

# Devon Aggregates & Biodiversity Project



## Parish Biodiversity Audit

for

# Woodbury



Report produced by the Devon Biodiversity Records Centre (DBRC) - the DBRC is operated by the Devon Wildlife Trust and supported by a partnership of Local Authorities, statutory and non-statutory nature conservation organisations.

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## **Woodbury - Parish Plan Biodiversity Project**

This document has been produced as a starting point to help community action for wildlife. By starting to bring together knowledge of the natural assets of the Parish, it may go some way to achieving its aim of contributing to - and stimulating ideas for - local action.

It should be emphasised that it is just a beginning. It does not represent a comprehensive account of the Parish and is based very largely on existing records held by the Devon Biodiversity Records Centre. There will be a wealth of local knowledge that can be used to build upon and improve this report. Indeed, it is important that it is seen as a 'living document' and one that belongs to the Parish. It is hoped that it will be added to and refined by the people of Woodbury Parish in future years.

### **Introduction**

Woodbury Parish must be one of the most diverse parishes in the county. Extending out into the middle of the Exe Estuary with its mud flats and internationally important numbers of winter wildfowl and waders, to the hills in the east where one of the largest expanses of lowland heath in southern Britain can be found with associated rarities such as Dartford warbler, nightjar and silver studded blue butterflies.

Together with this the parish contains miles of traditional species-rich hedgerows with mature hedgerow trees. These provide valuable wildlife habitat and corridors along which wildlife can disperse. In some areas networks of copses and woodlands make the landscape appear very wooded. Because of this variety of habitats Woodbury Parish is home to a huge range of animals and plants.

Although large areas of the parish are dominated by agricultural land, which is mostly intensively managed pasture or arable land, the wildlife areas still form a major element of the parish. In places there is evidence that ancient medieval strip fields still exist and most of the hedges are probably also from this time.

Three main settlements, Woodbury, Exton and Woodbury Salterton have churchyards, playing fields and gardens as well as buildings which all offer opportunities for wildlife. An area of parkland associated with Nutwell Court called Nutwell Park, with mature non-native trees provides an additional habitat.

Part of the parish is within the East Devon Area of Outstanding Natural Beauty (AONB) and it is also bisected by the East Devon Way a long-distance footpath of some 100 miles linking Exmouth to Lyme Regis passing through the AONB.

The main highlights of the parish are:

- Exe Estuary – Site of Scientific Interest/Special Area of Conservation (SSSI/SAC), internationally important for wintering wildfowl and waders.
- Woodbury Common – part of the East Devon Pebblebed Heaths SSSI, one of the largest expanses of lowland heath in southern Britain.
- East Devon Area of Outstanding Natural Beauty
- Parkland and veteran trees around Nutwell Court
- Woodland and copses around Coombe Plantation
- Woodland and lakes around Hogsbrook Farm
- Ancient field systems south of Greendale
- Narrow country roads and green lanes, flanked by Devon banks and tall, species-rich hedgerows.
- Churchyards, road verges, mature gardens and allotments in the villages of Woodbury, Woodbury Salterton and Exton.

## Designated Sites

### Exe Estuary Site of Special Scientific Interest/Special Protection Area and Ramsar Site

The Exe is a tidal estuary with mudflats, saltmarsh, reed beds, marshy grassland and ponds. The SSSI also includes the Exeter Canal and Dawlish Warren National Nature Reserve. The SSSI supports important bird and plant communities.



**Exe Estuary**

#### **Description and reasons for notification as SSSI:**

The waters, foreshore and low-lying land of the Exe Estuary are of international importance for wintering wildfowl and waders as well as a breeding area for water birds. Many rare species of plant occur too, whilst the sandbanks and mudflats support communities of invertebrates, including rare species, that are of national significance. The site also contains key features of geological interest and has been the subject of considerable scientific research.

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

The Exe is also designated under the Ramsar Convention and is a Special Protection Area under EC Directive on the Conservation of Wild Birds (79/410/EEC). Part of the site is covered by a Bird Sanctuary Order (SI. No. 901 of 1951).

**Ramsar sites** are wetlands of international importance designated under the Ramsar Convention. Sites proposed for selection are advised by the UK statutory nature conservation agencies and co-ordinated through JNCC. The initial emphasis of these sites was on selecting sites of importance to waterbirds within the UK, and consequently many Ramsar sites are also Special Protection Areas (SPAs) classified under the Birds Directive. Increasingly they are being considered for their other wetland assemblages.

### **Special Protection Areas (SPAs).**

In 1979 the European Community adopted the Council Directive on the Conservation of Wild Birds (79/409/EEC) - the 'Birds Directive'. It provides for the protection, management and control of all species of naturally occurring wild birds in the European territory of Member States and to identify areas to be given special protection for the rare or vulnerable species listed in Annex I (Article 4.1) and for regularly occurring migratory species (Article 4.2) and for the protection of wetlands, especially wetlands of international importance known as Special Protection Areas (SPAs).

### **Key species:** Otter UKBAP, DBAP, EC Habitats Directive.

Over 10,000 wildfowl and 20,000 waders winter on the Estuary, which regularly supports over 1% of the European population of species such as dark-bellied Brent goose *Branta bernicla bernicla*, wigeon *Anas penelope*, ringed plover *Charadrius hiaticula* and black-tailed godwit *Limosa limosa*. At about 250 birds, the flock of wintering avocets *Recurvirostra avosetta* is one of the largest in Britain.

### **Key habitats:**

- Tidal estuary (DBAP)
- Mudflats (UKBAP)
- Saltmarsh (UKBAP)
- Reed beds (UKBAP/DBAP)
- Marshy grassland (UKBAP/DBAP)

*DBAP – Devon Biodiversity Action Plan*

*UKBAP – UK Biodiversity Action Plan*

## **East Devon Pebblebeds Site of Special Scientific Interest/Special Protection Area/Special Area of Conservation**

The East Devon Pebblebed Heaths is the largest block of lowland heath in Devon supporting many rare and endangered heathland species. The SSSI includes Aylesbeare and Harpford Commons, Bicton and East Budleigh Commons, Colaton Raleigh and Woodbury Commons and Venn Ottery Common. The site is mostly common land and recently registered as Open Access land under the CROW Act 2000. The whole area is under Countryside Stewardship and mainly owned by Clinton Devon Estates. It lies within the East Devon Area of Outstanding Natural Beauty.



**Woodbury Common – part of the East Devon Pebblebed Heaths SSSI**

**Description and reasons for notification:**

This is the largest block of lowland heath in Devon. It is a nationally important representative of the inland Atlantic-climate, lowland heathlands of Britain and north-west Europe. A significant feature of the site is the diversity of heathland associated communities, related to its large area and the range of substrate and topography. It also supports a wide range of birds and invertebrates.

The site overlies Triassic Bunter Pebblebeds, with some New Red Sandstone and Permian Marls, within an altitude range of 70 m to 150 m. The higher and drier areas are covered with heath dominated by heather *Calluna vulgaris*, bell heather *Erica cinerea*, western gorse *Ulex gallii*, bristle bent-grass *Agrostis curtisii* and purple moor-grass *Molinia caerulea*. Grasses and bracken *Pteridium aquilinum* are prevalent in places as are bramble *Rubus fruticosus* agg., and scrub with scattered pines *Pinus* spp. and birches *Betula* spp .

A series of shallow valleys gives rise to distinct changes of vegetation. The dry heath gives way to wet heath with flushes on the valley sides, and to valley mire with patches of willow *Salix* spp. scrub mainly on the valley floors. Bell heather is replaced by cross-leaved heath *Erica tetralix* and characteristic species are common sedge *Carex nigra*, meadow thistle *Cirsium dissectum*, lousewort *Pedicularis sylvatica* , bogbean *Menyanthes trifoliata*, heath spotted orchid *Dactylorhiza maculata*, lesser butterfly orchid *Platanthera bifolia* and sharp-flowered rush *Juncus acutiflorus*. Other species associated with the wetter areas are bog asphodel *Narthecium ossifragum*, sundews *Drosera* spp., pale butterwort *Pinguicula lusitanica*, bog pimpernel *Anagallis tenella*, common cottongrass *Eriophorum angustifolium* and the club-moss *Lycopodiella inundata*.

Mineral-rich flushes support tawny sedge *C. hostiana*, carnation sedge *C. panicea*, bog rush *Schoenus nigricans* and devil's-bit scabious *Succisa pratensis* together with the brown mosses *Sphagnum scorpioides*, *Campylium stellatum* and *Drepanocladus revolvens*.

Over 70 breeding bird species have been recorded notably nightjar *Caprimulgus europaeus*, hobby *Accipiter nisus* and in recent years Dartford warbler *Sylvia undata*. Among the 21 breeding dragonfly species are the small red damselfly *Ceriagrion tenellum*, southern damselfly *Coenagrion mercuriale* and the downy emerald *Cordulea aenea*. The bog bush cricket *Metrioptera brachyptera* has been recorded here.

Designated as SAC for its Northern Atlantic wet heaths with *Erica tetralix* and European dry heaths

**Special Areas of Conservation (SACs)** are areas which have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats. The Habitats Directive (Council Directive 92/43/EEC of 21 May 1992) requires EU Member States to create a network of protected wildlife areas, known as Natura 2000, across the European Union. This network consists of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

#### **Key species**

- Otter (UKBAP/DBAP)
- Bats (UKBAP/DBAP/EU Habitats Directive)
- Turtle dove (UKBAP)
- Bullfinch (UKBAP)
- Barn Owl (DBAP)
- Song Thrush (UKBAP)
- Curlew (DBAP)
- Nightjar (UKBAP/DBAP)
- Great Crested Newt (UKBAP/EC Habitats Directive)
- Silver studded blue (UKBAP)
- Primrose (DBAP)
- Snowdrop (EC Vb/CITES)

#### **Key habitats:**

- Lowland heath (UKBAP/DBAP)

*CITES – Convention on International Trade in Endangered Species of Wild Fauna and Flora*

### **East Devon Area of Outstanding Natural Beauty**

The eastern part of Woodbury Parish is situated in the East Devon Area of Outstanding Natural Beauty.

**Areas of Outstanding Natural Beauty (AONBs)** are areas of landscape whose distinctive character and natural beauty are so outstanding that it is in the nation's interest to safeguard them. There are 41 AONBs in England and Wales created by the legislation of the National Parks and Access to the Countryside Act of 1949, AONBs represent 18% of the finest Countryside in England and Wales. Their care has been entrusted to the local authorities, organisations, community groups and the individuals

who live and work within them or who value them. Each AONB has been designated for special attention by reason of their high qualities. These include their flora, fauna, historical and cultural associations as well as scenic views. The Countryside and Rights of Way Act, 2000 (the "CRoW" Act) added further regulation and protection, ensuring the future of AONBs as important national resources.

