

---

Parish Plans Biodiversity Project

---

**Bideford**

---

Report by the  
Devon Biodiversity Records Centre  
and  
Devon County Council

Emma Townsend  
Gavin Black

September 2004



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



DEVON COUNTY COUNCIL

# Contents

<b><u>BIDEFORD - PARISH PLAN BIODIVERSITY PROJECT</u></b> .....	<b>2</b>
<u>INTRODUCTION</u> .....	2
<b><u>DESIGNATED SITES:</u></b> .....	<b>3</b>
<u>TAW/TORRIDGE ESTUARY SITE OF SPECIAL SCIENTIFIC INTEREST:</u> .....	3
<u>UPCOTT WOOD AND FORD HOUSE WOOD - ANCIENT WOODLANDS</u> .....	3
<u>KENWITH VALLEY NATURE RESERVE</u> .....	3
<u>GODBOROUGH CASTLE NATURE RESERVE</u> .....	4
<b><u>OTHER HABITATS (IDENTIFIED FROM FIELD SURVEY):</u></b> .....	<b>5</b>
<u>SPECIES-RICH HEDGES</u> .....	5
<u>RECREATION AREAS AND PUBLIC OPEN SPACE</u> .....	6
<u>ALLOTMENTS AND GARDENS</u> .....	6
<u>CAUSEWAYS AND WATER’S EDGE</u> .....	6
<u>CUTTING ALONG NEW ROAD</u> .....	6
<u>CEMETERIES/ CHURCHYARD</u> .....	7
<u>TARKA TRAIL</u> .....	7
<b><u>SPECIES</u></b> .....	<b>8</b>
<u>IMPORTANT SPECIES</u> .....	8
<u>BIRDS</u> .....	8
<u>PLANTS</u> .....	8
<u>MAMMALS</u> .....	8
<u>INVERTEBRATES</u> .....	9
<u>REPTILES AND AMPHIBIANS</u> .....	9
<b><u>THE DEVON BIODIVERSITY ACTION PLAN (BAP)</u></b> .....	<b>10</b>
<u>BIODIVERSITY LINKS:</u> .....	10
<u>LINKS BETWEEN THE WILDLIFE OF BIDEFORD AND THE DEVON BAP:</u> .....	11
<b><u>SOME IDEAS FOR LOCAL ACTION</u></b> .....	<b>13</b>
<u>1 FURTHER SURVEY:</u> .....	13
<u>2 INFLUENCE THE MANAGEMENT OF PUBLIC OPEN SPACE:</u> .....	14
<u>3 BUILD RELATIONSHIPS WITH LOCAL LANDOWNERS:</u> .....	14
<u>4 ADOPT A ROAD VERGE:</u> .....	14
<u>5 WILDLIFE GARDENING:</u> .....	14
<u>6 JOIN LOCAL CONSERVATION ORGANISATIONS:</u> .....	15
<u>7 JAPANESE KNOTWEED:</u> .....	15
<b><u>USEFUL SOURCES OF FURTHER INFORMATION:</u></b> .....	<b>17</b>
<u>POSSIBLE SOURCES OF FUNDING:</u> .....	17
<b><u>BIBLIOGRAPHY</u></b> .....	<b>18</b>
<u>ACKNOWLEDGEMENTS</u> .....	18
<b><u>APPENDIX 1- NOTABLE SITES AND SPECIES WITHIN BIDEFORD</u></b> .....	<b>19</b>
<b><u>APPENDIX 2- SPECIES LIST RECORDED DURING FIELD SURVEY</u></b> .....	<b>36</b>

# **Bideford - Parish Plan Biodiversity Project**

## **Introduction**

Bideford is split into two by the Taw/Torridge estuary, which is partly designated as a Site of Special Scientific Interest. There are little other designated sites in Bideford parish as it lies within the Torridge District, which as of yet, has had no district wildlife survey programme.

But even without designations, there is much plant interest on the verges along the Tarka Trail or in the cemeteries and along the many hedges within the parish. The varied habitats range from Ancient Woodland, neutral grassland, ponds, saltmarsh, mudflats and reedbed.

There is opportunity to walk or ride along the edge of the estuary and there are many places where you can have extensive views over the river, the saltmarsh or over the mudflats if the tide is out. Large flocks of wintering birds like lapwing, curlew and redshank feed on the many invertebrates that thrive in the productive sediment.

## **Designated Sites:**

### **Taw/Torridge Estuary Site of Special Scientific Interest:**

A **Site of Special Scientific Interest** (SSSI) is a statutory designation notified by English Nature because of the plant, animal or geological features contained.

The Taw/Torridge Estuary has been identified as a SSSI because of its estuary habitats, which include **mudflats**, **saltmarsh** and **reedbed**. Mudflats and coastal saltmarsh are listed on the **UK Biodiversity Action Plan** as priority habitats, and estuaries are also listed on the **Devon Biodiversity Action Plan** as a priority habitat.

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

Saltmarshes too are important areas for birds, providing breeding sites and feeding areas. They are also important for invertebrates, and provide nursery sites for a variety of fish. Saltmarsh is often lost to erosion and pollution and there are now only some 45,000 hectares left in Britain.

### **Upcott Wood and Ford House Wood - Ancient Woodlands**

Upcott Wood and Ford House Wood are listed in the Devon Ancient Woodland Inventory, which was prepared in 1986 by the Nature Conservancy Council. (now English Nature).

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.

These woods are privately owned and there is no public access, but you are able to walk around the edge of them following Upcott Hill and the surrounding lanes, allowing a look in. The edge of Upcott Wood was viewed from these lanes and at least 10 species indicative of Ancient Woodland were recorded. These include: black bryony, hart's-tongue fern, polypody, pendulous sedge, holly, soft shield fern, wood millet, tutsan, great wood-rush, wood melick and the uncommon wild service tree.

### **Kenwith Valley Nature Reserve**

Kenwith Valley is a Local Nature Reserve owned by Torridge District Council, created in 1986 from the Kenwith Valley flood prevention scheme. It was created with help from volunteers from the Devon Birdwatching and Preservation Society as well as local people.

The habitats present on site include ponds, **reedbed**, tall herb vegetation, semi-improved grassland and scattered trees. 3,000 native trees were planted and ponds were created. Reedbed is listed on the **UK Biodiversity Action Plan** as priority habitat, and is also listed on the **Devon Biodiversity Action Plan** as a priority habitat.

Otter, roe deer and harvest mouse are known to be present at the site, along with 120 species of birds including reed and sedge warbler, mute swan, moorhen, kingfisher and rare species such as the dusky warbler. 140 flowers and trees have been recorded as well as 20 species of butterfly and 9 species of dragonfly and damselfly.

**Local Nature Reserves** are areas of accessible natural open space designated by the Local Authority as an important resource for people and wildlife. Kenwith Valley has no public right of access, but is publicly accessible and widely used by local people.

### **Godborough Castle Nature Reserve**

Though just outside of the Bideford Town boundary, Godborough Castle Nature Reserve is worth a mention. This site is owned and managed by the Devon Bird Watching and Preservation Society (DBWPS).

Whilst there is currently no public access to this nature reserve, it can be viewed from a footpath/minor road which runs along the east and north boundaries.

The reserve has a mixture of habitats covering 10½ hectares. These include old pasture and south facing stands of gorse (formerly known as Turners Wood, which was felled about 35 years ago). Amongst the birds that can be seen at the reserve are nuthatch, treecreeper, stonechat, sparrowhawk, buzzard and barn owl. Other fauna includes glow-worm, marbled white butterfly, serotine bat, daubenton's bat and roe deer. The flora is also of some interest and includes pale flax, rest harrow and autumn lady's tresses.

In recent years, DPWPS have undertaken a lot management work, including new planting and the creation of a complex of three interlinked ponds.

As might be gathered from its name, Godborough Castle Nature Reserve is also a site of some archaeological interest. The 'dyke' is an Iron Age structure, as may be the 'Castle'.

## **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 with less farm labour available and more reliance on mechanical cutting. 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, leaving them much more 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 laid.

With the advent of mechanical hedge-trimming has come another change - that it now becomes possible to trim all the hedges on a farm in one year. It is this that perhaps has the most impact on the vertebrate wildlife as the fruiting and seeding species are very much less productive and there is a different and less varied structure. Shrubs that do produce a good berry crop may be cut in the early autumn before the birds, particularly the migrants, can gain any advantage. A couple of generations ago, many hedges on a farm might have been cut only once in five or even seven years, 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 with perhaps only one or two of the three 'faces': the top and the two sides being 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!

