

# Devon Aggregates & Biodiversity Project



## Parish Biodiversity Audit

for

# Landkey

*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.

Author: Richard Knott

# **Contents**

<u>Introduction</u> .....	2
<u>Designated Sites</u> .....	3
<u>Codden Hill County Wildlife Site</u> .....	3
<u>Acland Wood County Wildlife Site</u> .....	4
<u>Harford Wood County Wildlife Site</u> .....	4
<u>Ancient Woodland:</u> .....	5
<b><u>OTHER HABITATS (IDENTIFIED FROM FIELD SURVEY):</u></b> .....	<b>6</b>
<u>Species-rich hedges</u> .....	6
<u>Cemeteries/ churchyard</u> .....	8
<u>Stone walls</u> .....	8
<u>Recreation areas and public open space</u> .....	9
<u>Gardens and allotments</u> .....	9
<u>Roadside verges</u> .....	10
<u>Arable land</u> .....	11
<u>Green lanes</u> .....	11
<u>Orchards</u> .....	11
<u>The Venn Stream</u> .....	12
<u>Wet woodland</u> .....	13
<u>Potential County Wildlife Sites</u> .....	13
<b><u>SPECIES</u></b> .....	<b>14</b>
<u>Important Species</u> .....	14
<u>Birds</u> .....	14
<u>Plants</u> .....	14
<u>Mammals</u> .....	15
<u>Invertebrates</u> .....	17
<u>Reptiles and Amphibians</u> .....	17
<b><u>THE DEVON BIODIVERSITY ACTION PLAN (BAP)</u></b> .....	<b>18</b>
Biodiversity links:.....	18
Links between the wildlife of Landkey and the Devon BAP: .....	19
<b><u>SOME IDEAS FOR LOCAL ACTION</u></b> ... ..	<b>20</b>
1 Further survey:.....	20
2 Influence the management of Public Open Space:.....	21
3 Build relationships with local landowners: .....	21
4 Adopt a road verge:.....	21
5 Wildlife gardening:.....	22
6 Join local conservation organisations: .....	22
7 Japanese Knotweed: .....	22
<b><u>USEFUL SOURCES OF FURTHER INFORMATION:</u></b> .....	<b>24</b>
Possible sources of funding:.....	24
<b><u>BIBLIOGRAPHY</u></b> .....	<b>26</b>
<u>Appendix 1a – Notable sites within Landkey Parish</u> .....	27
<u>Appendix 1b – Notable species within Landkey Parish</u> .....	28
<u>Appendix 2: Species list</u> .....	33

## **Landkey - 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 Landkey Parish in future years.

### **Introduction**

Landkey parish is situated to the south of the A361 (North Devon Link Road) and approximately 3 kilometres south east of Barnstaple. The hills to the south of Landkey create a distinctive series of 'whale backed' chert, shale and limestone and ridges, which are uncharacteristic of the surrounding landscape types in North Devon. To the north of the village the landscape is more gently rounded. Landkey village is situated in the valley of the Venn Stream.

The parish is characterised by a mosaic of pasture and arable fields. 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 Landkey 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.

Landkey is a parish rich in wildlife. Some of the 'highlights' include:

- The broadleaved woodland of Harford Wood;
- The orchard near Harford;
- The Millennium Green, churchyard and mature gardens in the village;
- 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 recreation areas. 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 County Wildlife Site is situated in the south-west of the parish. Only a small part of the site lies within Landkey parish, although the hill provides a vantage point to view the parish and its surroundings.

Codden Hill is a mosaic of bracken, dry heath, grassland and scrub woodland. Much of the hillside to north and east (outside the parish) is dominated by dense bracken. Some areas of heathland flora remain, particularly on the north western side of the hill. 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 ridge of Codden Hill and Hangman's 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.

That part of the County Wildlife Site within Landkey parish was mapped as semi-improved and unimproved grassland – species-rich grassland that has not undergone extensive agricultural improvement (in the form of re-seeding, drainage or the application of artificial fertilizer). A survey in the 1990's recorded black knapweed, common bird's-foot trefoil, tormentil, pignut, selfheal, heath spotted orchid and common dog violet. Parts of the grassland have been invaded by bracken and bramble scrub.

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.

### **Acland Wood County Wildlife Site**

Acland wood is a linear strip of semi-natural broadleaved woodland beside a stream and alongside the double-banked hedge of Westacott Road.