### **Rockham Wood County Wildlife Site**

Rockham Wood is an area of ancient semi-natural and secondary broadleaved woodland (UKBAP). Species recorded from the site include primrose (DBAP), roe deer and smooth brome, a Devon Notable species (DN2). Ancient woodlands are thought to have existed since at least 1600.

### **Woodbury Road Station County Wildlife Site**

The site includes areas of coastal saltmarsh (UKBAP) and reed bed (UKBAP/DBAP), as well as various Devon Notable saltmarsh plant species including annual seablite, common saltmarsh grass and greater sea spurrey. Saltmarshes exist in sheltered locations such as this and were tidal inundation either regularly or occasionally leads to the soils being salty. Only salt-tolerant species can thrive there. Much of this habitat has been lost in the past to agricultural improvement and flood defence.



**Woodbury Road Station CWS showing reedbed and saltmarsh behind the railway line.**

### **Black Hill County Wildlife Site**

Black Hill is a working quarry with remnant heath vegetation, butterfly and bird interest. Key habitats and species include lowland heath (UKBAP/DBAP), silver studded blue (UKBAP), Dartford warbler and nightjar (UKBAP/DBAP). Heathland restoration projects have been on-going since 1976 and several areas are under Countryside Stewardship and managed on behalf of the quarry company by the RSPB.



**Blackhill Quarry CWS showing extensive areas of heathland restoration.**

### **Hogsbrook Wood County Wildlife Site**

Hogsbrook wood is an area of ancient semi-natural woodland. Bluebell and primrose (DBAP) have been recorded on site.

**County Wildlife Sites (CWS)** 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. County Wildlife Sites are usually included in Local Plans as sites of regional or local biodiversity interest and are covered by Planning Policy Statement nine (PPS9). 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.

Note: 'Planning Policy Statement 9: Biodiversity and Geological Conservation' was published by the Department of the Environment in August 2005. Planning Policy Statements (PPS) set out the Government's national policies on different aspects of planning in England. PPS9 sets out planning policies on protection of biodiversity and geological conservation through the planning system. This PPS replaces Planning Policy Guidance Note 9 (PPG9) on nature conservation published in October 1994.

### **Devon Key Dragonfly Sites**

Although no sites occur within the parish there are several nearby at: Goosemoor (Dragonfly site inventory) in the Clyst Valley, East Devon Pebblebeds (Nationally Important Invertebrate site), Bystock Reserve (Nationally Important Dragonfly site), Bicton Common (Regionally Important Dragonfly site/Nationally Important

Invertebrate site), Woodbury Common (Nationally Important Invertebrate site), Aylesbeare Common (Nationally Important Invertebrate site) and Colaton Raleigh Common (Nationally Important Invertebrate site). Exe Estuary and Exminster Marshes is a Regionally Important Invertebrate site. With further survey important dragonfly sites may be found within the parish (e.g. lakes at Woodbury Park Golf Course, east of Hogsbrook Farm and Nutwell Park ponds).

**Nationally Important Key Dragonfly Site.** These are sites holding breeding populations of nationally scarce species, defined for this purpose as those which have been recorded in less than 10% of 10km squares in Britain. Those occurring in Devon are White-legged damselfly (*Playcnemis pennipes*), Scarce blue-tailed damselfly (*Ischnura pumilio*) Small red damselfly (*Ceriagrion tenellum*), southern damselfly (*Coenagrion mercuriale*), Hairy dragonfly (*Bracytron pratense*), Downy emerald (*Cordulia aenea*) and Keeled skimmer (*Orthoetrum coerulescens*).

**Regionally Important Key Dragonfly Site.** These are sites holding breeding populations of Regionally scarce species, designated as ‘Key Species’ for Devon which have been recorded in 10-20% of the 10km squares in Britain: Red-eyed damselfly (*Erythromma najas*) and Ruddy darter (*Sympetrum sanguineum*). In addition, well-studied sites with Keeled skimmer (*Orthoetrum coerulescens*) and White-legged damselfly (*Playcnemis pennipes*), and not necessarily any other key species, are included here.

### **Woodbury Wood AWI (Ancient Woodland Inventory)**

No survey information was available for this site.

**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.

### **Rushmoor Wood Local Wildlife Site**

Rushmoor Wood is a coniferous plantation on an ancient woodland site. No further survey information was available for the site.

**Local Wildlife Sites (LWS)** are sites of significant wildlife interest within a local context that do not reach the criteria for County Wildlife Sites. They are not covered by PPG9, but may be included in Local Plans.

### **Potential County Wildlife Sites**

There are five potential County Wildlife Sites in Woodbury parish. These are sites identified as having possible interest but have not been fully surveyed. Some of these sites will be areas of significant wildlife interest.

- Big Earth (SX989853) – ancient semi-natural woodland
- The Brake (SX996861) – Old coppiced woodland with bluebells and primroses.
- Nutwell Park Ponds (SX 987849 and SX987846) – parkland ponds
- Coombe Plantation (SY020848) – secondary woodland.
- Higher Mallocks (SY020855) – Semi-improved neutral grassland.

During the parish survey further sites were also identified:

- Windmill Hill (SY015900) - steep fields may have botanical interest (unimproved grassland).
- Exton field east of railway (SX984863) – elements of saltmarsh/reedbed
- Strip field system west of Bidgood’s Farm (SY005895) – possible unimproved grassland

## **Other habitats (identified from field survey):**

### **Estuaries**

Estuaries are listed in the **Devon Biodiversity Action Plan** and the **South West Biodiversity Action Plan** as a habitat of conservation concern in Devon. Here in Woodbury Parish a large area of the Exe Estuary between the Clyst and the northern edge of Lymptone and out to the river channel is within the parish.

Estuaries, including harbours and rias, are partially enclosed water bodies which are open to the sea but usually have reduced salinity as a result of freshwater inputs. Rias are drowned river valleys created by land subsidence, a rise in sea level, or a combination of both, forming deep narrow, well defined channels which have a large marine influence i.e. high salinity. Rias are characteristic of the South West, with the Region accounting for approximately 90% of the UK resource. The high salinity and shelter of rias supports a very high biodiversity compared with normal estuaries of lower salinity regime.

### **Mudflats**

Most of the estuarine part of the parish is mudflats and home to large populations of over-wintering wildfowl. Mudflats are very productive areas and support an abundance of organisms such as lugworms, ragworms and other species such as the ‘peppery furrow shell’. These invertebrates provide food for large numbers of birds and fish. The mudflats provide feeding and resting areas for important populations of migrant and wintering wildfowl and waders – the total number of waders present at any one time can reach over 20,000 birds.

### **Saltmarsh**

Coastal saltmarsh is listed on the **UK Biodiversity Action Plan** as a habitat of conservation concern. A small area at Woodbury Road Station (CWS) in Exton, other areas such as one to the north on Exton may be saltmarsh but was not visited. The

presence of the railway line along the banks of the estuary are the main barrier to the development of further saltmarsh.

Coastal saltmarshes in the UK comprise the upper, vegetated portions of intertidal mudflats, lying approximately between mean high water neap tides and mean high water spring tides. Saltmarshes are usually restricted to comparatively sheltered locations in five main physiographic situations: in estuaries, in saline lagoons, behind barrier islands, at the heads of sea lochs, and on beach plains. The development of saltmarsh vegetation is dependent on the presence of intertidal mudflats.

Saltmarsh vegetation consists of a limited number of salt tolerant species adapted to regular immersion by the tides. A natural saltmarsh system shows a clear zonation according to the frequency of inundation. At the lowest level the pioneer glassworts *Salicornia* spp can withstand immersion by as many as 600 tides per year, while transitional species of the upper marsh can only withstand occasional inundation.

Saltmarshes are an important resource for wading birds and wildfowl. They act as high tide refuges for birds feeding on adjacent mudflats, as breeding sites for waders, gulls and terns and as a source of food for passerine birds particularly in autumn and winter. In winter, grazed saltmarshes are used as feeding grounds by large flocks of wild ducks and geese. Areas with high structural and plant diversity, particularly where freshwater seepages provide a transition from fresh to brackish conditions, are particularly important for invertebrates. Saltmarshes also provide sheltered nursery sites for several species of fish.

Since medieval times, many saltmarshes have been reduced in extent by land claim. This practice continued until very recently; for instance, in the Wash 858 ha of saltmarsh were converted to agricultural use between 1970 and 1980. The land enclosed by sea walls was originally converted to grazing marsh with brackish ditches, but since the 1940s large areas of grazing marsh have been agriculturally improved to grow arable crops.

The most recent saltmarsh surveys of the UK estimate the total extent of saltmarsh (including transitional communities) to be approximately 45,500 ha (England 32,500 ha, Scotland 6747 ha, Wales 6089 ha, and Northern Ireland 215 ha).

### **Lowland heathland**

Quote from Cooper (2005)

*'This area has an extraordinary history reaching back to the age of the dinosaurs, and these heathlands have developed on ancient Triassic pebblebeds. During that period it was a vast desert stretching into France, with colossal rivers depositing layer upon layer of pebbles. As the millennia passed it became ice age tundra, then as the climate finally warmed, thick forest. Iron Age people arrived around 2500 years ago and built a great hill fort on one of its most prominent hills. Eventually all the trees were cleared, and heath began to develop. Today Woodbury Castle overlooks some of the most important places for wildlife in the county. Over time the heathland has become fragmented, but Woodbury remains the largest, and area*

*which consists of both wet and dry heath, lowland bog, pine and alder scrub with patches of deciduous woodland, all teeming with life.'*

Lowland heathland is characterised by the presence of plants such as heather, dwarf gorses, and cross-leaved heath and is generally found below 300 metres in altitude. Areas of good quality heathland should consist of an ericaceous layer of varying heights and structures, some areas of scattered trees and scrub, areas of bare ground, gorse, wet heaths, bogs and open water. The presence and numbers of characteristic birds, reptiles, invertebrates, vascular plants, bryophytes and lichens are important indicators of habitat quality.

There are very few areas of lowland heath left in the UK: over 90% of heaths have been lost, mostly in the last 50 years. Devon has lost some 70% of its heaths. Only a few areas remain such as the pebblebed heaths in the east of the county, coastal heaths, and heathland fragments in the Bovey Basin. Lowland heath is listed on the **UK Biodiversity Action Plan** and the **Devon Biodiversity Action Plan** as a habitat of conservation concern. Lowland heathland is a priority for nature conservation because it is a rare and threatened habitat.

Woodbury Common is part of the East Devon Pebblebed Heaths SSSI and is home to important assemblages of heathland specialists including Dartford warbler, nightjar, adder, common lizard, grayling butterfly, silver studded blue butterfly. Most of the commons in the area are owned by Clinton Devon Estates. Since 1900, over 75% of the heathland in East Devon has been lost and the Estate's 2,800 acres represents 80% of what is left (over 1000 acres is SSSI) (Wilson 2004). Loss of this habitat has now decreased dramatically and there are some good examples in the area of heathland restoration (mainly through removing areas of conifer plantation and allowing natural heathland regeneration). An area of Woodbury Wood appears to have been cleared and restored as lowland heathland.