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

In such a clearly agricultural landscape, the hedgerows and hedgebanks represent continuity as features in the landscape and provide a significant wildlife resource at a time when the fields themselves are being more intensively used. The UK Biodiversity Action Plan (UK Steering Group, 1995) lists ancient and or species-rich hedgerows as one of its priority habitats.

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

Hedgerows are often an essential corridor for the movement of wildlife and may support many animals and plants. The hedgerows along Upcott Hill are species-rich with between 5 and 8 woody species recorded in a 30 metre length. These include holly, hawthorn, ash, pedunculate oak, beech, hazel and sycamore. The hedge also has a rich bank flora with barren strawberry, hemp-agrimony, creeping cinquefoil, common knapweed, black bryony and dog's mercury present.

**Species rich hedges** are listed on the **Devon Biodiversity Action plan** as a habitat of conservation concern in Devon.

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

There are a number of areas of amenity grassland and open space in Bideford managed as recreation grounds and playing fields. These areas are important as wildlife corridors and may provide valuable links to other areas of wildlife habitat. The grounds of several large schools such as Edgehill College, Grenville College and Bideford School have large areas of parkland-type habitat with scattered mature trees. These areas are probably also of value for wildlife and may comprise old trees, which can provide homes for bats, birds and invertebrates, as well as supporting lichens and mosses.

### **Allotments and Gardens**

Gardens and allotments provide a haven for wildlife and can provide links to other areas of wildlife habitat. A number of species have been recorded from gardens and allotments in Bideford including common frog, grass snake, slow worm, common toad and hedgehog.

### **Causeways and Water's edge**

The causeways along the estuary edge provide extensive views over the estuary and mudflats, and the stone walls and embankments down to the water's edge are home to plants such as wild privet, traveller's joy, buddleia, wood sage, ivy-leaved toadflax, red valerian and red fescue. It is possible to walk along the western edge of the estuary from Bideford new bridge almost to Landcross. There are several places to sit and take in the view, as well as picnicking areas.

### **Cutting along New Road**

There is a large rock exposure along New Road, which forms a valuable geological feature. The geology of the area is Upper Carboniferous – Sandstones and slates. The site is not listed as a 'Regionally Important Geological Site'. The cutting supports an interesting and rich flora with lichens and mosses, a number of ferns and several attractive flowering plants. The flowers provide a colourful display with red valerian, buddleia and cat's-ear. Ferns include polypody and maidenhair spleenwort.

## Cemeteries/ churchyard

There are several cemeteries in Bideford parish. Small areas of relatively species-rich grassland occur in the cemeteries with species present including yarrow, ox-eye daisy, ribwort plantain, selfheal, black medick, meadow vetchling and rough hawkbit. A species of horseshoe bat has been recorded from one of the cemeteries in Bideford. All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 and also have European protection. **Greater horseshoe bats** are listed on the **Devon Biodiversity Action Plan** as a species of conservation concern.

## Tarka Trail

Bideford lies in the middle of 'Tarka Country,' which covers 500 square miles of rolling farmland, wild moorland and rugged coastline and stretches from the North Devon coast, to Exmoor and down to Dartmoor. The Tarka Trail is a walking and cycling route and part of the cycle trail passes through Bideford, following the estuary along the eastern edge. The habitats along and immediately adjacent to the section of Tarka Trail between Bideford and Landcross consist of secondary broadleaved woodland, scrub and hedges, species-rich grassland and saltmarsh, mudflats and reedbed within the Taw/ Torridge estuary.

The areas of grassland support species such as common knapweed, agrimony, ribwort plantain, yarrow, wild carrot, ox-eye daisy and meadow vetchling and are quite species rich in places. The wooded embankments are predominately oak with a blackthorn understory. Woodland type species recorded here include: barren strawberry, perforate St. John's-wort, common dog violet, betony and hart's-tongue fern.

There are stunning views over the estuary at several points along the cycleway. A jetty takes you out into the saltmarsh at one point along the route. Saltmarsh is one of Britain's most important ecosystems, supporting rare plants and invertebrates as well as providing winter feeding grounds for birds. Plants recorded here include: glasswort (*Salicornia* sp.), sea couch and sea plantain, but species such as cord-grass, common reed and sea purslane are also present.



## 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 Bideford has been produced and is presented separately (Appendix 1).

### Birds

Several species of birds were recorded during the survey including mallard, curlew, little egret, mute swan, green woodpecker, starling and woodpigeon.

The SSSI supports nationally important numbers of curlew, golden plover, lapwing, redshank, dunlin and oystercatcher. The total number of waders present at any one time can reach over 20,000.

Other notable species recorded within the parish of Bideford include barn owl, bullfinch, grasshopper warbler, kestrel, kingfisher and willow warbler. The **barn owl** and **curlew** are listed on the **Devon Biodiversity Action Plan** as species of conservation concern.

The barn owl has undergone a major decline in the last century due to changes in agricultural practice, as well as loss of nesting sites such as old barns and hollow trees. The barn owl requires areas of open, rough grassland where its preferred food of mice and voles are found.

### Plants

The variety of habitats present within Bideford parish support a good number of plants. The saltmarsh supports several uncommon species such as sea aster, rock-sea lavender and great sea stock. All these species are Devon notables, and rock sea-lavender is listed on the UK Biodiversity Action Plan. Bluebell and primrose have been recorded from several areas in Bideford. The **primrose** is listed on the **Devon Biodiversity Action Plan**.

Plant species noted on a visit on the 10<sup>th</sup> August 2004 are listed in Appendix 2.

### Mammals

Otters have been recorded from Salterns, Jennets reservoir and Upcott. The **otter** is listed on the **Devon Biodiversity Action plan** as a species of conservation concern in Devon.

Dormice are present in Pixey Copse near landcross (an area of ancient woodland) and have been recorded from a garden near Landcross. The **dormouse** is also listed on the **Devon Biodiversity Action plan** as a species of conservation concern in Devon.

Other mammals recorded from the area include badger, several species of bat, brown hare, roe deer, weasel and stoat.

### **Invertebrates**

Little information is held on invertebrates in Bideford parish. Glow-worms have been recorded from close to Jennetts reservoir, as well as uncommon butterflies such as green hairstreak, purple hairstreak and silver-washed fritillary.

The keeled skimmer dragonfly and hummingbird hawk-moth have been recorded from gardens in Bideford, and common blue, gatekeeper, meadow brown and ringlet butterflies were recorded during the field survey.

### **Reptiles and Amphibians**

Frogs are found in many gardens in Bideford, along with toads and palmate newts. Grass snake and slow worm are some of the more uncommon visitors to gardens, slow worms may also be found in the many allotments in Bideford.

## **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 Bideford and the Devon BAP:

Bideford wildlife feature	Brief description of feature	Link with the Devon Biodiversity Action Plan (BAP)
Taw/ Torridge Estuary	An estuary with mudflats, beaches and saltmarsh of major importance for its overwintering and migratory populations of wading birds.	<ul style="list-style-type: none"> <li>• Estuaries Habitat Action Plan</li> <li>• Curlew Species Action Plan</li> <li>• Otter Species Action Plan</li> </ul>
Upcott Woods Ancient Woodland	An area of woodland listed in the Ancient Woodland Inventory, with the uncommon wild service tree present.	<ul style="list-style-type: none"> <li>• Devon Whitebeam and related species Species Action Plan</li> <li>• Primrose Species Action Plan</li> </ul>
Kenwith Valley Local Nature Reserve	An area of ponds, reedbed, semi-improved grassland and scattered trees.	<ul style="list-style-type: none"> <li>• Freshwater reedbed Habitat Action Plan</li> <li>• Otter Species Action Plan</li> </ul>
Species-rich Hedges	Important – often ancient – wildlife habitats that can also form an important network of corridors along which wildlife can move and disperse.	<ul style="list-style-type: none"> <li>• Species-rich Hedges Habitat Action Plan</li> <li>• Dormouse Species Action Plan</li> </ul>
Churchyard /cemetery	These features support species-rich grassland, which has been protected from agricultural improvement. Species-rich grassland often has high populations of mice and voles, which birds of prey such as the barn owl feed on.	<ul style="list-style-type: none"> <li>• Flower-rich Meadows and Pastures Habitat Action Plan</li> <li>• Barn Owl 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 Bideford might include hedges and otter signs. The last two actions would directly contribute to the **Species-rich Hedges Action Plan** and the **Otter 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 Halsannery Field Studies Centre operates in the area.

