

# **Desktop Biodiversity Report**

## Land at Balcombe Parish

## ESD/14/747

Prepared for Katherine Daniel (Balcombe Parish Council)

13th February 2014



This report is not to be passed on to third parties without prior permission of the Sussex Biodiversity Record Centre. Please be aware that printing maps from this report requires an appropriate OS licence.

### Sussex Biodiversity Record Centre report regarding land at Balcombe Parish 13/02/2014

### Prepared for Katherine Daniel Balcombe Parish Council ESD/14/74

### The following information is included in this report:

| Maps                              | $\checkmark$ |
|-----------------------------------|--------------|
| Sussex Protected Species Register | $\checkmark$ |
| Sussex Bat Inventory              | $\checkmark$ |
| Sussex Bird Inventory             | $\checkmark$ |
| UK BAP Species Inventory          | ✓            |
| Sussex Rare Species Inventory     | ✓            |
| Sussex Invasive Alien Species     | $\checkmark$ |
| Full Species List                 | ✓            |
| Environmental Survey Directory    | $\checkmark$ |

### SNCI

M12 - Sedgy & Scott's Gills; M22 - Balcombe Lake & associated woodlands; M35 - Balcombe Marsh; M39 -Balcombe Estate Rocks; M40 - Ardingly Reservior & Loder Valley Nature Reserve; M42 - Rowhill & Station Pastures.

### SSSI

Worth Forest.

### Other Designations/Ownership

Area of Outstanding Natural Beauty; Environmental Stewardship Agreement; Local Nature Reserve; National Trust Property.

### Habitats

Ancient tree; Ancient woodland; Ghyll woodland; Lowland calcareous grassland; Lowland fen; Lowland heathland; Traditional orchard.

## Important information regarding this report

### It must not be assumed that this report contains the definitive species information for the site concerned.

The species data held by the Sussex Biodiversity Record Centre (SxBRC) is collated from the biological recording community in Sussex. However, there are many areas of Sussex where the records held are limited, either spatially or taxonomically.

A desktop biodiversity report from SxBRC will give the user a clear indication of what biological recording has taken place within the area of their enquiry. The information provided is a useful tool for making an assessment of the site, but should be used in conjunction with site visits and appropriate surveys before further judgements on the presence or absence of key species or habitats can be made. It may be that the content of this report guides the reader as to which surveys should be carried out on the site.

This report was compiled using data held at SxBRC at the time of production. SxBRC takes data validation very seriously, but cannot be held responsible for the accuracy of data included in this report.

### Copyright

The Sussex Biodiversity Record Centre must be acknowledged in all documents containing any part of the information contained in this report. You can also use the whole of a SxBRC report (unedited) as an appendix in your own report.

The SxBRC operates as agent to the individuals and groups who provide their records free of charge. The data suppliers retain copyright on their data, while SxBRC retains copyright on its desktop biodiversity reports.

### Data usage

The data contained within this report is for use in the project for which the data was requested. It is not to be shared with third parties for use in other projects, unless permission is granted from SxBRC.

The data may be used for 12 months, after which a replacement SxBRC report must be requested. This ensures the most up-to-date information is being used.

### **Ordnance Survey maps**

Members of the public wishing to reproduce maps made by SxBRC under East and West Sussex County Council or Brighton and Hove City Council licences must use copying facilities that have been authorised by Ordnance Survey (OS). Further information can be found on the <u>OS website</u>.

### Impartiality

SxBRC functions as custodian of biological data. Our role is to collect, manage and disseminate wildlife and habitat data. As such, we have to remain impartial and cannot offer opinions on the biodiversity value of a given site. Similarly, we cannot put forward objections to planning applications or be involved in campaigns.

### Supplying records

Our desktop biodiversity reports are only as good as the data we hold. We rely on the continuous submission of records to keep our database up-to-date. We are always grateful to receive records from ecological consultants and members of the public alike. We accept records in many different formats – please see our <u>website</u> for more details.

## **Confidential Records**

### Badgers

Badgers are one of our most recognisable native British mammals. They are not considered rare but are protected along with their setts under The Protection of Badgers Act 1992 and schedule 6 of the Wildlife and Countryside Act (1981, as amended).

It is an offence to kill, injure, or take a badger or interfere with a badger sett.

"Interference" is defined by section 3 of The Protection of Badgers Act and includes damaging or destroying a badger sett, obstructing any entrance to a sett and also disturbing a badger when it is occupying a sett. If you need to do any work near to a sett (within 30m) you must contact Natural England for guidance as your activities may require a licence.

With continued persecution of badgers, often for the most cruel and barbaric 'sport', detailed badger records are <u>not</u> included in our species inventory reports, as it has been requested that they remain confidential. However, the total number of badger records within the enquiry area <u>is</u> given in the full species list, if this has been requested.

If you need further information about badgers in your enquiry area please call the Badger Trust Sussex on 07910 198720 or visit their website: **www.badgertrust-sussex.org.uk** 

# The following species are <u>not</u> included in desktop biodiversity reports, but are flagged up as confidential at the end of the separate species inventories.

### Otters

Otters are slowly making a return to Sussex after becoming extinct in the 1960s, but are nowhere near their former numbers and remain very vulnerable.

If there is a river or tributary within 1km of your enquiry area please be aware of the potential for otters in the vicinity, especially if you are undertaking operations that may impact potential otter habitat.

Otters are protected by European and UK law. It is an offence under the Wildlife and Countryside Act 1981 to kill, injure or take an otter from the wild without a licence; to damage or obstruct a holt; or disturb an otter in its resting place. Licences are required for checking holts or for carrying out work that may disturb otters, such as the management of trees that are known to be used as resting sites. Natural England are responsible for issuing these licences in England.

If you require further information about otters in your enquiry area, please contact SxBRC. Permission to release record details will be required from the Sussex Wetland Landscapes Project and SxBRC will liase with the project officer on the enquirer's behalf.

### Wood White and Duke of Burgundy butterflies

These two rare butterfly species have a very restricted range in Sussex and records have been made confidential based on advice given from Butterfly Conservation Sussex Branch.

### Other confidential records

SxBRC holds records of other species that are confidential. Confidentiality can be for a variety of reasons but is usually to benefit the site or the species. Full details of these records are not disclosed but the enquirer is referred back to SxBRC if further information is needed.

# Any confidential records for your enquiry area will be flagged up at the end of the Protected Species Register, Rare Species Inventory and BAP Species Inventory.

### Birds

SxBRC holds nearly 1.5 million bird records provided by the Sussex Ornithological Society (SOS). Commercial data requests will automatically include a Notable Bird Report, which is based on a list of birds that are particularly scarce or vulnerable to development in Sussex. Non-commercial data requests will not include records from this list, but will be directed to the SOS for further information.





### MAPS

There are three maps included in a standard desktop biodiversity report which show designated sites (statutory and non-statutory); habitats and natural features; and ownership and management.

The key on a map only shows those layers which are located within the enquiry area or immediate area. Below is a list of all layers which we currently use in our maps, with details of the data source:

| Designated sites   |   |
|--|---|
| Area of Outstanding Natural Beauty (AONB)                | Downloaded from NE website.   |
| Country Park   | Downloaded from NE website.   |
| Local Geological Site (LGS)                              | Supplied by the Booth Museum, Brighton and digitised by SxBRC<br>in April 2009. LGS boundaries are digitised from hand-drawn<br>maps and in some instances are approximate.   |
| Local Nature Reserve (LNR)                               | Downloaded from NE website.   |
| Marine Site of Nature Conservation<br>Importance (MSNCI) | Supplied by ESCC in 2005.   |
| National Nature Reserve (NNR)                            | Downloaded from NE website.   |
| National Park  | Downloaded from NE website.   |
| Notable Road Verge                                       | Owned and provided by ESCC and WSCC.  |
| Ramsar   | Downloaded from NE website.   |
| Site of Nature Conservation Importance (SNCI)            | Supplied by WSCC, ESCC & BHCC.  |
| Site of Special Scientific Interest (SSSI)               | Downloaded from NE website.   |
| Special Area of Conservation (SAC)                       | Downloaded from NE website.   |
| Special Protection Area (SPA)                            | Downloaded from NE website.   |
| Habitats and natural features                            |   |
| Ancient/veteran tree                                     | Merged dataset created in July 2009. Data from Ancient Tree Hunt<br>(national survey carried out in 2007/2008) and Tree Register of the<br>British Isles (a charity which collates and updates data on notable<br>trees). |
| Ancient woodland   | Downloaded from NE website.   |
| Black poplar   | Created by SxBRC based upon species records arising from Sussex Wetland Landscapes Project.   |
| Chalk stream   | Created and owned by SWLP and SxBRC.  |
| Coastal & floodplain grazing marsh                       | Created by SxBRC for upload to NE national inventory. Data remains provisional until this has occurred.   |
| Coastal saltmarsh  | Supplied by EA, based on data from the SRCMP Habitat Mapping Project.   |
| Coastal sand dune  | Supplied by EA, based on data from the SRCMP Habitat Mapping Project.   |
| Coastal vegetated shingle                                | Downloaded from NE website.   |
| Ghyll woodland   | Boundaries drawn on paper maps by Dr Francis Rose which were then digitised by SxBRC. Not ground-truthed.   |
| Intertidal chalk   | Supplied by EA, based on data from the SRCMP Habitat Mapping Project.   |
| Intertidal mudflat                                       | Supplied by EA, based on data from the SRCMP Habitat Mapping Project.   |
| Lowland calcareous grassland                             | Merged dataset from NE and SDJC sources, created in 2005.   |

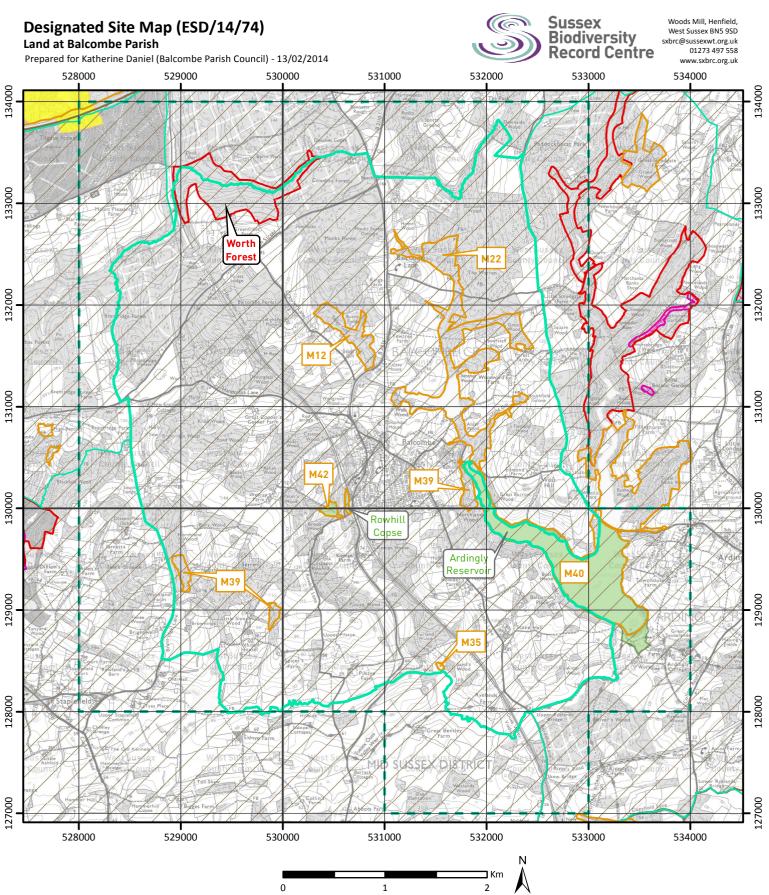
| Lowland fen                         | Created by SxBRC in June 2011. Layer is an amalgamation of all the fen data currently available to SxBRC.  |
|-------------------------------------|--|
| Lowland heathland                   | High Weald Heathland data created by the High Weald Unit in 2006. The rest of Sussex Heathland data was created by SxBRC, with funding from WSCC and RSPB in 2007. |
| Lowland meadow                      | Downloaded from NE website.  |
| Maritime cliff and slope            | Supplied by EA, based on data from the SRCMP Habitat Mapping Project.  |
| Open water                          | Derived from OS mapping. This includes inland and tidal, running and standing water.   |
| Reedbed                             | Created by SxBRC in June 2011. Layer is an amalgamation of all the reedbed data currently available to SxBRC.  |
| Saline lagoon                       | Downloaded from NE website.  |
| Traditional orchard                 | Downloaded from NE website.  |
| Ownership and management            | -  |
| Environmental Stewardship Agreement | Downloaded from NE website.  |
| National Trust property             | Owned and provided by National Trust.  |
| RSPB reserve                        | Owned and provided by RSPB.  |
| Sussex Wildlife Trust reserve       | Created and maintained by SxBRC on behalf of SWT.  |
| Woodland Trust site                 | Owned and provided by the Woodland Trust.  |

### Abbreviations

| BHCC  | Brighton and Hove City Council                  |
|-------|---|
| EA    | Environment Agency                              |
| ESCC  | East Sussex County Council                      |
| NE    | Natural England                                 |
| PTES  | People's Trust for Endangered Species           |
| RSPB  | Royal Society for the Protection of Birds       |
| SDJC  | South Downs Joint Committee                     |
| SRCMP | Strategic Regional Coastal Monitoring Programme |
| SxBRC | Sussex Biodiversity Record Centre               |
| SWLP  | Sussex Wetland Landscapes Project               |
| SWT   | Sussex Wildlife Trust                           |
| WSCC  | West Sussex County Council                      |

### Natural England datasets

These are available for anyone to download and use in their own Geographical Information System (GIS). Visit <u>www.gis.naturalengland.org.uk</u> for more information and register as a user.



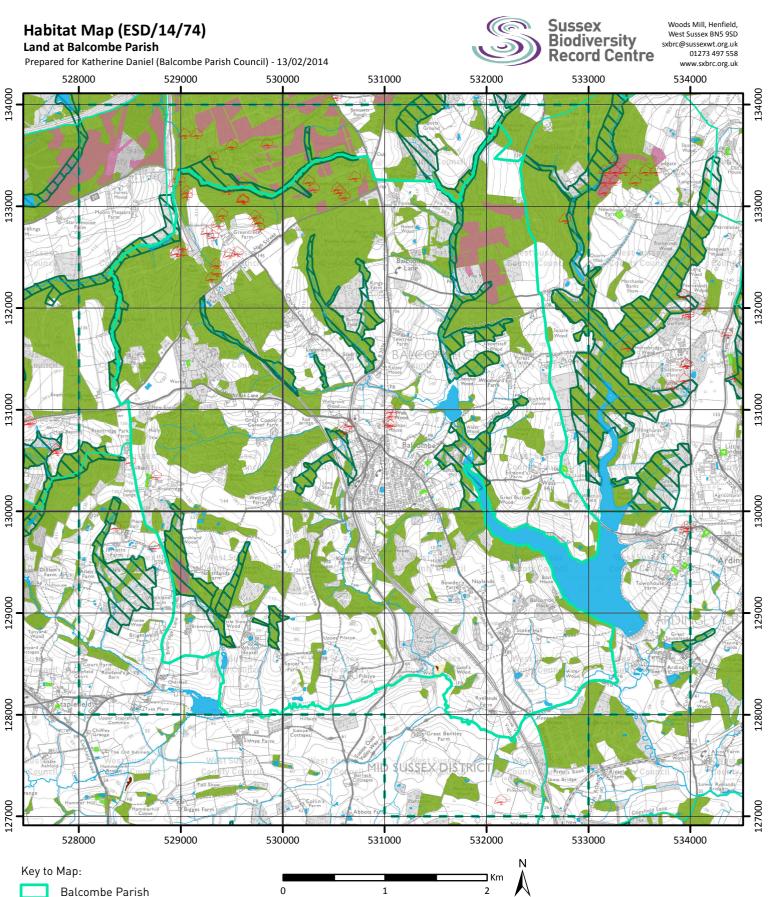
Key to Map:

Balcombe Parish
Species search area
Parish boundary
AONB
Country Park
LGS
LNR
SNCI

SSSI

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RAMSAR, Special Area of Conservation (SAC), Special Protection Area (SPA), National Park, Area of Outstanding Natural Beauty (AONB), National Nature Reserve (NNR), Site of Special Scientific Interest (SSSI), Local Nature Reserve (LNR) and Country Park data reproduced with permission of Natural England. Site of Nature Conservation Importance (SNCI) data provided by East and West Sussex County Councils, and Brighton & Hove City Councils. Local Geological Site (LGS) data created by SxBRC in partnership with Sussex Geodiversity Group. © Crown Copyright. All rights reserved 2014.



- Rey to Map:

   Balcombe Parish

   Species search area

   Parish boundary

   Ancient/veteran tree

   Ancient woodland

   Shyll woodland

   Lowland calcareous grassland

   Lowland fen

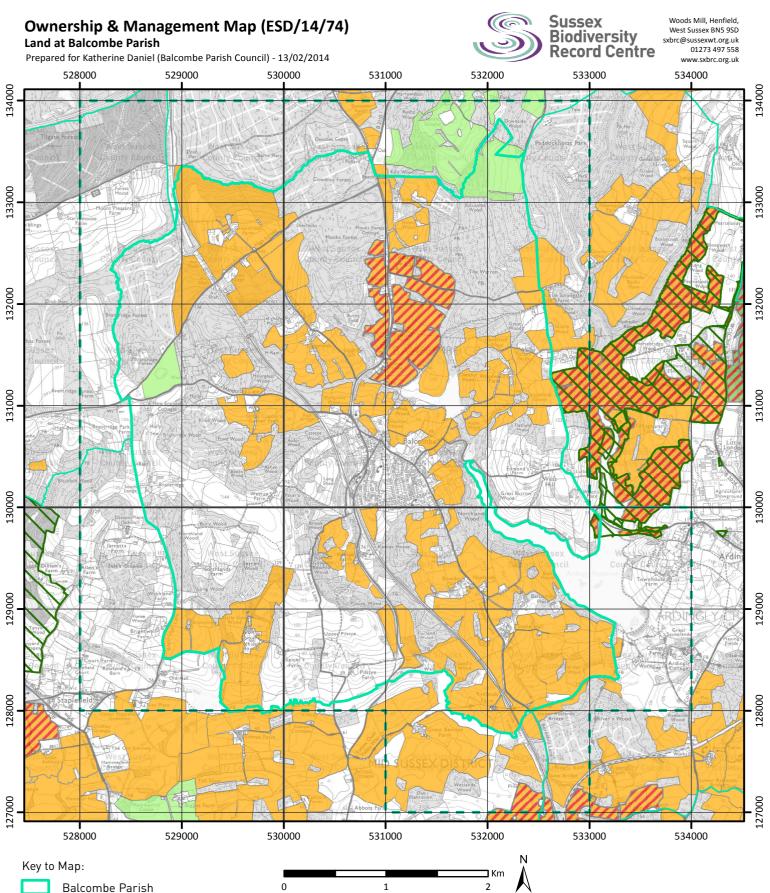
   Lowland heathland

   Open Water
- Traditional orchard

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Ancient woodland, traditional orchards, vegetated shingle and saline lagoon data reproduced with permission of Natural England. Revised coastal and floodplain grazing marsh data remains provisional and is also reproduced with permission of Natural England. Chalk grassland data supplied by Natural England and South Downs Conservation Board. Black Poplar data supplied by Sussex Wetland Landscapes Project. Ghyll woodland data supplied by Dr Francis Rose. Reedbed data funded by Environment Agency and West Sussex County Council is provided by Sussex Biodiversity Record Centre and maintained by RSPB. Heathland data funded by West Sussex County Council, RSPB and High Weald AONB Unit. Ancient/veteran tree data derived from results of the Ancient Tree Hunt Project and the Tree Register of the British Isles (TROBI). South East Coastal Habitat Mapping data reproduced with permission of Environment Agency. © Crown Copyright. All rights reserved 2014.

Habitat data held by Sussex Biodiversity Record Centre (SxBRC) are created in-house or obtained from a variety of dataset providers. SxBRC continually strive to further improve and update these data wherever possible. However, this map should be treated as indicative rather than definitive: data may be generated from a range of field survey and/or predictive methods, each of which may have its own inherent limitations. In some situations a recent ground survey may be required to establish definitively the current status of a particular habitat at a specific location.



- Species search area
- Parish boundary

National Trust property

Environmental Stewardship Agreements: Higher Level Stewardship (HLS)

Entry Level Stewardship (ELS)

Organic ELS

Organic ELS plus HLS

ELS plus HLS

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Environmental Stewardship Agreement data reproduced with permission of Natural England. Other datasets reproduced respectively with permission of the Woodland Trust, National Trust, Sussex Wildlife Trust and Royal Society for the Protection of Birds. © Crown Copyright. All rights reserved 2014.

The Protected Species Register does not include bat, bird, badger or otter records.

Bat and bird records are included in separate inventories, while badger and otter records are not included in SxBRC reports.

The Sussex Protected Species Register (PSR) consists of species of plants, fungi and animals that are protected under Schedules 5, 6 and 8 of the Wildlife and Countryside Act 1981 and other legislation.

### Please note the following limitations to the PSR:

- PSR records are labelled so that only one record per species per grid reference is included in a SxBRC report. This will usually be the most up to date record.
- If a protected species record appears in a SxBRC biodiversity report it does not mean that the species is still present. It means that the protected species was recorded last at that time and place by the recorder listed. The implications of the record should be further evaluated, and a survey to establish the current status of the species may be required.
- If there is no record of any particular protected species, this does not confirm that the species is absent from the site in question. It may mean that it has not been recorded, that the site has not been surveyed for this species, or that the Record Centre has not been informed of its presence.
- Some sites are part of the National Dormouse Monitoring Programme (NDMP) and therefore we are likely to hold historic records/more detailed information. If NDMP is mentioned in the location name of a record and you would like the historic dormouse data for that site, please contact the SxBRC.

### Wildlife Protection Legislation in England

Legislation that protects wildlife in England exists at the European and national level.

### European law

Legislation produced at a European level is an EU Directive, produced to have an effect at national level as regulations. The most relevant regulation for biodiversity is the 'Conservation of Habitats & Species Regulations 2010 (informally known as 'The Habitats Directive'). Further information can be found here: <a href="http://www.naturenet.net/law/habsregs.html">www.naturenet.net/law/habsregs.html</a>

### National law

**The Wildlife and Countryside Act (WCA) 1981** (as amended), strengthened by the Countryside and Rights of Way Act 2000, are together the most important legislation aimed at protecting wildlife in England. The Wildlife and Countryside Act is divided into four parts, details of which are available from: <a href="http://www.naturenet.net/law/wcagen.html">www.naturenet.net/law/wcagen.html</a>

### Species protection is provided under Schedules 1, 5, 6 and 8 of the WCA:

**Schedule 1: Birds** – Please refer to the Sussex Bird Inventory results and explanation sheet in your SxBRC biodiversity report.

### Schedule 5: Protected animals (other than birds)

Intentional or reckless killing, injuring, taking, possessing, disturbing and selling (including parts and derivatives) as well as damaging, destroying or obstructing access to any structure or place of refuge etc. are prohibited. N.B. Protection of some species is limited to certain sections of the Act, which are indicated in the lists as follows:

**Section 9(1)** Protection limited to intentional killing, injury or taking.

- **Section 9(2)** Protection limited to possessing and controlling.
- **Section 9(4a)** Protection limited to damaging, destroying or obstructing access to any structure or place used by the animal for shelter or protection.
- **Section 9(4b)** Protection limited to disturbing the animal while it is occupying any structure or place which it uses for shelter or protection.
- **Section 9(5a)** Protection limited to selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative).
- **Section 9(5b)** Protection limited to advertising for buying or selling such things.

### Schedule 6: Animals which may not be killed or taken by certain methods

Methods include traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others. Even humane trapping for research requires a licence.

### Schedule 8: Protected plants and fungi

Intentional picking, uprooting, destroying, trading (including parts and derivatives) etc. are prohibited. Under the Wildlife and Countryside Act, all wild plants in Britain are protected from intentional uprooting by an unauthorised person. Land owners, land occupiers, persons authorised by either of these, or persons authorised in writing by the Local Authority for the area are however exempt from this, except for Schedule 8 species which you can see on this website: <a href="http://www.naturenet.net/law/sched8.html">www.naturenet.net/law/sched8.html</a>

### Legislation protecting bats

Please refer to the explanation sheet of the Sussex Bat Inventory within your SxBRC biodiversity report, or visit <u>our website</u>.

### Legislation protecting badgers and otters

Please refer to the 'Confidential Records' sheet at the start of the report for information on badger and otter records in Sussex.



### SUSSEX PROTECTED SPECIES REGISTER REPORT

Please note that bat, bird, badger and otter records are not included in this report.

### Land at Balcombe Parish

| 13 February 2014       | ESD/14/74           | Search Area: | TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329 |
|------------------------|---------------------|--------------|--|
| Katherine Daniel (Balo | combe Parish Counci | il)          |  |

### Trichomanes speciosum

Killarney Fern

Known in Sussex only in the gametophyte state, this fern was first identified in Fairlight Glen near Hastings in 1992. It has subsequently been found in several other localities in East Sussex. The gametophytic or non-spore-bearing phase grows deep in clefts, crevices and natural rock hollows and appears to be able to exist in a state of arrested development, unable to produce the mature fronds under present conditions.

### fern

Bern Convention Appendix 1; European Protected Species; Habitats Directive Annex 2 - non-priority species; Habitats Directive Annex 4; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; Wildlife and Countryside Act 1981 (Schedule 8)

| Grid Reference | Recorder   | Date                            | Locality                        |
|----------------|--|---------------------------------|---------------------------------|
| TQ298289       | Anon @ Sussex Bot. Rec. Soc.;Rob<br>Cooke;Simon Davey                    | 1995                            | Staplefield, West Sussex (VC13) |
| TQ299288       | Tim Rich;Rob Cooke;Simon Davey   | January 1994 -<br>February 1995 | Rocks N.E. of the White House   |
| TQ317300       | Anon @ Sussex Bot. Rec. Soc.;Rob<br>Cooke;Simon Davey                    | 1995                            | Balcombe                        |
| TQ318303       | Francis Rose;Tim Rich;Rob<br>Cooke;Ronald Archie Boniface;Simon<br>Davey | 1948 - 1995                     | Balcombe Mill Rocks             |

### Mentha pulegium

### Pennyroyal

A short-lived perennial of seasonally inundated grassland overlying silt and clay. Currently known in our area only from Falmer, East Sussex. The plants which are frequent around the Ardingly Reservoir are an alien sub-species.

### flowering plant

IUCN (2001) - Endangered; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 8)

| Grid Reference | Recorder                                     | Date           | Locality                               |
|----------------|--|----------------|--|
| TQ329295       | Anon @ Sussex Bot. Rec. Soc.;Arthur<br>Hoare | 1987 - 2000    | Ardingly Reservoir, East Sussex (VC14) |
| TQ32J          | Anon   | 1991           | Ardingly Reservoir, West Sussex (VC13) |
| TQ331299       | Anon @ Sussex Bot. Rec. Soc.;Arthur<br>Hoare | 1987 - 2000    | Ardingly Reservoir, East Sussex (VC14) |
| TQ33302960     | Arthur Hoare                                 | 26/06/2004     | Ardingly Reservoir                     |
| TQ335289       | Ernest Sears                                 | September 2005 | Ardingly Reservoir                     |

### Triturus cristatus

### **Great Crested Newt**

The largest British newt. It is black or dark brown and the males have a crest along the back and an orange underside spotted with black. Frequently confused with male smooth newts, which also have a crest. The great crested newt prefers larger, open ponds that are free of fish and waterfowl and has declined substantially in Britain and across Europe, mainly due to habitat loss. The species is fully legally protected and Britain has special responsibility for its conservation as some of the best European populations occur here. Scattered across East and Central Sussex but scarce in the west.

### amphibian

Bern Convention Appendix 2; European Protected Species; Habitats Directive Annex 2 - non-priority species; Habitats Directive Annex 4; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.4b; 9.5a; 9.5b; Schedule 5)

| Grid Reference | Recorder                            | Date       | Locality  |
|----------------|-------------------------------------|------------|---|
| TQ2817828445   | Jerry Cheesman                      | 24/10/2013 | Staplefield Rowlands Wood   |
| TQ3028         | SARG Sussex Amphibian & Reptile Grp | 01/01/1993 | 54 Spicers Cottage, Rowhill Lane,<br>Balcombe, East Sussex (VC14) |
| TQ326294       | Paul Pendlebury                     | 14/05/2013 | Ardingly, West Sussex (VC13)                                      |

### Arvicola amphibius

### European Water Vole

The fastest declining native British mammal, the water vole was 'Ratty' in Wind in the Willows. Water voles prefer slow flowing streams, rivers and dykes with steep earth banks and luxuriant emergent vegetation. They have been in decline for over a century mainly due to loss of habitat while the presence of American mink has greatly hastened this decline. In many areas of mainland Britain water voles are already extinct but there are still some strong populations in Sussex. A legally protected species, listed on the Sussex Rare Species Inventory and the subject of a Sussex Species Action Programme.

### terrestrial mammal

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.1 taking; 9.2; 9.4a; 9.4b; 9.5a; 9.5b; Schedule 5)

| Grid Reference | Recorder    | Date        | Locality                             |
|----------------|-------------|-------------|--------------------------------------|
| TQ3128         | Martin Port | 03/07/1965  | VC14 East Sussex, East Sussex (VC14) |
| TQ324280       | Anon        | 1989 - 1990 | East Sussex (VC14)                   |

### Muscardinus avellanarius

### Hazel Dormouse

A nocturnal species of woodland and overgrown hedgerows. Dormice spend much of their time climbing among branches in search of fruit, nuts, insects and other food. They sleep in nests during the day in hollow trees, unoccupied bird or bat boxes and similar places and hibernate in winter. Dormice occur mainly in southern England in this country and are widespread in suitable habitats in Sussex.

### terrestrial mammal

European Protected Species; Habitats Directive Annex 4; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.4b; 9.5a; 9.5b; Schedule 5)

| Grid Reference | Recorder              | Date       | Locality  |
|----------------|-----------------------|------------|---|
| TQ310299       | Recorder @ WildCall   | 14/09/2012 | Garden of Winterfield, Oldlands Avenue,<br>Balcombe, West Sussex (VC13) |
| TQ335280       | NDMP Dormouse Monitor | 26/07/2011 | Ardingly Reservoir NDMP Site, Box No.8                                  |

### Anguis fragilis

### Slow-worm

A legally protected legless lizard resembling a small snake. Slow-worms are widespread in southern England and found in open habitats such as rough grassland, heath and on road and railway embankments. They are often common in urban and suburban areas. Like most reptiles and amphibians they have declined considerably and need protection wherever they occur.

### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder  | Date       | Locality   |
|----------------|---|------------|--|
| TQ2838428390   | Jerry Cheesman                                    | 02/05/2010 | Rowland's Wood, Staplefield  |
| TQ2932         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 17/06/1999 | Old House, High Street, Balcombe Forest,<br>East Sussex (VC14)       |
| TQ3130         | SARG 2002 Leaflet                                 | 2002       | Little Orchards, Hayards Heath Road,<br>Balcombe, East Sussex (VC14) |
| TQ313301       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 01/04/1995 | 1 Oldlands Avenue, Balcombe, East Sussex<br>(VC14)                   |
| TQ315299       | SARG 2002 Leaflet                                 | 2002       | Radford, Haywards Heath Road, Balcombe,<br>West Sussex (VC13)        |

### Natrix natrix

### Grass Snake

A widespread, but legally protected, snake with a normally olive body flecked with black and a distinctive yellow collar. Frequent in Sussex near places where its food, largely frogs, is readily available. Like most reptiles and amphibians, grass snakes have declined considerably and need protection wherever they occur.

### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder  | Date       | Locality   |
|----------------|---|------------|--|
| TQ2833         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 01/01/1987 | Tilgate Forest, nr M23, West Sussex (VC13)                           |
| TQ2838428390   | Jerry Cheesman                                    | 02/05/2010 | Rowland's Wood, Staplefield  |
| TQ2932         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 17/06/1999 | Old House, High Street, Balcombe Forest,<br>East Sussex (VC14)       |
| TQ293312       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 14/08/1991 | Cherry Tree Kennels, Handcross Road,<br>Balcombe, East Sussex (VC14) |
| TQ300294       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 01/06/1993 | The White House, Balcombe, East Sussex<br>(VC14)                     |
| TQ3030         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 27/09/1994 | Rocks Lane Cottage, Rocks Lane,<br>Balcombe, East Sussex (VC14)      |
| TQ311303       | SARG recorder                                     | 31/08/2001 | Stockcroft Road, Balcombe, Balcombe                                  |
| TQ3130         | SARG 2002 Leaflet                                 | 2002       | Little Orchards, Hayards Heath Road,<br>Balcombe, East Sussex (VC14) |
| TQ315299       | SARG 2002 Leaflet                                 | 2002       | Radford, Haywards Heath Road, Balcombe,<br>West Sussex (VC13)        |
| TQ316311       | Simon Curson                                      | 23/08/2002 | Balcombe Lake and associated woodlands,<br>Balcombe                  |
| TQ334288       | Denis Brown                                       | 26/03/2004 | Ardingly - reservoir car park, Ardingly<br>Reservoir                 |

### Zootoca vivipara

### Common Lizard

The most abundant British lizard and widespread in Sussex in the Weald and along the coast. Probably under-recorded and increasingly confined to small areas of open sunny habitat. A legally protected species due to concern about its overall decline.

### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder            | Date       | Locality                                 |
|----------------|---------------------|------------|--|
| TQ2838428390   | Jerry Cheesman      | 02/05/2010 | Rowland's Wood, Staplefield              |
| TQ319285       | Anon @ RAUK website | 25/07/2010 | Stone Farm bridge over railway, Balcombe |

### Vipera berus

Adder

Britain's only venomous snake, though incidences of snakebite involving man or domestic animals are relatively uncommon. Adders have a distinctive zig zag pattern of black or brown and white. They occur in open areas on downs, heaths and in heathy woods. Grass snakes and slow-worms are often misidentified as adders. Though widespread in Britain and found in suitable areas across Sussex, the adder, like all our native reptiles has declined substantially through habitat loss and other factors. The adder is a protected species and it is illegal intentionally to kill or injure them.

### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder  | Date       | Locality   |
|----------------|---|------------|--|
| TQ2832         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 26/04/1994 | Mount Pleasant Farm, Pease Pottage, West<br>Sussex (VC13)      |
| TQ2932         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 17/06/1999 | Old House, High Street, Balcombe Forest,<br>East Sussex (VC14) |
| TQ305334       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 29/04/1999 | Cowdray Forest, East Sussex (VC14)                             |
| TQ308297       | SARG Sussex Amphibian & Reptile Grp               | 01/05/1990 | Balcombe Railway Line, East Sussex (VC14)                      |

0 Confidential records exist for this enquiry area. Please contact the record centre if you require further information.

## SUSSEX BAT INVENTORY



### **Bat species**

There are 18 species of bat which are resident in the UK (17 of which are known to be breeding here), all of which have been recorded in Sussex:

Barbastella barbastellus Barbastelle Eptesicus serotinus Serotine Myotis alcathoe Alcathoe Myotis bechsteinii Bechstein's Myotis brandtii Brandt's Myotis daubentonii Daubenton's Myotis myotis Greater mouse-eared Myotis mystacinus Whiskered Myotis nattereri Natterer's Nyctalus leisleri Leisler's Nyctalus noctula Noctule Pipistrellus nathusii Nathusius's pipistrelle Pipistrellus pipistrellus Common pipistrelle Pipistrellus pygmaeus Soprano pipistrelle Plecotus auritus Brown long-eared Plecotus austriacus Grey long-eared Rhinolophus ferrumequinum Greater horseshoe Rhinolophus hipposideros Lesser horseshoe

Four other bat species have been recorded in Sussex as vagrants: Savi's pipistrelle *(Hypsugo savii)*, Kuhl's pipistrelle *(Pipistrellus kuhlii)*, parti-coloured bat *(Vespertilio murinus)* and Geoffroy's bat *(Myotis emarginatus)*.

**Five species are included in Annex II of the EU Habitats Directive:** Barbastelle, Bechstein's, greater mouseeared, greater horsehoe and lesser horseshoe. All 18 species are included in Annex IV.

**Seven species are included in the UK Biodiversity Action Plan:** Barbastelle, Bechstein's, brown long-eared, greater horseshoe, lesser horseshoe, noctule and soprano pipistrelle.

### Background

Bats are the only mammals capable of true flight. Those found in the UK feed exclusively on insects and use a sophisticated form of sonar to navigate and catch their prey at night. In late spring and summer, female bats form maternity colonies to raise their young. This is when they are most obvious to us, as they leave the roost at or after sunset in search of food. Bats hibernate during the winter when insects are scarce, usually at a different site to the maternity roost where a constant cool temperature can be found i.e. in underground sites or within deep crevices in trees or buildings. **Bats return to the same roost sites every year, so even if the animals themselves are not present, the roost is still legally protected.** 

Unfortunately there are many misconceptions about bats. They are in fact sociable, intelligent, clean animals that rarely come into contact with humans. They do not build nests and very rarely cause structural damage to buildings.

### **Current status and threats**

Bat populations have suffered huge declines in the last century. The common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) remain the most abundant and widespread species of bat, but are thought to have suffered from a huge reduction in numbers. Estimates from a National Bat Colony Survey suggest a population decline of around 70% between 1978 and 1993.

This reduction in bat numbers is largely due to their roosts being disturbed or destroyed, a loss of suitable feeding and flightline habitat (e.g. hedgerows) and a reduction in insect numbers (e.g. through farming intensification and the use of pesticides). A number of species are now included in the National Bat Monitoring Programme (NBMP), run by the Bat Conservation Trust (BCT), which gives up-to-date information on population trends.

Bats are also particularly vulnerable to human interference for the following reasons:

- They have a low reproductive rate; generally one pup a year.
- They require specific conditions for each of their roost types.
- They are very secretive and often go unnoticed until discovered by building works or home improvements.

Consequently, bats and their roosts receive some of the highest levels of legal protection.

### Bats and the law

All species of bat and their roosts are protected by UK and European law. Bats and their roosts may also be protected by site designations, for example if their roost site or feeding grounds are notified as a Special Area of Conservation (SAC) or a Site of Special Scientific Interest (SSSI).

### You could be committing a criminal offence if you:

- 1. Deliberately capture, injure or kill a bat
- 2. Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
- 3. Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
- 4. Intentionally or recklessly obstruct access to a bat roost
- 5. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat

### It is <u>not</u> illegal to:

Tend/care for a bat solely for the purpose of restoring it to health and subsequent release. (This should always be done by an experienced bat handler, contact details of which can be found through the Sussex Bat Group.)

### Licensing

If you have a bat roost in your property, it does not necessarily mean that building work cannot take place. Work can be planned so as not to interfere with the roost and at a time that bats may be absent. If you are planning any sort of work that may interfere with bats, advice must be sought first from Natural England (see contact details below). Similarly, if you discover bats <u>after</u> work has begun, you must stop and contact Natural England for their advice <u>before</u> continuing.

Licences to permit illegal activities relating to bats and their roost sites can be issued for specific purposes. It is an offence not to comply with the terms and conditions of such a licence. If you carry out work affecting bats or roosts without a licence, you will be breaking the law.

### Further advice and information:

### **Bat Conservation Trust**

The national charity working for bat conservation. Website: <u>www.bats.org.uk</u> Bat helpline: 0845 1300 228 Email: <u>enquiries@bats.org.uk</u>

### Natural England

The government body responsible for issuing licences for work that may affect bats or their roosts. Website: <u>www.naturalengland.org.uk/ourwork/regulation/wildlife/species/bats.aspx</u> General and licensing enquiries. Tel: 0845 601 4523 (local rate).

### **Sussex Bat Group**

A local voluntary group working for the conservation of bats in Sussex. Website: <u>www.sussexbatgroup.org.uk</u> Email: <u>contact@sussexbatgroup.org.uk</u>

Land at Balcombe Parish

ESD/14/74

Search Area: TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329

Katherine Daniel (Balcombe Parish Council)

13 February 2014

| Common Name                 | Latin Name                | No of<br>Records | M/S H FR MR UR D |
|-----------------------------|---------------------------|------------------|------------------|
| Bat sp.                     | Chiroptera                | 4                |                  |
| Bechstein's Bat             | Myotis bechsteinii        | 2                |                  |
| Brown Long-eared Bat        | Plecotus auritus          | 17               |                  |
| Common Pipistrelle (45 kHz) | Pipistrellus pipistrellus | 6                |                  |
| Long-eared sp.              | Plecotus                  | 2                |                  |
| Pipstrelle sp.              | Pipistrellus              | 4                |                  |
| Serotine                    | Eptesicus serotinus       | 2                |                  |
| Soprano Pipstrelle (55 kHz) | Pipistrellus pygmaeus     | 4                |                  |
| Unidentified Bat            | Myotis                    | 1                |                  |

### SUSSEX BAT INVENTORY REPORT SUMMARY

Please note that all species of bat and their roosts are protected by UK and European law, under the Wildlife and Countryside Act 1981 (WCA) in the UK and the Habitats Directive in the EU. Bats and their roosts may also be protected by site designations, for example if their roost site or feeding grounds are notified as Special Area of Conservation (SAC) or a Site of Special Scientific Interest (SSSI).

### You could be committing a criminal offence if you :

1. Deliberately capture, injure or kill a bat. 2. Intentionally or recklessly disturb a bat in the roost or deliberately disturb a group of bats. 3. Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time). 4. Intentionally or recklessly obstruct access to a bat roost. 5. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.

### Key to Indicators

Woods Mill, Henfield, West Sussex BN5 9SD

Tel: 01273 497 558 / 557 Fax: 0203 070 0709 Email: sxbrc@sussexwt.org.uk

Web: sxbrc.org.uk

| M/S | Mating/Swarming   |
|-----|-------------------|
| н   | Hibernaculum      |
| FR  | Feeding Roost     |
| MR  | Maternity Roost   |
| UR  | Unspecified Roost |
| D   | Droppings         |
|     |                   |



Woods Mill, Henfield, West Sussex BN5 9SD Tel: 01273 497 558 / 557 Fax: 0203 070 0709 Email: sxbrc@sussexwt.org.uk Web: sxbrc.org.uk

### Key to Indicators

- M/S Mating/Swarming
- H Hibernaculum
- **FR** Feeding Roost
- MR Maternity Roost
- UR Unspecified Roost
- D Droppings

### Land at Balcombe Parish

bat (dead or alive) or any part of a bat.

13 February 2014 ESD/14/74

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or feeding grounds are notified as Special Area of Conservation (SAC) or a Site of Special Scientific Interest (SSSI).

TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329

Katherine Daniel (Balcombe Parish Council)

### Chiroptera

### Bat sp.

Search Area:

Please note that all species of bat and their roosts are protected by UK and European law, under the Wildlife and Countryside Act 1981 (WCA)

in the UK and the Habitats Directive in the EU. Bats and their roosts may also be protected by site designations, for example if their roost site

1. Deliberately capture, injure or kill a bat.2. Intentionally or recklessly disturb a bat in the roost or deliberately disturb a group of bats. 3. Damage or destroy a bat

roosting place (even if bats are not occupying the roost at the time). 4. Intentionally or recklessly obstruct access to a bat roost. 5. Possess or advertise/sell/exchange a

Chiroptera (from the ancient Greek for 'wing hand') is the natural group, or order, that covers all the bats. In Britain we have 18 bat species and all have the highest level of legal protection. Many people simply record bats in general when they are not able to assign them to a particular species and these are then included under Chiroptera in our reports.

| Date                       | Location   | Grid Reference | Recorder      | Sampling Method        | M/SH FRMRURD | Abundance | Notes   |
|----------------------------|--|----------------|---------------|------------------------|--------------|-----------|---|
| 08/09/2002                 | St Peter's Church, Church<br>Lane, Ardingly, East Sussex<br>(VC14) | TQ339298       | NE Bat Worker | Building<br>Inspection |              |           |   |
| 01/01/2000 -<br>31/12/2000 | Birchanger, Balcombe Forest,<br>West Sussex (VC13)                 | TQ290316       | Julie Worrall | Visual                 |              | 2 Present | One or two seen around house and farm in warm weather.            |
| 01/07/1991                 | Brightwell Farm, Staplefield,<br>West Sussex (VC13)                | TQ287287       | NE Bat Worker | Building<br>Inspection |              |           | Scattered droppings; bat moved out.<br>Timber treatment required. |

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SUSSEX BAT INVENTORY REPORT

You could be committing a criminal offence if you :

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| 01/07/1991 | Brightwell Farm, Balcombe,            | TQ3030 | NE Bat Worker | Building   | 1 Present |
|------------|---------------------------------------|--------|---------------|------------|-----------|
|            | Haywards Heath, East Sussex<br>(VC14) |        |               | Inspection |           |
|            | (VC14)                                |        |               |            |           |

### Eptesicus serotinus

Serotine

A large bat that frequents pasture, parklands and gardens as well as the wider countryside. It forms summer roosts in buildings where it also probably hibernates. A widespread southern species in the UK, though often only present in small numbers. Its British strongholds are in the south east (widespread in Sussex) and parts of the West Country.

| Date       | Location  | Grid Reference | Recorder      | Sampling Method        | M/SH FRMRURD | Abundance    | Notes  |
|------------|---|----------------|---------------|------------------------|--------------|--------------|--|
| 26/07/2010 | Bramerton, Victoria Road,<br>Balcombe                             | TQ311303       | Amanda Millar | Grounded Bat           |              | 1 Adult Male |  |
| 15/09/1986 | Washlands, Brantridge Lane,<br>Staplefield, West Sussex<br>(VC13) | TQ289291       | NE Bat Worker | Building<br>Inspection |              |              | Identified from droppings, also Long-<br>eared bats present. |

Myotis

### **Unidentified Bat**

| Date       | Location             | Grid Reference | Recorder  | Sampling Method       | M/S H | FR MR UR D | Abundance     | Notes |
|------------|----------------------|----------------|-----------|-----------------------|-------|------------|---------------|-------|
| 13/09/2007 | Balcombe Rail bridge | TQ3063430209   | Giles Coe | Aural bat<br>detector |       |            | taxon Present |       |

### Myotis bechsteinii

### Bechstein's Bat

A medium-sized bat with long ears, favouring wooded, low-lying countryside. In summer it roosts in tree holes, bat boxes and, less commonly, in buildings. It hibernates in tree holes and occasionally in cellars, mine tunnels and caves. It is the rarest British Myotis species and is virtually restricted to southern England. Most records held by SxBRC are from West Sussex, but it has been recorded from East Sussex.

| Date       | Location  | Grid Reference | Recorder      | Sampling Method        | M/SH FRMRURD | Abundance      | Notes  |
|------------|---|----------------|---------------|------------------------|--------------|----------------|--|
| 11/07/2008 | Poplar Cottage, London Road,<br>Haywards Heath, West Sussex<br>(VC13) | TQ308335       | NE Bat Worker | Building<br>Inspection |              | 50 Present     | Colony at north end. Appear at end of<br>April, leave by October. Colony<br>discovered 10 years ago. Have not<br>missed a season since. On emergence<br>move south along hedge line south. |
| 26/06/2005 | Balcombe, West Sussex (VC13)  | TQ308336       | David King    | Unspecified            |              | Bat(s) Present | Reported to recorder.  |

BAP

### Pipistrellus Pipstrelle sp.

There are three species of Pipistrelle bat found in the UK; common (Pipistrellus pipistrellus), soprano (P. pygmaeus) and Nathusius (P. Nathusii). Common and soprano pipistrelles were previously recorded as one species, but they are now recognised as separate species, with a peak frequency echolocation at 45 kHz and 55 kHz respectively. The following records refer to an aggregate of the two species, where the audio frequency or specific species is undetermined. Little is known about the Nathusius pipistrelle, but the other two species are found in all types of countryside (except very exposed areas) as well as in towns and suburbs. Summer roosts are usually in buildings, though tree holes and bat boxes are also used. Hibernation sites are in buildings and tree holes. Both common and soprano pipistrelles are widespread in Sussex, while Nathusius' is much rarer.

| Date       | Location   | Grid Reference | Recorder          | Sampling Method        | M/SH FRMRURD | Abundance     | Notes             |
|------------|--|----------------|-------------------|------------------------|--------------|---------------|-------------------|
| 12/05/2011 | Private property, Bramble Hill<br>area, Balcombe   | TQ309306       | NE Bat Worker     | Building<br>Inspection |              | 59 Bat(s)     |                   |
| April 2009 | Handcross  | TQ2931         | Colleen Mainstone | Building<br>Inspection |              | taxon Present |                   |
| 04/09/2006 | Cherry Tree Kennels,<br>Handcross Road, Balcombe,<br>RH17 6PP, West Sussex (VC13)        | TQ292313       | NE Bat Worker     | Building<br>Inspection |              | 10+ Present   | Bat detector used |
| 21/07/2005 | Balcombe ATE, Tower House,<br>Stockcroft Road, Balcombe,<br>RH17 6HR, West Sussex (VC13) | TQ309305       | NE Bat Worker     | Building<br>Inspection |              | 10 Present    | Dead bats present |

### Pipistrellus pipistrellusCommon Pipistrelle (45 kHz)

The common pipistrelle (Pipistrellus pipistrellus) and soprano pipistrelle (P. pygmaeus) were previously recorded as one species. They are now recognised as separate species, with a peak frequency echolocation at 45 kHz and 55 kHz respectively. Pipistrelles are the most common bat in the British Isles and are found in all types of countryside (except very exposed areas) as well as in towns and suburbs. Summer roosts are usually in buildings, though tree holes and bat boxes are also used. Winter roosts are in buildings and tree holes.

| Date       | Location  | Grid Reference | Recorder      | Sampling Method       | M/SH FRMRURD | Abundance                                   | Notes   |
|------------|---|----------------|---------------|-----------------------|--------------|---|---|
| 09/07/2012 | Risk Factor Solutions, Kemps<br>Farm, London Road, Balcombe | TQ30782953     | Amanda Millar | Grounded Bat          |              | 1 Infant                                    | Commercial premises, timber clad  |
| 13/09/2007 | Balcombe Rail bridge  | TQ3063430208   | Giles Coe     | Aural bat<br>detector |              | taxon Present                               | Several passes  |
| 11/07/2007 | 13 Oldlands Avenue, Balcombe                                | TQ312300       | Amanda Millar | Grounded Bat          |              | 2 Juvenile<br>Female                        | Roost at house  |
| 22/06/2007 | Ferndale, Deanland Road,<br>Balcombe                        | TQ311303       | Amanda Millar | Grounded Bat          |              | 1 Male infant                               | Probably roost in house   |
| 21/06/2006 | East Cottage, Church Lane,<br>Ardingly                      | TQ339296       | Amanda Millar | Grounded Bat          |              | 1 Adult Male                                | Caught by cat   |
| 21/07/2005 | Telephone exchange,<br>Stockcroft Road, Balcombe            | TQ309306       | Amanda Millar | Grounded Bat          |              | 1 Lactating<br>Female; 2<br>Infant; 23 Dead | Roost overheated, 20 found dead, 1<br>live female and 2 juveniles alive, rest<br>of roost moved |

### Pipistrellus pygmaeus

### Soprano Pipstrelle (55 kHz)

For a while considered as a variant of the common pipistrelle, the soprano pipistrelle is now recognised as a separate species. Pipistrelles are the most common bat in the British Isles and are found in all types of countryside (except very exposed areas) as well as in towns and suburbs. This species has a stronger association with water than common pipistrelle. Summer roosts are usually in buildings, though tree holes and bat boxes are also used. Winter roosts are in buildings and tree holes.

| Date       | Location  | Grid Reference | Recorder                  | Sampling Method       | M/SH FRMRURD | Abundance   | Notes   |
|------------|---|----------------|---------------------------|-----------------------|--------------|---|---|
| 29/07/2011 | Russettings Nursing Home,<br>Mill Lane, Balcombe      | TQ313304       | Amanda Millar             | Grounded Bat          |              | 1 Male  |   |
| 02/07/2011 | B.T. Exchange, Bramble Hill,<br>Balcombe, Balcombe CP | TQ308306       | Jenny Clark               | Grounded Bat          |              | 1 Adult<br>Female; 1<br>Infant; 19<br>Dead; 8 Alive | Found enclosed in B.T. Exchange,<br>starved. Died end of July. (16 dead, 8<br>alive, 3 then died, 1 adult F. + baby<br>released). Sussex Bat Goup informed. |
| 13/09/2007 | Balcombe Rail bridge                                  | TQ3063430207   | Giles Coe                 | Aural bat<br>detector |              | taxon Present                                       | Several passes  |
| 15/08/2007 | Rocks Lane, Balcombe                                  | TQ30633021     | Giles Coe;Helen<br>Hodson | Aural bat<br>detector |              | 1 Present   | Circling in tunnel.   |

### Plecotus

### Long-eared sp.

It is difficult to distinguish the rare grey long-eared bat from the much more common brown long-eared bat without studying in the hand. This also applies to identifying the species from their droppings.

| Date       | Location   | Grid Reference | Recorder      | Sampling Method        | M/SH FRMRURD | Abundance | Notes              |
|------------|--|----------------|---------------|------------------------|--------------|-----------|--------------------|
| 04/06/2007 | 2 Shelley Cottages, Grouse<br>Road, Pease Pottage, RH11<br>9AS, West Sussex (VC13) | TQ328325       | NE Bat Worker | Building<br>Inspection |              | 7 Present |                    |
| 04/09/2006 | Cherry Tree Kennels,<br>Handcross Road, Balcombe,<br>RH17 6PP, West Sussex (VC13   | TQ292313       | NE Bat Worker | Building<br>Inspection |              | 1 Present | Bat detector used. |

### Plecotus auritus

### Brown Long-eared Bat

One of the more common British bat species, but difficult to distinguish from the much rarer grey long-eared bat (Plecotus austriacus), unless in the hand. It frequents woodland and orchards and has summer roosts in older buildings and trees. It often hibernates in caves, tunnels and mines. The brown long-eared has declined in the British Isles though it remains widespread.

| Date       | Location  | Grid Reference | Recorder                       | Sampling Method        | M/SH FRMRURD | Abundance      | Notes   |
|------------|---|----------------|--------------------------------|------------------------|--------------|----------------|---|
| 01/08/2013 | 3 Lake View Cottages,<br>Balcombe   | TQ31003068     | Amanda Millar                  | Grounded Bat           |              | 1 Adult Female | Not had baby this year, dead on<br>arrival. Caught by cat   |
| 14/05/2013 | Earlsworth, High Street<br>Balcombe   | TQ29413224     | Amanda Millar                  | Grounded Bat           |              | 1 Adult Male   |   |
| 01/08/2011 | Private property, Westup<br>Farm, Balcombe  | TQ299302       | NE Bat Worker                  | Building<br>Inspection |              | 12 Bat(s)      |   |
| 11/07/2008 | Poplar Cottage, London Road,<br>Haywards Heath, West Sussex<br>(VC13)             | TQ308335       | NE Bat Worker                  | Building<br>Inspection |              | 6 Present      | Mainly at south end of cottage.   |
| 03/11/2005 | Cherry Tree Kennels,<br>Handcross Road, Balcombe,<br>RH17 6PP, West Sussex (VC13) | TQ292313       | NE Bat Worker                  | Building<br>Inspection |              |                | Cavity wall insulation proposed.<br>Owner very bat friendly and said he<br>wouldn't get it done if threat to roost.<br>Reassured he can do it at right time of<br>year. |
| 26/06/2005 | Balcombe, West Sussex (VC13)  | TQ308336       | David King                     | Unspecified            |              | Bat(s) Present | Reported to recorder.   |
| 17/06/2005 | Balcombe Mill Rocks, West<br>Sussex (VC13)  | TQ318303       | Francis Rose                   | Unspecified            |              | Bat(s) Present |   |
| 22/08/2000 | Glendale, London Rd,<br>Balcombe, West Sussex (VC13)                              | TQ307305       | NE Bat Worker                  | Building<br>Inspection |              |                |   |
| 16/09/1999 | 45 Newlands, Balcombe, East<br>Sussex (VC14)                                      | TQ307300       | NE Bat Worker                  | Building<br>Inspection |              |                |   |
| 13/04/1994 | Glendale, London Road,<br>Balcombe, East Sussex (VC14)                            | TQ3030         | Recorder @<br>Sussex Bat Group | Building<br>Inspection |              | 1 Present      | Large number of droppings.  |
| 28/03/1994 | Glendale, London Road,<br>Balcombe, East Sussex (VC14)                            | TQ3030         | NE Bat Worker                  | Building<br>Inspection |              | 1 Present      | 100 during 1993 summer, first seen<br>1989.   |
| 01/07/1991 | Brightwell Farm, Balcombe,<br>East Sussex (VC14)                                  | TQ288288       | NE Bat Worker                  | Building<br>Inspection |              | 1 Present      |   |

| 21/10/1987                 | 42 Newlands, Balcombe, East<br>Sussex (VC14)                      | TQ308302 | Anon  | Droppings              |                |  |
|----------------------------|---|----------|---|------------------------|----------------|--|
| 23/08/1987                 | Washlands, Brantridge Lane,<br>Staplefield, West Sussex<br>(VC13) | TQ289291 | NE Bat Worker   | Building<br>Inspection | 1 Adult        | Well-used roost identified from droppings.                         |
| 23/08/1987                 | Heasmans Cottage,<br>Balcombe, West Sussex (VC13)                 | TQ310324 | NE Bat Worker   | Building<br>Inspection | 1 Present      |  |
| 31/12/1986                 | Heasmans Cottage,<br>Balcombe, West Sussex (VC13)                 | TQ310324 | NE Bat Worker   | Building<br>Inspection | 1 Hibernating  | This bat had moved at least twice since discovery in mid-November. |
| 01/01/1948 -<br>31/12/1995 | Balcombe Mill Rocks, West<br>Sussex (VC13)                        | TQ318303 | Simon<br>Davey;Francis<br>Rose;Tim<br>Rich;Rob<br>Cooke;Ronald<br>Archie Boniface | Unspecified            | Bat(s) Present |  |

## SUSSEX BIRD INVENTORY

The SxBRC holds nearly 1.5 million bird records provided by the Sussex Ornithological Society (SOS), ranging from 1990 onwards. Records within the breeding season of 15 Schedule 1 birds and three other species which are classed as sensitive in Sussex are not included in the Bird Inventory report. Any breeding season records of these species within your search area will be flagged up at the top of the report. It is



recommended that the SOS is contacted directly for further information as the birds in question will be protected by law and may be affected if potentially damaging operations are to be carried out. The list of withheld species is available on our website: <a href="https://www.sxbrc.org.uk/data-requests/SOS-excluded-data.pdf">www.sxbrc.org.uk/data-requests/SOS-excluded-data.pdf</a>

### Icons used in the Bird Report:

### Schedule 1 birds

Schedule 1 of the Wildlife and Countryside Act 1981 provides an additional tier of protection so that rare species are specially protected by increased penalties and cannot be intentionally or recklessly disturbed when nesting. **Schedule 1 status also infers a right of arrest** by a police officer if someone is suspected of committing certain offences against one of these species.

### **BAP** Biodiversity Action Plan Species (UK BAP)

Twenty-six species of bird are identified as Priority Species in the UK Biodiversity Action Plan (UK BAP), each the subject of a dedicated action plan which seeks to reverse their declines and protect vulnerable populations. Any Priority Species recorded within your enquiry area will be indicated in the species information of the bird report. Further details of BAP bird species can be found on the <u>JNCC website</u>.

### N Natural Environment & Rural Communities (NERC) Act

There are 49 bird species on the England Biodiversity List which was drawn up to meet the requirements of Section 41 of the Act. Further details of the NERC Act can be found on the <u>Natural</u> <u>England website</u>.

### Birds of Conservation Concern 3 (2009)

Every five years the leading governmental and non-governmental conservation organisations in the UK review the population status of the 247 species of bird that are regularly found in the UK. There are three lists – Red, Amber and Green - into which each of the species has been placed. 40 species are Red-listed, 121 are Amber-listed and 86 are Green-listed. The status decisions are based on several factors which include: the species' global and European conservation status; recent and historical decline; whether it is a rare breeder; if it is only confined to a few sites in the UK; and if the species is of international importance.

**Red List** species are those that are **Globally Threatened** according to IUCN criteria; those whose population or range has decline rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery.

Amber List species are those with Unfavourable Conservation Status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.

**Green List** species are those that do not fulfil any of the above criteria. Some of these species are however protected by law and the list includes some Schedule 1 species which have the highest level of protection. A green icon will <u>not</u> appear in our reports.

This information has been obtained from '*Birds of Conservation Concern 3*' (BoCC3) which can be downloaded from the <u>RSPB website</u>.

### Other bird legislation and conservation measures:

### Wildlife and Countryside Act (WCA) 1981

All British birds, their nests and eggs are protected by UK law. It is an offence to take, kill or injure any wild bird or to take, damage, destroy any nest or egg of any wild bird under Part 1 of the Wildlife and Countryside Act 1981, Schedules 1-4.

### Hedgerow removal and birds

It is advisable not to trim, cut or remove hedgerows during the bird nesting season. You will be violating the Wildlife and Countryside Act if there are birds nesting within it due to the disturbance or destruction of their habitat whilst nesting. The Hedgerows Regulations were introduced in 1997 to protect important hedgerows in the countryside. The regulations state that it is a criminal offence, unless an exception applies, to deliberately remove or otherwise destroy a hedgerow without permission. Please apply to your local planning authority for a Hedgerow Removal Application. Domestic hedges are not included in this regulation, however it is still illegal to cut or remove any hedges if birds are suspected to be nesting in it.

### **Birds in roofs**

There are various species that may nest in roofs. Unless they are causing a health hazard, the nests, eggs and chicks are protected by law. The parent birds must not be prevented from gaining access to their nest. Many of the birds that use roof spaces are now species of conservation concern because of their population decline over the past 25 years. Starlings and House Sparrows are Red-listed, while Barn Owls, House Martins and Swallows are Amber-listed (see next page for details). Roofs are also important for Swifts.

Further information about birds and the law can be found on the RSPB website.

### **Environmental Stewardship Target Species**

Farmland birds are one of the key targets of which a landowner can be awarded points through the Higher Level Stewardship scheme. Each Joint Character Area (e.g. High Weald, South Downs, South Coast Plain etc.) has specific key bird species whose populations must be maintained or enhanced to gain points as part of the land owner's 'Farm Environment Plan'. This can be done through a combination of management practices which should provide year round habitat requirements, in locations where these birds are known to be present or within 2km of such sites. If a key farmland bird species appears in your report, it will show to which Joint Character Area it is linked.

Further information about agri-environment schemes can be found on the RSPB website.

### **EU Birds Directive**

The Birds Directive addresses the conservation of all wild birds throughout the European Union, including marine areas, and covers their protection, management, control and exploitation. It applies to the birds, their eggs, nests and habitats. It places a broad requirement on Member States to take necessary measures to maintain the populations of all wild birds at levels determined by ecological, scientific and cultural needs. In doing so, Member States must also consider economic and recreational needs.

The Directive divides into two main parts: **habitat conservation** and **species protection**. In summary, it requires Member States to preserve, maintain and re-establish sufficient diversity and area of habitats for all wild birds.

### Annex I:

Species listed in Annex 1 of the Birds Directive are the subject of special conservation measures concerning their habitat to ensure their survival and reproduction. This includes the designation of areas as Special Protection Areas (SPAs).

### Annex 2:

Annex 2 of the Birds Directive lists birds that can be hunted under the legislation of the Member States. The Directive bands certain non-selective methods of hunting and defines the limits within which Member States can set the hunting season.

Further information about the EU Birds Directive can be found on the BirdLife website.

### **IUCN Red List**

The World Conservation Union (IUCN) has been assessing the conservation status of species, subspecies, varieties and even selected sub-populations on a global scale in order to highlight taxa threatened with extinction, and therefore promote their conservation. The IUCN Red List (different from the previously mentioned Red List) is the world's most comprehensive inventory of the global conservation status of plant and animal species. It uses a set of criteria to evaluate the extinction risk of thousands of species and subspecies. These criteria are relevant to all species and all regions of the world. With its strong scientific base, the IUCN Red List is recognized as the most authoritative guide to the status of biological diversity.

Further information about the Red List can be found on the IUCN website.



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### SUSSEX BIRD INVENTORY REPORT SUMMARY

### Please note that this is a summary page. Full details of these records are on the following pages.

N.B. The breeding season records of 15 Schedule 1 birds and three other species which are classed as sensitive in Sussex are not included in our biodiversity reports (see www.sxbrc.org.uk/enquiries/SOS-excluded-data.pdf for the list of excluded species). 58 such records have been flagged up in this search. It is critical that the Sussex Ornithological Society (SOS) is contacted directly for more information on these records if potentially damaging operations are to occur in the enquiry area. Email: conservation@sos.org.uk

### Land at Balcombe Parish

13 February 2014 ESD/14/74 Search Area: TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329

Katherine Daniel (Balcombe Parish Council)

| Common Name                 | Latin Name         | First Date | Last Date  | No. of Rec's | Total Abundance | Max. Abundance |
|-----------------------------|--------------------|------------|------------|--------------|-----------------|----------------|
| Mandarin Duck               | Aix galericulata   | 05/03/1978 | 13/12/2012 | 61           | 186             | 12             |
| Wood Duck                   | Aix sponsa         | 21/09/1986 | 12/08/1991 | 5            | 7               | 2              |
| Northern Pintail            | Anas acuta         | 12/10/1978 | 11/12/1993 | 3            | 5               | 2              |
| Northern Shoveler           | Anas clypeata      | 12/03/1980 | 23/03/2003 | 6            | 10              | 2              |
| Eurasian Teal               | Anas crecca        | 12/01/1978 | 11/01/2011 | 15           | 139             | 84             |
| Eurasian Wigeon             | Anas penelope      | 12/12/1979 | 14/10/2011 | 9            | 80              | 46             |
| Mallard                     | Anas platyrhynchos | 12/11/1977 | 13/12/2012 | 273          | 20736           | 450            |
| Gadwall                     | Anas strepera      | 12/11/1981 | 12/03/2006 | 9            | 42              | 14             |
| Greater White-fronted Goose | Anser albifrons    | 13/02/1999 | -          | 1            | 12              | 12             |
| Greylag Goose               | Anser anser        | 12/03/1985 | 13/12/2012 | 127          | 4429            | 342            |
| Common Pochard              | Aythya ferina      | 12/01/1978 | 22/02/2011 | 73           | 1131            | 118            |
| Tufted Duck                 | Aythya fuligula    | 12/01/1978 | 13/12/2012 | 165          | 2260            | 72             |
| Ferruginous Duck            | Aythya nyroca      | 10/03/1978 | -          | 1            | 1               | 1              |
| Brent Goose                 | Branta bernicla    | 23/03/2003 | 04/04/2012 | 3            | 6               | 4              |
| Greater Canada Goose        | Branta canadensis  | 24/02/1928 | 13/12/2012 | 182          | 4742            | 132            |
| Common Goldeneye            | Bucephala clangula | 12/02/1979 | 28/01/1996 | 13           | 24              | 3              |
| Black Swan                  | Cygnus atratus     | 25/08/1980 | 07/10/2006 | 3            | 6               | 4              |
| Mute Swan                   | Cygnus olor        | 12/12/1978 | 13/12/2012 | 121          | 774             | 32             |
| Common Scoter               | Melanitta nigra    | 06/04/2003 | -          | 1            | 5               | 5              |

| Common Name              | Latin Name                 | First Date | Last Date  | No. of Rec's | Total Abundance | Max. Abundance |
|--------------------------|----------------------------|------------|------------|--------------|-----------------|----------------|
| Smew                     | Mergellus albellus         | 07/02/1998 | 20/02/1998 | 3            | 3               | 1              |
| Goosander                | Mergus merganser           | 09/12/1989 | 13/12/2012 | 6            | 11              | 4              |
| Red-breasted Merganser   | Mergus serrator            | 12/01/1987 | 12/12/1987 | 2            | 2               | 1              |
| Ruddy Duck               | Oxyura jamaicensis         | 03/01/2002 | -          | 1            | 2               | 2              |
| Ruddy Shelduck           | Tadorna ferruginea         | 17/04/1982 | -          | 1            | 1               | 1              |
| Common Swift             | Apus apus                  | 23/04/1996 | 27/07/2010 | 9            | 23              | 6              |
| Grey Plover              | Pluvialis squatarola       | 07/05/1990 | 12/09/1999 | 2            | 7               | 6              |
| Northern Lapwing         | Vanellus vanellus          | 12/12/1977 | 24/03/2012 | 40           | 824             | 150            |
| Black-headed Gull        | Chroicocephalus ridibundus | 23/01/1993 | 13/12/2012 | 21           | 3989            | 2000           |
| Little Gull              | Hydrocoloeus minutus       | 26/08/1996 | -          | 2            | 2               | 1              |
| Herring Gull             | Larus argentatus           | 16/01/2004 | 13/12/2012 | 9            | 42              | 19             |
| Mew Gull                 | Larus canus                | 23/01/1993 | 12/12/2011 | 7            | 97              | 40             |
| Lesser Black-backed Gull | Larus fuscus               | 23/01/1993 | -          | 2            | 5               | 3              |
| Mediterranean Gull       | Larus melanocephalus       | 24/07/1990 | -          | 1            | 1               | 1              |
| Black-legged Kittiwake   | Rissa tridactyla           | 29/04/1981 | -          | 1            | 35              | 35             |
| Pallas's Sandgrouse      | Syrrhaptes paradoxus       | 05/06/1863 | -          | 1            | 1               | 1              |
| Common Sandpiper         | Actitis hypoleucos         | 13/05/1989 | 14/07/2009 | 28           | 71              | 13             |
| Dunlin                   | Calidris alpina            | 02/06/1989 | -          | 1            | 1               | 1              |
| Common Snipe             | Gallinago gallinago        | 09/12/1990 | 23/03/2003 | 2            | 3               | 2              |
| Eurasian Woodcock        | Scolopax rusticola         | 22/05/1976 | 30/07/2009 | 41           | 80              | 11             |
| Common Greenshank        | Tringa nebularia           | 12/09/1989 | 17/08/2005 | 4            | 7               | 2              |
| Green Sandpiper          | Tringa ochropus            | 12/11/1977 | 06/05/1994 | 13           | 23              | 5              |
| Black Tern               | Chlidonias niger           | 06/05/1990 | 29/08/2004 | 4            | 59              | 51             |
| Common Tern              | Sterna hirundo             | 13/05/1989 | 12/06/2010 | 20           | 49              | 10             |
| Sandwich Tern            | Sterna sandvicensis        | 18/04/1989 | 09/09/2011 | 3            | 5               | 2              |
| Grey Heron               | Ardea cinerea              | 01/04/1987 | 13/12/2012 | 147          | 607             | 28             |
| Great Bittern            | Botaurus stellaris         | 14/01/1982 | 16/09/2011 | 4            | 6               | 3              |
| Little Egret             | Egretta garzetta           | 31/07/1995 | 12/12/2011 | 9            | 9               | 1              |
| Stock Pigeon             | Columba oenas              | 11/06/1982 | 02/06/2012 | 10           | 9               | 2              |
| Common Wood Pigeon       | Columba palumbus           | 11/06/1982 | 13/12/2012 | 37           | 3398            | 2000           |
| Eurasian Collared Dove   | Streptopelia decaocto      | 30/06/1982 | 14/06/2012 | 9            | 10              | 2              |
| European Turtle Dove     | Streptopelia turtur        | 30/06/1982 | 01/07/2007 | 19           | 28              | 4              |
| Rose-ringed Parakeet     | Psittacula krameri         | 31/03/1998 | _          | 1            | 1               | 1              |
| Common Kingfisher        | Alcedo atthis              | 31/03/1978 | 13/12/2012 | 97           | 133             | 8              |
| Common Cuckoo            | Cuculus canorus            | 11/06/1982 | 01/07/2007 | 27           | 28              | 2              |
| Eurasian Sparrowhawk     | Accipiter nisus            | 30/06/1982 | 24/10/2012 | 36           | 43              | 3              |
| Common Buzzard           | Buteo buteo                | 08/06/1985 | 19/11/2012 | 79           | 160             | 7              |
| Hen Harrier              | Circus cyaneus             | 21/01/2012 | -          | 1            | 1               | 1              |
| Red Kite                 | Milvus milvus              | 15/12/2011 | 20/12/2011 | 2            | 3               | 2              |

| Common Name          | Latin Name                    | First Date | Last Date  | No. of Rec's | Total Abundance | Max. Abundance |
|----------------------|-------------------------------|------------|------------|--------------|-----------------|----------------|
| Osprey               | Pandion haliaetus             | 23/05/1984 | 17/09/2011 | 17           | 18              | 2              |
| Merlin               | Falco columbarius             | 15/12/1992 | -          | 1            | 1               | 1              |
| Peregrine Falcon     | Falco peregrinus              | 05/01/1983 | -          | 1            | 1               | 1              |
| Eurasian Hobby       | Falco subbuteo                | 22/09/1984 | 22/09/2007 | 9            | 11              | 2              |
| Common Kestrel       | Falco tinnunculus             | 30/07/1989 | 27/08/2012 | 19           | 19              | 2              |
| Red-legged Partridge | Alectoris rufa                | 22/01/1993 | 30/04/2012 | 8            | 15              | 3              |
| Grey Partridge       | Perdix perdix                 | 19/05/2001 | -          | 1            | 2               | 2              |
| Common Pheasant      | Phasianus colchicus           | 11/06/1982 | 13/12/2012 | 48           | 129             | 39             |
| Common Crane         | Grus grus                     | 03/05/2010 | 04/05/2010 | 2            | 0               | 0              |
| Common Coot          | Fulica atra                   | 12/12/1982 | 13/12/2012 | 187          | 7137            | 417            |
| Common Moorhen       | Gallinula chloropus           | 07/04/1983 | 13/12/2012 | 127          | 787             | 19             |
| Water Rail           | Rallus aquaticus              | 29/07/1984 | 15/03/2003 | 7            | 7               | 1              |
| Long-tailed Tit      | Aegithalos caudatus           | 11/06/1982 | 13/12/2012 | 29           | 108             | 35             |
| Sky Lark             | Alauda arvensis               | 08/04/2007 | 05/05/2011 | 2            | 2               | 1              |
| Wood Lark            | Lullula arborea               | 03/06/1992 | 25/10/2008 | 38           | 64              | 6              |
| Eurasian Treecreeper | Certhia familiaris            | 11/06/1982 | 13/12/2012 | 34           | 45              | 5              |
| Common Raven         | Corvus corax                  | 13/12/2012 | -          | 1            | 1               | 1              |
| Carrion Crow         | Corvus corone                 | 11/06/1982 | 13/12/2012 | 30           | 123             | 16             |
| Carrion Crow         | Corvus corone subsp. corone   | 11/06/1982 | 23/08/2002 | 4            | 0               | 0              |
| Rook                 | Corvus frugilegus             | 20/01/2008 | 19/11/2012 | 6            | 78              | 52             |
| Eurasian Jackdaw     | Corvus monedula               | 30/06/1982 | 19/11/2012 | 23           | 139             | 45             |
| Eurasian Jay         | Garrulus glandarius           | 11/06/1982 | 19/11/2012 | 19           | 24              | 4              |
| Black-billed Magpie  | Pica pica                     | 11/06/1982 | 19/11/2012 | 25           | 39              | 5              |
| Yellowhammer         | Emberiza citrinella           | 11/06/1982 | 02/06/2012 | 30           | 62              | 18             |
| Reed Bunting         | Emberiza schoeniclus          | 01/06/1979 | 12/06/2010 | 18           | 85              | 14             |
| Lesser Redpoll       | Carduelis cabaret             | 27/06/1979 | 13/12/2012 | 36           | 1640            | 325            |
| Common Linnet        | Carduelis cannabina           | 30/06/1982 | 02/06/2012 | 5            | 3               | 1              |
| European Goldfinch   | Carduelis carduelis           | 08/10/1989 | 13/12/2012 | 42           | 491             | 100            |
| European Greenfinch  | Carduelis chloris             | 30/06/1982 | 30/04/2012 | 13           | 472             | 189            |
| Common Redpoll       | Carduelis flammea             | 11/06/1982 | -          | 1            | 0               | 0              |
| Eurasian Siskin      | Carduelis spinus              | 05/10/1989 | 13/12/2012 | 60           | 1213            | 150            |
| Hawfinch             | Coccothraustes coccothraustes | 17/01/1986 | 05/02/2003 | 2            | 2               | 1              |
| Chaffinch            | Fringilla coelebs             | 11/06/1982 | 13/12/2012 | 32           | 230             | 100            |
| Brambling            | Fringilla montifringilla      | 12/03/1989 | 22/10/1997 | 13           | 199             | 70             |
| Common Crossbill     | Loxia curvirostra             | 16/11/1979 | 28/07/2009 | 92           | 1481            | 100            |
| Common Bullfinch     | Pyrrhula pyrrhula             | 11/06/1982 | 13/12/2012 | 49           | 85              | 8              |
| House Martin         | Delichon urbicum              | 08/10/1990 | 27/08/2012 | 30           | 808             | 250            |
| Barn Swallow         | Hirundo rustica               | 15/04/1990 | 27/08/2012 | 31           | 120             | 20             |
| Sand Martin          | Riparia riparia               | 25/03/1990 | 27/08/2012 | 5            | 38              | 30             |

| Common Name           | Latin Name                      | First Date | Last Date  | No. of Rec's | Total Abundance | Max. Abundance |
|-----------------------|---------------------------------|------------|------------|--------------|-----------------|----------------|
| Great Grey Shrike     | Lanius excubitor                | 23/03/1996 | _          | 1            | 1               | 1              |
| Meadow Pipit          | Anthus pratensis                | 05/02/1984 | -          | 1            | 40              | 40             |
| Tree Pipit            | Anthus trivialis                | 28/05/1978 | 26/05/2001 | 50           | 139             | 15             |
| Pied Wagtail          | Motacilla alba                  | 11/06/1982 | 19/11/2012 | 16           | 155             | 100            |
| Pied Wagtail          | Motacilla alba subsp. yarrellii | 11/06/1982 | 08/04/2007 | 2            | 1               | 1              |
| Grey Wagtail          | Motacilla cinerea               | 01/06/1962 | 08/07/2013 | 122          | 215             | 7              |
| Yellow Wagtail        | Motacilla flava                 | 10/11/1995 | -          | 1            | 1               | 1              |
| Pied Flycatcher       | Ficedula hypoleuca              | 19/08/1989 | -          | 1            | 1               | 1              |
| Spotted Flycatcher    | Muscicapa striata               | 11/06/1982 | 27/07/2010 | 24           | 38              | 5              |
| Northern Wheatear     | Oenanthe oenanthe               | 25/03/1990 | 07/10/2006 | 3            | 3               | 1              |
| Blue Tit              | Cyanistes caeruleus             | 11/06/1982 | 13/12/2012 | 53           | 1507            | 206            |
| Great Tit             | Parus major                     | 11/06/1982 | 13/12/2012 | 56           | 504             | 69             |
| Coal Tit              | Periparus ater                  | 11/06/1982 | 19/11/2012 | 38           | 97              | 10             |
| Willow Tit            | Poecile montanus                | 26/11/1983 | 02/06/2007 | 38           | 61              | 6              |
| Marsh Tit             | Poecile palustris               | 11/06/1982 | 13/12/2012 | 89           | 286             | 20             |
| House Sparrow         | Passer domesticus               | 30/01/2005 | 02/06/2012 | 7            | 22              | 12             |
| Eurasian Tree Sparrow | Passer montanus                 | 22/11/1985 | -          | 1            | 1               | 1              |
| Hedge Accentor        | Prunella modularis              | 30/06/1982 | 13/12/2012 | 22           | 30              | 4              |
| Firecrest             | Regulus ignicapilla             | 08/10/1989 | 12/05/2000 | 9            | 13              | 3              |
| Goldcrest             | Regulus regulus                 | 11/06/1982 | 13/12/2012 | 44           | 104             | 20             |
| European Robin        | Erithacus rubecula              | 11/06/1982 | 13/12/2012 | 35           | 131             | 21             |
| Common Nightingale    | Luscinia megarhynchos           | 01/06/1980 | 01/07/2007 | 24           | 35              | 3              |
| Common Redstart       | Phoenicurus phoenicurus         | 13/05/1982 | 15/06/2000 | 13           | 16              | 4              |
| Whinchat              | Saxicola rubetra                | 26/08/1995 | 29/08/2008 | 2            | 2               | 1              |
| Stonechat             | Saxicola torquata               | 14/04/1996 | 26/02/2000 | 5            | 11              | 4              |
| Wood Nuthatch         | Sitta europaea                  | 11/06/1982 | 24/10/2012 | 73           | 198             | 25             |
| Common Starling       | Sturnus vulgaris                | 30/01/2005 | 16/11/2012 | 5            | 62              | 50             |
| Sedge Warbler         | Acrocephalus schoenobaenus      | 08/10/1989 | 23/04/2004 | 3            | 4               | 2              |
| Eurasian Reed Warbler | Acrocephalus scirpaceus         | 14/06/1989 | 14/05/2012 | 12           | 24              | 6              |
| Common Chiffchaff     | Phylloscopus collybita          | 11/06/1982 | 27/08/2012 | 61           | 185             | 40             |
| Wood Warbler          | Phylloscopus sibilatrix         | 01/06/1984 | 19/08/2007 | 14           | 17              | 2              |
| Willow Warbler        | Phylloscopus trochilus          | 11/06/1982 | 27/08/2012 | 18           | 46              | 9              |
| Blackcap              | Sylvia atricapilla              | 30/06/1982 | 02/06/2012 | 39           | 146             | 60             |
| Garden Warbler        | Sylvia borin                    | 11/06/1982 | 02/06/2012 | 19           | 45              | 20             |
| Common Whitethroat    | Sylvia communis                 | 31/12/1978 | 02/06/2012 | 9            | 17              | 5              |
| Lesser Whitethroat    | Sylvia curruca                  | 03/06/2002 | -          | 1            | 1               | 1              |
| Winter Wren           | Troglodytes troglodytes         | 11/06/1982 | 13/12/2012 | 31           | 94              | 19             |
| Redwing               | Turdus iliacus                  | 15/03/1989 | 19/11/2012 | 10           | 512             | 200            |
| Common Blackbird      | Turdus merula                   | 11/06/1982 | 13/12/2012 | 30           | 104             | 19             |

| Common Name               | Latin Name                | First Date | Last Date  | No. of Rec's | Total Abundance | Max. Abundance |
|---------------------------|---------------------------|------------|------------|--------------|-----------------|----------------|
| Song Thrush               | Turdus philomelos         | 11/06/1982 | 13/12/2012 | 34           | 55              | 9              |
| Fieldfare                 | Turdus pilaris            | 09/09/1990 | 26/03/2011 | 13           | 663             | 200            |
| Mistle Thrush             | Turdus viscivorus         | 11/06/1982 | 26/03/2011 | 11           | 52              | 40             |
| European Shag             | Phalacrocorax aristotelis | 06/01/1993 | -          | 1            | 1               | 1              |
| Great Cormorant           | Phalacrocorax carbo       | 12/10/1984 | 13/12/2012 | 161          | 2113            | 90             |
| Great Spotted Woodpecker  | Dendrocopos major         | 04/06/1980 | 13/12/2012 | 82           | 112             | 8              |
| Lesser Spotted Woodpecker | Dendrocopos minor         | 11/06/1982 | 20/02/2003 | 11           | 11              | 1              |
| Green Woodpecker          | Picus viridis             | 30/06/1982 | 13/12/2012 | 42           | 49              | 5              |
| Slavonian Grebe           | Podiceps auritus          | 23/11/1993 | 18/03/1994 | 2            | 3               | 2              |
| Great Crested Grebe       | Podiceps cristatus        | 12/03/1978 | 13/12/2012 | 332          | 3407            | 105            |
| Little Grebe              | Tachybaptus ruficollis    | 15/01/1984 | 08/10/2006 | 7            | 11              | 3              |
| European Nightjar         | Caprimulgus europaeus     | 03/06/1992 | -          | 1            | 1               | 1              |
| Little Owl                | Athene noctua             | 01/03/1980 | 06/08/2008 | 35           | 54              | 4              |
| Tawny Owl                 | Strix aluco               | 30/04/1979 | 30/04/2012 | 46           | 59              | 4              |
| Barn Owl                  | Tyto alba                 | 25/01/1977 | 05/11/2012 | 4            | 4               | 1              |
| Ноорое                    | Upupa epops               | 25/08/1980 | -          | 1            | 1               | 1              |



### SUSSEX BIRD INVENTORY REPORT

### Land at Balcombe Parish

13 February 2014 ESD/14/74 Search Area: TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329

Katherine Daniel (Balcombe Parish Council)

Please note that all British birds, their nests and eggs are protected in British law. It is an offence to deliberately take, kill or injure any wild bird or to take, damage, or destroy any nest or egg of any wild bird under Part 1 of the Wildlife and Countryside Act 1981 (as amended). However, Schedule 1 of this act provides an additional tier of protection so that rare species are specially protected by increased penalties and cannot be intentionally or recklessly disturbed when nesting. Schedule 1 status also infers a right of arrest by a police officer if someone is suspected of committing certain offences against one of these species. Other statuses listed below can be referenced in the attached sheets.

### Aix galericulata

### Mandarin Duck

Scarce but increasing introduced resident in Sussex. This ornate eastern Asian duck can be found on lakes and slow-flowing rivers with plenty of surrounding vegetation. It breeds in tree holes.

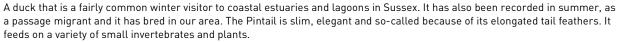
Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 05/03/1978 | 13/12/2012 | 61             |

| Aix sponsa | Wa         | ood Duck       |
|------------|------------|----------------|
| First Date | Last Date  | No. of Records |
| 21/09/1986 | 12/08/1991 | 5              |

### Anas acuta

### **Northern Pintail**



Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2; EC CITES Annex C; Wildlife and Countryside Act 1981 [Schedule 1 Part 2]

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/10/1978 | 11/12/1993 | 3              |

### Anas clypeata

**Northern Shoveler** 



A very scarce resident duck and a fairly common winter visitor and passage migrant. Easily distinguished by its long and broad spatulate bill which it uses to sift small insects and plant matter from the water. Breeds on marshy, reed-fringed pools and winters on lakes, reservoirs, marshes and estuaries.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2; EC CITES Annex C

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/03/1980 | 23/03/2003 | 6              |

### Anas crecca

### **Eurasian Teal**



This small duck is a scarce resident and common winter visitor to Sussex. It feeds on small invertebrates and seeds, and both male and female show bright green wing patches in flight. The Arun valley is a particularly important overwintering site. It is often present in summer in places such as Rye Harbour, Pagham Harbour and the Arun Valley.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2; EC CITES Annex C

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/01/1978 | 11/01/2011 | 15             |

### Anas penelope

### Eurasian Wigeon

A common winter visitor and passage migrant. Males show a distinct white wing patch and cream-buff forehead and crown. This medium-sized duck favours estuaries and coastal marshes, but also found on reservoirs and gravel pits. It feeds on aquatic plants, grasses and roots.

Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2; EC CITES Annex C

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/12/1979 | 14/10/2011 | 9              |

### Anas platyrhynchos

A large common duck found throughout the British Isles both as a breeding resident and winter visitor. Can be seen in most wetland habitats including ponds in urban areas. It feeds on seeds, acorns and berries, plants, insects and shellfish. The population is supplemented each year with birds captive bred for shooting.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2

Mallard

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/11/1977 | 13/12/2012 | 273            |

### Anas strepera

### Gadwall

A grey-coloured dabbling duck which is a scarce breeder, fairly common winter visitor and passage migrant. Breeds in small numbers throughout south and south east England and East Anglia on still inland waters such as reservoirs and flooded gravel pits. Feeds on stems, leaves and seeds.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/11/1981 | 12/03/2006 | 9              |

A

### Anser albifrons

### **Greater White-fronted Goose**

BAP N

A scarce winter visitor and passage migrant mainly in the east of the county. It is a grey goose which feeds on grass, clover, grain, winter wheat and potatoes.

Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 13/02/1999 | -         | 1              |

### Anser anser

### **Greylag Goose**

An increasingly common introduced resident, winter visitor and scarce passage migrant. There are truly wild populations in northern Britain. The Greylag is the largest and bulkiest of the wild geese native to our area. They are mostly found around reservoirs, lakes and gravel pits in our area where they can feed on grass and roots.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 2)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/03/1985 | 13/12/2012 | 127            |

### Aythya ferina

### **Common Pochard**

A stocky diving duck that is a very scarce breeder and fairly common winter visitor and passage migrant. It breeds on large, reedfringed lakes and winters on lakes, reservoirs and in sheltered bays. It has a varied diet of plants and seeds, snails, small fish and insects.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/01/1978 | 22/02/2011 | 73             |

## Aythya fuligula

### **Tufted Duck**



Α

A diving duck that needs the deep waters of lakes, reservoirs and gravel pits. Males have a golden eye and a purple head with a tuft. It feeds on molluscs, insects and some plants. It is a scarce breeding species and fairly common resident and winter visitor which is widespread in suitable habitats across East and West Sussex.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/01/1978 | 13/12/2012 | 165            |

### Aythya nyroca

### **Ferruginous Duck**

A medium-sized diving duck which is a rare vagrant. It feeds on aquatic plants with some molluscs, aquatic insects and small fish.(see details at www.sos.org.uk)

Birds Directive Annex 1; Convention on Migratory Species; Appendix 1; Convention on Migratory Species; Appendix 2; EC CITES Annex A

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 10/03/1978 | -         | 1              |

### Branta bernicla

#### **Brent Goose**



This small dark goose is a common winter visitor especially to Chichester and Pagham Harbours where it can be found in the estuaries and shallow coasts with mudflats. It grazes on fields near the coast and on it's main food, eel-grass, on the mud flats. It is also a passage migrant; a few oversummer. This nominate subspecies breeds in western Siberia.

Bird Population Status - amber; Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 23/03/2003 | 04/04/2012 | 3              |

## Branta canadensis

#### **Greater Canada Goose**

A common and increasing introduced resident and partial migrant, showing a grey/brown body and black neck and cap. The Canada goose was introduced around 300 years ago but was not much seen outside waterfowl collections until after World War II when it started to spread. Now the most familiar goose in the British countryside. Canada geese are a complex group of species, subspecies and hybrids. It feeds on vegetation: roots, grass, leaves and seeds.

Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 24/02/1928 | 13/12/2012 | 182            |

### Bucephala clangula

#### **Common Goldeneye**



This medium-sized diving duck is a scarce winter visitor and rare in summer. Mainly recorded from Chichester Harbour, Pagham Harbour and Rye Harbour, as well as Weir Wood and Bewl Water reservoirs. Mussels, insect larvae, small fish and plants make up the diet of this striking black, white and green duck.

Bird Population Status - amber; Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 2)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/02/1979 | 28/01/1996 | 13             |

| Cygnus atratus | E          | Black Swan     |
|----------------|------------|----------------|
| First Date     | Last Date  | No. of Records |
| 25/08/1980     | 07/10/2006 | 3              |

# Cygnus olor

#### **Mute Swan**

A fairly common resident which has increased recently due to better protection and the control of the sale of lead fishing weights. This elegant large white waterbird has an orange beak and is found on lakes, rivers and other waterbodies where it feeds on water plants, insects and snails.

Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/12/1978 | 13/12/2012 | 121            |

### Melanitta nigra

#### **Common Scoter**



A common spring passage migrant and fairly common winter visitor; scarcer in summer and autumn; this dark seaduck has been recorded off the Sussex coast throughout the year. They are often seen as large bobbing rafts offshore, or long straggling lines flying along the coast. Its main wintering locality is Rye Bay. Wintering concentrations are extremely vulnerable to largescale oil spills and breeding populations in the north have declined substantially. It feeds on molluscs.

Bird Population Status - red; Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 06/04/2003 | -         | 1              |
|            |           |                |

#### Mergellus albellus

A small compact diving duck which is a very scarce winter visitor, mainly to the east of the county. Usually recorded from inland waters, such as gravel pits, reservoirs and lakes rather than at sea, especially during hard weather. The male is the regions whitest small wildfowl and the female has a chestnut-red head. The smew belongs to the Sawbill family and feeds on fish, insect larvae and other insects.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2

### Mergus merganser

#### Goosander

Smew

The Goosander is the largest of the Sawbill family. It is a scarce winter visitor and passage migrant mainly to reservoirs and estuaries with numbers increasing during hard weather. This handsome diving duck uses it's long serrated bills for catching fish prey and is often seen in groups. As with other sawbills the females are known as "Redheads."

Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 09/12/1989 | 13/12/2012 | 6              |

#### Mergus serrator

## **Red-breasted Merganser**

This attractive diving duck is a fairly common winter visitor and passage migrant to the coast, and a few summer. Most frequently recorded in winter from the Chichester Harbour and Pagham areas, sometimes in large flocks. They are of the Sawbill family which means that they have long, serrated bills used for catching fish. As with other sawbills the females are known as "Redheads."

Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/01/1987 | 12/12/1987 | 2              |

# Oxyura jamaicensis

## **Ruddy Duck**

A duck that was introduced into Europe from North America for wildfowl collections. It is well-established and increasing, both in Britain and on the European mainland where it hybridises with the indigenous white-headed duck, Oxyura leucocephala. If the ruddy duck is not controlled there is a danger that the globally threatened white-headed will become extinct. The British government has decided in 2002 to proceed with a ruddy duck eradication programme and other control measures.

Convention on Migratory Species; Appendix 2

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 03/01/2002 | -         | 1              |

### Tadorna ferruginea

**Ruddy Shelduck** 



This large orange-brown duck is a rare vagrant, or more frequently escape. All records in the UK since 1946 are considered to be of captive origin. (see details at www.sos.org.uk).

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 17/04/1982 | -         | 1              |
|            |           |                |

#### Apus apus

# **Common Swift**

A well-known common summer visitor and passage migrant, widely distributed in Sussex. This sickle-shaped medium-sized dark aerial bird only stops flying when at the nest, it even sleeps on the wing! Many towns and villages have breeding populations. Very large migration movements are sometimes recorded with many thousands of birds involved. Can be seen in large screaming parties speeding around rooftops. They feed on flying insects and airborne spiders.

Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 23/04/1996 | 27/07/2010 | 9              |

## Pluvialis squatarola

### **Grey Plover**

A medium-sized browny-grey Plover which is a common winter visitor and passage migrant usually recorded on the intertidal zone. It feeds on shellfish and worms, and can be seen on mudflats, estuaries and saltmarsh at low tide, and in flocks on coastal fields at high tide. Identified by it's white rump and black "armpits" which are visible in flight.

Bird Population Status - amber; Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 07/05/1990 | 12/09/1999 | 2              |

# Vanellus vanellus

# Northern Lapwing



A large wader which is a familiar farmland and wetland bird, is a scarce breeder and very common winter visitor that is widespread in Sussex. The bird declined markedly in South East England at the end of the last century. The favoured breeding habitat is mixed farmland and suitable habitats have been in short supply. Its diet consists of worms and insects.

Bird Population Status - red; Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2; Environmental Stewardship Target Species (Pevensey Levels); Environmental Stewardship Target Species (Romney Marsh); Environmental Stewardship Target Species (South Downs); Environmental Stewardship Target Species (Wealden Greensand); Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/12/1977 | 24/03/2012 | 40             |

## Chroicocephalus ridibundus Black-headed Gull

This medium-sized gull has a chocolate-coloured head in the summer and a white head for the rest of the year. It is a common breeding species, abundant winter visitor and passage migrant occurring both inland and on the coast. This is the most numerous and widespread gull in Sussex and can be found feeding in small groups and flocks on coastal habitats aswell as inland on ploughed fields and playing fields; it's diet is made up of worms, insects, fish and carrion.

Bird Population Status - amber; Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 23/01/1993 | 13/12/2012 | 21             |

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Α

### Hydrocoloeus minutus

Little Gull



This small dainty gull is a fairly common passage migrant which is most numerous in spring but scarce in summer and winter. Records of this species have increased during recent decades. Mainly recorded from the coast, but occasionally inland. Can be seen along coasts and estuaries, but also inland at lakes and reservoirs where it feeds on insects.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 26/08/1996 | -         | 2              |

# Larus argentatus

Herring Gull

BAP N R

This large gull is a common breeding resident, passage migrant and winter visitor, but one that has suffered moderate declines over the last 25 years. It breeds, often in colonies, in coastal locations including on rooftops. Widely recorded both inland, including reservoirs and rubbish tips, and in most coastal habitats including shingle beaches. It is omnivorous and is a voracious scavenger.

Bird Population Status - red; Birds Directive Annex 2.2; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 16/01/2004 | 13/12/2012 | 9              |

## Larus canus

Mew Gull

The Mew Gull (also known as the Common Gull) is a smaller, more gentle-looking, version of the Herring Gull. It is a common winter visitor and passage migrant with small numbers in the summer; it bred in Sussex until 1963 and attempted to breed in 2006. Widely recorded both inland in towns and on farmland, and on the coast especially in estuarine habitats. It has a varied diet of worms, insects, fish, carrion and rubbish.

Bird Population Status - amber; Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 23/01/1993 | 12/12/2011 | 7              |

# Larus fuscus

# Lesser Black-backed Gull

Fairly common passage migrant and winter visitor; small numbers (mainly immatures) summer and a few pairs breed on rooftops in towns. Can be found in coastal areas in the summer and on farmland in the winter; roosting on large bodies of water such as reservoirs. Its an omnivore and scavenges a wide range of food.

Bird Population Status - amber; Birds Directive Annex 2.2

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 23/01/1993 | -         | 2              |

# Larus melanocephalus

Mediterranean Gull



Α

Fairly common throughout the year and increasing globally. Has bred annually since 1994, with an established breeding colony at Rye Harbour. This gull is slightly larger than a Black-headed Gull, with a bright red beak; it feeds on insects, fish, offal and carrion.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 24/07/1990 | -         | 1              |

# Rissa tridactyla

# **Black-legged Kittiwake**



A common but localised breeding species on cliffs near Newhaven, Seaford and a few places elsewhere, it is a common winter visitor and passage migrant. This gentle-looking medium-sized gull is usually recorded on the coast and is rare inland. It feeds on fish, shrimps and worms and gets its name from the "kitti-waaake" call that it makes.

Bird Population Status - amber

| Biru Population Statt                         |   |  |           |
|---|---|--|-----------|
| First Date                                    | Last Date   | No. of Records   |           |
| 29/04/1981                                    | -   | 1  |           |
| Syrrhaptes pa                                 | aradovus  | Pallas's Sandgrouse  |           |
| Syn napies pe                                 |   | allas s Januyi vuse  |           |
| Bern Convention App                           | oendix 2  |  |           |
| First Date                                    | Last Date   | No. of Records   |           |
| 05/06/1863                                    | -   | 1  |           |
| Actitis hypole                                | ucos (  | Common Sandpiper   |           |
|   |   | ge migrant, recognised by its bobbing motion and high pitched call. A few<br>is most commonly seen on muddy margins along rivers, and around poo   |           |
| Bird Population Statu                         | us - amber; Convention or                                 | n Migratory Species; Appendix 2  |           |
| First Date                                    | Last Date   | No. of Records   |           |
| 13/05/1989                                    | 14/07/2009  | 28   |           |
| Calidris alpin                                | a l   | Dunlin   | R         |
| wherever mud is pre                           | sent. Often seen feeding i                                | tor and common passage migrant occurring on the coast and along estu<br>in flocks, looking for insects, worms and snails. Small numbers are also<br>otund shape are key identification features.   |           |
| Bern Convention App                           | endix 2; Bird Population                                  | Status - red; Convention on Migratory Species; Appendix 2  |           |
| First Date                                    | Last Date   | No. of Records   |           |
| 02/06/1989                                    | -   | 1  |           |
| Gallinago gall                                | linago (  | Common Snipe   | A         |
| undergone particular<br>with short legs and a | rly steep declines in lowla<br>long bill used to probe fo | winter visitor favouring poorly drained pasture. The UK population of Sn<br>and wet grassland in the past twenty-five years. It is a plump medium-siz<br>or small invertebrates, including worms and insect larvae. Males display<br>ucing a noise by vibrating their tail feathers. | zed wader |

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 09/12/1990 | 23/03/2003 | 2              |

### Scolopax rusticola

#### **Eurasian Woodcock**



The Woodcock is a large bulky wading bird with short legs and a long tapered bill used for probing the earth for worms, beetles, spiders, caterpillars, fly larvae and small snails. It is a fairly common resident and winter visitor found mainly in the more heavily wooded parts of The Weald as it needs large areas of moist woodland with rides, dense undergrowth and damp areas for feeding. It is well known for it's "Roding" display flight when it makes lots of croak and whistle sounds while flying slowly around it's territory.

Bird Population Status - amber; Birds Directive Annex 2.1; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 22/05/1976 | 30/07/2009 | 41             |

# Tringa nebularia

### Common Greenshank

This medium-sized slim wader has dark upperparts, white underparts and long green legs. In Sussex it is a fairly common passage migrant, and a few overwinter. More commonly recorded in West Sussex at places such as Chichester and Pagham Harbours, but also recorded elsewhere along the Sussex coast on estuaries and saltmarshes, and at some inland sites such as gravel pits and reservoirs. Its diet is made up of worms, snails and fish.

Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/09/1989 | 17/08/2005 | 4              |

# Tringa ochropus

#### **Green Sandpiper**

A scarce spring and fairly common autumn passage migrant recorded from a wide range of fresh water sites in Sussex, both inland and near the coast preferring freshwater margins. Small numbers overwinter in Sussex. It is a dark and white medium sized wader with a distinctive white rump and it feeds on insects.

Bern Convention Appendix 2; Bird Population Status - amber; Convention on Migratory Species; Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/11/1977 | 06/05/1994 | 13             |

## Chlidonias niger

# **Black Tern**



Α

V

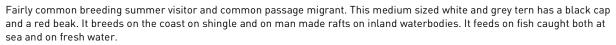
This small dark marsh tern is a scarce passage migrant recorded from many places in Sussex, both on freshwater habitats such as gravel pits, reservoirs and lakes, and along the coast. It feeds on invertebrates and fish which it skims from the surface of the water. They occasionally occur in large numbers.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 06/05/1990 | 29/08/2004 | 4              |

## Sterna hirundo

## Common Tern



Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 13/05/1989 | 12/06/2010 | 20             |

#### Sterna sandvicensis

Sandwich Tern



It is a scarce breeding summer visitor and common passage migrant; rarely recorded in winter. Breeds on beaches and islands, in Sussex the only breeding site is currently Rye Harbour. This large white tern has a shaggy black cap and a black beak tipped with yellow. It feeds on fish such as sand-eels, sprats and whiting.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 18/04/1989 | 09/09/2011 | 3              |

## Ardea cinerea

### **Grey Heron**

A fairly common resident, the Grey Heron is increasing in numbers and can be found in most wetland areas standing silently at the water's edge waiting for fish prey. Breeds colonially in tall trees near to plentiful fish supplies.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 01/04/1987 | 13/12/2012 | 147            |

#### Botaurus stellaris

**Great Bittern** 

BAP N R

This elusive bird, well known for its "booming" call, is rare but increasing within the UK. In the breeding season it is confined almost entirely to lowland marshes and reedbeds in Norfolk, Suffolk and Lancashire where it feeds principally on fish and amphibians. It has been recorded as a scarce wintering species in several Sussex wetlands including those at the Rye Harbour NR where extensive work has been undertaken to improve conditions for it. It is rare outside the winter months.

Bern Convention Appendix 2; Bird Population Status - red; Birds Directive Annex 1; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 14/01/1982 | 16/09/2011 | 4              |

# Egretta garzetta

# Little Egret



A medium-sized white heron with characteristic bright yellow feet. It overwinters in Britain primarily on estuaries in the south and west and it has been breeding at a few southern sites since 1996. The little egret has been recorded from many places along Sussex coasts and estuaries and Chichester and Langstone Harbours are one of the best British locations. It feeds on fish.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; EC CITES Annex A

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 31/07/1995 | 12/12/2011 | 9              |

#### Columba oenas

# Stock Pigeon

This species is similar in appearance to the Feral Pigeon and is a common resident and possible winter visitor. Mostly recorded north of the Downs in ancient woods and parkland as well as cliffs and quarries. It declined considerably when organochlorine pesticides were in use, but has made a steady recovery. Feeds on seed.

Bird Population Status - amber; Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 02/06/2012 | 10             |

#### Columba palumbus

### **Common Wood Pigeon**

This is the UK's largest and most common pigeon and is an abundant resident and winter visitor. Found in woodland, farmland and urban areas, and can be seen in large flocks in fields in the winter. Feeds on crops like cabbages, sprouts, peas and grain. Also buds, shoots, seeds, nuts and berries.

Birds Directive Annex 2.1

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 37             |

# Streptopelia decaocto

# Eurasian Collared Dove

This species is a very common resident closely associated with human habitation and can be found on farms, in gardens and in parks where it can feed on seeds and grain. After spreading across Europe, this species first bred in Britain in 1955 and arrived in Sussex in 1958; it is now found throughout the area. It has a distinctive buff plumage with a black neck collar and is usually seen in pairs. It is well known for its monotonous cooing.

Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 14/06/2012 | 9              |

## Streptopelia turtur

## European Turtle Dove



A declining summer migrant that breeds at the northern edge of its range in the UK. It is confined largely to the south and east of England and is associated with fertile arable farmland in warm, dry situations where it feeds on seed. Nests in thick hedges, bushes and low trees in woodland edges, copses, commons, heaths and parkland. Easily identified by its evocative purring call.

Bird Population Status - red; Birds Directive Annex 2.2; EC CITES Annex A; Environmental Stewardship Target Species (High Weald); Environmental Stewardship Target Species (Low Weald); Environmental Stewardship Target Species (Romney Marsh); Environmental Stewardship Target Species (South Downs); Environmental Stewardship Target Species (Wealden Greensand); Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 01/07/2007 | 19             |

# Psittacula krameri

# **Rose-ringed Parakeet**

The UK's only naturalised parrot species which is green with a red beak. This noisy bird can be found in parks, gardens and orchards where it can feed on fruit, berries, seeds and nuts and use nest-holes in mature trees. This is a very scarce introduced breeding resident in Sussex.

EC CITES Annex C

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 31/03/1998 | -         | 1              |

## Alcedo atthis

## **Common Kingfisher**



Fairly common resident and occasional winter visitor which is widespread across Sussex, but often declines following hard winters. A brilliantly coloured blue and orange bird which can be found in lowland freshwater areas such as rivers, ponds and streams, and during the winter on the coast and in estuarine areas. Nests in hole in riverbank or sandpit.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 31/03/1978 | 13/12/2012 | 97             |

#### Cuculus canorus

#### **Common Cuckoo**



The Cuckoo is a fairly common summer visitor though usually absent from urban areas and has one of the best known voices of a bird in the UK. The species has shown a moderate decline. They are well-known brood parasites, the females laying their eggs in the nests of other birds. It breeds in a variety of habitats including farmland, wetland and woodland where its familiar call can be heard. It's diet consists of insects, especially hairy caterpillars.

Bird Population Status - red; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 01/07/2007 | 27             |

### Accipiter nisus

#### Eurasian Sparrowhawk

The Sparrowhawk is a common resident and passage migrant. A bird that decreased substantially in the middle of the last century following the widespread use of organochlorine pesticides. It has now made a good recovery and is the second commonest Sussex raptor. The Sparrowhawk's tail and wings are adapted for fast low flying through trees and branches where it catches small bird prey. It nests in trees and hedges, and they are now regular garden visitors.

Convention on Migratory Species; Appendix 2; EC CITES Annex A

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 24/10/2012 | 36             |

### Buteo buteo

## Common Buzzard

A fairly common resident, passage migrant, and regular visitor. Probably much more frequent before persecution reduced its numbers. Well-established in Ashdown Forest and central West Sussex with occasional records from elsewhere. It feeds on small mammals, birds and carrion.

Convention on Migratory Species; Appendix 2; EC CITES Annex A

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 08/06/1985 | 19/11/2012 | 79             |

## Circus cyaneus

# **Hen Harrier**



This elegant bird of prey is a scarce winter visitor and passage migrant. Most records are from coastal farmland, marshes along the larger river valleys and on the Downs where it feeds on small birds and mammals.

Bird Population Status - red; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; EC CITES Annex A; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 21/01/2012 | -         | 1              |

## Milvus milvus

## Red Kite

This unmistakable large bird of prey is a very scarce breeding resident and scarce visitor. Red kites were almost extinct in the UK by the early 1900s but in the last two decades, they have been re-introduced to England and Scotland, with magnificent results. It is easily recognised by its red colour and forked tail. It feeds on carrion, worms and small mammals.

Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; EC CITES Annex A; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 15/12/2011 | 20/12/2011 | 2              |

### Pandion haliaetus

Osprey



This impressive black and white bird of prey is a scarce passage migrant, identified by its uniquely shaped wings which kink at the wrist to make an "M" shape. This is a species that has increased steadily over the last fifty years with records from the coast and reservoirs inland. It can be seen hovering over water before it plunges in, feet first, to catch its fish prey.

Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; EC CITES Annex A; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 23/05/1984 | 17/09/2011 | 17             |

# Falco columbarius

# Merlin

The Merlin is the UK's smallest bird of prey which has a fast, agile flight which it needs in order to catch small bird prey. It is a scarce winter visitor and passage migrant to Sussex where it is recorded mainly from coastal farmland and marshes. It is similar to a Kestrel, but has shorter broader wings, a square-cut tail and darker duller plumage.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; EC CITES Annex A; Wildlife and Countryside Act 1981 [Schedule 1 Part 1]

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 15/12/1992 | -         | 1              |

# Falco peregrinus

# **Peregrine Falcon**

Scarce breeding resident, passage migrant and winter visitor usually nesting on cliffs. This large and powerful falcon is wellknown for its propensity to roost on tall buildings and has been widely recorded in Sussex. Takes medium-sized birds, such as wading birds, pigeons and small ducks.

Bern Convention Appendix 2; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; EC CITES Annex A; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 05/01/1983 | -         | 1              |

# Falco subbuteo

## **Eurasian Hobby**

Scarce breeding summer visitor and regular passage migrant. An agile species which feeds on insects and small birds, associated with heathlands but is now also found on farmland with pine clumps and woodland. Widely recorded in Sussex.

Bern Convention Appendix 2; Convention on Migratory Species; Appendix 2; EC CITES Annex A; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 22/09/1984 | 22/09/2007 | 9              |

# Falco tinnunculus

# Common Kestrel

This well-known bird of prey is a fairly common resident and passage migrant, which can often be seen hovering over roadside verges, open country, parks and towns looking for small mammal prey. It is our commonest raptor and it is widespread in Sussex. The Kestrel has characteristic pointed wings, long tail and chestnut colour. They have been recently declining as a result of habitat degradation due to continuing intensive management of farmland.

Bern Convention Appendix 2; Bird Population Status - amber; Convention on Migratory Species; Appendix 2; EC CITES Annex A

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/07/1989 | 27/08/2012 | 19             |

# Alectoris rufa

# **Red-legged Partridge**

This is a striking looking bird that is an introduced resident established since the mid-19th century; it is now widespread in Sussex. The population is augmented annually by shooting estates from captive bred stock and it has also hybridised with an introduced partridge called the 'chukar' (Alectoris chukar) in part of West Sussex. It is usually seen in groups in open fields, where it feeds on roots and seeds.

Birds Directive Annex 2.1

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 22/01/1993 | 30/04/2012 | 8              |

# Perdix perdix

# **Grey Partridge**



A medium-sized gamebird with a distinctive orange face, which is a scarce and decreasing resident species that has suffered a major decline nationally. It was formerly widespread on the South Downs but is now very scarce there. Found in arable areas where it feeds on leaves, seeds and insects. However, it continues to be recorded in larger numbers in the far East of the county around Rye Bay.

Bird Population Status - red; Birds Directive Annex 2.1; Environmental Stewardship Target Species (High Weald); Environmental Stewardship Target Species (Low Weald); Environmental Stewardship Target Species (Pevensey Levels); Environmental Stewardship Target Species (Romney Marsh); Environmental Stewardship Target Species (South Downs); Environmental Stewardship Target Species (Wealden Greensand); Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 19/05/2001 | -         | 1              |

# Phasianus colchicus

# **Common Pheasant**

A very common introduced resident only absent from places like the Pevensey Levels, probably because there is little cover. The population is augmented annually by shooting estates from captive bred stock. The male is unmistakable with its long tail-feathers and rich chestnut colour. Feeds on seeds, grain and shoots.

Birds Directive Annex 2.1

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 48             |

# Grus grus

#### **Common Crane**



This large elegant bird is a rare visitor which comes from northern parts of Europe and Asia. Small numbers pass through the UK during spring and autumn migration and are often found in open arable land or grassland where it can feed on seeds, crops, insects, snails and worms.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; EC CITES Annex A

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 03/05/2010 | 04/05/2010 | 2              |

# Fulica atra

## **Common Coot**

A black medium-sized bird which is a common resident, with numbers much increased by visitors outside the breeding season. Breeds in any suitable freshwater habitat, where it can feed on vegetation, snails and insect larvae. Its white beak and "shield" gives it a bald look against it's black plumage.

Birds Directive Annex 2.1

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/12/1982 | 13/12/2012 | 187            |

#### Gallinula chloropus

#### Common Moorhen

This ground-dwelling medium-sized bird is a very common resident and winter visitor. It is found all year round in virtually all freshwater habitats across Sussex, where it feeds on water plants, seeds, fruit, grasses, insects, snails and worms. It is slate grey, brown and white with a striking red and yellow bill.

Birds Directive Annex 2.2; Convention on Migratory Species; Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 07/04/1983 | 13/12/2012 | 127            |

# Rallus aquaticus

### Water Rail

Very scarce resident and fairly common winter visitor. A highly secretive bird of overgrown streams, ditches and reedbeds, though sometimes found in drier areas. Most records are from suitable sites along the coast, but there are some inland. Feeds mainly on small fish, snails and insects and it's pig-like squealing calls make this bird more often heard than seen.

Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 29/07/1984 | 15/03/2003 | 7              |

## Aegithalos caudatus

# Long-tailed Tit

This charming small bird is a very common resident found in woodland, farmland hedgerows, scrubland, parks and gardens. In winter they form flocks with other tit species. They are widespread across Sussex. It is easily recognised as it has a very long tail, and distinctive pink, white and black colouration. It feeds on insects and sometimes seed during the autumn and winter.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 29             |

# Alauda arvensis

Sky Lark



RAP N

In Sussex a fairly common resident, passage migrant and winter visitor. This lark has a brown back, white front and a small crest. It can be found in open countryside such as lowland farmland where it feeds on seeds and insects, and is recognised by its distinctive song flight which can last for many hours. A species of high conservation concern.

Bird Population Status - red; Birds Directive Annex 2.2; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 08/04/2007 | 05/05/2011 | 2              |

## Lullula arborea

## Wood Lark

Declined considerably in the mid- to late-20th century largely due to loss of heathland habitat and changes in agriculture. This lark is brown on it's back and white underneath and has a beautiful song which is often heard on heathlands at night. Its breeding strongholds in our area are in the west of West Sussex and on the Ashdown Forest, but it is gradually moving back to other areas. Feeds on insects and seeds.

Bird Population Status - amber; Birds Directive Annex 1; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 03/06/1992 | 25/10/2008 | 38             |

### Certhia familiaris

### Eurasian Treecreeper

A small brown and white bird which is a common resident frequenting coniferous and deciduous woods, small copses, parks and gardens with mature trees. It can also be found in thick hedges in winter. It is widespread in woodland areas across Sussex. It moves like a mouse moving up tree trunks looking for insects and spiders.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 34             |

#### Corvus corax

#### **Common Raven**

This massive black bird with a large bill and diamond shape tail is a scarce resident. It is usually recorded from the coast, especially where there are cliffs, but is sometimes seen inland too. It feeds on carrion.

## Corvus corone Carrion Crow

This all black crow is a very common resident found almost everywhere, from the centre of cities to heathland and from woodlands to the seashore, using trees, cliffs and buildings as nest sites. It feeds on carrion, insects, worms, seeds, fruit and any scraps. Recorded almost everywhere in Sussex.

Birds Directive Annex 2.2

| First Date | No. of Records |
|------------|----------------|
| 1/06/1982  | 30             |

#### Corvus corone subsp. corone Carrion Crow

Birds Directive Annex 2.2

#### Corvus frugilegus

Rook

This large black crow with a prominent white beak is a very common resident of lowland farmland of open fields, especially grassland with tall trees close by where they build their nests. Nearly always found in gregarious flocks, and regularly with Jackdaws. Widespread in Sussex though less so in the north east Weald. The Rook feeds on worms, grain and insects.

Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 20/01/2008 | 19/11/2012 | 6              |

#### Corvus monedula

## Eurasian Jackdaw

This small black and grey crow is a very common resident of woodland, parks and gardens with areas of grassland, often seen in pairs or small flocks. In towns it will nest in roofs and chimneys which simulate its more natural tree hole sites. In winter it spends time in stubble and ploughed fields and pasture, often in the company of Rooks. It feeds on insects, seeds and scraps.

Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 19/11/2012 | 23             |

## Garrulus glandarius

#### **Eurasian Jay**

The most colourful of the regions crow family, the Jay is a very common resident of broad-leaved and coniferous woodland. It has also moved into parks, cemeteries and gardens where there are mature trees. They are secretive birds that usually only make their presence known with a screaming call. Widespread across Sussex but absent or less frequent in the coastal plain. They feed on acorns, nuts, seeds and insects; burying some acorns for retrieval later on in the winter.

Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 19/11/2012 | 19             |

# Pica pica

# **Black-billed Magpie**

This well-known black and white bird is a very common resident of woodland, farmland, parks and gardens - though they prefer grassland with thick hedges or scattered trees. Frequent in towns and widespread across Sussex. Often seen in small flocks; they are omnivorous scavengers.

Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 19/11/2012 | 25             |

# Emberiza citrinella

### Yellowhammer

BAP N

A strikingly yellow bunting that is a fairly common resident that favours open country such as farmland with hedgerows and bushes, heaths, commons and areas of scrubland. It feeds on insects and seed. It is widespread in Sussex but has suffered recent declines. Well known for their "a little bit of bread and no cheeeese" song.

Bern Convention Appendix 2; Bird Population Status - red; Environmental Stewardship Target Species (High Weald); Environmental Stewardship Target Species (Low Weald); Environmental Stewardship Target Species (Romney Marsh); Environmental Stewardship Target Species (South Downs); Environmental Stewardship Target Species (Wealden Greensand); Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 02/06/2012 | 30             |

# Emberiza schoeniclus

# **Reed Bunting**



A black, white and brown bunting that is a fairly common resident, passage migrant and winter visitor typically found in wet vegetation but it has recently spread into farmland and, in winter, into gardens. It feeds on seeds and insects. It has suffered a serious population decline in recent years.

Bern Convention Appendix 2; Bird Population Status - amber; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 01/06/1979 | 12/06/2010 | 18             |

# Carduelis cabaret

Lesser Redpoll



This is a small brown streaked finch with a distinctive red forehead. It is a scarce breeder, fairly common passage migrant and winter visitor with most records from the east and north of Sussex. It can be seen in large flocks with Siskins feeding on seeds in Birch and Alder trees.

Bird Population Status - red; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 27/06/1979 | 13/12/2012 | 36             |

### Carduelis cannabina

**Common Linnet** 



A small finch that declined rapidly, particularly in the 1970s and 1980s. Populations have subsequently been stable, but not increasing thought partly to do with the destruction of hedges which it requires for nesting sites. Widely recorded across East and West Sussex, often near the coast or on farmland where it feeds on seeds and insects.

Bern Convention Appendix 2; Bird Population Status - red; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 02/06/2012 | 5              |

# Carduelis carduelis

# **European Goldfinch**

A colourful finch which is a common summer visitor, passage migrant and fairly common winter visitor. It likes trees and bushes with areas of tall weeds nearby and often breeds in parks, gardens, nurseries, orchards and churchyards as well as in the wider countryside. Its diet consists of insects and seeds, particularly thistle and teasel, and it is often seen in social flocks.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 08/10/1989 | 13/12/2012 | 42             |

# Carduelis chloris

# **European Greenfinch**

This finch has distinctive green-yellow wing patches and is very common resident, scarce passage migrant and winter visitor. It can be found anywhere in Sussex with tall, fairly dense trees and plenty of seeds and insects. In winter it tends to feed in fields, gardens and along the seashore, often joining with flocks of other finches and buntings.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 30/04/2012 | 13             |

Carduelis flammea

## Common Redpoll

This small finch is a scarce visitor to Sussex, mainly in autumn and winter. It is similar to the Lesser Redpoll with a red forehead, but larger and paler in appearance. It winters in areas with birch, alder and spruce trees where it can feed on small seeds from the trees and insects.

Bern Convention Appendix 2

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 11/06/1982 | -         | 1              |

Carduelis spinus

### **Eurasian Siskin**

A yellow-green and black bird that is a common winter visitor and passage migrant and a very scarce breeder mainly in mature conifer woods close to heathlands. There are many coastal records and it is often seen feeding on alder seeds along rivers. There is an increasing tendency to visit peanut feeders in gardens.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 05/10/1989 | 13/12/2012 | 60             |

### Coccothraustes coccothraustes Hawfinch



V

BAP N

This is our largest finch, with a massive powerful bill for eating seeds, buds and shoots. A scarce breeding resident and very scarce passage migrant. An elusive finch of mixed deciduous woodland recorded rather more frequently in East Sussex. This species is probably under-recorded in the county owing to its secretive nature.

Bern Convention Appendix 2; Bird Population Status - red; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 17/01/1986 | 05/02/2003 | 2              |

# Fringilla coelebs

#### Chaffinch

This colourful finch is an abundant resident, passage migrant and winter visitor. It is Britain's second commonest breeding bird favouring places with trees and bushes, including coniferous and deciduous woodland, farmland hedgerows, parks and rural and suburban gardens where it can feed on seeds and insects. It is recorded almost everywhere in Sussex.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 32             |

# Fringilla montifringilla Brambling

This finch is a fairly common winter visitor and passage migrant of fields, woodland edges, beech woods, parks and gardens. It often forms large feeding flocks with other finches feeding on seeds.

Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/03/1989 | 22/10/1997 | 13             |

### Loxia curvirostra

# Common Crossbill

A chunky finch with a large head and bill, it is a scarce visitor occurring in large numbers in particularly favourable years. Feeds almost exclusively on seeds in conifer woodlands. Breeds occasionally and can be seen flying in family groups or larger flocks.

Bern Convention Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 16/11/1979 | 28/07/2009 | 92             |

# Pyrrhula pyrrhula

# **Common Bullfinch**

A fairly common and widespread resident species found in woodland, in orchards and on farmland, where it is closely associated with dense shrubs, scrub and untrimmed hedges. It is a stout finch which feeds on seeds, buds and insects (for its young). It has declined substantially in recent years mainly due to habitat changes.

Bird Population Status - amber; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 49             |

# Delichon urbicum

# House Martin

A distinctive hirundine with a forked tail and white rump, it is a common summer visitor and abundant passage migrant. It is more abundant in urban areas than in the countryside because of the availability of suitable nesting sites in the eaves of buildings, but it will feed on around insects that it finds on agricultural land and around water.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 08/10/1990 | 27/08/2012 | 30             |

### Hirundo rustica

#### **Barn Swallow**



Our familiar swallow with long tail streamers is a common summer visitor and abundant passage migrant. They are agile in flight and spend most of their time on the wing hunting. They often breed in quiet farm buildings with nearby ponds and open pasture especially near cattle where they can feed on plentiful insects. Reedbeds are used as pre-migration roosts in late summer and early autumn.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 15/04/1990 | 27/08/2012 | 31             |

# Riparia riparia

## Sand Martin

This small hirundine is a fairly common summer visitor and very common passage migrant, often seen in large gregarious flocks. The Sand Martin needs suitable sandy quarries or cliffs in which to excavate its nesting burrows and it therefore has a restricted distribution as a breeding species in Sussex. It is an agile flier and takes invertebrates in flight over water; it is often seen above rivers and water bodies such as gravel pits and reservoirs. On passage they roost in reedbeds.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 25/03/1990 | 27/08/2012 | 5              |

# Lanius excubitor

## **Great Grey Shrike**

This medium-sized bird is a very scarce winter visitor and passage migrant with a handful or records in most years from both coastal and inland sites. It sits on prominent lookouts and is also known as the "butcher bird" as it sometimes impales its prey on long thorns or barbed wire. It feeds on small mammals and birds, lizards and insects. The Ashdown Forest is this species' Sussex stronghold.

Bern Convention Appendix 2

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 23/03/1996 | -         | 1              |

### Anthus pratensis

# **Meadow Pipit**

This small brown, streaky bird is a locally common resident, very common passage migrant and winter visitor; probably under recorded. It favours open country including farmland, flooded meadows, heathland and grassland where it can feed on spiders and insects such as flies, beetles and moths. Found widely in the southern half of the county and on Ashdown Forest, but rarely seen elsewhere in Sussex. They can often be seen in small flocks in the winter.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 05/02/1984 | -         | 1              |

## Anthus trivialis

# Tree Pipit



A

This pipit is a fairly common but local summer visitor and passage migrant, with most records coming from the Ashdown Forest area and from the heaths in West Sussex. It nests on the ground in open woodland, including young conifer plantations and heaths where there are suitable song-posts from which males can display. It feeds mainly on small invertebrates, and some plant matter, especially berries, in autumn. Numbers have seen a moderate decline in the past 25 years.

Bern Convention Appendix 2; Bird Population Status - red; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 28/05/1978 | 26/05/2001 | 50             |

### Motacilla alba

# **Pied Wagtail**

A common resident, passage migrant and winter visitor. Pied wagtails prefer habitats near water - river banks or lake edges with a stony or gravelly shore as well as moorland, farmland, coasts, estuaries, parks and gardens. Widespread across Sussex. Motacilla alba yarrelli is the main subspecies of the British Isles and is generally darker than the subspecies commoner in mainland Europe Motacilla alba alba. It feeds on insects and can be found in large roosts in urban areas during the winter.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 19/11/2012 | 16             |

### Motacilla alba subsp. yarrellii

### Pied Wagtail

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 08/04/2007 | 2              |

# Motacilla cinerea Grey Wagtail

This small grey and yellow bird is a fairly common resident, passage migrant and winter visitor. This species has gradually increased its range in the past 150 years and has expanded into the English lowlands from the northern and western uplands. It has suffered recent moderate declines. It can be found on flowing freshwater, nesting on bridge supports and other constructions, and also at sewage farms, farmyards, lakes and canals where they can catch insects to feed on.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 01/06/1962 | 08/07/2013 | 122            |

# Motacilla flava

Yellow Wagtail



This small elegant yellow bird is a scarce and very localised summer visitor and fairly common autumn passage migrant. It is primarily a bird of coastal levels, mainly in East Sussex, and also areas of short grass. Its diet consists of small insects, including flies and beetles; it is often seen associating with cattle to find insects. It appears to have been in decline since at least the 1980s, most likely due to loss of habitat for nesting and feeding.

Bern Convention Appendix 2; Bird Population Status - red; Environmental Stewardship Target Species (Romney Marsh); UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 10/11/1995 | -         | 1              |

## Ficedula hypoleuca

# **Pied Flycatcher**



Scarce passage migrant; more numerous in autumn than spring. Has bred. Often recorded in some numbers near the coast in woods and copses during autumn migrations. It feeds on insects and caterpillars; fruit and seeds in late summer and on migration.

Bird Population Status - amber; Convention on Migratory Species; Appendix 2

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 19/08/1989 | -         | 1              |

### Muscicapa striata

#### **Spotted Flycatcher**



A scarce summer visitor and fairly common passage migrant which prefers open woodland with ample clearings and prominent perches, but can adapt well to gardens and parks which provide similar feeding opportunities. It feeds on insects, which it catches by flying from a perch. This species has suffered recent dramatic population declines.

Bern Convention Appendix 2; Bird Population Status - red; Convention on Migratory Species; Appendix 2; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 27/07/2010 | 24             |

#### Oenanthe oenanthe

#### **Northern Wheatear**

Very scarce breeding summer visitor and common passage migrant. Once one of the characteristic downland birds, this species declined drastically from 1938 and is now mainly recorded on or near the coast and Downs where it feeds on insects and larvae. Its black mask and white rump are key identification features and the only regular breeding area in Sussex is the Rye Bay area.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 25/03/1990 | 07/10/2006 | 3              |

### Cyanistes caeruleus

This colourful small bird is an abundant resident found mainly in deciduous woodland. It has adapted to gardens with mature trees or nestboxes and is also found in parkland, hedgerows and conifers. Recorded almost everywhere in Sussex. It feeds on insects, caterpillars, seeds and nuts, and is a regular visitors to garden birdfeeders.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 53             |

## Parus major

# Great Tit

**Blue Tit** 

This is the UK's largest tit, and is an abundant resident. It is a woodland bird which has readily adapted to man-made habitats and is a familiar garden visitor. It feeds on insects, seeds and nuts and will readily visit garden birdfeeders and use nestboxes. It can also be found along hedgerows and in parks and coniferous woodland. Recorded almost everywhere in Sussex.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 56             |

### Periparus ater

# Coal Tit

A small bird that is a very common resident that favours woodland, especially conifer woods, parks and gardens. It feeds on insects, seeds and nuts and is a regular visitor to peanut feeders in gardens. It is widespread in Sussex. In winter it joins with other tits to form feeding flocks.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 19/11/2012 | 38             |

### Poecile montanus

Willow Tit



A scarce resident that favours damp woodland close to rivers, streams and gravel pits. It also likes undergrowth in broadleaved woodland and is sometimes found well away from water in marginal habitat not so suitable for other Tit species. This species has suffered recent population declines. It has a large sooty-black cap extending to the back of the neck and a small untidy black bib; it feeds on insects, seeds and berries.

