
Parish Plans Biodiversity Project

Barnstaple

Report by the
Devon Biodiversity Records Centre
and
Devon County Council

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Barnstaple - Parish Plan Biodiversity Project

Introduction

The name of Barnstaple probably derives from the Old English "Beardan Stapol" meaning the post (perhaps literally trading post) of a man called Bearda. The town that grew up here in the 9th and 10th centuries, on a ford of the river, gradually became more important than the original hilltop settlement at Pilton.

Barnstaple started out as a Saxon stronghold defending the area against Danish raiding parties. At that time the settlement was heavily fortified although nowadays the only remnants of the town's military past that can be seen at Barnstaple is the town's Norman Castle Mound. The countryside around Barnstaple was the setting for the book Tarka the Otter, and the Tarka Trail also passes through Barnstaple following the route of the old railway.

The landscape of Barnstaple is dominated by the Taw/Torrige Estuary.. The valleys of the River Yeo and Bradiford Water to the north and east of the town, and Codden Hill to the South have been designated as Areas of Great Landscape Value.

The Barnstaple area contains three Sites of Special Scientific Interest - The Taw Torrige Estuary, Fremington Claypits and Bradiford Valley. Barnstaple also contains a wealth of locally important nature conservation sites and biodiversity networks. These include the County Wildlife Sites at Anchorwood Bank, Larkbear Plantation, Higher Gorse Claypits, the Tarka Trail, Bishops Tawton Saltmarsh, Acland Wood, Frankmarsh Wood and Shearford Lane.

To complement these sites, various biodiversity networks have been identified including those along the River Taw, Bradiford Water, River Yeo, Coney Gut and Muddlebridge. These sites aim to retain and enhance the amenity value of natural habitats and the wildlife they support.

Barnstaple is also home to several uncommon plant and animal species. Otters regularly pass through the centre of Barnstaple, the estuary is home to internationally important numbers of wading birds and dormice are thought to be present in several woodland sites in the area.

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.

The site regularly supports important numbers of curlew, golden plover and lapwing. Other species of waders such as redshank, dunlin and oystercatcher are also abundant. Little egret are present throughout the year and spoonbill between October and early May.

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.

There are unconfirmed records of an unknown species of eelgrass washed up on the Taw/Torridge estuary. Eelgrass beds are of national importance and are listed as a **Priority Biodiversity Habitat**. The species that are known to occur in the UK are nationally scarce, occurring in between 16-100 / km squares. Eelgrass beds form important nurseries for juvenile fish, providing protection from predators.

Biosphere reserve – takes in the Taw/Torridge as well as Braunton Burrows.

Bradiford Valley Site of Special Scientific Interest:

Bradiford valley is important for its ancient sessile oak woodland and associated breeding birds. Additional habitats are provided by an old mill leat, pond, stream and several meadows. The whole site supports a diverse wildlife in close proximity to the town of Barnstaple.

The wood consists of mainly a stand of sessile oak (*Quercus petraea*) and ash. Hazel, holly and occasional hawthorn occur in the understory. The ground flora is species-rich with primrose, wood anemone, wood avens and dog's mercury. In some areas there is frequent great wood-rush.

The hillside and flood-plain fields are pasture grasslands and have characteristic species such as bent-grass (*Agrostis sp.*), crested dog's-tail, perennial rye-grass, clovers and buttercups. Other herb species include cat's-ear, common knapweed and common fleabane.

The site supports over 50 breeding bird species. These include buzzard, sparrowhawk, all three species of woodpecker, tawny owl, little owl and spotted flycatcher. Dipper, grey wagtail, water rail and kingfisher may be found near the watercourses.

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. (now English Nature).

Fremington Clay Pits Geological Site of Special Scientific Interest

Fremington Claypits is located next to Higher Gorse Claypits County Wildlife Site and is one of the most important Pleistocene sites in South West England.

Fremington Clay Pit contains boulder clays, lake clays and glacial outwash gravels of Pleistocene age, providing evidence that the glacier margin reached as far south as the Southwest Peninsula. The raised beaches on the coast, and broken, jumbled rocks of the 'head' (solifluction) deposits covering the area (well displayed for example at Westward Ho! Cliffs SSSI) are evidence of the periglacial tundra conditions which affected this area.

Pitts, quarries and cuttings are listed on the **Devon Biodiversity Action Plan** as habitats of conservation concern in Devon. The numerous working pitts and quarries in Devon are used for the extraction of a variety of minerals and are of great importance to the local and national economy. The pitts and quarries are also of importance for the varied wildlife they support. Uncommon species of bird such as the peregrine falcon and raven may use the quarry edges to nest, greater and lesser horseshoe bats next in cave-like quarries and reptiles such as common lizard and adder may be found basking in sunny areas in many quarries.

Frankmarsh Wood County Wildlife Site

The site comprises a strip of broadleaved woodland south of the river Yeo. The woodland has wooded and open floodplain areas, steep slopes and a small abandoned quarry.

Tree species recorded from the woodland include field maple, guelder-rose, ash, sessile oak, pedunculate oak, spindle, hazel, hawthorn and holly. The ground flora is species-rich with over 10 ancient woodland indicator species including woodruff, great wood-rush, wood spurge, wood-sorrel, yellow pimpernel, primrose and barren strawberry.

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.

Anchor Wood County Wildlife Site

Anchor wood is situated on an old sea cliff to the north of Sticklepath. The woodland grades down and joins the Tarka Trail along the old railway line. The site comprises semi-natural broadleaved woodland with a canopy dominated by sessile oak, with ash, beech and wild cherry. Understory species include hawthorn, spindle and Devon Whitebeam.

The ground flora includes primrose, herb robert, wild strawberry and bluebell.

Anchorwood Bank County Wildlife Site

Anchorwood Bank comprises an area of saltmarsh, which is dominated by sea couch. Other species recorded include English scurvy-grass, sea aster and sea purslane.

To the south of this area is some rank semi-improved calcareous grassland with saline influence. Species recorded include common knapweed, wild carrot, false oat-grass and red fescue.

