



**Whitchurch & Ganarew**  
Group Parish Council



**Whitchurch & Ganarew**  
Neighbourhood Plan

## **Preliminary Evidence Base**

### **The Natural Environment**

<b><i>Contents:</i></b>	<b><i>Page</i></b>
1. Green Infrastructure	2
1.1. Overview of Green Infrastructure	2
1.2 Green Infrastructure in residential areas	3
1.3 Green infrastructure linkages between parishes	3
1.4 Designated sites relating to the natural environment	4
2. Biodiversity	7
3. Landscape	8
4. Agricultural Land	9
5. Key Issues affecting the Natural Environment	11
6. Sources of information for Evidence Report	12
 Attachments	
i. Sites of Special Scientific Interest	13
ii. Nature Reserves in Whitchurch and Ganarew Parish	15
iii. Biodiversity Summary - notable and protected species	16

*Note: Water and flooding Issues are considered in a separate report.*

***February 2016. Neighbourhood Plan Steering Group.***

# 1. Green Infrastructure

## 1.1 Overview of green infrastructure

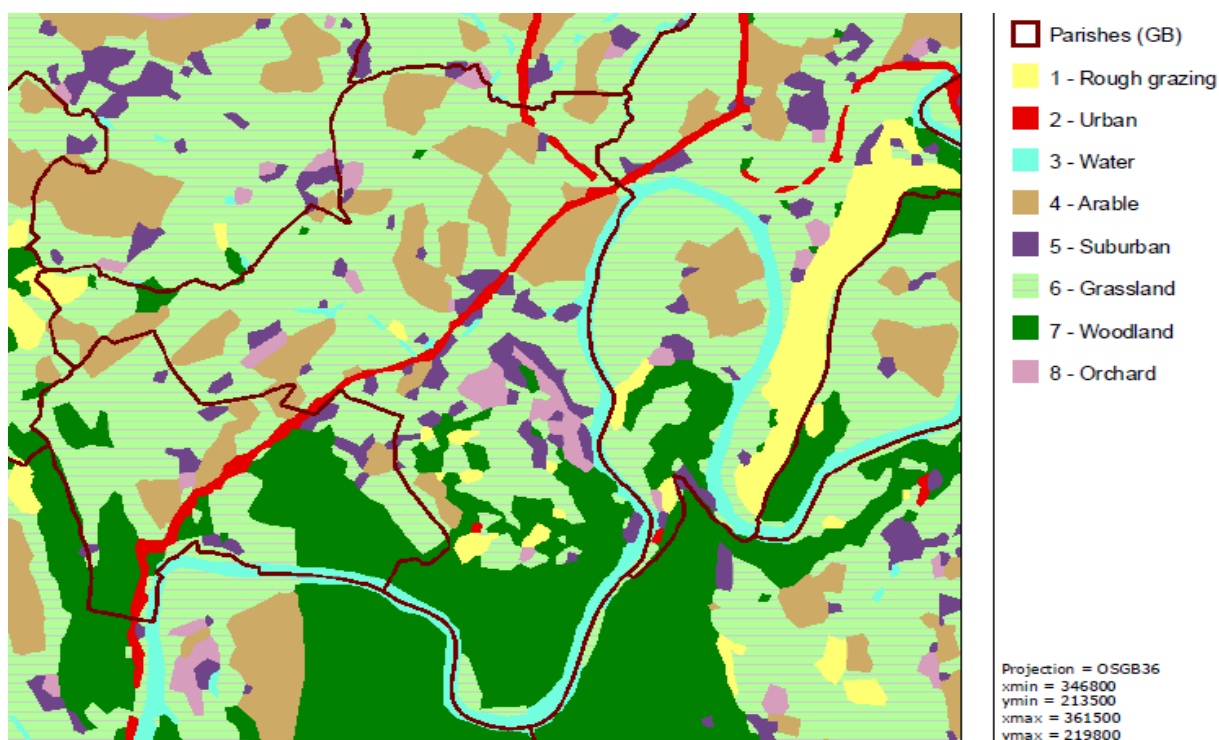
WAG is a rural parish with only around 5% of its land area occupied by residential buildings, civic amenities, business premises and transport infrastructure. An estimated 50-60% of its land is used for agriculture and livestock and around 40% is woodland and commercial forestry.

The parish is bisected on a NE/SW axis by the busy dual carriage way of the A40 which also follows a geographical split between the lower rolling countryside of the central Herefordshire plain and the higher hills of the Doward. The River Wye forms the east and south boundary.

The countryside to the north and west of the A40 is mixed farmland with a mosaic of medium sized fields bounded by hedgerows with some large boundary trees and some areas of woodland at the western edge of the parish. This area has some footpaths, byways and quiet lanes but no open access land way from the village envelope.

The Countryside to the south and east of the A40 is a hilly well wooded landscape around Symonds Yat and the Doward there is an extensive network of footpaths and byways and Forestry Commission land which has open access to its woodlands for walkers only. Public access is also allowed on several nature reserves owned by Hereford Wildlife Trust and The Woodland Trust. There are several small and little used areas of common land.

Figure 5.1.1 Land Use in WAG from Defra's website [magic.gov](http://magic.gov).



## **1.2 Green infrastructure in residential areas.**

Whitchurch village has some areas of wide road verges some of which are tended and planted with garden bulbs and others are occasionally cut and left for natural vegetation to establish. The brook flows the length of the village is mainly inaccessible, canalised and in many parts underground. A narrow strip of woodland goes along the sides of this stream and covers the bank of the exit road and bridge over the A40, helping to buffer the sound and visual impact of the A40.

On Old Monmouth Road a flat area of land below the bank has been converted to a small park with playing and seating facilities. On the other side of the road there is a small green on the corner of Grange Park with one bench and several trees which offers residents some open space.

Most properties in Whitchurch have good sized gardens with many mature trees and beyond there are some fields and hedgerows which connect into the village.

Between Whitchurch and Symonds Yat there is a school with a playing field and a small but separate woodland zone used for outdoor teaching activities.