Bern Convention Appendix 2; Bird Population Status - red; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 26/11/1983 | 02/06/2007 | 38             |

# Poecile palustris

Marsh Tit



A smart looking bird with a black bib and glossy black cap. It is a fairly common resident preferring woodland areas, normally away from the coast. Also found in orchards, mature gardens and parkland. It feeds on insects and seeds. It has seen recent population declines.

Bern Convention Appendix 2; Bird Population Status - red; UK Biodiversity Action Plan priority species.NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 89             |

#### Passer domesticus

#### **House Sparrow**

This well-known noisy and gregarious bird is a very common, but possibly declining resident, recorded almost everywhere in Sussex. Found both in urban areas and the countryside, it normally feeds and breeds near people. It feeds on seeds and scraps. Although vanishing from the centre of many cities, it is not uncommon in most towns and villages, though it is declining. This has earned it a place on the Red List of species of conservation concern.

Bird Population Status - red; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/01/2005 | 02/06/2012 | 7              |

## Passer montanus

## **Eurasian Tree Sparrow**



A bird that has had large fluctuations in population in the past but which has been in decline in the British Isles for some time. In Sussex it is a scarce and declining resident, passage migrant and winter visitor more abundant in East Sussex than in the West. It is mainly a bird of open farmland with hedgerows and free-standing trees where it feeds on insects and seeds.

Bird Population Status - red; Environmental Stewardship Target Species (High Weald); Environmental Stewardship Target Species (Low Weald); Environmental Stewardship Target Species (Pevensey Levels); Environmental Stewardship Target Species (Romney Marsh); Environmental Stewardship Target Species (South Downs); Environmental Stewardship Target Species (Wealden Greensand); Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 22/11/1985 | -         | 1              |

# Prunella modularis

## **Hedge Accentor**



A very common resident, the Dunnock needs areas with thick vegetation - thickets, brambles, hedges, woodland edges. Readily uses man-made habitats like parks, gardens and churchyards. It is inclined to suffer in hard winters. This grey and brown bird is quite shy and inconspicuous, and creeps about on the ground in the undergrowth, looking for insects, spiders, worms and seeds.

Bern Convention Appendix 2; Bird Population Status - amber; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 13/12/2012 | 22             |

### Regulus ignicapilla

Firecrest



A scarce breeder, passage migrant and winter visitor. A bird that shows a preference for the edges of mature spruce plantations where it feeds on insects and spiders. This tiny beautiful bird is recorded from only a few scattered locations in our area.

Bern Convention Appendix 2; Bird Population Status - amber; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 08/10/1989 | 12/05/2000 | 9              |

## Regulus regulus

Goldcrest

The Goldcrest is the UK's smallest songbird and is a very common breeding resident, common passage migrant and winter visitor. It is predominantly a bird of coniferous forests and may also take up residence in deciduous woodland, suburban parks and large gardens where there are conifers nearby. They feed on insects and can often be found in tit flocks. Inclined to suffer in hard winters.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 44             |

| Fri | tha | CUS | ruh  | ecul | a |
|-----|-----|-----|------|------|---|
|     | una | LUS | I UD | cluu | 7 |

# European Robin

The quintessential British bird, the Robin "redbreast" is an abundant and well-known resident, passage migrant and winter visitor. It favours woodlands, parks and gardens with plenty of undergrowth where it can find worms and seeds, fruits and insects.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 35             |

# Luscinia megarhynchos

# Common Nightingale



This rufous-coloured bird is slightly larger than a robin and is a fairly common summer visitor and infrequently seen passage migrant. Nightingales feed on insects and like dense thickets and scrub with thick foliage or nesting in; the edges of clearings or rides, or clumps of bushes surrounded by heath or open space, are ideal. This secretive bird is more often heard than seen; they have an unmistakable loud, rich and mellow song often heard at night.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 01/06/1980 | 01/07/2007 | 24             |

## *Phoenicurus phoenicurus* Common Redstart



This robin-sized bird is a scarce summer visitor and fairly common passage migrant. Recorded mainly from its preferred habitat of old parkland with scattered trees where it feeds mainly on insects but also spiders, worms and berries. Males regularly flick their bright red tails. Mostly found in the centre and north of our area.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 13/05/1982 | 15/06/2000 | 13             |

### Saxicola rubetra

#### Whinchat



Rare summer visitor and fairly common passage migrant that formerly bred on the Downs and elsewhere. This small perching bird is widespread in Sussex on migration and can be told apart from the similar stonechat by virtue of it's distinctive white eye-stripe.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 26/08/1995 | 29/08/2008 | 2              |

# Saxicola torquata

## Stonechat

A robin-sized bird which is a fairly common resident and partial migrant. It shows a marked preference for heathland with scattered clumps of gorse as well as some downland plantations, where you can hear its loud "tacc tacc" call like two stones being tapped together. Widespread in our area. Feeds on Invertebrates, seeds and fruit (e.g. blackberries).

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 14/04/1996 | 26/02/2000 | 5              |

## Sitta europaea

# **Wood Nuthatch**

A small plump colourful bird which is a common resident of mature deciduous woods, especially large oakwoods, wooded parks and gardens. It is widespread across Sussex except on the coastal plain. It feeds on a varied diet of insects, hazel nuts, acorns, beechmast and other nuts and seed.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 24/10/2012 | 73             |

Sturnus vulgaris

# **Common Starling**



This beautiful glossy black bird is a common resident, passage migrant and winter visitor. It favours open woodland and woodland edges, hedgerows, parks and gardens and winters in arable fields, pasture, gardens, parks and on the seashore. It feeds on insects and fruit. Large noisy feeding flocks can collect into even larger roosting flocks. Still one of the commonest of garden birds, its decline elsewhere makes it a Red List species of conservation concern.

Bird Population Status - red; Birds Directive Annex 2.2; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/01/2005 | 16/11/2012 | 5              |

#### Acrocephalus schoenobaenus 'Sedge Warbler

A small plump warbler with a striking cream eyestripe, it is a fairly common summer visitor and abundant passage migrant, mainly recorded in the southern half of Sussex. It is a bird of tangled undergrowth, mainly near water, including the drier edges of reedbeds with shrubs. It has a loud rambling song and it feeds on insects, and berries in the autumn.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 08/10/1989 | 23/04/2004 | 3              |

#### Acrocephalus scirpaceus Eurasian Reed Warbler

This plain brown warbler is a common summer visitor and very common passage migrant. It frequents reedbeds in lowland areas and occasionally tall vegetation in drier places. On passage it can turn up almost anywhere, including orchards, gardens and in crops, often some way from water. It feeds on insects, and on berries in the autumn. Its song is a loud rhythmic chattering.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 14/06/1989 | 14/05/2012 | 12             |

# Phylloscopus collybita Common Chiffchaff

A very common summer visitor and passage migrant, with small numbers wintering, this is a well-known bird which is named after its call. This small olive-brown warbler favours deciduous and mixed woodland, stands of trees, parks and mature gardens where there is thick undergrowth. It feeds on insects and is widespread across Sussex.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 27/08/2012 | 61             |

## *Phylloscopus sibilatrix* Wood Warbler

BAP N R

A very scarce summer resident and passage migrant. This large white and yellow leaf warbler is associated with damp oak woodland where it feeds mainly on insects and spiders. Its best locations are in the north of our area, although it has never been common in Sussex and seems to be declining.

Bird Population Status - red; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 01/06/1984 | 19/08/2007 | 14             |

### Phylloscopus trochilus

#### Willow Warbler



This small grey-green and yellow warbler is a fairly common summer visitor and passage migrant. It favours deciduous woodland and scrub where it can feed on a wide variety of small insects and spiders, and fruit and berries in the autumn. Their population, especially in southern Britain, has undergone a moderate decline over the past 25 years.

Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 27/08/2012 | 18             |

Sylvia atricapilla

### Blackcap

A very common summer visitor and passage migrant, with small numbers wintering. Males have a black cap and females and juveniles a red brown cap on otherwise grey plumage. Although primarily a summer visitor birds from Germany and north-east Europe are increasingly spending the winter in the UK. It favours woodland with tall trees and undergrowth as well as parks and mature gardens, where it can feed on insects and berries.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 02/06/2012 | 39             |

# Sylvia borin

### Garden Warbler

A common summer visitor and passage migrant it has very dull brown non-descript plumage as it's Latin name suggests. Despite its name it is not normally a garden bird, preferring deciduous and mixed woodland and woodland edges, with glades, rides and other open areas where it can feed on insects and berries. Widespread in wooded areas and less frequent on the Downs and coastal plain.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 02/06/2012 | 19             |

# Sylvia communis

# **Common Whitethroat**

A medium-sized warbler which is a very common summer visitor and passage migrant. Favours open areas including hedges, scrub, coastal clifftops and young deciduous woods and woodland edges. Widespread across Sussex, avoiding urban areas. It feeds on insects, and berries and fruit in the autumn.

Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 31/12/1978 | 02/06/2012 | 9              |

# Sylvia curruca

# Lesser Whitethroat

A fairly common summer visitor and passage migrant. It is a small skulking warbler that favours bushy places and scrub rather than woodland or open farmland. Particularly favours hawthorn and blackthorn bushes and hedges where it can feed on insects, and berries in the autumn. Widespread in suitable places across Sussex.

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 03/06/2002 | -         | 1              |

# Troglodytes troglodytes Winter Wren

This tiny red-brown bird is an abundant resident, breeding in Sussex wherever there is available cover, particularly in dense undergrowth. It is found in most habitats ranging from gardens to woodland and orchards to hedgerows. Often seen moving about like a mouse looking for insect and spider prey. It can decline significantly after hard winters, especially in more exposed places. It has a beautiful loud trilling song.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 31             |

### Turdus iliacus

#### Redwing

The smallest of the region's thrushes with conspicuous red flanks, it is a very common, occasionally very common, passage migrant and winter visitor. It is often seen in the wider countryside and sometimes visits parks and gardens, especially in cold, snowy weather. They feed in fields and hedgerows on berries and worms. Sometimes seen in flocks with Fieldfares.

Bird Population Status - red; Birds Directive Annex 2.2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 15/03/1989 | 19/11/2012 | 10             |

### Turdus merula

### Common Blackbird

An abundant resident and winter visitor, and perhaps a passage migrant. One of the commonest and well-known British birds of woodland, farmland, gardens and parks where they like areas with bushes, shrubs and trees and nearby open ground with short grass where they can feed on insects, worms and berries.

Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 30             |

# Turdus philomelos

# Song Thrush



Decreasing resident and partial migrant; common passage migrant and winter visitor. A species which is declining throughout the UK with an estimated reduction of 73% in farmland and 49% in woodland habitats. Still widespread in Sussex. It has a spotted breast and a repetitive song and feeds on worms, snails and fruits.

Bird Population Status - red; Birds Directive Annex 2.2; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 13/12/2012 | 34             |

# Turdus pilaris

# Fieldfare

This large, colourful thrush is a common, occasionally very common, passage migrant and winter visitor usually seen in flocks of anything from a dozen or two to several hundred. They feed on insects, worms and berries and can be seen in open countryside with grass fields, and berry-bearing hedgerows, especially hawthorn. Also frequent visitors to orchards, gardens and parks especially ones with apple trees. They will come into towns and feed in parks and on playing fields too.

Bird Population Status - red; Birds Directive Annex 2.2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 09/09/1990 | 26/03/2011 | 13             |

## Turdus viscivorus

# **Mistle Thrush**

This large thrush is a common resident and partial migrant of open woodland, gardens and parkland. It is widespread across Sussex. It feeds on slugs, worms, berries and insects, and will aggressively defend its favourite food source such as a berry tree.

Bird Population Status - amber; Birds Directive Annex 2.2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 11/06/1982 | 26/03/2011 | 11             |

## Phalacrocorax aristotelis European Shag

A fairly common winter visitor and passage migrant found only on coastal salt water. Similar to a cormorant, but smaller and slimmer in build. Feeds on fish, and occasionally crustacea and molluscs.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 06/01/1993 | -         | 1              |

# Phalacrocorax carbo

## **Great Cormorant**

An increasing breeding species and common winter visitor on the coast, often now breeding some distance inland. If numbers are large, they can be a cause of concern among fisherman as they are fish-eating birds with a healthy appetite. Any queries relating to cormorants should be addressed initially to the Sussex Ornithological Society.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/10/1984 | 13/12/2012 | 161            |

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### Dendrocopos major

### **Great Spotted Woodpecker**

A striking red, black and white medium-sized bird which is a common resident especially near large trees with suitable holes for nesting, especially in woodland and parkland. Often recorded from suburban gardens where it feeds at peanut feeders and bird tables. It also feeds on insects, seeds and nuts. It tends to be rarely recorded from much of the coastal plain. Its presence is often announced by its loud call or by its distinctive spring 'drumming' display.

Bern Convention Appendix 2

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 04/06/1980 | 13/12/2012 | 82             |

### Dendrocopos minor

# Lesser Spotted Woodpecker

BAP N R

The size of a sparrow, this is Europe's smallest woodpecker and it is a scarce Sussex resident that favours damp, open, broad leaved woodland. It feeds on insects, especially larvae, spiders and wood-boring insects. It requires decaying wood in which it makes a new nest chamber each year. Its population is scattered across Sussex in suitable areas; the county holds a significant proportion of the national population.

Bern Convention Appendix 2; Bird Population Status - red; UK Biodiversity Action Plan priority species. NERC Act 2006.

| First Date | Last Date  | No. of Records |  |
|------------|------------|----------------|--|
| 11/06/1982 | 20/02/2003 | 11             |  |

# Picus viridis

## **Green Woodpecker**

This is the largest of the three resident British woodpeckers and is fairly common, its presence is usually announced by its laughing "yaffle" call. This striking green woodpecker has a red crown stripe and requires mature trees for nesting and open areas for feeding, such as orchards, parks and farmland where it can feed on insects, especially ants; however most records are from wooded areas. Numbers can fall in hard winters and recovery is slow.

Bern Convention Appendix 2; Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/06/1982 | 13/12/2012 | 42             |

# Podiceps auritus

## **Slavonian Grebe**

This medium-sized grebe is a scarce winter visitor and passage migrant found in sheltered coastal waters. It feeds on fish and insect larvae.

Bern Convention Appendix 2; Bird Population Status - amber; Birds Directive Annex 1; Convention on Migratory Species; Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 23/11/1993 | 18/03/1994 | 2              |

## Podiceps cristatus

# **Great Crested Grebe**

A fairly common resident; passage migrant and winter visitor when large flocks can develop on coastal waters. This species was once killed for its breast and head feathers, and came close to extinction. The creation of gravel pits is thought to have helped the bird and it breeds on large areas of fresh water. It feeds mainly on fish.

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 12/03/1978 | 13/12/2012 | 332            |

# Tachybaptus ruficollis

Little Grebe



Our smallest grebe and a species that breeds in a wide range of wetlands, some very small. It is a scarce resident in Sussex, passage migrant and winter visitor when flocks of 20 plus individuals can develop, although it is rarely seen on the sea. This species feeds on insects and larvae and is dependent on suitable water levels for successful breeding.

Bird Population Status - amber

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 15/01/1984 | 08/10/2006 | 7              |

# Caprimulgus europaeus European Nightjar



This brown hawk-like bird is recorded as a breeding species from many commons, heaths and open woods across both East and West Sussex but is a declining species due mainly to habitat loss, afforestation and fragmentation. This nocturnal species feeds on insects and moths and its churring song is an evocative sound of the summer. It is a fairly common summer visitor which is rarely seen on migration.

Bern Convention Appendix 2; Bird Population Status - red; Birds Directive Annex 1; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; UK Biodiversity Action Plan priority species

| 03/06/1992 |   |   |
|------------|---|---|
| 03/00/1772 | - | 1 |

## Athene noctua

#### Little Owl

This is the UK's smallest owl and is a fairly common resident in Sussex. It is not a British native but was introduced at various times from the mid-19th century, including to the Knepp Estate in West Sussex. Now well established and widespread in the two counties. It can be found around agricultural land, trees, copses, hedges, parkland and orchards where it can feed on small mammals and birds, beetles and worms. It nests in farm buildings and in nestholes in trees and it is often seen in the day time perched on tree branches.

Bern Convention Appendix 2; EC CITES Annex A

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 01/03/1980 | 06/08/2008 | 35             |

# Strix aluco

## Tawny Owl

This is the UK's most abundant owl and is a fairly common resident in Sussex, particularly in the more wooded areas. Found in deciduous and coniferous woodland, and also farmland, parks and churchyards, it is scarce or absent from more treeless areas near the coast. It is more often heard than seen, recognised by it's characteristic hooting. It feeds on a varied diet of small mammals, small birds, frogs, fish, insects and worms.

Bern Convention Appendix 2; EC CITES Annex A

| First Date | Last Date  | No. of Records |
|------------|------------|----------------|
| 30/04/1979 | 30/04/2012 | 46             |

# Tyto alba

#### Barn Owl



A distinctive and much loved bird of the countryside, this scarce breeding resident declined substantially during the last century mainly due to loss of habitat, particularly areas of rough grassland where it hunts for mice, voles and shrews. The position has been improving recently with many nest boxes being erected, although the conversion of barns in Sussex has had a negative impact on potential breeding sites.

Bern Convention Appendix 2; Bird Population Status - amber; EC CITES Annex A; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

# Upupa epops

### Ноорое



Very scarce spring and even scarcer autumn passage migrant which has bred in Sussex. This exotic-looking black, white and orange bird has a crest and it has been recorded from both coastal and inland locations including garden lawns where it feeds on insects and spiders.

Bern Convention Appendix 2; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

| First Date | Last Date | No. of Records |
|------------|-----------|----------------|
| 25/08/1980 | -         | 1              |

# The BAP Species Inventory does not include bat, bird or otter records. Bat and bird records are included in separate inventories, while otter records are not included in SxBRC reports.

#### The background

In 1992 the UK and 159 other governments signed the Convention on Biological Diversity (CBD) at the Earth Summit in Rio de Janeiro. The CBD called for signatories to develop national strategies and action plans to conserve biodiversity, and the UK responded with the UK Biodiversity Action Plan (UK BAP). This was first published in 1994 and included specific plans for species and habitats afforded priority conservation action. These plans set out the threats faced by species and habitats as well as the actions being taken or to be taken to help tackle the threats. The UK BAP list was updated in 2007 and has since been superseded by the 'UK Post-2010 Biodiversity Framework', as a result of a change in strategic thinking.

Further information on the UK BAP and details of the species and habitat action plans can be found on the <u>JNCC website</u>.

#### At the local level

An important aspect to the success of the UK BAP is the translation of the national strategy into effective action at the local level. The Sussex Biodiversity Partnership co-ordinates action for Priority Species and Habitats. Further details can be found on their website: <u>www.biodiversitysussex.org.uk</u>

#### BAP species within this report

- BAP records are labelled so that only one record per species per grid reference is included in a SxBRC report. This will usually be the most up to date record.
- Species which appear in the 'England Biodiversity List' to meet the requirements of Section 41 of the NERC Act (2006) \* are labelled with the symbol N.

#### \* Natural Environment & Rural Communities (NERC) Act

The NERC Act (2006) was established with the intention to help ensure that biodiversity becomes an integral consideration in the development of policies, and that decisions of public bodies work with nature and not against it.

The England Biodiversity List has been drawn up to meet the requirements of Section 41 of the Act. The S41 list consists of **943 species** and **56 habitats** of principal importance in England and will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act.

Further details of the NERC Act can be found on the Natural England website.



# **UK BIODIVERSITY ACTION PLAN SPECIES INVENTORY REPORT**

Please note that bat, bird and otter records are not included in this report

#### Land at Balcombe Parish

13 February 2014 ESD/14/74 Search Area: TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329

Katherine Daniel (Balcombe Parish Council)

# Pyrenula nitida

A lichen that occurs on the smooth, shaded bark of old deciduous trees, especially hornbeam and beech. Found in the British Isles only in southern and south eastern England. Recorded in our area only from an unspecified West Sussex location before 1900.

#### lichen

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| TQ23V Francis Rose 27/02/1968 Balcombe Forest | Grid Reference | Recorder     | Date       | Locality        |  |
|---|----------------|--------------|------------|-----------------|--|
|   | TQ23V          | Francis Rose | 27/02/1968 | Balcombe Forest |  |

a lichen

### Bacidia incompta

A lichen of basic-barked tree trunks often along rain or sap seepage tracks, sometimes on rocks. Southern England but much declined since Dutch elm disease. Recorded quite widely in East and West Sussex. 1900-2002.

#### lichen

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder     | Date       | Locality                       |
|----------------|--------------|------------|--------------------------------|
| TQ3229         | Francis Rose | 15/06/1968 | Balcombe Place, S. of Balcombe |
| TQ33G          | Francis Rose | 21/11/1968 | Whole Valley - Paddockhurst    |

# Pertusaria hemisphaerica

A lichen that occurs on the rough bark or sheltered, well-lit mature trees, especially beech, oak and ash in ancient woodlands and parklands. Found in the British Isles in Southern England, Wales and Ireland.

#### lichen

Sussex Biodiversity Action Plan Species

| Grid Reference | Recorder     | Date       | Locality                       |
|----------------|--------------|------------|--------------------------------|
| TQ23V          | Francis Rose | 27/02/1968 | Balcombe Forest                |
| TQ2830         | Francis Rose | 15/05/1975 | Brantridge Park                |
| TQ3229         | Francis Rose | 15/06/1968 | Balcombe Place, S. of Balcombe |
| TQ3233         | Francis Rose | 05/02/1969 | Paddockhurst Park (and Rocks)  |
| TQ33F          | Francis Rose | 21/11/1968 | Wakehurst Estate               |

Ν

# Lophozia ventricosa

# **Tumid Notchwort**

#### liverwort

Sussex Biodiversity Action Plan Species

| Grid Reference | Recorder     | Date                         | Locality                        |
|----------------|--------------|------------------------------|---------------------------------|
| TQ291293       | Simon Davey  | January 1995                 | Northlands Rocks                |
| TQ2929         | Francis Rose | 15/05/1975                   | Northlands Farm, S. of Balcombe |
| TQ317304       | Francis Rose | 18/03/1986                   | S. of Balcombe Mill, Balcombe   |
| TQ318303       | Simon Davey  | January 1995 -<br>April 1995 | Balcombe Mill Rocks             |
| TQ3233         | Francis Rose | 30/01/1986                   | Paddockhurst Park (and Rocks)   |
| TQ33F          | Francis Rose | 16/07/1988                   | Wakehurst - Tilgate Wood        |

## Orthodontium gracile

Slender Thread-moss

N

A rare and decreasing lowland moss of sheltered acidic rocks recorded from widely scattered localities in the British Isles. It has been recorded from a number of sandrocks in both East and West Sussex recently but, according to Smith (2004), is out-competed by the very similar Orthodontium lineare and this has led to its disappearance in many places.

#### moss

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder   | Date       | Locality                              |
|----------------|--|------------|---------------------------------------|
| TQ320334       | Howard Matcham   | 2000       | Paddockhurst Park, East Sussex (VC14) |
| TQ3233         | Andy Jackson;Howard<br>Matcham;Martha Newton;Simon<br>Davey;Francis Rose | 18/02/1994 | Paddockhurst Park (and Rocks)         |
| TQ33F          | Andy Jackson;Howard<br>Matcham;Martha Newton;Simon<br>Davey;Francis Rose | 18/02/1994 | Wakehurst - Tilgate Wood              |

# Pilularia globulifera

#### Pillwort

Ν

A small fern growing that grows beside still, or slowly flowing, non-calcareous water. Formerly scattered thinly across our area but now assumed to be extinct in both East and West Sussex. 1790-1985

#### fern

IUCN (2001) - Lower risk - near threatened; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                | Date        | Locality |
|----------------|-------------------------|-------------|----------|
| TQ3030         | William Botting Hemsley | 1790 - 1924 | Balcombe |

#### Scleranthus annuus

Annual Knawel

Ν

A plant of disturbed sandy soil on heaths, commons, waste places, arable fields and, rarely, river or maritime shingle. Occasional in West Sussex on the Lower Greensand on abandoned arable and field margins and on roadsides, but now very rare in East Sussex.

#### flowering plant

Farm Environment Plan Guidance 007- Table 3; IUCN (2001) - Endangered; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                                   | Date | Locality                           |
|----------------|--|------|------------------------------------|
| TQ304291       | Anon @ Sussex Bot. Rec. Soc.;Alan<br>Knapp | 1993 | SW of Balcombe, East Sussex (VC14) |
| TQ32E          | Anon @ Sussex Bot. Rec. Soc.               | 1990 | East Sussex (VC14)                 |

# Mentha pulegium

# Pennyroyal

A short-lived perennial of seasonally inundated grassland overlying silt and clay. Currently known in our area only from Falmer, East Sussex. The plants which are frequent around the Ardingly Reservoir are an alien sub-species.

#### flowering plant

IUCN (2001) - Endangered; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 8)

| Grid Reference | Recorder                                     | Date           | Locality                               |
|----------------|--|----------------|--|
| TQ329295       | Anon @ Sussex Bot. Rec. Soc.;Arthur<br>Hoare | 1987 - 2000    | Ardingly Reservoir, East Sussex (VC14) |
| TQ32J          | Anon @ Monks Wood;SPASU                      | 1991           | Ardingly Reservoir, West Sussex (VC13) |
| TQ331299       | Anon @ Sussex Bot. Rec. Soc.;Arthur<br>Hoare | 1987 - 2000    | Ardingly Reservoir, East Sussex (VC14) |
| TQ33302960     | Arthur Hoare                                 | 26/06/2004     | Ardingly Reservoir                     |
| TQ335289       | Ernest Sears                                 | September 2005 | Ardingly Reservoir                     |

### Spilosoma lubricipeda

White Ermine

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Ν

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A white moth with black speckles. Flies in the summer months and 'woolly bear' larvae feed on low-growing plants. Widespread across Sussex.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder       | Date       | Locality                                   |
|----------------|----------------|------------|--|
| TQ288334       | Graham Collins | 06/06/1994 | Tilgate Forest                             |
| TQ289334       | Julian Clarke  | 26/05/2012 | Tilgate Forest Tilgate, West Sussex (VC13) |

**Buff Ermine** 

## Spilosoma luteum

A yellowish-buff summer-flying moth normally with black speckles. Larvae feed on low-growing plants as well as trees and shrubs. Widespread and often common in Sussex.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder       | Date       | Locality                                   |
|----------------|----------------|------------|--|
| TQ288334       | Graham Collins | 06/06/1994 | Tilgate Forest                             |
| TQ289334       | Julian Clarke  | 26/05/2012 | Tilgate Forest Tilgate, West Sussex (VC13) |

Cinnabar

# Tyria jacobaeae

A red and black day-flying moth whose orange and black ringed larvae feed on ragwort and related plants. Common across Sussex.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder      | Date       | Locality                                   |
|----------------|---------------|------------|--|
| TQ289334       | Julian Clarke | 26/05/2012 | Tilgate Forest Tilgate, West Sussex (VC13) |

# Watsonalla binaria

# Oak Hook-tip

A widespread moth of woods and parks, though said to be rapidly declining. Relatively common in Sussex, but numbers are inclined to fluctuate.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder       | Date       | Locality                                   |
|----------------|----------------|------------|--|
| TQ288334       | Graham Collins | 11/06/1983 | Tilgate Forest                             |
| TQ289334       | Julian Clarke  | 26/05/2012 | Tilgate Forest Tilgate, West Sussex (VC13) |

# Ecliptopera silaceata

# Small Phoenix

Pretty Chalk Carpet

A common moth in England and Wales and, though widespread in Scotland, it is less common there. It lives in a variety of habitats including open woodland, downland, commons, gardens and waste ground. Generally common in Sussex.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder       | Date       | Locality                                   |
|----------------|----------------|------------|--|
| TQ288334       | Graham Collins | 14/06/1984 | Tilgate Forest                             |
| TQ289334       | Julian Clarke  | 26/05/2012 | Tilgate Forest Tilgate, West Sussex (VC13) |

## Melanthia procellata

Hedgerows, edges of woods and bushy places on calcareous soils. Larva on Clematis. Southern England ranging northwards to Lincolnshire and Caernarvonshire. In our area mainly recorded from the West Sussex Downs.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| <b>Grid Reference</b> | <b>Recorder</b> | <b>Date</b> | <b>Locality</b>                             |
|-----------------------|-----------------|-------------|---|
| TQ289334              | Julian Clarke   | 10/06/1990  | Tilgate Forest, Tilgate, West Sussex (VC13) |
| Timandra co           | mae             | Blood-Vein  | N   |

A widespread and moderately common moth in southern Britain with records from across Sussex. It is regarded as being in rapid decline.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                                | Date       | Locality                                    |
|----------------|---|------------|---|
| TQ289334       | Julian Clarke                           | 17/05/1990 | Tilgate Forest, Tilgate, West Sussex (VC13) |
| TQ31522844     | Graeme Lyons;James Power;Shaun<br>Pryor | 08/07/2013 | Balcome Marsh SWT Reserve                   |

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# Hepialus humuli

#### Ghost Moth

A large moth that is a member of a primitive suborder of the Lepidoptera. Frequenting hillsides, waste ground and other grassy places, this species is widespread over the whole of the British Isles. The larvae feed at the roots of grasses and a wide variety of wild and cultivated plants. Widely recorded in Sussex both at specific (Hepialus humuli) and subspecific (H. humuli humuli) level.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| <b>Grid Reference</b> | <b>Recorder</b> | <b>Date</b> | <b>Locality</b>                             |
|-----------------------|-----------------|-------------|---|
| TQ289334              | Julian Clarke   | 01/07/1983  | Tilgate Forest, Tilgate, West Sussex (VC13) |
|                       |                 |             |   |

Ghost Moth

## Hepialus humuli subsp. humuli

A large moth that is a member of a primitive suborder of the Lepidoptera. Frequenting hillsides, waste ground and other grassy places, this species is widespread over the whole of the British Isles. The larvae feed at the roots of grasses and a wide variety of wild and cultivated plants. Widely recorded in Sussex both at specific (Hepialus humuli) and subspecific (H. humuli humuli) level.

#### insect - moth

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder       | Date       | Locality       |
|----------------|----------------|------------|----------------|
| TQ288334       | Graham Collins | 14/06/1984 | Tilgate Forest |

# Erynnis tages

The butterfly occurs in discrete colonies, frequenting downland, dunes, heaths, embankments, woodland rides and occasionally damper areas. The larva feeds on birdsfoot trefoils, Lotus corniculatus and L. uliginosus. Southern Britain and Wales, being more local further north. Widespread but declining in Sussex Weald. More stable on the South Downs. Recorded under both Erynnis tages and as the nominate subspecies Erynnis tages tages.

**Dingy Skipper** 

#### insect - butterfly

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder   | Date       | Locality                   |
|----------------|------------|------------|----------------------------|
| TQ285291       | J.P. Gay   | 01/05/1997 | Soles Coppice, Staplefield |
| TQ3229         | Paul Ffeil | 09/07/1998 | Ardingly Reservoir         |
| TQ3328         | Paul Ffeil | 09/07/1998 | Ardingly Reservoir         |

# Pyrgus malvae

# Grizzled Skipper

N

A butterfly of sheltered meadows, downland and open woodland rides. Larva on Potentilla, Fragaria vesca and Agrimonia eupatoria. Commonest in central southern England, Wales and the Midlands up to Yorkshire. Still widespread on the Downs but less common than it was in the Weald.

#### insect - butterfly

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder        | Date       | Locality           |
|----------------|-----------------|------------|--------------------|
| TQ312311       | Graham Champion | 05/06/1997 | Balcombe Estate    |
| TQ3328         | Paul Ffeil      | 17/06/1998 | Ardingly Reservoir |

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| Acronicta psi  |  | Grey Dagger  | N  |
|--|--|--|--|
|  | s over much of the southern half of<br>dely recorded in Sussex.  | the British Isles frequenti  | ng woods and gardens but now suffering a   |
| insect - moth  |  |  |  |
|  | t and Rural Communities Act 2006<br>UK Biodiversity Action Plan priority   |  | rtance in England (sec; Sussex Biodiversity  |
| Grid Reference   | Recorder   | Date   | Locality   |
| TQ289334   | Julian Clarke  | 17/06/1986   | Tilgate Forest, Tilgate, West Sussex (VC13   |
| Acronicta run  | nicis  | Knot Grass   | N  |
| A widely distributed   | moth in in the southern half of the  | British Isles, but one that is   | marked decline. Widely recorded in Sussex.   |
| insect - moth  |  |  |  |
|  | t and Rural Communities Act 2006<br>UK Biodiversity Action Plan priority   |  | rtance in England (sec; Sussex Biodiversity  |
| Grid Reference   | Recorder   | Date   | Locality   |
| TQ289334   | A. Bradshaw;Julian Clarke  | 19/05/2010   | Tilgate Forest, Tilgate, West Sussex (VC13   |
| Caradrina mo   | orpheus  | Mottled Rustic   | : N  |
| A common noctuid n   | noth whose larvae feed on nettle, d  | andelion and other low-gro   | wing plants. It is in marked decline in the UK,  |
|  |  |  |  |
|  | lely recorded in Sussex.   |  |  |
| bu has been very wid<br>insect - moth<br>Natural Environment   | dely recorded in Sussex.   |  | rtance in England (sec; Sussex Biodiversity  |
| bu has been very wid<br>insect - moth<br>Natural Environment   | dely recorded in Sussex.<br>t and Rural Communities Act 2006 ·   |  | rtance in England (sec; Sussex Biodiversity<br>Locality  |
| bu has been very wic<br><b>insect - moth</b><br>Natural Environmen<br>Action Plan Species;   | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority   | / species  |  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference  | dely recorded in Sussex.<br>t and Rural Communities Act 2006<br>UK Biodiversity Action Plan priority<br><b>Recorder</b>  | y species<br>Date  | <b>Locality</b><br>Tilgate Forest, Tilgate, West Sussex (VC13  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot   | dely recorded in Sussex.<br>t and Rural Communities Act 2006<br>UK Biodiversity Action Plan priority<br><b>Recorder</b>  | Date<br>10/06/1990<br>Small Square-  | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-spot N  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot   | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in l   | Date<br>10/06/1990<br>Small Square-  | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-spot N  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofte<br>insect - moth<br>Natural Environmen   | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in l<br>m abundant in Sussex.  | Date<br>Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a  | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-spot N  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofte<br>insect - moth<br>Natural Environmen   | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in l<br>m abundant in Sussex.<br>t and Rural Communities Act 2006 -  | Date<br>Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a  | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.   |
| bu has been very wid<br>insect - moth<br>Natural Environment<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofter<br>insect - moth<br>Natural Environment<br>Action Plan Species;<br>Grid Reference<br>TQ288334  | dely recorded in Sussex.<br>t and Rural Communities Act 2006<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in l<br>in abundant in Sussex.<br>t and Rural Communities Act 2006<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Graham Collins  | p species<br>Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date<br>11/06/1983   | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality<br>Tilgate Forest  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mod<br>Widespread and ofter<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference  | dely recorded in Sussex.<br>t and Rural Communities Act 2006<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in l<br>in abundant in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b>  | p species<br>Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date   | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality  |
| bu has been very wid<br>insect - moth<br>Natural Environment<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofter<br>insect - moth<br>Natural Environment<br>Action Plan Species;<br>Grid Reference<br>TQ288334  | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in l<br>in abundant in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Graham Collins<br>Julian Clarke   | p species<br>Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date<br>11/06/1983   | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality<br>Tilgate Forest  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofte<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ288334<br>TQ289334<br>Melanchra pe   | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in L<br>abundant in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Graham Collins<br>Julian Clarke  | Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date<br>11/06/1983<br>10/06/1990<br>Dot Moth                                | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality<br>Tilgate Forest<br>Tilgate Forest, Tilgate, West Sussex (VC13  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofte<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ288334<br>TQ289334<br>Melanchra per<br>A dark noctuid moth   | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in L<br>abundant in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Graham Collins<br>Julian Clarke  | Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date<br>11/06/1983<br>10/06/1990<br>Dot Moth                                | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality<br>Tilgate Forest<br>Tilgate Forest, Tilgate, West Sussex (VC13  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofte<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ288334<br>TQ289334<br>Melanchra pee<br>A dark noctuid moth<br>recorded in Sussex.<br>insect - moth<br>Natural Environmen                         | dely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in L<br>in abundant in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Graham Collins<br>Julian Clarke<br><b>Prsicariae</b><br>with a distinctive white wing spot.   | Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date<br>11/06/1983<br>10/06/1990<br>Dot Moth<br>Larvae feed on a wide varie | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality<br>Tilgate Forest<br>Tilgate Forest, Tilgate, West Sussex (VC13  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofte<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ288334<br>TQ289334<br>Melanchra pee<br>A dark noctuid moth<br>recorded in Sussex.<br>insect - moth<br>Natural Environmen                         | tely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in l<br>in abundant in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Graham Collins<br>Julian Clarke<br><b>Prsicariae</b><br>with a distinctive white wing spot.<br>t and Rural Communities Act 2006 -   | Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date<br>11/06/1983<br>10/06/1990<br>Dot Moth<br>Larvae feed on a wide varie | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality<br>Tilgate Forest<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>N<br>ety of low-growing plants and trees. Widely  |
| bu has been very wid<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ289334<br>Diarsia rubi<br>A brown noctuid mot<br>Widespread and ofte<br>insect - moth<br>Natural Environmen<br>Action Plan Species;<br>Grid Reference<br>TQ288334<br>TQ289334<br>Melanchra pee<br>A dark noctuid moth<br>recorded in Sussex.<br>insect - moth<br>Natural Environmen<br>Action Plan Species; | tely recorded in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Julian Clarke<br>th which flies in early and again in L<br>in abundant in Sussex.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority<br><b>Recorder</b><br>Graham Collins<br>Julian Clarke<br><b>Prsicariae</b><br>with a distinctive white wing spot.<br>t and Rural Communities Act 2006 -<br>UK Biodiversity Action Plan priority | Date<br>10/06/1990<br>Small Square-<br>ate summer. Larvae eat a<br>Species of Principal Impo<br>y species<br>Date<br>11/06/1983<br>10/06/1990<br>Dot Moth<br>Larvae feed on a wide varie | Locality<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>-Spot N<br>wide variety of low-growing plants.<br>rtance in England (sec; Sussex Biodiversity<br>Locality<br>Tilgate Forest<br>Tilgate Forest, Tilgate, West Sussex (VC13<br>N<br>ety of low-growing plants and trees. Widely<br>rtance in England (sec; Sussex Biodiversity |

#### **Broom Moth** Ν Melanchra pisi A mid-brown, variable noctuid moth associated with open woodland and heathland. The distinctive caterpillar with longitudinal yellow stripes feeds on broom, bracken and other plants. Recorded from across Sussex, but not common. insect - moth Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species **Grid Reference** Recorder Date Locality TQ288334 Graham Collins 06/06/1994 **Tilgate Forest** TQ289334 Julian Clarke 26/05/2012 Tilgate Forest Tilgate, West Sussex (VC13) Shoulder-striped Wainscot Ν Mythimna comma One of the more strongly patterened wainscot moths flying in midsummer. The larvae are found on various grasses. insect - moth Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species Recorder **Grid Reference** Date Locality TQ289334 Julian Clarke 16/06/1984 Tilgate Forest, Tilgate, West Sussex (VC13) Small Pearl-bordered Fritillary Boloria selene Ν A rapidly declining, violet-feeding woodland butterfly only recorded from 10 1km squares, all in central East Sussex, since 2000. Once widespread and abundant in both counties. insect - butterfly IUCN (2001) - Lower risk - near threatened; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species **Grid Reference** Recorder Date Locality T0289334 Julian Clarke 17/06/1983 Tilgate Forest, Tilgate, West Sussex (VC13) Small Heath Ν Coenonympha pamphilus A small grassland butterfly that is fairly widespread in Sussex, especially on the Downs. The species has become much less common than it used to be in many areas in recent decades. insect - butterfly IUCN (2001) - Lower risk - near threatened; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species **Grid Reference** Recorder Date Locality TQ3033 J R Havers 1997 **Cowdray Forest** TQ308297 Arthur McCulloch 14/07/1998 South Balcombe TQ3130 S. Jones 11/07/1999 Garden, Balcombe TQ3229 Paul Ffeil 17/06/1998 Ardingly Reservoir TQ3230 Graham Champion 09/07/1995 Loder Valley, Wakehurst TQ3328 Paul Ffeil 06/08/1998 Ardingly Reservoir TQ3329 Paul Ffeil 17/06/1998 Ardingly Reservoir

# Limenitis camilla

### White Admiral

Ν

A fairly widespread woodland butterfly that has increased a little in numbers and range in Sussex in recent decades. The larvae are found on honeysuckle.

### insect - butterfly

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                       | Date       | Locality  |
|----------------|--------------------------------|------------|---|
| TQ303299       | Mike Funnell;Robin Edwards     | 20/07/1995 | Rowhill Meadow  |
| TQ306302       | Anon @ M&S Big Butterfly Count | 28/07/2010 | Balcombe, East Sussex (VC14)                                  |
| TQ3131         | Andrew Guest                   | 04/07/2010 | Balcombe, Yew Tree Farm (1km sq), East<br>Sussex (VC14)       |
| TQ315284       | W Merritt                      | 21/07/1983 | Balcombe Marsh SWT Reserve                                    |
| TQ3228         | Graham Champion                | 08/08/1996 | Ardingly Reservoir  |
| TQ3230         | A.J. Guest                     | 29/06/2009 | Tetrad TQ33F, East Sussex (VC14)                              |
| TQ329310       | D. Dancy                       | 1996       | Tilgate Wood, Wakehurst NT Reserve                            |
| TQ334298       | Steven Robinson                | 12/07/2010 | Ardingly Reservoir 2, Section number 1,<br>East Sussex (VC14) |
| TQ336299       | Steven Robinson                | 01/07/2009 | Ardingly Reservoir 2, Section number 2,<br>East Sussex (VC14) |

# Anguilla anguilla

# European Eel

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Ν

Eels breed in the sea and migrate to freshwater to grow before returning to the sea to spawn. This unusual fish is in sharp decline, though the reasons are not fully understood. However, it is generally thought that habitat degradation is a major factor. It has been found across the British Isles and very widely in Sussex.

### bony fish (Actinopterygii)

IUCN (2001) - Critically endangered; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                | Date       | Locality  |
|----------------|-------------------------|------------|---|
| TQ324280       | EA - Environment Agency | 15/08/2001 | Upper Ryelands Bridge, Balcombe Estate,<br>East Sussex (VC14) |

# Salmo trutta subsp. fario

# **Brown Trout**

Subspecies fario is the riverine form of the brown trout and it is now highly threatened or extinct in many European countries as a result of habitat loss, barriers to migration, pollution and over-fishing. It is found in well-oxygenated streams and rivers. It has been widely recorded across East and West Sussex.