Four Devon Notable plant species were recorded from the site. These include English scurvy-grass, sea aster, sea purslane and sea couch.

Calcareous grassland communities have a very restricted distribution in Devon, and are almost absent from North Devon. Calcaerous grasslands are one of the rarest habitats in Devon and the grasslands support a range of plant species that are locally distributed both in Devon and nationally. These include quaking grass, tor grass, common rock-rose, yellow-wort, hound's-tongue and hoary plantain. Unimproved calcareous grassland is listed on the **UK Biodiversity Action Plan** as it is a rare habitat.

Shearford Lane & Bradiford Scarp County Wildlife Site

Shearford Lane and Bradiford scarp is an area of broadleaved semi-natural woodland, scrub, a species-rich hedgebank, ponds and a watercourse.

Shearford Lane is probably an ancient trackway, with mature, species-rich hedges. Tree species include ash, beech, field maple, elder, spindle, hawthorn, hazel and holly. Seven ancient woodland indicator species have been recorded from the site, including opposite-leaved golden-saxifrage, common polypody, primrose and black bryony.

Bradiford Water is a strip of mature woodland along a scarp with several mature trees including ash, alder and oak along the streamside. Flora recorded from this area includes dog's mercury, meadowsweet, wood-sorrel, lesser celandine and primrose.

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 layed.

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 Shearford Lane, Acland wood and the hedge near Bishop's Tawton Saltmarsh are species-rich with 7 or 8 woody species recorded in a 30 length. Other species-rich hedges can be found at along Derby Road, Whiddon lane. and Smoky House lane.

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

Bishop's Tawton Saltmarsh County Wildlife Site

The site consists of areas of saltmarsh, semi-improved grassland, a watercourse and a species-rich hedgebank. The saltmarsh is dominated by sea couch, with sea plantain, sea beet, sea aster and English scurvy-grass. There are several Devon Notable plant species present here including annual sea-blite (DN2) and frosted orache.

The small area of semi-improved grassland has species present including meadow buttercup, ribwort plantain, common sorrel and common mouse-ear. Semi-improved grassland is quite an uncommon habitat in Barnstaple, as many of these areas have been lost to agricultural 'improvement' (ie. Re-seeding, ploughing or draining). The site also has a species-rich hedge with 8 woody species recorded in a 30m stretch. Species include field maple, sycamore, hazel, spindle, beech, ash, blackthorn and a species of elm.

Coastal saltmarsh is listed on the **UK Biodiversity Action Plan** as a habitat of conservation concern.

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

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

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

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

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

Acland Wood County Wildlife Site

Acland Wood comprises a narrow strip of broadleaved semi-natural woodland with a watercourse and a species-rich hedgebank. The main canopy species of the woodland are oak and ash, with some beech. The ground flora is species-rich with many ancient woodland indicator species recorded including opposite-leaved golden-saxifrage, broad-leaved helleborine, wood spurge, wood-sorrel, primrose, black bryony and common polypody.

Pudnor Wood County Wildlife Site

Pudnor Wood is an area of ancient semi-natural woodland partly replanted with non-native broadleaves. Part of the site has a canopy of mature oak with an understory of hazel, holly and sycamore. The ground flora is rich in places with wood-sorrel, hard fern, bluebell and broad-buckler fern. Other areas of the site comprise abandoned hazel coppice and an area of semi-improved grassland. The grassland is on a steep slope and is quite species-rich with species present including cat's-ear, common knapweed, meadow vetchling and red bartsia.

Higher Gorse Claypits County Wildlife Site

Higher Gorse Claypits is a diverse site comprising semi-natural broadleaved woodland with continuous scrub, mesotrophic ponds and semi-improved neutral grassland.

The woodland is dominated by sessile and pedunculate oak, with occasional ash and willow. The grassland is damp with areas of tall ruderal vegetation. Species recorded include common fleabane, hard rush, creeping buttercup and greater bird's-foot trefoil.

Larkbear Plantation County Wildlife Site

Larkbear Plantation is a species-rich semi-natural broadleaved woodland with areas of sitka spruce & Italian black poplar plantation. The semi-natural areas have a species-rich ground flora with many ancient woodland indicator species present including hard fern, pendulous sedge, primrose, black bryony and betony. The site is reported to be an active site for dormice.

The dormouse is listed on the **Devon Biodiversity Action Plan** as a species of Conservation concern in Devon.

Nationally, the dormouse has experienced a marked contraction in range in recent decades, and has become extinct in up to seven counties where it occurred in the last century, representing about half of its former range.

In Devon, the dormouse appears to be holding its own, and the County is now a major stronghold of the species. However, no detailed quantification of population change has been possible, due to lack of comparable data over time. Having said this, indirect evidence, from the losses of hedgerow length and declines in quality of hedgerows and woodlands that have occurred in the County over the past few decades, indicates that dormice have probably declined in a similar fashion.

County Wildlife Sites (CWS): these are sites of county importance for wildlife, designated on the basis of the habitat or the known presence of particular species. This is not a statutory designation like SSSIs, and does not have any legal status. County Wildlife Sites are usually included in Local Plans as sites of substantive nature conservation interest and are covered by Planning Policy Guidance note nine (PPG9). CWS recognition does not demand any particular actions on the part of the Landowner and does not give the public rights of access. However, it may increase eligibility for land management grants.

Tarka Trail Fields Local Wildlife Site

Tarka Trail Fields lies adjacent to the Taw/Torridge Estuary SSSI (Penhill Saltmarsh) and is an area of species-poor rush pasture. Species recorded from the site include common fleabane, creeping buttercup, creeping cinquefoil, agrimony and marsh foxtail.

Shorleigh Wood Local Wildlife Site

Shoreleigh Wood is a species-rich ancient semi-natural woodland, with areas replanted with conifers and non-native broadleaves. The areas of semi-natural woodland are the most interesting, with a canopy of ash, oak and beech, and a dense understory of hazel, blackthorn and hawthorn. The ground flora contains bluebell, primrose, yellow archangel, wood millet and wood-sorrel, all ancient woodland indicator species. There are some wetter areas where damp-loving species such as meadowsweet, common valerian and opposite-leaved golden-saxifrage can be found.