Symonds Yat is largely comprised of well spaced private properties many of which are on wooded sloping terrain with a network of narrow roads, byways and footpaths. There are few wide verges and no useable communal space. A riverside footpath runs along the parish edge from Wyastone Court through Biblins and the Wye Gorge, Symonds Yat (west), St Dubricius Church and on towards Goodrich.

The Doward with its footpaths, nature reserves and woodlands is a well used resource for the residents of Whitchurch and Symonds Yat and the many visitors to the area.

Most other housing in the parish is in scattered settlements which have little or no specific green infrastructure of their own but benefit from close access to very pleasant countryside.

## **1.3 Green infrastructure linkages between parishes**

To the south and east the footpaths and trails go beyond the River Wye connecting with High Meadow Woods (Reddings and Marion Enclosure) and Mailscot Wood using a suspension footbridge at Biblins or two hand-pulled ferries operated by local inns. This gives foot or bicycle connection to the edge of Monmouth, Coleford, Berry Hill and Staunton.

Along the river, the Wye Valley Walk goes through Monmouth where it can connect with Offa's Dyke Path and on to the Seven Estuary at Chepstow.

Connection to Goodrich and Llangrove parishes is limited to small roads and rough footpaths mainly along field edges.

## **1.4 Designated sites relating to the Natural Environment**

### ***Statutory Designations***

#### **i) Area of Outstanding Natural Beauty (AONB)**

Around 85% of land in WAG is in the Wye Valley AONB. This takes in all the area south of the A40 and also includes Whitchurch and beyond to the boundary with Goodrich. The countryside around Ganarew is not included in the designation but is no less attractive.

#### **ii) Sites of Special Scientific Interest (SSSI)**

Around 10% of the total area of WAG is designated as an SSSI in three separate area designations:

### 1. Upper Wye Gorge SSSI

Designated for the quality and biodiversity of its ancient woodland habitats.  
The last condition assessment states it is 'Unfavourable but recovering'.

### 2. The River Wye (Lower Wye) SSSI

Designated as an important wildlife corridor, an essential migration route, and a key breeding area for many nationally and internationally important species.  
The last condition assessment states it is 'Unfavourable but recovering'.

### 3. Great Doward SSSIs)

Two small areas of former limestone quarry workings with species-rich grassland containing some notable flora and invertebrates but now in unfavourable condition.

See attachment i) for more details on each site.

### **iii) Special Areas of Conservation (SAC)**

The Upper Wye Gorge SSSI and the The River Wye (Lower Wye) SSSI have been given the higher designation as 'Special Areas of Conservation' (SAC) under article 3 of the Habitats Directive which requires the establishment of a pan-European network of important high-quality conservation sites.

The River Wye is also designated as a salmonid fishery under the EC Freshwater Fish Directive 78/659/EC.

### ***Non-statutory Designations***

#### **i) Nature Reserves**

An estimated 8% of the land cover of WAG comprises of nature reserves totalling 109ha which belong to two charitable Trusts. These are Herefordshire Wildlife Trust who own or manage 24.8ha in 7 small reserves on Great Doward and the Woodland Trust who manage 84.3ha in three reserves the largest of which is on Little Doward. Some private land in the parish is also managed for wildlife conservation. See details about nature reserves in the parish in attachment 2.

No areas in the parish are designated National Nature Reserves although over the river to the south WAG adjoins Lady Park Wood National Nature Reserve in Monmouthshire.

#### **ii) Special Wildlife Sites (SWS)**

There are three zones registered under this County Council managed scheme (also known as 'Local Wildlife Sites') which although not statutory does still have to be taken into consideration in any development planning proposal. The zones are:

SO42/22          Garren Brook SWS

The register states: "Much of this brook has a good, wooded margin of alder and willow. The associated plants include Common Meadow-rue, Water-crowfoot and some interesting bryophytes"

SO51/02          The Doward and Huntsham Hill SWS

Within a broad area a few small additional fields and woodland areas on the Doward and near Wyastone Leys are listed as wildlife sites. (see HBRC map.)

SO53/06          River Wye SWS

This mirrors the SSSI designation of the river.

There are also no Local Nature Reserves (i.e. community owned or managed nature reserves) in WAG although a number of places could warrant future inclusion. There are also no 'roadside verge nature reserves'. Some potentially interesting areas on private land have either not been surveyed or information about them is not in the public domain.