### **Species-rich hedges**

Hedgerows tend to be taken for granted as they always seem to be there, providing such a constant in a familiar landscape. However, they do require regular attention to keep them in good condition. That so many are still in good condition is a testament to the skill and hard work of generations of farmers. But there are changes even in the oldest hedgelines as the way the majority are managed has altered. There is now less farm labour available and more reliance on mechanical cutting rather than traditional hedge laying (or, as it is known in Devon, 'steeping').

Even the mechanical cutting has changed as reciprocating cutters that could cut shrub stems cleanly have given way to tractor-mounted flails which can tackle slightly older growth but at the expense of every stem being shattered. Flailing can actually promote bud development (on hawthorn, for example, research indicates that severe damage to the end of a branch encourages shoot development further down in the base of the plant which can help to thicken it up). However, flailing can also leave shrubs susceptible to infection. As individual hedge plants die, they leave gaps which render the hedge less effective and which would in the past have been filled when the hedge was next steeped.

With the advent of mechanical hedge-trimming has come another change - it is now possible to trim all the hedges on a farm in one year. It is this that perhaps has had the most impact on the vertebrate wildlife. Fruiting and seeding species are very much less productive and there is a different and less varied structure. Also, shrubs that do produce a good berry crop are sometimes cut in the early autumn before the birds, particularly the migrants, can gain any advantage from this food source. A couple of generations ago, many hedges on a farm might have been cut less frequently, allowing them to be much more productive in the meantime.

Recognising these changes does allow choices in the way hedges are managed in the future. Hedges can be cut on a two or even three year rotation. Alternatively, perhaps only one or two of the three 'faces' (the top and the two sides) could be cut in any one year. This wouldn't stop road or drive side hedges being cut from both the safety and visual aspects but for the majority of hedges it would have two major benefits: it would take less time (and hence cost) and it would benefit wildlife! However, whatever pattern of cutting is adopted, "all hedges, except perhaps holly, will need laying or coppicing sooner or later because they will become thin at the base. This is the best form of long-term management" (*Devon's hedges: Conservation and management*, Devon County Council / Devon Hedge Group).

Once it was realised nationally that many thousands of kilometres of hedgerow were being lost annually and that something ought to be done about it, the Hedgerow Regulations (made under Section 97 of the Environment Act 1995) were introduced in England and Wales in 1997 to protect them. The Regulations are intended to prevent the removal of most countryside hedgerows without first submitting a hedgerow removal notice to the local planning authority. The local planning authorities are only able to require the retention of 'important' hedgerows. The Regulations then set out criteria to be used by the local authority in determining which hedgerows are important (Bickmore, 2002).

In such a clearly agricultural landscape, the 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. The UK Biodiversity Action Plan (UK Steering Group, 1995) lists ancient and or species-rich hedgerows as one of its priority habitats.

Various definitions of species-rich hedges have been used in different parts of the country but it would not be unreasonable to treat a hedge that has five or more woody species in a 30 metre length as a 'species-rich' one.

Hedgerows are often an essential corridor for the movement of wildlife and may support many animals and plants. Most of the hedgerows around Woodbury parish are traditional hedges built on banks and containing a good variety of woody species, typically including elm, field maple, oak, hazel, hawthorn, ash and holly with frequent mature standing trees of either oak (English) or ash. As many of the lanes are narrow and there is evidence of medieval stip fields south of Greendale it is quite probable that many of the hedges in the parish are medieval. Larger fields in many parts of the parish probably indicate that there has been extensive hedgerow loss in recent years.

Species-rich hedges are listed on the **Devon Biodiversity Action Plan** as a habitat of conservation concern in Devon. Many of the hedges along the lanes of Woodbury would be classified as species-rich. The hedges also provide sheltered corridors through areas of farmland, they link copses and woodlands and probably support a good variety of invertebrates.

### **Cemeteries/ churchyard**

Churchyards at Woodbury and Woodbury Salterton were carefully tended with short species-poor grassland but with hedgerows and trees associated with them. A cemetery at Woodbury was situated adjacent to agricultural land with hedgerows on three sides. All provided habitat for woodland birds such as blue tit, robin, great tit and blackbird. The older gravestones contained good populations of lichens.



**Woodbury cemetery surrounded by hedgerows and trees.**

### **Recreation areas and public open space**

A cricket ground, recreation ground and village green (in front of the church) in Woodbury; a children's play area in Woodbury Salterton; and a play-area/field in Exton all provided public open spaces. Hedgerows, trees, scrub and grassland were associated with these areas and all have the potential to increase their value to wildlife.



**Playing field at Woodbury with plenty of scope for habitat creation such as tree planting, pond creation and wild flower areas.**

### **Allotments and gardens**

Gardens and allotments are a haven for wildlife and can provide links to other areas of wildlife habitat. Several species have been recorded on the day of survey from gardens in Woodbury parish including blue tit, great tit, jackdaw, rook, wood pigeon, blackbird and robin.

### **Causeways and water's edge**

The water's edge was only accessible at Exton near the train station and here there was a saltmarsh and reedbed (designated as Woodbury Road Station CWS). The railway running between Exeter and Exmouth runs along the water's edge preventing good access. Other small areas may also be present but not found at time of the survey.

### **Unimproved grassland**

Flower-rich meadows and pastures are a habitat of conservation concern in Devon and are listed on the **Devon Biodiversity Action Plan** as well as the **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 ciril bunting. One pCWS may be unimproved grassland (Higher Mallocks) and steep fields at Windmill Hill (just north of Greendale Barton and south of the A3052) looked like they may be unimproved.

## **Roadside verges**

As many of the lanes were lined with hedgerows roadside verges were scarce except on the main roads such as the A3052, B3180, B3179 and A376. Further survey may reveal that some verges are species-rich.

Roadside verges often support flower-rich grassland, as well as a variety of semi-natural habitats including calcareous grassland, neutral grassland, acid grassland, heathland, open water (ditches), broadleaved woodland, scrub, hedgerows and walls. They may also support populations of scarce or declining species of flora and/or fauna, some of which enjoy statutory protection. Linear grassland habitats provide a valuable wildlife resource. Verges provide shelter and food for a variety of species from small mammals, to birds of prey and insects.

Devon has a very substantial resource of roadside verges; approximately 14,000 km of roads, corresponding to about 2,000 ha of roadside verge. However, of this very large resource, the area which is species-rich is relatively small and localised in distribution.

Devon County Council and Highways Agency manage roadside verges to incorporate prescriptions to maintain or enhance wildlife interests. DCC operate a **Special Verge Scheme** to manage areas of particular wildlife or amenity value. These verges are protected from damaging activities, and grass cutting is limited to specific periods to avoid the destruction of attractive stands of wildflowers.

## **Arable land**

Some of the larger fields, especially in the northern part of the parish between Woodbury Salterton and Greendale, were arable and have probably had hedges removed in the past. All were surrounded by traditional hedges and mature trees, however no buffer zones were seen or winter stubbles. Further survey may reveal rare arable weeds.

### **Arable plants:**

Common arable plants include red dead-nettle, cut-leaved crane's-bill and scentless mayweed. There are also a number of rare arable weeds associated with spring cereals and winter stubble including cornflower, corn marigold, shepherd's-needle and weasel's-snout. Arable land in Britain has lost most of its arable plants over the last 50 years; several species have become extinct and there are many more that are now rare.

Changes in arable farming practice are thought to be responsible for the losses. Technology that allowed more effective seed-cleaning caused an initial decline, but herbicide development was catastrophic for many plants. Nowadays, arable plants are generally confined to the strip along the field edge, which provides a home to many animals, invertebrates and plants.

## **Parklands**

Parklands and wood pasture are habitats listed on the **Devon Biodiversity Action Plan**. The parklands and wood pastures of Devon are ancient places, some of which date back to mediaeval times or even further. Their elegant and grand surroundings, with their associated country houses, estates and castles are a distinctive element of both the natural and historic heritage of the County

Parklands and wood pastures, due to their long standing, provide a continuity of habitat established over centuries. This has allowed plant and animal communities of great richness and diversity to develop, many of which are found in few other habitats.

The main fabric 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 than any other tree in Britain, and this is especially true of those specimens in parkland, which, over time, have developed particularly rich communities of invertebrates, lichens, and mosses and fungi. The soils surrounding the trees often have been undisturbed by cultivation for similarly long periods and themselves support rich and diverse communities of soil and leaf-litter dwelling invertebrates, and a grass sward rich in flowering plants. Dead and fallen limbs of trees are the habitat to a specialised invertebrate fauna which feed on decaying wood.

Parklands and wood pastures are perhaps best known to the naturalist for the rich assemblages of lichens which grow on the bark of the trees, and the clean air of Devon is one factor which has allowed a particularly large number of species to live here.

Mammals also make their home in parkland trees, including several species of bat, for which the crevices in split trunks provide ideal safe roosting sites, as well as providing the high densities of insects that bats rely on, especially high when grazing stock are present, their dung attracting swarms of insects.

A variety of birds use parklands and wood pastures for nesting and feeding; invertebrate-rich bark provides food for tits, tree-creepers and woodpeckers, while other species, such as flycatchers and redstarts catch insects from open perches of the lower canopy. Nutwell Park on the outskirts of Lympstone, in Woodbury parish is a typical parkland.

## **Veteran trees**

No veteran trees were seen during the field survey in the parish, however, this does not mean there are none. There were many trees large enough to be 'potentially interesting' and 'valuable in terms of conservation' (see below). The parkland at Nutwell Park may well have some veteran trees as well as some of the CWS/AWI woodlands. There is an initiative by the District Council called the Great Tree Hunt to find veteran trees in the area (see Existing Initiatives on P 26).

English Nature 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.

## **Green lanes**

A green lane can be defined as an unmetalled track with field boundaries either side. These boundaries may be banks, hedges, woodland edge, stone walls or fences and often features such as ditches or streams are incorporated within the lanes. The combination of the track, its boundaries and associated features create a landscape unit with its own microclimate and ecology. These sheltered conditions within lanes are of great importance to butterfly populations and may be more botanically species-rich than single hedge boundaries.

Several green lanes can be found in the parish including Moor Lane, at Pilehayes Farm, Watery Lane at Bond Farm House and various un-named lanes, mostly leading to farms. Many have public access as either footpaths or bridle paths.

## **Pits, quarries & cuttings**

Pits, quarries and cuttings are listed on the **Devon Biodiversity Action Plan** as habitats of conservation concern in Devon. The numerous working pits and quarries in Devon are used for the extraction of a variety of minerals and are of great importance to the local and national economy. The pits and quarries are also of importance for the varied wildlife they support. Uncommon species of bird such as the peregrine falcon and raven may use the quarry edges to nest, greater and lesser horseshoe bats use the

cave-like quarries and reptiles such as common lizard and adder may be found basking in sunny areas in many quarries.