### bony fish (Actinopterygii)

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                | Date       | Locality                                |
|----------------|-------------------------|------------|---|
| TQ324280       | EA - Environment Agency | 15/08/2001 | Upper Ryelands Bridge, Balcombe Estate, |
|                |                         |            | East Sussex (VC14)                      |

# Bufo bufo

# Common Toad

Still a widespread species in Sussex but declining due to loss of habitat and other factors. Toads tend to have large populations centred on particular breeding sites and they may become locally extinct if these are damaged or destroyed. Common toads are legally protected against sale.

#### amphibian

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.5a; 9.5b)

| Grid Reference | Recorder                            | Date       | Locality   |
|----------------|-------------------------------------|------------|--|
| TQ2828         | Jerry Cheesman                      | 08/10/2011 | Rowland's Wood, Staplefield  |
| TQ3030         | SARG Sussex Amphibian & Reptile Grp | 01/01/1996 | Dean Land Shaw By Jobes, Balcombe,<br>East Sussex (VC14)             |
| TQ303285       | SARG Sussex Amphibian & Reptile Grp | 01/03/1994 | Cherry Lane Balcombe, East Sussex<br>(VC14)                          |
| TQ3130         | SARG 2002 Leaflet                   | 2002       | Little Orchards, Hayards Heath Road,<br>Balcombe, East Sussex (VC14) |
| TQ315299       | SARG 2002 Leaflet                   | 2002       | Radford, Haywards Heath Road,<br>Balcombe, West Sussex (VC13)        |
| TQ327296       | SARG recorder                       | 01/03/1993 | Ardingly Reservoir   |

# Triturus cristatus

# **Great Crested Newt**

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The largest British newt. It is black or dark brown and the males have a crest along the back and an orange underside spotted with black. Frequently confused with male smooth newts, which also have a crest. The great crested newt prefers larger, open ponds that are free of fish and waterfowl and has declined substantially in Britain and across Europe, mainly due to habitat loss. The species is fully legally protected and Britain has special responsibility for its conservation as some of the best European populations occur here. Scattered across East and Central Sussex but scarce in the west.

#### amphibian

Bern Convention Appendix 2; European Protected Species; Habitats Directive Annex 2 - non-priority species; Habitats Directive Annex 4; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.4b; 9.5a; 9.5b; Schedule 5)

| Grid Reference | Recorder                            | Date       | Locality  |
|----------------|-------------------------------------|------------|---|
| TQ2817828445   | Jerry Cheesman                      | 24/10/2013 | Staplefield Rowlands Wood   |
| TQ3028         | SARG Sussex Amphibian & Reptile Grp | 01/01/1993 | 54 Spicers Cottage, Rowhill Lane,<br>Balcombe, East Sussex (VC14) |
| TQ326294       | Paul Pendlebury                     | 14/05/2013 | Ardingly, West Sussex (VC13)                                      |

### Erinaceus europaeus

### West European Hedgehog

The hedgehog is one of our most familiar and endearing small mammals and it is still widespread in Sussex and Britain. However, hedgehog numbers have been adversely affected by changes in agriculture with less permanent pasture and fewer hedgerows. Climate change may also affect the availability of earthworms, one of their main foods, during hot, dry summers. There is some survey evidence that hedgehogs are most common where badgers are rarer and badgers do, of course, prey on them

### terrestrial mammal

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder             | Date        | Locality  |
|----------------|----------------------|-------------|---|
| TQ282310       | Alan Gillham         | 05/04/2001  | B2110 near Brantridge Lane, East Sussex<br>(VC14) |
| TQ310303       | Anon Bioblitz Card   | 2010        | Stockcroft Road                                   |
| TQ313281       | Brenda Card          | August 2010 | 222 Chanctonbury Road, Burgess Hill               |
| TQ3233         | National Game Census | 1965        | Paddockhurst, East Sussex (VC14)                  |

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### Lepus europaeus

### Brown Hare

Widely distributed throughout England and Wales and probably an ancient introduction. Hares occur on a wide range of mainly open farmland and nationally the species is thought to be undergoing a steady decline. Much less common in Sussex that it used to be, but widely recorded.

#### terrestrial mammal

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                                | Date       | Locality  |
|----------------|---|------------|---|
| TQ295297       | Simon Rowledge                          | 25/06/2007 | Northlands Farm, Northlands Farm, S. of<br>Balcombe         |
| TQ3030         | Recorder @ Sussex Mammal Group<br>Stall | 2003       | Balcombe  |
| TQ303291       | John Rose                               | 18/06/2007 | Rowhill Lane, Balcombe , Balcombe CP                        |
| TQ321273       | Simon Curson                            | 12/05/1999 | Borde Hill Estate,North Park,Field 5, East<br>Sussex (VC14) |

### Arvicola amphibius

European Water Vole

The fastest declining native British mammal, the water vole was 'Ratty' in Wind in the Willows. Water voles prefer slow flowing streams, rivers and dykes with steep earth banks and luxuriant emergent vegetation. They have been in decline for over a century mainly due to loss of habitat while the presence of American mink has greatly hastened this decline. In many areas of mainland Britain water voles are already extinct but there are still some strong populations in Sussex. A legally protected species, listed on the Sussex Rare Species Inventory and the subject of a Sussex Species Action Programme.

### terrestrial mammal

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.1 taking; 9.2; 9.4a; 9.4b; 9.5a; 9.5b; Schedule 5)

| Grid Reference | Recorder    | Date        | Locality                             |
|----------------|-------------|-------------|--------------------------------------|
| TQ3128         | Martin Port | 03/07/1965  | VC14 East Sussex, East Sussex (VC14) |
| TQ324280       | Anon        | 1989 - 1990 | East Sussex (VC14)                   |

# Muscardinus avellanarius

# Hazel Dormouse

A nocturnal species of woodland and overgrown hedgerows. Dormice spend much of their time climbing among branches in search of fruit, nuts, insects and other food. They sleep in nests during the day in hollow trees, unoccupied bird or bat boxes and similar places and hibernate in winter. Dormice occur mainly in southern England in this country and are widespread in suitable habitats in Sussex.

### terrestrial mammal

European Protected Species; Habitats Directive Annex 4; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.4b; 9.5a; 9.5b; Schedule 5)

| Grid Reference | Recorder              | Date       | Locality  |
|----------------|-----------------------|------------|---|
| TQ310299       | Recorder @ WildCall   | 14/09/2012 | Garden of Winterfield, Oldlands Avenue,<br>Balcombe, West Sussex (VC13) |
| TQ335280       | NDMP Dormouse Monitor | 26/07/2011 | Ardingly Reservoir NDMP Site, Box No.8                                  |

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# Anguis fragilis

### Slow-worm

A legally protected legless lizard resembling a small snake. Slow-worms are widespread in southern England and found in open habitats such as rough grassland, heath and on road and railway embankments. They are often common in urban and suburban areas. Like most reptiles and amphibians they have declined considerably and need protection wherever they occur.

#### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder  | Date       | Locality   |
|----------------|---|------------|--|
| TQ2838428390   | Jerry Cheesman                                    | 02/05/2010 | Rowland's Wood, Staplefield  |
| TQ2932         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 17/06/1999 | Old House, High Street, Balcombe Forest,<br>East Sussex (VC14)       |
| TQ3130         | SARG 2002 Leaflet                                 | 2002       | Little Orchards, Hayards Heath Road,<br>Balcombe, East Sussex (VC14) |
| TQ313301       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 01/04/1995 | 1 Oldlands Avenue, Balcombe, East<br>Sussex (VC14)                   |
| TQ315299       | SARG 2002 Leaflet                                 | 2002       | Radford, Haywards Heath Road,<br>Balcombe, West Sussex (VC13)        |

### Natrix natrix

### Grass Snake

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A widespread, but legally protected, snake with a normally olive body flecked with black and a distinctive yellow collar. Frequent in Sussex near places where its food, largely frogs, is readily available. Like most reptiles and amphibians, grass snakes have declined considerably and need protection wherever they occur.

### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder  | Date       | Locality   |
|----------------|---|------------|--|
| TQ2833         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 01/01/1987 | Tilgate Forest, nr M23, West Sussex<br>(VC13)                        |
| TQ2838428390   | Jerry Cheesman                                    | 02/05/2010 | Rowland's Wood, Staplefield  |
| TQ2932         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 17/06/1999 | Old House, High Street, Balcombe Forest,<br>East Sussex (VC14)       |
| TQ293312       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 14/08/1991 | Cherry Tree Kennels, Handcross Road,<br>Balcombe, East Sussex (VC14) |
| TQ300294       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 01/06/1993 | The White House, Balcombe, East Sussex<br>(VC14)                     |
| TQ3030         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 27/09/1994 | Rocks Lane Cottage, Rocks Lane,<br>Balcombe, East Sussex (VC14)      |
| TQ311303       | SARG recorder                                     | 31/08/2001 | Stockcroft Road, Balcombe, Balcombe                                  |
| TQ3130         | SARG 2002 Leaflet                                 | 2002       | Little Orchards, Hayards Heath Road,<br>Balcombe, East Sussex (VC14) |
| TQ315299       | SARG 2002 Leaflet                                 | 2002       | Radford, Haywards Heath Road,<br>Balcombe, West Sussex (VC13)        |
| TQ316311       | Simon Curson                                      | 23/08/2002 | Balcombe Lake and associated woodlands, Balcombe                     |
| TQ334288       | Denis Brown                                       | 26/03/2004 | Ardingly - reservoir car park, Ardingly<br>Reservoir                 |

# Zootoca vivipara

# Common Lizard

The most abundant British lizard and widespread in Sussex in the Weald and along the coast. Probably under-recorded and increasingly confined to small areas of open sunny habitat. A legally protected species due to concern about its overall decline.

### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder            | Date       | Locality                                    |
|----------------|---------------------|------------|---|
| TQ2838428390   | Jerry Cheesman      | 02/05/2010 | Rowland's Wood, Staplefield                 |
| TQ319285       | Anon @ RAUK website | 25/07/2010 | Stone Farm bridge over railway,<br>Balcombe |

# Vipera berus

Adder

Britain's only venomous snake, though incidences of snakebite involving man or domestic animals are relatively uncommon. Adders have a distinctive zig zag pattern of black or brown and white. They occur in open areas on downs, heaths and in heathy woods. Grass snakes and slow-worms are often misidentified as adders. Though widespread in Britain and found in suitable areas across Sussex, the adder, like all our native reptiles has declined substantially through habitat loss and other factors. The adder is a protected species and it is illegal intentionally to kill or injure them.

### reptile

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.5a; 9.5b)

| Grid Reference | Recorder  | Date       | Locality   |
|----------------|---|------------|--|
| TQ2832         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 26/04/1994 | Mount Pleasant Farm, Pease Pottage,<br>West Sussex (VC13)      |
| TQ2932         | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 17/06/1999 | Old House, High Street, Balcombe Forest,<br>East Sussex (VC14) |
| TQ305334       | SARG Sussex Amphibian & Reptile<br>Grp;Dennis Dey | 29/04/1999 | Cowdray Forest, East Sussex (VC14)                             |
| TQ308297       | SARG Sussex Amphibian & Reptile Grp               | 01/05/1990 | Balcombe Railway Line, East Sussex<br>(VC14)                   |

0 Confidential records exist for this enquiry area. Please contact the record centre if you require further information.

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# The Rare Species Inventory does not include bat, bird or otter records.

Bat and bird records are included in separate inventories, while otter records are not included in SxBRC reports.

The Sussex Rare Species Inventory (RSI) contains over 3,400 species. These species are selected according to strict criteria of rarity associated with their occurrence in Sussex.

### The criteria for selection of species are listed below:

- All species in the British Red Data Books including all Notable fauna and Nationally Scarce flora and British endemic taxa which have ever occurred in Sussex whether extinct or not.
- Species included in the UK Biodiversity Action Plan (BAP species).
- Internationally rare taxa cited in the Bern Convention, IUCN Red Data lists, or EU Habitats Directive which are not covered by any of the above.
- County rarities.

The RSI has been designed to be comprehensive for species but representative for records. This is managed in several ways:

- RSI records are labelled so that only one record per species per grid reference gets flagged up. This will usually be the most up to date record.
- SxBRC does not hold marine information other than coastal species and cetaceans.
- The following species are relatively common in Sussex but are in the RSI because they are Notable or Nationally Scarce. Only *one* record of these species is labelled per 2km tetrad:

| Round-headed Rampion | Phyteuma orbiculare                    |
|----------------------|--|
| Frogbit              | Hydrocharis morus-ranae                |
| Adonis Blue          | Lysandra bellargus                     |
| Long-winged Conehead | Conocephalus discolor (syn. C. fuscus) |
| Door snail           | Macrogastra rolphii                    |
| Variable Damselfly   | Coanagrion pulchellum                  |
| Door snail           | Macrogastra rolphii                    |
| Variable Damselfly   | Coenagrion pulchellum                  |
| Downy Emerald        | Cordulea aenea                         |

For records of rare vascular plants, bryophytes and lichens the Record Centre recommends the Sussex Rare Plant Register, compiled by the Sussex Botanical Recording Society. This gives up to date (2001) information on the distribution and status of over 400 Sussex Rare Plants, putting data from RSI reports into a Sussex-wide context. Please look on the publication page of our website for more information: www.sxbrc.org.uk/biodiversity/publications

### IUCN Categories of Rarity

The following is a summary of the IUCN categories of rarity. For further information visit the IUCN website.

### Extinct (EX)

A taxon is Extinct when there is no reasonable doubt that the last individual has died.

### Extinct in the Wild (EW)

A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range.

### Critically Endangered (CR)

A taxon is Critically Endangered when it is considered to be facing an extremely high risk of extinction in the wild.

### Endangered (EN)

A taxon is Endangered when it is considered to be facing a very high risk of extinction in the wild.

### Vulnerable (VU)

A taxon is Vulnerable when it is considered to be facing a high risk of extinction in the wild.

### Near Threatened (NT)

A taxon is Near Threatened when it is close to qualifying for or is likely to qualify for a threatened category in the near future.

### Least Concern (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened.

### Data Deficient (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status.

### Not Evaluated (NE)

A taxon is Not Evaluated when it is has not yet been evaluated against the criteria.

### Regionally Scarce (NR)

Occurs in 5 or fewer 10km squares in a particular region of Britain. Locally determined.



# SUSSEX RARE SPECIES INVENTORY REPORT

Please note that bat, bird and otter records are not included in this report

### Land at Balcombe Parish

| 13 February 2014         | ESD/14/74           | Search Area: | TQ2828 to TO | Q3233; | TQ3127 to | т Q3227; Т Q | 3328 to TQ3329 |
|--------------------------|---------------------|--------------|--------------|--------|-----------|--------------|----------------|
| Katherine Daniel (Balcom | nbe Parish Council) |              |              |        |           |              |                |

### Cystocoleus ebeneus

#### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date        | Locality                      |
|----------------|---|-------------|-------------------------------|
| TQ318303       | Francis Rose;Tim Rich;Rob Cooke;Ronald<br>Archie Boniface;Simon Davey | 1948 - 1995 | Balcombe Mill Rocks           |
| TQ3233         | Francis Rose  | 05/02/1969  | Paddockhurst Park (and Rocks) |

# Pyrenula nitida

A lichen that occurs on the smooth, shaded bark of old deciduous trees, especially hornbeam and beech. Found in the British Isles only in southern and south eastern England. Recorded in our area only from an unspecified West Sussex location before 1900.

### lichen

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder     | Date       | Locality        |
|----------------|--------------|------------|-----------------|
| TQ23V          | Francis Rose | 27/02/1968 | Balcombe Forest |

# Trapelia placodioides

A lichen of acid soils, dead moss, decayed wood, rocks and walls, especially when they are metal-rich. Widespread but mainly from the north and upland areas in the British Isles. Recorded in our area from nine sites across both East and West Sussex. 1971-1997.

### lichen

| Grid Reference | Recorder                           | Date       | Locality                      |
|----------------|------------------------------------|------------|-------------------------------|
| TQ3233         | Andy Jackson;Howard Matcham;Martha | 18/02/1994 | Paddockhurst Park (and Rocks) |
|                | Newton;Simon Davey;Francis Rose    |            |                               |

# Cladonia caespiticia

A lichen of mossy tree trunks, soil and earth banks that often forms small cushions. A mainly western and northern species in Britain. Recorded from about 10 sites across East and West Sussex. 1950-1997.

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date        | Locality                      |
|----------------|---|-------------|-------------------------------|
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994  | Paddockhurst Park (and Rocks) |
| TQ33F          | SAMLL   | 1950 - 1995 | East Sussex (VC14)            |

# Cladonia incrassata

A lichen of moist sandrocks, rotting wood and acid woodland soil. Widespread but local in Britain and recorded in our area mainly from inland sandstone exposures in East Sussex. 1984-1997.

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date         | Locality                      |
|----------------|---|--------------|-------------------------------|
| TQ291293       | Simon Davey   | January 1995 | Northlands Rocks              |
| TQ292296       | Simon Davey   | 1995         | East Sussex (VC14)            |
| TQ318303       | Francis Rose;Tim Rich;Rob Cooke;Ronald<br>Archie Boniface;Simon Davey | 1948 - 1995  | Balcombe Mill Rocks           |
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994   | Paddockhurst Park (and Rocks) |
| TQ33F          | Francis Rose  | 17/04/1991   | Wakehurst - Tilgate Wood      |

### Cladonia subcervicornis

A lichen of soil pockets and sandrocks in both woodlands and more open sites. A species mainly of western and northern upland and coastal Britain recorded in our area only from Paddockhurst Park near Turner's Hill, East Sussex in 1994.

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date       | Locality                      |
|----------------|---|------------|-------------------------------|
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994 | Paddockhurst Park (and Rocks) |

# Micarea botryoides

A lichen that usually grows on underhangs on rock, roots and soil, often on mosses; sometimes on stumps and tree bases. Common in western and upland Britain. In our area recorded from several sites in East and West Sussex including Nap Wood, Frant and Eridge Rocks. 1950-1997.

### lichen

| Grid Reference | Recorder | Date | Locality           |
|----------------|----------|------|--------------------|
| TQ3231         | SAMLL    | 1969 | East Sussex (VC14) |

# Micarea leprosula

A lichen that grows on dead mosses on acid rocks, rarely on bark or wood. Primarily an upland species of northern and western Britain but recorded in our area only from Paddockhurst Park some time after 1950.

#### lichen

Sussex Rare Species Inventory Species

| TQ3233 Francis Rose 30/01/1986 Paddockhurst Park (and Rocks) |  |
|--|--|
|  |  |

# Bacidia incompta

a lichen

A lichen of basic-barked tree trunks often along rain or sap seepage tracks, sometimes on rocks. Southern England but much declined since Dutch elm disease. Recorded quite widely in East and West Sussex. 1900-2002.

### lichen

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder     | Date       | Locality                       |
|----------------|--------------|------------|--------------------------------|
| TQ3229         | Francis Rose | 15/06/1968 | Balcombe Place, S. of Balcombe |
| TQ33G          | Francis Rose | 21/11/1968 | Whole Valley - Paddockhurst    |

# Biatora sphaeroides

A lichen of mature deciduous trees in shaded, often humid, valley bottoms. Sometimes on mossy rocks. Widespread in north and west Britain, but very scarce in the south east. Recorded from two sites in West Sussex and two in East Sussex. 1805-1975.

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality                |
|----------------|--------------|------------|-------------------------|
| TQ2829         | Francis Rose | 15/05/1975 | Wood SW of Ditton Place |
| TQ283293       | SAMLL        | 1975       | East Sussex (VC14)      |

### Bunodophoron melanocarpum

A shrubby lichen that usually grows among mosses on acid rocks, sometimes on trees. Common in north west Scotland, but local and rather rare elsewhere in the British Isles. In our area known from several sandrock locations, all in East Sussex

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality                      |
|----------------|--------------|------------|-------------------------------|
| TQ3233         | Francis Rose | 05/02/1969 | Paddockhurst Park (and Rocks) |

# Sphaerophorus globosus

A shrubby lichen that is often abundant in upland regions of the British Isles. Rare in lowland England and in Sussex only recently recorded from sandrocks in Paddockhurst Park and at Eridge Rocks, both in East Sussex.

### lichen

| Grid Reference | Recorder  | Date       | Locality                      |
|----------------|---|------------|-------------------------------|
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994 | Paddockhurst Park (and Rocks) |

# Caloplaca ferruginea

A lichen that occurs mainly on smooth, well-lit bark of young trees, sometimes on wood. Now chiefly confined to upland areas of Britain but recorded in our area from Ashburnham and Eridge parks in East Sussex and Parham Park in West Sussex. 1972-1992.

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality                       |
|----------------|--------------|------------|--------------------------------|
| TQ307309       | Francis Rose | 15/05/1975 | Balcombe Churchyard            |
| TQ3229         | Francis Rose | 15/06/1968 | Balcombe Place, S. of Balcombe |

### Leprocaulon microscopicum

A mainly coastal lichen which grows in cliff crevices, sandrocks and sometimes on tree trunks or bare soil. Widespread in western and northern Britain. In our area recorded from several inland sites in West Sussex and from Wakehurst in East Sussex. 1950-1993.

#### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder    | Date       | Locality           |
|----------------|-------------|------------|--------------------|
| TQ33F          | Simon Davey | 05/02/1993 | East Sussex (VC14) |

# Porpidia cinereoatra

A lichen of n exposed, acid rocks and stonework. Mainly and upland species in the British Isles but also coastal. Scattered across our area and recorded in from three sites in East Sussex and five in West Sussex. 1967-1993.

#### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date       | Locality                      |
|----------------|---|------------|-------------------------------|
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994 | Paddockhurst Park (and Rocks) |

# Porpidia crustulata

A lichen that grows on a wide range of rocks, stonework and pebbles, sometimes on worked wood and old sacking. Scarce in south and east England, common elsewhere. Recorded in our area from Ashdown Forest and the cliffs between Newhaven and Brighton in East Sussex and three unspecified locations in West Sussex. 1950-1992.

#### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality                      |
|----------------|--------------|------------|-------------------------------|
| TQ3233         | Francis Rose | 30/01/1986 | Paddockhurst Park (and Rocks) |

# Porpidia platycarpoides

A lichen that grows mainly on hard maritime rocks but sometimes or rocks and stonework inland. Widespread but scattered in western Britain. Recorded in our area only from Trotton, West Sussex.

### lichen

| Grid Reference | Recorder     | Date       | Locality                |
|----------------|--------------|------------|-------------------------|
| TQ3233         | Francis Rose | 19/10/1982 | Paddockhurst Park Rocks |

# Leptogium teretiusculum

A lichen that grows on the shaded bark of old trees, on smooth-grained basic rocks and in coastal grassland. Found throughout the British Isles and recorded in our area from parklands, downs and commons across both East and West Sussex. 1967-1994.

#### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder    | Date          | Locality           |
|----------------|-------------|---------------|--------------------|
| TQ33F          | Simon Davey | February 1993 | East Sussex (VC14) |

# Peltigera canina

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality                |
|----------------|--------------|------------|-------------------------|
| TQ2829         | Francis Rose | 15/05/1975 | Wood SW of Ditton Place |
| TQ33F          | Francis Rose | 05/02/1969 | Wakehurst Estate        |

# Icmadophila ericetorum

A grey green lichen with pink fruiting bodies which grows on damp ground, peat and rotting wood, especially in upland areas. Very rare and decreasing in the lowlands. Recorded in our area from Ashdown Forest in East Sussex and Black Down in West Sussex

### lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality                |
|----------------|--------------|------------|-------------------------|
| TQ3233         | Francis Rose | 19/10/1982 | Paddockhurst Park Rocks |

# Pertusaria dealbescens

lichen

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date       | Locality                      |
|----------------|---|------------|-------------------------------|
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994 | Paddockhurst Park (and Rocks) |

# Fuscidea lightfootii

A variable lichen of horizontal boughs and twigs, especially of ash and willow, overhanging streams and rivers and in boggy places. Frequent, mainly in the north and west of the British Isles. In our area recorded from Buckhurst Park, Wiligh Park, Dallington Forest and Sheffield Park in East Sussex and Parham Park and North Marden Down in West Sussex. 1968-1991.

### lichen

| Grid Reference | Recorder     | Date       | Locality                       |
|----------------|--------------|------------|--------------------------------|
| TQ3229         | Francis Rose | 15/06/1968 | Balcombe Place, S. of Balcombe |

# *Hygrocybe calyptriformis var. calyptriformis*

Pink Waxcap

A waxcap fungus of unimproved lawns and similar grassland habitats. Widespread across East and West Sussex, especially in churchyards.

#### fungus

Sussex Rare Species Inventory Species

| <b>Grid Reference</b><br>TQ307309 | <b>Recorder</b><br>Recorder @ WWFRG | <b>Date</b><br>20/09/2001 | <b>Locality</b><br>Balcombe Church |  |
|-----------------------------------|-------------------------------------|---------------------------|------------------------------------|--|
| Hygrocybe p                       | ounicea                             | Crimson Waxo              | ар                                 |  |
| fungus                            |                                     |                           |                                    |  |
| Sussex Rare Speci                 | es Inventory Species                |                           |                                    |  |
| Grid Reference                    | Recorder                            | Date                      | Locality                           |  |
| TQ287282                          | Unknown                             | 1997 - 1999               | East Sussex (VC14)                 |  |
|                                   |                                     |                           |                                    |  |

# Blasia pusilla

Common Kettlewort

A remarkable liverwort with many unique characteristics that grows, often impermanently, on a variety of substrates. Widespread in the west and north of Britain. Scattered sites in West Sussex and formerly at Crowborough Brickworks in East Sussex.

### liverwort

Sussex Rare Species Inventory Species

| Grid Reference | Recorder | Date | Locality           |
|----------------|----------|------|--------------------|
| TQ33F          | SAMLL    | 1988 | East Sussex (VC14) |

# Bazzania trilobata

### **Greater Whipwort**

A handsome liverwort that forms mats mainly on soil overlying acidic rocks. A western and northern species that is occasional in East Sussex and very local in West Sussex on sandstone rocks and moist peaty banks in old woodland. Last recorded in 1997.

### liverwort

Sussex Rare Species Inventory Species

| Grid Reference | Recorder              | Date       | Locality                      |
|----------------|-----------------------|------------|-------------------------------|
| TQ3233         | Francis Rose          | 30/01/1986 | Paddockhurst Park (and Rocks) |
| TQ33F          | Rose, Stern, Matcham. | 11/11/2008 | Ardingly                      |
| TQ33G          | Rose, Stern, Matcham. | 2010       |                               |

# Cephalozia catenulata

# **Chain Pincerwort**

Primarily a liverwort of humid places in western and northern Britain. Rare in our area but recorded from both East and West Sussex on shaded sandrocks and decaying timber in woodland.

#### liverwort

| Grid Reference | Recorder     | Date       | Locality                 |
|----------------|--------------|------------|--------------------------|
| TQ33F          | Francis Rose | 16/07/1988 | Wakehurst - Tilgate Wood |

# Scapania umbrosa

# Shady Earwort

A pioneer liverwort mainly of shaded sandstone rocks, steep banks, decorticated logs and similar habitats. A western species with scattered localities in the south and east. Recorded in our area from near Midhurst in West Sussex, and Boarshead and Eridge Rocks in East Sussex.

#### liverwort

Sussex Rare Species Inventory Species

| Grid Reference | Recorder              | Date | Locality |
|----------------|-----------------------|------|----------|
| TQ33F          | Rose, Stern, Matcham. | 2010 | Ardingly |

# Calypogeia integristipula

Meylan's Pouchwort

A scarce liverwort mainly of acidic rocks and boulders. Its British strongholds are in The Weald but it is also found further north. Recorded in our area almost entirely from shaded sandrocks, mainly in the north of East Sussex where it can be quite common and also from a few locations in West Sussex.

### liverwort

Sussex Rare Species Inventory Species

| <b>Grid Reference</b><br>TQ22Z | Recorder<br>Base Stern Matchem  | <b>Date</b><br>2010             | Locality                        |
|--------------------------------|---|---------------------------------|---------------------------------|
|                                | Rose, Stern, Matcham.   |                                 |                                 |
| TQ2929                         | Francis Rose  | 15/05/1975                      | Northlands Farm, S. of Balcombe |
| TQ299288                       | Simon Davey   | January 1995 -<br>February 1995 | Rocks N.E. of the White House   |
| TQ3029                         | Francis Rose  | 15/05/1975                      | Pilstye Rocks                   |
| TQ318303                       | Simon Davey   | January 1995 -<br>April 1995    | Balcombe Mill Rocks             |
| TQ3233                         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994                      | Paddockhurst Park (and Rocks)   |
| TQ32E                          | Rose, Stern, Matcham.   | 2010                            |                                 |
| TQ33A                          | Rose, Stern, Matcham.   | 2010                            |                                 |
| TQ33F                          | Rose, Stern, Matcham.   | 15/10/1994                      | Ardingly                        |
| TQ33G                          | Rose, Stern, Matcham.   | 2010                            |                                 |

### Racomitrium aciculare

# Yellow Fringe-moss

A dark green or blackish moss of acidic rocks subject to submergence in and by water or on irrigated rocks. Not uncommon in western and northern Britain but very rare in lowland England. In Sussex recorded from the stonework of bridges by streams and moist sandrocks from Graffham in West Sussex, and Tilgate Wood and Ramslye Rocks in East Sussex.

### moss

Sussex Rare Species Inventory Species

| Sussex Rule Speek              | es intentory species     |                     |                                       |  |
|--------------------------------|--------------------------|---------------------|---------------------------------------|--|
| <b>Grid Reference</b><br>TQ33F | <b>Recorder</b><br>SAMLL | <b>Date</b><br>1954 | <b>Locality</b><br>East Sussex (VC14) |  |
| Racomitrium affine             |                          | Lesser Fring        | e-moss                                |  |
| moss                           |                          |                     |                                       |  |
| Sussex Rare Speci              | es Inventory Species     |                     |                                       |  |
| Grid Reference                 | Recorder                 | Date                | Locality                              |  |
| TQ33A                          | SAMLL                    | 1986                | East Sussex (VC14)                    |  |
|                                |                          |                     |                                       |  |

# Racomitrium fasciculare

# Green Mountain Fringe-moss

A moss of roofs and old buildings recorded from Balcombe Mill, West Sussex and, prior to 1908, from two sites in East Sussex. Very rare in lowland Britain but frequent or common elsewhere.

#### moss

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date        | Locality                      |
|----------------|---|-------------|-------------------------------|
| TQ317304       | Ron Boniface;Francis Rose   | 23/01/1954  | S. of Balcombe Mill, Balcombe |
| TQ318303       | Francis Rose;Tim Rich;Rob Cooke;Ronald<br>Archie Boniface;Simon Davey | 1948 - 1995 | Balcombe Mill Rocks           |

# Racomitrium lanuginosum

# Woolly Fringe-moss

A moss of exposed rocks and soil and nutrient-poor habitats in mountains and moorland. Sometimes sufficiently abundant in northern Britain to be the dominant plant and form Racomitrium heath. Rare in lowland England and only recorded in our area from exposed north-facing chalk grassland and the roofs of old buildings in West Sussex.

#### moss

Sussex Rare Species Inventory Species

| Grid Reference | Recorder  | Date        | Locality                      |
|----------------|---|-------------|-------------------------------|
| TQ317304       | Ron Boniface;Francis Rose   | 23/01/1954  | S. of Balcombe Mill, Balcombe |
| TQ318303       | Francis Rose;Tim Rich;Rob Cooke;Ronald<br>Archie Boniface;Simon Davey | 1948 - 1995 | Balcombe Mill Rocks           |

# Dicranella crispa

# Curl-leaved Forklet-moss

A rare moss of open habitats and disturbed soil. Recorded from sandy banks in a few sites in East Sussex in the last 50 years and once, over a century ago, from Henfield in West Sussex.

#### moss

Sussex Rare Species Inventory Species

| Grid Reference | Recorder                  | Date        | Locality                      |
|----------------|---------------------------|-------------|-------------------------------|
| TQ3032         | Francis Rose              | 1963 - 1975 | Worth Forest (East)           |
| TQ3131         | Francis Rose              | 10/03/1962  | The Warren, NE of Balcombe    |
| TQ317304       | Ron Boniface;Francis Rose | 23/01/1954  | S. of Balcombe Mill, Balcombe |

# Dicranodontium denudatum

### Beaked Bow-moss

Primarily a montane species in the British Isles, but also found on damp rocks, decaying wood and peaty soil in lowland areas. Recorded from shaded sandrock exposures in a few sites in East and West Sussex in the last half of the 20th century.

### moss

| Grid Reference | Recorder | Date | Locality           |
|----------------|----------|------|--------------------|
| TQ3233         | SAMLL    | 1994 | East Sussex (VC14) |
| TQ33F          | SAMLL    | 1995 | East Sussex (VC14) |

# Trichostomum tenuirostre

# Narrow-fruited Crisp-moss

Formerly known as Oxystegus tenuirostris, this moss is frequent or common in the western British Isles, but rare elsewhere. In Sussex confined to moist shaded rocks in some Wealden Gills in both East and West Sussex.

#### moss

Sussex Rare Species Inventory Species

| <b>Grid Reference</b><br>TQ299288 | <b>Recorder</b><br>Simon Davey  | <b>Date</b><br>January 1995 - | <b>Locality</b><br>Rocks N.E. of the White House |
|-----------------------------------|---|-------------------------------|--|
| TQ318303                          | Francis Rose;Tim Rich;Rob Cooke;Ronald<br>Archie Boniface:Simon Davey | February 1995<br>1948 - 1995  | Balcombe Mill Rocks                              |
| TQ33F                             | SAMLL   | 1993                          | East Sussex (VC14)                               |

### Orthodontium gracile

### Slender Thread-moss

A rare and decreasing lowland moss of sheltered acidic rocks recorded from widely scattered localities in the British Isles. It has been recorded from a number of sandrocks in both East and West Sussex recently but, according to Smith (2004), is out-competed by the very similar Orthodontium lineare and this has led to its disappearance in many places.

### moss

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder  | Date       | Locality                      |
|----------------|---|------------|-------------------------------|
| TQ320334       | Howard Matcham  | 2000       | East Sussex (VC14)            |
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994 | Paddockhurst Park (and Rocks) |
| TQ33F          | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994 | Wakehurst - Tilgate Wood      |

# Osmunda regalis

Royal Fern

A large fern found of fen-carr woodland, ditches, and riverbanks. Thought to be native in Sussex only in Ashdown Forest and elsewhere likely to be of garden origin.

### fern

| Grid Reference | Recorder     | Date       | Locality    |
|----------------|--------------|------------|-------------|
| TQ3356429984   | Arthur Hoare | 02/08/2008 | Ardingly CP |

# Trichomanes speciosum

# Killarney Fern

Known in Sussex only in the gametophyte state, this fern was first identified in Fairlight Glen near Hastings in 1992. It has subsequently been found in several other localities in East Sussex. The gametophytic or non-spore-bearing phase grows deep in clefts, crevices and natural rock hollows and appears to be able to exist in a state of arrested development, unable to produce the mature fronds under present conditions.

#### fern

Bern Convention Appendix 1; European Protected Species; Habitats Directive Annex 2 - non-priority species; Habitats Directive Annex 4; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; Wildlife and Countryside Act 1981 (Schedule 8)

| Grid Reference | Recorder  | Date                            | Locality                      |
|----------------|---|---------------------------------|-------------------------------|
| TQ298289       | Anon ଢ Sussex Bot. Rec. Soc.;Rob<br>Cooke;Simon Davey                 | 1995                            | West Sussex (VC13)            |
| TQ299288       | Tim Rich;Rob Cooke;Simon Davey  | January 1994 -<br>February 1995 | Rocks N.E. of the White House |
| TQ317300       | Anon ଢ Sussex Bot. Rec. Soc.;Rob<br>Cooke;Simon Davey                 | 1995                            | Balcombe                      |
| TQ318303       | Francis Rose;Tim Rich;Rob Cooke;Ronald<br>Archie Boniface;Simon Davey | 1948 - 1995                     | Balcombe Mill Rocks           |

# Pilularia globulifera

Pillwort

A small fern growing that grows beside still, or slowly flowing, non-calcareous water. Formerly scattered thinly across our area but now assumed to be extinct in both East and West Sussex. 1790-1985

### fern

IUCN (2001) - Lower risk - near threatened; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder                | Date        | Locality |
|----------------|-------------------------|-------------|----------|
| TQ3030         | William Botting Hemsley | 1790 - 1924 | Balcombe |

### Dryopteris aemula

Hay-scented Buckler-fern

In the Weald a fern of in deep, steep-sided wooded gills. Very rare in West Sussex but locally frequent in the High Weald area of East Sussex. This species is one for which Britain has special responsibility.

### fern

| Grid Reference | Recorder  | Date         | Locality                        |
|----------------|---|--------------|---------------------------------|
| TQ290293       | Ernest Sears  | 18/02/2008   | East Sussex (VC14)              |
| TQ291293       | Simon Davey   | January 1995 | Northlands Rocks                |
| TQ2929         | Francis Rose  | 15/05/1975   | Northlands Farm, S. of Balcombe |
| TQ317304       | Ron Boniface;Francis Rose   | 23/01/1954   | S. of Balcombe Mill, Balcombe   |
| TQ318303       | Francis Rose;Tim Rich;Rob Cooke;Ronald<br>Archie Boniface;Simon Davey | 1948 - 1995  | Balcombe Mill Rocks             |
| TQ3233         | Andy Jackson;Howard Matcham;Martha<br>Newton;Simon Davey;Francis Rose | 18/02/1994   | Paddockhurst Park (and Rocks)   |
| TQ33F          | Francis Rose  | 15/11/1984   | Wakehurst - Tilgate Wood        |

# Epipactis palustris

# Marsh Helleborine

An orchid of neutral to calcareous fens, marshes, damp pastures, meadows and dune-slacks. It is restricted to two widely seperated sites in East Sussex.

### flowering plant

EC CITES Annex B; Sussex Rare Species Inventory Species

| Grid Reference | Recorder                                | Date       | Locality                   |
|----------------|---|------------|----------------------------|
| TQ3128         | Graham Roberts;Francis Rose             | 21/06/1993 | Balcombe Fen               |
| TQ314284       | David Lang                              | 12/07/2005 | Balcombe Marsh SWT Reserve |
| TQ31522847     | Alan Knapp;Arthur Hoare                 | 13/07/2005 | Balcombe Marsh SWT Reserve |
| TQ315284       | Clare Nightingale                       | 1992       | Balcombe Marsh SWT Reserve |
| TQ315285       | Anon @ Sussex Bot. Rec. Soc.;David Lang | 1992       | Balcombe Marsh SWT Reserve |

### Hammarbya paludosa

Bog Orchid

Fragrant Orchid

A small orchid of boggy areas typically among saturated Sphagnum, but also on peaty mud and on the edges of runnels and flushes. Now regarded as extinct in Sussex.

#### flowering plant

EC CITES Annex B; Sussex Rare Species Inventory Species

| Grid Reference | Recorder | Date | Locality                   |
|----------------|----------|------|----------------------------|
| TQ314285       | SPASU    | 1865 | Balcombe Marsh SWT Reserve |

# Gymnadenia conopsea subsp. densiflora

### flowering plant

EC CITES Annex B; IUCN (2001) - Data Deficient; Sussex Rare Species Inventory Species

| Grid Reference | Recorder                                | Date       | Locality                   |
|----------------|---|------------|----------------------------|
| TQ3128         | Graham Roberts;Francis Rose             | 21/06/1993 | Balcombe Fen               |
| TQ315284       | W Merritt                               | 21/07/1983 | Balcombe Marsh SWT Reserve |
| TQ315285       | Anon @ Sussex Bot. Rec. Soc.;David Lang | 1992       | Balcombe Marsh SWT Reserve |

# Carex pulicaris

# Flea Sedge

Once frequent in damp, base-rich situations, now extremely rare in the county. Although usually associated with bogs and damp pastures, it was occasionally found on the Downs.

#### flowering plant

Sussex Rare Species Inventory Species

| Grid Reference | Recorder                    | Date       | Locality                   |  |
|----------------|-----------------------------|------------|----------------------------|--|
| TQ3128         | Graham Roberts;Francis Rose | 21/06/1993 | Balcombe Fen               |  |
| TQ315284       | Gavin Stewart               | 30/05/1981 | Balcombe Marsh SWT Reserve |  |

# Carex viridula subsp. brachyrrhyncha

### Long-stalked Yellow-sedge

#### flowering plant

| Grid Reference | Recorder      | Date       | Locality                   |
|----------------|---------------|------------|----------------------------|
| TQ32E          | C.M.P. Ryland | 22/06/2005 | Balcombe Marsh SWT Reserve |

# Bromus secalinus

### Rye Brome

Ivy-leaved Crowfoot

An introduced grass of cereal fields, which is also found as a casual on waste ground, and occasionally in improved leys. Now very rare in our area and possible gone from West Sussex.

#### flowering plant

Farm Environment Plan Guidance 007- Table 3; IUCN (2001) - Vulnerable; Sussex Rare Species Inventory Species

| Grid Reference | Recorder                | Date       | Locality           |
|----------------|-------------------------|------------|--------------------|
| TQ306283       | Alan Knapp;Arthur Hoare | 13/07/2005 | East Sussex (VC14) |
| TQ309284       | Alan Knapp;Arthur Hoare | 13/07/2005 | East Sussex (VC14) |

### Ranunculus hederaceus

A plant that grows mainly at the edge of small water bodies and by the sheltered backwaters of rivers. Recently recorded from several sites in West Sussex but there seems to have been a huge decline in East Sussex, with only a single recent record. This species is regarded as one for which Britain has special responsibility.

#### flowering plant

Sussex Rare Species Inventory Species

| Grid Reference | Recorder            | Date                       | Locality           |
|----------------|---------------------|----------------------------|--------------------|
| TQ3150628470   | Jacqueline Thompson | 26/08/2009 -<br>11/11/2009 | East Sussex (VC14) |

### Myosurus minimus

An annual of seasonally flooded, nutrient-rich soils in areas disturbed by machinery or animals, such as hollows on ploughed land, rutted tracks and gateways in pastures. In Sussex this species was always rather scarce and sporadic in appearance. It is declining slowly in West Sussex and has now gone from East Sussex.

Mousetail

#### flowering plant

Farm Environment Plan Guidance 007- Table 3; IUCN (2001) - Vulnerable; Sussex Rare Species Inventory Species

| Grid Reference | Recorder | Date        | Locality           |
|----------------|----------|-------------|--------------------|
| TQ33F          | SPASU    | 1790 - 1986 | East Sussex (VC14) |

### Geum rivale

# Water Avens

A perennial of marshy areas in shaded or open habitats. This plant is local in southern England and is currently known only from one site in West Sussex and as a rare garden escape in East Sussex.

#### flowering plant

Sussex Rare Species Inventory Species

| Grid Reference | Recorder    | Date       | Locality                             |
|----------------|-------------|------------|--------------------------------------|
| TQ317324       | Mary Scruby | 11/06/1982 | The Warren (Paddockhurst), Balcombe. |

# Euphorbia platyphyllos

### Broad-leaved Spurge

A long-established annual of cultivated and waste ground, the margins of arable fields, and occasionally on roadsides. Decreasing throughout southern England and north-west Europe, but with more than 30 post 1986 records from East and West Sussex.