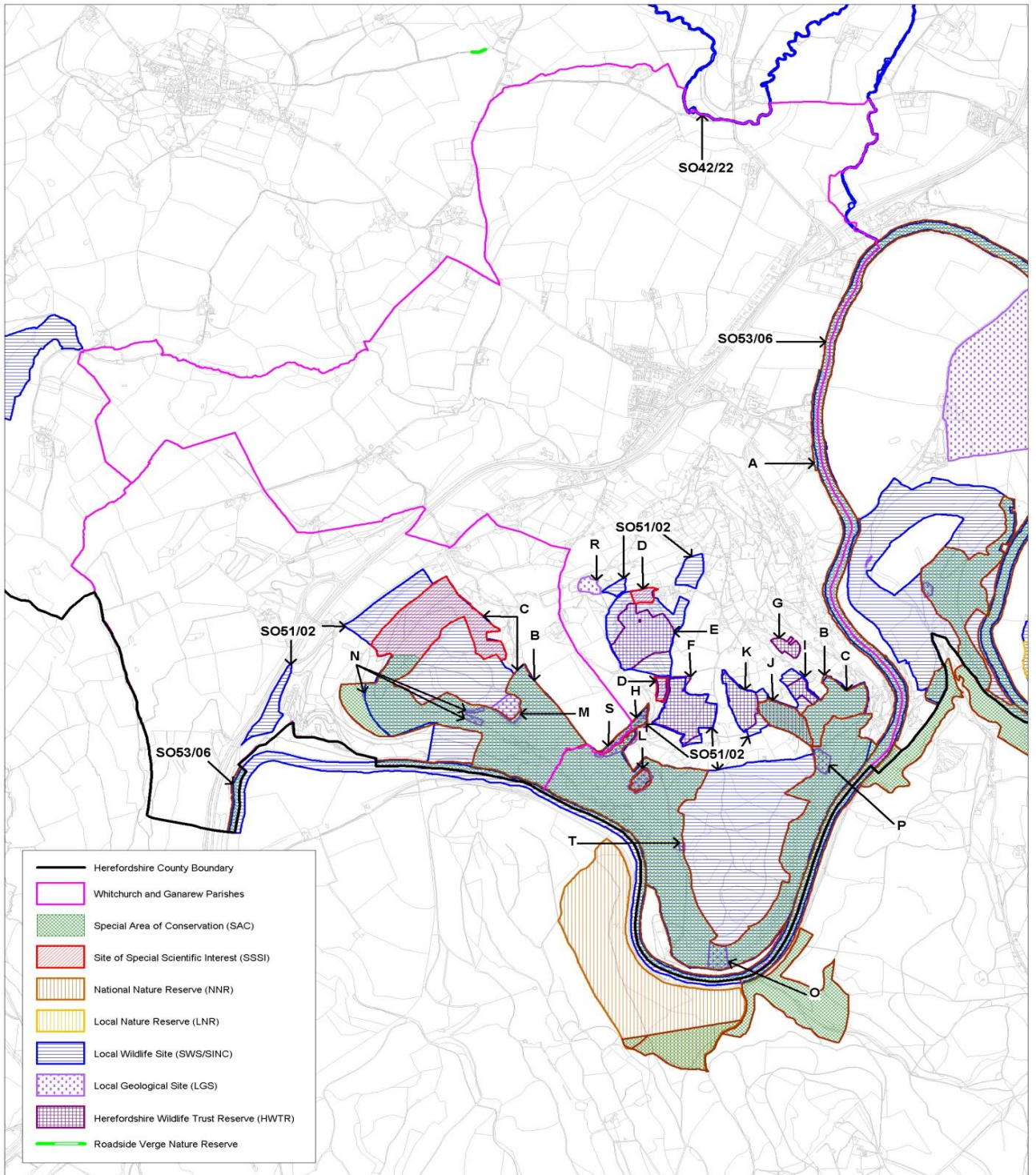
### **iii) Geodiversity**

There are seven Local Geological Sites (formerly known as Regionally Important Geological Sites – or RIGS) in the parish. These are non-statutory sites that are designated by the Herefordshire and Worcestershire Earth Heritage Trust as being of sites of geo-diversity importance. By designating a Local Geological Site, the features identified become a material consideration in any future development. These sites are:

- Little Doward Hillside 1 - Devonian, Upper ORS, Quartz Conglomerate Formation
- Little Doward Hillside 2 - Carboniferous, Lower Limestone Shales
- Little Doward Hillside 3 - Carboniferous, Lower Dolomite and Crease Limestone
- Limestone Pavement, Little Doward - Quaternary, Carboniferous, Crease Limestone Formation
- Quarry north of King Arthur's Cave - Carboniferous, Crease Limestone and Whitehead Limestone
- King Arthur's Cave - Quaternary, Carboniferous, Crease Limestone Formation
- Lordswood Quarry - Carboniferous, Carboniferous Limestone Series
- The Biblins - Carboniferous and Quaternary

King Arthurs Cave and Merlin's Cave and several other sites on the Doward are important for Pleistocene palaeontology with many important fossil finds in the 19<sup>th</sup> Century.

fig 1.1. Herefordshire Biological Records site designations map.



Map showing designated sites within Whitchurch and Ganarew Parishes

SCALE 1:18,000

© Crown copyright and database rights (2016) Ordnance Survey (100024168)



Herefordshire Archive and Records Centre  
 Fir Tree Lane  
 Rotherwas  
 Hereford  
 HR2 6LA

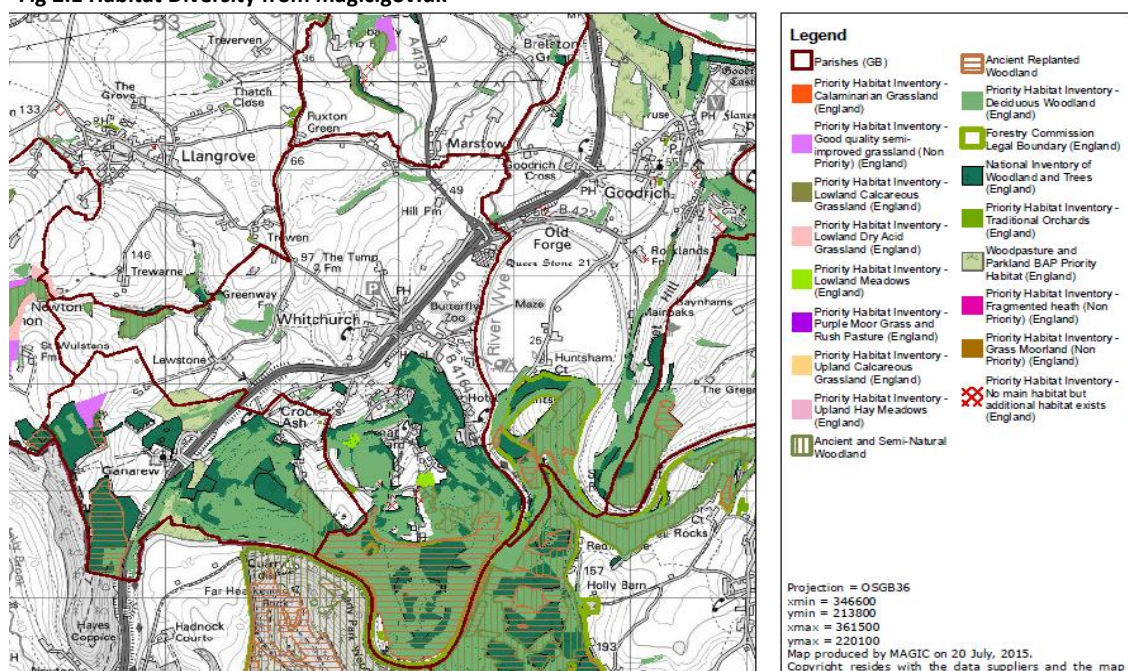
Telephone: (01432) 261538  
 Email: hbr@herefordshire.gov.uk

## 2. Biodiversity

As is evident by the amount of land under statutory designations or in nature reserves, this parish is exceptional and even of national importance for its biodiversity. This particularly relates to its semi-natural woodlands, its patches of species-rich calcareous grassland and the aquatic and riparian habitats of the River Wye and its feeder streams such as the Garren Brook.

