

Devon Aggregates & Biodiversity Project



Parish Biodiversity Audit

for

Holcombe Rogus

*Devon
Biodiversity
Records
Centre*

- 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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Holcombe Rogus - 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 Holcombe Rogus Parish in future years.

Introduction

Holcombe Rogus is a parish in mid Devon close to the Devon/Somerset border. It is very rural, the only settlements of any size being the villages of Holcombe Rogus, Twitchen and Whipcott. The parish lies over geology of limestone and this rock contributes significantly to the environment of the parish. A large working quarry, Westleigh quarry, is present in the south of the parish and there are many other old quarries and lime kilns present, showing limestone's importance to the parish through history and in the present day.

Limestone is uncommon in Devon and such areas have the potential to support locally rare calcicolous plant species. Holcombe Rogus is in the main intensively farmed and therefore agricultural improvement techniques such as the application of chemical fertilisers have probably destroyed this flora. However there are areas, especially in the north and west of the parish, of grassland on steep slopes, which may have had lower levels of improvement and consequently could still be of conservation interest.

The topography of the parish is varied, with large expanses of relatively flat, arable land in the eastern and central sections. The steep slopes form stream valleys and cover the north and west, whilst to the south the land tends to be low lying, level and damp beside a series of small streams. The agriculture is a mixture of arable and intensive grassland with permanent grassland on the steeper slopes and low-lying wetter areas. Most of the livestock seen during the survey were sheep. A surprisingly high number of battery poultry rearing units are also present.

The main ecological feature of the parish is the Grand Western canal, which runs from Tiverton northwards through the parish. It has been partially restored in recent years and is a Country Park as well as a County Wildlife

Site. The parish has several streams running through it, most of which flow in a south-easterly direction, eventually entering the canal. A higher than average number of lakes and ponds are also present, many of these being on the streams.

Other wildlife habitats present are a network of hedgerows, although many have been lost in the arable areas. There are several broadleaved woodlands, the majority being small copses associated with disused quarries, and one or two plantations of conifers. The quarries are likely to be of interest for the flora and fauna that they may support. One orchard was seen within Holcombe Rogus village and a large area of intensive orchards is present near the eastern boundary of the parish. Grass margins adjacent to hedgerows in the eastern half of the parish indicate that some farms are receiving agri-environment grants. This means that habitats should be under sympathetic management and some features may be subject to restoration plans.

Designated Sites

Stout's Cottage Geological Site of Special Scientific Interest (gSSSI)

This site is of special interest because it provides crucial evidence concerning the age and origin of the Upper Westleigh Limestones. The rare combination here of goniatites and conodonts, has established a Lower Carboniferous for correlation in the Visean. The Westleigh Limestone contains fossils and blocks of sediment originally formed in shallow water but transported into this deeper water site by powerful submarine turbidity currents, thus adding considerably to the overall thickness of strata in the areas. It is a key site for studies of both sedimentation and biostratigraphy in the Lower Carboniferous.

Lower Whipcott gSSSI

The rocks and structures seen at this locality are typical of the Upper Westleigh Limestone, and they are particularly valuable because comparable exposures in the area are now inaccessible. Palaeontological evidence for the Lower Carboniferous (Dinantian) age of the sediments is available here and the limestones appear to be of turbiditic origin. This indicates that the Westleigh area lay in a marine basin, receiving influxes of sediment, in the form of dense turbid debris flows, from a now concealed source to the east. The sediments and fossils conveyed in these turbidity flows originated in shallow water and were swept down the sloping sea bed, adding to the thickness of sediment already accumulating in the basin. Lower Whipcott is an important site for studies of Dinantian sedimentation and stratigraphy and is also a County Wildlife Site.

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.

Geological SSSIs

Types of geological SSSI

English Nature uses a classification based on the type of site as a basic categorisation for the purpose of site management. The classification allows generic threats and conservation strategies to be defined for the different site types. A fundamental distinction is that between exposure and integrity sites.