A survey in 2000 recorded the following woodland species: field maple, opposite-leaved golden saxifrage, broad-leaved helleborine, wood spurge, holly, wood sorrell, common polypody, primrose, wild cherry. The presence of beech, sweet chestnut and larch indicate that the wood has been inter-planted with non-native species.

### **Harford Wood County Wildlife Site**

Harford Wood is situated on a steep south east facing slope. A well-used public footpath runs through the wood.

A large part of this ancient woodland site contains a mature beech woodland community, which is not typical of semi-natural woodlands in Devon. Beech trees cast a dense shade, resulting in a virtually non-existent shrub layer and sparse ground flora. Holly and patches of bluebell are able to survive.

In the bottom of the valley is high-quality woodland of ash and hazel, with alder in the wetter parts. The wet ground is carpeted in places by opposite-leaved golden saxifrage, with frequent lady fern, dog's mercury, yellow archangel and guelder rose.

The remainder of the wood is oak-dominated, with a ground flora of wood sorrel, bramble, violets, yellow archangel and ferns.

**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.

There are two areas of ancient woodland in the parish. These are Harford Wood and Little Silver Woods. All have to some extent been replanted.

**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.

## **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 Landkey parish are quite species rich. Especially species-rich hedges were noted at the following locations:

- Minor road between East Acland and the bridge over the A381 linkroad (8 woody species);
- Acland Road, Landkey (7 species);
- Landkey, on the Tarka Trail on the edge of the Millennium Green (7 species);
- Minor road to Bradninch (6 species);
- Minor road leading to Harford (5 species);
- Bableigh Road, south of Landkey (5 species);
- Green lane at Greyshall Cross, near Hangman's Hill (5 species).

Common hedgerow species include hawthorn, blackthorn, hazel, elder, wych elm, dog rose, willow, holly and Field maple. 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 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 a characteristic feature of the hedge banks in North Devon.

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 Landkey would be classified as species-rich. The hedges also provide sheltered corridors though areas of farmland and probably support a good variety of invertebrates.

## **Cemeteries/ churchyard**

The churchyard of St. Paul's church in Landkey is a haven for wildlife. Between the churchyard and the road is a small parcel of land with areas of long grass and scattered ash, elder, hazel, apple bushes and small trees. 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.

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 Landkey. Species recorded include wall-rue and maidenhair spleenwort.

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.

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. A good example of a wall with a diverse flora can be seen in Landkey around the playground of the school.

Walls with crumbling mortar, crack 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**

There are several areas of amenity grassland and public open space in Landkey, and these are supplemented by a good network of public footpaths, green lanes and quiet country roads from which to explore the parish.

The most significant area of public open space in Landkey is the Millennium Green. This area of former agricultural land now successfully integrates recreation (sports pitch) and wildlife. Areas have been planted with a mixture of native and ornamental shrubs chosen to attract wildlife. These are now developing into dense cover for mammal, birds and reptiles. The well-wooded Venn Stream flows between the old sports field and the new Millennium Green. Evidence of otter was found under the footbridge. A wet ditch increases the diversity of the area, and is likely to support species such as frogs, toads and grass snake.

At the time of the survey the hedgerow along this ditch and much of the vegetation had been heavily flailed, damaging some of its wildlife interest. Consideration should be given to more 'wildlife-friendly' management of this particularly sensitive area of the Millennium Green. As has already been commented, a relaxation of the grassland mowing in places could enhance the diversity of the grassland. Cutting the grass once or twice a year and raking the cuttings (traditional practice in hay meadows) would be of benefit – the 'haymaking' could make an ideal community involvement day every summer.

When it began in 1996, the aim of the Millennium Greens initiative was to provide new areas of public open space close to people's homes that could be enjoyed permanently by the local community. At the end of December 2001, 245 Millennium Greens had been created. They were all developed by the local people who had drawn up their plans, purchased the land, and carried out the work necessary to provide a local green space.

The 'Tarka Trail' passes through the parish, along the valley of the Venn Stream from the edge of Bishop's Tawton to the stream's headwaters northeast of the parish. Other footpaths and by-ways allow walkers to view wildlife-rich areas such as the Venn Stream and Harford Wood.