Blackhill Quarry within Woodbury parish is an aggregates quarry extracting sands, stone (pebbles) and gravels which are used for road-building. Although there are extensive areas of worked quarry with little or no vegetation there are also lakes, wetland, ponds, restored heath and woodland on site making it a valuable wildlife site (designated a CWS). Already Dartford warbler and nightjar and several species of dragonfly have been recorded on the restored heathland areas. Much of the restored heath is under Countryside Management with the RSPB working in partnership with the quarry company to maintain the habitats in good condition. Silver studded blue butterflies have been recorded around the periphery of the site.

## **Orchards**

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 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.

With such a wealth of fruit and insects available in old orchards, it is only to be expected that there is a wide range of feeding opportunities for birds and mammals. Birds such as woodpeckers (green and great-spotted), nuthatches, treecreepers 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.

Several orchards can be seen in the parish, usually farm orchards (e.g. Rydon Farm, Greendale, north-west of Higher Venmore Farm), however these seem to have suffered a lack of management and the fruit trees are not being utilised and new stock not planted. It is noted that there is an extensive orchard just outside the parish at Sunnyhay Fruit Farm and that historical evidence shows a great tradition in the parish of cider orchards. The old map of 1891 shows extensive areas of orchard around the village of Woodbury itself but these have subsequently been lost to pasture or arable land or housing development. Apparently most farms had their own orchards

and would have had their own equipment to process apples. Cider was a great staple for local workers. Rural cider-making waned during the 1950s and large cider-makers took over and orchards were gradually grubbed out. A Woodbury 'Scrumpy' is apparently still available (Stokes 1999).

## **Species**

### **Important Species**

A report from the Devon Biodiversity Records Centre (DBRC) database showing what legally protected, locally notable or noteworthy (eg Japanese Knotweed) species are known to have been present in and around Woodbury has been prepared and is presented separately (Appendix 1), species recorded during the parish survey are given in Appendix 2.

### **Birds**

Several species of birds were recorded during the survey including buzzard, blue tit, great tit, blackbird, jackdaw, rook, robin, greenfinch, chaffinch, shelduck, curlew and black-tailed godwit.

Species recorded on the heathland from the DBRC database include Dartford warbler, nightjar, tree pipit, turtle dove, wood warbler, cuckoo and curlew.

On the Exe Estuary DBRC has records of avocet, curlew, shelduck, spoonbill, bar-tailed godwit, whimbrel, dunlin, teal, shoveler, lapwing, redshank, little egret and wigeon.

During the inquiry into the building of the Woodbury Park Golf Course dozens of bird species were recorded as nesting in recent years (Wilson 2004). These included many common garden/woodland birds but also kestrel, lapwing, curlew, snipe, turtle dove, nightjar, cuckoo, skylark, marsh tit, treecreeper, mistle thrush, song thrush, wheatear, stonechat, whinchat, grasshopper warbler, whitethroat, willow warbler, wood warbler, spotted flycatcher, red-backed shrike, linnet, redpoll, crossbill, yellowhammer, reed bunting and Dartford warbler.

Additional birds listed in Secret Nature of Devon (Cooper 2005) on the East Devon Heaths include - brambling, great grey shrike, peregrine, merlin, sand martin and hobby.

Many of these species are protected under the Wildlife and Countryside Act 1981 (as amended) – see species list from DBRC in Appendix 1.

#### **Barn owl:**

The **barn owl** is listed on the **Devon Biodiversity Action Plan** as species of conservation concern.

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. It is estimated that there are now about 350-470 pairs in the County.

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.

In the last 30 years, loss of hunting habitat through widespread agricultural change has probably been the main cause of this bird's decline. Rough grassland and field edges (often associated with hedgerows) are disappearing, hay meadows have been converted to silage and more and more former marginal land has been lost.

All this may have been exacerbated by the loss of many traditional nest (and roost) sites as old hedgerow trees were removed and old farm buildings demolished, modernised or converted for other uses. The new second generation rodenticides, such as brodifacoum, bromadiolone and difenacoum, are much more toxic to barn owls than first generation poisons such as warfarin, and should not be used on farms where barn owls are known to be present. The barn owl is also highly susceptible to severe winters, particularly long, cold spells and lengthy periods of snow cover. Encouragingly, barn owl numbers are now on the increase in much of Devon. Barn owls have been recorded in the Woodmanton area in the recent past (SS).

## **Plants**

Plant species noted on a visit on the 7<sup>th</sup> October 2005 include elm, English oak, holly, hazel, blackthorn, hawthorn, ash, field maple, bluebell and primrose. A plant survey was not carried out due to the time constraints, existing data and the time of year.

Several Devon notable species have been recorded in the saltmarsh area at Woodbury Road Station including annual seablite, common saltmarsh grass and greater sea spurrey.

### **Primrose:**

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. Primroses are fairly common in the parish in woodlands, hedgerows and on road verges.

### **Bluebell:**

Wild bluebells are protected in Britain with respect to sale under the Wildlife and Countryside Act 1981. Classified as a UK Biodiversity Action Plan species of conservation concern, although not a priority species. Bluebells can be found in several woodlands in the parish as well as in the older hedgerows.

## **Mammals**

Several mammal species have been recorded from Woodbury parish. These include otter, badger, roe deer, fallow deer, hedgehog, pipistrelle bat, noctule bat.

### **Bats:**

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 vary in colour, but are usually medium to dark brown on the back and only slightly paler underneath. They are the most common species in towns. Only very recently have scientists recognised that two separate species have been confused under the name *P. pipistrellus*. 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.

Bats are under-recorded in the parish due to a lack of survey effort. As Devon is such a stronghold for all 16 British species it is likely that several species occur here. Lesser horseshoe and greater horseshoe have been recorded at East Budleigh Common and Sue Searle recorded pipistrelle (45) and noctule at Exton whilst carrying out a National Bat Monitoring Programme survey in summer 2005. Brown long-eared bat has been recorded in Woodbury village.

### **Greater horseshoe bat:**

This species of bat was recorded just outside the parish on East Budleigh Common so could be present within the parish. The greater horseshoe bat is listed on the **Devon Biodiversity Action Plan** as a species of conservation concern.

During this century the greater horseshoe bat has declined significantly throughout northern Europe. In the UK, this species is restricted to south-west England and south Wales, although vagrants may be recorded elsewhere. There are currently 35 recognised maternity and all-year roosts and 369 hibernation sites. Current estimates range between 4,000 and 6,600 individuals. In Devon it breeds in disused farm buildings and caves. The feeding habitat requirements of the greater horseshoe bat are permanent pasture (unimproved and semi-improved, preferably grazed by cattle), tall hedgerows with mature trees, mixed deciduous woodland, wetland and scrub.

The greater horseshoe bat is under threat from the loss, destruction and disturbance of roosting and hibernation sites and the loss of insect-rich feeding habitats and flyways. The loss of feeding areas is often due to the loss of wetlands and hedgerows and the conversion of permanent pasture to arable.

**Otter:**

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 60s and 70s. The main serious threat to otters today is from road kills, with many animals sadly reported dead each year.

The otter is listed on the Devon Biodiversity Action Plan as a species of conservation concern. There are several records of otter in the area including on the Exe, at Exton and on Woodbury Common.

**Dormouse:**

Dormice have not been recorded in the parish but there is extensive suitable habitat and it may be that they just haven't been found yet. The dormouse is listed on the **Devon Biodiversity Action Plan** as a species of Conservation concern in Devon.

Nationally, the dormouse 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.

**Invertebrates**

No invertebrates were recorded during the field visit, mainly due to the time of year. Invertebrates are under-recorded in the area and further investigation of ponds and lakes in the area should reveal further species of dragonfly and also damselflies and surveys of gardens, hedgerows and heathland will reveal more butterfly species. Common darter and keeled skimmer as well as small heath and grayling butterflies have been seen regularly on Woodbury Common in recent years (SS). Several local heathlands are important invertebrate or dragonfly sites.

The data search from DBRC revealed:

**Butterflies:**

Silver studded blue, white admiral, silver-washed fritillary, purple hairstreak, green hairstreak, dark green fritillary, small pearl-bordered fritillary (Bicton Common)

**Dragonflies:**

Keeled skimmer (Bystock pools)

## **Reptiles and Amphibians**

No reptiles or amphibians were recorded during the field survey due to time constraints, existing data and time of year. DBRC records are given in Appendix 1.

Species known to the in the area include: adder (SS seen on Woodbury Common), slow-worm, common (viviparous lizard), common toad, common frog, great crested newt (one record in 2001).

### **Great crested newt:**

The great crested newt is listed on the **UK Biodiversity Action Plan** as it has suffered a decline in recent years with studies in the 1980s indicating a national rate of colony loss of approximately 2% over five years. Loss of suitable breeding ponds caused by water table reduction, in-filling for development, farming, waste disposal, neglect or fish stocking and the degradation, loss and fragmentation of terrestrial habitats are thought to be the cause of the decline. Recorded in 2001 in Woodbury near Woodmanton (SY014861).

## **The Devon Biodiversity Action Plan (BAP)**

The Devon Biodiversity Action Plan (BAP) describes the key actions needed to look after 37 of Devon's most important habitats and species. It does not stand alone, but is part of a much wider process aimed at conserving our biodiversity.

The Devon BAP is a direct descendent of a process started at the famous 'Earth Summit' held in Rio de Janeiro in 1992. At this summit, world leaders pledged to halt and reverse the loss of the planet's biodiversity. For its part, the UK government produced a series of Action Plans for a great many threatened habitats and species. These national plans have been joined by a series of regional Action Plans aimed at providing a more local perspective.

The Devon BAP builds on this endeavour, identifying local priorities and providing targets and plans of action for the County.

All of this work has one aim: to encourage practical action on the ground. Its success depends upon us all.

### **Biodiversity links:**

- The Devon BAP can be viewed at [www.devon.gov.uk/biodiversity](http://www.devon.gov.uk/biodiversity). 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 [www.swbiodiversity.org.uk](http://www.swbiodiversity.org.uk).
- National Action Plans can be viewed at [www.ukbap.org.uk](http://www.ukbap.org.uk). This site also contains useful background information on UK biodiversity action planning.