Exposure sites exhibit geological features which are relatively extensive underground. Removal of material should uncover more material of the same type. Examples include active quarries, disused quarries and cuttings, coastal cliffs, foreshore exposures, natural inland outcrops and stream sections, and mines. Conservation of exposure sites focuses on maintaining representative exposures of the features of interest. Threats to conservation of exposure sites include coastal defences which conceal outcrops in cliffs or foreshore, landfill in disused quarries and afforestation of natural outcrops, commonly in upland areas.

Integrity sites exhibit features which are finite and irreplaceable if destroyed. Examples include many in situ mineral and some fossil deposits which may occur in any of the site types above, mine dumps, karst, caves and geomorphological sites, both static and active. Conservation of integrity sites focuses on preservation, with restrictions against man-made changes which are likely to damage the interest. Threats to conservation of integrity sites include irresponsible specimen collection from certain mineral or fossil sites and the direct or indirect effects of human developments on active geomorphological sites. The importance of distinguishing between these two groups is that their successful management usually requires a quite different approach. As a rule, exposure sites are more robust than integrity sites and can often tolerate the effects of human activities to a greater degree. The site categories are not mutually exclusive and there are numerous examples where part of a site is classified as exposure and another part is classified as integrity. For example, a stratigraphic sequence in a cliff or quarry would have an exposure classification, as removal of rock would generally produce further exposure of the same material. However, mineral veins within the same sequence would often have an integrity classification as removal of vein material would not produce fresh exposure but would result in loss of the interest.

Grand Western Canal County Wildlife Site

The Grand Western Canal Country Park runs between Tiverton and Holcombe Rogus, and is eleven and a quarter miles long, with an accessible

and level towpath along its length. The canal was constructed to follow the contours of the landscape and employed cuttings and embankments where necessary. The canal meanders through agricultural land and small pockets of woodland providing spectacular views of the surrounding countryside. The canal also an ideal habitat for many plants and animals, including Otters and Kingfishers, and has recently been declared a Local Nature Reserve in recognition of its value for wildlife and for providing excellent opportunities for people to appreciate and learn more about nature.

Holcombe Wood County Wildlife Site

This is a large area of woodland on a fairly steep slope, dominated by Ash and Sycamore with frequent Beech. It appears to be managed as a broadleaved plantation and has good structure with a well generating understorey. The ground flora and native shrubs present indicate the base-rich limestone geology. Typical plants include Field maple, Bugle, Yellow archangel, White dead-nettle, Wood sorrel, Gooseberry and Wych elm. The site qualifies as ancient woodland (replanted) due to the mix of species present (see following sections). A badger sett is also present and several bird species were recorded here.

Lowland mixed deciduous woodland is a UK BAP priority habitat.

Lower Whipcott County Wildlife Site

This is an interesting site at a disused limestone quarry where secondary broadleaved woodland and calcicolous grassland is developing. The woodland is dominated by Ash with a very dense shrubby understorey of Hawthorn and Bramble providing excellent bird habitat. There are extensive areas of bare rock with sparse grassland developing, attracting a wide range of invertebrates including several butterfly species. The grassland is quite herb rich and includes limestone loving Yellow oat-grass, Welled thistle, Field scabious, Fairy flax and Burnet saxifrage.

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

Calcicolous grassland:

Calcicolous grassland communities have a very restricted distribution in Devon, and are almost absent from North Devon. They are one of the rarest habitats in Devon and support a range of plant species that are locally distributed both in Devon and nationally. These include quaking grass, tor

grass, common rock-rose, yellow-wort, hound's-tongue and hoary plantain. Unimproved calcicolous grassland is listed on the UK Biodiversity Action Plan as it is a rare habitat.

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

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*) 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.

The Grand Western Canal is listed on the inventory of Dragonfly sites for Devon. It is classed as 'other dragonfly sites', which means it has been surveyed but does not contain the species required to qualify it as a key site. Species included along its length include Hairy dragonfly, a nationally important species, Blue tailed damselfly and Migrant hawkler.

