

Devon Aggregates & Biodiversity Project



Parish Biodiversity Audit

for

Bishop's Tawton

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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Bishop's Tawton - 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 Bishop's Tawton in future years.

Introduction

Bishop's Tawton in North Devon is a large rural parish located on rising land on the eastern side of the Taw valley. Codden Hill dominates the landscape to the south east, with the wide valley of the River Taw to the west. Whitemoor Hill and the rising land to the north east of the village are dissected by Venn Stream, which flows westwards from Landkey to join the River Taw.

Codden Hill forms the western end of a distinctive series of 'whale backed' chert, shale and limestone ridges. These are uncharacteristic of the surrounding landscape of North Devon and are protected as an Area of Great Landscape Value (AGLV).

The parish is characterised by a mosaic of small, irregular fields of mixed pasture and arable use. A network of hedgerows with mature hedgerow trees provides valuable wildlife habitat and corridors along which wildlife can disperse. Small woodland copses are commonly situated on land too steep to cultivate. Areas of wildflower-rich grassland have escaped agricultural improvement on some of these steep hillsides.

A walk around the village of Bishop's Tawton reveals numerous features of wildlife interest. The churchyard and gardens are havens for wildlife, and signs of otter can often be seen along the course of the Venn Stream. Within a short walk from the village is the River Taw, which is tidal at this point.

Bishop's Tawton is a parish rich in wildlife. Some of the 'highlights' include:

- Windswept, open bracken slopes and heathland on Codden Hill;

- The upper Taw estuary near Bishop's Tawton village;
- The River Taw, near Chapelton Station;
- Parkland and veteran trees around Hall and Herner;
- The churchyard, road verges, mature gardens and allotments in the village of Bishop's Tawton;
- The wooded valley of the Venn Stream; and
- Narrow country roads and green lanes, flanked by Devon banks and tall, species-rich hedgerows.

All of these features can be explored or seen from the accessible network of lanes, public rights of way and access land. There are probably many other areas which, with further survey, could be found to be of considerable wildlife interest.

Designated Sites

There are no nationally or internationally designated sites within the parish. The following sites are of county or local importance.

Codden Hill County Wildlife Site

Codden Hill is a mosaic of bracken, dry heath, grassland and scrub woodland. These semi-natural habitats occupy the northern slopes and top of Codden Hill, the prominent east-west ridge to the south of Bishop's Tawton village. Much of the hillside to north and east is dominated by dense bracken. Beneath the bracken the vegetation is species-poor, with grasses, common sorrel, foxglove and broad-leaved dock.

Some areas of heathland flora remain, particularly on the north western side of the hill. Here the purple colours of ling, bell heather and cross-leaved heath can be seen in late summer, along with the yellow, coconut-scented flowers of common gorse. Other species such as tormentil, sheep's sorrel and purple moor grass are also characteristic of heathland or acid grassland vegetation. The conical pink spikes of heath-spotted orchid can be seen in early summer, and a previous survey recorded the red, twining tangles of dodder, which is a parasitic plant that grows on gorse.

Areas of gorse and birch scrub have developed on the eastern side of the hill. The dense shrubs and young woodland are attractive to breeding birds and provides a fine display of autumn colour. Numerous rowan trees scattered over the hillside will attract flocks of redwing and fieldfare in winter.

The heathland character of the CWS has been significantly degraded by the increase in bracken since the original survey in the 1990's. This survey noted that there had been a recent fire on the heath. It is known that burning will actually encourage bracken unless grazing or mechanical management is also carried out. It is encouraging to note that the entire hill (including the

CWS) is now in an Environmental Stewardship scheme, which provides the landowner with financial assistance to re-introduce grazing and other management of benefit to the wildlife habitats. A further benefit of this Environmental Stewardship has been the provision of new parking and permissive paths, which provide enhanced public access.

Adders have been recorded on Codden Hill, although they are seldom seen and avoid humans. The hill is a spectacular place to view ravens and birds of prey, which may be seen riding the thermals and air currents generated by the slopes. Buzzards are common, and there is usually at least one, perhaps being mobbed by a carrion crow or jackdaw. Kestrels and sparrowhawks are also common, and peregrine falcons are seen regularly.

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 a heather 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, flowering plants, mosses, liverworts 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. The few remaining areas in Devon are concentrated in the east of the County on the Pebblebed Heaths, along the coasts, and heathland fragments in the Bovey Basin. Lowland heath is a very scarce habitat within North Devon, and 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.

Bishop's Tawton Saltmarsh County Wildlife Site

This area of agriculturally improved, semi-improved and brackish grassland with fringing saltmarsh is situated on the east bank of the Taw estuary, and straddles the parish boundary. Saltmarsh habitat is now restricted to a narrow strip below the flood embankment. The CWS survey recorded the following Devon notable plants characteristic of saltmarshes: annual seablite, English scurvy grass, frosted orache and sea aster. The embankment is relatively species rich. The internal pasture between the bank and the cycleway is heavily grazed, but the drains and wet areas maintain a good variety of plant species (31 species recorded in the CWS survey).

The County Wildlife Site can be seen from the Tarka Trail, and from the public footpath that follows the bank south as far as the railway bridge.

Coastal saltmarsh is listed on the **UK Biodiversity Action Plan** as a habitat of conservation concern and is included in the Estuaries section of the Devon Biodiversity Action Plan.

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 such as here in the upper reaches of the Taw estuary. The development of saltmarsh vegetation is dependent on the presence of intertidal mudflats.

Since medieval times, many saltmarshes have been reduced in extent by land claim. In common with many other estuaries, the construction of the embankment here to drain and claim land for agriculture has restricted the saltmarsh to a narrow strip.

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 species such as glassworts 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. 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.

Many of the features of a natural saltmarsh described above are missing from this CWS and the surrounding estuary due to the restricted area following historical land claim and construction of the bank.

The loss of saltmarsh to land claim continued until very recently; for instance, in the Wash 858 ha of saltmarsh was 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.

In some parts of the Country, this process is now being reversed. Sea walls are being breached to re-create large areas of saltmarsh. These projects benefit wildlife and provide a natural coastal defence against rising sea levels. In Devon the RSPB has recently undertaken just such a project on its nature reserve at Bowling Green Marsh, near Exeter.