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:**

Relaxing the intensity of amenity management, where practical, can significantly increase the value of public open space for wildlife. For example, some areas of grassland could be left long to benefit invertebrates and small mammals. Some areas could be sown with a wildflower seed mix or planted with wildflower plugs, or native species of trees could be planted in the odd corner where there is currently no interest.

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.

## **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 Bideford 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:**

One example of a prominent local conservation organisation is the Devon Wildlife Trust. The Devon Wildlife Trust has a number of Local Groups which, amongst other things, get involved in practical management work.

There may well be opportunities to work with Torridge District Council and/or the Devon Bird Watching and Preservation Society at Kenwith Valley Local Nature Reserve.

## **7 Japanese Knotweed:**

Not something to cherish, but it can't be ignored! Unfortunately, Japanese Knotweed is present at several locations in Bideford 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

---

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



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).

## Useful sources of further information:

- Devon Wildlife Trust: [www.devonwildlifetrust.org](http://www.devonwildlifetrust.org)
- Devon Birdwatching and Preservation Society: Secretary tel: 01837 53360
- 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.

## 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 but the following sites may be worth checking for suitability:

Awards for All: [www.awardsforall.org.uk](http://www.awardsforall.org.uk)

Countryside Trust Awards: 01242 521382 or [www.countryside-trust.org](http://www.countryside-trust.org)

Living Spaces: 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)

## **Bibliography**

Bickmore CJ (2002) *Hedgerow Survey Handbook* Countryside Council for Wales

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

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

Hubbard CE (1984) *Grasses* Penguin Group London

Rose F (1981) *The Wild Flower Key* Penguin Group London

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

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

## **Acknowledgements**

Many thanks to the following for assistance:

Chris Hassall

Pip Yollands, Hallsannery Field Centre

## Appendix 1 - Notable sites and species within Bideford.

File Code	Site Name	Grid Ref.	Area (ha)	Description	Status
SS43/048	Taw/Torridge Estuary	SS 470304	1353.5	Estuary with mudflats, beaches and saltmarsh with bird interest	SSSI
	Stone Wood	SS481263	3.2	Semi-natural ancient woodland	AWI
	Ford House Wood	SS450257	8.2	Semi-natural ancient woodland	AWI
	Upcott Wood	SS450250	8.6	Semi-natural ancient woodland	AWI
	Pixey Copse	SS474242	40.0	Semi-natural ancient woodland	AWI

**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.

**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.

No.	Name	Latin Name	Location	Date	UK Protection	International Protection	Status
1	Badger	Meles meles	A39 at the junction serving 'The Big Sheep' tourist attraction, Abbotsham,.	2003	WCA 6, BA	Bern III	
2	Badger	Meles meles	Crossing the A39 close to the turning for The Big Sheep.	2002	WCA 6, BA	Bern III	
3	Glow-worm	Lampyris noctiluca	Land near to Jennets reservoir	1998			
4	Japanese Knotweed	Fallopia japonica	Public recreation area off Littlefield.	2001	WCA 9		
5	Japanese Knotweed	Fallopia japonica	Beside stream next to playing field, leading from footpath adjoining Short Close, Abbotsham.	2003	WCA 9		
6	Common Frog	Rana temporaria	Stuckley Rd.	2002	WCA 5(S)	EC Va; Bern III	
7	Common Frog	Rana temporaria	Clovelly Rd	2003	WCA 5(S)	EC Va; Bern III	
8	Badger	Meles meles	Bideford	2002	WCA 6, BA	Bern III	
9	Horseshoe Bats	Rhinolophidae	Old Town Cemetery.	2000	WCA 5, 6	EC IIa, IVa; Bern II; Bonn II	UKBAP(P)
10	Common Toad	Bufo bufo	Lane to Jennets Reservoir near Upcott Wood	2002	WCA 5(S)	Bern III	
11	Slow-worm	Anguis fragilis	Edge of woodland Edghill Colledge	2003	WCA 5(KIS)	Bern III	

12	Japanese Knotweed	<i>Fallopia japonica</i>	Garden at Norlow, First Raleigh.	2003	WCA 9		
13	Grass Snake	<i>Natrix natrix</i>	Lower Hyford House, Clovelly Rd	2001	WCA 5(KIS)	Bern III	
14	Great Green Bush Cricket	<i>Tettigonia viridissima</i>	Allotments near Belvoir Road	2000			DBAP
15	Slow-worm	<i>Anguis fragilis</i>	Allotments near Belvoir Road	2000	WCA 5(KIS)	Bern III	
16	Otter	<i>Lutra lutra</i>	Bideford	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
17	Otter	<i>Lutra lutra</i>	Bideford	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
18	Otter	<i>Lutra lutra</i>	Bideford	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
19	Otter	<i>Lutra lutra</i>	Bideford	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
20	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Westwood, Raleigh.	1999	WCA 5, 6	EC IVa; Bern III, Bonn II	UKBAP(P)
21	Great Green Bush Cricket	<i>Tettigonia viridissima</i>	Garden of Clovelly Road.	1996			DBAP
22	Otter	<i>Lutra lutra</i>	Upcot	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
23	Otter	<i>Lutra lutra</i>	Jennetts	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
24	Otter	<i>Lutra lutra</i>	Jennetts	1997	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
25	Otter	<i>Lutra lutra</i>	Jennetts	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
26	Otter	<i>Lutra lutra</i>	Jennetts	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
27	Otter	<i>Lutra lutra</i>	Upcot	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
28	Otter	<i>Lutra lutra</i>	Jennetts	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
29	Otter	<i>Lutra lutra</i>	Jennetts	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
30	Otter	<i>Lutra lutra</i>	Jennetts	1997	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
31	Otter	<i>Lutra lutra</i>	Upcot	1997	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
32	Badger	<i>Meles meles</i>	Upcott Woods.	2002	WCA 6, BA	Bern III	

33	Badger	<i>Meles meles</i>	Upcott Woods.	2002	WCA 6, BA	Bern III	
34	Roe Deer	<i>Capreolus capreolus</i>	Upcott Woods.	2002	DA	Bern III	
35	Badger	<i>Meles meles</i>	Minor road close to Barton cross	1999	WCA 6, BA	Bern III	
36	Common Toad	<i>Bufo bufo</i>	Upcott Woods and garden of Inawood, Upcott.	2002	WCA 5(S)	Bern III	
37	Japanese Knotweed	<i>Fallopia japonica</i>	Land adjoining Meddon Street	2002	WCA 9		
38	Otter	<i>Lutra lutra</i>	Culvert on the main road by the Kenwith Valley flood prevention area.	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
39	Slow-worm	<i>Anguis fragilis</i>	Bideford	2000	WCA 5(KIS)	Bern III	
40	Japanese Knotweed	<i>Fallopia japonica</i>	Bottom of garden at Hill Croft Terrace, Pitt Lane and in BT compound opposite.	2003	WCA 9		
41	Japanese Knotweed	<i>Fallopia japonica</i>	Forest Hill House, New Road	2003	WCA 9		
42	Common Frog	<i>Rana temporaria</i>	Gunstone	2002	WCA 5(S)	EC Va; Bern III	
43	Japanese Knotweed	<i>Fallopia japonica</i>	Riverbank at Pynewood, Torrington Road.	2002	WCA 9		
44	Badger	<i>Meles meles</i>	A388 just outside Bideford	1999	WCA 6, BA	Bern III	
45	Badger	<i>Meles meles</i>	A386 South Bideford.	2002	WCA 6, BA	Bern III	
46	Rock Sea-Lavender [agg.]	<i>Limonium binervosum</i> agg.	Westleigh	1991			UKBAP(GP); DN1
47	Badger	<i>Meles meles</i>	A386 south of Bideford (HGV layby).	2002	WCA 6, BA	Bern III	
48	Slow-worm	<i>Anguis fragilis</i>	Back of Citizens Advice Bureau, Bridgeland Street.	2002	WCA 5(KIS)	Bern III	
49	Japanese Knotweed	<i>Fallopia japonica</i>	On the A386 road verge at Little America, near Bideford.	2002	WCA 9		
50	Starling	<i>Sturnus vulgaris</i>	Bideford Old Bridge.	2001			Red
51	Japanese Knotweed	<i>Fallopia japonica</i>	In field at the end of garden at Riverside Close.	2000	WCA 9		
52	Badger	<i>Meles meles</i>	Coachmans Cottage, Yeo Vale.	2001	WCA 6, BA	Bern III	
53	Barn Owl	<i>Tyto alba</i>	Coachmans Cottage, Yeo Vale.	2001	WCA 1, 9		DBAP; Amber
54	Bullfinch	<i>Pyrrhula pyrrhula</i>	Coachmans Cottage, Yeo Vale.	2001			UKBAP(P); Red
55	Common Dormouse	<i>Muscardinus avellanarius</i>	Coachmans Cottage, Yeo Vale.	2001	WCA 5, 6	EC IVa; Bern III	UKBAP(P); DBAP
56	Common Shrew	<i>Sorex araneus</i>	Coachmans Cottage, Yeo Vale.	2001	WCA 6	Bern III	
57	Goldcrest	<i>Regulus regulus</i>	Coachmans Cottage, Yeo Vale.	2001			Amber