Holcombe Fields Local Wildlife Site

This site lies on the opposite side of the valley to Holcombe Wood, again on a steep slope. It is a mixture of improved, semi-improved and unimproved grassland with large patches of scrub comprised of Gorse, Elder and Brambles. Apart from the scrub, the most interesting areas are the unimproved dry grassland on the steepest slopes. This is neutral with a slight calcareous influence shown by the presence of species such as Yellow oat-grass and Dwarf thistle, both being Devon notable species. The combination of herb-rich grassland and scrub is ideal habitat for a range of invertebrates and birds.

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 cirl bunting.

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.

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.

The majority of the hedges in Holcombe Rogus appear to be tightly trimmed and therefore of limited wildlife value. In the damper south of the parish and in some of the steep valleys to the north they are the opposite and have been left unmanaged. The hedges sampled contained between 4 and 7 woody species, although some may be more species rich as some species may not have been apparent in the winter.

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 Holcombe Rogus would be classified as species-rich but would provide far better wildlife habitat if managed more sympathetically. The hedges also provide sheltered corridors through areas of farmland and probably support a good variety of invertebrates.

Cemeteries/ churchyard

The only churchyard in the parish is in Holcombe Rogus village and the grassland looks quite species rich, including plants such as Pignut and Cat's-ear. The eastern half of the churchyard is fenced off and appears to be grazed by sheep. As sheep tend to preferentially graze flower heads this area has fewer plant species present, being dominated by grasses.

Some of the the gravestones are very old and these, together with other walls in the vicinity, may support interesting lichen communities. Bats and birds such as Jackdaws are also associated with churches. Two species of bat, Brown long-eared and Noctule, have been found roosting at nearby Holcombe Court so it is likely the church is also used as a roost site.

Recreation areas and public open space

The most significant public open space is along the Great Western Canal, which is managed for both people and wildlife as a Local Nature Reserve and Country Park. From here people can walk south as far as Tiverton or northwards to link up to a series of paths to Wellington. Farmers in the Countryside Stewardship Scheme have provided permissive paths to and from the canal from Holcombe Rogus and along the outskirts of Westleigh Quarry. Most of the footpaths are in the south of the parish though a couple of other head northwards from Kytton Barton to Ashbrittle and eastwards from Twitchen to Waterslade. No other public open spaces were seen in the parish.

Allotments and gardens

Gardens are a haven for wildlife and can provide links to other areas of wildlife habitat. The gardens in Holcombe Rogus and Twitchen looked to be of some wildlife value, being 'old fashioned' with a mixture of flowers and vegetables being grown. Many gardens had stone walls which are good habitat for lichens and lizards. Most had compost heaps which are excellent for invertebrates and species such as grass snakes.

Arable land

Large areas of arable land are present and many of the farms in Countryside Stewardship have created 2 or 6 metre wide margins along the boundaries of some arable fields. These are strips that are kept out of crop growing. Some are left unmanaged to provide a rough grass and herb margin, which supports birds, small mammals and invertebrates, some of which prey on crop pests. Others are cultivated annually to encourage the germination of arable weeds, which are a good source of pollen in summer and seed food for birds in winter.

There are 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 and the move from spring sown to winter sown cereals proved catastrophic for many plants. Nowadays, arable plants are generally confined to the strip along the field edge.

Veteran trees

Several veteran trees were noted in the parish, mainly around the Holcombe Court estate. There are also a couple of old Yew trees in the churchyard at Holcombe Rogus. In addition many of the hedgerows contain mature oak and ash trees that may be 60 – 80 years old – the veterans of the future!

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.

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

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

Parklands

Holcombe Court, in the centre of Holcoombe Rogus is a country house of significant historical value set in a large area of parkland. It contains several veteran trees, mainly oak and ash, together with many new specimens planted in the last few years.

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.

Within the grounds of Holcombe Court are also a series of large lakes, often a feature of parkland settings. Lakes tend to be of greater value if not stocked with fish, as they tend to consume plants, invertebrates and amphibian eggs

and larvae. It is not known whether the lakes here have fish in them but it is quite likely that they are used for recreational fishing.