As the habitat diversity map shows, the river, woodland and open areas in the south of the parish are richest in biodiversity and the part of least interest is the farmland to the north of Whitchurch although other intensively grazed or cropped fields on sandstone soils also support very little wildlife.

Fig 2.1 Habitat Diversity from magic.gov.uk



Properly validated records exist for around 2,000 native species of plants, animals and fungi that have been found in the parish within the last 20 years. These are:

Plants: 350+ species of vascular plants and 120+ species of Bryophytes.

Vertebrates: 96 species of birds, 35 mammals, 4 reptiles, 4 amphibians and 20+ fish.

Invertebrates: Records exist for over 1,000 species

Fungi and Lichens: Over 200 species are recorded.

Although these numbers may be high compared to many other parishes, they still represent only a small proportion of what actually exists in the parish. Our knowledge is constrained by a lack of expertise in recording difficult to identify groups, poor reporting and archiving of data as well as limited access to some private sites.

Amongst the national rarities here are two species of Whitebeam trees (*Sorbus herefordensis* and *S. greenii*) that have never been recorded anywhere else in the UK and so are endemic to the Doward. A considerable number of other wildlife species occur here at their only known site in Herefordshire.

In addition to the main habitats in the parish there is also an area of heathland in Lords Wood, which is in need for restoration, and a privately owned area of wetland near Daff-y-Nant. There are also

several small areas of species-rich limestone grassland which is a nationally important and highly threatened habitat.

The habitats and the species in the parish make a major contribution to the county and the national Biodiversity Action Plan (see Building Biodiversity into LDF2009 and BAP 2005). It also supports a significant number of 37 'actions' as listed on Defra's Biodiversity Action Reporting System.

Further details on biodiversity and a review of notable and protected species are available in attachment iii.

### **3. Landscape**

Most of the parish is under the statutory designation of an Area of Outstanding Natural Beauty. Although its beauty may appear self evident there is a need provide a methodical explanation of the quality of the landscape to justify the added protection it gets.

The Unitary Development Plan of Herefordshire Council includes a set of guiding principles informed by strategic policies covering the protection, restoration and enhancement of its natural and historical assets. To do this it has six specific policies which relate to their commissioned work reported as 'Landscape Character Assessment - Supplementary Planning Guidance 2004' (updated 2009).

In this assessment WAG is deemed to comprise of three landscape types; Principal Settled Farmland (NW of A40), Forest Smallholdings and Dwelling (Doward), Principal Wooded Hills (Symonds Yat). It also looks out to the east on some Riverside Meadows and to the north to Sandstone Farmlands. See the reference document for details.

Landscape is determined by the underlying geology and subsequent geomorphological and anthropogenic changes that have taken place over more recent timescales. The geology of Whitchurch and Ganarew is essentially a continuation of the western edge of the Forest of Dean limestone and sandstone rock formations. The southern and eastern parish boundaries are formed by the River Wye, which has cut through the southerly dipping rocks, resulting in The Doward now being one of the few places in the area where you can see the complete geological succession from the late Early Devonian to the Early Carboniferous, a time span of roughly 55 million years. North of Little and Great Doward the older Lower Devonian rocks, mainly sandstones form the largely agricultural land with characteristic red soils in the north of the parish. The flatter land bordering the River Wye is overlain by more recent Quaternary estuarine alluvium.

The landscape of the River Wye and its gorge near Symonds Yat became a nationally important destination for 18<sup>th</sup> and 19<sup>th</sup> century tourism following the writings Reverent William Gilpin following his tour in 1770 which led to the 'picturesque' movement in the popular culture of that time.

Surveys by The Woodland Trust under the Ancient Tree Hunt project have identified a large number of ancient and veteran trees across WAG. Some old coppiced beech stools may be the largest in the country.

## 4. Agricultural Land

Around 70% of land in the parish is used for some sort of agricultural purpose whether livestock production, arable crops, horticulture (including glasshouses) or horse paddocks. There are over 10 commercial farming enterprises. The exact land usages have changed over time as economics of production has altered. Recent arable crops have included wheat, barley, oil seed rape and maize and now livestock production on temporary or permanent grassland dominates.

Defra's classification of the quality of land for agricultural production puts most of the areas NW of the A40 as grade 3 (good to moderate) with some patches being grade 2 (very good). The Doward is grade 4 (poor).

The whole parish apart from higher land on the Doward is designated a Nitrate Vulnerable Zone by Defra regarding ground water and the area around Garren Brook is sensitive regarding surface waters.

A significant area receives some level financial support from the government under the latest agri-environment scheme. This is mostly under a basic 'entry level' stewardship north west of the A40 with some plots on the Doward receiving 'higher level' Stewardship support.