### flowering plant

EC CITES Annex B; Farm Environment Plan Guidance 007- Table 3; Sussex Rare Species Inventory Species

| Grid Reference | Recorder          | Date        | Locality           |
|----------------|-------------------|-------------|--------------------|
| TQ315274       | Anon @ Monks Wood | 1974        | East Sussex (VC14) |
| TQ319310       | Anon @ Monks Wood | 1991        | East Sussex (VC14) |
| TQ32J          | SPASU             | 1790 - 1979 | West Sussex (VC13) |

# Epilobium lanceolatum

### Spear-leaved Willowherb

A perennial of roadsides, walls, banks, quarries, and dunes. Sometimes a garden weed. Generally scarce in West Sussex and very scarce in East Sussex, where it appears to have declined.

#### flowering plant

Sussex Rare Species Inventory Species

| <b>Grid Reference</b> | <b>Recorder</b> | <b>Date</b> | <b>Locality</b>                          |
|-----------------------|-----------------|-------------|--|
| TQ293317              | Mary Scruby     | 30/06/1982  | Balcombe Forest (west) & Hourglass Wood. |
|                       |                 |             |  |

### Galium uliginosum

# Fen Bedstraw

A perennial plant of base-rich marshes and fens, An uncommon and declining species with a handful of sites in West Sussex and now only one in East Sussex.

#### flowering plant

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality                     |
|----------------|--------------|------------|------------------------------|
| TQ287321       | Mary Scruby  | 18/06/1982 | Brantridge Forest, Balcombe. |
| TQ319317       | Arthur Hoare | 19/06/2004 | Balcombe CP                  |
| TQ33A          | Arthur Hoare | 11/05/2004 | Balcombe CP                  |

# Littorella uniflora

### Shoreweed

. An aquatic plant of lakes, reservoirs, rivers, streams, ponds and winter-flooded dune-slacks. Once widespread in our area but now close to extinction due to competition from the alien New Zealand pigmyweed, Crassula helmsii.

### flowering plant

Sussex Rare Species Inventory Species

| Grid Reference | Recorder                                  | Date           | Locality           |
|----------------|---|----------------|--------------------|
| TQ3273429685   | A. Spiers                                 | 25/08/2006     | Ardingly Reservoir |
| TQ328296       | Anon @ Sussex Bot. Rec. Soc.;Arthur Hoare | 1987 - 2000    | East Sussex (VC14) |
| TQ3289429486   | Alan Knapp                                | 25/11/2007     | Ardingly Reservoir |
| TQ3309829658   | A. Spiers                                 | 25/08/2006     | Ardingly Reservoir |
| TQ331298       | Anon @ Sussex Bot. Rec. Soc.;Arthur Hoare | 1987 - 2000    | East Sussex (VC14) |
| TQ3328429722   | Alan Knapp                                | 28/12/2007     | Ardingly Reservoir |
| TQ33302960     | Arthur Hoare                              | 26/06/2004     | Ardingly Reservoir |
| TQ333297       | Alan Knapp                                | 12/07/2004     | Ardingly Reservoir |
| TQ335289       | Ernest Sears                              | September 2005 | Ardingly Reservoir |

### Mentha pulegium

Pennyroyal

A short-lived perennial of seasonally inundated grassland overlying silt and clay. Currently known in our area only from Falmer, East Sussex. The plants which are frequent around the Ardingly Reservoir are an alien sub-species.

#### flowering plant

IUCN (2001) - Endangered; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 8)

| Grid Reference | Recorder                                  | Date           | Locality           |
|----------------|---|----------------|--------------------|
| TQ329295       | Anon @ Sussex Bot. Rec. Soc.;Arthur Hoare | 1987 - 2000    | East Sussex (VC14) |
| TQ32J          | Anon @ Monks Wood;SPASU                   | 1991           | West Sussex (VC13) |
| TQ331299       | Anon @ Sussex Bot. Rec. Soc.;Arthur Hoare | 1987 - 2000    | East Sussex (VC14) |
| TQ33302960     | Arthur Hoare                              | 26/06/2004     | Ardingly Reservoir |
| TQ335289       | Ernest Sears                              | September 2005 | Ardingly Reservoir |

# Lathraea clandestina

# Purple Toothwort

### flowering plant

| Sussex Rare Species  |  |  |  |
|--|--|--|--|
| <b>Grid Reference</b><br>TQ3230  | <b>Recorder</b><br>Anon @ Sussex Bot. Rec. Soc.;Arthur Hoare   | <b>Date</b><br>1987 - 2000   | <b>Locality</b><br>East Sussex (VC14)  |
| Hieracium ex   | r <b>otericum</b> Ha   | awkweed  |  |
| flowering plant  |  |  |  |
| Sussex Rare Species  | s Inventory Species  |  |  |
| Grid Reference   | Recorder   | Date   | Locality   |
| TQ317324   | Mary Scruby  | 11/06/1982   | The Warren (Paddockhurst), Balcombe.   |
| Anthemis arv   | v <b>ensis</b> Co  | orn Chamom   | ile  |
|  | nt has undergone a drastic reduction over the w<br>are almost certainly the result of deliberate int   |  |  |
| flowering plant  |  |  |  |
| Farm Environment F   | Plan Guidance 007- Table 3; IUCN (2001) - Endar  | ngered; Sussex Ra  | re Species Inventory Species   |
|  |  | Date   | Locality   |
| Grid Reference   | Recorder   | Dale   | Locatty  |
| Grid Reference<br>TQ318310   | <b>Recorder</b><br>Anon @ Sussex Bot. Rec. Soc.;Alan Knapp   | 1987 - 2001  | East Sussex (VC14)   |
|  | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp  |  | -  |
| TQ318310<br><b>Dipsacus pilo</b><br>A biennial herb plan   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp  | 1987 - 2001<br>nall Teasel<br>d other habitats, u  | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather  |
| TQ318310<br><b>Dipsacus pilo</b><br>A biennial herb plan   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks an  | 1987 - 2001<br>nall Teasel<br>d other habitats, u  | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather  |
| TQ318310<br><b>Dipsacus pilo</b><br>A biennial herb plan<br>rare in Sussex but in  | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks an<br>acreasing in some parts of the west of our area,  | 1987 - 2001<br>nall Teasel<br>d other habitats, u  | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather  |
| TQ318310<br>Dipsacus pilo<br>A biennial herb plan<br>rare in Sussex but in<br>flowering plant  | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks an<br>acreasing in some parts of the west of our area,  | 1987 - 2001<br>nall Teasel<br>d other habitats, u  | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather  |
| TQ318310<br><b>Dipsacus pilo</b><br>A biennial herb plan<br>rare in Sussex but in<br><b>flowering plant</b><br>Sussex Rare Species   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks an<br>acreasing in some parts of the west of our area,<br>s Inventory Species   | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Aro                       | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.  |
| TQ318310<br>Dipsacus pilo<br>A biennial herb plan<br>rare in Sussex but in<br>flowering plant<br>Sussex Rare Species<br>Grid Reference   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks an<br>acreasing in some parts of the west of our area,<br>s Inventory Species<br><b>Recorder</b><br>Mary Scruby   | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Aro<br>Date               | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.  |
| TQ318310<br><b>Dipsacus pilo</b><br>A biennial herb plan<br>rare in Sussex but in<br><b>flowering plant</b><br>Sussex Rare Species<br><b>Grid Reference</b><br>TQ297320  | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks an<br>acreasing in some parts of the west of our area,<br>s Inventory Species<br><b>Recorder</b><br>Mary Scruby<br><b>WS pervicax</b>   | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Aro<br>Date               | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.  |
| TQ318310<br><b>Dipsacus pilo</b><br>A biennial herb plan<br>rare in Sussex but in<br><b>flowering plant</b><br>Sussex Rare Species<br><b>Grid Reference</b><br>TQ297320<br><b>Ceutorhynche</b>   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks and<br>acreasing in some parts of the west of our area,<br>s Inventory Species<br><b>Recorder</b><br>Mary Scruby<br><b>US pervicax</b><br>eoptera)  | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Aro<br>Date               | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.  |
| TQ318310<br><b>Dipsacus pilo</b><br>A biennial herb plan<br>rare in Sussex but in<br><b>flowering plant</b><br>Sussex Rare Species<br><b>Grid Reference</b><br>TQ297320<br><b>Ceutorhyncha</b><br><b>insect - beetle (Cole</b>   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br><b>PSUS</b> Sn<br>t of woodland edges, stream and river banks and<br>acreasing in some parts of the west of our area,<br>s Inventory Species<br><b>Recorder</b><br>Mary Scruby<br><b>US pervicax</b><br>eoptera)  | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Aro<br>Date               | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.  |
| TQ318310<br>Dipsacus pilo<br>A biennial herb plan<br>rare in Sussex but in<br>flowering plant<br>Sussex Rare Species<br>Grid Reference<br>TQ297320<br>Ceutorhynchi<br>insect - beetle (Cole<br>Sussex Rare Species<br>Grid Reference   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br>PSUS Sn<br>t of woodland edges, stream and river banks and<br>hereasing in some parts of the west of our area,<br>s Inventory Species<br>Recorder<br>Mary Scruby<br>US pervicax<br>eopteral<br>s Inventory Species<br>Recorder<br>Peter Hodge                     | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Ard<br>Date<br>02/07/1982 | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.<br>Locality<br>Balcombe Forest (east). |
| TQ318310<br>Dipsacus pilo<br>A biennial herb plan<br>rare in Sussex but in<br>flowering plant<br>Sussex Rare Species<br>Grid Reference<br>TQ297320<br>Ceutorhynchi<br>insect - beetle (Cole<br>Sussex Rare Species<br>Grid Reference<br>TQ300311   | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br>PSUS Sn<br>t of woodland edges, stream and river banks an<br>increasing in some parts of the west of our area,<br>s Inventory Species<br>Recorder<br>Mary Scruby<br>US pervicax<br>eopteral<br>is Inventory Species<br>Recorder<br>Peter Hodge                    | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Ard<br>Date<br>02/07/1982 | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.<br>Locality<br>Balcombe Forest (east). |
| TQ318310<br>Dipsacus pilo<br>A biennial herb plan<br>rare in Sussex but in<br>flowering plant<br>Sussex Rare Species<br>Grid Reference<br>TQ297320<br>Ceutorhynchi<br>insect - beetle (Cole<br>Sussex Rare Species<br>Grid Reference<br>TQ300311<br>Acidota cruei                          | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br>PSUS Sn<br>t of woodland edges, stream and river banks an<br>acreasing in some parts of the west of our area,<br>s Inventory Species<br>Recorder<br>Mary Scruby<br>US pervicax<br>eopteral<br>s Inventory Species<br>Recorder<br>Peter Hodge<br>Dtata<br>eopteral | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Ard<br>Date<br>02/07/1982 | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.<br>Locality<br>Balcombe Forest (east). |
| TQ318310<br>Dipsacus pilo<br>A biennial herb plan<br>rare in Sussex but in<br>flowering plant<br>Sussex Rare Species<br>Grid Reference<br>TQ297320<br>Ceutorhynchu<br>insect - beetle (Cole<br>Sussex Rare Species<br>Grid Reference<br>TQ300311<br>Acidota cruen<br>insect - beetle (Cole | Anon @ Sussex Bot. Rec. Soc.;Alan Knapp<br>PSUS Sn<br>t of woodland edges, stream and river banks an<br>acreasing in some parts of the west of our area,<br>s Inventory Species<br>Recorder<br>Mary Scruby<br>US pervicax<br>eopteral<br>s Inventory Species<br>Recorder<br>Peter Hodge<br>Dtata<br>eopteral | 1987 - 2001<br>nall Teasel<br>d other habitats, u<br>mainly around Ard<br>Date<br>02/07/1982 | East Sussex (VC14)<br>Isually on damp, calcareous soils. Rather<br>undel and Little Bognor.<br>Locality<br>Balcombe Forest (east). |

# Staphylinus dimidiaticornis

### insect - beetle (Coleoptera)

TQ289334

Sussex Rare Species Inventory Species

| <b>Grid Reference</b><br>TQ286297 | <b>Recorder</b><br>Clare Blencowe;Michael Blencowe   | <b>Date</b><br>06/05/2013 | <b>Locality</b><br>West Sussex (VC13)             |
|-----------------------------------|--|---------------------------|---|
| Ptychoptera                       | longicauda   | Phantom cran              | e flies   |
| insect - true fly (Di             | ptera)   |                           |   |
| Sussex Rare Specie                | es Inventory Species   |                           |   |
| <b>Grid Reference</b><br>TQ335299 | <b>Recorder</b><br>Mike Edwards  | <b>Date</b><br>07/06/1996 | <b>Locality</b><br>East Sussex (VC14)             |
| Lasioglossu<br>malachurum         | m (Evylaeus)<br>n  |                           |   |
| insect - hymenopte                | eran   |                           |   |
|                                   | es Inventory Species   |                           |   |
| <b>Grid Reference</b><br>TQ335299 | <b>Recorder</b><br>Recorder @ BWARS  | <b>Date</b><br>18/07/1996 | <b>Locality</b><br>Lodder Valley NR e. lower wood |
| Priocnemis                        | (Umbripennis) coriacea   |                           |   |
| insect - hymenopte                | eran   |                           |   |
| Sussex Rare Specie                | es Inventory Species   |                           |   |
| <b>Grid Reference</b><br>TQ320321 | <b>Recorder</b><br>Recorder @ BWARS  | <b>Date</b><br>23/05/1937 | <b>Locality</b><br>Balcombe                       |
| Eilema soro                       | rcula  | Orange Footm              | an  |
|                                   | local species found in woods in southern UK<br>d can be quite common in woods. Caterpillar             |                           |   |
| insect - moth                     |  |                           |   |
| Sussex Rare Specie                | es Inventory Species   |                           |   |
| <b>Grid Reference</b><br>TQ289334 | <b>Recorder</b><br>Julian Clarke   | <b>Date</b><br>26/05/2012 | <b>Locality</b><br>West Sussex (VC13)             |
| Tetheella flu                     | ictuosa  | Satin Lutestrir           | ng  |
|                                   | Il species occurs in mature woodlands in sou<br>« it is widespread and sometimes common in<br>n Birch. |                           |   |
| insect - moth                     |  |                           |   |
| Sussex Rare Specie                | es Inventory Species   |                           |   |
| <b>Grid Reference</b><br>TQ288334 | <b>Recorder</b><br>Graham Collins  | <b>Date</b><br>06/06/1994 | Locality<br>Tilgate Forest                        |

26/05/2012

West Sussex (VC13)

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Julian Clarke

# Eriocrania chrysolepidella

# Small Hazel Purple

#### insect - moth

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date        | Locality |
|----------------|--------------|-------------|----------|
| TQ3030         | Mark Parsons | 1790 - 1970 | Balcombe |

### Chloroclysta siterata

Red-green Carpet

This woodland species is common in the north and west of Britain and scarce, but increasing elsewhere. In Sussex it is now widespread in the Wealden and greensand woodlands. Caterpillars feed on the leaves of various trees.

#### insect - moth

Sussex Rare Species Inventory Species

| Grid Reference | Recorder      | Date       | Locality           |
|----------------|---------------|------------|--------------------|
| TQ289334       | Julian Clarke | 26/05/2012 | West Sussex (VC13) |

### Hypomecis roboraria

This nationally scarce (b) species occurs in ancient woodlands in central southern England. In Sussex it occurs in many of the

Great Oak Beauty

mature woodlands, but is only regularly found in the mature woods around Petworth. Caterpillars feed on Oak.

#### insect - moth

Sussex Rare Species Inventory Species

| Grid Reference | Recorder      | Date       | Locality           |
|----------------|---------------|------------|--------------------|
| TQ289334       | Julian Clarke | 26/05/2012 | West Sussex (VC13) |

### Perconia strigillaria

Grass Wave

A nationally local species of heathland, commons and heathy woods all over UK, but only at all common around the New Forest and the Surrey heaths. In Sussex it is found all over Ashdown Forest in East Sussex and the northern heaths in West Sussex such as Ambersham Common, Lavington Common, Midhurst Common, Van Common and Iping Common. Caterpillars feed on Heathers, Broom and Petty Whin.

#### insect - moth

Sussex Rare Species Inventory Species

| Grid Reference | Recorder      | Date       | Locality           |
|----------------|---------------|------------|--------------------|
| TQ289334       | Julian Clarke | 16/06/1984 | West Sussex (VC13) |

### Elaphria venustula

Rosy Marbled

A nationally scarce (b) species of heathy woodlands in south east England. In Sussex it has increased and is now very widespread in woodlands throughout the county. Caterpillars are thought to feed on the flowers of Tormentil and Creeping Cinquefoil.

#### insect - moth

| Grid Reference | Recorder       | Date       | Locality           |
|----------------|----------------|------------|--------------------|
| TQ288334       | Graham Collins | 06/06/1994 | Tilgate Forest     |
| TQ289334       | Julian Clarke  | 10/06/1990 | West Sussex (VC13) |

# Furcula bicuspis

# Alder Kitten

This nationally local species in the west and south west and the south east of England in woodland. In Sussex it is fairly widespread in East Sussex being common on Ashdown Forest. In West Sussex it is very scarce with Tilgate and St. Leonards Forests around Crawley being the only sites. Caterpillars feed on Alder and Birches.

#### insect - moth

Sussex Rare Species Inventory Species

| Grid Reference | Recorder       | Date       | Locality           |
|----------------|----------------|------------|--------------------|
| TQ288334       | Graham Collins | 06/06/1994 | Tilgate Forest     |
| TQ289334       | Julian Clarke  | 26/05/2012 | West Sussex (VC13) |

# Ptilodon cucullina

# Maple Prominent

Purple Emperor

A nationally local species of woods, mostly on the chalk. It is found mostly in southern and eastern England, but is expanding its range. In Sussex it is found in woods on the Downs west of Arundel and in woods between Battle and Rye in the east of East Sussex. Caterpillars feed on Field Maple.

### insect - moth

Sussex Rare Species Inventory Species

| Grid Reference | Recorder      | Date       | Locality           |
|----------------|---------------|------------|--------------------|
| TQ289334       | Julian Clarke | 26/05/2012 | West Sussex (VC13) |

### Apatura iris

Much rarer today than in the past, this sallow-feeding woodland butterfly has shown some signs of recovery in recent years. Currently widespread nationally, but rare in West Sussex.

### insect - butterfly

IUCN (2001) - Lower risk - near threatened; Sussex Rare Species Inventory Species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.5a; 9.5b)

| Grid Reference | Recorder                         | Date        | Locality                   |
|----------------|----------------------------------|-------------|----------------------------|
| TQ315284       | W Merritt                        | 21/07/1983  | Balcombe Marsh SWT Reserve |
| TQ33F          | BBCS British Butterfly Con. Soc. | 1996 - 2000 | East Sussex (VC14)         |

### Boloria selene

# Small Pearl-bordered Fritillary

A rapidly declining, violet-feeding woodland butterfly only recorded from 10 1km squares, all in central East Sussex, since 2000. Once widespread and abundant in both counties.

### insect - butterfly

IUCN (2001) - Lower risk - near threatened; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species

| Grid Reference | Recorder      | Date       | Locality           |
|----------------|---------------|------------|--------------------|
| TQ289334       | Julian Clarke | 17/06/1983 | West Sussex (VC13) |

# Cordulia aenea

# Downy Emerald

A dragonfly of nutrient-poor tree-lined or woodland ponds, lakes, canals, slow-flowing rivers and streams. Thinly but widely scattered across our area. Elsewhere it is a scarce species and southern and south eastern England are its main strongholds in the British Isles.

### insect - dragonfly (Odonata)

Sussex Rare Species Inventory Species

| Grid Reference | Recorder    | Date       | Locality           |
|----------------|-------------|------------|--------------------|
| TQ316309       | Andrew Gray | 29/06/1986 | East Sussex (VC14) |

# Somatochlora metallica

# **Brilliant Emerald**

A dragonfly of large, mildly acidic pools often in pine woods. Locally common in the High Weald in the north of our area and in the Arun and Adur catchments. The insect has a remarkably disjunct distribution in the British Isles with its main concentration in The Weald and adjacent areas and elsewhere only in the Scottish Highlands.

#### insect - dragonfly (Odonata)

IUCN (2001) - Vulnerable; Sussex Rare Species Inventory Species

| <b>Grid Reference</b> | <b>Recorder</b> | <b>Date</b> | <b>Locality</b>    |  |
|-----------------------|-----------------|-------------|--------------------|--|
| TQ318304              | Phil Belden     | 13/06/2003  | East Sussex (VC14) |  |
|                       |                 |             |                    |  |

# Conocephalus fuscus

# Long-winged Cone-head

#### insect - orthopteran

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date           | Locality  |
|----------------|--------------|----------------|---|
| TQ284338       | Simon Curson | September 1999 | Tilgate Forest                                      |
| TQ314310       | Simon Curson | 23/08/2002     | Balcombe Lake and associated woodlands,<br>Balcombe |

Roesel's Bush-cricket

# Metrioptera roeselii

#### insect - orthopteran

Sussex Rare Species Inventory Species

| Grid Reference | Recorder                             | Date       | Locality                   |
|----------------|--------------------------------------|------------|----------------------------|
| TQ31522844     | Graeme Lyons;James Power;Shaun Pryor | 08/07/2013 | Balcome Marsh SWT Reserve  |
| TQ315284       | Graeme Lyons                         | 15/07/2008 | Balcombe Marsh SWT Reserve |

### Agapetus fuscipes

Several records from rivers and streams in the west of West Sussex and the only Glossomatid caddis fly to be recorded in Sussex. Widespread elsewhere in Britain.

### insect - caddis fly (Trichoptera)

Sussex Rare Species Inventory Species

| Grid Reference | Recorder     | Date       | Locality   |
|----------------|--------------|------------|------------|
| TQ314283       | Robin Pepper | 01/03/2011 | River Ouse |

Bullhead

### Cottus gobio

# bony fish (Actinopterygii)

Habitats Directive Annex 2 - non-priority species; Sussex Rare Species Inventory Species

| Grid Reference | Recorder                | Date | Locality           |
|----------------|-------------------------|------|--------------------|
| TQ324280       | EA - Environment Agency | 2001 | East Sussex (VC14) |

### Lampetra

# Lamprey Sp.

### jawless fish (Agnatha)

Sussex Rare Species Inventory Species

| Grid Reference | Recorder                | Date | Locality           |
|----------------|-------------------------|------|--------------------|
| TQ324280       | EA - Environment Agency | 2001 | East Sussex (VC14) |

# Arvicola amphibius

# European Water Vole

The fastest declining native British mammal, the water vole was 'Ratty' in Wind in the Willows. Water voles prefer slow flowing streams, rivers and dykes with steep earth banks and luxuriant emergent vegetation. They have been in decline for over a century mainly due to loss of habitat while the presence of American mink has greatly hastened this decline. In many areas of mainland Britain water voles are already extinct but there are still some strong populations in Sussex. A legally protected species, listed on the Sussex Rare Species Inventory and the subject of a Sussex Species Action Programme.

### terrestrial mammal

Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (sec; Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.1 killing/injuring; 9.1 taking; 9.2; 9.4a; 9.4b; 9.5a; 9.5b; Schedule 5)

| <b>Grid Reference</b><br>TQ3128<br>TQ324280 | <b>Recorder</b><br>Martin Port<br>Anon | <b>Date</b><br>03/07/1965<br>1989 - 1990 | <b>Locality</b><br>East Sussex (VC14)<br>East Sussex (VC14) |  |
|---|--|--|---|--|
| Macrogastra                                 | n (Pseudovestia) rolphii               | Rolph's Door                             | Snail   |  |
| mollusc                                     |  |  |   |  |
| Sussex Rare Specie                          | es Inventory Species                   |  |   |  |
| <b>Grid Reference</b><br>TQ299288           | <b>Recorder</b><br>Amanda Millar       | <b>Date</b><br>1995                      | <b>Locality</b><br>East Sussex (VC14)                       |  |
| Ashfordia gr                                | anulata                                |  |   |  |
| mollusc                                     |  |  |   |  |
| Sussex Rare Specie                          | es Inventory Species                   |  |   |  |
| <b>Grid Reference</b><br>TQ33F              | <b>Recorder</b><br>Martin Willing      | <b>Date</b><br>1980 - 1990               | <b>Locality</b><br>East Sussex (VC14)                       |  |
| Leiostyla (Le                               | eiostyla) anglica                      | English Chrys                            | salis Snail   |  |
| mollusc                                     |  |  |   |  |
| Sussex Rare Specie                          | es Inventory Species                   |  |   |  |
| <b>Grid Reference</b><br>TQ3130             | <b>Recorder</b><br>Martin Willing      | <b>Date</b><br>1989                      | <b>Locality</b><br>West Sussex (VC13)                       |  |
| Spermodea                                   | lamellata                              |  |   |  |
| mollusc                                     |  |  |   |  |
| Sussex Rare Specie                          | es Inventory Species                   |  |   |  |
|   | Recorder                               | Date                                     | L ocality   |  |

| Grid Reference | Recorder       | Date       | Locality           |
|----------------|----------------|------------|--------------------|
| TQ3130         | Martin Willing | 1989       | West Sussex (VC13) |
| TQ333297       | B Colville     | 13/04/1974 | Ardingly Reservoir |

# Phenacolimax major

mollusc

Sussex Rare Species Inventory Species

| Grid Reference | Recorder   | Date       | Locality           |
|----------------|------------|------------|--------------------|
| TQ332298       | B Colville | 19/04/1974 | Ardingly Reservoir |

0 Confidential records exist for this enquiry area. Please contact the record centre if you require further information.

# SUSSEX INVASIVE ALIEN SPECIES REPORT

The Sussex Invasive Alien Species Report is produced in order to help minimise the threat posed by invasive alien species in Sussex. Records are labelled so that only one record per species per grid reference is included - this will usually be the most up to date record.

Most alien species pose no threat to native species, and indeed many naturalised non-natives represent important additions to our flora and fauna. An older record of an alien invasive species may denote that there was once a problem at this site, but it has subsequently been dealt with. However, the problem may still persist but no up to date information is available.

### What is an Invasive Alien Species?

The term alien is synonymous with the term non-native. An invasive alien is defined as an alien species whose introduction and/or spread threatens biological diversity. Invasive alien species are referred to by several names, which are often used interchangeably: non-natives, introduced, non-indigenous, exotic, foreign, noxious, aggressive, pest or harmful species.

### What's the problem?

With no natural predators and a benign climate, invasive alien species can out-compete our native plant and animal species. For example, some invasive alien plants species can change light levels, decrease dissolved oxygen in water, change soil chemistry and its structure, and increase surface run-off and soil erosion. On a more subtle level, invasive alien species can affect ecosystem processes such as nutrient cycling, pollination and regeneration of soils. Invasive fauna can compete with native species, displace them, consume them, act as parasites or transmit diseases, reduce growth and survival rates, cause the decline or extinction of local populations or even entire species.

### What control is in place?

Section 14 of The Wildlife and Countryside Act (1981) is the principal legislation dealing with the release of non-native species. This has been amended by the Natural Environment and Rural Communities (NERC) Act (2006) in England and Wales. Section 14 of the Act makes it illegal to allow any animal which is not ordinarily resident in Great Britain, or is listed on Schedule 9 of the Act, to escape into the wild, or to release it into the wild. It is also illegal to plant or otherwise cause to grow in the wild any plant listed on Schedule 9 of the Act.

### What to do if there is an invasive alien species on your site

If you have any of the species listed in this report on your site, firstly investigate the recommended control for the particular species. You can search by species name on the <u>GB non-native species secretariat website</u> for further advice.

If there are invasive alien species at your site that are not in this report please contact us on <a href="mailto:sxbrc@sussexwt.org.uk">sxbrc@sussexwt.org.uk</a> or 01273 497521 so that we can update our database.



# SUSSEX INVASIVE ALIEN SPECIES REPORT

ESD/14/74

Please note that bird records are not included in this report.

### Land at Balcombe Parish

13 February 2014

Search Area: TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329

Katherine Daniel (Balcombe Parish Council)

arch Area: 10282810103233;10312710103227;1033281010

### Cotoneaster simonsii

i Himalayan contoneaster

A shrub up to 4m tall from the Himalayas widely naturalised in the British Isles. Well-established across East and West Sussex. Listed on schedule 9 of the Wildlife & Countryside Act 1981.

#### flowering plant

| <b>Grid Reference</b> | <b>Recorder</b>       | <b>Date</b>     | <b>Locality</b>                    |
|-----------------------|-----------------------|-----------------|------------------------------------|
| TQ32E                 | Alan Knapp;K.A. Knapp | 21/08/2007      | SW of Balcombe, East Sussex (VC14) |
| Crassula hel          | Imsii                 | New Zealand Pig | myweed                             |

# An Australasian aquatic plant introduced to Britain in the 1920s. It started to spread rapidly in the late 1970s and is now widespread around ponds, lakes and reservoirs, though possibly declining. It has a very damaging effect on indigenous flora and fauna by smothering waterside habitat and is almost impossible to eradicate from a site once it is established.

#### flowering plant

| Grid Reference | Recorder     | Date       | Locality   |
|----------------|--------------|------------|--|
| TQ333297       | Alan Knapp   | 12/07/2004 | Ardingly Reservoir                                   |
| TQ33F          | Arthur Hoare | May 2004   | Loder Valley, Wakehurst Place, East<br>Sussex (VC14) |

# Crocosmia pottsii x aurea = C. x crocosmiiflora

### Montbretia

A well-known garden escape with orange flowers from South Africa. Widespread across Sussex. Listed on Schedule 9 of the Wildlife & Countryside Act 1981.

#### flowering plant

| Grid Reference | Recorder     | Date       | Locality                                    |
|----------------|--------------|------------|---|
| TQ23W          | Alan Knapp   | 23/04/2009 | SE of Greentrees Farm                       |
| TQ293317       | Mary Scruby  | 30/06/1982 | Balcombe Forest (west) & Hourglass<br>Wood. |
| TQ33A          | Arthur Hoare | 11/05/2004 | Balcombe, Balcombe CP                       |
| TQ33F          | Alan Knapp   | 25/11/2007 | West Hill area, East Sussex (VC14)          |

# Elodea nuttallii

# Nuttall's Waterweed

First recorded as naturalised in Oxford in 1966. Grows in still or slow flowing waters. Due to increased eutrophication it has replaced Elodea canadensis at many sites and in turn is being replaced by Lagarosiphon major. It is often found in species poor plant communities subject to boat traffic, management and in eutrophic drainage ditches. Widespread in Sussex.

#### flowering plant

| Grid Reference | Recorder     | Date     | Locality                            |
|----------------|--------------|----------|-------------------------------------|
| TQ33F          | Arthur Hoare | May 2004 | Loder Valley, Wakehurst Place, East |
|                |              |          | Sussex (VC14)                       |

### Fallopia japonica

Japanese Knotweed

Listed on Schedule 9 Part II of the Wildlife & Countryside Act (1981). It is an offence to plant or otherwise cause to grow the species in the wild. Described as the most pernicious weed in Britain by Plantlife, Japanese knotweed was introduced in the UK in the mid-19th century as an ornamental plant. It is now is a problem invasive perennial throughout Europe. It is an offence to plant, or otherwise cause to grow, the species in the wild. Landowners are liable to prosecution if they allow the plant to spread from their land.

#### flowering plant

| Grid Reference | Recorder                | Date       | Locality  |
|----------------|-------------------------|------------|---|
| TQ32E          | Alan Knapp;Arthur Hoare | 13/07/2005 | Pilstye Farm, East Sussex (VC14)                      |
| TQ32J          | A. Symon                | 19/06/2011 | Ardingly, Ardingly CP                                 |
| TQ33B          | Alan Knapp              | 09/09/2008 | N of Balcombe, Stoney Lane, East Sussex<br>(VC14)     |
| TQ33F          | Arthur Hoare            | May 2004   | Loder Valley, Wakehurst Place, East<br>Sussex (VC14)  |
| TQ33G          | Arthur Hoare            | 09/07/2004 | Paddockhurst Park, Worth Abbey, East<br>Sussex (VC14) |

### Heracleum mantegazzianum

Giant Hogweed

A very large, introduced umbelliferous plant from south west Asia with a capacity to cause dermatitis and painful blistering of the skin. First recorded in the wild in UK in 1828 and now widespread especially along river and stream banks. It addition to its irritant qualities its huge leaves suppress native flora and fauna. Widespread in Sussex.

flowering plant

| Grid Reference | Recorder              | Date       | Locality   |
|----------------|-----------------------|------------|--|
| TQ2807428009   | Alan Knapp;K.A. Knapp | 28/06/2009 | E of Staplefield, East Sussex (VC14)                 |
| TQ32J          | Arthur Hoare          | 02/08/2008 | Ardingly, Ardingly CP                                |
| TQ33F          | Arthur Hoare          | May 2004   | Loder Valley, Wakehurst Place, East<br>Sussex (VC14) |

### Impatiens glandulifera

### Indian Balsam

A tall annual alien introduced in 1839. Usually found in waterside situations where it becomes a dominant plant substantially reducing native species richness.

#### flowering plant

| Grid Reference | Recorder                | Date       | Locality  |
|----------------|-------------------------|------------|---|
| TQ32E          | Alan Knapp;Arthur Hoare | 13/07/2005 | Pilstye Farm, East Sussex (VC14)                  |
| TQ32J          | Alan Knapp              | 11/06/2005 | W of Upper Ryelands Bridge, East Sussex<br>(VC14) |
| TQ33F          | Arthur Hoare            | 18/08/2005 | Wakehurst Place                                   |

# Lamium galeobdolon subsp. argentatum

Yellow Archangel

Often listed just as Lamiastrum galeobdolon montanum. However, the New Atlas of the British Flora and other sources point out that L. g. montanum is the widespread yellow archangel of the British countryside and that the nominate subspecies L. g. ssp. galeobdolon is a rare plant confined as a native to Lincolnshire and Kirkcudbrightshire. Some authorities position the variegated invasive alien yellow archangel as L. g. ssp. montanum, others as L. g. ssp. argentatum. This latter form is thought to have been introduced in the late 1960s and is spreading rapidly. It is widespread in Sussex and listed on Schedule 9 of the Wildlife & Countryside Act 1981.

#### flowering plant

| Grid Reference | Recorder   | Date       | Locality                                      |
|----------------|------------|------------|---|
| TQ22Z          | Alan Knapp | 18/04/2004 | Brantridge Lane, East Sussex (VC14)           |
| TQ23W          | Alan Knapp | 17/06/2006 | Crawley Lane, West Sussex (VC13)              |
| TQ32E          | Ady Symon  | 27/03/2011 | S of Balcombe, East Sussex (VC14)             |
| TQ33F          | Alan Knapp | 25/11/2007 | West Hill area, East Sussex (VC14)            |
| TQ33G          | Alan Knapp | 15/11/2005 | S of Paddockhurst Park, East Sussex<br>(VC14) |

# Muntiacus reevesi

### **Chinese Muntjac**

Listed on Schedule 9 of the Wildlife and Countryside Act 1981. A small Chinese species of deer that has considerable impact on coppice regrowth, and tree seedlings. Muntjac may also damage bluebells and wild orchids and they are thought to compete with native roe deer. It is on Schedule 9 of the Wildlife and Countryside Act 1981 which prevents release into areas from which they are currently absent. Widespread in Sussex.

#### terrestrial mammal

Bern Convention Appendix 3

| Grid Reference | Recorder        | Date       | Locality   |
|----------------|-----------------|------------|--|
| TQ290316       | Julie Worrall   | 2000       | Birchanger, Balcombe Forest, East<br>Sussex (VC14) |
| TQ33F          | Graham Champion | 20/05/1990 | Balcombe - Loder area, East Sussex<br>(VC14)       |

### Neovison vison

### American Mink

A member of the weasel family introduced in the 1920s for the fur trade and now found in the wild in much of Britain. Mink take bird's eggs and chicks and have caused a serious decline in water voles. They also damage fisheries and poultry farms. Attempts to control them are usually ongoing.

#### terrestrial mammal

| Grid Reference | Recorder     | Date       | Locality   |  |  |
|----------------|--------------|------------|--|--|--|
| TQ315310       | Alan Gillham | 20/09/1985 | Balcombe Lake, Balcombe, East Sussex<br>(VC14)       |  |  |
| TQ316283       | Robin Pepper | 10/03/2009 | Great Bentley Farm                                   |  |  |
| TQ335288       | Unknown      | 1991       | Ardinly Reservoir and Loder Valley Nature<br>Reserve |  |  |

### Petasites fragrans

# Winter Heliotrope

A large-leaved, rampant perennial plant from the Far East spreading by means of underground stems by up to 1 metre per year. Very invasive, often forming large wayside colonies to the exclusion of all other species. Sweet scented mauve pink spikes of flower in winter.

#### flowering plant

| Grid Reference | Recorder   | Date       | Locality                           |
|----------------|------------|------------|------------------------------------|
| TQ339297       | Alan Knapp | 11/01/2006 | W of Ardingly, East Sussex (VC14)  |
| TQ33A          | Alan Knapp | 31/01/2004 | Balcombe, Balcombe CP              |
| TQ33F          | Alan Knapp | 25/11/2007 | West Hill area, East Sussex (VC14) |

### Prunus laurocerasus

# Cherry Laurel

From eastern Europe and western Asia a now widely planted and often self-sown shrub in many woods in Britain. In some cases it makes up the whole of the lower canopy, effectively shading out any ground flora and preventing the natural regeneration of trees and shrubs. Widespread and increasing in Sussex.

#### flowering plant

| Grid Reference | Recorder   | Date       | Locality   |  |  |  |
|----------------|--|------------|--|--|--|--|
| TQ22Z          | Alan Knapp   | 18/04/2004 | NE of Staplefield, East Sussex (VC14)                            |  |  |  |
| TQ23V          | Alan Knapp 14/05/2005 Brantridge, East Sussex (VC14) |            |  |  |  |  |
| TQ303319       | Simon Curson   | 10/12/2002 | Sedgy and Scotts Gills SNCI, Sedgy and<br>Scott's Gill, Balcombe |  |  |  |
| TQ307317       | Mary Scruby  | 11/06/1982 | Sedgy and Scott's Gill, Balcombe                                 |  |  |  |
| TQ317324       | Mary Scruby  | 11/06/1982 | The Warren (Paddockhurst), Balcombe.                             |  |  |  |
| TQ32E          | Alan Knapp;K.A. Knapp                                | 23/01/2010 | S of Balcombe, East Sussex (VC14)                                |  |  |  |
| TQ33A          | Arthur Hoare   | 11/05/2004 | Balcombe, Balcombe CP  |  |  |  |
| TQ33B          | Alan Knapp   | 20/05/2006 | NE of Balcombe, East Sussex (VC14)                               |  |  |  |
| TQ33F          | Arthur Hoare   | May 2004   | Loder Valley, Wakehurst Place, East<br>Sussex (VC14)             |  |  |  |

### Rhododendron ponticum

# Rhododendron

A naturalised, purple-flowered shrub introduced in 1763. Most UK plants derive from Spanish stock. A highly invasive species that suppresses native vegetation and its associated flora and fauna.

### flowering plant

| Grid Reference | Recorder                | Date                       | Locality   |
|----------------|-------------------------|----------------------------|--|
| TQ22Z          | Roy Wells;M. Berry      | 28/02/2008                 | NE of Staplefield, East Sussex (VC14)                            |
| TQ23V          | Alan Knapp              | 14/05/2005                 | Brantridge, East Sussex (VC14)                                   |
| TQ23W          | Arthur Hoare            | 17/08/2004                 | Tilgate Forest   |
| TQ2833         | Neil Sanderson          | 13/05/2010                 | Tilgate Forest, Crawley, Tilgate Forest                          |
| TQ2872932617   | Jacqueline Thompson     | 26/08/2009 -<br>11/11/2009 | Site: 114 Tilgate Forest, Balcombe, East<br>Sussex (VC14)        |
| TQ287321       | Mary Scruby             | 18/06/1982                 | Brantridge Forest, Balcombe.                                     |
| TQ291293       | Kate Ryland             | 25/09/1996                 | Northlands Rocks   |
| TQ293317       | Mary Scruby             | 30/06/1982                 | Balcombe Forest (west) & Hourglass<br>Wood.                      |
| TQ296330       | Mary Scruby             | 02/07/1982                 | Greentrees Farm Wood, Balcombe.                                  |
| TQ297320       | Mary Scruby             | 02/07/1982                 | Balcombe Forest (east).  |
| TQ303319       | Simon Curson            | 10/12/2002                 | Sedgy and Scotts Gills SNCI, Sedgy and<br>Scott's Gill, Balcombe |
| TQ307317       | Mary Scruby             | 11/06/1982                 | Sedgy and Scott's Gill, Balcombe                                 |
| TQ317317       | Simon Curson            | 23/08/2002                 | Balcombe Lake and associated woodlands, Balcombe                 |
| TQ317324       | Mary Scruby             | 11/06/1982                 | The Warren (Paddockhurst), Balcombe.                             |
| TQ318303       | Kate Ryland             | 25/09/1996                 | Balcombe Mill Rocks  |
| TQ318307       | Mary Scruby             | 14/07/1982                 | Alder Wood & Sedgy Wood, Balcombe.                               |
| TQ3233         | Francis Rose            | 30/01/1986                 | Paddockhurst Park (and Rocks)                                    |
| TQ323317       | Mary Scruby             | 16/06/1982                 | Great Wood (Paddockhurst), Balcombe.                             |
| TQ32E          | Alan Knapp;Arthur Hoare | 10/06/2008                 | Upper Pilstye area, East Sussex (VC14)                           |
| TQ32J          | Arthur Hoare            | 02/08/2008                 | Ardingly, Ardingly CP  |
| TQ33A          | Arthur Hoare            | 11/05/2004                 | Balcombe, Balcombe CP  |
| TQ33B          | Alan Knapp              | 25/05/2005                 | Cowdray Forest, East Sussex (VC14)                               |
| TQ33F          | Arthur Hoare            | May 2004                   | Loder Valley, Wakehurst Place, East<br>Sussex (VC14)             |
| TQ33G          | Arthur Hoare            | 09/07/2004                 | Paddockhurst Park, Worth Abbey, East<br>Sussex (VC14)            |

# Sus scrofa

# Wild Boar

Escaped wild boar have been spreading on the Sussex/Kent border for about twenty years and are now widespread in the area (2005). A great deal study is currently under way on the implications and there is much detail on the Defra web site. The animals have also been recorded from one or two other Sussex sites in small numbers.