Orchards

Only three orchards were recorded in Holcombe Rogus. One is a traditional old orchard close to the village centre, quite a large site but with trees covering only half of it. It would be of great benefit if the remainder of the site were replanted. Another orchard appears to be present at Margerys Farm, this could not be inspected during the survey and its condition is unknown. Near the eastern boundary of the parish at Redhill Farm is a large area of modern orchards. These tend to be of lesser wildlife value as dwarf trees are grown which are harvested mechanically and subject to an intensive regime of management including pesticide use.

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.

Potential County Wildlife Sites

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

- ST 01/028: - Fenton Copse, an area of possible interest, it consists of secondary broadleaved woodland around an abandoned quarry.
- ST 01/020: - Higher Besley Farm, broadleaved woodland.
- ST 01/032: -Knowle Farm Wood, a small patch of broadleaved woodland.
- ST 02/028 and ST02/27: - Kytton Copse and Marcombe Lake East look to be interesting sites, being steep wooded slopes of a stream valley, connected to each other and to another pCWS to the west.
- ST 02/29: - Whipples Wood is slightly to the east of the last two sites and of a similar character.
- ST02/030: -Ramsey Farm is another small area of broadleaved woodland.

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 Holcombe Rogus has been prepared and is presented separately (Appendix 1).

Birds

A few species of birds were recorded during the survey including Snipe, Jackdaw, Moorhen, Mallard, Blackbird, Rook, Robin, Chaffinch and House sparrow. Bird activity was limited due to the time of year and bad weather.

The data search provides a more interesting list, mainly from the Grand Western Canal, which includes Reed Bunting, a Birds of Conservation Concern red list species (see data search for status definitions), and two amber list species, Mute swan and Grey wagtail. Other species recorded on the canal are Sedge warbler, Coot and Canada goose. Not all these species were recorded within Holcombe Rogus, but as birds are very mobile they are bound to be using the parish itself.

Plants

Plant species noted on a visit on the 14th February are listed in Appendix 2.

No notable species were recorded on the field survey and the number of species recorded was relatively low due to the time of year and time constraints. A further survey would no doubt reveal more species including many limestone specialists which are uncommon in Devon.

The data search has shown that such plants have been recorded here in the past, including the Devon notable 2 species Downy oat-grass, Dwarf thistle and Smooth brome. Other notable species recorded were Primrose, a Devon BAP species, and Bluebell, wild specimens of which being protected from being uprooted and sold.

Mammals

Several mammal species have been recorded from Holcombe Rogus parish. These include the Brown hare, which is a Devon and UK BAP priority species. The brown hare was probably introduced to us by the Romans and is fairly common in areas of arable crops and grass leys. The hare is listed on the Devon Biodiversity Action Plan as it has undergone a significant decline in the last 50 years, probably associated with changes in farming practice and increased use of pesticides. The mixed landscape at Holcombe Rogus suits this species well, with food sources in both arable and grassland fields and

the frequent small copses that have developed around old quarries providing good shelter.

The other mammals, apart from the very common Badger, that have been recorded are all bats:- Noctule, Brown long-eared and Whiskered. All bats are legally protected by both UK and European legislation but none of these species are BAP priorities. The bats were all recorded within buildings being used as roosts, two at Holcombe Court. There are many old buildings in the area in addition to Holcombe Court; these and the mature trees in parkland and woodlands provide good roosting habitat for bats. However the intensively farmed landscape may limit feeding opportunities.

Invertebrates

No invertebrates were recorded during the field survey due to the time of year and bad weather. The data search does have a few records of dragonflies associated with the Grand Western Canal, including the Hairy dragonfly, a nationally important species, slightly south of Holcombe Rogus. As dragonflies are also quite mobile species it is likely that this species also occurs within the parish. Other more common species recorded on the canal include Emperor dragonfly, Migrant hawkler, Azure damselfly, Common blue and blue-tailed damselfly.