## Links between the wildlife of Woodbury and the Devon BAP:

Woodbury wildlife feature	Brief description of feature	Link with the Devon Biodiversity Action Plan (BAP)
Exe Estuary	Tidal estuary with mudflats, saltmarsh, reed beds, marshy grassland and ponds. Supports important bird and plant communities.	<ul style="list-style-type: none"> <li>• Estuaries Habitat Action Plan</li> <li>• Curlew Species Action Plan</li> <li>• Otter Species Action Plan</li> </ul>
East Devon Pebblebeds	This is the largest block of lowland heath in Devon. It is a nationally important representative of lowland heathlands of Britain and north-west Europe. A significant feature of the site is the diversity of heathland associated communities supporting a wide range of birds and invertebrates.	<ul style="list-style-type: none"> <li>• Lowland Heath Habitat Action Plan</li> <li>• Nightjar Species Action Plan</li> <li>• Southern Damselfly Species Action Plan</li> </ul>
Traditional hedgerows	The parish has many miles of traditional Devon hedgebanks, many of them species-rich and possibly dating back from medieval times.	<ul style="list-style-type: none"> <li>• Species-rich Hedgerows Habitat Action Plan</li> <li>• Greater Horseshoe Bat Species Action Plan</li> <li>• Dormouse Species Action Plan</li> </ul>
Ancient woodland	Several areas of ancient semi-natural woodland within the parish including, Rockham Wood, Hogsbrook Wood and Woodbury Wood.	<ul style="list-style-type: none"> <li>• Primrose Species Action Plan</li> <li>• Dormouse Species Action Plan</li> </ul>
Parkland and Wood Pasture	Nutwell Park is a good example of parkland with grazed woodland and mature native and non-native trees as well as other habitats such as ponds and hedgerows.	<ul style="list-style-type: none"> <li>• Parkland and wood pasture Habitat Action Plan</li> </ul>

View the Devon Biodiversity Action Plan at [www.devon.gov.uk/biodiversity](http://www.devon.gov.uk/biodiversity).

## 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 follow 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 Woodbury might include **species-rich hedges** which would directly contribute to the **Species-rich Hedges 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.

Why not carry out a primrose survey of the parish which would contribute records to the Primrose Species Action Plan? Or an autumn 'nut hunt' for Dormouse which would contribute records to the Dormouse Species Action Plan and may direct hedgerow and woodland management in the parish. Another survey could be of veteran trees to link in with the East Devon District Council initiative – Great Trees of East Devon.

Survey work could be undertaken as a community group or in liaison with conservation groups active in the area. For example, the Devon Wildlife Trust is active in the area, they manage Bystock Pools reserve. The RSPB manage large areas of the East Devon Pebblebeds, in particular Aylesbeare Reserve, but are assisting Clinton Devon Estates and Blackhill Quarry, amongst others with heathland

management in the area. The East Devon District Council has a Countyside Service and they are actively involved in habitat management at various sites in the District.

Help to build up a picture of the state of Devon's environment by sending your records to the Devon Biodiversity Records Centre 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. There are several sites within the parish suitable for enhancing the wildlife interest and maybe also interpretation opportunities to help the community understand the wildlife in their public spaces. Possible sites include children's play areas, playing fields, school grounds and other community areas – several of which are managed or owned by the Parish Council. Consider orchard planting as orchards were such a major feature of the parish in the past. Caravan sites, golf courses and other public places could also work towards enhancing wildlife on site.

## **3 Build relationships with local landowners:**

Encourage the adoption of more wildlife-friendly land management including buffer strips around hedgerows and along streams and rivers, orchard restoration and woodland 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? If a farmer is considering tree planting encourage him to join up existing woodlands by planting belts of trees, thickening up hedges or planting copses to link woodlands together.



**Encourage landowners to leave buffer strips next to hedgerows and rivers or streams.**

#### **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 Woodbury, Woodbury Salterton and Exton 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. Bird feeders, wild areas, nectar-rich flower planting, log piles and ponds are all good ways of increasing wildlife in gardens. A very good source of information on wildlife gardening is the English Nature web site:

[www.english-nature.org.uk/Nature In The Garden](http://www.english-nature.org.uk/Nature%20In%20The%20Garden)

English Nature is the Government's adviser on nature conservation. Its web site also contains links to a number of other very useful sources of information.

## **6 Join local conservation organisations:**

Examples of prominent local conservation organisations are the Devon Wildlife Trust and the RSPB. These organisations have a number of Local Groups which, amongst other things, get involved in practical management work. East Devon District Council has a Countryside Service including an Education Ranger and may be able to advise on any ideas you have for the parish.

## **7 Japanese Knotweed:**

Not something to cherish, but it can't be ignored! Luckily, Japanese Knotweed has not been recorded in Woodbury, however that does not mean it is not present. 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.

What can you do?

- Firstly, it is important to build up a picture of where Japanese Knotweed is present, if it is present. This will give an idea of the scale of the problem and will help to prevent it being accidentally spread during any ditch clearance, highway work and so on. To help develop an understanding of the problem in Devon, records should also be sent to the Devon Biodiversity Records Centre<sup>1</sup>. Ideally, records should include when you first saw it and confirmation of when it was seen most recently; its precise location (notes or a sketch map are helpful, as is a grid reference if you have one); the kind of habitat it is in (e.g. next to running water, on a road verge), and a rough indication of how abundant it is.
- Secondly, be careful not to spread the plant further! This is all too easily done as it can regenerate from even the smallest fragment and is easy to spread unknowingly. It is important not to flail it or to try and dig it up. Often, it is best not to cut Japanese Knotweed at all, but if it is it should be very carefully disposed of on site when dead or removed as Controlled Waste. Any tools used should be properly cleaned.
- Finally, if Japanese Knotweed is on your land, the best way to prevent its spread is to control or eradicate it as soon as possible. Regular cutting can weaken and eventually kill the plant but it is a time-consuming job and proper disposal of the

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<sup>1</sup> DBRC, Shirehampton House, 35-37 St David's Hill, Exeter, Devon, EX4 4DA. Phone: 01392 273244; Fax: 01392 433221; E-mail: [dbrc@devonwt.cix.co.uk](mailto:dbrc@devonwt.cix.co.uk)

cut material can be a problem. Usually, the most effective method of control is to treat the plant with herbicide. This can take a number of years to be successful but if the plant is left untreated it will inevitably spread. A number of issues should be taken into account in deciding which herbicide to use, particularly the presence of water (where special care needs to be taken and the advice of the Environment Agency must be sought).

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:

[www.devon.gov.uk/biodiversity/japanese\\_knotweed](http://www.devon.gov.uk/biodiversity/japanese_knotweed).

## **8. Existing Initiatives**

### **Parish Map**

Created by Pippa Thompson and published in 1994 to accompany a book to celebrate the centenary of the Parish Council this illustrated map shows many of the important species found in the parish as well as other points of interest such as historic buildings. A re-print was commissioned in 1998.

### **Great Tree Hunt - Great Trees of East Devon**

This is a three-year project to:

- Find and record the most important trees in the district
- Support the parish tree wardens with training and advice
- Help local schools with tree and seed projects
- Give advice and information about ancient trees

To find out more about the Great Trees project or to get more nomination forms, contact KateTobin on: 01395 517557

### **East Devon Way**

The East Devon Way starts in Exmouth and runs inland across the beautiful countryside within the East Devon Area of Outstanding Natural Beauty, to Lyme Regis, a distance of 100 kilometres all round. The East Devon Way links footpaths, bridleways and stretches of country lanes to create an inland route through the East Devon AONB to Uplyme and provides one of the most delightful walking areas anywhere, many of the hills, woods, rivers and hill forts are accessible only on foot. The route is well marked, look out for Devon County Council finger posts. The Foxglove is on the sign, a flower which is seen throughout the area.



**Part of the East Devon Way near Blackhill Quarry**

**East Devon Heathland Heritage Project**

The RSPB is spear-heading heathland restoration in the area with a number of landowners including Clinton Devon Estates. Several areas have been cleared of conifers to allow heathland to re-appear and other heathland sites have been managed to discourage scrub invasion. Although the project was only funded until 2005 there will still be opportunities for the local community to get involved with conservation work on heathland sites in the parish.

## Useful sources of further information:

The following organisations can offer advice and information on various wildlife topics as well as organising events and carrying out projects.

- Devon Wildlife Trust: [www.devonwildlifetrust.org](http://www.devonwildlifetrust.org)
- Devon Birdwatching and Preservation Society: Secretary tel: 01837 53360
- Dartmoor National Park Authority: Tel: 01626 832093 <http://www.dartmoor-npa.gov.uk/>
- English Nature: [www.english-nature.org.uk](http://www.english-nature.org.uk)
- Plantlife: [www.plantlife.org.uk](http://www.plantlife.org.uk)
- RSPB: [www.rspb.org.uk](http://www.rspb.org.uk)
- The Woodland Trust: [www.woodland-trust.org.uk](http://www.woodland-trust.org.uk)
- The Living Churchyards & Cemeteries Project, Arthur Rank Centre, National Agricultural Society, Stoneleigh Park, Warwickshire, CV8 2LZ Tel: 01203 696969 ext. 364/339.

In addition, Devon County Council is currently (June 2006) developing a Community Biodiversity Toolkit which will be available via the DCC web site ([www.devon.gov.uk/biodiversity](http://www.devon.gov.uk/biodiversity)). This toolkit will aim to provide practical advice on management to encourage wildlife and, in particular, will provide 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 will also provide guidance on seeking funding for project work. In the meantime, you may find the following sources of funding useful.

## Possible sources of funding:

A number of potential sources of funding are available for local biodiversity projects. Each has its own rules, criteria and objectives, and funding sources are sometimes only available for a limited period of time. However, the following may well be worth checking for suitability (not all will be applicable to your particular parish):

- Awards for All: National Lottery grants aimed at communities. [www.awardsforall.org.uk](http://www.awardsforall.org.uk)
- Biffawards: small grants for biodiversity projects within 10 miles of a Biffa operation (landfill). <http://www.biffaward.org/projects/smallgrants.php>

- British Dragonfly Society: grants of £250 for pond building.  
<http://www.dragonflysoc.org.uk/>
- Breathing Places: grants available for the creation of community green spaces. Distributed by the Big Lottery Fund.  
<http://www.biglotteryfund.org.uk/programmes/breathingplaces/index.html>
- Countryside Trust Awards: 01242 521382 or [www.countryside-trust.org](http://www.countryside-trust.org)
- Defra's Environmental Action Fund. <http://www.defra.gov.uk/environment/eaf/>
- Defra: information about woodland grant schemes.  
<http://www.defra.gov.uk/erdp/schemes/wgs/default.htm>
- Enriching Nature Programme (SITA Trust): for biodiversity projects within 10 miles of a landfill site. [http://www.sitatrust.org.uk/nature/apply\\_nature](http://www.sitatrust.org.uk/nature/apply_nature)
- Exmoor National Park: conservation grants for projects within the National Park.  
[http://www.exmoor-nationalpark.gov.uk/index/living\\_in/living\\_in\\_grants.htm](http://www.exmoor-nationalpark.gov.uk/index/living_in/living_in_grants.htm)
- Esmée Fairburn Foundation: grant-giving trust for environmental projects.  
<http://www.esmeefairbairn.org.uk/programmes/env.html>
- Forestry Commission: grants and sources of funding available for improving biodiversity. <http://www.forestry.gov.uk/forestry/hcou-4u4j28>
- Hanson Environmental Fund: if you live within 5 miles of a Hanson quarry.  
<http://www.hansonenvfund.org/welcome.php>
- Heritage Lottery Fund: various grants for different types of community projects.  
<http://www.hlf.org.uk/English/>
- Living Spaces: projects to enhance the environment of communities. 0845 600 3190 or [www.living-spaces.org.uk](http://www.living-spaces.org.uk).
- Local Heritage Initiative: 01226 719019 or [www.lhi.org.uk](http://www.lhi.org.uk).
- Tree Council: small grants for schools and communities for tree planting schemes.  
<http://www.treecouncil.org.uk/>

If you are within Dartmoor or Exmoor National Parks, or within one of Devon's five Areas of Outstanding Natural Beauty (AONBs) it may also be worth exploring if your project is eligible for support through the **Sustainable Development Fund**.