Fig 4.1 WAG Agricultural Stewardship schemes northwest of A40

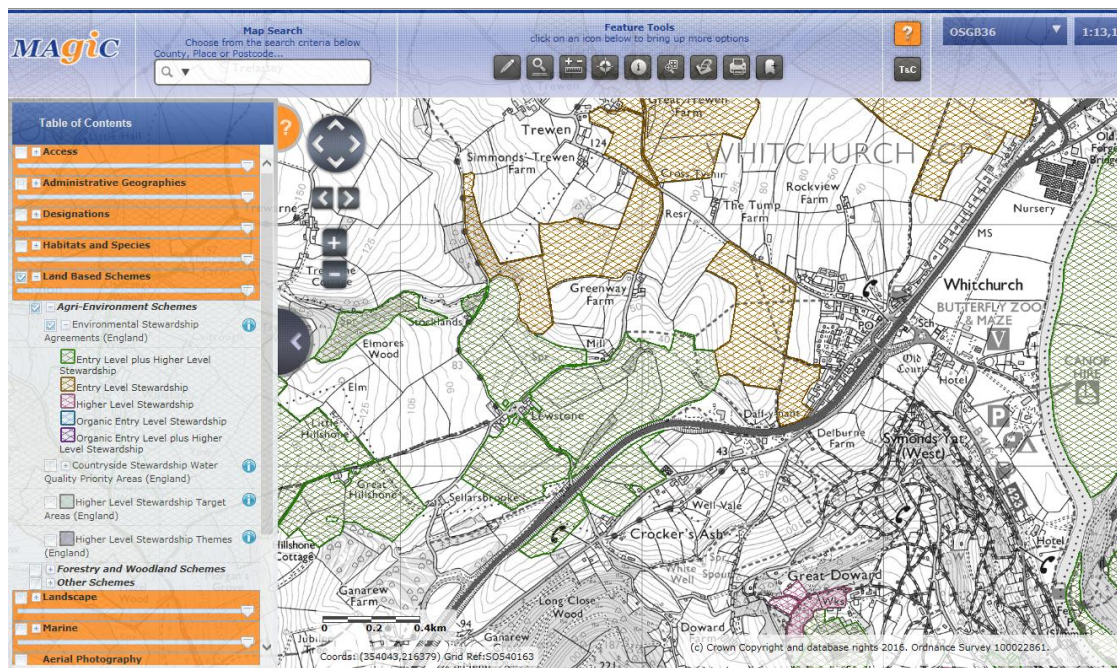
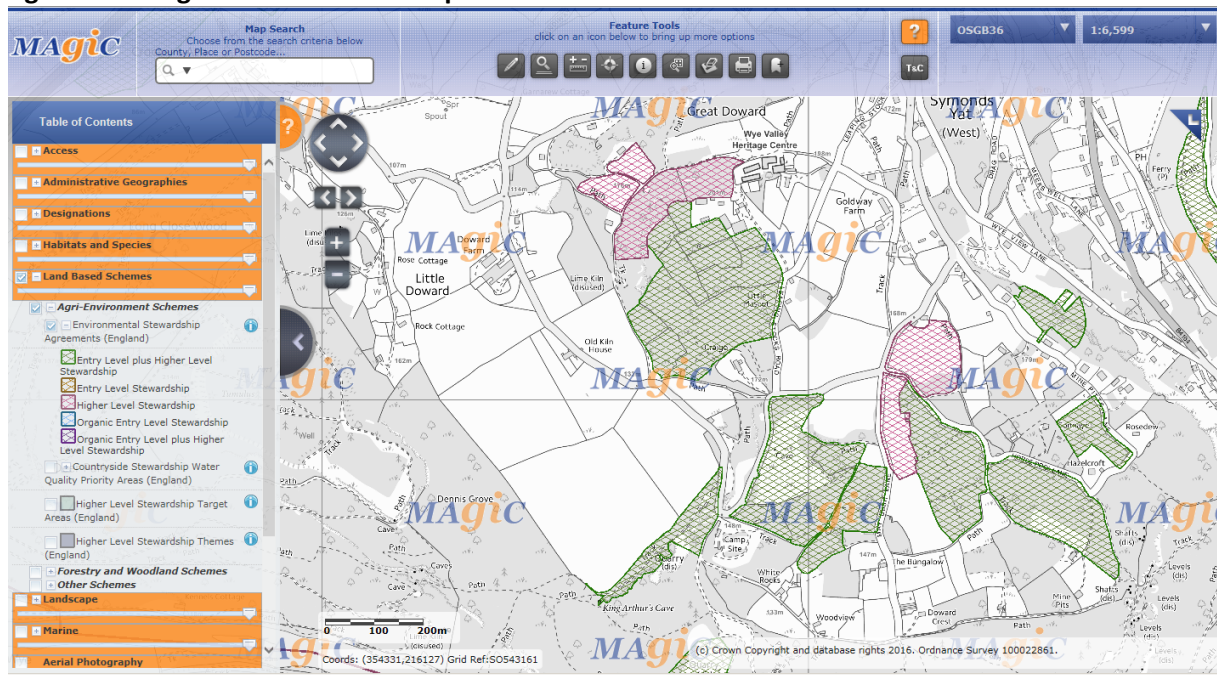


Fig 4.2 WAG Agricultural Stewardship schemes on the Doward



## 5. Key Issues affecting the natural environment

### General issues for the villages and resident

- Flood damage risk to certain properties and travel/access difficulties especially in Whitchurch caused by upstream water load in River Wye and/or extreme weather events and/or blocked culverts. (for water see separate report)
- Decline in quality and quantity of wildlife-rich countryside and green infrastructure available for residents and visitors to enjoy.
- How to balance the quiet enjoyment of the countryside with growing numbers of residents and visitors, and their recreational needs and infrastructure.
- Negative visual impacts by inappropriate developments and litter and waste disposal issues.

### General Issues for Biodiversity

- Increasing numbers of residents and visitors causing ever greater disturbance to sensitive areas causing damage to habitats and loss of species.
- Building developments causing loss and fragmentation of wildlife habitats.
- Agricultural intensification using practices that cause direct loss of species diversity.
- Poor woodland management such as a lack of coppicing reducing biodiversity.
- Excessive deer numbers (and now wild boar) with too much grazing/browsing /rooting causing loss of ground flora and middle storey.
- Invasive plants and animals outcompeting native species and spreading potentially serious diseases such as Ash Dieback and Sudden Oak Disease.
- Loss of species-rich wild flower meadows and verges to agricultural, commercial and recreational developments.
- Pollution of water courses from septic tanks, slurries, sewage, overflow drainage and accidental spillage. Includes lack of enforcement of statutory guidance.

### Specific issues affecting SACs

#### a) River Wye (Lower Wye) SAC

- Sediment loading through soil erosion from agriculture and construction.
- Overflow drainage of slurry from farming and road/housing.
- High phosphates and nitrates from land use practices
- Loss of bank-side flora and fauna through invasive species (e.g. Himalayan Balsam, Mink )
- Lack of buffer zones in some areas

#### b) Wye Valley Woodlands SAC

- Destruction of flora and fauna by volume of foot/bike and horse traffic.
- Damage to flora by deer and wild boar populations
- Invasive non-indigenous species (mainly evergreen trees)
- Scrub encroachment and poor management of calcareous grassland
- Uncontrolled collection of natural resources on public land (wood, plants, fungi etc)

### KEY ISSUES FOR WAG NEIGHBOURHOOD PLAN

- Balancing the attractive rural nature of the parish with a growing population and economy and the associated recreational and infrastructure requirements.
- Avoiding the negative visual and polluting impacts of excessive or inappropriate development on greenfield or brownfield sites and protecting the AONB status.
- Ensuring all future development does not cause net damage to the natural environment and protects or enhances the biodiversity and bioabundance of the SACs and other protected areas in the parish.