Tawstock Park (E) Local Wildlife Site

Tawstock Park (E) is a single semi-improved field that lies between the river Taw and Tawstock Park. The site comprises species-rich and species-poor damp semi-improved neutral grassland. Species recorded from the grassland include: soft rush, compact rush, Yorkshire fog and creeping buttercup. The drainage channels within the field are also interesting and have developed into a species-rich plant community, with species present such as ragged robin, marsh woundwort, common marsh-bedstraw and hemlock water-dropwort.

Whitmoor (S) Local Wildlife Site

This site comprises unimproved and semi-improved neutral grassland and species-poor rush pasture. The marshy grassland areas are quite species-rich with species recorded such as brooklime, fool's water-cress, soft rush and water forget-me-not. The dry grassland areas also have a diverse flora, with species including meadow vetchling, selfheal, common knapweed and oxeye daisy.

Flower-rich meadows and pastures are a habitat of conservation concern in Devon and are listed on the **Devon Biodiversity Action Plan** as well as the **UK Biodiversity Action Plan**. Unimproved neutral grassland habitat has undergone a huge decline in the 20th century, almost entirely due to changing agricultural practice. It is estimated that by 1984 in lowland England and Wales, semi-natural grassland had declined by 97% over the previous 50 years to approximately 0.2million ha.

Unimproved grassland is often very flower-rich and as a result of this attracts an abundance of butterflies and other invertebrates. The rich insect life in turn attracts bats such as the greater horseshoe bat and birds such as the green woodpecker and circl bunting.

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

Uppacott Wood Devon Wildlife Trust Nature Reserve

Though just outside of the Barnstaple Town boundary, Uppacott Wood Nature Reserve is worth a mention. This site is owned and managed by the Devon Wildlife Trust (DWT).

Uppacott Wood is a small reserve of some 6 hectares in size divided into 11 compartments. All the compartments consist of mixed broadleaved woodland. The central section of the reserve is fairly wet and boggy and the outer compartments are dryer and more exposed on the brow of a large hill. The dominant trees consist of pedunculate oak and ash with birch and beech. Alder occurs in the wetter parts. The under story is hazel, honey suckle and bramble. There are at least four Devon whitebeam trees on this nature reserve.

There is a history of dormice on the site and the North Devon section of the Devon Mammal Group have been conducting a study into possible presence of dormice using 50 dormice nest boxes. Roe deer and brown hare have been seen as well as signs of badger, mole and grey squirrel. There are also records of wood mice and bank voles. The usual woodland bird species include great spotted and green woodpecker, nuthatch, treecreeper, various tits, finches and warblers.

The wood is located 4 miles south of Barnstaple and has full public access. From the New Bridge at Bishop's Tawton take the minor road signed Harepie Cross. At Harepie Cross turn right and the wood is about 250m down this road. Access onto the reserve is from this road. Parking is limited to the verge.

The wood is on level ground and walking is easy, mostly dry with some wet areas to the north-east. The Devon Wildlife Trust Barnstaple local group have laid out a network of paths, but, because they are narrow, winding and follow animal tracks, as well as occasionally banks and streams to cross, the tracks are not recommended for wheelchairs. Allow between 1 and 2 hours to walk around this site.

There is a management programme of clearing small areas to create glades to encourage woodland flowers, butterflies and the dormice. This is to increase the diversity and enhance the wildlife value.

The Barnstaple Devon Wildlife Trust local group are currently collecting biological data on the woodland and are looking for volunteers to help. This involves regular visiting and monitoring of vegetation, birds and invertebrates. They are looking for volunteers to be part of a monitoring team, taking small sections of the wood to check at monthly intervals, to help to build up a picture of the wildlife and the health of the woodland.

Contact Joyce Dignam, Barnstaple Local Group for details
Telephone: 01271 374324

Potential County Wildlife Sites

There are 20 potential County Wildlife Sites in Barnstaple Parish. These are sites identified as having possible interest but not fully surveyed. Some of these sites will be areas of significant wildlife interest.

Windy Ash (W), Tews Lane, Ashtree Cottage, Brynsworthy Farm, Netherby Elmpark Copse (E), Bishop's Tawton Bridge, Whitemoor (N), Venn Cross, Venn Cottage, Pudnor Hill and Venn Cross are areas of unimproved and semi-improved neutral grassland.

However, recent work carried out by DBRC, which involved looking at recent aerial photos of the sites, have shown the nearly all of these grassland Potential County Wildlife Sites have been lost to agricultural 'improvement'. This only leaves a few small areas having possible wildlife interest. In North Devon as a whole, there has been a significant loss of Potential County Wildlife Sites and County Wildlife Sites over the last 10-20 years. In North Devon out of 630 unimproved and semi-improved grassland Potential County Wildlife Sites, only 157 remain in a favourable condition. This represents a loss of 75% of unimproved and semi-improved grassland in a 20 year period.

Stoneyard Plantation, Tutshill, Netherby (E), Brynsworthy (W), Tawstock Park, Elmpark Copse and Springfield Copse are areas of secondary broadleaved woodland. **Blakewell Nursery Plantation** is an area of mixed plantation.

As a contrast to the grassland sites, the aerial photo interpretation work showed that most of the woodland sites still look in a favourable condition. Only Tutshill has been lost completely to a housing development.

Barnstaple and area Biodiversity Network

The rationale behind the establishment of Biodiversity Networks is to provide an effective means of protecting and enhancing biodiversity. It also seeks to retain and enhance the amenity value of natural habitats and the wildlife they support. The establishment of Biodiversity Networks is of value in maintaining long term local environmental quality and when considering the sustainability of new urban development.

The vision for the Biodiversity network approach is clearly set out in paragraph 15 of Planning Policy Guidance Note 9.