## **Bibliography**

Cooper A (2005) *Secret Nature of Devon* Green Books.

DCC & Devon Hedge Group (1997) *Devon's Hedges* Devon County Council and Devon Hedge Group

Devon Biodiversity Partnership (1998) *The Nature of Devon: A Biodiversity Action Plan*

Stokes R (1999) *Woodbury – The Twentieth Century Revisited*. Halsgrove

UK Steering Group (1995) *Biodiversity: The UK Steering Group Report Vol 1 Meeting the Rio Challenge* HMSO London

UK Steering Group (1995) *Biodiversity: The UK Steering Group Report Vol 2 Action Plans* HMSO London

Wilson M (2004) *A Woodbury Triumph!* (self published)

### **Websites:**

[www.woodland-trust.org.uk](http://www.woodland-trust.org.uk)

[www.devonwildlifetrust.org](http://www.devonwildlifetrust.org)

[www.clintondevon.co.uk](http://www.clintondevon.co.uk)



**Appendix 1 – Notable sites and species within Woodbury Parish - Devon Biodiversity Records Centre database.**

<b>File Code</b>	<b>Site Name</b>	<b>Grid Ref.</b>	<b>Area (ha)</b>	<b>Description</b>	<b>Status</b>
SX98/001	Exe Estuary	SX980838	2139.2	Tidal estuary with mudflats, saltmarsh, reed beds, marshy grassland & pond. Includes the canal. Important ornithological & botanical assemblages.	SSSI/SPA/Ramsar
SY08/030	East Devon Pebblebed Heaths	SY040870, SY060900, SY045832, SY054920, SY062920, SY066920 & SY050910	1122.2	Lowland heath	SSSI/SPA/DWTreserve
SY08/003	Rushmoor Wood	SY030874	2.2	Coniferous plantation on an ancient woodland site	LWS
SX98/003	Woodbury Road Station	SX982863	2.2	Saltmarsh & reedbed	CWS*
SY08/001	Black Hill	SY030855	56.6	Working quarry with remnant heath vegetation, butterfly & bird interest	CWS*
SY08/004	Rockham Wood	SY033886	13.7	Ancient semi-natural & secondary broadleaved woodland	CWS*
SY08/008	Hogsbrook Wood	SY024889	3.0	Ancient semi-natural woodland	CWS*
0	Woodbury Wood	SY023870	31.5	Semi-natural ancient woodland	AWI
SX98/004	Big Earth	SX989853	2.0	Ancient semi-natural woodland	pCWS
SX98/103	The Brake	SX996861	3.1	Old coppiced woodland with bluebells and primroses	pCWS
SX98/095	Nutwell Park Ponds	SX987849 & SX987846	2.4	Parkland ponds	pCWS
SY08/015	Coombe Plantation	SY020848	23.5	Secondary woodland	pCWS
SY08/007	Higher Mallocks	SY020855	7.8	semi-improved neutral grassland	pCWS
	Bystock Reserve	SY033843		Nationally Important Dragonfly site	
	Bicton Common	SY040858		Regionally Important Dragonfly site	
	Goosemoor	SX974878		Other dragonfly sites in inventory	

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

**Special Areas of Conservation (SAC):** these are notified by English Nature because they contain species and/or habitats of European importance (listed in the Habitats Directive 1994), and are part of a network of conservation sites set up through Europe known as the Natura 2000 series. On land, all candidate SACs are, or will be notified as SSSIs. English Nature needs to be consulted before any operations likely to damage the special interest are undertaken. SAC 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. County Wildlife Sites are usually included in Local Plans as sites of substantive nature conservation interest and are covered by Planning Policy Guidance note nine (PPG9). 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.

**Local Wildlife Sites (LWS):** these are sites of significant wildlife interest within a local context that do not reach the criteria for County Wildlife Sites. They are not covered by PPG9, but may be included in Local Plans.

**Potential County Wildlife Sites / Unconfirmed County Wildlife Sites (pCWS or Unc):** these are sites identified as having possible interest but not fully surveyed. Some of these sites will be areas of significant wildlife interest.

**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.

### Notable Species within Wildlife Sites within the Parish of Woodbury

No.	Name	Latin Name	Location	Date	Grid Ref.	UK Protection	International Protection	Status
1	Hedgehog	<i>Erinaceus europaeus</i>	Park Way, Woodbury	2002	SY013868	WCA 6	Bern III	
2	Slow-worm	<i>Anguis fragilis</i>	Woodbury	2002	SY013868	WCA 5(KIS)	Bern III	
3	Warty Newt	<i>Triturus cristatus</i>	Woodberry	2001	SY014861	WCA 5	EC IIa, IVa; Bern II	UKBAP(P)
4	Bluebell	<i>Hyacinthoides non-scripta</i>	Woodbury Salterton	2004	SY014887	WCA 8 (S)		
5	Snowdrop	<i>Galanthus nivalis</i>	Woodbury Salterton	2004	SY014887		EC Vb(where native); CITES II	
6	Common Toad	<i>Bufo bufo</i>	White Cross Road, Woodbury Salterton	2005	SY017886	WCA 5(S)	Bern III	
7	Badger	<i>Meles meles</i>	Woodmanton	1997	SY0186	WCA 6, BA	Bern III	
8	Badger	<i>Meles meles</i>	B3179	2003	SY020864	WCA 6, BA	Bern III	
9	a newt	<i>Triturus sp.</i>	Toby Lane, Woodbury Salterton	2001	SY020883	WCA 5(S)	Bern III	
10	Common Frog	<i>Rana temporaria</i>	Toby Lane, Woodbury Salterton.	2002	SY020883	WCA 5(S)	EC Va; Bern III	
11	Bluebell	<i>Hyacinthoides non-scripta</i>	SITE DELETED - Woodbury Wood	2003	SY023870	WCA 8 (S)		
12	Primrose	<i>Primula vulgaris</i>	SITE DELETED - Woodbury Wood	2003	SY023870			DBAP
13	Bluebell	<i>Hyacinthoides non-scripta</i>	Hogsbrook Wood	1993	SY024889	WCA 8 (S)		
14	Primrose	<i>Primula</i>	Hogsbrook Wood	1993	SY024889			DBAP

		vulgaris						
15	Smooth Brome	Bromus racemosus	Hogsbrook Wood	1993	SY024889			DN2
16	Silver-studded Blue	Plebejus argus	Lympstone Common	1997	SY0285	WCA 5 (S)		UKBAP(P); Nb
17	Roe Deer	Capreolus capreolus	Woods between Woodbury & Woodbury Castle	2001	SY028874	DA	Bern III	
18	Silver-studded Blue	Plebejus argus	Black Hill	1993	SY030855	WCA 5 (S)		UKBAP(P); Nb
19	Small Cudweed	Filago minima	Black Hill	2003	SY030855			DN1
20	White Water-lily	Nymphaea alba	Black Hill	2003	SY030855			DN1
21	Dartford Warbler	Sylvia undata	Black Hill	1993	SY030865	WCA 1		Amber
22	Silver-studded Blue	Plebejus argus	Black Hill	1993	SY030865	WCA 5 (S)		UKBAP(P); Nb
23	Green Woodpecker	Picus viridis	Near quarry at Woodbury Common.	2001	SY032856			Amber
24	Viviparous Lizard	Lacerta vivipara	Near quarry at Woodbury Common.	2001	SY032856	WCA 5(KIS)	Bern III	
25	Badger	Meles meles	Just off East Devon way, in wood	1999	SY032875	WCA 6, BA	Bern III	
26	Bluebell	Hyacinthoides non-scripta	Rockham Wood	1993	SY033886	WCA 8 (S)		
27	Primrose	Primula vulgaris	Rockham Wood	1993	SY033886			DBAP
28	Roe Deer	Capreolus capreolus	Rockham Wood	1993	SY033886	DA	Bern III	

29	Smooth Brome	<i>Bromus racemosus</i>	Rockham Wood	1993	SY033886			DN2
30	Cuckoo	<i>Cuculus canorus</i>	Woodbury Common,	2002	SY034867			Amber
31	Curlew	<i>Numenius arquata</i>	Woodbury Common	2002	SY034867			DBAP; Amber
32	Dartford Warbler	<i>Sylvia undata</i>	Woodbury Common,	2002	SY034867	WCA 1		Amber
33	Pale Dog-violet	<i>Viola lactea</i>	Woodbury Common,	2002	SY034867			NS; DN2
34	Tree Pipit	<i>Anthus trivialis</i>	Woodbury Common,	2002	SY034867			Amber
35	Turtle Dove	<i>Streptopelia turtur</i>	Woodbury Common,	2002	SY034867			UKBAP(P); Red
36	Viviparous Lizard	<i>Lacerta vivipara</i>	Woodbury Common,	2002	SY034867	WCA 5(KIS)	Bern III	
37	Wood Warbler	<i>Phylloscopus sibilatrix</i>	Woodbury Common,	2002	SY034867			Amber
38	Silver-studded Blue	<i>Plebejus argus</i>	Woodbury Common	1997	SY0386	WCA 5 (S)		UKBAP(P); Nb
39	Badger	<i>Meles meles</i>	B3179	2000	SY0388	WCA 6, BA	Bern III	
40	Spoonbill	<i>Platalea leucorodia</i>	River Exe at Exton	2000	SX970865	WCA 1		Amber
41	Avocet	<i>Recurvirostra avosetta</i>	River Clyst, Topsham.	2001	SX974872	WCA 1		Amber
42	a glasswort	<i>Salicornia sp.</i>	Woodbury Road Station	1993	SX982862			DN2
43	Annual Sea-blite	<i>Suaeda maritima</i>	Woodbury Road Station	1993	SX982862			DN2
44	Common Saltmarsh-grass	<i>Puccinellia maritima</i>	Woodbury Road Station	1993	SX982862			DN2