Codden Hill is a large area of publicly accessible open space on the edge of 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 Landkey 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 Landkey 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 calcareous grassland, neutral grassland, acid grassland, heathland, open water (ditches), broadleaved woodland, scrub, hedgerows and walls. They may also support populations of scarce or declining species of flora and/or fauna, some of which enjoy statutory protection. Linear grassland habitats provide a valuable wildlife resource. Verges provide shelter and food for a variety of species from small mammals, to birds of prey and insects.

Devon has a very substantial resource of roadside verges; approximately 14,000 km of roads, corresponding to about 2,000 ha of roadside verge. However, of this very large resource, the area 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.

One relatively species-rich verge was noted on the route of the Tarka Trail, just before it passes under the A361 linkroad near Harford Cross. A more detailed survey at an appropriate time of year would undoubtedly reveal other verges in the parish which are of similar quality. Species recorded here include black knapweed, tufted vetch, creeping cinquefoil, selfheal, wild carrot, pignut, oxeye daisy, meadowsweet and yarrow.

## **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. 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.

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.

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.

## **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.

There are two green lanes in the south of the parish near Bableigh. Look out for species-rich hedges and banks rich in wild flowers and ferns.

## **Orchards**

There were traditionally many orchards around Landkey and the village has a strong association with growing Mazzards, a local variety of cherry. The village also has its own variety of plum, the Landkey Yellow. An orchard south of Harford contains many old apple and pear trees, as well as some exceptionally large cherry trees. The public footpath between Harford and Landkey passes through this orchard.

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.

## **The Venn Stream**

The Venn Stream flows through the parish, from its headwaters to the north and east of the parish. Almost its entire length is well-wooded, providing abundant cover for otters and other wildlife. In the village itself the stream is contained in an artificial channel for flood defence purposes. The high water quality is indicated by the presence of aquatic plants such as water cress and birds such as grey wagtail.

Unrestricted access to the stream by farm animals can result in increased bank erosion and large amounts of sediment entering the water. Constant grazing and browsing prevents the re-establishment of bankside trees, so that tree cover declines over time. Fortunately, this is only a localised problem on this watercourse.

Rivers, streams, floodplains and fluvial processes are listed on the **Devon Biodiversity Action Plan** as features of conservation concern in Devon. The Venn Stream is regularly used by otters. The otter is a **Devon Biodiversity Action Plan** species.

## **Wet woodland**

Wet woodland is a **UK Biodiversity Action Plan** habitat and is also listed on the **Devon Biodiversity Action Plan**.

Wet woodland occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species, but sometimes including ash, oak, pine and beech on the drier riparian areas. It is found on floodplains, as successional habitat on fens, mires and bogs, along streams and hillside flushes, and in peaty hollows. These woodlands occur on a range of soil types including nutrient-rich mineral and acid, nutrient-poor organic ones.

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

A fine example of wet woodland can be seen from the Tarka Trail near Lower Venn, south-west of Landkey. Much of the Venn Stream both upstream and downstream of the village is fringed by a narrow strip of alder-dominated woodland.

## **Potential County Wildlife Sites**

There are 17 potential County Wildlife Sites in Landkey parish. Eight of the sites are broadleaved woodland and the remainder is 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.

There are relatively few broadleaved woodlands in the parish. 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 Landkey has been prepared and is presented separately (Appendix 1).

### **Birds**

Several species of birds were recorded during the survey: Wood Pigeon, Jackdaw, House Martin, Great Spotted Woodpecker, Swallow, Grey Wagtail, Great Tit, Wren and Magpie. 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 probable 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 number of species of national conservation concern occur in Devon: jay, chiffchaff, dunnock, goldcrest, starling, rook, song thrush, and possibly linnet and spotted flycatcher. House sparrows and starlings are thought of as common birds associated with villages and farms, but their populations have declined in many areas. Whilst none of the above these species were recorded during the present survey it is likely that they could breed in the parish.

Swallows and house martins both nest in the village, and probably in many of the scattered farms and hamlets throughout the area.

### **Plants**

Plant species noted on a visit on the 26 September 2005 are listed in Appendix 2.

Although the best-known member of the genus *Sorbus* in Devon is the rowan or mountain ash, the County is also home to other scarcer species, some of which occur nowhere else in the world. Indeed Devon is one of the richest counties in Britain for whitebeams and supports seven such species, all but

one of which of which are endemic to Britain and Ireland. One of these endemic speceis is the Devon whitebeam (also known as French Hales). The DBRC database lists two occurrences of Devon whitebeam from Landkey parish. The whitebeams of Devon are listed as priority species in the **Devon Biodiversity Action Plan**.