### terrestrial mammal

| Grid Reference | Recorder       | Date     | Locality                                |
|----------------|----------------|----------|---|
| TQ3232         | Steve Robinson | May 2000 | Paddockhurst Estate, East Sussex (VC14) |



# SPECIES LIST (Excluding Birds)

### Land at Balcombe Parish

13 February 2014 ESD/14/74 **Search Area:** TQ2828 to TQ3233; TQ3127 to TQ3227; TQ3328 to TQ3329 Katherine Daniel (Balcombe Parish Council)

No. of Rec's Latin Name **Common Name** Taxon Group First Date Last Date Aphanothece 06/10/1989 23/10/1989 2 bacterium Oscillatoria bacterium 23/10/1989 1 -Metatrichia floriformis slime mould 21/04/2011 \_ 1 27/02/1968 15/05/1975 5 Arthonia didvma lichen Arthonia radiata lichen 15/06/1968 1 -3 Arthonia spadicea lichen 21/11/1968 15/05/1975 lichen 15/06/1968 05/02/1969 6 Arthonia vinosa 7 Chrvsothrix candelaris lichen 27/02/1968 30/01/1986 Cresponea premnea lichen 15/06/1968 1 27/02/1968 13 Enterographa crassa lichen 16/07/1988 Lecanactis abietina lichen 21/11/1968 16/07/1988 8 Opegrapha sorediifera lichen 05/10/1968 1 -15/06/1968 05/02/1969 5 Opegrapha vulgata lichen lichen 27/02/1968 19/09/1989 7 Schismatomma decolorans Schismatomma quercicola lichen 05/10/1968 05/02/1969 3 Melaspilea ochrothalamia lichen 31/12/1875 1 2 Cystocoleus ebeneus lichen 05/02/1969 31/12/1995 05/02/1969 1 *Hysterium pulicare* fungus \_ Stenocybe septata fungus 27/02/1968 31/12/1995 8 lichen 1 Acrocordia salweyi 15/11/1984 -30/01/1986 1 lichen Anisomeridium ranunculosporum \_ Pyrenula chlorospila lichen 05/10/1968 1 -Pyrenula nitida lichen 27/02/1968 1 \_ 2 lichen 21/11/1968 05/02/1969 Normandina pulchella Verrucaria glaucina lichen 15/05/1975 1 -Verrucaria hochstetteri lichen 15/05/1975 1 -Verrucaria muralis lichen 12/09/1996 1 \_ 15/05/1975 12/09/1996 2 Verrucaria nigrescens lichen

| Latin Name                             | Common Name        | Taxon Group | First Date | Last Date  | No. of Rec's |
|--|--------------------|-------------|------------|------------|--------------|
| Verrucaria viridula                    |                    | lichen      | 15/05/1975 | -          | 1            |
| Trapeliopsis granulosa                 |                    | lichen      | 15/06/1968 | 18/03/1969 | 6            |
| Trapeliopsis pseudogranulosa           |                    | lichen      | 30/01/1986 | 18/02/1994 | 2            |
| Placynthiella icmalea                  |                    | lichen      | 18/02/1994 | -          | 1            |
| Placynthiella uliginosa                |                    | lichen      | 15/05/1975 | -          | 2            |
| Trapelia coarctata                     |                    | lichen      | 05/02/1969 | -          | 1            |
| Trapelia placodioides                  |                    | lichen      | 18/02/1994 | -          | 1            |
| Baeomyces rufus                        |                    | lichen      | 05/10/1968 | 30/01/1986 | 4            |
| Candelariella vitellina                |                    | lichen      | 15/06/1968 | 15/05/1975 | 2            |
| Cladonia caespiticia                   |                    | lichen      | 20/03/1986 | 31/12/1995 | 4            |
| Cladonia chlorophaea                   |                    | fungus      | 15/06/1968 | 31/01/1995 | 6            |
| Cladonia coccifera                     | Scarlet-cup Lichen | lichen      | 19/10/1982 | 31/01/1995 | 4            |
| Cladonia coniocraea                    |                    | lichen      | 27/02/1968 | 31/12/1995 | 20           |
| Cladonia digitata                      |                    | lichen      | 15/06/1968 | 31/12/1995 | 12           |
| Cladonia fimbriata                     |                    | lichen      | 15/06/1968 | 19/10/1982 | 5            |
| Cladonia furcata                       |                    | lichen      | 05/02/1969 | 30/01/1986 | 5            |
| Cladonia incrassata                    |                    | lichen      | 19/09/1989 | 31/12/1995 | 7            |
| Cladonia macilenta                     |                    | lichen      | 05/10/1968 | 19/09/1989 | 8            |
| Cladonia ochrochlora                   |                    | lichen      | 18/02/1994 | -          | 1            |
| Cladonia polydactyla                   |                    | lichen      | 15/05/1975 | 31/12/1995 | 14           |
| Cladonia portentosa                    | Reindeer Moss      | lichen      | 05/02/1969 | -          | 1            |
| Cladonia pyxidata                      |                    | lichen      | 15/05/1975 | -          | 2            |
| Cladonia rangiformis                   |                    | lichen      | 05/02/1969 | -          | 1            |
| Cladonia squamosa                      |                    | lichen      | 21/11/1968 | 31/12/1995 | 10           |
| Cladonia squamosa var. subsquamosa     |                    | lichen      | 19/10/1982 | 31/12/2001 | 3            |
| Cladonia subcervicornis                |                    | lichen      | 05/02/1969 | 18/02/1994 | 4            |
| Cladonia subulata                      |                    | lichen      | 31/12/2001 | -          | 1            |
| Cladonia uncialis                      |                    | lichen      | 15/11/1984 | -          | 1            |
| Haematomma ochroleucum var. porphyrium |                    | lichen      | 05/10/1968 | -          | 1            |
| Lecanora campestris                    |                    | lichen      | 15/05/1975 | -          | 1            |
| Lecanora chlarotera                    |                    | lichen      | 15/06/1968 | 05/02/1969 | 4            |
| Lecanora conizaeoides                  |                    | lichen      | 27/02/1968 | 15/05/1975 | 6            |
| Lecanora dispersa                      |                    | lichen      | 15/06/1968 | 15/05/1975 | 2            |
| Lecanora expallens                     |                    | lichen      | 27/02/1968 | 19/09/1989 | 9            |
| Lecanora sulphurea                     |                    | lichen      | 15/05/1975 | -          | 1            |
| Lecidella scabra                       |                    | lichen      | 15/06/1968 | 19/09/1989 | 3            |
| Lecidella stigmatea                    |                    | lichen      | 15/05/1975 | -          | 1            |
| Pyrrhospora quernea                    |                    | lichen      | 27/02/1968 | 16/07/1988 | 15           |
| Cetraria aculeata                      |                    | lichen      | 05/02/1969 | 30/01/1986 | 2            |
| Evernia prunastri                      | Oak Moss           | lichen      | 10/03/1962 | 19/09/1989 | 20           |
| Flavoparmelia caperata                 |                    | lichen      | 10/03/1962 | 19/09/1989 | 26           |
| Hypogymnia physodes                    | Dark Crottle       | lichen      | 10/03/1962 | 16/07/1988 | 29           |
| Hypogymnia tubulosa                    |                    | lichen      | 15/06/1968 | 15/05/1975 | 3            |
| Hvpotrachvna revoluta                  |                    | lichen      | 18/03/1967 | 16/07/1988 | 13           |

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|--|----------------------|-------------|------------|------------|--------------|
| Imshaugia aleurites                      |                      | lichen      | 15/05/1975 | -          | 1            |
| Melanelixia fuliginosa subsp. glabratula |                      | lichen      | 27/02/1968 | 19/09/1989 | 12           |
| Melanohalea laciniatula                  |                      | lichen      | 21/11/1968 | -          | 1            |
| Neofuscelia loxodes                      |                      | lichen      | 15/06/1968 | -          | 1            |
| Parmelia saxatilis                       |                      | lichen      | 10/03/1962 | 16/07/1988 | 23           |
| Parmelia sulcata                         | Netted Shield Lichen | lichen      | 10/03/1962 | 16/07/1988 | 16           |
| Parmelina tiliacea                       |                      | lichen      | 15/06/1968 | -          | 1            |
| Parmeliopsis ambigua                     |                      | lichen      | 18/03/1967 | 18/03/1969 | 6            |
| Parmotrema perlatum                      |                      | lichen      | 27/02/1968 | 19/09/1989 | 8            |
| Parmotrema reticulatum                   |                      | lichen      | 15/06/1968 | 15/05/1975 | 4            |
| Platismatia glauca                       |                      | lichen      | 27/02/1968 | 16/07/1988 | 9            |
| Pleurosticta acetabulum                  |                      | lichen      | 15/06/1968 | -          | 1            |
| Punctelia reddenda                       |                      | lichen      | 21/11/1968 | 05/02/1969 | 3            |
| Punctelia subrudecta                     |                      | lichen      | 27/02/1968 | 15/05/1975 | 7            |
| Tuckermanopsis chlorophylla              |                      | lichen      | 15/06/1968 | 18/03/1969 | 5            |
| Usnea ceratina                           |                      | lichen      | 15/06/1968 | 21/11/1968 | 3            |
| Usnea cornuta                            |                      | lichen      | 15/06/1968 | 30/01/1986 | 4            |
| Usnea rubicunda                          |                      | lichen      | 21/11/1968 | 05/02/1969 | 2            |
| Usnea subfloridana                       |                      | lichen      | 15/06/1968 | 15/05/1975 | 8            |
| Phaeophyscia orbicularis                 |                      | lichen      | 15/06/1968 | 15/05/1975 | 2            |
| Physcia adscendens                       |                      | lichen      | 15/06/1968 | 15/05/1975 | 2            |
| Physcia caesia                           |                      | lichen      | 15/05/1975 | -          | 1            |
| Physcia tenella                          |                      | lichen      | 15/06/1968 | -          | 1            |
| Physconia distorta                       |                      | lichen      | 15/06/1968 | -          | 3            |
| Physconia grisea                         |                      | lichen      | 15/06/1968 | -          | 1            |
| Rinodina exigua                          |                      | lichen      | 15/06/1968 | -          | 1            |
| Rinodina roboris                         |                      | lichen      | 27/02/1968 | 21/11/1968 | 3            |
| Fellhaneropsis vezdae                    |                      | lichen      | 15/05/1975 | -          | 1            |
| Micarea botryoides                       |                      | lichen      | 31/12/1969 | -          | 1            |
| Micarea leprosula                        |                      | lichen      | 19/10/1982 | 30/01/1986 | 2            |
| Micarea lignaria                         |                      | lichen      | 19/10/1982 | 30/01/1986 | 2            |
| Micarea peliocarpa                       |                      | lichen      | 19/10/1982 | 30/01/1986 | 2            |
| Bacidia incompta                         | alichen              | lichen      | 15/06/1968 | 21/11/1968 | 2            |
| Biatora sphaeroides                      |                      | lichen      | 15/05/1975 | 31/12/1975 | 2            |
| Catinaria atropurpurea                   |                      | lichen      | 15/06/1968 | 15/05/1975 | 5            |
| Cliostomum griffithii                    |                      | lichen      | 27/02/1968 | 16/07/1988 | 8            |
| Ramalina farinacea                       |                      | lichen      | 15/06/1968 | 21/11/1968 | 7            |
| Loxospora elatina                        |                      | lichen      | 27/02/1968 | -          | 1            |
| ,<br>Bunodophoron melanocarpum           |                      | lichen      | 05/02/1969 | -          | 1            |
| Sphaerophorus globosus                   |                      | lichen      | 05/02/1969 | 18/02/1994 | 5            |
| Lepraria incana                          |                      | lichen      | 27/02/1968 | 31/12/1995 | 22           |
| Lepraria lobificans                      |                      | lichen      | 31/12/1995 | -          | 1            |
| Lepraria membranacea                     |                      | lichen      | 05/02/1969 | 30/01/1986 | 2            |
| Lepraria vouauxii                        |                      | lichen      | 28/02/1995 | 31/12/1995 | 2            |

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| Caloplaca aurantia                  |                    | lichen      | 12/09/1996 | -          | 1            |
| Caloplaca citrina                   |                    | lichen      | 15/05/1975 | 12/09/1996 | 2            |
| Caloplaca dalmatica                 |                    | lichen      | 12/09/1996 | -          | 1            |
| Caloplaca ferruginea                |                    | lichen      | 15/06/1968 | 15/05/1975 | 2            |
| Caloplaca flavescens                |                    | lichen      | 15/05/1975 | -          | 1            |
| Caloplaca teicholyta                |                    | lichen      | 15/05/1975 | -          | 1            |
| Teloschistes flavicans              | Golden Hair-lichen | lichen      | 31/12/1901 | -          | 1            |
| Xanthoria candelaria                |                    | lichen      | 15/06/1968 | -          | 1            |
| Xanthoria parietina                 |                    | lichen      | 15/06/1968 | -          | 2            |
| Tephromela atra                     | Black Shields      | lichen      | 15/05/1975 | -          | 1            |
| Leprocaulon microscopicum           |                    | lichen      | 05/02/1993 | -          | 1            |
| Psilolechia lucida                  |                    | lichen      | 15/05/1975 | 31/12/1995 | 2            |
| Scoliciosporum umbrinum             |                    | lichen      | 15/05/1975 | -          | 1            |
| Lecidea fuscoatra                   |                    | lichen      | 15/06/1968 | 19/10/1982 | 3            |
| Porpidia cinereoatra                |                    | lichen      | 18/02/1994 | -          | 1            |
| Porpidia crustulata                 |                    | lichen      | 19/10/1982 | 30/01/1986 | 2            |
| Porpidia platycarpoides             |                    | lichen      | 19/10/1982 | -          | 1            |
| Porpidia tuberculosa                |                    | lichen      | 15/05/1975 | 18/02/1994 | 2            |
| Dimerella pineti                    |                    | lichen      | 05/10/1968 | 15/05/1975 | 4            |
| Graphis elegans                     |                    | lichen      | 27/02/1968 | 16/07/1988 | 9            |
| Graphis scripta                     | Script Lichen      | lichen      | 27/02/1968 | 30/01/1986 | 12           |
| Phaeographis dendritica             |                    | lichen      | 21/11/1968 | 05/02/1969 | 2            |
| Gyalecta truncigena                 |                    | lichen      | 05/02/1969 | -          | 1            |
| Pachyphiale carneola                |                    | lichen      | 15/06/1968 | 05/02/1969 | 7            |
| Phlyctis argena                     |                    | lichen      | 27/02/1968 | 30/01/1986 | 16           |
| Porina aenea                        |                    | lichen      | 28/02/1995 | -          | 1            |
| Thelotrema lepadinum                |                    | lichen      | 27/02/1968 | 15/05/1975 | 6            |
| Leptogium teretiusculum             |                    | lichen      | 28/02/1993 | -          | 1            |
| Peltigera canina                    |                    | lichen      | 21/11/1968 | 15/05/1975 | 3            |
| Peltigera lactucifolia              |                    | lichen      | 27/02/1968 | 05/10/1968 | 2            |
| Peltigera praetextata               |                    | lichen      | 21/11/1968 | 15/05/1975 | 2            |
| Icmadophila ericetorum              |                    | lichen      | 19/10/1982 | _          | 1            |
| Aspicilia calcarea                  |                    | lichen      | 15/05/1975 | -          | 1            |
| Ochrolechia androgyna               |                    | lichen      | 27/02/1968 | 19/09/1989 | 11           |
| Ochrolechia parella                 | Crabs Eye Lichen   | lichen      | 15/06/1968 | 15/05/1975 | 3            |
| Ochrolechia subviridis              |                    | lichen      | 15/06/1968 | 19/09/1989 | 8            |
| Ochrolechia turneri                 |                    | lichen      | 27/02/1968 | 18/03/1969 | 7            |
| Pertusaria albescens                |                    | lichen      | 15/06/1968 | 05/02/1969 | 3            |
| Pertusaria albescens var. corallina |                    | lichen      | 15/06/1968 | 05/10/1968 | 3            |
| Pertusaria amara                    |                    | lichen      | 10/03/1962 | 19/09/1989 | 19           |
| Pertusaria coccodes                 |                    | lichen      | 15/06/1968 | 16/07/1988 | 11           |
| Pertusaria corallina                |                    | lichen      | 05/02/1969 | 18/02/1994 | 5            |
| Pertusaria dealbescens              |                    | lichen      | 19/10/1982 | 18/02/1994 | 3            |
| Pertusaria flavicans                |                    | lichen      | 31/12/1992 | -          | 1            |

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| Pertusaria hemisphaerica                     |                          | lichen      | 27/02/1968 | 30/01/1986 | 9            |
| Pertusaria hymenea                           |                          | lichen      | 27/02/1968 | 19/09/1989 | 16           |
| Pertusaria leioplaca                         |                          | lichen      | 15/06/1968 | 15/05/1975 | 2            |
| Pertusaria multipuncta                       |                          | lichen      | 15/06/1968 | 05/02/1969 | 4            |
| Pertusaria pertusa                           |                          | lichen      | 27/02/1968 | 19/09/1989 | 17           |
| Pertusaria pupillaris                        |                          | lichen      | 21/11/1968 | -          | 1            |
| Rhizocarpon lavatum                          |                          | lichen      | 15/05/1975 | -          | 1            |
| Amandinea punctata                           |                          | lichen      | 15/06/1968 | -          | 1            |
| Buellia aethalea                             |                          | lichen      | 19/09/1989 | -          | 1            |
| Calicium viride                              |                          | lichen      | 15/06/1968 | 18/03/1969 | 5            |
| Diploicia canescens                          |                          | lichen      | 15/06/1968 | -          | 1            |
| Fuscidea lightfootii                         |                          | lichen      | 15/06/1968 | -          | 1            |
| Hypocenomyce scalaris                        |                          | lichen      | 15/06/1968 | 21/11/1968 | 2            |
| Chaenotheca brunneola                        | Pinhead Lichen           | lichen      | 05/10/1968 | -          | 1            |
| Chaenotheca ferruginea                       |                          | lichen      | 15/06/1968 | 16/07/1988 | 5            |
| Mniaecia jungermanniae                       |                          | fungus      | 28/02/1995 | -          | 1            |
| Pseudombrophila merdaria                     |                          | fungus      | 24/02/2011 | -          | 1            |
| Clavulinopsis corniculata                    | Meadow Coral             | fungus      | 20/09/2001 | -          | 1            |
| Hygrocybe calyptriformis var. calyptriformis | Pink Waxcap              | fungus      | 20/09/2001 | -          | 1            |
| Hygrocybe chlorophana                        | Golden Waxcap            | fungus      | 20/09/2001 | -          | 1            |
| Hygrocybe coccinea                           | Scarlet Waxcap           | fungus      | 20/09/2001 | -          | 1            |
| <i>Hygrocybe glutinipes var. glutinipes</i>  | Glutinous Waxcap         | fungus      | 20/09/2001 | -          | 1            |
| Hygrocybe punicea                            | Crimson Waxcap           | fungus      | 31/12/1999 | -          | 1            |
| Hygrocybe virginea var. virginea             | Snowy Waxcap             | fungus      | 20/09/2001 | -          | 1            |
| Collybia confluens                           | Clustered Toughshank     | fungus      | 23/01/1954 | 31/12/1975 | 2            |
| Antrodia xantha                              |                          | fungus      | 19/01/2012 | -          | 1            |
| Ganoderma applanatum                         | Artist's Bracket         | fungus      | 21/04/2011 | _          | 1            |
| Stereum rugosum                              | Bleeding Broadleaf Crust | fungus      | 21/04/2011 | _          | 1            |
| Phaeoceros laevis subsp. laevis              |                          | hornwort    | 31/12/1989 | -          | 1            |
| Blasia pusilla                               | Common Kettlewort        | liverwort   | 31/12/1988 | 31/12/2010 | 2            |
| Lunularia cruciata                           | Crescent-cup Liverwort   | liverwort   | 23/01/1954 | 03/08/2011 | 2            |
| Conocephalum conicum                         | Great Scented Liverwort  | liverwort   | 15/05/1975 | 03/08/2011 | 10           |
| Riccia cavernosa                             | Cavernous Crystalwort    | liverwort   | UNKNOWN    | 30/12/1899 | 1            |
| Riccia glauca                                | Glaucous Crystalwort     | liverwort   | 31/12/2010 | -          | 1            |
| Riccia huebeneriana                          | Violet Crystalwort       | liverwort   | UNKNOWN    | 30/12/1899 | 1            |
| Riccia sorocarpa                             | Common Crystalwort       | liverwort   | 31/12/2010 | -          | 1            |
| Pellia endiviifolia                          | Endive Pellia            | liverwort   | 10/03/1962 | 29/08/2011 | 7            |
| Pellia epiphylla                             | Overleaf Pellia          | liverwort   | 23/01/1954 | 31/12/2011 | 26           |
| Fossombronia pusilla                         | Common Frillwort         | liverwort   | 31/12/2010 | -          | 1            |
| Fossombronia wondraczekii                    | Acid Frillwort           | liverwort   | 31/12/2010 | _          | 1            |
| Metzgeria consanguinea                       | Whiskered Veilwort       | liverwort   | 31/12/2010 | _          | 1            |
| Metzgeria furcata                            | Forked Veilwort          | liverwort   | 23/01/1954 | 31/12/2011 | 13           |
| Aneura pinguis                               | Greasewort               | liverwort   | 31/12/2010 | -          | 1            |
| Riccardia chamedryfolia                      | Jagged Germanderwort     | liverwort   | 31/12/2010 | 03/08/2011 | 2            |

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| Porella platyphylla                     | Wall Scalewort             | liverwort   | 11/06/1982 | -          | 1            |
| Radula complanata                       | Even Scalewort             | liverwort   | 31/12/1975 | 31/12/2010 | 2            |
| Frullania dilatata                      | Dilated Scalewort          | liverwort   | 15/06/1968 | 31/12/2011 | 4            |
| Frullania tamarisci                     | Tamarisk Scalewort         | liverwort   | 27/02/1968 | 31/12/2010 | 13           |
| Lejeunea cavifolia                      | Micheli's Least Pouncewort | liverwort   | 23/01/1954 | 31/12/2010 | 3            |
| Microlejeunea ulicina                   | Fairy Beads                | liverwort   | 10/03/1962 | 31/12/1975 | 8            |
| Blepharostoma trichophyllum             | Hairy Threadwort           | liverwort   | 17/10/1994 | -          | 1            |
| Trichocolea tomentella                  | Handsome Woollywort        | liverwort   | 10/03/1962 | 31/12/2010 | 5            |
| Bazzania trilobata                      | Greater Whipwort           | liverwort   | 21/11/1968 | 31/12/2010 | 8            |
| Kurzia sylvatica                        | Wood Fingerwort            | liverwort   | 31/12/2010 | -          | 1            |
| Lepidozia reptans                       | Creeping Fingerwort        | liverwort   | 05/02/1969 | 22/03/2011 | 24           |
| Lophocolea bidentata                    | Bifid Crestwort            | liverwort   | 23/01/1954 | 31/12/2011 | 13           |
| Lophocolea bidentata var. bidentata     |                            | liverwort   | 31/12/1975 | -          | 1            |
| Lophocolea heterophylla                 | Variable-leaved Crestwort  | liverwort   | 10/03/1962 | 31/12/2011 | 11           |
| Chiloscyphus pallescens                 | St Winifrid's Other Moss   | liverwort   | 31/12/2010 | -          | 1            |
| Chiloscyphus polyanthos                 | St Winifrid's Moss         | liverwort   | 15/05/1975 | 03/08/2011 | 5            |
| Chiloscyphus polyanthos var. polyanthos |                            | liverwort   | 23/01/1954 | 10/03/1962 | 2            |
| Plagiochila asplenioides                |                            | liverwort   | 15/05/1975 | 28/02/1995 | 3            |
| Plagiochila asplenioides                | Greater Featherwort        | liverwort   | 30/01/1986 | 29/08/2011 | 5            |
| Plagiochila porelloides                 | Lesser Featherwort         | liverwort   | 28/02/1995 | 31/12/2010 | 3            |
| Jamesoniella autumnalis                 | Autumn Flapwort            | liverwort   | 31/12/1908 | -          | 1            |
| Cephalozia bicuspidata                  | Two-horned Pincerwort      | liverwort   | 10/03/1962 | 03/08/2011 | 11           |
| Cephalozia catenulata                   | Chain Pincerwort           | liverwort   | 16/07/1988 | 31/10/1994 | 2            |
| Cephalozia connivens                    | Forcipated Pincerwort      | liverwort   | 19/10/1982 | 31/12/2010 | 5            |
| Cephalozia lunulifolia                  | Moon-leaved Pincerwort     | liverwort   | 15/05/1975 | 31/12/2010 | 10           |
| Odontoschisma denudatum                 | Matchstick Flapwort        | liverwort   | 15/05/1975 | 31/12/2010 | 6            |
| Barbilophozia attenuata                 | Trunk Pawwort              | liverwort   | 05/02/1969 | 31/12/2010 | 15           |
| Tritomaria exsectiformis                | Larger Cut Notchwort       | liverwort   | 30/01/1986 | 31/12/2010 | 5            |
| Lophozia bicrenata                      | Lesser Notchwort           | liverwort   | 31/12/2010 | -          | 1            |
| Lophozia excisa                         | Capitate Notchwort         | liverwort   | 31/12/2010 | -          | 1            |
| Lophozia incisa                         | Jagged Notchwort           | liverwort   | 23/01/1954 | 31/12/2010 | 2            |
| Lophozia ventricosa                     | Tumid Notchwort            | liverwort   | 23/01/1954 | 31/12/2010 | 15           |
| Diplophyllum albicans                   | White Earwort              | liverwort   | 23/01/1954 | 03/08/2011 | 17           |
| Scapania curta                          | Least Earwort              | liverwort   | 31/12/2010 | -          | 1            |
| Scapania gracilis                       | Western Earwort            | liverwort   | 21/11/1968 | 31/12/2010 | 11           |
| Scapania irrigua                        | Heath Earwort              | liverwort   | 31/12/2010 | -          | 1            |
| Scapania nemorea                        | Grove Earwort              | liverwort   | 10/03/1962 | 31/12/2010 | 5            |
| Scapania umbrosa                        | Shady Earwort              | liverwort   | 18/02/1994 | 31/12/2010 | 2            |
| Scapania undulata                       | Water Earwort              | liverwort   | 10/03/1962 | 31/12/2010 | 4            |
| Nylia anomala                           | Anomalous Flapwort         | liverwort   | 31/12/2010 | -          | 1            |
| Calypogeia arguta                       | Notched Pouchwort          | liverwort   | 28/02/1995 | 03/08/2011 | 4            |
| Calypogeia fissa                        | Common Pouchwort           | liverwort   | 10/03/1962 | 31/12/2011 | 6            |
| Calypogeia integristipula               | Meylan's Pouchwort         | liverwort   | 15/05/1975 | 31/12/2010 | 16           |
| Calypogeia muelleriana                  | Mueller's Pouchwort        | liverwort   | 31/12/1975 | 22/03/2011 | 7            |

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| Leiocolea heterocolpos           | Ragged Notchwort           | liverwort   | 20/03/1986 | -          | 1            |
| Jungermannia gracillima          | Crenulated Flapwort        | liverwort   | 31/12/2010 | -          | 1            |
| Jungermannia hyalina             | Transparent Flapwort       | liverwort   | 31/12/2010 | -          | 1            |
| Jungermannia leiantha            | Long-leaved Flapwort       | liverwort   | 31/12/1908 | -          | 1            |
| Jungermannia pumila              | Dwarf Flapwort             | liverwort   | 10/03/1962 | 31/12/2010 | 7            |
| Nardia scalaris                  | Ladder Flapwort            | liverwort   | 31/12/1975 | 31/12/2010 | 2            |
| Harpanthus flotovianus           | Great Mountain Flapwort    | liverwort   | 27/09/1992 | -          | 1            |
| Harpanthus scutatus              | Stipular Flapwort          | liverwort   | 23/01/1954 | 31/12/2010 | 11           |
| Sphagnum                         | Bog Moss                   | moss        | 18/06/1982 | -          | 1            |
| Sphagnum denticulatum            |                            | moss        | 10/03/1962 | 13/05/2010 | 4            |
| Sphagnum cuspidatum              | Feathery Bog-moss          | moss        | 30/12/1899 | 31/12/1975 | 2            |
| Sphagnum denticulatum            | Cow-horn Bog-moss          | moss        | UNKNOWN    | 30/12/1899 | 1            |
| Sphagnum fallax                  | Flat-topped Bog-moss       | moss        | UNKNOWN    | 30/12/1899 | 1            |
| Sphagnum fimbriatum              | Fringed Bog-moss           | moss        | UNKNOWN    | 30/12/1899 | 1            |
| Sphagnum palustre                | Blunt-leaved Bog-moss      | moss        | 30/12/1899 | 13/05/2010 | 11           |
| Sphagnum squarrosum              | Spiky Bog-moss             | moss        | 13/05/2010 | -          | 1            |
| Sphagnum subnitens               | Lustrous Bog-moss          | moss        | 13/05/2010 | -          | 1            |
| Atrichum undulatum               | Common Smoothcap           | moss        | 15/05/1975 | 31/12/2011 | 25           |
| Pogonatum aloides                | Aloe Haircap               | moss        | 30/01/1986 | 03/08/2011 | 4            |
| Pogonatum nanum                  | Dwarf Haircap              | moss        | 31/12/2009 | -          | 1            |
| Pogonatum urnigerum              | Urn Haircap                | moss        | 31/12/2009 | -          | 1            |
| Polytrichum commune              | Common Haircap             | moss        | 31/12/1975 | 02/07/1982 | 4            |
| Polytrichum commune var. commune |                            | moss        | 31/12/2009 | -          | 1            |
| Polytrichum formosum             | Bank Haircap               | moss        | 10/03/1962 | 31/12/2011 | 23           |
| Polytrichum juniperinum          | Juniper Haircap            | moss        | 31/12/1975 | 31/12/2011 | 2            |
| Polytrichum longisetum           | Slender Haircap            | moss        | UNKNOWN    | 30/12/1899 | 1            |
| Tetraphis pellucida              | Pellucid Four-tooth Moss   | moss        | 30/12/1899 | 29/08/2011 | 26           |
| Tetrodontium brownianum          | Brown's Four-tooth Moss    | moss        | 30/12/1899 | 17/04/1991 | 3            |
| Aphanorhegma patens              | Spreading Earth-moss       | moss        | 23/10/2001 | 31/12/2010 | 2            |
| Funaria hygrometrica             | Common Cord-moss           | moss        | 31/12/1975 | 31/12/2011 | 3            |
| Physcomitrium pyriforme          | Common Bladder-moss        | moss        | 31/12/2010 | -          | 1            |
| Schistidium apocarpum            |                            | moss        | 23/01/1954 | 31/12/2010 | 3            |
| Grimmia orbicularis              | Round-fruited Grimmia      | moss        | 31/12/1908 | -          | 1            |
| Grimmia pulvinata                | Grey-cushioned Grimmia     | moss        | 23/01/1954 | 31/12/2011 | 3            |
| Racomitrium aciculare            | Yellow Fringe-moss         | moss        | 31/12/1954 | 31/12/2010 | 2            |
| Racomitrium affine               | Lesser Fringe-moss         | moss        | 31/12/1986 | -          | 2            |
| Racomitrium fasciculare          | Green Mountain Fringe-moss | moss        | 23/01/1954 | 31/12/2010 | 3            |
| Racomitrium heterostichum        | Bristly Fringe-moss        | moss        | 23/01/1954 | 31/12/2010 | 4            |
| Racomitrium lanuginosum          | Woolly Fringe-moss         | moss        | 23/01/1954 | 31/12/2010 | 3            |
| Archidium alternifolium          | Clay Earth-moss            | moss        | 31/12/2009 | -          | 1            |
| Fissidens adianthoides           | Maidenhair Pocket-moss     | moss        | 15/05/1975 | 31/12/2010 | 2            |
| Fissidens bryoides               | Lesser Pocket-moss         | moss        | 23/01/1954 | 31/12/2011 | 6            |
| Fissidens celticus               | Welsh Pocket-moss          | moss        | 15/05/1975 | -          | 1            |
| Fissidens dubius                 | Rock Pocket-moss           | moss        | 31/12/2010 | -          | 1            |

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| Fissidens exilis                     | Slender Pocket-moss           | moss        | 31/12/2010 | -          | 1            |
| Fissidens pusillus                   | Petty Pocket-moss             | moss        | 31/12/2010 | 03/08/2011 | 2            |
| Fissidens taxifolius                 | Common Pocket-moss            | moss        | 23/01/1954 | 31/12/1995 | 10           |
| Fissidens taxifolius var. taxifolius |                               | moss        | 22/03/2011 | 31/12/2011 | 3            |
| Fissidens viridulus                  | Green Pocket-moss             | moss        | 30/04/1995 | 31/12/1995 | 2            |
| Pleuridium acuminatum                | Taper-leaved Earth-moss       | moss        | 30/12/1899 | 31/12/1975 | 2            |
| Pseudephemerum nitidum               | Delicate Earth-moss           | moss        | 23/10/2001 | 31/12/2009 | 2            |
| Ditrichum heteromallum               | Curve-leaved Ditrichum        | moss        | 31/01/1995 | 31/12/2009 | 2            |
| Ceratodon purpureus                  | Redshank                      | moss        | 23/01/1954 | 31/12/2011 | 7            |
| Dichodontium pellucidum              |                               | moss        | 30/04/1995 | 31/12/1995 | 2            |
| Dichodontium pellucidum              | Transparent Fork-moss         | moss        | 23/01/1954 | 29/08/2011 | 11           |
| Dicranoweisia cirrata                | Common Pincushion             | moss        | 23/01/1954 | 31/12/2011 | 26           |
| Dicranella cerviculata               | Red-neck Forklet-moss         | moss        | UNKNOWN    | 30/12/1899 | 1            |
| Dicranella crispa                    | Curl-leaved Forklet-moss      | moss        | 23/01/1954 | 31/12/1975 | 3            |
| Dicranella heteromalla               | Silky Forklet-moss            | moss        | 15/05/1975 | 31/12/2011 | 26           |
| Dicranella rufescens                 | Rufous Forklet-moss           | moss        | 31/12/2009 | -          | 2            |
| Dicranella schreberiana              | Schreber's Forklet-moss       | moss        | 29/08/2011 | -          | 1            |
| Dicranella staphylina                | Field Forklet-moss            | moss        | 23/10/2001 | 29/08/2011 | 2            |
| Dicranum majus                       | Greater Fork-moss             | moss        | 23/01/1954 | 31/12/2009 | 6            |
| Dicranum montanum                    | Mountain Fork-moss            | moss        | 15/05/1975 | 31/12/2009 | 3            |
| Dicranum scoparium                   | Broom Fork-moss               | moss        | 23/01/1954 | 31/12/2011 | 29           |
| Dicranum tauricum                    | Fragile Fork-moss             | moss        | 15/05/1975 | 31/12/2009 | 2            |
| Dicranodontium denudatum             | Beaked Bow-moss               | moss        | 05/02/1969 | 31/12/1995 | 7            |
| Campylopus flexuosus                 | Rusty Swan-neck Moss          | moss        | 23/01/1954 | 31/12/2011 | 16           |
| Campylopus fragilis                  | Brittle Swan-neck Moss        | moss        | 23/01/1954 | 31/12/2009 | 3            |
| Campylopus pyriformis                | Dwarf Swan-neck Moss          | moss        | 18/06/1982 | 31/12/2009 | 3            |
| Leucobryum glaucum                   | Large White-moss              | moss        | 31/12/1975 | 31/12/2009 | 11           |
| Leucobryum juniperoideum             | Smaller White-moss            | moss        | 28/02/1995 | -          | 1            |
| Weissia controversa                  | Green-tufted Stubble-moss     | moss        | 15/05/1975 | 31/12/2010 | 2            |
| Trichostomum tenuirostre             | Narrow-fruited Crisp-moss     | moss        | 30/12/1899 | 31/12/1995 | 5            |
| Gyroweisia tenuis                    | Slender Stubble-moss          | moss        | 31/12/2010 | -          | 1            |
| Ephemerum serratum                   | Serrated Earth-moss           | moss        | 23/10/2001 | -          | 1            |
| Ephemerum serratum var. minutissimum |                               | moss        | 31/12/2010 | -          | 1            |
| Barbula convoluta                    | Lesser Bird's-claw Beard-moss | moss        | 03/08/2011 | 31/12/2011 | 2            |
| Barbula unguiculata                  | Bird's-claw Beard-moss        | moss        | 31/12/1975 | 31/12/2011 | 4            |
| Didymodon fallax                     | Fallacious Beard-moss         | moss        | 31/12/2011 | -          | 1            |
| Didymodon insulanus                  | Cylindric Beard-moss          | moss        | 31/12/1995 | 29/08/2011 | 2            |
| Didymodon luridus                    | Dusky Beard-moss              | moss        | 31/12/1995 | -          | 1            |
| Didymodon rigidulus                  | Rigid Beard-moss              | moss        | 15/05/1975 | -          | 1            |
| Didymodon tophaceus                  | Olive Beard-moss              | moss        | 31/12/2010 | -          | 1            |
| Didymodon vinealis                   | Soft-tufted Beard-moss        | moss        | 31/12/2010 | 03/08/2011 | 2            |
| Tortula marginata                    | Bordered Screw-moss           | moss        | 30/01/1986 | 29/08/2011 | 3            |
| Tortula muralis                      | Wall Screw-moss               | moss        | 15/05/1975 | 31/12/2011 | 4            |
| Tortula truncata                     | Common Pottia                 | moss        | 23/01/1954 | 31/12/2011 | 3            |

| Latin Name                                | Common Name               | Taxon Group | First Date | Last Date  | No. of Rec's |
|---|---------------------------|-------------|------------|------------|--------------|
| Phascum cuspidatum                        | Cuspidate Earth-moss      | moss        | 31/12/1995 | 31/12/2011 | 2            |
| Microbryum curvicolle                     | Swan-necked Earth-moss    | moss        | 23/01/1954 | -          | 1            |
| Acaulon muticum                           | Rounded Pygmy-moss        | moss        | 23/01/1954 | 31/12/2010 | 3            |
| Syntrichia intermedia                     | Intermediate Screw-moss   | moss        | 15/05/1975 | 29/08/2011 | 2            |
| Syntrichia laevipila                      | Small Hairy Screw-moss    | moss        | 15/06/1968 | 31/12/2010 | 2            |
| Syntrichia latifolia                      | Water Screw-moss          | moss        | 31/12/2010 | -          | 1            |
| Zygodon conoideus                         | Lesser Yoke-moss          | moss        | 31/12/2010 | -          | 1            |
| Zygodon rupestris                         | Park Yoke-moss            | moss        | 31/12/1975 | 31/12/2010 | 2            |
| Zygodon viridissimus                      | Green Yoke-moss           | moss        | 27/02/1968 | 31/12/2010 | 4            |
| Zygodon viridissimus var. viridissimus    |                           | moss        | 29/08/2011 | -          | 1            |
| Orthotrichum affine                       | Wood Bristle-moss         | moss        | 21/11/1968 | 31/12/2011 | 2            |
| Orthotrichum anomalum                     | Anomalous Bristle-moss    | moss        | 15/05/1975 | 31/12/2010 | 2            |
| Orthotrichum lyellii                      | Lyell's Bristle-moss      | moss        | 15/06/1968 | 31/12/2010 | 3            |
| Orthotrichum pulchellum                   | Elegant Bristle-moss      | moss        | 31/12/2010 | -          | 1            |
| Ulota crispa                              |                           | moss        | 21/11/1968 | -          | 1            |
| Ulota bruchii                             | Bruch's Pincushion        | moss        | 31/12/2010 | -          | 1            |
| Ulota crispa                              | Crisped Pincushion        | moss        | 31/12/2010 | 22/03/2011 | 2            |
| Philonotis fontana                        | Fountain Apple-moss       | moss        | 31/12/2010 | -          | 1            |
| Bryum argenteum                           | Silver-moss               | moss        | 31/12/2011 | -          | 1            |
| Bryum bicolor                             | Bicoloured Bryum          | moss        | 31/12/2011 | -          | 1            |
| Bryum capillare                           | Capillary Thread-moss     | moss        | 15/05/1975 | 31/12/2011 | 3            |
| Bryum dichotomum                          |                           | moss        | 03/08/2011 | -          | 1            |
| Bryum klinggraeffii                       | Raspberry Bryum           | moss        | 23/10/2001 | 31/12/2010 | 2            |
| Bryum pseudotriquetrum                    | Marsh Bryum               | moss        | 31/12/2010 | -          | 1            |
| Bryum subelegans                          | Flabby Thread-moss        | moss        | 15/05/1975 | -          | 1            |
| Pohlia annotina                           | Pale-fruited Thread-moss  | moss        | 31/12/2010 | -          | 1            |
| Pohlia lutescens                          | Yellow Thread-moss        | moss        | 31/12/2010 | -          | 1            |
| Pohlia melanodon                          | Pink-fruited Thread-moss  | moss        | 23/10/2001 | 29/08/2011 | 4            |
| Pohlia nutans                             | Nodding Thread-moss       | moss        | 31/12/1975 | 31/12/2010 | 2            |
| Pohlia wahlenbergii                       | Pale Glaucous Thread-moss | moss        | 31/12/2010 | -          | 1            |
| Mnium hornum                              | Swan's-neck Thyme-moss    | moss        | 10/03/1962 | 31/12/2011 | 39           |
| Rhizomnium punctatum                      | Dotted Thyme-moss         | moss        | 10/03/1962 | 03/08/2011 | 14           |
| Plagiomnium affine                        | Many-fruited Thyme-moss   | moss        | 14/07/1982 | 22/03/2011 | 2            |
| Plagiomnium cuspidatum                    | Woodsy Thyme-moss         | moss        | 31/12/2010 | -          | 1            |
| Plagiomnium rostratum                     | Long-beaked Thyme-moss    | moss        | 31/12/2010 | -          | 1            |
| Plagiomnium undulatum                     | Hart's-tongue Thyme-moss  | moss        | 10/03/1962 | 31/12/2011 | 21           |
| Aulacomnium androgynum                    | Bud-headed Groove-moss    | moss        | 31/12/2010 | -          | 1            |
| Orthodontium gracile                      | Slender Thread-moss       | moss        | 19/10/1982 | 31/12/2000 | 4            |
| Orthodontium lineare                      | Cape Thread-moss          | moss        | 18/03/1967 | 31/12/2010 | 6            |
| Hookeria lucens                           | Shining Hookeria          | moss        | 23/01/1954 | 03/08/2011 | 14           |
| Fontinalis antipyretica                   | Greater Water-moss        | moss        | 31/12/1975 | _          | 1            |
| Fontinalis antipyretica var. antipyretica | Greater Water-moss        | moss        | 31/12/2010 | _          | 1            |
| Cratoneuron filicinum                     | Fern-leaved Hook-moss     | moss        | 31/12/2010 | _          | 1            |
| Amblystegium serpens                      | Creeping Feather-moss     | moss        | 15/05/1975 | 29/08/2011 | 3            |