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.

Ancient Woodland:

Devon is one of the least wooded counties in Britain, with only 2.2% ancient woodland cover, as compared to other southern English counties like East Sussex (10.6%) and Kent (8.5%). Devon has approximately 14,937 ha of ancient woodland, of which the largest element is oak woodland. However, ash is the dominant woodland tree in the parish of Bishop's Tawton.

There are three areas of ancient woodland in the parish. These are Lower Mortiscombe Wood, Kippesleigh Wood and Warren Wood. All have to some extent been replanted. There are no publicly accessible areas of broad-leaved woodland in the parish.

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. Ancient woodland is specifically mentioned in PPS9, ensuring that Local Authority policies protect those areas of ancient woodland that do not have statutory protection.

Whitemoor Local Wildlife Site

Whitemoor consists of species-rich grassland that has not undergone extensive agricultural improvement (in the form of drainage or the application of artificial fertilizer). A survey in the 1990's recorded black knapweed,

agrimony, oxeye daisy, meadow vetchling, selfheal and other flowering plants which are characteristic of grassland on neutral soils. The Local Wildlife Site also includes areas of wet, marshy grassland.

Flower-rich meadows and pastures are habitats 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 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 and birds such as the green woodpecker.

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 PPS9, but may be included in local planning documents.

Other habitats (identified from field survey):

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 an essential corridor for the movement of wildlife and may support many animals and plants. Most of the hedgerows around Bishop's Tawton parish are quite species rich. Especially species-rich hedges were noted at the following locations:

- Minor road west of Halmpstone, between Halmpstone and Hall (8 woody species, including spindle);
- 'Pill Lane', now the cycleway leading from Bishop's Tawton to Barnstaple (8 species);
- Minor road south of Herner, between Herner and Yeotown (7 species, including spindle);
- 'Clement's Lane', leading to the new car part at the eastern end of Codden Hill near Downrew (7 species);

- Sentry Lane', the minor road from Bishop's Tawton to Bableigh (6 species).

Common hedgerow species include hawthorn, blackthorn, hazel, elder, wych elm, dog rose, willow and holly. Field maple, dog wood and spindle are less frequent, and generally found in only the most species-rich hedges. Large, mature hedgerow trees (principally oak and ash) are a feature of many hedges in the parish. Several plants more typical of woodland habitats were noted on the banks beneath species rich hedges. These species, such as herb Robert, wood avens, wood sage, dog's mercury, lords-and-ladies, hartstongue fern and common polypody are also indicators of important hedges.

It is likely that a survey carried out in the spring would reveal bluebell, primrose, common dog-violet and other species which are such a characteristic feature of the hedge banks in North Devon.

Species-rich hedges are listed on the **Devon Biodiversity Action Plan** and **UK Biodiversity Action Plan** as a habitat of conservation concern in Devon. Many of the hedges along the lanes of Bishop's Tawton would be classified as species-rich. The hedges also provide sheltered corridors through areas of farmland and probably support a good variety of invertebrates.

Cemeteries/ churchyard

The churchyard of St. John the Baptist church in Bishop's Tawton is a haven for wildlife. Mature common lime, sycamore, yew, horse chestnut, beech, cherry, hawthorn and elder trees surround the churchyard, which runs down to the railway. Wild areas have been left un-cut, resulting in dense cover of brambles, nettles, ivy, creeping buttercup, herb Robert, broad-leaved dock, willowherb, tutsan, teasel, bittersweet and yarrow. The grassy areas around the graves are cut regularly, and are consequently not particularly rich in flowering plants. Some relaxation of the mowing regime, coupled with collecting or raking up the cuttings would allow a greater diversity of attractive flowering plants, which in turn would attract a range of insects.

The walls of the church and many of the gravestones are covered with a colourful array of lichens. The different types of decorative stone enhance the diversity of lichens found here.

Slow worm, common lizard, mole, field vole, grey squirrel, jackdaw, wood pigeon and robin are just a few of the animals which live in or around the churchyard.

Churchyards are included in the action plan for 'Cities, towns and villages' in the **Devon Biodiversity Action Plan**.

Stone walls

Walls provide a variety of habitats in which plants can grow, including crevices and joints between the stones, on the wall tops where small amounts of soil build up and also on the stones themselves. Several native ferns are found growing on walls within Bishop's Tawton. Species recorded include wall-rue, maidenhair spleenwort and rustyback fern.

Wall-rue shows a distinct preference for limestone when growing on natural rock and it finds similar conditions in the mortar of walls, where it is more commonly found. It is the typical pioneer species of wall vegetation over most of Europe. Many young plants are often found where mortar has broken away to form small ledges and crevices. Maidenhair spleenwort usually grows on mortared walls and in rock crevices, preferring surfaces that face south-west. This species is not confined to any particular kind of rock though it is often abundant on limestone. Rustyback fern is naturally a plant of crevices in limestone but mortared walls provide a suitable alternative. This fern is sensitive to extremes of temperature and drought so during dry weather the leaves curl up and remain in this position until re-wetted.

Ivy-leaved toadflax is one of Britain's most widely and longest established introduced plant species, and has successfully colonised many walls within the village. Where soil has built up on the top of a wall, plants such as red valerian, grasses, black knapweed, common ragwort and creeping cinqfoil thrive. A good example of a wall with a diverse flora can be seen in Bishop's Tawton along a 150m stretch of pavement on the west side of the main road, between 'Little Pill' and 'South View'.

Walls with crumbling mortar, cracks and crevices are an important refuge for reptiles such as common lizard and slowworm, and for insects such as solitary bees.

Stone walls are included in the action plan for 'Cities, towns and villages' in the **Devon Biodiversity Action Plan**.

Recreation areas and public open space

The recreation area in the village is notable for its trees (including some recently planted oak saplings) and the fringing hedgerows. The grassland is species poor and regularly mown. Like the churchyard, the parts of the grassland (the slopes above the football pitch) would benefit from a more relaxed cutting regime.

There is also a good network of public footpaths, green lanes and quiet country roads from which to explore the parish. The 'Tarka Trail' passes through the parish, along the Taw estuary from the centre of Barnstaple and then following the wooded valley of the Venn Stream. Other footpaths and by-ways allow walkers to view wildlife-rich areas such as the estuary, the River Taw and the parkland around Hall.