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.

Japanese Knotweed, a highly invasive introduced plan species was noted at several locations in the parish. 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 Landkey parish. These include otter records from the Venn Stream and a number of badger records. During the course of this survey signs of rabbit, grey squirrel, otter, badger and mole 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.

Recent **otter** spraints (distinctive droppings which also mark their territories) were seen during the field survey in September 2005 at several location on the Venn Stream in the village. This indicates that otters are active in the heart of Landkey village. It is quite likely that otters will travel throughout the stream system - there is certainly plenty of suitable habitat and vegetation cover.

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.

DBRC holds no records of **bat** species in the parish, although there are records from just outside the parish boundary. 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 bats, and it is likely that they are simply under-recorded.

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 in the neighbouring parish of Bishop's Tawton.

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, close to the parish boundary.

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.

### **Reptiles and Amphibians**

Little information is held on reptiles and amphibians in Landkey 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 and grass snakes probably occur in and around private gardens and the Millennium Green in Landkey village.

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

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

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

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

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

### **Biodiversity links:**

- The Devon BAP can be viewed at [www.devon.gov.uk/biodiversity](http://www.devon.gov.uk/biodiversity). This site also contains links to other nature conservation issues relevant to Devon, such as information on hedges. If you do not have access to the internet and require paper copies of relevant sections of the Devon BAP please contact Devon County Council's Biodiversity Officer on 01392 382804.
- Details of biodiversity planning in the South West region can be viewed at [www.swbiodiversity.org.uk](http://www.swbiodiversity.org.uk).
- National Action Plans can be viewed at [www.ukbap.org.uk](http://www.ukbap.org.uk). This site also contains useful background information on UK biodiversity action planning.

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

Landkey 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"> <li>• Lowland heathland Habitat Action Plan</li> </ul>
Ancient woodland	Ancient semi-natural and re-planted broadleaved woodland	<ul style="list-style-type: none"> <li>• Primrose Species Action Plan</li> <li>• Dormouse Species Action Plan</li> </ul>
Species-rich grassland in road verges and several potential County Wildlife Sites	Species-rich grassland, which has been protected from agricultural improvement	<ul style="list-style-type: none"> <li>• Flower-rich meadows and pastures Habitat Action Plan</li> </ul>
Wet woodland near Lower Venn	Alder woodland on wet ground in the valley-bottom	<ul style="list-style-type: none"> <li>• Wet woodland Habitat Action Plan</li> </ul>
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, green lanes and orchards.	<ul style="list-style-type: none"> <li>• Flower-rich meadows and pastures Habitat Action Plan</li> <li>• Species-rich hedges Habitat Action Plan</li> <li>• Primrose Species Action Plan</li> <li>• Devon whitebeam Species Action Plan</li> <li>• Brown hare Species Action Plan</li> <li>• Dormouse Species Action Plan</li> </ul>
Landkey village Scattered hamlets, farms and dwellings	Private gardens, recreation areas, churchyards, the Millenium Green, stone walls and road verges.	<ul style="list-style-type: none"> <li>• Cites, towns and villages Habitat Action Plan</li> <li>• Flower-rich meadows and pastures Habitat Action Plan</li> </ul>
Venn Stream	A stream with good water quality in a well-wooded valley.	<ul style="list-style-type: none"> <li>• Rivers, streams, floodplains and fluvial processes Habitat Action Plan</li> <li>• Wet woodland Habitat Action Plan</li> <li>• Otter Species Action Plan</li> </ul>

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

## Some Ideas for Local Action...

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

A major step to knowing what you can do for your local wildlife and geology is to know what you have already got. This report will help you in this, but it is just a start.

Ultimately, the protection and enhancement of the local natural environment requires the interest and enthusiasm of the local community.

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

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

### 1 Further survey:

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

Specific features to survey in Landkey might include otter, dormouse or Devon Whitebeam. These actions would directly contribute to the **Dormouse Action Plan**, **Otter Action Plan** and **Devon whitebeam 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 few wildlife records from the village of Landkey. Local residents could be encouraged to record the wildlife they see in their gardens and around the Millennium Green. The results could be used raise awareness of wildlife, perhaps through on-site interpretation. There are several locations within the village that have been highlighted in this report which would be suitable, the most obvious being the Millenium Green and Venn Stream. This action would directly contribute to the **Cities, Towns & Villages Action Plan**.