## 6. Sources of information for Evidence Report

### Key Reports

Herefordshire Core Strategy, Pre-submission document 2011-2031

Green Infrastructure Strategy Herefordshire - Local Development Framework Feb.2010

Wye Valley AONB management Plan 2009-2014

Herefordshire Local Biodiversity Action Plan (2007)

Building Biodiversity into the LDF (2009)

Herefordshire Green Infrastructure Strategy (2010)

Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011)

The EC Conservation of Habitats and Species Regulations (2010)

Landscape Character Assessment - Supplementary Planning Guidance 2004' (updated 2009).

Herefordshire Biological Records Centre (customized report Jan 2016)

### Useful websites.

<http://publications.naturalengland.org.uk/>

<http://www.magic.gov.uk/MagicMap.aspx>

<https://www.herefordshire.gov.uk/corestrategy>

<https://www.herefordshire.gov.uk/greeninfrastructure>

<http://www.herefordshirewt.org/>

<https://www.woodlandtrust.org.uk/>

<https://www.herefordshire.gov.uk/environmental-protection/conservation-and-sustainability/environmental-services-ecology-and-geology>

## Attachment i. Sites of Special Scientific Interest Designations.

The following texts are annotated extracts from the site notification documents produced by Natural England.

**1. Upper Wye Gorge SSSI** is 245ha but this is including land in Gloucestershire and Gwent. In the parish around 130ha of Lords Wood and adjoining King Arthurs Cave is part of this. It is designated for the quality of its ancient woodland habitats including populations of nationally rare Large-leaved Lime and various Whitebeam species some of which have been recently been determined to be endemic to the Doward. There are a host of other plant, fungi, invertebrates, birds and mammals that are nationally rare, scarce or local.

The site lies on the banks of the River Wye where it has cut a spectacular meandering gorge through Old Red Sandstone and Carboniferous Limestone in the vicinity of Symonds Yat. It consists of one of the most extensive blocks of semi-natural broadleaved woodland in the whole of the Wye Valley. Other habitats represented include woodland streams, small areas of limestone grassland and limestone rock outcrops. The site is also important for Pleistocene mammal remains. The woodlands have a range of soil types which are generally alkaline in character although in places more acidic surface layers have developed. The variety of rocks and soil types has resulted in a very diverse broadleaved woodland with ten different types of woodland having been identified with a correspondingly varied ground flora.

Site Condition on last survey - Favourable

### **2. The River Wye (Lower Wye) SSSI**

Together the River Wye (Lower Wye) and the River Wye (Upper Wye) SSSIs and several tributaries represent a large, linear ecosystem which acts as an important wildlife corridor, an essential migration route, and a key breeding area for many nationally and internationally important species. The site supports the following species and habitats covered by Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora:

Allis shad *Alosa alosa* Annex IIa, Va;

Twaite shad *Alosa fallax* Annex IIa, Va;

Sea lamprey *Petromyzon marinus* Annex IIa

Brook lamprey *Lampetra planeri* Annex IIa

River lamprey *Lampetra fluviatilis* Annex IIa, Va;

Atlantic salmon *Salmo salar* Annex IIa, Va;

Bullhead *Cottus gobio* Annex IIa

Grayling *Thymallus thymallus* Annex Va;

Common otter *Lutra lutra* Annex IIa, IVa;

Atlantic stream crayfish *Austropotamobius pallipes* Annex IIa, Va;

Freshwater pearl mussel *Margaritifera margaritifera* Annex IIa, IVa;

Floating vegetation of *Ranunculus* of plane and sub-mountainous rivers Annex I

Common otter, Atlantic stream crayfish and freshwater pearl mussel are also listed under Schedule 5 of the Wildlife and Countryside Act 1981, as amended.

The River Wye (Lower Wye) SSSI has been designated as a salmonid fishery under the EC Freshwater Fish Directive 78/659/EC.

The last site condition assessment was 'unfavourable (re-covering)'.

### 3. Great Doward SSSIs.

Kiln Tumps and Webbs Quarry (1.1ha 2.6 acres).

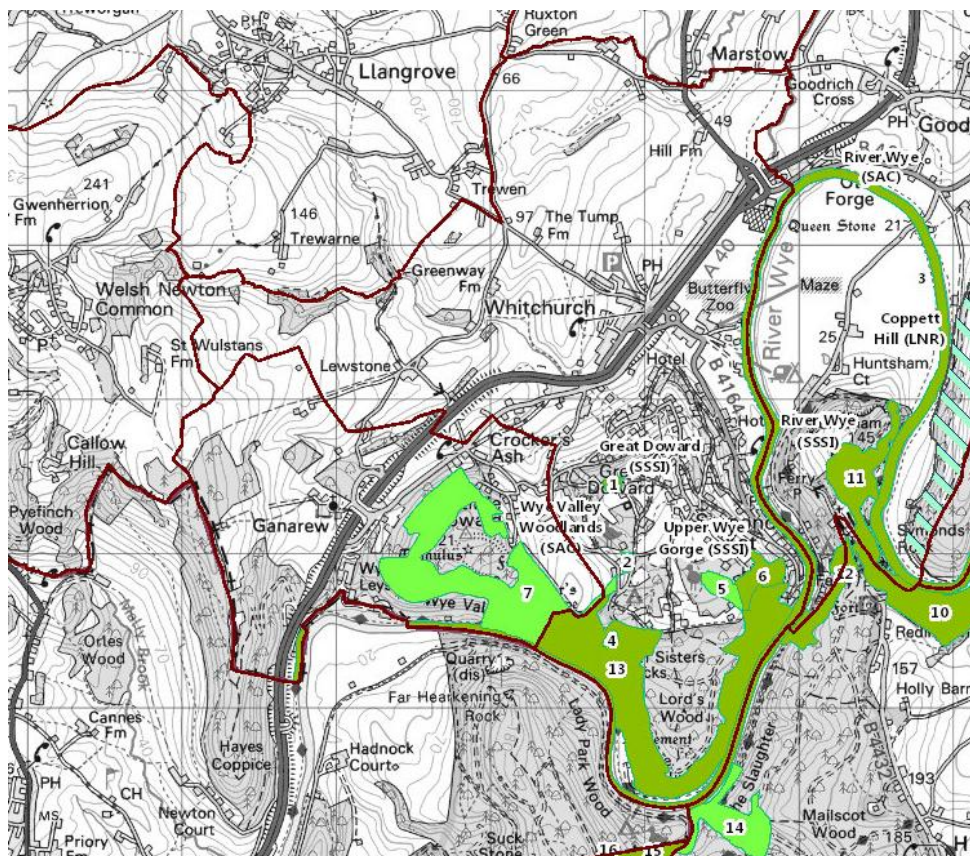
This site consists of two small areas of limestone grassland, with associated scrub and woodland communities, situated on the south west facing slopes of the Great Doward Hill.