“Statutory and non-statutory sites, together with countryside features which provide wildlife corridors, links or stepping stones from one habitat to another, help to form a network necessary to ensure the maintenance of the current range and diversity of our flora and fauna’ geological and landform features and the survival of important species”

This network is essential for migration, dispersal and genetic exchange and is therefore necessary to maintain local biodiversity. One of the main purposes of

Biodiversity networks is to reduce the fragmentation of natural habitats, which has occurred because of development and cultivation. Another function is as an amenity in built up areas, where they can be important landscape features or valuable for recreation.

Examples of linear and continuous landscape features that make up the biodiversity network include watercourses and their associated vegetation. Other examples include hedgerows, ponds, small woods, dense scrub, railway lines, road verges, coastal habitats and even strips of long gardens. Often these features are linear, but need not necessarily be so in order to contribute to the biodiversity network effect. Discontinuous patches of habitat can enable wildlife to disperse and migrate and are sometimes called “stepping stones”.

Sites of Substantive Nature Conservation Value (County Wildlife Sites) form the cornerstone of the biodiversity network. Briefly, the network includes Sites of Substantive Nature Conservation Value, buffers to those sites and links between them. Areas of semi-natural habitat that make a significant contribution to the overall movement of species by acting as “stepping stones” or conduits are included. They have been referred to as “Key Network Features”. They include, for example, areas of species rich grassland, double hedgerows, ponds and belts of woodland. Although all hedges have good potential as network features, their abundance made it impracticable to identify all but the best hedgerows as network sites. However, their presence has been recognised in determining the biodiversity network.

Land providing the best opportunity to protect and/or enhance biodiversity in relation to new development or changes in land use is included. This includes land buffering and linking designated sites and watercourse buffers. Green wedges, that form fingers of green space into urban areas from the surrounding countryside, have also been included in the network where these support connective habitat features.

North Devon Key Network Features: are areas of semi-natural habitat likely to make a significant contribution to the overall movement/dispersal of species within the local landscape as wildlife ‘stepping stones’ or conduits. These include for example, areas of species-rich semi-improved grassland, double hedgerows/hedgebanks, significant belts/areas of scrub, semi-natural or plantation broadleaved woodland and ponds.

North Devon Network Sites (Biodiversity Network): are statutory and non-statutory sites, together with countryside features which provide wildlife corridors, links or stepping stones from one habitat to another, help to form a *network* essential for migration, dispersal and genetic exchange and therefore necessary to maintain biodiversity.

The biodiversity network in Barnstaple is heavily proscribed by existing development and some areas of the town are lacking in any wildlife habitat. Much of the network is associated with streams and rivers despite the fact that many of the watercourses in Barnstaple have development adjacent and sometimes over them. This development has implications for the width of biodiversity network buffer along watercourses – the buffer is very narrow or non-existent in places. The areas of terrestrial semi-natural habitat are fairly discrete.

The River Taw is an important wildlife corridor running between Sticklepath and Barnstaple. Supporting this is large area of open space beside the east bank of the River, including Rock Park (which contains Bishop's Tawton Saltmarsh CWS).

Another important area is at Whiddon Valley, where the network is based strongly on the watercourses. The River Yeo and adjacent Frankmarsh Wood CWS, together with the Raleigh area to the north form an important green wedge extending from the countryside into the urban area. The north west boundary of Barnstaple is bounded by network based around Bradiford Water. There is a discrete area of open space around Pilton School where the network effect could be enhanced.

Strong linear features include the stream running through Bickington on an east-west axis (otters have been recorded using this stream) and the Tarka Trail also forms a strong linear landscape feature. This rapidly growing part of Barnstaple has a strong biodiversity network, with links from and to the countryside, right through the area from east to west and north to south. It is bounded by the Taw Torridge Estuary SSSI (a cornerstone in the network) to the north.

Other habitats:

Recreation areas and public open space

There are a number of areas of amenity grassland and open space in Barnstaple 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 (many of these areas have already been identified as Biodiversity Networks and Key Network Features, for example Rock Park near Newport and the castle mound behind the Civic Centre).

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 Barnstaple including common frog, common toad, hedgehog, grass snake and badger.

Causeways and Water's edge

The causeways along the estuary edge provide extensive views over the estuary and mudflats, and it is possible to walk along the eastern edge of the estuary from Pill House to Sticklepath and Pottington where the path becomes the Tarka Trail. There are several places to sit and take in the view.

Cemeteries/ churchyard

The churchyard of the Holy Trinity Church and the cemetery off Bear Street probably contain moderately species-rich semi-improved grassland.

Tarka Trail

Barnstaple 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 Barnstaple, following the estuary along both the northern and southern edges. The trail along the northern edge of the estuary joins Barnstaple to Braunton, whilst the trail along the southern edge joins Barnstaple to Instow, and eventually Bideford.

The habitats along and immediately adjacent to the Tarka Trail near Barnstaple include young secondary broadleaved woodland, scrub and hedges, species-rich neutral and calcareous grassland and saltmarsh, mudflats and reedbed within the Taw/Torridge estuary.

The areas of calcareous grassland support species such as common knapweed, agrimony, wild basil, yarrow, wild carrot, dove's-foot crane's-bill and pale St. John's-wort and are quite species rich in places.

There are stunning views over the estuary at several points along the cycleway as well as chances to view the saltmarsh and the birds on the mudflats. Saltmarsh is one of Britain's most important ecosystems, supporting rare plants and invertebrates as well as providing winter feeding grounds for birds. Sea couch dominates the lower embankments between Barnstaple and Fremington and other plants recorded here include glasswort (*Salicornia* sp.), sea plantain, cord-grass, common reed and sea purslane.

The cycling and walking trails were established by Devon County Council, to celebrate Henry Williamson's 1927 novel - "Tarka the Otter". The book depicts Tarka's adventure travelling through North Devon's countryside.

The trails stretch from Okehampton in the South to Lynton in the North.

There are four trails in all

Taw Valley

Bideford coastal path

Braunton coastal path

Exmoor National Park

For up to date information on the trail visit the www.northdevon.gov.uk

The South West Coast path

This walk follows the route of the old railway line from Barnstaple to Bideford, making it a flat walk. The South West Coast Path and Tarka Trail are both the same path along this part of the coast, and the walk starts with good views of the river Taw. As you reach Instow, the river Taw and Torridge meet, flowing out to sea. Rounding the corner from Instow, there are views over to Northam, before passing under the A39 into Bideford.