58	Greater Horseshoe Bat	Rhinolophus ferrumequinum	Coachmans Cottage, Yeo Vale.	2001	WCA 5, 6	EC IIa, IVa; Bern II; Bonn II	UKBAP(P); DBAP
59	Green Woodpecker	Picus viridis	Coachmans Cottage, Yeo Vale.	2001			Amber
60	Hedgehog	Erinaceus europaeus	Coachmans Cottage, Yeo Vale.	2001	WCA 6	Bern III	
61	Kestrel	Falco tinnunculus	Coachmans Cottage, Yeo Vale.	2001			Amber
62	Lesser Spotted Woodpecker	Dendrocopos minor	Coachmans Cottage, Yeo Vale.	2001			Red
63	Marsh Tit	Parus palustris	Coachmans Cottage, Yeo Vale.	2001			Red
64	Mistle Thrush	Turdus viscivorus	Coachmans Cottage, Yeo Vale, Bideford (and surrounding area).	2001			Amber
65	Natterer's Bat	Myotis nattereri	Coachmans Cottage, Yeo Vale.	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
66	Noctule	Nyctalus noctula	Coachmans Cottage, Yeo Vale.	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
67	Pipistrelle	Pipistrellus pipistrellus	Coachmans Cottage, Yeo Vale.	2001	WCA 5, 6	EC IVa; Bern III, Bonn II	UKBAP(P)
68	Pygmy Shrew	Sorex minutus	Coachmans Cottage, Yeo Vale.	2001	WCA 6	Bern III	
69	Song Thrush	Turdus philomelos	Coachmans Cottage, Yeo Vale.	2001			UKBAP(P); Red
70	Stoat	Mustela erminea	Coachmans Cottage, Yeo Vale.	2001		Bern III; CITES (UK reservation)	
71	Weasel	Mustela nivalis	Coachmans Cottage, Yeo Vale.	2001		Bern III	
72	Willow Tit	Parus montanus	Coachmans Cottage, Yeo Vale.	2001			Red
73	Wren	Troglodytes troglodytes	Coachmans Cottage, Yeo Vale.	2001			endemic
74	Common Frog	Rana temporaria	Barnstaple Stree.	2002	WCA 5(S)	EC Va; Bern III	
75	Badger	Meles meles	A386 south of Bideford.	2003	WCA 6, BA	Bern III	
76	Great Green Bush Cricket	Tettigonia viridissima	Torridge Close	2000			DBAP
77	Bluebell	Hyacinthoides non-scripta	Tarka Trail from Bideford to bridge at Pill Mouth.	2003	WCA 8 (S)		
78	Otter	Lutra lutra	Graynfyld Drive	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
79	Primrose	Primula vulgaris	Tarka Trail from Bideford to bridge at Pill Mouth.	2003			DBAP
80	Twiggy Mullein	Verbascum virgatum	East-the-Water	1987			NS; DN2
81	Badger	Meles meles	Landcross. Wooded cliff of River Yeo on east side, 500m south-west of Landcross Bridge.	2002	WCA 6, BA	Bern III	

82	Badger	<i>Meles meles</i>	Landcross. Wooded cliff, east side of River Yeo, 500m south-west of Landcross Bridge.	2002	WCA 6, BA	Bern III	
83	Bluebell	<i>Hyacinthoides non-scripta</i>	Watertown Farm, Landcross	2002	WCA 8 (S)		
84	Brown Hare	<i>Lepus europaeus</i>	Watertown Farm, Landcross	2002			UKBAP(P); DBAP
85	Common Frog	<i>Rana temporaria</i>		2000	WCA 5(S)	EC Va; Bern III	
86	Common Frog	<i>Rana temporaria</i>		2000	WCA 5(S)	EC Va; Bern III	
87	Common Frog	<i>Rana temporaria</i>		2000	WCA 5(S)	EC Va; Bern III	
88	Great Water-parsnip	<i>Sium latifolium</i>	Watertown Farm, Landcross	2002			UKBAP(P); NS
89	Primrose	<i>Primula vulgaris</i>	Watertown Farm, Landcross	2002			DBAP
90	Badger	<i>Meles meles</i>	River Yeo saltmarsh and adjacent territory, Watertown, Landcross, near Bideford.	2001	WCA 6, BA	Bern III	
91	Curlew	<i>Numenius arquata</i>	River Yeo mudflats and saltmarsh at Watertown Farm, Landcross.	2001			DBAP; Amber
92	Curlew	<i>Numenius arquata</i>	River Yeo at Watertown Farm, Landcross	2001			DBAP; Amber
93	Mute Swan	<i>Cygnus olor</i>	River Yeo at Watertown Farm, Landcross	2001			Amber
94	Otter	<i>Lutra lutra</i>	River Yeo, Landcross	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
95	Otter	<i>Lutra lutra</i>	River Yeo saltmarsh and mudflats, Watertown, Landcross	2001	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
96	Shelduck	<i>Tadorna tadorna</i>	River Yeo at Watertown Farm, Landcross, Bideford.	2001			Amber
97	Common Toad	<i>Bufo bufo</i>		2000	WCA 5(S)	Bern III	
98	Japanese Knotweed	<i>Fallopia japonica</i>	B-road from Landcross to Bradworthy, a little way along the road.	2003	WCA 9		
99	Japanese Knotweed	<i>Fallopia japonica</i>	Garages and tarmac adjoining The Grange, Grange Road.	2001	WCA 9		
100	a bat	bat sp.	Downscott, Old Barnstaple Road.	2003	WCA 5, 6	EC IVa; Bonn II	
101	a bat	bat sp.	Downscott, Old Barnstaple Road.	2003	WCA 5, 6	EC IVa; Bonn II	
102	a bat	bat sp.	Downscott, Old Barnstaple Road.	2003	WCA 5, 6	EC IVa; Bonn II	
103	Bullfinch	<i>Pyrrhula pyrrhula</i>	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red



104	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
105	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
106	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
107	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
108	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
109	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
110	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
111	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
112	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
113	Bullfinch	Pyrrhula pyrrhula	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
114	Common Frog	Rana temporaria	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	EC Va; Bern III	
115	Common Frog	Rana temporaria	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	EC Va; Bern III	
116	Common Frog	Rana temporaria	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	EC Va; Bern III	
117	Common Frog	Rana temporaria	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	EC Va; Bern III	
118	Common Frog	Rana temporaria	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	EC Va; Bern III	
119	Common Frog	Rana temporaria	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	EC Va; Bern III	
120	Common Frog	Rana temporaria	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	EC Va; Bern III	
121	Common Toad	Bufo bufo	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	Bern III	
122	Common Toad	Bufo bufo	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	Bern III	
123	Common Toad	Bufo bufo	Downscott, Old Barnstaple Road.	2001	WCA 5(S)	Bern III	
124	Dunnock	Prunella modularis	Downscott, Old Barnstaple Road.	2003			Amber
125	Dunnock	Prunella modularis	Downscott, Old Barnstaple Road.	2002			Amber
126	Dunnock	Prunella modularis	Downscott, Old Barnstaple Road.	2002			Amber
127	Dunnock	Prunella modularis	Downscott, Old Barnstaple Road.	2003			Amber
128	Dunnock	Prunella modularis	Downscott, Old Barnstaple Road.	2002			Amber
129	Dunnock	Prunella modularis	Downscott, Old Barnstaple Road.	2002			Amber
130	Dunnock	Prunella modularis	Downscott, Old Barnstaple Road.	2003			Amber