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. This action

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 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 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?

## **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 Landkey 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 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. 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 Landkey 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<sup>1</sup>. Ideally, records should include when you first saw it and confirmation of when it was seen most recently; its precise location (notes or a sketch map are helpful, as is a grid reference if you have one); the kind of habitat it is in (e.g. next to running water, on a road verge), and a rough indication of how abundant it is.

- Secondly, be careful not to spread the plant further! This is all too easily done as it can regenerate from even the smallest fragment and is easy to spread unknowingly. It is important not to flail it or to try and dig it up. Often, it is best not to cut Japanese Knotweed at all, but if it is it should be very carefully disposed of on site when dead or removed as Controlled Waste. Any tools used should be properly cleaned.
- Finally, if Japanese Knotweed is on your land, the best way to prevent its spread is to control or eradicate it as soon as possible. Regular cutting can weaken and eventually kill the plant but it is a time-consuming job and proper disposal of the cut material can be a problem. Usually, the most effective method of control is to treat the plant with herbicide. This can take a number of years to be successful but if the plant is left untreated it will inevitably spread. A number of issues should be taken into account in deciding which herbicide to use, particularly the presence of water (where special care needs to be taken and the advice of the Environment Agency must be sought).

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

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

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

## 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](http://www.btcvcd.org.uk)
- Butterfly Conservation: [www.butterfly-conservation.org](http://www.butterfly-conservation.org)
- Devon Bat Group: [www.dbg.me.uk](http://www.dbg.me.uk)
- Devon Birdwatching and Preservation Society: Secretary tel: 01837 53360
- Devon Mammal Group: [www.devonmammalgroup.org](http://www.devonmammalgroup.org)
- Devon Wildlife Trust: [www.devonwildlifetrust.org](http://www.devonwildlifetrust.org)
- English Nature: [www.english-nature.org.uk](http://www.english-nature.org.uk)
- Plantlife: [www.plantlife.org.uk](http://www.plantlife.org.uk)
- RSPB: [www.rspb.org.uk](http://www.rspb.org.uk)
- The Woodland Trust: [www.woodland-trust.org.uk](http://www.woodland-trust.org.uk)
- The Living Churchyards & Cemeteries Project, Arthur Rank Centre, National Agricultural Society, Stoneleigh Park, Warwickshire, CV8 2LZ  
Tel: 01203 696969 ext. 364/339.

In addition, Devon County Council is currently (June 2006) developing a Community Biodiversity Toolkit which will be available via the DCC web site ([www.devon.gov.uk/biodiversity](http://www.devon.gov.uk/biodiversity)). This toolkit will aim to provide practical advice on management to encourage wildlife and, in particular, will provide a central point from which to access the large amount of advice that is already available from a huge range of other organisations.

In addition to management advice, the toolkit will also provide guidance on seeking funding for project work. In the meantime, you may find the following sources of funding useful.

## Possible sources of funding:

A number of potential sources of funding are available for local biodiversity projects. Each has its own rules, criteria and objectives, and funding sources are sometimes only available for a limited period of time. However, the following may

well be worth checking for suitability (not all will be applicable to your particular parish):

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

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

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### Appendix 1a – Notable sites within Landkey Parish.

<b>File Code</b>	<b>Site Name</b>	<b>Grid Ref.</b>	<b>Area (ha)</b>	<b>Description</b>	<b>Status</b>
SS52/031	Codden Hill	SS580298	55.5	Lowland dry heath with areas of dense bracken & semi-improved neutral grassland	CWS
SS53/174	Acland Wood	SS587320	8.1	Broadleaved semi-natural woodland with watercourse & species-rich hedgebank	CWS
SS63/075	Harford Wood	SS602324	9.6	Ancient semi-natural woodland partly replanted with non-native broadleaves	CWS, AWI
SS52/050	Vellacott Wood	SS587299, SS586296 & SS593295	10.0	Broadleaved woodland	pCWS
SS53/141	Acland Barton	SS594326 & SS593325	1.6	Broadleaved woodland	pCWS
SS53/142	Acland Cross	SS595317	2.6	Semi-improved neutral grassland	pCWS
SS53/143	Four Oak Cross	SS592317	3.0	Semi-improved neutral grassland	pCWS
SS53/154	Denes	SS595313	2.4	Semi-improved neutral grassland	pCWS
SS53/145	Plyms	SS589313	1.0	Semi-improved neutral grassland	pCWS
SS53/153	Newland Bridge	SS596309	6.0	Semi-improved neutral grassland	pCWS
SS53/152	Venn Lane End	SS593306	2.6	Semi-improved neutral grassland	pCWS
SS53/151	Higher Bableigh (N)	SS592300	2.3	Semi-improved neutral grassland	pCWS
SS53/150	Venn Cross Farm Wood	SS589305	1.1	Broadleaved woodland	pCWS
SS53/146	Landkey Bridge (W)	SS588309	8.7	Unimproved & semi-improved neutral grassland	pCWS
SS53/148	Quarry Wood	SS586308	1.1	Broadleaved woodland	pCWS
SS53/144	Hill Farm	SS583309 & SS583311	6.2	Semi-improved neutral grassland	pCWS
SS63/076	West Bradninch	SS608330	1.1	Broadleaved woodland	pCWS
SS63/140	Harford Wood (E)	SS604324	5.0	Broadleaved woodland	pCWS
SS63/081	Little Silver Woods	SS612322	12.2	Ancient woodland partly replanted	PCWS, AWI