The walk starts from the station at Barnstaple. The station is over the other side of the river from the town. Cross the river, then the station is signed, but go straight on past the shops on the left and then the station is at the end of the road. The path is well signed and starts at the end of the station car park. As you will probably have guessed, this path follows the route of the old railway line from Barnstaple to Bideford, which was closed in 1982, and removed in 1985.

Being an old railway line it is flat and so easy to walk on. The path is also part of the Tarka Trail, a popular cycle route, so it can get busy, especially in the summer. As you leave Barnstaple, the coast path runs close to the river edge, giving good views over to Barnstaple and of the wildlife in the estuary. As you approach Fremington, there is a path out to Penhill Point. The path heads in land a little after Fremington, but rejoins the river at Yelland.

The Tarka trail connects the towns of Bideford and Barnstaple forming a proportion of the southern shoreline of the Taw-Torridge Estuary. From Bideford the trail runs to

Great Torrington along the valley of the river Torridge. The trail also follows on to Petrockstowe from Barnstaple.

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

Birds

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.

Important bird areas in Barnstaple are Pottington – along the Tarka Trail following the estuary, Bradiford Water and Penhill Marsh at the edge of the estuary. The centre of Barnstaple is also important with a resident ring-billed gull, usually found around the leisure centre.

Other notable species recorded within the parish of Bideford include Lesser whitethroat, which is spreading as a breeding species between Barnstaple and Bideford (Tarka trail management plan) and the barn owl, which has been recorded from a few places within Barnstaple.

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

The barn owl has undergone a major decline in the last century due to changes in agricultural practice, as well as loss of nesting sites such as old barns and hollow trees. It is estimated that there are now about 350-470 pairs in the County.

The barn owl requires areas of open, rough grassland where its preferred food of mice and voles are found. It is largely nocturnal and feeds almost exclusively on small mammals, particularly voles, but also takes shrews, mice, rats and very occasionally, birds.

Plants

The variety of habitats present within the Barnstaple study area 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**. Primroses have been recorded from several areas in Barnstaple. The **primrose** is listed on the **Devon Biodiversity Action Plan**.

The uncommon yellow-wort (a Devon Notable Species) has been recorded from the Tarka Trail near to Sticklepath, and monk's-hood (a Nationally Scarce plant species)

has been recorded from the Fremington area. Several uncommon saltmarsh plants were also recorded from Bishop's Tawton Saltmarsh CWS.

The uncommon Devon whitebeam (*Sorbus devoniensis*) and wild service tree (*S torminalis*) have been recorded from Anchor Wood County Wildlife Site.

The main habitat of all of the *Sorbus* species but the Devon whitebeam is open woodland, usually on steep slopes near to the sea or rocky coastal cliffs, but including less wooded areas and scrub in a few localities.

The Devon whitebeam is different from the others in that it is largely a hedgerow species, but also occurs in a few sites on rocky oak wood and even moorland edges. It is essentially a species of acid soils, whereas the others occur mostly on base-rich soils. Devon whitebeam is relatively numerous across the North and West of Devon.

Mammals

Otters have been recorded from many watercourses in the Barnstaple area. Records exist for near Chaddiford Lane, Newport Road and the river Yeo near Pilton. Frankmarsh Wood and Bradiford Water also contain areas of suitable otter habitat in Barnstaple. The **otter** is listed on the **Devon Biodiversity Action plan** as a species of conservation concern in Devon.

Dormice have been recorded from a garden in Barnstaple and have been reported to be present in Acland Wood and Larkbear Plantation. 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, hedgehog and a species of bat.

Invertebrates

Little information is held on invertebrates in Barnstaple. Glow-worms may be present along the Tarka Trail between Barnstaple and Torrington where suitable habitat exists. The areas of species-rich grassland along the Tarka Trail may also support many species of butterfly.

Reptiles and Amphibians

Frogs are found in many gardens in Barnstaple along with toads and grass snakes.

The ponds at Portmore Farm golf course look suitable for amphibians and areas along the Tarka Trail may provide suitable habitat for adders and slow worms.

The Devon Biodiversity Action Plan (BAP).

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

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

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

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

Biodiversity links:

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

Links between the wildlife of Barnstaple and the Devon BAP:

Barnstaple wildlife feature	Brief description of feature	Link with the Devon Biodiversity Action Plan (BAP)
Taw/ Torridge Estuary SSSI	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"> • Estuaries Habitat Action Plan • Curlew Species Action Plan • Otter Species Action Plan
Anchor Wood and Larkbear Plantation County Wildlife Sites and Uppacott Wood DWT Nature Reserve	Three areas of semi-natural broadleaved woodland.	<ul style="list-style-type: none"> • Devon Whitebeam and related species Species Action Plan • Primrose Species Action Plan • Dormouse Species Action Plan
Bradiford Valley SSSI	An area of ancient oak woodland and floodplain meadows	<ul style="list-style-type: none"> • Oak Woodland Habitat Action Plan • Primrose Species Action Plan
Species-rich Hedges (including Shearford Lane and Bradiford Scarp)	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"> • Species-rich Hedges Habitat Action Plan • Dormouse Species Action Plan
Fremington Claypits gSSSI	An important Pleistocene site	<ul style="list-style-type: none"> • Pits, quarries and cuttings Habitat Action Plan
Churchyard /cemetery and Whitmoor (S) and Tawstock Park (E) LWS	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"> • Flower-rich Meadows and Pastures Habitat Action Plan • Barn Owl Species Action Plan

View the Devon Biodiversity Action Plan at www.devon.gov.uk/biodiversity

Some Ideas for Local Action...

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

A major step to knowing what you can do for your local wildlife and geology is to know what you have already got. This report will help you in this, but it is just a start. Ultimately, the protection and enhancement of the local natural environment requires the interest and enthusiasm of the local community.