Another notable invertebrate recorded on the Grand Western Canal is the Brown hairstreak butterfly. This species is probably laying its eggs on Blackthorn beside the canal towpaths. The Brown hairstreak has declined considerably in the last 40 years due to yearly hedge trimming, as it only lays its eggs on two-year old wood. The canal banks are probably one of the last refuges for this species in Holcombe Rogus.

Reptiles and Amphibians

The survey was carried out when reptiles are hibernating and it was too cold & early to see spawning amphibians. The only species recorded by the data search is the Viviporous or common lizard but all common species of reptile and amphibian are likely to occur in Holcombe Rogus. The canal will support frogs, toads and probably grass snakes. Slow worms will be found wherever there is tussocky grassland such as field margins and hedgebanks, and old quarries will provide good basking and hunting areas for Adders and Common lizards. The diverse gardens in the villages may support a range of herpetofauna including frogs, toads, slow worms and grass snakes.

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 Holcombe Rogus and the Devon BAP:

Holcombe Rogus wildlife feature	Brief description of feature	Link with the Devon Biodiversity Action Plan (BAP)
<i>Holcombe Court</i>	<i>A country house in a parkland setting</i>	<ul style="list-style-type: none"> • <i>Parkland & wood pasture Habitat Action Plan</i>
<i>Holcombe Fields Local Wildlife Site, Holcombe Rogus churchyard, potential steep slopes</i>	<i>Species-rich neutral and limestone grassland</i>	<ul style="list-style-type: none"> • <i>Flower-rich meadows and pastures Habitat Action Plan</i>
<i>Grand Western Canal County Wildlife Site</i>	<i>Aquatic and water's edge habitats</i>	<ul style="list-style-type: none"> • <i>Otter Species Action Plan</i>
<i>Lower Whipcott Quarry County Wildlife Site and other disused quarries</i>	<i>Disused quarries colonised by species rich grassland and secondary woodland.</i>	<ul style="list-style-type: none"> • <i>Pits, quarries and cuttings Habitat Action Plan</i>
<i>Species rich hedgerows</i>	<i>Hedges containing more than five woody species on average</i>	<ul style="list-style-type: none"> • <i>Species-rich hedges Habitat Action Plan</i> • <i>Primrose Species Action Plan</i>
<i>Mixed farmland interspersed with small copses</i>	<i>Extensive areas of mixed habitats</i>	<ul style="list-style-type: none"> • <i>Brown hare Species Action Plan</i>

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 Holcombe Rogus might include grasslands on the steeper slopes in the west of the parish, or carrying out a Brown hare survey. The last two actions would directly contribute to the **Flower-rich meadows and pastures Habitat Action Plan** and the **Brown hare Species Action Plan**.

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

Survey work could be undertaken as a community group or in liaison with conservation groups active in the area. For example, the Devon Wildlife Trust is active in the area and is in the process of setting up a local group based in Tiverton. In addition the Mid Devon Natural History Society holds monthly meetings in Tiverton.

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. 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 that 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?

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 Newton Ferrers and Noss Mayo 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](http://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 Mid Devon Natural History Society. These organisations have a number of Local Groups, which amongst other things, get involved in practical management work.

7 Japanese Knotweed:

Not something to cherish, but it can't be ignored! Luckily, Japanese Knotweed has not been recorded from Holcombe Rogus. 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 Centre¹. 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

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

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
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- 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
- Mid Devon Natural History Society: Secretary Miss Cooke tel. 01837 53360
- 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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Websites:

www.woodland-trust.org.uk

www.devonwildlifetrust.org

Appendix 1 – Notable sites and species within Holcombe Rogus Parish.