Codden Hill is the largest area of publicly accessible open space in the parish. At 189 m above sea level there are dramatic views of the parish, and beyond to Barnstaple, the Taw/Torridge estuary and Braunton. The un-enclosed areas of Codden Hill have recently been designated as 'open access' under the Countryside and Rights of Way Act 2000.

Gardens and allotments

Gardens and allotments are the places in which the residents of Bishop's Tawton parish can have the greatest positive effect on biodiversity. Gardens can include a wide variety of habitats such as trees, areas of grass, flower and shrub borders, water features, and also areas for growing food. This range of habitats can support a number of resident species by providing them with food throughout the year, as well as resting and breeding sites. In addition, gardens can also be very important for migratory birds and insects.

The varied habitats within gardens are used by a number of species. These include birds such as the song thrush, blackbird, house sparrow, blue tit, robin, starling and wren. They are also important for hedgehogs, frogs, toads, slowworms, butterflies, ladybirds, spiders and snails. Gardens also provide insect rich feeding areas for bat species especially pipistrelles and whiskered bats.

Gardens are a haven for wildlife and can provide links to other areas of wildlife habitat. Unfortunately very little information is held by DBRC on species that have been recorded from gardens in Bishop's Tawton parish.

Gardens are included in the action plan for 'Cities, towns and villages' in the **Devon Biodiversity Action Plan**.

Roadside verges

Roadside verges often support flower-rich grassland, as well as a variety of semi-natural habitats including species-rich 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 that is species-rich is relatively small and localised in distribution.

Devon County Council 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.

In Bishop's Tawton village, the road verge and bank along the east side of the A377 from the A39 roundabout to Mount Pleasant displays a diverse flora of both woodland and grassland species. A local naturalist has counted 60 species of flowering plant in this 1 km stretch.

Arable land

In the UK as a whole, one third of all agricultural land is arable and 40% of that is cultivated for winter wheat. Looking at the farmed landscape from Codden Hill, Bishop's Tawton parish would seem to broadly match this national 'average'. However, in contrast to many areas of Britain, this part of North Devon has retained its relatively small fields and network of good-quality hedgerows.

Several common arable plant species were recorded during the survey including field pansy, cut-leaved crane's-bill and scentless mayweed.

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.

Examples of arable fields with well developed 'conservation headlands' can be seen around Halmpstone.

Many once-common lowland farmland birds have declined over the last 25 years to the extent that several species are included in the **UK Biodiversity Action Plan**. A number of UK species of conservation concern and **Devon Biodiversity Action Plan** priority species make use of arable crops and stubble for shelter, feeding or nesting. In North Devon, these include brown hare, skylark and linnet.

Veteran trees and Parkland

Several veteran oak trees were noted in the parish. One such tree can be seen from the lane and footpath approximately 300 m south along the road from Herner Church. It is likely that there are other veteran trees in this area, associated with the parkland landscape around Hall. This parkland is mapped by DBRC as a potential County Wildlife Site (see below) and is listed in the North Devon Biodiversity Action Plan.

English Nature has 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:

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

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.

Parkland is listed on the **Devon Biodiversity Action Plan** as a habitat of conservation concern in Devon.

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. Several species of bat roost in the crevices in split trunks. The bats rely on the high densities of insects, especially high when grazing stock are present.

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.

Green lanes

A green lane is 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, are used by bats and may be more botanically species-rich than single hedge boundaries.

The parish has a number of green lanes, many of them being public rights of way. Look out for species-rich hedges and banks rich in wild flowers and ferns. Hamnett's Lane, above Mount Pleasant in the village of Bishop's Tawton, is a typical example. The lane's species-rich hedges are draped with traveller's joy and there are some quite localised plants such as wood avens and stinking iris growing on the banks.

The River Taw

Rivers and their valleys are important wildlife corridors along which animals and plants move to new areas of habitat. Natural fluvial processes may result in the creation of new areas of natural habitat, but these processes are often prevented by flood defences, channelisation and bank stabilisation. Most of the Taw is not heavily modified. However, the lower reaches are embanked, separating river and floodplain.

Water quality is generally fairly good, although nutrient levels are elevated above the naturally low conditions in many rivers. The fast flows and low nutrients mean that few higher plants are present. Invertebrate communities, both aquatic and associated terrestrial species, tend to be of high value although not necessarily diverse.

Unrestricted access to riverbanks by farm animals can result in increased bank erosion and large amounts of sediment entering the river. Constant grazing and browsing prevents the re-establishment of bankside trees, so that

tree cover declines over time. Cattle, in particular, often access the river to drink and may stand in it for long periods, fouling the water and stirring up fine sediments that infiltrate gravels and damage fish spawning habitat.

The River Taw marks the western boundary of the parish. The river is tidal to a point approximately 1km south of Bishop's Tawton village. The tidal part of the river can be best seen from the footpath that goes past the church and under the railway to the Venn Stream's confluence with the Taw. Birds such as shelduck, little egret, cormorant and black-headed gulls can be seen feeding on the mud or roosting on shingle banks in mid-stream. Common and green sandpipers are regularly seen during their autumn passage migration and over winter.

Further upstream, to the south, the river can be best seen from the footbridge near Chapelton Station. Here the character of the river is entirely different. Tidal mud banks and turbid water are replaced by natural meanders, islands, crumbling sandy banks, shingle bars, fast-flowing riffles and deep pools. The peaty-brown water is a legacy of the river's origin high on Dartmoor. The river banks have numerous trees and dense cover for otters, and the sandy banks are ideal for nesting sand martins and kingfisher. One of the most abundant flowering plants along the river is Himalayan balsam, with its pink 'policeman's helmet' flowers and exploding seed pods. This invasive alien plant has spread throughout most of Devon's river system. Whilst not as problematic as Japanese knotweed, it may still suppress the native river vegetation.

Rivers, streams, floodplains and fluvial processes are listed on the **Devon Biodiversity Action Plan** as features of conservation concern in Devon. The River Taw is an important Atlantic Salmon river. The Atlantic salmon is a **Devon Biodiversity Action Plan** species.