File Code	Site Name	Grid Ref.	Area (ha)	Description	Status
SS63/080	Little Silver Woods (E)	SS611319	1.5	Ancient woodland	PCWS, AWI

**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.

**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 Landkey Parish.

No.	Name	Latin Name	Location	Date	U K Protection	International Protection	Status
1	Badger	<i>Meles meles</i>	A361 North Devon Link Road	2001	WCA 6, BA	Bern III	
2	Japanese Knotweed	<i>Fallopia japonica</i>	Venn Road, Barnstaple.	2004	WCA 9		
3	Japanese Knotweed	<i>Fallopia japonica</i>	Venn Road, Barnstaple.	2004	WCA 9		
4	Japanese Knotweed	<i>Fallopia japonica</i>	Hill Farm, Landkey, near Barnstaple.	2004	WCA 9		
5	Grass Snake	<i>Natrix natrix</i>	Rhododendron Avenue, Barnstaple.	1998	WCA 5(KIS)	Bern III	

No.	Name	Latin Name	Location	Date	U K Protection	International Protection	Status
6	Otter	<i>Lutra lutra</i>	Landkey Bridge (W)	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
7	Badger	<i>Meles meles</i>	Barnstaple.	2003	WCA 6, BA	Bern III	
8	Common Frog	<i>Rana temporaria</i>	Bakery Way, Landkey, Barnstaple,	2002	WCA 5(S)	EC Va; Bern III	
9	Badger	<i>Meles meles</i>	A361 100m West of the Landkey junction.	2000	WCA 6, BA	Bern III	
10	French hales	<i>Sorbus devoniensis</i>	Goodleigh, Landkey	1990			DBAP; NS; DN1
11	Badger	<i>Meles meles</i>	On minor road between Landkey and Goodleigh.	1999	WCA 6, BA	Bern III	
12	French hales	<i>Sorbus devoniensis</i>	Goodleigh-Landkey	1990			DBAP; NS; DN1
13	Otter	<i>Lutra lutra</i>	North Devon Link Road (A361), on the Swimbridge Viaduct.	2001	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
14	Badger	<i>Meles meles</i>	A361 North Devon Link Road east of Landkey turning.	1999	WCA 6, BA	Bern III	
15	* Badger	<i>Meles meles</i>	Bishop's Tawton, near Barnstaple	2001	WCA 6, BA	Bern III	
16	* Badger	<i>Meles meles</i>	On road from Bishops Tawton garage up to Cobbaton; just before Codden Hill,	2002	WCA 6, BA	Bern III	
17	* Badger	<i>Meles meles</i>	Near turning to Horswell, Bishop's Tawton	2000	WCA 6, BA	Bern III	