Wildlife Sites within Holcombe Rogus Parish

File Code	Site Name	Grid Ref.	Area (ha)	Description	Status
ST01/019	Stout's Cottage	ST 048192	0.6	Broadleaved woodland	gSSSI
ST01/029	Lower Whipcott	ST 069185	6.5	Disused quarry with unimproved calcareous grassland, semi-improved neutral grassland and secondary broadleaved woodland	gSSSI
SS91/079	Grand Western Canal	SS963123-SS999136	23.6	Canal with associated wetland flora & marshy grassland	CWS/Country Park
ST01/027	Holcombe Wood	ST055194	12.1	Ancient semi-natural woodland partly replanted with conifers	CWS
ST01/029	Lower Whipcott	ST 069185	6.5	Disused quarry with unimproved calcareous grassland, semi-improved neutral grassland and secondary broadleaved woodland	CWS
ST02/028	Kytton Copse	ST062211	3.5	Ancient semi-natural woodland	pCWS
ST01/028	Fenton Copse	ST058198	3.4	Broadleaved woodland	pCWS
ST02/029	Whipples Wood	ST066212	1.8	Broadleaved woodland	pCWS
ST01/032	Knowle Farm Wood	ST058176	1.4	Broadleaved woodland	pCWS
ST02/026	Killon Cleave	ST051209	10.6	Ancient semi-natural woodland	pCWS
ST02/027	Marcombe Lake East	ST057209	7.7	Semi-improved grassland with bracken	pCWS
ST02/030	Ramsey Farm	ST072203	1.2	Broadleaved woodland	pCWS
ST01/018	Waterslade	ST045192	5.4	Broadleaved plantation	pCWS
ST01/020	Higher Besly Farm	ST044183	3.7	Broadleaved woodland	pCWS
ST01/026	Holcombe Fields	ST054196	11.9	Semi-improved & unimproved neutral grassland and scrub	LWS

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 1 kilometre of Holcombe Rogus Parish

No.	Name	Latin Name	Location	Date	Grid Ref.	UK Protection	International Protection	Status
1	Whiskered Bat	<i>Myotis mystacinus</i>	Queens Lodge, Hockworthy, near Wellington.	1997	ST038194	WCA 5, 6	EC IVa; Bern II; Bonn II	
2	Brown Hare	<i>Lepus europaeus</i>	Hole Farm, Hockworthy.	2000	ST047204			UKBAP(P); DBAP
3	Downy Oat-grass	<i>Helictotrichon pubescens</i>	Holcombe Fields	1993	ST054196			DN2
4	Dwarf Thistle	<i>Cirsium acaule</i>	Holcombe Fields	1993	ST054196			DN2
5	Viviparous Lizard	<i>Lacerta vivipara</i>	Westleigh, near Tiverton	2001	ST055169	WCA 5(KIS)	Bern III	
6	Bluebell	<i>Hyacinthoides non-scripta</i>	Holcombe Wood	1993	ST055194	WCA 8 (S)		
7	Primrose	<i>Primula vulgaris</i>	Holcombe Wood	1993	ST055194			DBAP
8	Smooth Brome	<i>Bromus racemosus</i>	Holcombe Wood	1993	ST055194			DN2
9	Brown Long-eared Bat	<i>Plecotus auritus</i>	Holcombe Court, Holcombe Rogus.	2005	ST0562190 3	WCA 5, 6	EC IVa; Bern II; Bonn II	
10	Noctule	<i>Nyctalus noctula</i>	Holcombe Court, Holcombe Rogus.	2005	ST0562190 3	WCA 5, 6	EC IVa; Bern II; Bonn II	
11	Hairy Dragonfly	<i>Brachytron pratense</i>	Grand Western Canal. Westcott Bridge to Ebear Bridge.	2003	ST060163			Nb; KeyD (N)
12	Brown Hare	<i>Lepus</i>	Kytton Barton,	2000	ST061201			UKBAP(P);