131	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2002			Amber
132	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2002			Amber
133	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2003			Amber
134	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2003			Amber
135	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2002			Amber
136	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2003			Amber
137	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2003			Amber
138	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2002			Amber
139	Dunnock	<i>Prunella modularis</i>	Downscott, Old Barnstaple Road.	2003			Amber
140	Goldcrest	<i>Regulus regulus</i>	Downscott, Old Barnstaple Road.	2003			Amber
141	Goldcrest	<i>Regulus regulus</i>	Downscott, Old Barnstaple Road.	2002			Amber
142	Goldcrest	<i>Regulus regulus</i>	Downscott, Old Barnstaple Road, Bideford.	2002			Amber
143	Goldcrest	<i>Regulus regulus</i>	Downscott, Old Barnstaple Road.	2003			Amber
144	Goldcrest	<i>Regulus regulus</i>	Downscott, Old Barnstaple Road.	2002			Amber
145	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2003			Red
146	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2002			Red
147	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2002			Red
148	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2003			Red
149	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2003			Red
150	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2002			Red
151	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2002			Red
152	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2003			Red
153	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2002			Red
154	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2003			Red
155	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2002			Red
156	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2003			Red
157	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2003			Red
158	House Sparrow	<i>Passer domesticus</i>	Downscott, Old Barnstaple Road.	2002			Red
159	Humming-bird Hawk-moth	<i>Macroglossum stellatarum</i>	Downscott, Old Barnstaple Road.	2003			Migrant
160	Keeled Skimmer	<i>Orthetrum coerulescens</i>	Downscott, Old Barnstaple Road.	2003			KeyD (N)
161	Linnet	<i>Carduelis cannabina</i>	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
162	Linnet	<i>Carduelis cannabina</i>	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
163	Marsh Tit	<i>Parus palustris</i>	Downscott, Old Barnstaple Road.	2002			Red

164	Mistle Thrush	<i>Turdus viscivorus</i>	Downscott, Old Barnstaple Road.	2003			Amber
165	Mistle Thrush	<i>Turdus viscivorus</i>	Downscott, Old Barnstaple Road.	2003			Amber
166	Redwing	<i>Turdus iliacus</i>	Downscott, Old Barnstaple Road.	2003	WCA 1		Amber
167	Redwing	<i>Turdus iliacus</i>	Downscott, Old Barnstaple Road.	2003	WCA 1		Amber
168	Slow-worm	<i>Anguis fragilis</i>	Downscott, Old Barnstaple Road.	2002	WCA 5(KIS)	Bern III	
169	Slow-worm	<i>Anguis fragilis</i>	Downscott, Old Barnstaple Road.	2002	WCA 5(KIS)	Bern III	
170	Slow-worm	<i>Anguis fragilis</i>	Downscott, Old Barnstaple Road, Bideford	2002	WCA 5(KIS)	Bern III	
171	Slow-worm	<i>Anguis fragilis</i>	Downscott, Old Barnstaple Road, Bideford	2001	WCA 5(KIS)	Bern III	
172	Slow-worm	<i>Anguis fragilis</i>	Downscott, Old Barnstaple Road.	2002	WCA 5(KIS)	Bern III	
173	Smooth Newt	<i>Triturus vulgaris</i>	Downscott, Old Barnstaple Road.	2002	WCA 5(S)	Bern III	
174	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
175	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
176	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
177	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
178	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
179	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
180	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
181	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
182	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2003			UKBAP(P); Red
183	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
184	Song Thrush	<i>Turdus philomelos</i>	Downscott, Old Barnstaple Road.	2002			UKBAP(P); Red
185	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
186	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
187	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road, Bideford.	2002			Red

188	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
189	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
190	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
191	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2002			Red
192	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
193	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
194	Starling	<i>Sturnus vulgaris</i>	Downscott, Old Barnstaple Road.	2003			Red
195	Swallow	<i>Hirundo rustica</i>	Downscott, Old Barnstaple Road.	2002			Amber
196	Swallow	<i>Hirundo rustica</i>	Downscott, Old Barnstaple Road.	2003			Amber
197	Willow Warbler	<i>Phylloscopus trochilus</i>	Downscott, Old Barnstaple Road.	2003			Amber
198	Willow Warbler	<i>Phylloscopus trochilus</i>	Downscott, Old Barnstaple Road.	2003			Amber
199	Willow Warbler	<i>Phylloscopus trochilus</i>	Downscott, Old Barnstaple Road.	2002			Amber
200	Wren	<i>Troglodytes troglodytes</i>	Downscott, Old Barnstaple Road.	2002			endm
201	Wren	<i>Troglodytes troglodytes</i>	Downscott, Old Barnstaple Road.	2002			endm
202	Wren	<i>Troglodytes troglodytes</i>	Downscott, Old Barnstaple Road.	2002			endm
203	Wren	<i>Troglodytes troglodytes</i>	Downscott, Old Barnstaple Road.	2003			endm
204	Wren	<i>Troglodytes troglodytes</i>	Downscott, Old Barnstaple Road.	2002			endm
205	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
206	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
207	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
208	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
209	Common Frog	<i>Rana temporaria</i>	Cliff Pool, Watertown, Landcross.	2002	WCA 5(S)	EC Va; Bern III	
210	Common Frog	<i>Rana temporaria</i>	Cliff Pool, Watertown, Landcross.	2002	WCA 5(S)	EC Va; Bern III	
211	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
212	Common Frog	<i>Rana temporaria</i>	Cliff Pool, Watertown, Landcross.	2002	WCA 5(S)	EC Va; Bern III	
213	Common Toad	<i>Bufo bufo</i>	Watertown Farm, Landcross	2003	WCA 5(S)	Bern III	
214	Common Toad	<i>Bufo bufo</i>	Watertown Farm, Landcross	2003	WCA 5(S)	Bern III	
215	Common Toad	<i>Bufo bufo</i>	Watertown Farm, Landcross	2003	WCA 5(S)	Bern III	
216	Common Toad	<i>Bufo bufo</i>	Watertown Farm, Landcross	2003	WCA 5(S)	Bern III	
217	Stoat	<i>Mustela erminea</i>	River Yeo saltmarsh and flood bank at Watertown Farm, Landcross.	2001		Bern III; CITES (UK reservation)	
218	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2002	WCA 5(S)	EC Va; Bern III	
219	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2002	WCA 5(S)	EC Va; Bern III	
220	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2002	WCA 5(S)	EC Va; Bern III	
221	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross, Bideford, EX395JA	2002	WCA 5(S)	EC Va; Bern III	
222	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross,	2002	WCA 5(S)	EC Va; Bern III	

			Bideford				
223	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross, Bideford	2002	WCA 5(S)	EC Va; Bern III	
224	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2002	WCA 5(S)	EC Va; Bern III	
225	Common Toad	<i>Bufo bufo</i>	Watertown Farm, Landcross	2002	WCA 5(S)	Bern III	
226	Common Toad	<i>Bufo bufo</i>	Watertown Farm, Landcross	2002	WCA 5(S)	Bern III	
227	Hedgehog	<i>Erinaceus europaeus</i>	On road at top of Landcross Hill adjacent to Tarka Trail bridge	2000	WCA 6	Bern III	
228	Palmate Newt	<i>Triturus helveticus</i>	Watertown Farm, Landcross	2002	WCA 5(S)	Bern III	
229	Slow-worm	<i>Anguis fragilis</i>	Watertown Farm, Landcross	2002	WCA 5(KIS)	Bern III	
230	Slow-worm	<i>Anguis fragilis</i>	Watertown Farm, Landcross	2002	WCA 5(KIS)	Bern III	
231	a glasswort	<i>Salicornia</i> sp.	Watertown Farm, Landcross	1997			DN2
232	Annual Sea-blite	<i>Suaeda maritima</i>	Watertown Farm, Landcross	2001			DN2
233	Annual Sea-blite	<i>Suaeda maritima</i>	Watertown Farm, Landcross	1997			DN2
234	Badger	<i>Meles meles</i>	Watertown Farm, Landcross	2001	WCA 6, BA	Bern III	
235	Badger	<i>Meles meles</i>	Watertown Farm, Landcross	2000	WCA 6, BA	Bern III	
236	Badger	<i>Meles meles</i>	Watertown Farm, Landcross	2002	WCA 6, BA	Bern III	
237	Badger	<i>Meles meles</i>	Watertown Farm, Landcross	2000	WCA 6, BA	Bern III	
238	Badger	<i>Meles meles</i>	Watertown Farm, Landcross	2003	WCA 6, BA	Bern III	
239	Badger	<i>Meles meles</i>	Watertown Farm, Landcross	2003	WCA 6, BA	Bern III	
240	Badger	<i>Meles meles</i>	Watertown Farm, Landcross	2003	WCA 6, BA	Bern III	
241	Black-headed Gull	<i>Larus ridibundus</i>	Watertown Farm, Landcross	2001			Amber
242	Black-headed Gull	<i>Larus ridibundus</i>	Watertown Farm, Landcross	2000			Amber
243	Brown Long-eared Bat	<i>Plecotus auritus</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
244	Brown Long-eared Bat	<i>Plecotus auritus</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
245	Brown Long-eared Bat	<i>Plecotus auritus</i>	Watertown Farm, Landcross	2003	WCA 5, 6	EC IVa; Bern II; Bonn II	
246	Brown Long-eared Bat	<i>Plecotus auritus</i>	Watertown Farm, Landcross	2000	WCA 5, 6	EC IVa; Bern II; Bonn II	
247	Bullfinch	<i>Pyrrhula pyrrhula</i>	Watertown Farm, Landcross	2002			UKBAP(P); Red
248	Bullfinch	<i>Pyrrhula pyrrhula</i>	Watertown Farm, Landcross	2002			UKBAP(P); Red
249	Bullfinch	<i>Pyrrhula pyrrhula</i>	Watertown Farm, Landcross	2001			UKBAP(P); Red