Potential County Wildlife Sites

There are 24 potential County Wildlife Sites in Bishop's Tawton parish. Eight of the sites are broadleaved woodland, one is parkland and the remainder are unimproved or semi-improved neutral grassland.

Unimproved and semi-improved grassland has not undergone extensive agricultural improvement (in the form of drainage, re-seeding or the application of artificial fertilizer). Grassland on neutral soils is characterised by flowering plants such as black knapweed, agrimony, bird's foot trefoil, sweet vernal grass. Many of these potential county wildlife sites are small and steeply-sloping, making it uneconomical for them to be agriculturally improved. South- and west-facing grasslands are likely to be particularly rich in insects due to their warm, sheltered aspect. However, if traditional farming practices (cutting and/or grazing) cease, these areas of flower-rich grassland are vulnerable to being overgrown by bramble and trees. Small patches of unimproved neutral grassland remain outside of these sites along green lanes, on road verges, or in the corner of fields.

Broadleaved woodlands in the parish are mostly small in area and scattered. The most wooded area of the parish is around Downrew, Halmpstone, Woolstone and Hall. Grant aid, in the form of Woodland Grant Scheme has encouraged some landowners to plant new woodlands or extend existing areas.

Even small woods can provide shelter and food for mammals, birds and insects. The value of woodland is greatly enhanced if it is connected to a network of hedgerows.

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

Species

Important Species

A report from the DBRC database showing what legally protected, locally notable or noteworthy (eg Japanese Knotweed) species are known to have been present in and around Bishop's Tawton has been prepared and is presented separately (Appendix 1).

Birds

Several species of birds were recorded during the survey:

- Open farmland, and slopes of Codden Hill - Buzzard, House martin, Kestrel, Linnet, Meadow pipit, Mistle thrush, Peregrine, Raven, Rook, Stonechat, Swallow, Wheatear (Skylark are also present at Codden Hill).
- Hedgerows and woodland habitats - Blackbird, Blue tit, Chiffchaff, Coal tit, Great spotted woodpecker, Great tit, Jackdaw, Jay, Robin, Sparrowhawk, Wood pigeon, Wren.
- Streams, River Taw and estuary - Black-headed gull, Grey heron, Grey wagtail, Kingfisher, Mallard, Moorhen, Mute swan.
- Village, hamlets and farms - Collared dove, House sparrow.

Woodland, hedgerow and farmland birds are under-represented in this list. A survey at a more appropriate time of year (i.e. spring and early summer) would reveal many more species present in the high-quality network of mature hedgerows, copses and broadleaved woodlands that are such an essential feature of the parish. It is likely that nationally declining species such as bullfinch, skylark and yellowhammer breed in the parish. These three species are listed on the birds of conservation concern (2002-2007) 'Red List' and are **UK Biodiversity Action Plan** priority species.

A local resident reports seeing barn owls hunting over the floodplain fields to the west and south of Bishop's Tawton, and also over the farmland around Halmpstone Manor. 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 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, thanks to the work of numerous landowners and organisations such as the Barn Owl Trust.

Swallows and house martins both nest in the village, and probably in many of the scattered farms and hamlets throughout the area. Swifts nest every year in the Village Hall. There is a small rookery in the village, in pine trees over the entrance to 'The Elms' on the south edge of the village.

Until recently, spotted flycatchers were a frequent summer sight in Bishop's Tawton churchyard, and nested nearby. In common with other parts of Devon and UK, their numbers have seriously declined in recent years – placing them high on the birds of conservation concern (2002-2007) 'Red List'.

DBRC holds a record of sand martins on the river Taw, near to the village. The eroding, sandy riverbanks of the Taw above the upper tidal range of the estuary would provide ideal places for their nest burrows. Sand martins are on the 'Amber' list of birds of conservation concern.

Plants

Plant species noted on a visit on the 12 September 2005 are listed in Appendix 2.

The DBRC database list no rare plants recorded from Bishop's Tawton parish, but several plants with a localised distribution in Devon were noted during the survey.

The hedgerow species spindle, dogwood and wych elm were recorded from several species-rich hedges in the parish. These species are largely confined to areas of lime-rich (calcareous) soils, which is rather uncommon in this part of Devon.

Spindle is native to most of Europe, but not the extreme south or north. It generally is found in woodland, hedgerows and scrub and likes chalk and lime soils. Wood from this tree was used to make spindles. Local names include skewerwood and pegwood in Devon. It is said that spindle will only establish in a hedge which has six other shrub species present, which suggests that the hedge must be at least 600 years old before spindle will settle in.

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.

Following a poll by Plantlife International, a charity dedicated to conserving all forms of plant life in their natural habitats in the UK, Europe and across the world, the primrose was voted by the public as Devon's County Flower.

Japanese Knotweed, a highly invasive introduced plant species was noted at a location on the edge of the village. More information about this problem plant is presented below in the section 'Some Ideas for Local Action...'.

Mammals

Several mammal species have been recorded from Bishop's Tawton parish. These include several otter records from the River Taw and a particular concentration of badger records along the road south of Codden Hill near Downrew House. During the course of this survey rabbit, grey squirrel, otter and badger were noted. It would appear that mammals are under-recorded in the parish – there is certainly no lack of high quality habitat for many mammal species. A local naturalist who lives in the village reports past sightings of roe deer, red deer, fox, field vole, mole, pygmy shrew and water shrew (the latter being a species for which there are very few records in Devon, and whose conservation status is not well known).

Fresh **otter** footprints and spraints (distinctive droppings which also mark their territories) were seen during the field survey in September 2005 below the A377 bridge over Venn Stream, and where the stream meets the Taw. This indicates that otters are active in the heart of Bishop's Tawton village. It is

quite likely that otters will travel right up this stream past Venn to Landkey and beyond - there is certainly plenty of suitable habitat and vegetation cover along this stream. It is appropriate that this should also be the route of the 'Tarka Trail' footpath! Otter spraint was also found on a pier of the footbridge over the Taw near Chapelton Station.