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

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

1 Further survey:

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

Specific features to survey in Barnstaple 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 Devon Birdwatching and Preservation Society have a nature reserve 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

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 who have a nature reserve, Uppacott Wood near Tawstock. The Devon Wildlife Trust has a number of Local Groups which, amongst other things, get involved in practical management work.

7 Japanese Knotweed:

Not something to cherish, but it can't be ignored! Unfortunately, Japanese Knotweed is present at several locations in Barnstaple 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 Centre¹. Ideally, records should include when you first saw it and confirmation of when it was seen most recently; its precise location (notes or a sketch map are helpful, as is a grid reference if you have one); the kind of habitat it is in (e.g. next to running water, on a road verge), and a rough indication of how abundant it is.
- Secondly, be careful not to spread the plant further! This is all too easily done as it can regenerate from even the smallest fragment and is easy to spread unknowingly. It is important not to flail it or to try and dig it up. Often, it is best not to cut Japanese Knotweed at all, but if it is it should be 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

¹ 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

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

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

www.devon.gov.uk/biodiversity/japanese_knotweed.

Useful sources of further information:

- Devon Wildlife Trust: www.devonwildlifetrust.org
- Devon Birdwatching and Preservation Society: Secretary tel: 01837 53360
- English Nature: www.english-nature.org.uk
- Plantlife: www.plantlife.org.uk
- RSPB: www.rspb.org.uk
- The Woodland Trust: www.woodland-trust.org.uk
- The Living Churchyards & Cemeteries Project, Arthur Rank Centre, National Agricultural Society, Stoneleigh Park, Warwickshire, CV8 2LZ Tel: 01203 696969 ext. 364/339.

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

Countryside Trust Awards: 01242 521382 or www.countryside-trust.org

Living Spaces: 0845 600 3190 or www.living-spaces.org.uk

Local Heritage Initiative: 01226 719019 or www.lhi.org.uk

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Websites:

www.northdevon.gov.uk

www.ukbap.org.uk

www.devon.gov.uk/biodiversity

www.barnstaple.co.uk

www.barnstaple-history.co.uk

Appendix 1 - Notable sites and species within Barnstaple.

File Code	Site Name	Grid Ref.	Area (ha)	Description	Status
SS53/040	Bradiford Valley	SS559351	22.9	Ancient semi-natural woodland and semi-improved neutral grassland	SSSI
SS43/048	Taw/Torrige Estuary	SS470304	1353.5	Estuary with mudflats, beaches and saltmarsh with bird interest	SSSI
SS53/165	Fremington Clay Pits	SS 530316	1.0	Important Pleistocene site	gSSSI
SS53/087	Tarka Trail Fields	SS532332	9.2	Species-poor rush pasture	LWS
SS53/106	Shorleigh Wood	SS553303 & SS555304	7.8	Ancient semi-natural woodland largely replanted with conifers & non-native broadleaves	LWS
SS53/117	Tawstock Park (E)	SS562303	4.4	Species-rich & species-poor semi-improved neutral grassland	LWS
SS53/119	Whitemoor (S)	SS571304	5.3	Unimproved & semi-improved neutral grassland & species-poor rush pasture	LWS
SS53/057	Pudnor Wood	SS572364	18.7	Ancient semi-natural woodland partly replanted with non-native broadleaves	CWS
SS53/092	Higher Gorse Claypits	SS529318	6.8	Semi-natural broadleaved woodland with continuous scrub. Mesotrophic ponds	CWS
SS53/113	Frankmarsh Wood	SS569340	6.0	Broadleaved semi-natural woodland, watercourse & tall herbs	CWS
SS53/167	Anchor Wood	SS543328	3.6	Semi-natural broadleaved woodland	CWS
SS53/168	Larkbear Plantation	SS548312	9.2	Species rich semi-natural broadleaved woodland with areas of sitka spruce & Italian black poplar plantation	CWS
SS53/169	Anchorwood Bank	SS553331	1.1	Saltmarsh & semi-improved calcareous grassland. 4 Devon notable species	CWS
SS53/172	Shearford Lane & Bradiford Scarp	SS559346	2.3	Broadleaved semi-natural woodland, scrub, species-rich hedgebank, ponds & a watercourse	CWS
SS53/173	Bishop's Tawton Saltmarsh	SS562316	4.5	Saltmarsh, semi-improved grassland, watercourse & species-rich hedgebank	CWS
SS53/174	Acland Wood	SS587320	8.1	Broadleaved semi-natural woodland with watercourse & species-rich hedgebank	CWS
SS53/039	Tutshill	SS552354	1.5	Broadleaved woodland	pCWS
SS53/041	Pudnor Hill	SS566360	12.2	Semi-improved neutral grassland, bracken & broadleaved woodland	pCWS
SS53/160	Blakewell Nursery Plantation	SS564361	7.6	Mixed plantation	pCWS
SS53/101	Tews Lane	SS532316	1.9	Semi-improved neutral grassland	pCWS
SS53/099	Brynsworthy Farm	SS535311	0.8	Semi-improved neutral grassland	pCWS
SS53/104	Netherby (E)	SS543305	2.9	Broadleaved woodland	pCWS
SS53/105	Netherby	SS539304	11.3	Semi-improved neutral grassland	pCWS
SS53/098	Brynsworthy (W)	SS532313	3.8	Broadleaved woodland	pCWS
SS53/107	Tawstock Park	SS559300	9.7	Broadleaved woodland	pCWS