250	Common Frog	<i>Rana temporaria</i>	Upper edge of saltmarsh and garden patio pond, Watertown, Landcross.	1998	WCA 5(S)	EC Va; Bern III	
251	Common Frog	<i>Rana temporaria</i>	Watertown Farm	2000	WCA 5(S)	EC Va; Bern III	
252	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
253	Common Frog	<i>Rana temporaria</i>	Upper edge of saltmarsh and garden patio pond, Watertown, Landcross.	2000	WCA 5(S)	EC Va; Bern III	
254	Common Frog	<i>Rana temporaria</i>	Upper edge of saltmarsh and garden patio pond, Watertown, Landcross.	1997	WCA 5(S)	EC Va; Bern III	
255	Common Frog	<i>Rana temporaria</i>	Watertown Farm	2000	WCA 5(S)	EC Va; Bern III	
256	Common Frog	<i>Rana temporaria</i>	Patio pond at Watertown Farm, Landcross.	2001	WCA 5(S)	EC Va; Bern III	
257	Common Frog	<i>Rana temporaria</i>	Toilet at Watertown Farm, Landcross.	2001	WCA 5(S)	EC Va; Bern III	
258	Common Frog	<i>Rana temporaria</i>	Upper edge of saltmarsh and garden patio pond, Watertown, Landcross.	2001	WCA 5(S)	EC Va; Bern III	
259	Common Frog	<i>Rana temporaria</i>	Upper edge of saltmarsh and garden patio pond, Watertown, Landcross	1999	WCA 5(S)	EC Va; Bern III	
260	Common Saltmarsh-grass	<i>Puccinellia maritima</i>	Watertown Farm, Landcross	1997			DN2
261	Common Shrew	<i>Sorex araneus</i>	Watertown Farm, Landcross	2003	WCA 6	Bern III	
262	Common Shrew	<i>Sorex araneus</i>	Watertown Farm, Landcross	2002	WCA 6	Bern III	
263	Common Shrew	<i>Sorex araneus</i>	Watertown Farm, Landcross	2002	WCA 6	Bern III	
264	Common Shrew	<i>Sorex araneus</i>	Watertown Farm, Landcross	2002	WCA 6	Bern III	
265	Common Toad	<i>Bufo bufo</i>	Upper edge of saltmarsh and garden patio pond, Watertown, Landcross.	2001	WCA 5(S)	Bern III	
266	Cormorant	<i>Phalacrocorax carbo</i>	Watertown Farm, Landcross	2001			Amber
267	Curlew	<i>Numenius arquata</i>	Watertown Farm, Landcross	2002			DBAP; Amber
268	Curlew	<i>Numenius arquata</i>	Watertown Farm, Landcross	2001			DBAP; Amber
269	Daubenton's Bat	<i>Myotis daubentoni</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
270	Daubenton's Bat	<i>Myotis daubentoni</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
271	Dunlin	<i>Calidris alpina</i>	Watertown Farm, Landcross	2001			Amber
272	Dunnock	<i>Prunella modularis</i>	Watertown Farm, Landcross	2001			Amber
273	Dunnock	<i>Prunella modularis</i>	Watertown Farm, Landcross	2002			Amber
274	Dunnock	<i>Prunella modularis</i>	Watertown Farm, Landcross	2002			Amber
275	English Scurvygrass	<i>Cochlearia anglica</i>	Watertown Farm, Landcross	2001			DN2
276	Goldcrest	<i>Regulus regulus</i>	Watertown Farm, Landcross	2001			Amber

277	Grasshopper Warbler	<i>Locustella naevia</i>	Watertown Farm, Landcross	2001			Red
278	Greenshank	<i>Tringa nebularia</i>	Watertown Farm, Landcross	2000	WCA 1		
279	Grey Wagtail	<i>Motacilla cinerea</i>	Watertown Farm, Landcross	2000			Amber
280	Grey Wagtail	<i>Motacilla cinerea</i>	Watertown Farm, Landcross	2001			Amber
281	House Martin	<i>Delichon urbica</i>	Watertown Farm, Landcross	2001			Amber
282	House Martin	<i>Delichon urbica</i>	Watertown Farm, Landcross	2002			Amber
283	House Sparrow	<i>Passer domesticus</i>	Watertown Farm, Landcross	2001			Red
284	House Sparrow	<i>Passer domesticus</i>	Watertown Farm, Landcross	2002			Red
285	House Sparrow	<i>Passer domesticus</i>	Watertown Farm, Landcross	2002			Red
286	House Sparrow	<i>Passer domesticus</i>	Watertown Farm, Landcross	2002			Red
287	Kestrel	<i>Falco tinnunculus</i>	Watertown Farm, Landcross	2001			Amber
288	Kingfisher	<i>Alcedo atthis</i>	Watertown Farm, Landcross	2002	WCA 1		Amber
289	Kingfisher	<i>Alcedo atthis</i>	Watertown Farm, Landcross	2001	WCA 1		Amber
290	Lapwing	<i>Vanellus vanellus</i>	Watertown Farm, Landcross	2001			Amber
291	Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IIa, IVa; Bern II; Bonn II	UKBAP(P)
292	Linnet	<i>Carduelis cannabina</i>	Watertown Farm, Landcross	2001			UKBAP(P); Red
293	Little Egret	<i>Egretta garzetta</i>	Watertown Farm, Landcross	2002			Amber
294	Little Egret	<i>Egretta garzetta</i>	Watertown Farm, Landcross	2001			Amber
295	Merlin	<i>Falco columbarius</i>	Watertown Farm, Landcross	2001	WCA 1		Amber
296	Natterer's Bat	<i>Myotis nattereri</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
297	Otter	<i>Lutra lutra</i>	Watertown Farm, Landcross	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
298	Otter	<i>Lutra lutra</i>	Watertown Farm, Landcross	2003	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
299	Otter	<i>Lutra lutra</i>	Watertown Farm, Landcross	2003	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
300	Otter	<i>Lutra lutra</i>	Watertown Farm, Landcross	2003	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
301	Oystercatcher	<i>Haematopus ostralegus</i>	Watertown Farm, Landcross	2001			Amber
302	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Watertown Farm, Landcross	2003	WCA 5, 6	EC IVa; Bern III, Bonn II	UKBAP(P)
303	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern III, Bonn II	UKBAP(P)
304	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern III,	UKBAP(P)

