bat are protected under UK law and International law. This makes it illegal to intentionally kill, injure or take a bat, or to damage, obstruct or destroy any place that a bat uses for shelter or protection.

The pipistrelle is Britain's smallest and most common bat. They are the most common species in towns. Their flight appears fast and jerky as they dodge about pursuing small insects, which are caught and eaten in flight. A single pipistrelle may consume up to 3000 insects in a night.

Buildings are the most favoured roost sites and more than half of known roosts are in buildings less than 30 years old. Pipistrelles prefer to roost in very confined spaces around the outside of the building, typical sites being behind hanging tiles, weather boarding, soffit and barge or eaves boarding, between roofing felt and roof tiles or in cavity walls. Pipistrelles rarely enter roof spaces except in the more stable, well-established large colonies found particularly in older buildings.



Photo: Pipistrelle, Hugh Clark

Invertebrates

There are several butterfly records for the parish. These include:

Brown Hairstreak:

- The Fishleigh Estate
- Near Gribbleford Bridge
- Hatherleigh Moor County Wildlife Site

Grizzled Skipper:

• The Fishleigh Estate

Purple Hairstreak:

- Gribbleford Bridge
- Hannaborough Moor County Wildlife Site

Wood White:

o The Fishleigh Estate

Marsh Fritillary:

- Waterhouse County Wildlife Site
- o Southmoor Farm Site of Special Scientific Interest

The *marsh fritillary* is listed on the **Devon and UK Biodiversity Action Plans.** They are very habitat specific: they breed in two main habitats, damp neutral or acid grasslands (Rhôs pastures) and dry chalk and limestone grasslands. They are dependent on the presence of their larval food plant, devil's-bit scabious.

The UK is a major European stronghold for the species, but even here it has declined substantially over the last 150 years. In Britain, its range has reduced by over 62%, and it has recently disappeared from most of eastern England and eastern Scotland. It is still quite widespread in parts of south-west England and Wales, but colonies are estimated to be disappearing at a rate of well over 10% per decade. Colonies are often small and prone to extinction, so extensive networks of habitat patches which permit re-colonisation are essential to their long term survival.



Photo: Gary Pilkington

Freshwater pearl mussels were once found throughout the River Torridge. DBRC holds a record from the River Torridge, near Meeth, Okehampton along the northern edge of Hatherleigh parish. This was of a single empty shell but

the last systematic survey (in 2002) failed to find living freshwater pearl mussels this far upstream.

The freshwater pearl mussel is one of Europe's ten most threatened species. The river Torridge catchment holds the most southerly of only 13 populations in England. Sadly, the majority of these freshwater pearl mussel populations are under severe threat of extinction. The Environment Agency is working with the Northern Devon NIA project, riparian owners and other partners to reverse the decline in Devon.

The name 'pearl mussel' is misleading: mussels rarely contain pearls and where they do they are small. Illegal pearl mussel fishing still happens in Scotland where mussels occur in much higher numbers than here in Devon. Nevertheless it is important to maintain confidentiality about the location of the remaining Torridge populations of this legally protected species.



Reptiles and Amphibians

The only record for the parish is for a grass snake from west of Basset's Bridge (south of Hatherleigh town). It is likely that frogs, toads, newts and lizards are also present in the parish.

Biodiversity links

- The Devon BAP can be viewed at <u>www.devon.gov.uk/biodiversity</u> This site also contains links to other nature conservation issues relevant to Devon, such as information on hedges. If you do not have access to the internet and require paper copies of relevant sections of the Devon BAP please contact Devon County Council's Biodiversity Officer on 01392 382804.
- Details of biodiversity planning in the South West region can be viewed at <u>http://www.biodiversitysouthwest.org.uk/</u>
- National Action Plans can be viewed at <u>http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/pro</u> <u>tectandmanage/ukactionplan.aspx</u> This site also contains useful background information on UK biodiversity action planning.
- Information on the North Devon Biosphere Reserve Biodiversity Action Plan can be viewed at <u>http://www.northdevonbiosphere.org.uk/wildlife/</u>

Links between the wildlife of Hatherleigh parish and the Devon and North Devon Biosphere Reserve BAPs:

Hatherleigh wildlife feature	Brief description of feature	Link with the Devon Biodiversity Action Plan (BAP) and North Devon Biosphere Reserve BAP
Hedgerows	Species-rich and ancient hedgerows throughout the parish.	Species rich hedges Habitat Action plan and North Devon Biosphere Reserve BAP Primrose Species Action Plan Dormouse Species Action Plan
Culm grassland CWS and SSSIs	Southmoor Farm SSSI, Hatherleigh Moor, Hannaborough Moor, Lock's Park Farm, Mount Pleasant & Waterhouse CWS, Areas throughout the parish identified as potential Culm grassland sites.	Rhos pasture Habitat Action plan Otter Species Action plan. Marsh fritillary Species Action Plan Barn Owl species Action Plan Culm grassland -North Devon Biosphere Reserve BAP
Possible areas of semi- improved and unimproved grassland	Small areas of semi-improved grassland, which have been protected form agricultural improvement. Species- rich road verges containing unimproved neutral grassland.	Flower-rich meadows and pastures Habitat Action Plan Enclosed farmland -North Devon Biosphere Reserve BAP (Brown Hare Species Action Plan) Barn Owl Species Action Plan Primrose Species Action Plan
Rivers, streams and open water	Rivers Torridge, Okement and Lew and Beckamoor Brook, Merryland Stream, Hatherleigh Moor Brook, Pulworthy Brook and Medland Brook.	Otter Species Action plan Freshwater pearl mussel Species Action Plan Rivers and streams -North Devon Biosphere Reserve BAP Rivers, streams, floodplains & fluvial processes Habitat Action Plan
Woodlands and copses	Ancient semi-natural woodlands and secondary with some ancient woodland indicators. Some areas of wet woodland.	Primrose Species Action Plan Dormouse Species Action Plan Wet Woodland Habitat Action Plan Broadleaved woodland -North Devon Biosphere Reserve BAP
Hatherleigh Town and hamlets	Town with old buildings, churchyards, gardens and stone walls.	Cities, towns and villages Habitat Action Plan Primrose Species Action Plan (Greater Horseshoe Bat Species Action Plan) Barn Owl Species Action Plan Towns and villages -North Devon Biosphere Reserve BAP

Possible veteran in field trees	Areas of possible parkland with veteran trees either side of the A386 and near the Fishleigh Estate.	Parkland and Wood-pasture Habitat Action Plan (Greater Horseshoe Bat Species Action Plan) Barn Owl Species Action Plan
Orchards	Orchards identified from aerial photos. Some may be managed traditionally.	Traditional orchards-North Devon Biosphere Reserve BAP

*Species and habitats in brackets have not been recorded from the parish View the Devon Biodiversity Action Plan at <u>www.devon.gov.uk/biodiversity</u> and the North Devon Biosphere Reserve Biodiversity Action plan http://www.northdevonbiosphere.org.uk/wildlife/

Some Ideas for Local Action

This section of the report is provided by Devon County Council (contact: nature@devon.gov.uk).

A major step to knowing what you can do for your local wildlife and geology is to know what you have already got. This report will help you in this, but it is just a start. Ultimately, the protection and enhancement of the local natural environment requires the interest and enthusiasm of the local community.

There follows some initial ideas for local nature conservation action. Many of them will directly help to achieve the objectives of the habitat and species action plans contained in the Devon Biodiversity Action Plan.

It is by no means an exhaustive list. As a community, you may have many more ideas for action that you would like to take forward in the coming years.

1 Further survey:

This report is just a beginning. Carrying out further survey within your area will help build a better picture of the wildlife present, and of the opportunities for enhancement. Gaining a better understanding of the resource is usually a key objective of the Devon BAP's habitat and species action plans.

Specific features to survey in Hatherleigh might include species-rich hedgerows and flower-rich road verges. The last two actions would directly contribute to the *Species-rich hedgerow Action Plan* and the *Flower-rich meadows and pastures Action Plan*.

One example of survey work that might usefully be undertaken would be to produce a hedgerow appraisal for your local area. Comparing the current distribution of hedges against boundary lines shown on old maps will give a clue as to how this important resource has changed over recent years. It may also highlight opportunities for restoring hedges in your area. It might also be possible to assess the condition of hedges and this may, in turn, give some ideas about improving their future management to benefit wildlife.

Survey work could be undertaken as a community group or in liaison with conservation groups active in the area.

Help to build up a picture of the state of Devon's environment by sending your wildlife records to the Devon Biodiversity Records Centre <u>http://www.dbrc.org.uk/tell-us-about-your-sighting/</u> where they can be properly collated.

2 Influence the management of Public Open Space:

Creating areas of more species-rich grassland will help to reduce the isolation of the remaining fragments of traditionally managed agricultural land, contributing to the *Flower-rich Meadows and Pastures Action Plan*.

Churchyards have often received less intensive management than the surrounding land and can provide good opportunities for wildlife.

Planting up areas that are currently of little wildlife interest with new copses of native trees and shrubs will also help to attract wildlife. Suitable sites might include unused areas of playing fields, for example.

3 Build relationships with local landowners:

Encourage the adoption of more wildlife-friendly land management. For example, hedges which are cut only every other year will provide an autumn and winter source of nuts and berries for birds and small mammals (and can save the landowner money in management costs). The improved management of hedgerows is a key objective of the Species-rich Hedges Action Plan. If the owner is willing, why not get involved with practical management, such as traditional hedge laying or pond restoration? Devon County Council's website has some very good resources for hedge management and ideas for community involvement

http://www.devon.gov.uk/index/environmentplanning/natural_environment/bio diversity/devon_hedges.htm

4 Adopt a road verge:

Many verges can have a significant value for wildlife because they have escaped the intensive management of the surrounding farmland. Ensuring such verges are managed for their wildlife is a very positive step, again contributing to the *Flower-rich Meadows and Pastures Action Plan.*

There are, of course, obvious health and safety implications to roadside management. It is an action that would need to be undertaken in close liaison with the relevant highways authority (generally, this is the Highways Agency for motorways and trunk roads, and Devon County Council for all other roads).