The otter is listed on the **Devon Biodiversity Action Plan** as a species of conservation concern. Formerly widespread throughout the UK, the otter underwent a rapid decline in numbers from the 1950s to 1970s and was effectively lost from midland and south-eastern counties of England by the 1980s. Populations remain in Wales, south-west England and much of Scotland, where sea loch and coastal colonies comprise one of the largest populations in Europe. There is also a significant population of otters in Northern Ireland. The decline now appears to have halted and sightings are being reported in former habitats. Devon has an internationally important otter population and otters are now found on most watercourses and wetlands throughout the County. Otters are even now recolonising areas where they were thought to have been lost during the 60's and 70's. The main serious threat to otters today is from road kills, with many animals sadly reported dead each year.

There is a single record of an unidentified **bat** species held by DBRC, and a local resident regularly sees bats in and around the village. A lesser horseshoe bat was recorded just to the south of the parish. The farmed landscape throughout the parish and in particular the network of hedges and hedgerow trees would make the entire parish highly suitable for foraging lesser horseshoe and other species of bats. A walk to the river Taw on a summer night would almost certainly reveal Daubenton's bats swooping low over the water.

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. 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.

The pipistrelle, greater horseshoe, lesser horseshoe, barbastelle and Bechstein's bats are all **UK Biodiversity Action Plan** priority species. In addition, the greater horseshoe bat is listed on the **Devon Biodiversity Action Plan** as a species of conservation concern.

DBRC does not hold any records of **brown hare** within the parish, although the farmland landscape and habitat mosaic of arable fields, pasture, hedgerows and woodland would appear to be ideal for this species. A local naturalist reports that she has seen brown hares, particularly in the area around Halmpstone Manor.

The brown hare is listed on the **Devon Biodiversity Action Plan** as a species of conservation concern. The brown hare was probably introduced to us by the Romans and is fairly common in areas of arable crops and grass leys. The species has undergone a significant decline in the last 50 years, probably associated with changes in farming practice and increased use of pesticides.

Although DBRC does not hold any records of **dormouse** from the parish, the species-rich hedgerows and areas of broad-leaved woodland provide a perfect habitat for this secretive rodent. A local naturalist has found evidence of dormice (in the form of the distinctive feeding signs left in nibbled hazelnuts) on the eastern side of Codden Hill.

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 an important UK stronghold of the species. However, no detailed quantification of population change has been possible, due to lack of comparable data over time.

Invertebrates

Insects and other invertebrates are an under-recorded group (with the exception of popular species such as butterflies and dragonflies). There are few records for the parish. Purple hairstreak, silver-washed fritillary and white admiral butterflies have been recorded in Hawkridge Wood, just outside the parish. These species may be present in other broadleaved woodlands within the parish, such as Mortiscombe Wood (very close to Hawkridge Wood) and the woodlands around Halmpstone Manor.

The silver-washed fritillary declined during the twentieth century, especially in England and Wales, but has spread noticeably during recent decades. It is listed as a 'species of conservation concern' in the UK BAP. The butterfly breeds in broad-leaved woodland, especially woods with sunny rides and glades. In Devon it may also breed in wooded hedgerows and sheltered lanes near to woods.

Codden Hill is listed on the Invertebrate Site Register. It is a Grade C site, meaning that it is: "a site of potential importance where habitat structure or a small number of records of notable species indicate that the site is likely to be of importance". The only invertebrate record for the site is dark green fritillary from 1984.

The dark green fritillary is a large and powerful butterfly, which can be seen in mid-summer flying rapidly in open and sunny habitats. The butterfly occurs in a range of flower-rich grasslands, often with patches of scrub, including: coastal grassland, dunes and scrub; chalk and limestone grassland; moorland and wet flushes; acid grassland with bracken, and occasionally woodland rides and clearings.

The Invertebrate Site Register is a dataset of information on the occurrence of scarcer British terrestrial and freshwater invertebrates. It has gathered data from a wide variety of often scattered sources, synthesized it to produce readily accessible information for use in all facets of invertebrate conservation. Data was collated systematically during the 1980s and early 1990s in particular to cover the period 1970 onwards, but records of the scarcer species were included from earlier periods, back to the 19th century for some species, in order to be able to describe and analyse declines and other changes in range and frequency of occurrence. Data were maintained as up to date as possible up until the early 1990s.

Reptiles and Amphibians

Little information is held on reptiles and amphibians in Bishop's Tawton parish. It is likely that the heathland and bracken slopes of Codden Hill are important for reptiles such as adders and common lizards. Common frogs and toads occur in garden ponds in the village and probably in many of the scattered hamlets. Slow worms and common lizards are known to occur in Bishop's Tawton churchyard and nearby gardens. Grass snakes have also been seen in a garden close to the church, and probably occur elsewhere - perhaps hunting for amphibians in garden ponds or using compost heaps in which to lay their eggs.

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. 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.
- National Action Plans can be viewed at www.ukbap.org.uk. This site also contains useful background information on UK biodiversity action planning.

Links between the wildlife of Bishop's Tawton and the Devon BAP:

Bishop's Tawton wildlife feature	Brief description of feature	Link with the Devon Biodiversity Action Plan (BAP)
Codden Hill County wildlife site	Bracken, lowland heath and scrub	<ul style="list-style-type: none"> • Lowland heathland Habitat Action Plan
Bishop's Tawton Saltmarsh County Wildlife Site	Agriculturally improved, semi-improved and brackish grassland with fringing saltmarsh	<ul style="list-style-type: none"> • Estuaries Habitat Action Plan • Grazing marsh Habitat Action Plan
Ancient woodland	Ancient semi-natural and re-planted broadleaved woodland	<ul style="list-style-type: none"> • Primrose Species Action Plan • Dormouse Species Action Plan
Whitemoor Local Wildlife Site	Species-rich grassland, which has been protected from agricultural improvement	<ul style="list-style-type: none"> • Flower-rich meadows and pastures Habitat Action Plan
River Taw	An important Devon river, showing transition from non-tidal river to tidal upper estuary	<ul style="list-style-type: none"> • Rivers, streams, floodplains and fluvial processes Habitat Action Plan • Otter Species Action Plan • Atlantic Salmon Species Action Plan
Farmed landscape (including several potential County Wildlife Sites)	A landscape of mixed pasture and arable fields, with species-rich hedgerows, hedgerow trees, areas of woodland and green lanes.	<ul style="list-style-type: none"> • Flower-rich meadows and pastures Habitat Action Plan • Species-rich hedges Habitat Action Plan • Primrose Species Action Plan • Barn owl Species Action Plan • Brown hare Species Action Plan • Dormouse Species Action Plan
Bishop's Tawton village Scattered hamlets, farms and dwellings	Private gardens, recreation areas, churchyards, stone walls and road verges.	<ul style="list-style-type: none"> • Cites, towns and villages Habitat Action Plan • Flower-rich meadows and pastures Habitat Action Plan
Veteran trees and Parkland	Parkland at Hall, with veteran oaks	<ul style="list-style-type: none"> • Parkland and wood pasture Habitat Action Plan