45	Greater Sea-spurrey	<i>Spergularia media</i>	Woodbury Road Station	1993	SX982862			DN2
46	Kingfisher	<i>Alcedo atthis</i>	Woodbury Road Station	1993	SX982862	WCA 1		Amber
47	Lesser Sea-spurrey	<i>Spergularia marina</i>	Woodbury Road Station	1993	SX982862			DN3
48	Sea Aster	<i>Aster tripolium</i>	Woodbury Road Station	1993	SX982862			DN3
49	Sea Couch	<i>Elytrigia atherica</i>	Woodbury Road Station	1993	SX982862			DN3
50	Sea Rush	<i>Juncus maritimus</i>	Woodbury Road Station	1993	SX982862			DN2
51	Wild Celery	<i>Apium graveolens</i>	Woodbury Road Station	1993	SX982862			DN3
52	Bulbous Foxtail	<i>Alopecurus bulbosus</i>	Exton, Woodbury	1980	SX982863			NS; DN1; DR
53	Otter	<i>Lutra lutra</i>	Exton	1997-1998	SX982863	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
54	Badger	<i>Meles meles</i>	A376	1998-2002	SX982871	WCA 6, BA	Bern III	
55	Otter	<i>Lutra lutra</i>	River Exe	1999	SX986846	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
56	Badger	<i>Meles meles</i>	A376	1997-2002	SX9985	WCA 6, BA	Bern III	
57	Silver-washed Fritillary	<i>Argynnis paphia</i>	Woodbury	1990	SY0287			
58	Dark Green Fritillary	<i>Argynnis aglaja</i>	Black Hill Quarry	1998	SY021865			Decline
59	Green Hairstreak	<i>Callophrys rubi</i>	Lympstone Common	1998-2000	SY026850			Decline
60	Silver-studded Blue	<i>Plebejus argus</i>	Lympstone Common	1998	SY026850	WCA 5 (S)		UKBAP(P); Nb
61	Silver-studded	<i>Plebejus argus</i>	Blackhill Quarry	1996	SY027852	WCA 5 (S)		UKBAP(P); Nb

	Blue							
62	Silver-studded Blue	<i>Plebejus argus</i>	Budleigh Common	1990-1996	SY029862	WCA 5 (S)		UKBAP(P); Nb
63	Silver-washed Fritillary	<i>Argynnis paphia</i>	Woodbury Common	1994-1999	SY0386			
64	Green Hairstreak	<i>Callophrys rubi</i>	Bicton Common	1990-2003	SY0386			Decline
65	Small Pearl-bordered Fritillary	<i>Boloria selene</i>	Bicton Common	1990-2001	SY0386			Decline
66	Silver-studded Blue	<i>Plebejus argus</i>	Bicton Common	1990-2003	SY0386	WCA 5 (S)		UKBAP(P); Nb
67	Silver-washed Fritillary	<i>Argynnis paphia</i>	Woodbury Castle	1992	SY032873			
68	White Admiral	<i>Ladoga camilla</i>	Woodbury Common	1996	SY0487			Decline
69	Purple Hairstreak	<i>Quercusia quercus</i>	Woodbury Common	1996	SY0487			Decline
70	Dark Green Fritillary	<i>Argynnis aglaja</i>	Hogsbrook Lakes	2003	SY029888			Decline
71	Badger	<i>Meles meles</i>	Powderham village, close to the Round House.	2001	SX960847	WCA 6, BA	Bern III	
72	Shoveler	<i>Anas clypeata</i>	Exminster Marshes	2002	SX962873			Amber
73	Teal	<i>Anas crecca</i>	Exminster Marshes	2002	SX962873			Amber
74	Badger	<i>Meles meles</i>	A379	1999	SX963846	WCA 6, BA	Bern III	
75	Avocet	<i>Recurvirostra avosetta</i>	Exe Estuary, near Turf Locks	2000	SX964861	WCA 1		Amber
76	Weasel	<i>Mustela nivalis</i>	Exminster Marshes	2000	SX964874		Bern III	
77	Otter	<i>Lutra lutra</i>	Exe Estuary at Topsham	2003	SX965875	WCA 5	EC IIa, IIIa;	UKBAP(P);

							Bern II	DBAP
78	Whimbrel	<i>Numenius phaeopus</i>	River Exe, Topsham.	2003	SX968872	WCA 1		Amber
79	Avocet	<i>Recurvirostra avosetta</i>	Exe mud flats, Topsham	2001-2004	SX968873	WCA 1		Amber
80	Bar-tailed Godwit	<i>Limosa lapponica</i>	The Goat Walk and Estuary, Topsham	2004	SX969873			Amber
81	Dunlin	<i>Calidris alpina</i>	The Goat Walk and Estuary, Topsham	2004	SX969873			Amber
82	Teal	<i>Anas crecca</i>	The Goat Walk and Estuary, Topsham	2004	SX969873			Amber
83	Spoonbill	<i>Platalea leucorodia</i>	Bowling Green Marsh, Topsham.	2002	SX969879	WCA 1		Amber
84	Badger	<i>Meles meles</i>	Topsham Market Gardens	2002	SX970878	WCA 6, BA	Bern III	
85	Barn Owl	<i>Tyto alba</i>	Bowling Green Marsh, Topsham	2003	SX971874	WCA 1, 9		DBAP; Amber
86	Avocet	<i>Recurvirostra avosetta</i>	Bowling Green Marsh, Topsham	2004	SX971876	WCA 1		Amber
87	Dunnock	<i>Prunella modularis</i>	Bowling Green Marsh, Topsham	2004	SX971876			Amber
88	Lapwing	<i>Vanellus vanellus</i>	Bowling Green Marsh, Topsham	2004	SX971876			Amber
89	Redpoll	<i>Carduelis flammea</i>	Bowling Green Marsh, Topsham	2004	SX971876			Amber
90	Redshank	<i>Tringa totanus</i>	Bowling Green Marsh, Topsham	2004	SX971876			Amber
91	Shelduck	<i>Tadorna tadorna</i>	Bowling Green Marsh, Topsham	2004	SX971876			Amber

92	Shoveler	<i>Anas clypeata</i>	Bowling Green Marsh, Topsham	2004	SX971876			Amber
93	Spoonbill	<i>Platalea leucorodia</i>	Bowling Green Marsh, Topsham	2004	SX971876	WCA 1		Amber
94	Starling	<i>Sturnus vulgaris</i>	Bowling Green Marsh, Topsham	2004	SX971876			Red
95	Wigeon	<i>Anas penelope</i>	Bowling Green Marsh, Topsham	2004	SX971876			Amber
96	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Bowling Green Marsh, Topsham.	2003	SX971878	WCA 5, 6	EC IVa; Bern III, Bonn II	UKBAP(P)
97	Otter	<i>Lutra lutra</i>	Clyst Bridge, Topsham	2001	SX971882	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
98	Little Egret	<i>Egretta garzetta</i>	Clyst Bridge, Topsham	2004	SX971883			Amber
99	a bat	bat sp.	Powderham, Nr Kenton.	1998	SX972844	WCA 5, 6	EC IVa; Bonn II	
100	Natterer's Bat	<i>Myotis nattereri</i>	Powderham, Nr Kenton.	1998	SX972844	WCA 5, 6	EC IVa; Bern II; Bonn II	
101	Otter	<i>Lutra lutra</i>	Powderham to Turf Hotel	2000	SX972844	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
102	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Powderham, Nr Kenton.	1998	SX972844	WCA 5, 6	EC IVa; Bern III, Bonn II	UKBAP(P)
103	Pintail	<i>Anas acuta</i>	Bowling Green Marsh, Topsham	2003	SX972875	WCA 1b		Amber
104	Sand Martin	<i>Riparia riparia</i>	Bowling Green Marsh, Topsham	2003	SX972875			Amber
105	Shelduck	<i>Tadorna tadorna</i>	Bowling Green Marsh, Topsham	2003	SX972875			Amber
106	Teal	<i>Anas crecca</i>	Bowling Green Marsh, Topsham	2003	SX972875			Amber

107	White-fronted Goose	Anser albifrons	Bowling Green Marsh, Topsham.	2004	SX972875			Amber
108	Wigeon	Anas penelope	Bowling Green Marsh, Topsham	2003	SX972875			Amber
109	Black-tailed Godwit	Limosa limosa	Bowling Green Marsh, Topsham.	2003	SX972876	WCA 1		Red
110	Mute Swan	Cygnus olor	Bowling Green Marsh, Topsham.	2003	SX972876			Amber
111	Peregrine	Falco peregrinus	Bowling Green Marsh, Topsham.	2003	SX972876	WCA 1		Amber
112	Shelduck	Tadorna tadorna	Bowling Green Marsh, Topsham.	2003	SX972876			Amber
113	Spoonbill	Platalea leucorodia	Bowling Green Marsh, Topsham.	2003	SX972876	WCA 1		Amber
114	Teal	Anas crecca	Bowling Green Marsh, Topsham.	2003	SX972876			Amber
115	Wigeon	Anas penelope	Bowling Green Marsh, Topsham.	2003	SX972876			Amber
116	Dunlin	Calidris alpina	Clyst Bridge, Clyst Marshes	1993	SX972881			Amber
117	Greenshank	Tringa nebularia	Clyst Bridge, Clyst Marshes	1993	SX972881	WCA 1		
118	Little Egret	Egretta garzetta	Clyst Bridge, Clyst Marshes	1993	SX972881			Amber
119	Redshank	Tringa totanus	Clyst Bridge, Clyst Marshes	1993	SX972881			Amber
120	Badger	Meles meles	B road, Starcross to Powderham	2002	SX973834	WCA 6, BA	Bern III	
121	Little Egret	Egretta garzetta	Topsham	2001	SX973873			Amber

122	Little Egret	<i>Egretta garzetta</i>	Bowling Green Marsh, Topsham	2003	SX973873			Amber
123	Otter	<i>Lutra lutra</i>	Bowling Green Marsh, Topsham	2003	SX973873	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
124	Lapwing	<i>Vanellus vanellus</i>	Bowling Green Marsh, Topsham	2001	SX973877			Amber
125	Peregrine	<i>Falco peregrinus</i>	Bowling Green Marsh, Topsham	2004	SX973877	WCA 1		Amber
126	Noctule	<i>Nyctalus noctula</i>	Bowling Green Marsh, Topsham	2003	SX973878	WCA 5, 6	EC IVa; Bern II; Bonn II	
127	Badger	<i>Meles meles</i>	Minor road between Powderham and Starcross	2002	SX974840	WCA 6, BA	Bern III	
128	Roe Deer	<i>Capreolus capreolus</i>	Bowling Green Marsh, Topsham	2003	SX974874	DA	Bern III	
129	Otter	<i>Lutra lutra</i>	Bowling Green Marsh, Topsha	2003	SX974878	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
130	Shelduck	<i>Tadorna tadorna</i>	Bowling Green Marsh, Topsham	2003	SX974878			Amber
131	Badger	<i>Meles meles</i>	A376,	2002	SX998846	WCA 6, BA	Bern III	
132	Otter	<i>Lutra lutra</i>	Greendale	1997	SY001902	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
133	Badger	<i>Meles meles</i>	A3052	1999	SY007905	WCA 6, BA	Bern III	
134	Barn Owl	<i>Tyto alba</i>	A3052 just east of Farringdon Cross	2002	SY015904	WCA 1, 9		DBAP; Amber
135	Kestrel	<i>Falco tinnunculus</i>	A3052	2003	SY016904			Amber
136	Badger	<i>Meles meles</i>	Bystock Field	1992	SY022838	WCA 6, BA	Bern III	
137	Green	<i>Picus viridis</i>	Bystock Field	1992	SY022838			Amber