		europaeus	Holcombe Rogus.					DBAP
13	Badger	Meles meles	Holcombe Rogus.	2000	ST0619	WCA 6, BA	Bern III	
14	Grey Wagtail	Motacilla cinerea	Grand Western Canal. Ebear to Fossend Bridge.	2003	ST068169			Amber
15	Mute Swan	Cygnus olor	Grand Western Canal. Ebear to Fossend Bridge.	2003	ST068169			Amber
16	Reed Bunting	Emberiza schoeniclus	Grand Western Canal. Ebear to Fossend Bridge.	2003	ST068169			UKBAP(P); Red
17	Prickly Lettuce	Lactuca serriola	Lower Whipcott	1993	ST069185			DN2
18	Lesser Horseshoe Bat	Rhinolophus hipposideros	Barns at Little Brimley, Stawley.	1999	ST072217	WCA 5, 6	EC IIa, IVa; Bern II; Bonn II	UKBAP(P)
19	Badger	Meles meles	A38	2000	ST087167	WCA 6, BA	Bern III	
20	Brown Hairstreak	Thecla betulae		1996	ST0418	WCA 5 (S)		Nb
21	Brown Hairstreak	Thecla betulae	Grand Western Canal	1997	ST058161	WCA 5 (S)		Nb

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 IIb: 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.
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.
Red List	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.

Nb **Nationally Notable B:** recorded from 30-100 10km squares in Great Britain since 1980

NS **Nationally Scarce:** 15-100 10km squares in Atlas of British Flora 1962.

Devon Notable Species: 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).

DN1 **Devon Notable¹:** 1-25 2 km squares in Atlas of Devon Flora 1984.

DN2 **Devon Notable²:** 26-50 2 km squares in Atlas of Devon Flora 1984.

DN3 **Devon Notable³:** Selected species recorded from over 50 2 km squares in Atlas of Devon Flora 1984.

DR **Devon Rarity:** native species recorded from 3 or fewer localities within Devon

Appendix 2

Species list for insert parish parish, recorded during the field survey

Scientific name	Common name
<i>Acer campestre</i>	Field maple
<i>Alnus glutinosa</i>	Alder
<i>Anthriscus sylvestris</i>	Cow parsley
<i>Apium nodiflorum</i>	Fool's watercress
<i>Arum maculatum</i>	Lords-and-ladies
<i>Conopodium major</i>	Pignut
<i>Cornus sanguinea</i>	Dogwood
<i>Dactylis glomerata</i>	Cock's-foot
<i>Deschampsia cespitosa</i>	Tufted hair-grass
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Fagus sylvatica</i>	Beech
<i>Festuca rubra</i>	Red fescue
<i>Fraxinus excelsior</i>	Ash
<i>Galium aparine</i>	Cleaver
<i>Galium mollugo</i>	Hedge bedstraw
<i>Geum urbanum</i>	Herb bennet
<i>Glechoma hederacea</i>	Ground-ivy
<i>Holcus lanatus</i>	Yorkshire fog
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Ilex aquifolium</i>	Holly
<i>Lamium galeobdolon</i>	Yellow archange
<i>Lemna minor</i>	Duckweed
<i>Ligustrum vulgare</i>	Wild privet
<i>Oenanthe crocata</i>	Hemlock water-dropwort
<i>Phyllitis scolopendrium</i>	Hart's tongue
<i>Polypodium vulgare</i>	Common polypody
<i>Polystichum setiferum</i>	Soft shield fern
<i>Prunus spinosa</i>	Blackthorn
<i>Pteridium aquilinum</i>	Bracken
<i>Quercus robur</i>	English oak
<i>Ranunculus ficaria</i>	Lesser celandine
<i>Ranunculus repens</i>	Creeping buttercup
<i>Rosa canina</i>	Dog-rose
<i>Rumex acetosa</i>	Common sorrel
<i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Salix cinerea</i>	Grey willow
<i>Sambucus nigra</i>	Elder
<i>Silene dioica</i>	Red campion
<i>Taraxacum officinale</i> agg.	Dandelion
<i>Taxus baccata</i>	Yew
<i>Trifolium repens</i>	White clover
<i>Typha latifolia</i>	Bullrush
<i>Ulex europaeus</i>	Common gorse
<i>Urtica dioica</i>	Common nettle