View the Devon Biodiversity Action Plan at 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 Bishop's Tawton might include dormouse, otter or wildlife in the village. These actions would directly contribute to the **Dormouse Action Plan, Otter Action Plan** and **Cites, Towns & Villages Action Plan**.

For example, there is very little information about the occurrence of dormouse in the parish. A public participation survey, based on the successful national 'Great Nut Hunt' would contribute to the Devon BAP objective: "to gain a better understanding of the distribution of the dormouse in Devon".

There are currently no wildlife records from the village of Bishop's Tawton. Local residents could be encouraged to record the wildlife they see in their gardens and around the village. The results could be used raise awareness of wildlife, perhaps through on-site interpretation for use by visitors and the local school. There are several locations within the village that have been highlighted in this report which would be suitable, such as Pill Lane, the churchyard, and the footpath alongside the Venn Stream where it meets the Taw.

Another 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. These actions would directly contribute to the **Species-rich Hedgerows Action Plan** and indirectly to the **Dormouse Action Plan**.

Survey work could be undertaken as a community group or in liaison with conservation groups active in the area (see Point 6, below).

Help to build up a picture of the state of Devon's environment by sending your records to the Devon Biodiversity Records Centre¹ where they can be properly collated.

During consultation on this report, one idea for further survey was proposed for the village. Current records for the village appear to be few and far between and it was suggested that a survey here, perhaps linked into the development of nature walks, could make a good school walk.

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.

It has been proposed that the top half of the playing field could be cut on a less frequent basis, for example, with perhaps a path cut through the long grass.

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

3 Build relationships with local landowners:

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

¹ 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

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 Bishop's Tawton represent a significant area that could be used to benefit wildlife. Large or small, you can turn your garden (or a part of it!) into a haven for wildlife. A very good source of information on wildlife gardening is the English Nature web site:

www.english-nature.org.uk/Nature_In_The_Garden

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 British Trust for Conservation Volunteers. These trusts have a number of Local Groups which, amongst other things, get involved in practical management work.

For example, the Devon Wildlife Trust is active in the area, and manages a nature reserve nearby at Uppacott Wood. Barnstaple and District DWT Local Group can be contacted via Joyce Dignam (01271 374324).

7 Japanese Knotweed:

Not something to cherish, but it can't be ignored! Unfortunately Japanese Knotweed is present in at least one location in Bishop's Tawton parish. 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. 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. 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 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.

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.

- British Trust for Conservation Volunteers: www.btcvcd.org.uk
- Butterfly Conservation: www.butterfly-conservation.org
- Devon Bat Group: www.dbg.me.uk
- Devon Birdwatching and Preservation Society: Secretary tel: 01837 53360
- Devon Mammal Group: www.devonmammalgroup.org
- Devon Wildlife Trust: www.devonwildlifetrust.org
- English Nature: www.english-nature.org.uk
- Plantlife: www.plantlife.org.uk
- RSPB: www.rspb.org.uk
- The Woodland Trust: 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). 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
- 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
- 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
- Exmoor National Park: conservation grants for projects within the National Park. 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.
- Local Heritage Initiative: 01226 719019 or 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**.

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Appendix 1a – Notable sites within Bishop’s Tawton Parish.

File Code	Site Name	Grid Ref.	Area (ha)	Description	Status
SS52/031	Codden Hill	SS580298	55.5	Lowland dry heath with areas of dense bracken & semi-improved neutral grassland	CWS
SS53/173	Bishop's Tawton Saltmarsh	SS562316	4.5	Saltmarsh, semi-improved grassland, watercourse & species-rich hedgebank	CWS
SS53/119	Whitemoor (S)	SS571304	5.3	Unimproved & semi-improved neutral grassland & species-poor rush pasture	LWS
SS52/050	Vellacott Wood	SS587299, SS586296 & SS593295	10.0	Broadleaved woodland	pCWS
SS52/033	King's Cott	SS574287 & SS572286	1.2	Semi-improved neutral grassland	pCWS
SS52/052	Halmpstone Cross	SS599283	19.1	Broadleaved woodland	pCWS
SS52/049	Halmpstone Wood	SS590286	17.6	Broadleaved woodland	pCWS
SS53/116	Elmpark Copse (E)	SS562308	4.4	Semi-improved neutral grassland	pCWS
SS53/121	Windy Ash (W)	SS569312	8.5	Unimproved & semi-improved neutral grassland	pCWS
SS53/118	Bishop's Tawton Bridge	SS564303	0.7	Semi-improved neutral grassland	pCWS
SS53/120	Whitemoor (N)	SS572307	6.2	Semi-improved neutral grassland	pCWS
SS53/122	Venn Cross	SS574310	22.8	Semi-improved neutral grassland	pCWS
SS53/123	Whitemoor Copse	SS576302	3.7	Broadleaved woodland	pCWS
SS52/032	Overton	SS574292	7.3	Semi-improved neutral grassland	pCWS
SS52/034	Great Fisherton	SS571280	41.1	Semi-improved neutral grassland	pCWS
SS52/036	Great Westacott	SS579280	2.9	Semi-improved neutral grassland	pCWS
SS52/041	Yeotown	SS584264 & SS588260	10.4	Semi-improved neutral grassland	pCWS
SS52/048	Broadmoor Brake	SS580288	2.4	Broadleaved woodland & semi-improved neutral	pCWS