Webbs Quarry is an area of old quarry workings, which over a long period has become colonised by a rich limestone flora. This includes such characteristic calcicole (lime-loving) species as salad burnet *Sanguisorba minor*, wild thyme *Thymus praecox*, wild basil *Clinopodium vulgare* and hairy violet *Viola hirta* as well as wild madder *Rubia peregrina* and fly orchid *Ophrys insectifera* both of which are of local distribution. Webbs Quarry is also important as a site for the nationally rare fingered sedge *Carex digitata*.

Kiln Tumps is an area of ancient limestone pasture, where the grassland community is exceptionally rich, with over 140 plant species recorded. These include less common species such as greater butterfly-orchid *Platanthera chlorantha*, autumn lady's-tresses *Spiranthes spiralis* and green-winged orchid *Orchis morio*.

The last site condition assessment is 'unfavourable' and the last two species listed are likely to be extinct locally

Map of Sites of Special Scientific Interest (Ref. magic.com).



## Attachment ii. Nature Reserves in Whitchurch and Ganarew parish

Herefordshire Wildlife Trust		Woodland Trust	
Leeping Stocks	8.0 ha	Quarry wood	1.95ha
White Rocks	5.3ha	Little Doward Woods	82.39ha
Miners Rest	3.1 ha	Great Doward west	ca. 1ha
Woodside	3.7 ha		
King Arthurs Cave	1.5 ha		
Lords Wood Quarry	1.3 ha		
Lower Wood	0.9 ha		
7 reserves totalling = 24.8 ha (61 acres)		3 Reserves totalling 84.37 (208 acres)	

In addition to these there are a number of sites that although not nature reserves are managed sympathetically for their wildlife conservation value. The Forestry Commission in its management of Lords Wood stands out in this regard. Some privately owned land is also managed for primarily for wildlife and a number of other sites have been left sufficiently undisturbed that valuable semi-natural habitats have developed. Two other sites worthy of mention are the wetland near Daff y Nant service station and riverside grassland and scrub between the holiday park and the Ferry Inn. Other private sites may also be of significant biodiversity value but remain unsurveyed and often unprotected.

## Attachment iii. Biodiversity Summary.

### ***Notable and protected species in Whitchurch and Ganarew Parish***

#### **Vascular Plants:**

Over 350 species of native vascular plants have been recorded in the parish.

#### *Trees;*

The deciduous woodland is dominated by Beech, Oak and Ash but is actually very diverse. Of particular importance are *Sorbus* species especially Whitebeams of which Doward has 14 species, possibly more than any other site in UK. Of these 2 species (*Sorbus greenii* and *S. herefordensis*) are endemic to Doward and 3 more species (*S. evansii*, *S. saxicola* & *S. eminentiformis*) are near-endemic meaning the parish is holding most of the world population. A good number of Wild Service Trees (*Sorbus torminalis*) is also notable.

Other scarce trees present here are the Large-leaved and the Small-leaved Lime (*Tilia platyphyllos* and *T. cordata*), Wayfaring Tree (*Viburnum lantana*) and Buckthorn (*Rhamnus cathartica*).

#### *Other Dicot Plants;*

Most of the notable plants are associated with the thin soils on carboniferous limestone especially around the crags in Lords Wood and Little Doward. Included in this list are the scarce Pale St Johns Wort (*Hypericum montanum*), Narrow-leaved Bittercress (*Cardamine impatiens*), Wild Clary (*Salvia verbenaca*), Yellow Bird's-nest (*Monotropa hypopitys*), Bloody Cranesbill (*Geranium sanguineum*), Wild Madder (*Rubia peregrina*), Hutshinsinia (*Hornungia petraea*) and Dropwort (*Filipendula vulgaris*).

#### *Monocot plants;*

At least 10 species of orchid still exist including a notable population of Greater Butterfly Orchids (*Platanthera chlorantha*) and the rare Fly Orchid (*Ophrys insectifera*) is just hanging on. Six further species, Autumn Ladies Tresses (*Spiranthes spiralis*), Narrow-leaved Helleborine (*Cephalanthera longifolia*), Narrow-lipped Helleborine (*Epipactis leptochila*), Red Helleborine (*Cephalanthera rubra*) and Green-winged Orchids (*Anacamptis morio*) were recorded prior to 2000 but now seem to be extinct in the area.

The dry limestone crags are also notable for three rare sedges (*Carex humilis*, *C. digitata* and *C. montana*).

There are several uncommon grasses including most of the county population of Wood Barley (*Hordelymus europaeus*) and two species with a northerly distribution Mountain Melick (*Melica nutans*) and Blue Moor-grass (*Sesleria caerulea*). The Blunt-flowered Rush *Juncus subnodulosus* occurs here in a private wetland site and at its only site in south of county.

#### *Ferns:*

At least 16 species of Fern occur in the parish including the scarce Adders Tongue (*Ophioglossum vulgatum*) and a rare form of Maidenshair Spleenwort (*Asplenium trichomanes* var. *pachyrachis*).