	Woodpecker							
138	Kestrel	Falco tinnunculus	Bystock Field	1992	SY022838			Amber
139	Otter	Lutra lutra	Farringdon	2001	SY022909	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
140	Badger	Meles meles	A3052	2001-2002	SY024905	WCA 6, BA	Bern III	
141	Badger	Meles meles	A3052	2001	SY025905	WCA 6, BA	Bern III	
142	House Martin	Delichon urbica	Withen Lane, Aylesbeare.	2001-2002	SY026906			Amber
143	Pipistrelle	Pipistrellus pipistrellus	Withen Lane, Aylesbeare.	2001	SY026906	WCA 5, 6	EC IVa; Bern III, Bonn II	UKBAP(P)
144	Red Deer	Cervus elaphus		2002	SY026906	DA	Bern III	
145	Redwing	Turdus iliacus	Withen Lane, Aylesbeare.	2002	SY026906	WCA 1		Amber
146	Song Thrush	Turdus philomelos	Withen Lane, Aylesbeare.	2002	SY026906			UKBAP(P); Red
147	a bat	bat sp.	Withen Lane, Aylesbeare.	1996	SY02979084	WCA 5, 6	EC IVa; Bonn II	
148	Kestrel	Falco tinnunculus	Withen Lane, Aylesbeare.	2001	SY030905			Amber
149	Red Deer	Cervus elaphus	Withen Lane, Aylesbeare.	2002	SY030905	DA	Bern III	
150	Roe Deer	Capreolus capreolus	Withen Lane, Aylesbeare.	2001	SY030905	DA	Bern III	
151	Badger	Meles meles	Aylesbeare	2002	SY030909	WCA 6, BA	Bern III	
152	Roe Deer	Capreolus capreolus	Bystock Pools	1976	SY031844	DA	Bern III	
153	Badger	Meles meles	Bystock Pools	1976	SY032844	WCA 6, BA	Bern III	
154	Bullfinch	Pyrrhula	Bystock Pools	2004	SY032845			UKBAP(P);

		<i>pyrrhula</i>						Red
155	Dartford Warbler	<i>Sylvia undata</i>	Bystock Pools	2004	SY032845	WCA 1		Amber
156	Dunnock	<i>Prunella modularis</i>	Bystock Pools	2004	SY032845			Amber
157	Fieldfare	<i>Turdus pilaris</i>	Bystock Pools	2004	SY032845	WCA 1		Amber
158	Goldcrest	<i>Regulus regulus</i>	Bystock Pools	2004	SY032845			Amber
159	Green Hairstreak	<i>Callophrys rubi</i>	Bystock Pools	2003	SY032845			Decline
160	Green Woodpecker	<i>Picus viridis</i>	Bystock Pools	2004	SY032845			Amber
161	Grey Wagtail	<i>Motacilla cinerea</i>	Bystock Pools	2004	SY032845			Amber
162	Marsh Tit	<i>Parus palustris</i>	Bystock Pools	2004	SY032845			Red
163	Meadow Pipit	<i>Anthus pratensis</i>	Bystock Pools	2004	SY032845			Amber
164	Mistle Thrush	<i>Turdus viscivorus</i>	Bystock Pools	2004	SY032845			Amber
165	Redwing	<i>Turdus iliacus</i>	Bystock Pools	2004	SY032845	WCA 1		Amber
166	Roe Deer	<i>Capreolus capreolus</i>	Bystock Pools	2004	SY032845	DA	Bern III	
167	Keeled Skimmer	<i>Orthetrum coerulescens</i>	Bystock Reserve, Bystock Pools	1995	SY033843			KeyD (N)
168	Roe Deer	<i>Capreolus capreolus</i>	Lympstone Common.	2004	SY033850	DA	Bern III	
169	Badger	<i>Meles meles</i>	Bystock Pools	1999	SY034844	WCA 6, BA	Bern III	
170	Green Woodpecker	<i>Picus viridis</i>	Bystock Pools	2000	SY034844			Amber
171	Roe Deer	<i>Capreolus</i>	Bystock Pools	2000	SY034844	DA	Bern III	

		capreolus						
172	Green Woodpecker	Picus viridis	Bystock Pools	1976	SY035843			Amber
173	Dartford Warbler	Sylvia undata	Hawkerland/Woodbury	2002	SY035845	WCA 1		Amber
174	Green Woodpecker	Picus viridis	Bystock Pools,	1976	SY035845			Amber
175	Turtle Dove	Streptopelia turtur	Hawkerland/Woodbury	2002	SY035845			UKBAP(P); Red
176	Wood Warbler	Phylloscopus sibilatrix	Hawkerland/Woodbury	2002	SY035845			Amber
177	Greater Horseshoe Bat	Rhinolophus ferrumequinum	East Budleigh Common	2003	SY039848	WCA 5, 6	EC IIa, IVa; Bern II; Bonn II	UKBAP(P); DBAP
178	Lesser Horseshoe Bat	Rhinolophus hipposideros	East Budleigh Common	2003	SY039848	WCA 5, 6	EC IIa, IVa; Bern II; Bonn II	UKBAP(P)
179	Cuckoo	Cuculus canorus	Woodbury Common	2005	SY039862			Amber
180	Otter	Lutra lutra	Woodbury Common	2001	SY042884	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
181	Fallow Deer	Dama dama	Sanctuary Lane, east of Woodbury Salterton	2001	SY042891	DA	Bern III	
182	Crossbill	Loxia curvirostra	East Budleigh Commons	2002	SY043851	WCA 1		
183	Dartford Warbler	Sylvia undata	East Budleigh Commons	2002	SY043851	WCA 1		Amber
184	Tree Pipit	Anthus trivialis	East Budleigh Commons	2002	SY043851			Amber
185	Brown Long-	Plecotus auritus	Woodbury, Exeter	1999	SY043885	WCA 5, 6	EC IVa; Bern	

	eared Bat						II; Bonn II	
186	Badger	Meles meles	Hawkerland Brakes.	1999	SY046884	WCA 6, BA	Bern III	

- WCA 1**      **Wildlife and Countryside Act (1981) Schedule 1:** birds which are protected by special penalties at all times.
- WCA 5**      **Wildlife and Countryside Act (1981) Schedule 5:** species protected against killing, injury, disturbance and handling.
- WCA 5 (S)**      **Wildlife and Countryside Act (1981) Schedule 5: (sale):** species protected against sale only.
- WCA 6**      **Wildlife and Countryside Act (1981) Schedule 6:** animals (other than birds) which may not be killed or taken by certain methods
- BA**      **Protection of Badgers Act 1992:** badgers may not be deliberately killed, persecuted or trapped except under licence. Badger setts may not be damaged, destroyed or obstructed.
- Bern III**      **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix III:** Exploitation of listed animal species to be subject to regulation
- Bern II**      **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix II:** Special protection for listed animal species and their habitats.
- ECVa, Vb**      **EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex Va and Vb:** Exploitation of listed animals and plants to be subject to management if necessary.
- ECIVa, IVb**      **EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex IVa:** Exploitation of listed animals and plants to be subject to management if necessary.
- ECIIa, IIb**      **EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex IIa and IIb:** Designation of protected areas for animal and plant species listed.
- ECIIIa, IIIb**      **EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex IIIa and IIIb:** Species used as criteria for designating Special Areas of Conservation (SACs).
- Bonn II**      **Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) Appendix II:** Range states encouraged to conclude international agreements to benefit species listed.

<b>UKBAP(P)</b>	<b>UK Priority Species (Short and Middle Lists - UK Biodiversity steering Group Report 1995)</b> i.e. species that are globally threatened and rapidly declining in the UK (by more than 50% in the last 25 years). Has a Species Action Plan.
<b>DBAP</b>	<b>Devon Biodiversity Action Plan species:</b> these have been identified as species of key conservation concern in Devon.
<b>Decline</b>	Substantial local decline in Devon
<b>Amber List</b>	Bird species of medium conservation concern, such as those whose population is in moderate decline, rare breeders, internationally important and localised species and those of unfavourable conservation status in Europe.
<b>Red List</b>	Bird species of high conservation concern, such as those whose population or range is rapidly declining, recently or historically, and those of global conservation concern.
<b>Nb</b>	<b>Nationally Notable B:</b> recorded from 30-100 10km squares in Great Britain since 1980
<b>NS</b>	<b>Nationally Scarce:</b> 15-100 10km squares in Atlas of British Flora 1962.
	<b>Devon Notable Species:</b> Selected species recorded from over 50 2km squares in the Atlas of Devon Flora 1984 (R.B. Ivimey-Cook, Department of Biological Sciences, The University of Exeter).
<b>DN1</b>	<b>Devon Notable<sup>1</sup>:</b> 1-25 2 km squares in Atlas of Devon Flora 1984.
<b>DN2</b>	<b>Devon Notable<sup>2</sup>:</b> 26-50 2 km squares in Atlas of Devon Flora 1984.
<b>DN3</b>	<b>Devon Notable<sup>3</sup>:</b> Selected species recorded from over 50 2 km squares in Atlas of Devon Flora 1984.
<b>DR</b>	<b>Devon Rarity:</b> native species recorded from 3 or fewer localities within Devon

**See attached maps from DBRC showing Wildlife Sites and Notable Species.**

## **Appendix 2 – Species list recorded during field visit**

Species list for Woodbury parish, recorded during the field survey on 7<sup>th</sup> October 2005.

<b>Common name</b>	<b>Scientific name</b>
Elm	<i>Ulmus procera</i>
Field maple	<i>Acer campestre</i>
Ash	<i>Fraxinus excelsior</i>
English oak	<i>Quercus robur</i>
Holly	<i>Ilex aquifolium</i>
Hazel	<i>Corylus avellana</i>
Blackthorn	<i>Prunus spinosa</i>
Hawthorn	<i>Crataegus monogyna</i>
Primrose	<i>Primula vulgaris</i>
Bluebell	<i>Hyacinthoides non-scripta</i>

Additional records from Sue Searle

Adder – Woodbury Common 2004

Viviparous lizard – Woodbury Common 2004

Pipistrelle bat – Exton village 2005

Noctule bat – Exton village 2005

Barn owl – Woodmanton 2003

Barn owl - St Peter's School 2003

**See attached map showing points of interest around the parish.**