File Code	Site Name	Grid Ref.	Area (ha)	Description	Status
				grassland	
SS52/084	Lower Mortiscombe Wood	SS599255	2.6	Ancient woodland largely replanted	PCWS, AWI
SS52/055	Higher Mortiscombe Wood	SS598255	4.8	Broadleaved woodland	pCWS
SS52/054	Hill	SS591263	5.5	Semi-improved neutral grassland	pCWS
SS52/042	Herner (N)	SS587270	18.0	Parkland	pCWS
SS52/085	Higher Woolstone	SS585273	3.9	Semi-improved neutral grassland	pCWS
SS52/045	Kippesleigh Wood & Warren Wood	SS583273	13.2	Ancient woodland & plantation on ancient woodland site	PCWS, AWI
SS52/044	Warren Field	SS581273	1.3	Semi-improved neutral grassland	pCWS
SS52/046	Cleave (S)	SS584279	10.9	Unimproved and semi-improved neutral grassland	pCWS
SS52/047	Cleave (N)	SS583285	16.9	Semi-improved neutral grassland	pCWS
NSS52NE1	Codden Hill Quarry	SS569297	0.6	Type locality of the Carboniferous Codden Hill Chert. With structural features including faulting	RIGS

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 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.

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 (pCWS): 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.

Appendix 1b – Notable species within Bishop’s Tawton Parish.

No.	Name	Latin Name	Location	Date	UK Protection	International Protection	Status
1	Otter	<i>Lutra lutra</i>	SW3 Hollamore Farm	1981	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
2	Sand Martin	<i>Riparia riparia</i>	River Taw near Bishop's Tawton.	2001			Amber
3	Otter	<i>Lutra lutra</i>	New Bridge	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
4	Otter	<i>Lutra lutra</i>	SW2 Hall	1981	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
5	Otter	<i>Lutra lutra</i>	SW2 Hall	1985	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
6	Badger	<i>Meles meles</i>	One mile down Sentry Lane near Bishop's Tawton,	2001	WCA 6, BA	Bern III	
7	Badger	<i>Meles meles</i>	Codden Hill, quarter of a mile before Downrew Hotel	2002	WCA 6, BA	Bern III	
8	Otter	<i>Lutra lutra</i>	SW2 Hall	1983	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
9	Badger	<i>Meles meles</i>	Near turning to Horswell, Bishop's Tawton	2000	WCA 6, BA	Bern III	
10	Badger	<i>Meles meles</i>	Road from Bishop's Tawton, near to Downrew House Hotel	1999	WCA 6, BA	Bern III	

No.	Name	Latin Name	Location	Date	UK Protection	International Protection	Status
11	Badger	<i>Meles meles</i>	Near to Downrew House Hotel, Bishop's Tawton	2000	WCA 6, BA	Bern III	
12	Badger	<i>Meles meles</i>	Past Downrew House, near Bishop's Tawton	2000	WCA 6, BA	Bern III	
13	Badger	<i>Meles meles</i>	Near to turning for Downrew and Hayne, Bishop's Tawton.	2000	WCA 6, BA	Bern III	
14	a bat	bat sp.	Downrew Farm, Bishop's Tawton, Barnstaple.	1996	WCA 5, 6	EC IVa; Bonn II	
15	Badger	<i>Meles meles</i>	On the road out of Bishop's Tawton going towards Codden Hill.	2003	WCA 6, BA	Bern III	
16	* Otter	<i>Lutra lutra</i>	SW2 Hall	1984	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
17	* Otter	<i>Lutra lutra</i>	River Taw	1982	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
18	* Brown Hare	<i>Lepus europaeus</i>	Barnstaple	1996			UKBAP(P); DBAP
19	* Otter	<i>Lutra lutra</i>	SW2 Hall	1985	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
20	* Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	Chapleton, Umberleigh,	1999	WCA 5, 6	EC IIa, IVa; Bern II; Bonn II	UKBAP(P)

No.	Name	Latin Name	Location	Date	UK Protection	International Protection	Status
21	* Otter	<i>Lutra lutra</i>	SW2 Hall	1979	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
22	* Purple Hairstreak	<i>Quercusia quercus</i>	Hawkridge Wood	1999			Decline
23	* Silver-washed Fritillary	<i>Argynnis paphia</i>	Hawkridge Wood	1996			
24	* White Admiral	<i>Ladoga camilla</i>	Hawkridge Wood	1997			Decline

* these species were recorded outside the parish, but within a one kilometre radius.

- WCA 5** **Wildlife and Countryside Act (1981) Schedule 5:** species protected against killing, injury, disturbance and handling.
- 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 II** **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix II:** Special protection for listed animal species and their habitats.
- 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
- 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 IIb:** Species used as criteria for designating Special Areas of Conservation (SACs).
- 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.

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.
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.
UKBAP(P)	UK Priority Species (Short and Middle Lists - UK Biodiversity steering Group Report 1995) 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.
DBAP	Devon Biodiversity Action Plan species: these have been identified as species of key conservation concern in Devon.
Decline	Substantial local decline in Devon
Amber List	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.

Appendix 2: Species list

Species list for Bishop's Tawton parish, recorded during the field survey on 12 September 2005.