SS53/108	Elmpark Copse	SS558308 & SS558306	3.5	Broadleaved woodland	pCWS
SS53/116	Elmpark Copse (E)	SS562308	4.4	Semi-improved neutral grassland	pCWS
SS53/134	Stoneyard Plantation	SS583342	1.7	Broadleaved woodland	pCWS
SS53/121	Windy Ash (W)	SS569312	8.5	Unimproved & semi-improved neutral grassland	pCWS
SS53/118	Bishop's Tawton Bridge	SS564303	0.7	Semi-improved neutral grassland	pCWS
SS53/120	Whitemoor (N)	SS572307	6.2	Semi-improved neutral grassland	pCWS
SS53/122	Venn Cross	SS574310	22.8	Semi-improved neutral grassland	pCWS
SS53/125	Venn Cottage	SS579311	1.2	Semi-improved neutral grassland	pCWS
SS53/126	Venn Cross	SS578313	5.4	Semi-improved neutral grassland	pCWS
SS53/127	Ashtree Cottage	SS572314	4.1	Semi-improved neutral grassland	pCWS
SS53/019	Springfield Copse	SS537359 & SS533359	3.5	Broadleaved woodland	pCWS

No.	Name	Latin Name	Location	Date	UK Protection	International Protection	Status
1	House Sparrow	<i>Passer domesticus</i>	No. 16, Park View Caravan Site, Barnstaple.	2001			Red
2	Starling	<i>Sturnus vulgaris</i>	No. 16, Park View Caravan Site, Barnstaple.	2001			Red
3	Otter	<i>Lutra lutra</i>	Garden in Chaddiford Lane, Bradiford, Barnstaple	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
4	Japanese Knotweed	<i>Fallopia japonica</i>	Bank of the Bradiford Water, Bradiford, Barnstaple.	2003	WCA 9		
5	Common Frog	<i>Rana temporaria</i>	Sticklepath hill, Barnstaple	2002	WCA 5(S)	EC Va; Bern III	
6	a bat	bat sp.	Greylands, Bradiford, Barnstaple.	2003	WCA 5, 6	EC IVa; Bonn II	
7	Otter	<i>Lutra lutra</i>	SW15 Westaway	1988	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
8	Otter	<i>Lutra lutra</i>	SW16 Anchor Mills	1987	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
9	Japanese Knotweed	<i>Fallopia japonica</i>	Tarka Trail just past Barnstaple Station.	2001	WCA 9		
10	Japanese Knotweed	<i>Fallopia japonica</i>	Sticklepath, Barnstaple.	2002	WCA 9		
11	Common Toad	<i>Bufo bufo</i>	4 Abbey Road, Barnstaple.	2002	WCA 5(S)	Bern III	
12	a bat	bat sp.	Broadgate House, Belle Aire, Pilton, Barnstaple, EX31 1QZ.	1999	WCA 5, 6	EC IVa; Bonn II	
13	Japanese Knotweed	<i>Fallopia japonica</i>	Barnstaple Station near Tarka Trail, behind Railway Cottages.	2003	WCA 9		
14	Common Frog	<i>Rana temporaria</i>	4 Margrove Terrace, Barnstaple	2002	WCA 5(S)	EC Va; Bern III	
15	Common Frog	<i>Rana temporaria</i>	15 Wordsworth Avenue, Pilaton, Barnstaple, EX31 1QQ	2001	WCA 5(S)	EC Va; Bern III	
16	Japanese Knotweed	<i>Fallopia japonica</i>	On the hospital (north) bank of the River Yeo, Barnstaple. Some 50m from the entrance to Pilton Lawns.	2002	WCA 9		
17	Japanese Knotweed	<i>Fallopia japonica</i>	Barnstaple. Bank of River Yeo off Raleigh Road.	2002	WCA 9		
18	Badger	<i>Meles meles</i>	North Devon District Hospital	2000	WCA 6, BA	Bern III	
19	Otter	<i>Lutra lutra</i>	Barnstaple, Newport Road	1999	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
20	Otter	<i>Lutra lutra</i>	Barnstaple	1997	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP

21	Otter	<i>Lutra lutra</i>	Underwood SW34	1984	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
22	Badger	<i>Meles meles</i>	6 Charles Hudson Lane, Barnstaple	2000	WCA 6, BA	Bern III	
23	Common Frog	<i>Rana temporaria</i>	Glenavon, Barbican Lane, Barnstaple	2002	WCA 5(S)	EC Va; Bern III	
24	Common Frog	<i>Rana temporaria</i>	12 Chichester Close, Newport, Barnstaple, EX32 9EJ	2002	WCA 5(S)	EC Va; Bern III	
25	Japanese Knotweed	<i>Fallopia japonica</i>	Garden at 93 Victoria Street, Newport, Barnstaple, EX32 9JD.	2001	WCA 9		
26	Common Frog	<i>Rana temporaria</i>	102 Charters Hill, Barnstaple	2002	WCA 5(S)	EC Va; Bern III	
27	Common Dormouse	<i>Muscardinus avellanarius</i>	Garden of 28 Sherratts Oak, Barnstaple, EX31 4UX	2002	WCA 5, 6	EC IVa; Bern III	UKBAP(P); DBAP
28	a bat	bat sp.	Long Causey, Landkey Road, Barnstaple.	2003	WCA 5, 6	EC IVa; Bonn II	
29	a newt	<i>Triturus</i> sp.	1 Berry Rd, Barnstaple, EX23 8ES	2002	WCA 5(S)	Bern III	
30	Common Frog	<i>Rana temporaria</i>	1 Berry Road, Barnstaple.	2002	WCA 5(S)	EC Va; Bern III	
31	Common Toad	<i>Bufo bufo</i>	Garden pond at 1 Berry Road, Barnstaple.	2002	WCA 5(S)	Bern III	
32	Badger	<i>Meles meles</i>	Garden at 3 Brahms Way, Goodleigh Rise, Barnstaple, Devon, EX32 8AH	2000	WCA 6, BA	Bern III	
33	Otter	<i>Lutra lutra</i>	Pitt Farm SW35	1987	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
34	Japanese Knotweed	<i>Fallopia japonica</i>	Tesco parking lot, Barnstaple.	2002	WCA 9		
35	Japanese Knotweed	<i>Fallopia japonica</i>	Homebase Superstore, Barnstaple.	2002	WCA 9		
36	Badger	<i>Meles meles</i>	A361 North Devon Link Road just before Landkey turnoff heading East	2001	WCA 6, BA	Bern III	
37	Grass Snake	<i>Natrix natrix</i>	Pond at Rhododendron Avenue, Barnstaple.	1998	WCA 5(KIS)	Bern III	
38	Green-winged Orchid	<i>Orchis morio</i>	Penhill	1992			DN1
39	Monk's-hood	<i>Aconitum napellus</i> agg.	Fremington, Muddlebridge	1992			NS
40	Green-winged Orchid	<i>Orchis morio</i>	Ashford	1992			DN1
41	Smooth Brome	<i>Bromus racemosus</i>	Tarka Trail Fields	1994			DN2
42	Great Green Bush Cricket	<i>Tettigonia viridissima</i>	Near public footpath, Anchor Wood & Sticklepath Field	2000			DBAP
43	French hales	<i>Sorbus devoniensis</i>	Anchor Wood & Sticklepath Field	2001			DBAP; NS; DN1
44	Wild Service-tree	<i>Sorbus torminalis</i>	Anchor Wood & Sticklepath Field	2001			DN2
45	Great Green Bush Cricket	<i>Tettigonia viridissima</i>	Fields by Tutshill Woods SSSI Barnstaple	2000			DBAP