No.	Name	Latin Name	Location	Date	U K Protection	International Protection	Status
18	* Badger	<i>Meles meles</i>	Road from Bishop's Tawton	1999	WCA 6, BA	Bern III	
19	* Badger	<i>Meles meles</i>	Near to Downrew House Hotel, Bishop's Tawton	2000	WCA 6, BA	Bern III	
20	* Badger	<i>Meles meles</i>	Past Downrew House, near Bishop's Tawton	2000	WCA 6, BA	Bern III	
21	* Badger	<i>Meles meles</i>	Near to turning for Downrew and Hayne, Bishop's Tawton.	2000	WCA 6, BA	Bern III	
22	* a bat	<i>bat sp.</i>	Downrew Farm, Bishop's Tawton, Barnstaple.	1996	WCA 5, 6	EC IVa; Bonn II	
23	* Badger	<i>Meles meles</i>	On the road out of Bishop's Tawton going towards Codden Hill.	2003	WCA 6, BA	Bern III	
24	* Common Frog	<i>Rana temporaria</i>	Chichester Close, Newport, Barnstaple	2002	WCA 5(S)	EC Va; Bern III	
25	* Japanese Knotweed	<i>Fallopia japonica</i>	Victoria Street, Newport, Barnstaple	2001	WCA 9		
26	* a bat	<i>bat sp.</i>	Long Causey, Landkey Road, Barnstaple.	2003	WCA 5, 6	EC IVa; Bonn II	
27	* Common Toad	<i>Bufo bufo</i>	Berry Road, Barnstaple.	2002	WCA 5(S)	Bern III	
28	* Japanese Knotweed	<i>Fallopia japonica</i>	Tesco parking lot, Barnstaple.	2002	WCA 9		

No.	Name	Latin Name	Location	Date	U K Protection	International Protection	Status
29	* Japanese Knotweed	<i>Fallopia japonica</i>	Homebase Superstore, Barnstaple.	2002	WCA 9		
30	* Japanese Knotweed	<i>Fallopia japonica</i>	Venn Road, Barnstaple.	2004	WCA 9		
31	* Badger	<i>Meles meles</i>	unclassified road .25 mile east of Goodleigh	1999	WCA 6, BA	Bern III	
32	* Small Blue	<i>Cupido minimus</i>	Stoke rivers	1990	WCA 5(S)		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 5 (S)**        **Wildlife and Countryside Act (1981) Schedule 5: (sale):** species protected against sale only.

**WCA 5 (KIS)**    **Wildlife and Countryside Act (1981) Schedule 5: (killing & injury):** species protected against killing, injury and 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

**WCA 9**            **Wildlife and Countryside Act (1981) Schedule 9:** animals and plants for which release into the wild is prohibited.

**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

**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).

<b>ECIVa, IVb</b>	<b>EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats &amp; Species Directive) Annex IVa:</b> Exploitation of listed animals and plants to be subject to management if necessary.
<b>ECVa, Vb</b>	<b>EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats &amp; Species Directive) Annex Va and Vb:</b> Exploitation of listed animals and plants to be subject to management if necessary.
<b>Bonn II</b>	<b>Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) Appendix II:</b> Range states encouraged to conclude international agreements to benefit species listed.
<b>UKBAP(P)</b>	<b>UK Priority Species (Short and Middle Lists - UK Biodiversity steering Group Report 1995)</b> i.e. species that are globally threatened and rapidly declining in the UK (by more than 50% in the last 25 years). Has a Species Action Plan.
<b>DBAP</b>	<b>Devon Biodiversity Action Plan species:</b> these have been identified as species of key conservation concern in Devon.
<b>NS</b>	<b>Nationally Scarce:</b> 15-100 10km squares in Atlas of British Flora 1962.
	<b>Devon Notable Species:</b> Selected species recorded from over 50 2km squares in the Atlas of Devon Flora 1984 (R.B. Ivimey-Cook, Department of Biological Sciences, The University of Exeter).
<b>DN1</b>	<b>Devon Notable<sup>1</sup>:</b> 1-25 2 km squares in Atlas of Devon Flora 1984.
<b>Decline</b>	Substantial local decline in Devon

## **Appendix 2: Species list**

Species list for Landkey parish, recorded during the field survey on 26 September 2005.