Scientific name	Common Name
Plants	
<i>Acer campestre</i>	Field Maple
<i>Acer pseudoplatanus</i>	Sycamore
<i>Achillea millefolium</i>	Yarrow
<i>Aesculus hippocastanum</i>	Horse-chestnut
<i>Alnus glutinosa</i>	Alder
<i>Anagallis arvensis</i> ss. <i>arvensis</i>	Scarlet Pimpernel
<i>Arum maculatum</i>	Lords-and-Ladies
<i>Asplenium adiantum-nigrum</i>	Black spleenwort
<i>Asplenium ruta-muraria</i>	Wall rue
<i>Asplenium trichomanes</i>	Maidenhair spleenwort
<i>Betula pendula</i>	Silver Birch
<i>Calluna vulgaris</i>	Heather
<i>Castanea sativa</i>	Sweet Chestnut
<i>Centaurea nigra</i> ss. <i>nigra</i>	Common Knapweed/Hardheads
<i>Centranthus rubra</i>	Red Valerian
<i>Cerastium fontanum/holosteoides</i>	Common Mouse-ear
<i>Ceterach officinarum</i>	Rustyback fern
<i>Chaemerion angustifolium</i>	Rosebay Willowherb
<i>Cirsium arvense</i>	Creeping Thistle
<i>Clematis vitalba</i>	Traveller's-joy, Old Man's Beard
<i>Convolvulus arvensis</i>	Field Bindweed
<i>Cornus/Thelycrania sanguinea</i>	Dogwood
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Cymbalaria muralis</i>	Ivy-leaved Toadflax
<i>Digitalis purpurea</i>	Foxglove
<i>Dipsacus fullonum</i> ss. <i>sylvestris</i>	Teasel
<i>Erica cinerea</i>	Bell Heather
<i>Euonymus europaeus</i>	Spindle
<i>Eupatorium cannabinum</i>	Hemp-agrimony
<i>Fagus sylvatica</i>	Beech
<i>Fallopia japonica</i>	Japanese Knotweed
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Fraxinus excelsior</i>	Ash
<i>Galium aparine</i>	Cleavers
<i>Galium mollugo</i>	Hedge Bedstraw
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill
<i>Geranium robertianum</i>	Herb-Robert
<i>Geum urbanum</i>	Wood Avens
<i>Hedera helix</i>	Ivy
<i>Heracleum sphondylium</i>	Hogweed
<i>Hieracium</i> sp.	Hawkweed sp.
<i>Hypericum androsaenum</i>	Tutsan

Scientific name	Common Name
<i>Hypericum perforatum</i>	Perforate St John's-wort
<i>Ilex aquifolium</i>	Holly
<i>Impatiens glandulifera</i>	Himalayan balsam
<i>Iris foetidissima</i>	Stinking Iris
<i>Lactuca serriola</i>	Prickly Lettuce
<i>Larix sp.</i>	Larch
<i>Linaria vulgaris</i>	Common Toadflax
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Tripleurospermum inodorum</i>	Scentless Mayweed
<i>Mercurialis perennis</i>	Dog's Mercury
<i>Phragmites australis</i>	Common reed
<i>Phyllitis scolopendrium</i>	Heartstongue fern
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Plantago major</i>	Greater Plantain
<i>Polypodium vulgare agg.</i>	Common polypody
<i>Potentilla erecta</i>	Tormentil
<i>Potentilla reptans</i>	Creeping Cinquefoil
<i>Prunus avium</i>	Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Pteridium aquilinum</i>	Bracken
<i>Quercus robur</i>	Pedunculate Oak
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rosa canina</i>	Dog Rose
<i>Rubus fruticosus</i>	Bramble/Blackberry
<i>Rumex acetosella</i>	Sheep's Sorrel
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Salix caprea</i>	Goat Willow
<i>Sambucus nigra</i>	Elder
<i>Senecio jacobaea</i>	Common Ragwort
<i>Senecio vulgaris</i>	Groundsel
<i>Silene dioica</i>	Red Campion
<i>Solanum dulcamara</i>	Bittersweet
<i>Solidago virgaurea</i>	Goldenrod
<i>Sorbus aucuparia</i>	Rowan
<i>Stachys sylvatica</i>	Hedge Woundwort
<i>Stellaria media</i>	Common Chickweed
<i>Symphoricarpos albus</i>	Snowberry
<i>Taraxacum officinale</i>	Dandelion
<i>Taxus baccata</i>	Yew
<i>Teucrium scorodonia</i>	Wood Sage
<i>Tilia x europaea/x vulgaris</i>	Common Lime
<i>Trifolium pratense</i>	Red Clover
<i>Trifolium repens</i>	White Clover
<i>Ulex europaeus</i>	Common Gorse
<i>Ulex gallii</i>	Western Gorse
<i>Ulmus glabra</i>	Wych Elm
<i>Umbilicus rupestris</i>	Navelwort/Wall Pennywort
<i>Urtica dioica</i>	Common Nettle
<i>Veronica persica</i>	Common Field Speedwell

Scientific name*Viola arvensis***Common Name**

Field Pansy

Birds*Turdus merula*

Blackbird

Larus ridibundus

Black-headed Gull

Parus caeruleus

Blue Tit

Buteo buteo

Buzzard

Phylloscopus collybita

Chiffchaff

Parus ater

Coal Tit

Streptopelia decaocto

Collared Dove

Dendrocopos major

Great Spotted Woodpecker

Parus major

Great Tit

Ardea cinerea

Grey Heron

Motacilla cinerea

Grey Wagtail

Delichon urbica

House Martin

Passer domesticus

House Sparrow

Corvus monedula

Jackdaw

Garrulus glandarius

Jay

Falco tinnunculus

Kestrel

Alcedo atthis

Kingfisher

Carduelis cannabina

Linnet

Anas platyrhynchos

Mallard

Anthus pratensis

Meadow Pipit

Turdus viscivorus

Mistle Thrush

Gallinula chloropus

Moorhen

Cygnus olor

Mute Swan

Falco peregrinus

Peregrine

Corvus corax

Raven

Erithacus rubecula

Robin

Corvus frugilegus

Rook

Accipiter nisus

Sparrowhawk

Saxicola torquata

Stonechat

Hirundo rustica

Swallow

Oenanthe oenanthe

Wheatear

Columba palumbus

Wood Pigeon

Troglodytes troglodytes

Wren

Mammals*Oryctolagus cuniculus*

Rabbit

Sciurus carolinensis

Grey squirrel

Lutra lutra

Otter

Meles meles

Badger

Insects*Sympetrum striolatum*

Common darter

Aeshna juncea

Common hawker

Vanessa atalanta

Red admiral

Lasius flavus

Yellow meadow ant

Pararge aegeria

Speckled wood

Polyommatus icarus

Common blue

Gerris sp.

A pond skater

As stated at the beginning, this audit in no way attempts to be a comprehensive account of all the wildlife of the Parish. It is a starting point which can be built upon by the local community in the coming years.

The following additional species records were kindly supplied at the time of consultation with the Parish:

Scientific name	Common name
Birds	
<i>Aegithalos caudatus</i>	Long-tailed tit
<i>Pica pica</i>	Magpie
<i>Alauda arvensis</i>	Skylark
Mammals	
<i>Vulpes vulpes</i>	Fox
<i>Erinaceus europaeus</i>	Hedgehog