						Bonn II	
305	Redshank	<i>Tringa totanus</i>	Watertown Farm, Landcross	2000			Amber
306	Redshank	<i>Tringa totanus</i>	Watertown Farm, Landcross	2002			Amber
307	Redshank	<i>Tringa totanus</i>	Watertown Farm, Landcross	2001			Amber
308	Roe Deer	<i>Capreolus capreolus</i>	Watertown Farm, Landcross	2003	DA	Bern III	
309	Saltmarsh Rush	<i>Juncus gerardii</i>	Watertown Farm, Landcross	1997			DN3
310	Sand Martin	<i>Riparia riparia</i>	Watertown Farm, Landcross	2001			Amber
311	Sea Aster	<i>Aster tripolium</i>	Watertown Farm, Landcross	2001			DN3
312	Sea Aster	<i>Aster tripolium</i>	Watertown Farm, Landcross	1997			DN3
313	Sea Barley	<i>Hordeum marinum</i>	Watertown Farm, Landcross	2001			NS; DN1; DR
314	Sea Couch	<i>Elytrigia atherica</i>	Watertown Farm, Landcross	1997			DN3
315	Sea Purslane	<i>Atriplex portulacoides</i>	Watertown Farm, Landcross	2001			DN2
316	Sea Purslane	<i>Atriplex portulacoides</i>	Watertown Farm, Landcross	1997			DN2
317	Shelduck	<i>Tadorna tadorna</i>	Watertown Farm, Landcross	2001			Amber
318	Shelduck	<i>Tadorna tadorna</i>	Watertown Farm, Landcross, Bideford.	2002			Amber
319	Slow-worm	<i>Anguis fragilis</i>	River cliff, Watertown, Landcross.	2001	WCA 5(KIS)	Bern III	
320	Song Thrush	<i>Turdus philomelos</i>	Watertown Farm, Landcross	2001			UKBAP(P); Red
321	Song Thrush	<i>Turdus philomelos</i>	Watertown Farm, Landcross	2002			UKBAP(P); Red
322	Starling	<i>Sturnus vulgaris</i>	Watertown Farm, Landcross	2001			Red
323	Swallow	<i>Hirundo rustica</i>	Watertown Farm, Landcross	2001			Amber
324	Swallow	<i>Hirundo rustica</i>	Watertown Farm, Landcross	2000			Amber
325	Swallow	<i>Hirundo rustica</i>	Watertown Farm, Landcross	2002			Amber
326	Swallow	<i>Hirundo rustica</i>	Watertown Farm, Landcross	2002			Amber
327	Swallow	<i>Hirundo rustica</i>	Watertown Farm, Landcross	2002			Amber
328	Swallow	<i>Hirundo rustica</i>	Watertown Farm, Landcross, Bideford.	2002			Amber
329	Whiskered Bat	<i>Myotis mystacinus</i>	Watertown Farm, Landcross	2001	WCA 5, 6	EC IVa; Bern II; Bonn II	
330	Woodcock	<i>Scolopax rusticola</i>	Watertown Farm, Landcross	2001			Amber
331	Wren	<i>Troglodytes troglodytes</i>	Watertown Farm, Landcross	2002			endemic
332	Wren	<i>Troglodytes troglodytes</i>	Watertown Farm, Landcross	2002			endemic
333	Wren	<i>Troglodytes troglodytes</i>	Watertown Farm, Landcross	2001			endemic
334	Common Toad	<i>Bufo bufo</i>	Crossing the Bradworthy road (from west to east) near Landcross Chapel	2000	WCA 5(S)	Bern III	



335	Weasel	<i>Mustela nivalis</i>	A386 at Hallsannery, Bideford.	2002		Bern III	
336	Otter	<i>Lutra lutra</i>	Salterns	1997	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
337	Otter	<i>Lutra lutra</i>	Salterns	1997	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
338	Otter	<i>Lutra lutra</i>	Salterns	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
339	Otter	<i>Lutra lutra</i>	Salterns	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
340	Otter	<i>Lutra lutra</i>	Salterns	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
341	Otter	<i>Lutra lutra</i>	Salterns	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
342	Otter	<i>Lutra lutra</i>	Salterns	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
343	Otter	<i>Lutra lutra</i>	Salterns	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
344	Otter	<i>Lutra lutra</i>	Salterns	1998	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
345	Weasel	<i>Mustela nivalis</i>	Watertown Farm, Landcross	2002		Bern III	
346	Common Frog	<i>Rana temporaria</i>	Garden pond at Watertown Farm, Landcross.	2002	WCA 5(S)	EC Va; Bern III	
347	Common Frog	<i>Rana temporaria</i>	Garden pond at Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
348	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
349	Common Frog	<i>Rana temporaria</i>	Watertown Farm, Landcross	2003	WCA 5(S)	EC Va; Bern III	
350	Common Frog	<i>Rana temporaria</i>	Garden pond at Watertown Farm, Landcross.	2003	WCA 5(S)	EC Va; Bern III	
351	Common Frog	<i>Rana temporaria</i>	Garden pond at Watertown Farm, Landcross.	2003	WCA 5(S)	EC Va; Bern III	
352	Common Frog	<i>Rana temporaria</i>	Garden pond at Watertown Farm, Landcross.	2003	WCA 5(S)	EC Va; Bern III	
353	Common Frog	<i>Rana temporaria</i>	Garden pond at Watertown Farm, Landcross.	2003	WCA 5(S)	EC Va; Bern III	
354	Smooth Newt	<i>Triturus vulgaris</i>	Garden pond at Watertown Farm, Landcross.	2002	WCA 5(S)	Bern III	
355	Common Frog	<i>Rana temporaria</i>	Pond at Watertown farm, Landcross.	2000	WCA 5(S)	EC Va; Bern III	
356	Otter	<i>Lutra lutra</i>	Landcross	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P);

							DBAP
357	Stoat	<i>Mustela erminea</i>	A386 Landcross Bridge, Bideford.	2003		Bern III; CITES (UK reservation)	
358	Otter	<i>Lutra lutra</i>	Landcross	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
359	Common Frog	<i>Rana temporaria</i>	Freshwater spring at edge of saltmarsh, landcross.	2000	WCA 5(S)	EC Va; Bern III	
360	Badger	<i>Meles meles</i>	Eastridge Farm, East-the-Wate.	2001	WCA 6, BA	Bern III	
361	Little Egret	<i>Egretta garzetta</i>	River Torridge, Landcross.	2001			Amber
362	Slow-worm	<i>Anguis fragilis</i>	New building site on Gammaton road	2003	WCA 5(KIS)	Bern III	
363	Japanese Knotweed	<i>Fallopia japonica</i>	Pillhead Copse Landfill Site.	2001	WCA 9		
364	Brown Hare	<i>Lepus europaeus</i>	Beside old Barnstaple Road, near Saltrens water meadows.	2000			UKBAP(P); DBAP
365	Common Dormouse	<i>Muscardinus avellanarius</i>	Beara Wood, Landcross.	1995	WCA 5, 6	EC IVa; Bern III	UKBAP(P); DBAP
366	Silver-washed Fritillary	<i>Argynnis paphia</i>	Jennetts, Bideford	1991			
367	Silver-washed Fritillary	<i>Argynnis paphia</i>	Jennetts, Bideford	1998			
368	Green Hairstreak	<i>Callophrys rubi</i>	Jennetts, Bideford	1999			Declined
369	Silver-washed Fritillary	<i>Argynnis paphia</i>	Jennetts, Bideford	1999			
370	Purple Hairstreak	<i>Quercusia quercus</i>	Jennetts, Bideford	1991			Declined

**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 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.

**DA**                **Deer Act 1991:** deer protected under the Deer Act.

<b>Bern II</b>	<b>Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix II:</b> Special protection for listed animal species and their habitats.
<b>Bern III</b>	<b>Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix III:</b> Exploitation of listed animal species to be subject to regulation
<b>ECIIa, IIb</b>	<b>EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats &amp; Species Directive) Annex IIa and IIb:</b> Designation of protected areas for animal and plant species listed.
<b>ECIIIa, IIIb</b>	<b>EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats &amp; Species Directive) Annex IIIa and IIb:</b> 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>DN2</b>	<b>Devon Notable<sup>2</sup>:</b> 26-50 2 km squares in Atlas of Devon Flora 1984.
<b>DN3</b>	<b>Devon Notable<sup>3</sup>:</b> Selected species recorded from over 50 2 km squares in Atlas of Devon Flora 1984.
<b>DR</b>	<b>Devon Rarity:</b> native species recorded from 3 or fewer localities within Devon.