<b>Scientific name</b>	<b>Common Name</b>
<b>Plants</b>	
<i>Acer campestre</i>	Field Maple
<i>Acer pseudoplatanus</i>	Sycamore
<i>Achillea millefolium</i>	Yarrow
<i>Alnus glutinosa</i>	Alder
<i>Arum maculatum</i>	Lords-and-Ladies
<i>Asplenium ruta-muraria</i>	Wall rue
<i>Asplenium trichomanes</i>	Maidenhair spleenwort
<i>Blechnum spicant</i>	Hard fern
<i>Calystegia sepium</i>	Hedge Bindweed
<i>Castanea sativa</i>	Sweet Chestnut
<i>Centaurea nigra ss.nigra</i>	Black Knapweed/Hardheads
<i>Chaemerion angustifolium</i>	Rosebay Willowherb
<i>Circaea lutetiana</i>	Enchanter's-nightshade
<i>Cirsium palustre</i>	Marsh Thistle
<i>Clematis vitalba</i>	Traveller's-joy, Old Man's Beard
<i>Conopodium majus</i>	Pignut
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Cymbalaria muralis</i>	Ivy-leaved Toadflax
<i>Daucus carota</i>	Wild Carrot
<i>Digitalis purpurea</i>	Foxglove
<i>Dryopteris filix-mas</i>	Male fern
<i>Eupatorium cannabinum</i>	Hemp-agrimony
<i>Fagus sylvatica</i>	Beech
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Fraxinus excelsior</i>	Ash
<i>Geranium robertianum</i>	Herb-Robert
<i>Geum urbanum</i>	Wood Avens
<i>Hedera helix</i>	Ivy
<i>Hieracium sp.</i>	Hawkweed sp.
<i>Hypericum androsaenum</i>	Tutsan
<i>Ilex aquifolium</i>	Holly
<i>Iris pseudachorus</i>	Yellow Iris
<i>Leucanthemum vulgare /</i>	Oxeye Daisy
<i>Chrysanthemum leucanthemum</i>	
<i>Ligustrum vulgare</i>	Wild Privet
<i>Linaria vulgaris</i>	Common Toadflax
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Matricaria matricarioides</i>	Pineapple Mayweed
<i>Mentha aquatica</i>	Water Mint
<i>Mercurialis perennis</i>	Dog's Mercury
<i>Phyllitis scolopendrium</i>	Heartstongue fern

**Scientific name**

*Plantago lanceolata*  
*Plantago major*  
*Polygonum aviculare*  
*Polygonum persicaria*  
*Polypodium vulgare* agg.  
*Polystichum setiferum*  
*Potentilla anserina*  
*Potentilla reptans*  
*Prunella vulgaris*  
*Prunus avium*  
*Prunus spinosa*  
*Pteridium aquilinum*  
*Pulicaria dysenterica*  
*Quercus robur*  
*Ranunculus repens*  
*Rorippa nasturtium-aquaticum*  
*Rosa canina*  
*Rubus fruticosus*  
*Salix caprea*  
*Sambucus nigra*  
*Senecio jacobaea*  
*Silene dioica*  
*Sorbus aucuparia*  
*Stachys sylvatica*  
*Stachys/Betonica officinalis*  
*Succisa pratensis*  
*Tamus communis*  
*Taxus baccata*  
*Teucrium scorodonia*  
*Tilia x europaea/x vulgaris*  
*Trifolium pratense*  
*Ulex europaeus*  
*Ulmus glabra*  
*Umbilicus rupestris*  
*Urtica dioica*  
*Vicia cracca*

**Birds**

*Columba palumbus*  
*Corvus monedula*  
*Delichon urbica*  
*Dendrocopos major*  
*Hirundo rustica*  
*Motacilla cinerea*  
*Parus major*  
*Troglodytes troglodytes*  
*Pica pica*

**Mammals**

*Lutra lutra*  
*Meles meles*

**Common Name**

Ribwort Plantain  
Greater Plantain  
Knotgrass  
Redshank  
Common polypody  
Soft shield fern  
Silverweed  
Creeping Cinquefoil  
Selfheal  
Cherry  
Blackthorn  
Bracken  
Common Fleabane  
Pedunculate Oak  
Creeping Buttercup  
Watercress  
Dog Rose  
Bramble/Blackberry  
Goat Willow  
Elder  
Common Ragwort  
Red Campion  
Rowan  
Hedge Woundwort  
Betony  
Devil's-bit Scabious  
Black Bryony  
Yew  
Wood Sage  
Common Lime  
Red Clover  
Common Gorse  
Wych Elm  
Navelwort/Wall Pennywort  
Common Nettle  
Tufted Vetch  
  
Wood Pigeon  
Jackdaw  
House Martin  
Great Spotted Woodpecker  
Swallow  
Grey Wagtail  
Great Tit  
Wren  
Magpie  
  
Otter  
Badger

**Scientific name**

*Oryctolagus cuniculus*

*Sciurus carolinensis*

*Talpa europaea*

**Common Name**

Rabbit

Grey squirrel

Mole