46	Badger	<i>Meles meles</i>	A39 south-west of Barnstaple.	2003	WCA 6, BA	Bern III	
47	Badger	<i>Meles meles</i>	A361	2000	WCA 6, BA	Bern III	
48	a bat	bat sp.	Springfield Road, Bickington, Barnstaple.	2004	WCA 5, 6	EC IVa; Bonn II	
49	a bat	bat sp.	Whitegates, Brymsworthy, Bickington, Barnstaple.	1997	WCA 5, 6	EC IVa; Bonn II	
50	Badger	<i>Meles meles</i>	A39 roadside	2000	WCA 6, BA	Bern III	
51	Badger	<i>Meles meles</i>	A39(T)	2000	WCA 6, BA	Bern III	
52	a newt	<i>Triturus</i> sp.	17 Maple Grove, Roundswell, Barnstaple, EX31 3QP	2002	WCA 5(S)	Bern III	
53	Common Frog	<i>Rana temporaria</i>	17 Maple Grove, Roundswell, Barnstaple	2002	WCA 5(S)	EC Va; Bern III	
54	Badger	<i>Meles meles</i>	A361 North Devon Link Road just beyond Roundswell in the direction of Bideford	2001	WCA 6, BA	Bern III	
55	Barn Owl	<i>Tyto alba</i>	Sainsbury's car park on the Roundswell Estate, Barnstaple.	1996	WCA 1, 9		DBAP; Amber
56	Hedgehog	<i>Erinaceus europaeus</i>	Garden at 3a Orchard Close, Barnstaple, EX31 2DF.	2002	WCA 6	Bern III	
57	Barn Owl	<i>Tyto alba</i>	Barnstaple. On fence between wood adjacent to A39.	1993	WCA 1, 9		DBAP; Amber
58	Badger	<i>Meles meles</i>	A39 south of Barnstaple.	2004	WCA 6, BA	Bern III	
59	Kingfisher	<i>Alcedo atthis</i>	Pond at Lake (lake is an actual place!).	1998	WCA 1		Amber
60	Badger	<i>Meles meles</i>	Between Lake and Tawstock, in woods	1999	WCA 6, BA	Bern III	
61	Otter	<i>Lutra lutra</i>	Tawstock	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
62	Kingfisher	<i>Alcedo atthis</i>	River Taw, Bishop's Tawton, near Barnstaple.	2001	WCA 1		Amber
63	a bat	bat sp.	Westaway Cottage, Pilton, Barnstaple.	2002	WCA 5, 6	EC IVa; Bonn II	
64	Otter	<i>Lutra lutra</i>	Little Pill	2002	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
65	Badger	<i>Meles meles</i>	A377, Bishop's Tawton	1999	WCA 6, BA	Bern III	
66	Otter	<i>Lutra lutra</i>	SW14 Playford Mill	1987	WCA 5	EC IIa, IIIa; Bern II	UKBAP(P); DBAP
67	Japanese Knotweed	<i>Fallopia japonica</i>	Land adjoining "High Cross", East	2002	WCA 9		

			Street, Bishops Tawton, Barnstaple.				
68	Japanese Knotweed	Fallopia japonica	Venn Road, Barnstaple. On the approach to Venn Quarry.	2004	WCA 9		
69	Japanese Knotweed	Fallopia japonica	Hill Farm, Landkey, near Barnstaple.	2004	WCA 9		

GLOSSARY:

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.
Bern II	Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix II: Special protection for listed animal species and their habitats.
Bern III	Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix III: Exploitation of listed animal species to be subject to regulation
ECIIa, IIb	EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex IIa and IIb: Designation of protected areas for animal and plant species listed.
ECIIIa, IIIb	EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex IIIa and IIb: Species used as criteria for designating Special Areas of Conservation (SACs).
ECIVa, IVb	EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex IVa: Exploitation of listed animals and plants to be subject to management if necessary.
ECVa, Vb	EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats & Species Directive) Annex Va and Vb: Exploitation of listed animals and plants to be subject to management if necessary.
Bonn II	Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) Appendix II: Range states encouraged to conclude international agreements to benefit species listed.
UKBAP(P)	UK Priority Species (Short and Middle Lists - UK Biodiversity steering Group Report 1995) i.e. species that are globally threatened and rapidly declining in the UK (by more than 50% in the last 25 years). Has a Species Action Plan.
DBAP	Devon Biodiversity Action Plan species: these have been identified as species of key conservation concern in Devon.
NS	Nationally Scarce: 15-100 10km squares in Atlas of British Flora 1962.

Devon Notable Species: Selected species recorded from over 50 2km squares in the Atlas of Devon Flora 1984 (R.B. Ivimey-Cook, Department of Biological Sciences, The University of Exeter).

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

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

Red List Bird species of high conservation concern, such as those whose population or range is rapidly declining, recently or historically, and those of global conservation concern.

Amber List Bird species of medium conservation concern, such as those whose population is in moderate decline, rare breeders, internationally important and localised species and those of unfavourable conservation status in Europe.