<b>Red List</b>	Bird species of high conservation concern, such as those whose population or range is rapidly declining, recently or historically, and those of global conservation concern.
<b>Amber List</b>	Bird species of medium conservation concern, such as those whose population is in moderate decline, rare breeders, internationally important and localised species and those of unfavourable conservation status in Europe.
<b>KeyD (N)</b>	<b>Nationally Important Key Dragonfly Species:</b> those which have been recorded in less than 10% of 10km squares in Britain. Those occurring in Devon are White-legged damselfly ( <i>Platynema pennipes</i> ) Scarce blue-tailed damselfly ( <i>Ischnura pumilio</i> ) Small red damselfly ( <i>Ceragrion tenellum</i> ) Hairy dragonfly ( <i>Brachytron pratense</i> ) Downy emerald ( <i>Cordulia aenea</i> ) and Keeled skimmer ( <i>Orthetrum coerulescens</i> ).
<b>Decline</b>	Substantial local decline in Devon

## Appendix 2

Species list for Bideford parish, recorded during the field survey on 10/08/04.

<b>Common name</b>	<b>Scientific name</b>
a glasswort	<i>Salicornia sp.</i>
a hawkweed	<i>Hieracium umbellatum</i>
a rose (unidentified)	<i>Rosa sp.</i>
a sallow	<i>Salix sp.</i>
Agrimony	<i>Agrimonia eupatoria</i>
Alder	<i>Alnus glutinosa</i>
an oak	<i>Quercus sp.</i>
an orache	<i>Atriplex sp.</i>
Annual Meadow-grass	<i>Poa annua</i>
Ash	<i>Fraxinus excelsior</i>
Barren Strawberry	<i>Potentilla sterilis</i>
Beech	<i>Fagus sylvatica</i>
Betony	<i>Stachys officinalis</i>
Bittersweet	<i>Solanum dulcamara</i>
Black Bryony	<i>Tamus communis</i>
Black Medick	<i>Medicago lupulina</i>
Black Spleenwort	<i>Asplenium adiantum-nigrum</i>
Blackthorn	<i>Prunus spinosa</i>
Bramble	<i>Rubus fruticosus agg.</i>
Bristly Oxtongue	<i>Picris echioides</i>
Broad Buckler-fern	<i>Dryopteris dilatata</i>
Broad-leaved Dock	<i>Rumex obtusifolius</i>
Broad-leaved Everlasting-pea	<i>Lathyrus latifolius</i>
Butterfly-bush	<i>Buddleja davidii</i>
Buzzard	<i>Buteo buteo</i>
Cat's-ear	<i>Hypochaeris radicata</i>
Cherry Laurel	<i>Prunus laurocerasus</i>
Cock's-foot	<i>Dactylis glomerata</i>
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>
Common Blue	<i>Polyommatus icarus</i>
Common Dog-violet	<i>Viola riviniana</i>
Common Duckweed	<i>Lemna minor</i>
Common Field-speedwell	<i>Veronica persica</i>
Common Fleabane	<i>Pulicaria dysenterica</i>
Common Knapweed	<i>Centaurea nigra</i>
Common Mallow	<i>Malva sylvestris</i>
Common Nettle	<i>Urtica dioica</i>
Common Ragwort	<i>Senecio jacobaea</i>
Common Reed	<i>Phragmites australis</i>
Common Toadflax	<i>Linaria vulgaris</i>
Common Vetch	<i>Vicia sativa</i>
Creeping Buttercup	<i>Ranunculus repens</i>
Creeping Cinquefoil	<i>Potentilla reptans</i>
Creeping Thistle	<i>Cirsium arvense</i>

Curlew	<i>Numenius arquata</i>
Daisy	<i>Bellis perennis</i>
Dandelion	<i>Taraxacum officinale</i> agg.
Dog's Mercury	<i>Mercurialis perennis</i>
Elder	<i>Sambucus nigra</i>
False Oat-grass	<i>Arrhenatherum elatius</i>
False-brome	<i>Brachypodium sylvaticum</i>
Fennel	<i>Foeniculum vulgare</i>
Fool's Water-cress	<i>Apium nodiflorum</i>
Gatekeeper	<i>Pyronia tithonus britanniae</i>
Gorse	<i>Ulex europaeus</i>
Great Willowherb	<i>Epilobium hirsutum</i>
Great Wood-rush	<i>Luzula sylvatica</i>
Greater Plantain	<i>Plantago major</i>
Green Woodpecker	<i>Picus viridis</i>
Ground-ivy	<i>Glechoma hederacea</i>
Groundsel	<i>Senecio vulgaris</i>
Hart's-tongue	<i>Phyllitis scolopendrium</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Hedge Bindweed	<i>Calystegia sepium</i>
Hedge Woundwort	<i>Stachys sylvatica</i>
Hemlock Water-dropwort	<i>Oenanthe crocata</i>
Hemp-agrimony	<i>Eupatorium cannabinum</i>
Herb Bennet	<i>Geum urbanum</i>
Herb-robert	<i>Geranium robertianum</i>
Hogweed	<i>Heracleum sphondylium</i>
Holly	<i>Ilex aquifolium</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Ivy	<i>Hedera helix</i>
Ivy-leaved Toadflax	<i>Cymbalaria muralis</i>
Knotgrass [agg.]	<i>Polygonum aviculare</i> agg.
Lesser Periwinkle	<i>Vinca minor</i>
Little Egret	<i>Egretta garzetta</i>
Lords-and-ladies	<i>Arum maculatum</i>
Maidenhair Spleenwort	<i>Asplenium trichomanes</i>
Male Fern	<i>Dryopteris filix-mas</i> agg.
Mallard	<i>Anas platyrhynchos</i>
Meadow Brown	<i>Maniola jurtina</i>
Meadow Vetchling	<i>Lathyrus pratensis</i>
Meadowsweet	<i>Filipendula ulmaria</i>
Mugwort	<i>Artemisia vulgaris</i>
Mute Swan	<i>Cygnus olor</i>
Oxeye Daisy	<i>Leucanthemum vulgare</i>
Pedunculate Oak	<i>Quercus robur</i>
Pellitory-of-the-Wall	<i>Parietaria judaica</i>
Pendulus Sedge	<i>Carex pendula</i>
Perennial Rye-grass	<i>Lolium perenne</i>
Perforate St. John's-wort	<i>Hypericum perforatum</i>
Polypody	<i>Polypodium vulgare</i> agg.

Purple-loosestrife  
Red Campion  
Red Clover  
Red Dead-nettle  
Red Fescue  
Red Valerian  
Ribwort Plantain  
Ringlet  
Rough Hawkbit  
Scentless Mayweed [agg.]

Sea Couch  
Sea Plantain  
Sea Purslane  
Selfheal  
Silverweed  
Slow-worm  
Smooth Hawk's-beard  
Soft Rush  
Soft Shield-fern  
Spear Thistle  
Speckled Wood  
Starling  
Swallow  
Sycamore  
Tansy  
Traveller's Joy  
Tufted Vetch  
Tutsan  
Weeping Willow  
White Clover  
White Poplar  
Wild Carrot  
Wild Madder  
Wild Privet  
Wild Service-tree  
Wild Teasel  
Wood Melick  
Wood Millet  
Wood Sage  
Woodpigeon  
Yarrow  
Yew  
Yorkshire-fog

*Lythrum salicaria*  
*Silene dioica*  
*Trifolium pratense*  
*Lamium purpureum*  
*Festuca rubra* agg.  
*Centranthus ruber*  
*Plantago lanceolata*  
*Aphantopus hyperantus*  
*Leontodon hispidus*  
*Tripleurospermum maritimum*  
agg.  
*Elytrigia atherica*  
*Plantago maritima*  
*Atriplex portulacoides*  
*Prunella vulgaris*  
*Potentilla anserina*  
*Anguis fragilis*  
*Crepis capillaris*  
*Juncus effusus*  
*Polystichum setiferum*  
*Cirsium vulgare*  
*Pararge aegeria*  
*Sturnus vulgaris*  
*Hirundo rustica*  
*Acer pseudoplatanus*  
*Tanacetum vulgare*  
*Clematis vitalba*  
*Vicia cracca*  
*Hypericum androsaemum*  
*Salix babylonica*  
*Trifolium repens*  
*Populus alba*  
*Daucus carota*  
*Rubia peregrina*  
*Ligustrum vulgare*  
*Sorbus torminalis*  
*Dipsacus fullonum*  
*Melica uniflora*  
*Milium effusum*  
*Teucrium scorodonia*  
*Columba palumbus*  
*Achillea millefolium*  
*Taxus baccata*  
*Holcus lanatus*