At least 28 plant species on the Herefordshire Rare Plants Register occur in WAG

#### **Bryophytes:**

Mosses and Liverworts have been an under-recorded group in this parish since 18<sup>th</sup> century when several national rarities were recorded here. However, at least 80 moss and 25 liverwort species are now known to be present including scarcities such as *Gymnostomum viridulum*, *Marchensia mackaii* and *Porella arboris-vitae*. Much remains to be found.

**Fungi and Lichens :**

Over 200 species have been recorded in the parish though not all information is currently available.

Rare and scarce species found here include Devil's Bolete (*Boletus satanus*), Hollow Bolete (*Suillus cavipes*), Giant Clubs (*Clavariadelphus pistillaris*), Fluted Bird's Nest (*Cyathus olla*), Snakeskin Grisette (*Amanita cecilliae*).

**Mammals:**

35 species have been recorded in the parish. This includes 10 bat species of which there is a nationally important populations of Greater and Lesser Horseshoe Bats and the Western Barbastelle has been found on a couple of occasions. The woods and open land hold Fallow, Roe and Muntjac Deer have recently been joined by Wild Boar. Hazel Dormice are present where there is sufficiently dense cover and the commonest mouse on the Doward is the Yellow-necked Mouse. The last records of Water Vole was from Garren Brook and the River Wye in 1964. There are several records of Polecat on the Doward and both Otter and American Mink can be found on the river. The most unusual visitor to the parish has to be a Grey Seal which swam up to Symond's Yat in the floods of winter 2012/13.

**Birds:**

At least 96 species of bird have been recorded in the parish. Some are accidental visitors such as the Hoopoe seen in 2003 and the Whooper Swan in 2014 but most occur annually and several are nationally uncommon or declining species with small local breeding populations such as Hawfinch, Goshawk, Woodcock, Lesser spotted Woodpecker, Pied Flycatcher and Wood Warbler. There are still many questions to be answered such as do Lapwings and Yellowhammer still breed in the parish and have Willow Tits and Tree Sparrows now disappeared.

**Reptiles and Amphibians:**

Of the four reptiles recorded a good population of Slow Worms still exists and Grass Snakes are still to be found occasionally. However the only known record of an Adder was from land to the west of Ganarew in 2005 and although they are frequent on the other side of the river, the last Common Lizard was reported here in 1861! Of the amphibians, frogs, toads and three species of newt occur here with one record of the specially protected Great Crested Newt near the Garren Brook.

**Fish:**

The River Wye is famous for its Atlantic Salmon though numbers have declined significantly in recent years. This part of the Wye is also of national importance as the main national breeding ground of the Twaite Shad and Allis Shad. Other notable fish in the parish are three species of Lamprey, as well as the native Brown Trout and the Bullhead which is sometimes cited as an indicator of good water quality. At least 25 fish species have been recorded in the parish including many of those well-known to the angling community.

**Invertebrates:**

Insects:

**Butterflies;**

There are records for 39 species of butterfly seen within the last 40 years. However three of these (Purple Emperor, High Brown Fritillary and Grayling) have almost certainly died out here and a further four (Wall Brown, Small Pearl-bordered Fritillary, Brown Argus and Green Hairstreak) that have not been recorded for 20 years and are unlikely to still be resident. Two more species (White-letter Hairstreak and Pearl-bordered Fritillary) have so few records in the last ten years that their status here must be critical.

On the positive side, Lords Wood still has a healthy colony of the scarce Wood White, of which there are only 40 locations in UK and the rather scarce White Admiral can still be found here. Both Grizzled Skipper and Dingy Skipper still occur in some open areas of the Doward and the Essex Skipper has also moved into the area a few years ago.

#### *Moths;*

Around 700 species have been recorded around half of which are macro-moths. Of these over 60 species have been designated as scarce or local on a national scale. Examples of these are Great Oak Beauty, Ruddy Carpet, Scorched Pug, Bilberry Pug, Blomer's Rivulet, Drab Looper and Beautiful Snout.

#### *Other insects;*

A considerable number of species from other insect orders occur on the Doward as the only known site in Herefordshire or in just one or two other parishes. Some examples

Orthoptera (Grasshoppers and Crickets); Roesell's Bush Cricket and Long-winged Conehead.

Coleoptera (Beetles); *Platydracus stercorarius*, *Anaglyptus mysticus*

Diptera (True Flies); *Lophosia fasciata*, *Criorhina berberina*

Hemiptera (Plant Bugs); *Ledra aurita*

Hymenoptera (Bees, Wasps and Ants); *Gasteruption assecator*, *Omallus puncticollis*

Ephemeroptera (Mayflies); This section of the Wye holds the main UK population of the endangered Yellow Mayfly *Potamanthus luteus*.

Mention should also be made of a healthy population of Glowworms and presence of the scarce Club-tailed Dragonfly as one of the River Wye specialities.

#### Other invertebrates:

Arachnida ( Spiders and allies):The parish is the only known county site for the attractive Green Huntsman Spider and is notable for its Cave Spider *Meta menardi* population.

*Molluscs:* The scarce Lapidary Snail *Helicigona lapicida* on exists on crags of Little Doward. The river is notable for various freshwater mussels pearl mussel *Margaritifera margaritifera*.

*Crustaceans;* The now endangered White-clawed Freshwater Crayfish *Austropotamobius pallipes* has been reported in the parish as recently as 2007 and its status needs determining especially if it exists in local streams.

#### **Biodiversity Action Plans**

Herefordshire BAP 2005 listed 8 priority species and a further 7 species susceptible to development impact. WAG has recent records of 8 of these species. In addition the area holds 7 of the listed priority habitats.

Ian Draycott

January 2016.

*NB. This biodiversity summary is based on information from many sources including my own observations and data supplied on protected species or those of conservation concern from the Herefordshire Biological Records Centre. It is however far from being a complete picture. I would be pleased to hear of any other reports or observations about wildlife in the parish and given sufficient interest would like to set up an informal local recording group. Please contact me on [idraycott@yahoo.co.uk](mailto:idraycott@yahoo.co.uk).*