5 Wildlife gardening:

Green up your garden! Collectively the gardens of Hatherleigh represent a significant area that could be used to benefit wildlife. Large or small, you can turn your garden (or a part of it!) into a haven for wildlife. A very good source of information on wildlife gardening is the Devon Wildlife Trust web site: http://www.devonwildlifetrust.org/wildlife-gardening/

6 Contact the North Devon Biosphere Reserve:

The North Devon Biosphere reserve has a number of initiatives running to enable communities within the North Devon Biosphere Reserve to improve wildlife. On their website <u>http://www.northdevonbiosphere.org.uk/join-us-on-our-journey/</u> you can get ideas of how to improve nature in your area including tips on wildlife gardening and details of community initiatives in your area.

7 Japanese Knotweed:

Not something to cherish, but it can't be ignored! Unfortunately Japanese Knotweed is present in several locations in Hatheleigh. Introduced into Britain by the Victorians, Japanese Knotweed is a native of Japan, north China, Korea and Taiwan. It flourishes in Britain's mild and fertile environment and has no natural biological enemies here. Consequently, it is very invasive and can overrun large areas, replacing our native flora. It is a serious pest which can be so vigorous as to cause significant damage to buildings and roads. It is also a difficult plant to eradicate.

For these reasons Japanese Knotweed is listed under the Wildlife and Countryside Act 1981 as a plant that is not to be planted or otherwise introduced into the wild. In addition, all parts of the plant are considered as controlled waste under the Waste Regulations.



Japanese Knotweed

Fortunately, a great deal of advice (including an Environment Agency Code of Practice) is available on the Devon Knotweed Forum's web pages. You are recommended to view these at:

http://www.devon.gov.uk/biodiversity/japanese knotweed

8 Himalayan Balsam:

Himalayan or Indian balsam (*Impatiens glandulifera*) is another very invasive plant. A relative of the busy Lizzie, it is known by a wide variety of common names, including Indian balsam, jumping jack and policeman's helmet. It was

introduced to Britain in 1839, but escaped from gardens and rapidly colonised riverbanks and areas of damp ground.

Himalayan balsam grows in dense stands that suppress the growth of native grasses and other flora. In the autumn, the plants die back, leaving the banks bare of vegetation and vulnerable to erosion. It is sometimes seen in gardens, either uninvited or grown deliberately, but care must be taken to ensure that it does not escape into the wild.

It is a tall, robust, annual producing clusters of purplish pink (or rarely white) helmet-shaped flowers. These are followed by seed pods that open explosively when ripe, shooting their seeds up to 7m (22ft) away. Each plant can produce up to 800 seeds.

Devon Biodiversity Records Centre does not hold any records of Himalayan Balsam in Hatherleigh.

A useful leaflet on Himalayan Balsam can be viewed by following this link:

http://www.ceh.ac.uk/sci_programmes/documents/HimalayanBalsam.pdf

9 Useful sources of further information:

- Northern Devon Nature Improvement Team <u>www.devonwildlifetrust.org</u> (Tel: 01409 221823)
- Devon Biodiversity Records Centre <u>www.dbrc.org.uk/</u> (Tel: 01392 274128)
- Devon Wildlife Trust: <u>www.devonwildlifetrust.org</u> (Tel:01392 279244)
- o Devon Birdwatching and Preservation Society: <u>www.devonbirds.org</u>
- Natural England: <u>www.naturalengland.org.uk</u> (Tel: 01392 889770)
- Plantlife: <u>www.plantlife.org.uk</u>
- o RSPB: <u>www.rspb.org.uk</u>
- o The Woodland Trust: <u>www.woodland-trust.org.uk</u>
- o Butterfly Conservation http://www.butterfly-conservation.org/
- o Environment Agency http://www.environment-agency.gov.uk/
- o Devon Hedge Group http://www.devon.gov.uk/devon_hedge_group
- Forestry Commission http://www.forestry.gov.uk/

- o Orchards Live http://www.orchardslive.org.uk/
- o Awards for All: <u>www.awardsforall.org.uk</u>
- North Devon Biosphere Reserve <u>http://www.northdevonbiosphere.org.uk/welcome-to-a-very-special-place/</u>
- o British Trust for Conservation Volunteers: www.btcv.org.uk
- o British Dragonfly Society: <u>www.dragonflysoc.org.uk</u>
- o Devon Bat Group: <u>www.dbg.me.uk</u>
- o Devon Mammal Group: www.devonmammalgroup.org
- The Ancient Tree Forum <u>http://frontpage.woodland-trust.org.uk/ancient-tree-forum/</u>
- In addition, Devon County Council has produced a Community Wildlife Toolkit which is available via the DCC web site (www.devon.gov.uk/biodiversity). This toolkit aims to provide practical advice on management to encourage wildlife and, in particular, provides a central point from which to access the large amount of advice that is already available from a huge range of other organisations. In addition to management advice, the toolkit provides guidance on seeking funding for project work.