| Latin Name                                       | Common Name                    | Taxon Group | First Date | Last Date  | No. of Rec's |
|--|--------------------------------|-------------|------------|------------|--------------|
| Amblystegium serpens var. serpens                |                                | moss        | 31/12/2011 | -          | 1            |
| Amblystegium tenax                               | Fountain Feather-moss          | moss        | 31/12/2010 | -          | 1            |
| Leptodictyum riparium                            | Kneiff's Feather-moss          | moss        | 31/12/2010 | -          | 1            |
| Thuidium tamariscinum                            | Common Tamarisk-moss           | moss        | 15/05/1975 | 31/12/2011 | 21           |
| Eurhynchium crassinervium                        | Beech Feather-moss             | moss        | 31/12/2010 | -          | 1            |
| Eurhynchium praelongum                           | Common Feather-moss            | moss        | 10/03/1962 | 31/12/2011 | 29           |
| Eurhynchium pumilum                              | Dwarf Feather-moss             | moss        | 15/05/1975 | 29/08/2011 | 2            |
| Eurhynchium striatum                             | Common Striated Feather-moss   | moss        | 10/03/1962 | 31/12/2011 | 13           |
| Rhynchostegium confertum                         | Clustered Feather-moss         | moss        | 31/12/1975 | 31/12/2011 | 5            |
| Rhynchostegium riparioides                       | Long-beaked Water Feather-moss | moss        | 10/03/1962 | 03/08/2011 | 5            |
| Rhynchostegiella tenella                         | Tender Feather-moss            | moss        | 15/05/1975 | 29/08/2011 | 3            |
| Cirriphyllum piliferum                           | Hair-pointed Feather-moss      | moss        | 31/12/2010 | 22/03/2011 | 2            |
| Oxyrrhynchium hians                              | Swartz's Feather-moss          | moss        | 15/05/1975 | 31/12/2011 | 4            |
| Sciuro-hypnum plumosum                           | Rusty Feather-moss             | moss        | 10/03/1962 | 31/12/2010 | 4            |
| Brachythecium mildeanum                          | Sand Feather-moss              | moss        | 31/12/2010 | _          | 1            |
| Brachythecium rivulare                           | River Feather-moss             | moss        | 10/03/1962 | 03/08/2011 | 9            |
| Brachythecium rutabulum                          | Rough-stalked Feather-moss     | moss        | 10/03/1962 | 31/12/2011 | 13           |
| Scleropodium purum                               | Neat Feather-moss              | moss        | 31/12/1975 | 31/12/2011 | 10           |
| Brachytheciastrum velutinum                      | Velvet Feather-moss            | moss        | 31/12/1975 | 31/12/2010 | 2            |
| Homalothecium sericeum                           | Silky Wall Feather-moss        | moss        | 15/06/1968 | 31/12/2011 | 6            |
| Calliergonella cuspidata                         | Pointed Spear-moss             | moss        | 10/03/1962 | 31/12/2011 | 9            |
| Hypnum cupressiforme                             |                                | moss        | 27/02/1968 | 31/12/1995 | 24           |
| Hypnum andoi                                     | Mamillate Plait-moss           | moss        | 05/02/1969 | 03/08/2011 | 5            |
| Hypnum cupressiforme                             | Cypress-leaved Plait-moss      | moss        | 31/12/2011 | -          | 1            |
| Hypnum cupressiforme var. cupressiforme          |                                | moss        | 10/03/1962 | 31/12/1975 | 3            |
| Hypnum cupressiforme var. resupinatum            | Supine Plait-moss              | moss        | 22/03/2011 | 31/12/2011 | 2            |
| Hypnum jutlandicum                               | Heath Plait-moss               | moss        | 30/01/1986 | 31/12/2010 | 6            |
| Hypnum lacunosum var. lacunosum                  | Great Plait-moss               | moss        | 23/01/1954 | 19/09/1989 | 4            |
| Hypnum lindbergii                                | Lindberg's Plait-moss          | moss        | 31/12/2010 | -          | 2            |
| Ctenidium molluscum                              | Chalk Comb-moss                | moss        | 15/05/1975 | 31/12/2010 | 4            |
| Ctenidium molluscum var. sylvaticum              |                                | moss        | 10/03/1962 | 28/02/1995 | 3            |
| Hyocomium armoricum                              | Flagellate Feather-moss        | moss        | 15/05/1975 | 03/08/2011 | 8            |
| Heterocladium heteropterum var. flaccidum        |                                | moss        | 23/01/1954 | 31/12/2010 | 4            |
| ,<br>Heterocladium heteropterum var. heteropteru |                                | moss        | 31/12/2010 | -          | 1            |
| Pleurozium schreberi                             | Red-stemmed Feather-moss       | moss        | 31/12/1975 | 31/12/2010 | 5            |
| Rhytidiadelphus loreus                           | Little Shaggy-moss             | moss        | 31/12/2010 | -          | 1            |
| Rhytidiadelphus squarrosus                       | Springy Turf-moss              | moss        | 10/03/1962 | 22/03/2011 | 9            |
| Rhytidiadelphus triquetrus                       | Big Shaggy-moss                | moss        | 10/03/1962 | 31/12/2010 | 4            |
| Hylocomium splendens                             | Glittering Wood-moss           | moss        | 31/12/2010 | -          | 1            |
| Plagiothecium curvifolium                        | Curved Silk-moss               | moss        | 20/03/1986 | 03/08/2011 | 2            |
| Plagiothecium denticulatum                       | Dented Silk-moss               | moss        | 23/01/1954 | 22/03/2011 | 9            |
| Plagiothecium nemorale                           | Woodsy Silk-moss               | moss        | 05/02/1969 | 29/08/2011 | 9            |
| Plagiothecium succulentum                        | Juicy Silk-moss                | moss        | 15/05/1975 | 29/08/2011 | 4            |
| Plagiothecium undulatum                          | Waved Silk-moss                | moss        | 23/01/1954 | 22/03/2011 | 14           |

| Latin Name                           | Common Name              | Taxon Group | First Date | Last Date  | No. of Rec's |
|--------------------------------------|--------------------------|-------------|------------|------------|--------------|
| Pseudotaxiphyllum elegans            | Elegant Silk-moss        | moss        | 23/01/1954 | 31/12/2011 | 28           |
| Herzogiella seligeri                 | Silesian Feather-moss    | moss        | 23/01/1954 | 10/03/1962 | 2            |
| Leucodon sciuroides                  | Squirrel-tail Moss       | moss        | 15/05/1975 | -          | 1            |
| Neckera complanata                   | Flat Neckera             | moss        | 05/02/1969 | 31/12/2010 | 4            |
| Neckera pumila                       | Dwarf Neckera            | moss        | 21/11/1968 | 31/12/2010 | 5            |
| Homalia trichomanoides               | Blunt Feather-moss       | moss        | 31/12/1975 | 31/12/2010 | 4            |
| Thamnobryum alopecurum               | Fox-tail Feather-moss    | moss        | 23/01/1954 | 29/08/2011 | 8            |
| Isothecium alopecuroides             | Larger Mouse-tail Moss   | moss        | 15/05/1975 | 31/12/2011 | 5            |
| Isothecium myosuroides               | Slender Mouse-tail Moss  | moss        | 10/03/1962 | 31/12/2011 | 17           |
| Ophioglossum vulgatum                | Adder's-tongue           | fern        | 02/07/1982 | -          | 2            |
| Osmunda regalis                      | Royal Fern               | fern        | 02/08/2008 | -          | 1            |
| Hymenophyllum tunbrigense            | Tunbridge Filmy-fern     | fern        | 23/01/1954 | 18/02/2008 | 17           |
| Trichomanes speciosum                | Killarney Fern           | fern        | 28/02/1995 | 31/12/1995 | 5            |
| Pilularia globulifera                | Pillwort                 | fern        | 31/12/1924 | -          | 1            |
| Pteridium aquilinum                  | Bracken                  | fern        | 15/05/1975 | 13/05/2010 | 39           |
| Pteridium aquilinum subsp. aquilinum | Bracken                  | fern        | 23/08/2002 | -          | 1            |
| Phyllitis scolopendrium              | Hart's-tongue            | fern        | 15/05/1975 | 23/01/2010 | 15           |
| Asplenium adiantum-nigrum            | Black Spleenwort         | fern        | 31/12/1998 | 27/08/2011 | 4            |
| Asplenium ruta-muraria               | Wall-rue                 | fern        | 11/05/2004 | 13/07/2009 | 4            |
| Asplenium trichomanes                | Maidenhair Spleenwort    | fern        | 23/04/2009 | -          | 1            |
| Oreopteris limbosperma               | Lemon-scented Fern       | fern        | 11/06/1982 | 24/05/2007 | 7            |
| Athyrium filix-femina                | Lady-fern                | fern        | 15/05/1975 | 05/06/2011 | 25           |
| Blechnum spicant                     | Hard-fern                | fern        | 15/05/1975 | 28/08/2010 | 31           |
| Polystichum aculeatum                | Hard Shield-fern         | fern        | 18/04/2004 | 28/12/2007 | 2            |
| Polystichum setiferum                | Soft Shield-fern         | fern        | 15/05/1975 | 23/01/2010 | 8            |
| Dryopteris filix-mas agg.            | Male Fern                | fern        | 30/05/1981 | 27/06/1995 | 13           |
| Dryopteris aemula                    | Hay-scented Buckler-fern | fern        | 23/01/1954 | 18/02/2008 | 9            |
| Dryopteris affinis                   | Scaly Male-fern          | fern        | 15/05/1975 | 13/05/2010 | 18           |
| Dryopteris affinis subsp. borreri    | Buckler-Fern             | fern        | 26/04/2006 | 04/05/2006 | 2            |
| Dryopteris carthusiana               | Narrow Buckler-fern      | fern        | 11/06/1982 | 13/05/2010 | 13           |
| Dryopteris dilatata                  | Broad Buckler-fern       | fern        | 15/05/1975 | 13/05/2010 | 41           |
| Dryopteris filix-mas                 | Male-fern                | fern        | 15/05/1975 | 13/05/2010 | 22           |
| Polypodium vulgare                   | Polypody                 | fern        | 18/04/2004 | 15/03/2010 | 7            |
| Polypodium vulgare                   | Polypody                 | fern        | 15/05/1975 | 15/03/2010 | 6            |
| Selaginella kraussiana               | Krauss's Clubmoss        | clubmoss    | 31/12/1996 | -          | 1            |
| Equisetum arvense                    | Field Horsetail          | horsetail   | 18/06/1982 | 19/06/2011 | 9            |
| Equisetum fluviatile                 | Water Horsetail          | horsetail   | 05/07/1964 | 13/07/2005 | 5            |
| Equisetum palustre                   | Marsh Horsetail          | horsetail   | 05/07/1964 | 11/11/2009 | 10           |
| Equisetum pratense                   | Shady Horsetail          | horsetail   | 21/06/1993 | -          | 1            |
| Equisetum sylvaticum                 | Wood Horsetail           | horsetail   | 18/06/1982 | -          | 1            |
| Equisetum telmateia                  | Great Horsetail          | horsetail   | 11/05/2004 | 11/11/2009 | 5            |
| Pinaceae                             |                          | conifer     | 11/06/1982 | 02/07/1982 | 5            |
| Pseudotsuga menziesii                | Douglas Fir              | conifer     | 31/10/1996 | -          | 1            |
| Tsuga heterophylla                   | Western Hemlock-spruce   | conifer     | 31/12/2006 | 13/05/2010 | 2            |

| Latin Name                                    | Common Name              | Taxon Group     | First Date | Last Date  | No. of Rec's |
|---|--------------------------|-----------------|------------|------------|--------------|
| Picea abies                                   | Norway Spruce            | conifer         | 31/12/1997 | 06/02/2005 | 2            |
| Picea sitchensis                              | Sitka Spruce             | conifer         | 31/12/1995 | -          | 1            |
| Larix   | Larch                    | conifer         | 11/06/1982 | 14/07/1982 | 5            |
| Larix decidua                                 | European Larch           | conifer         | 25/09/1996 | 24/05/2007 | 2            |
| Larix decidua x kaempferi = L. x marschlinsii | Hybrid Larch             | conifer         | 28/02/2008 | -          | 1            |
| Pinus nigra                                   | Corsican Pine            | conifer         | 31/10/1993 | -          | 1            |
| Pinus nigra subsp. laricio                    | Corsican Pine            | conifer         | 13/05/2010 | -          | 1            |
| Pinus sylvestris                              | Scots Pine               | conifer         | 11/06/1982 | 04/09/2011 | 20           |
| Taxus baccata                                 | Yew                      | conifer         | 27/02/1968 | 23/01/2010 | 31           |
| Cryptomeria japonica                          | Japanese Red-cedar       | conifer         | 31/10/1981 | -          | 1            |
| Chamaecyparis lawsoniana                      | Lawson's Cypress         | conifer         | 31/12/1998 | -          | 1            |
| Thuja plicata                                 | Western Red-cedar        | conifer         | 31/10/2002 | -          | 1            |
| Nymphaea alba                                 | White Water-lily         | flowering plant | 19/06/2011 | -          | 1            |
| Nuphar lutea                                  | Yellow Water-lily        | flowering plant | 31/05/2004 | 28/06/2009 | 2            |
| Lysichiton americanus                         | American Skunk-cabbage   | flowering plant | 31/10/1987 | -          | 1            |
| Arum maculatum                                | Lords-and-Ladies         | flowering plant | 15/05/1975 | 15/03/2010 | 18           |
| Lemna minor                                   | Common Duckweed          | flowering plant | 21/06/1993 | 11/11/2009 | 7            |
| Lemna minuta                                  | Least Duckweed           | flowering plant | 31/12/1995 | 01/09/2008 | 3            |
| Alisma plantago-aquatica                      | Water-plantain           | flowering plant | 17/06/1982 | 04/09/2011 | 8            |
| Butomus umbellatus                            | Flowering-rush           | flowering plant | 31/10/1979 | 27/06/1995 | 2            |
| Elodea nuttallii                              | Nuttall's Waterweed      | flowering plant | 31/05/2004 | -          | 1            |
| Potamogeton berchtoldii                       | Small Pondweed           | flowering plant | 31/12/1997 | -          | 1            |
| Potamogeton lucens                            | Shining Pondweed         | flowering plant | 18/08/2005 | -          | 1            |
| Potamogeton natans                            | Broad-leaved Pondweed    | flowering plant | 11/05/2004 | 28/06/2009 | 4            |
| Potamogeton polygonifolius                    | Bog Pondweed             | flowering plant | 16/06/1982 | 13/05/2010 | 2            |
| Dioscorea communis                            | Black Bryony             | flowering plant | 15/05/1975 | 09/09/2008 | 21           |
| Epipactis helleborine                         | Broad-leaved Helleborine | flowering plant | 02/07/1982 | 09/06/2007 | 11           |
| Epipactis palustris                           | Marsh Helleborine        | flowering plant | 05/07/1964 | 13/07/2005 | 19           |
| Epipactis purpurata                           | Violet Helleborine       | flowering plant | 31/12/1997 | 23/07/2011 | 3            |
| Listera ovata                                 | Common Twayblade         | flowering plant | 30/06/1982 | 08/06/2007 | 6            |
| Hammarbya paludosa                            | Bog Orchid               | flowering plant | 31/12/1865 | -          | 1            |
| Gymnadenia conopsea                           | Fragrant Orchid          | flowering plant | 31/08/1985 | -          | 1            |
| Gymnadenia conopsea subsp. densiflora         | Fragrant Orchid          | flowering plant | 05/07/1964 | 21/06/1993 | 7            |
| Dactylorhiza fuchsii                          | Common Spotted-orchid    | flowering plant | 05/07/1964 | 08/07/2013 | 26           |
| Dactylorhiza maculata                         | Heath Spotted-orchid     | flowering plant | 30/05/1981 | -          | 1            |
| Dactylorhiza maculata subsp. ericetorum       | Heath Spotted-Orchid     | flowering plant | 08/06/2007 | 09/06/2007 | 6            |
| Orchis mascula                                | Early-purple Orchid      | flowering plant | 31/05/2004 | 15/04/2007 | 6            |
| Anacamptis pyramidalis                        | Pyramidal Orchid         | flowering plant | 19/06/2011 | -          | 1            |
| Iris foetidissima                             | Stinking Iris            | flowering plant | 23/01/2010 | -          | 1            |
| Iris pseudacorus                              | Yellow Iris              | flowering plant | 17/06/1982 | 04/09/2011 | 10           |
| Crocus tommasinianus                          | Early Crocus             | flowering plant | 15/03/2010 | -          | 1            |
| Montbretia                                    |                          | flowering plant | 30/06/1982 | 23/04/2009 | 6            |
| Allium ursinum                                | Ramsons                  | flowering plant | 25/03/1991 | 15/03/2010 | 11           |
| Allium vineale                                | Wild Onion               | flowering plant | 31/10/1977 | _          | 1            |

| Latin Name                                 | Common Name          | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|----------------------|-----------------|------------|------------|--------------|
| Galanthus caucasicus                       | Caucasian Snowdrop   | flowering plant | 04/03/2003 | -          | 1            |
| Galanthus elwesii                          | Greater Snowdrop     | flowering plant | 04/03/2003 | -          | 1            |
| Galanthus nivalis                          | Snowdrop             | flowering plant | 07/02/2003 | 15/03/2010 | 11           |
| Galanthus plicatus                         | Pleated Snowdrop     | flowering plant | 15/02/2004 | -          | 1            |
| Narcissus                                  | daffodils            | flowering plant | 11/05/2004 | 03/04/2009 | 5            |
| Narcissus agg.                             |                      | flowering plant | 13/05/2010 | -          | 1            |
| Narcissus pseudonarcissus                  | Daffodil             | flowering plant | 18/06/1982 | 27/03/2011 | 3            |
| Narcissus pseudonarcissus subsp. pseudonar | Daffodil             | flowering plant | 04/03/2003 | 06/04/2010 | 4            |
| Hyacinthoides non-scripta                  | Bluebell             | flowering plant | 15/05/1975 | 23/05/2013 | 41           |
| Ruscus aculeatus                           | Butcher's-broom      | flowering plant | 29/03/2006 | -          | 1            |
| Sparganium emersum                         | Unbranched Bur-reed  | flowering plant | 18/06/1982 | -          | 1            |
| Sparganium erectum                         | Branched Bur-reed    | flowering plant | 27/06/1995 | 08/07/2013 | 4            |
| Typha angustifolia                         | Lesser Bulrush       | flowering plant | 27/06/1995 | 26/06/2004 | 2            |
| Typha latifolia                            | Bulrush              | flowering plant | 30/05/1981 | 04/09/2011 | 14           |
| Juncus                                     | Rush                 | flowering plant | 06/07/2007 | -          | 1            |
| Juncus bufonius agg.                       | Toad Rush agg.       | flowering plant | 30/06/1982 | 05/08/2006 | 7            |
| Juncus acutiflorus                         | Sharp-flowered Rush  | flowering plant | 18/06/1982 | 13/05/2010 | 18           |
| Juncus articulatus                         | Jointed Rush         | flowering plant | 05/07/1964 | 16/06/2011 | 10           |
| Juncus bufonius                            | Toad Rush            | flowering plant | 11/06/1982 | 04/09/2004 | 3            |
| Juncus bulbosus                            | Bulbous Rush         | flowering plant | 11/06/1982 | 13/05/2010 | 11           |
| Juncus conglomeratus                       | Compact Rush         | flowering plant | 11/06/1982 | 28/08/2010 | 19           |
| Juncus effusus                             | Soft-rush            | flowering plant | 30/05/1981 | 08/07/2013 | 37           |
| Juncus inflexus                            | Hard Rush            | flowering plant | 30/05/1981 | 23/01/2010 | 17           |
| Juncus squarrosus                          | Heath Rush           | flowering plant | 24/05/2007 | -          | 1            |
| Juncus tenuis                              | Slender Rush         | flowering plant | 11/05/2004 | 04/09/2011 | 9            |
| Luzula campestris                          | Field Wood-rush      | flowering plant | 15/05/1975 | 25/05/2005 | 10           |
| Luzula forsteri                            | Southern Wood-rush   | flowering plant | 15/05/1975 | 21/08/2007 | 4            |
| Luzula forsteri x pilosa = L. x borreri    | Wood-Rush            | flowering plant | 15/05/1975 | -          | 1            |
| Luzula multiflora                          | Heath Wood-rush      | flowering plant | 30/05/1981 | 19/06/2011 | 13           |
| Luzula pilosa                              | Hairy Wood-rush      | flowering plant | 15/05/1975 | 13/05/2010 | 16           |
| Luzula sylvatica                           | Great Wood-rush      | flowering plant | 18/03/1986 | -          | 1            |
| Eriophorum angustifolium                   | Common Cottongrass   | flowering plant | 05/07/1964 | -          | 1            |
| Bolboschoenus maritimus                    | Sea Club-rush        | flowering plant | 26/06/2004 | -          | 1            |
| Scirpus sylvaticus                         | Wood Club-rush       | flowering plant | 05/07/1964 | 08/07/2013 | 9            |
| Eleocharis palustris                       | Common Spike-rush    | flowering plant | 30/05/1981 | 22/06/2005 | 4            |
| Isolepis setacea                           | Bristle Club-rush    | flowering plant | 31/12/1999 | -          | 1            |
| Carex                                      | Sedge                | flowering plant | 22/06/2005 | -          | 1            |
| Carex binervis                             | Green-ribbed Sedge   | flowering plant | 11/06/1982 | 17/04/2008 | 5            |
| Carex caryophyllea                         | Spring-sedge         | flowering plant | 02/07/1982 | 05/06/2011 | 3            |
| Carex divulsa subsp. divulsa               | Grey Sedge           | flowering plant | 31/05/2004 | 04/09/2011 | 7            |
| Carex echinata                             | Star Sedge           | flowering plant | 30/05/1981 | 22/06/2005 | 4            |
| Carex flacca                               | Glaucous Sedge       | flowering plant | 05/07/1964 | 08/05/2007 | 7            |
| Carex hirta                                | Hairy Sedge          | flowering plant | 25/03/1991 | 11/11/2009 | 6            |
| Carex laevigata                            | Smooth-stalked Sedge | flowering plant | 15/05/1975 | 13/05/2010 | 10           |

| Latin Name                           | Common Name               | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--------------------------------------|---------------------------|-----------------|------------|------------|--------------|
| Carex nigra                          | Common Sedge              | flowering plant | 05/07/1964 | 11/11/2009 | 7            |
| Carex otrubae                        | False Fox-sedge           | flowering plant | 22/06/2005 | -          | 2            |
| Carex ovalis                         | Oval Sedge                | flowering plant | 18/06/1982 | 11/11/2009 | 7            |
| Carex pallescens                     | Pale Sedge                | flowering plant | 30/05/1981 | 05/06/2011 | 2            |
| Carex panicea                        | Carnation Sedge           | flowering plant | 05/07/1964 | 21/06/1993 | 3            |
| Carex paniculata                     | Greater Tussock-sedge     | flowering plant | 05/07/1964 | 08/07/2013 | 17           |
| Carex pendula                        | Pendulous Sedge           | flowering plant | 15/05/1975 | 13/05/2010 | 28           |
| Carex pilulifera                     | Pill Sedge                | flowering plant | 02/07/1982 | 04/09/2011 | 7            |
| Carex pseudocyperus                  | Cyperus Sedge             | flowering plant | 16/07/1988 | -          | 1            |
| Carex pulicaris                      | Flea Sedge                | flowering plant | 05/07/1964 | 21/06/1993 | 3            |
| Carex remota                         | Remote Sedge              | flowering plant | 11/06/1982 | 13/05/2010 | 27           |
| Carex riparia                        | Greater Pond-sedge        | flowering plant | 25/03/1991 | -          | 1            |
| Carex spicata                        | Spiked Sedge              | flowering plant | 09/07/2004 | 19/06/2011 | 2            |
| Carex strigosa                       | Thin-spiked Wood-sedge    | flowering plant | 11/06/1982 | 04/09/2011 | 5            |
| Carex sylvatica                      | Wood-sedge                | flowering plant | 15/05/1975 | 13/05/2010 | 28           |
| Carex vesicaria                      | Bladder-sedge             | flowering plant | 18/06/1982 | 29/05/2006 | 2            |
| Carex viridula                       | Yellow-sedge              | flowering plant | 22/06/2005 | -          | 1            |
| Carex viridula subsp. brachyrrhyncha | Long-stalked Yellow-sedge | flowering plant | 22/06/2005 | -          | 1            |
| Carex viridula subsp. oedocarpa      | Common Yellow-sedge       | flowering plant | 11/05/2004 | 24/05/2007 | 4            |
| Sasa palmata                         | Broad-leaved Bamboo       | flowering plant | 31/12/2000 | -          | 1            |
| Milium effusum                       | Wood Millet               | flowering plant | 18/08/2005 | -          | 1            |
| Lolium multiflorum                   | Italian Rye-grass         | flowering plant | 13/07/2005 | 05/07/2007 | 3            |
| Lolium perenne                       | Perennial Rye-grass       | flowering plant | 27/06/1995 | 06/07/2007 | 13           |
| Festuca                              | Fescue                    | flowering plant | 25/03/1991 | -          | 1            |
| Festuca ovina agg.                   | Sheep's Fescue agg.       | flowering plant | 10/06/2008 | -          | 1            |
| Festuca rubra agg.                   | Red Fescue                | flowering plant | 09/07/2004 | 19/06/2011 | 8            |
| Festuca arundinacea                  | Tall Fescue               | flowering plant | 27/06/1995 | 27/09/2009 | 3            |
| Festuca gigantea                     | Giant Fescue              | flowering plant | 11/06/1982 | 13/05/2010 | 14           |
| Festuca pratensis                    | Meadow Fescue             | flowering plant | 05/07/1964 | 21/06/1993 | 2            |
| Festuca rubra                        | Red Fescue                | flowering plant | 20/07/1995 | 22/06/2005 | 2            |
| Vulpia bromoides                     | Squirreltail Fescue       | flowering plant | 10/06/2008 | -          | 2            |
| Vulpia myuros                        | Rat's-tail Fescue         | flowering plant | 05/06/2011 | -          | 1            |
| Cynosurus cristatus                  | Crested Dog's-tail        | flowering plant | 11/06/1982 | 27/09/2009 | 10           |
| Briza media                          | Quaking-grass             | flowering plant | 05/07/1964 | 05/07/2007 | 4            |
| Poa pratensis                        | Smooth Meadow-Grass       | flowering plant | 11/05/2004 | 09/07/2004 | 2            |
| Poa annua                            | Annual Meadow-grass       | flowering plant | 30/05/1981 | 13/07/2005 | 14           |
| Poa nemoralis                        | Wood Meadow-grass         | flowering plant | 11/06/1982 | 05/08/2006 | 15           |
| Poa pratensis                        | Smooth Meadow-grass       | flowering plant | 27/06/1995 | 28/06/2009 | 5            |
| Poa trivialis                        | Rough Meadow-grass        | flowering plant | 05/07/1964 | 19/06/2011 | 28           |
| Dactylis glomerata                   | Cock's-foot               | flowering plant | 30/05/1981 | 04/05/2006 | 22           |
| Arrhenatherum elatius                | False Oat-grass           | flowering plant | 17/06/1982 | 08/07/2013 | 20           |
| Avena sativa                         | Oat                       | flowering plant | 13/07/2005 | 15/07/2005 | 2            |
| Deschampsia cespitosa                | Tufted Hair-Grass         | flowering plant | 05/07/1964 | 13/05/2010 | 28           |
| Deschampsia flexuosa                 | Wavy Hair-grass           | flowering plant | 11/06/1982 | 10/06/2008 | 16           |

| Latin Name                          | Common Name          | Taxon Group     | First Date | Last Date  | No. of Rec's |
|-------------------------------------|----------------------|-----------------|------------|------------|--------------|
| Holcus lanatus                      | Yorkshire-fog        | flowering plant | 05/07/1964 | 08/07/2013 | 39           |
| Holcus mollis                       | Creeping Soft-grass  | flowering plant | 11/06/1982 | 13/05/2010 | 19           |
| Aira caryophyllea                   | Silver Hair-grass    | flowering plant | 18/06/1982 | 05/07/2009 | 2            |
| Aira praecox                        | Early Hair-grass     | flowering plant | 31/05/2004 | 11/05/2005 | 2            |
| Anthoxanthum odoratum               | Sweet Vernal-grass   | flowering plant | 05/07/1964 | 15/07/2005 | 22           |
| Phalaris arundinacea                | Reed Canary-grass    | flowering plant | 17/06/1982 | 31/05/2004 | 5            |
| Agrostis canina                     | Velvet Bent          | flowering plant | 11/06/1982 | 16/07/1982 | 9            |
| Agrostis canina                     | Velvet Bent          | flowering plant | 11/11/2009 | 13/05/2010 | 3            |
| Agrostis capillaris                 | Common Bent          | flowering plant | 11/06/1982 | 27/09/2009 | 22           |
| Agrostis gigantea                   | Black Bent           | flowering plant | 11/08/2006 | 04/09/2011 | 3            |
| Agrostis stolonifera                | Creeping Bent        | flowering plant | 11/06/1982 | 13/05/2010 | 21           |
| Agrostis vinealis                   | Brown Bent           | flowering plant | 31/12/2000 | -          | 1            |
| Alopecurus geniculatus              | Marsh Foxtail        | flowering plant | 31/05/2004 | 05/06/2011 | 4            |
| Alopecurus myosuroides              | Black-grass          | flowering plant | 13/07/2005 | 04/09/2011 | 3            |
| Alopecurus pratensis                | Meadow Foxtail       | flowering plant | 05/07/1964 | 11/11/2009 | 12           |
| Phleum bertolonii                   | Smaller Cat's-tail   | flowering plant | 20/07/1995 | 04/09/2011 | 12           |
| Phleum pratense                     | Timothy              | flowering plant | 27/06/1995 | 27/09/2009 | 8            |
| Glyceria                            | Sweet-Grass          | flowering plant | 11/06/1982 | 25/03/1991 | 2            |
| Glyceria declinata                  | Small Sweet-grass    | flowering plant | 17/06/1982 | -          | 1            |
| Glyceria fluitans                   | Floating Sweet-grass | flowering plant | 05/07/1964 | 05/06/2011 | 11           |
| Glyceria maxima                     | Reed Sweet-grass     | flowering plant | 27/06/1995 | 31/05/2004 | 2            |
| Glyceria notata                     | Plicate Sweet-grass  | flowering plant | 21/06/1993 | 05/06/2011 | 5            |
| Melica uniflora                     | Wood Melick          | flowering plant | 15/05/1975 | 28/06/2009 | 15           |
| Bromus hordeaceus subsp. hordeaceus | Common Soft-brome    | flowering plant | 11/05/2004 | 24/05/2007 | 5            |
| Bromus secalinus                    | Rye Brome            | flowering plant | 13/07/2005 | -          | 2            |
| Bromus sterilis                     | Barren Brome         | flowering plant | 11/06/2005 | 13/07/2005 | 2            |
| Bromopsis inermis                   | Hungarian Brome      | flowering plant | 31/12/1992 | -          | 1            |
| Bromopsis ramosa                    | Hairy-brome          | flowering plant | 15/05/1975 | 15/10/2009 | 6            |
| Brachypodium sylvaticum             | False-brome          | flowering plant | 11/06/1982 | 13/05/2010 | 25           |
| Elytrigia repens                    | Common Couch         | flowering plant | 11/05/2004 | 13/07/2009 | 9            |
| Elytrigia repens subsp. repens      | Common Couch         | flowering plant | 27/08/2008 | -          | 2            |
| Triticum aestivum                   | Bread Wheat          | flowering plant | 31/12/1993 | 19/06/2011 | 3            |
| Danthonia decumbens                 | Heath-grass          | flowering plant | 11/06/1982 | 24/05/2007 | 2            |
| Molinia caerulea                    | Purple Moor-grass    | flowering plant | 11/06/1982 | 01/09/2008 | 10           |
| Phragmites australis                | Common Reed          | flowering plant | 17/06/1982 | 25/11/2007 | 4            |
| Panicum miliaceum                   | Common Millet        | flowering plant | 31/12/1996 | 23/08/2004 | 3            |
| Echinochloa crus-galli              | Cockspur             | flowering plant | 23/08/2004 | 09/09/2008 | 4            |
| Setaria pumila                      | Yellow Bristle-grass | flowering plant | 23/08/2004 | 21/08/2007 | 2            |
| Setaria viridis                     | Green Bristle-grass  | flowering plant | 23/08/2004 | -          | 1            |
| Ceratophyllum demersum              | Rigid Hornwort       | flowering plant | 01/09/2008 | -          | 1            |
| Papaver somniferum                  | Opium Poppy          | flowering plant | 13/07/2005 | 27/09/2009 | 2            |
| Chelidonium majus                   | Greater Celandine    | flowering plant | 14/05/2005 | 25/11/2007 | 4            |
| Pseudofumaria lutea                 | Yellow Corydalis     | flowering plant | 11/05/2004 | -          | 1            |
| Caltha palustris                    | Marsh-marigold       | flowering plant | 05/07/1964 | 08/07/2013 | 13           |

| Latin Name                        | Common Name                       | Taxon Group     | First Date | Last Date  | No. of Rec's |
|-----------------------------------|-----------------------------------|-----------------|------------|------------|--------------|
| Nigella damascena                 | Love-in-a-mist                    | flowering plant | 31/12/1994 | -          | 1            |
| Anemone nemorosa                  | Wood Anemone                      | flowering plant | 15/05/1975 | 03/04/2009 | 13           |
| Clematis vitalba                  | Traveller's-joy                   | flowering plant | 16/07/1982 | 10/06/2008 | 4            |
| Ranunculus acris                  | Meadow Buttercup                  | flowering plant | 05/07/1964 | 27/09/2009 | 12           |
| Ranunculus auricomus              | Goldilocks Buttercup              | flowering plant | 31/12/1999 | -          | 1            |
| Ranunculus bulbosus               | Bulbous Buttercup                 | flowering plant | 27/06/1995 | -          | 1            |
| Ranunculus ficaria                | Lesser Celandine                  | flowering plant | 15/05/1975 | 13/05/2010 | 17           |
| Ranunculus ficaria subsp. ficaria | Lesser Celandine                  | flowering plant | 18/04/2004 | 29/05/2006 | 6            |
| Ranunculus flammula               | Lesser Spearwort                  | flowering plant | 30/05/1981 | 08/07/2013 | 22           |
| Ranunculus hederaceus             | Ivy-leaved Crowfoot               | flowering plant | 11/11/2009 | -          | 2            |
| Ranunculus omiophyllus            | Round-leaved Crowfoot             | flowering plant | 31/12/1997 | 25/08/2010 | 2            |
| Ranunculus peltatus               | Pond Water-crowfoot               | flowering plant | 28/06/2009 | -          | 1            |
| Ranunculus repens                 | Creeping Buttercup                | flowering plant | 30/05/1981 | 13/05/2010 | 36           |
| Ranunculus sardous                | Hairy Buttercup                   | flowering plant | 23/08/2004 | 28/06/2007 | 3            |
| Myosurus minimus                  | Mousetail                         | flowering plant | 31/12/1986 | -          | 1            |
| Aquilegia vulgaris                | Columbine                         | flowering plant | 09/09/2008 | 02/06/2011 | 2            |
| Ribes nigrum                      | Black Currant                     | flowering plant | 11/06/1982 | 05/08/2006 | 11           |
| Ribes rubrum                      | Red Currant                       | flowering plant | 15/05/1975 | 13/05/2010 | 16           |
| Ribes sanguineum                  | Flowering Currant                 | flowering plant | 31/12/2000 | 13/05/2010 | 2            |
| Ribes uva-crispa                  | Gooseberry                        | flowering plant | 09/07/2004 | -          | 1            |
| Bergenia crassifolia              | Elephant-ears                     | flowering plant | 31/12/1993 | -          | 1            |
| Chrysosplenium oppositifolium     | Opposite-leaved Golden-saxifrage  | flowering plant | 15/05/1975 | 13/05/2010 | 31           |
| Crassula helmsii                  | New Zealand Pigmyweed             | flowering plant | 31/05/2004 | 12/07/2004 | 2            |
| Sedum acre                        | Biting Stonecrop                  | flowering plant | 11/05/2004 | -          | 1            |
| Sedum album                       | White Stonecrop                   | flowering plant | 31/12/1995 | 05/06/2011 | 2            |
| Sedum rupestre                    | Reflexed Stonecrop                | flowering plant | 31/12/1995 | 31/12/1997 | 2            |
| Sedum telephium                   | Orpine                            | flowering plant | 18/08/2005 | 13/05/2010 | 3            |
| Galega officinalis                | Goat's-rue                        | flowering plant | 01/09/2008 | -          | 1            |
| Lotus corniculatus                | Common Bird's-foot-trefoil        | flowering plant | 02/07/1982 | 01/09/2007 | 13           |
| Lotus pedunculatus                | Greater Bird's-foot-trefoil       | flowering plant | 05/07/1964 | 08/07/2013 | 27           |
| Lotus tenuis                      | Narrow-leaved Bird's-foot-trefoil | flowering plant | 20/07/1995 | -          | 1            |
| Ornithopus perpusillus            | Bird's-foot                       | flowering plant | 11/05/2005 | -          | 1            |
| Vicia cracca                      | Tufted Vetch                      | flowering plant | 05/07/1964 | 08/07/2013 | 17           |
| Vicia hirsuta                     | Hairy Tare                        | flowering plant | 31/05/2004 | 19/06/2011 | 3            |
| Vicia sativa                      | Common Vetch                      | flowering plant | 18/06/1982 | 02/07/1982 | 2            |
| Vicia sativa subsp. nigra         | Narrow-leaved Vetch               | flowering plant | 11/05/2004 | 10/06/2008 | 4            |
| Vicia sativa subsp. sativa        | Common Vetch                      | flowering plant | 30/05/1981 | -          | 1            |
| Vicia sativa subsp. segetalis     | Common Vetch                      | flowering plant | 11/05/2004 | 28/08/2010 | 5            |
| Vicia sepium                      | Bush Vetch                        | flowering plant | 15/05/1975 | 23/01/2010 | 11           |
| Vicia tetrasperma                 | Smooth Tare                       | flowering plant | 31/05/2004 | 19/06/2011 | 3            |
| Lathyrus linifolius               | Bitter-vetch                      | flowering plant | 15/05/1975 | 15/03/2010 | 9            |
| Lathyrus nissolia                 | Grass Vetchling                   | flowering plant | 31/05/2004 | 02/06/2011 | 3            |
| Lathyrus pratensis                | Meadow Vetchling                  | flowering plant | 05/07/1964 | 11/11/2009 | 17           |
| Ononis repens                     | Common Restharrow                 | flowering plant | 20/07/1995 | 21/08/2007 | 2            |

| Latin Name                                   | Common Name            | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|------------------------|-----------------|------------|------------|--------------|
| Melilotus altissimus                         | Tall Melilot           | flowering plant | 06/09/2009 | -          | 1            |
| Medicago arabica                             | Spotted Medick         | flowering plant | 14/05/2005 | -          | 2            |
| Medicago lupulina                            | Black Medick           | flowering plant | 17/08/2004 | 01/09/2008 | 5            |
| Trifolium dubium                             | Lesser Trefoil         | flowering plant | 31/05/2004 | 19/06/2011 | 6            |
| Trifolium hybridum                           | Alsike Clover          | flowering plant | 01/09/2008 | -          | 1            |
| Trifolium medium                             | Zigzag Clover          | flowering plant | 20/07/1995 | 19/06/2011 | 8            |
| Trifolium micranthum                         | Slender Trefoil        | flowering plant | 24/05/2007 | 05/06/2011 | 2            |
| Trifolium pratense                           | Red Clover             | flowering plant | 30/05/1981 | 11/11/2009 | 17           |
| Trifolium repens                             | White Clover           | flowering plant | 17/06/1982 | 06/07/2007 | 18           |
| Cytisus scoparius                            | Broom                  | flowering plant | 25/09/1996 | 05/06/2011 | 7            |
| Genista tinctoria                            | Dyer's Greenweed       | flowering plant | 31/12/1999 | -          | 1            |
| Ulex europaeus                               | Gorse                  | flowering plant | 17/06/1982 | 23/01/2010 | 13           |
| Ulex minor                                   | Dwarf Gorse            | flowering plant | 11/08/2006 | 24/08/2009 | 2            |
| Polygala serpyllifolia                       | Heath Milkwort         | flowering plant | 17/06/1982 | 11/05/2005 | 2            |
| Polygala vulgaris                            | Common Milkwort        | flowering plant | 31/05/2004 | -          | 1            |
| Prunus avium                                 | Wild Cherry            | flowering plant | 11/06/1982 | 13/05/2010 | 20           |
| Prunus cerasifera                            | Cherry Plum            | flowering plant | 15/02/2004 | 25/02/2008 | 3            |
| Prunus domestica                             | Wild Plum              | flowering plant | 04/09/2011 | -          | 1            |
| Prunus laurocerasus                          | Cherry Laurel          | flowering plant | 11/06/1982 | 23/01/2010 | 9            |
| Prunus lusitanica                            | Portugal Laurel        | flowering plant | 31/10/1995 | 09/05/2004 | 2            |
| Prunus spinosa                               | Blackthorn             | flowering plant | 30/05/1981 | 28/08/2010 | 31           |
| Prunus spinosa x domestica = P. x fruticans  | Cherry                 | flowering plant | 31/12/1996 | -          | 1            |
| Malus pumila                                 | Apple                  | flowering plant | 20/07/1995 | 29/05/2006 | 5            |
| Malus sylvestris                             | Crab Apple             | flowering plant | 11/06/1982 | 01/03/2009 | 12           |
| Sorbus aucuparia                             | Rowan                  | flowering plant | 15/05/1975 | 13/05/2010 | 21           |
| Sorbus torminalis                            | Wild Service-tree      | flowering plant | 16/07/1982 | -          | 1            |
| Cotoneaster rehderi                          | Bullate Cotoneaster    | flowering plant | 31/12/1997 | -          | 2            |
| Cotoneaster simonsii                         | Himalayan contoneaster | flowering plant | 21/08/2007 | -          | 2            |
| Crataegus laevigata                          | Midland Hawthorn       | flowering plant | 31/10/1980 | 16/07/1982 | 3            |
| Crataegus monogyna                           | Hawthorn               | flowering plant | 30/05/1981 | 13/05/2010 | 30           |
| Filipendula ulmaria                          | Meadowsweet            | flowering plant | 05/07/1964 | 08/07/2013 | 23           |
| Rubus fruticosus agg.                        | Bramble                | flowering plant | 15/05/1975 | 13/05/2010 | 51           |
| Rubus idaeus                                 | Raspberry              | flowering plant | 11/06/1982 | 28/11/2005 | 10           |
| Rubus ulmifolius                             | Bramble                | flowering plant | 31/12/1995 | 13/07/2005 | 2            |
| Potentilla anglica                           | Trailing Tormentil     | flowering plant | 17/08/2004 | -          | 1            |
| Potentilla anglica x reptans = P. x mixta    | Hybrid Cinquefoil      | flowering plant | 11/05/2004 | 11/11/2009 | 4            |
| Potentilla anserina                          | Silverweed             | flowering plant | 30/05/1981 | 13/07/2005 | 14           |
| Potentilla erecta                            | Tormentil              | flowering plant | 30/05/1981 | 29/09/2007 | 19           |
| Potentilla erecta x anglica = P. x suberecta | Cinquefoil             | flowering plant | 17/08/2004 | -          | 1            |
| Potentilla reptans                           | Creeping Cinquefoil    | flowering plant | 30/05/1981 | 22/10/2009 | 18           |
| Potentilla sterilis                          | Barren Strawberry      | flowering plant | 15/05/1975 | 23/01/2010 | 24           |
| Fragaria vesca                               | Wild Strawberry        | flowering plant | 11/06/1982 | 01/09/2007 | 12           |
| Geum rivale                                  | Water Avens            | flowering plant | 11/06/1982 | -          | 1            |
| Geum urbanum                                 | Wood Avens             | flowering plant | 11/06/1982 | 13/05/2010 | 29           |

| Latin Name                            | Common Name                | Taxon Group     | First Date | Last Date  | No. of Rec's |
|---------------------------------------|----------------------------|-----------------|------------|------------|--------------|
| Agrimonia eupatoria                   | Agrimony                   | flowering plant | 02/07/1982 | 13/07/2009 | 13           |
| Agrimonia procera                     | Fragrant Agrimony          | flowering plant | 22/06/2005 | 13/07/2005 | 3            |
| Sanguisorba minor                     | Salad Burnet               | flowering plant | 02/07/1982 | -          | 1            |
| Sanguisorba minor subsp. minor        | Salad Burnet               | flowering plant | 06/09/2009 | -          | 1            |
| Aphanes arvensis agg.                 | Parsley Piert              | flowering plant | 13/07/2005 | -          | 1            |
| Aphanes arvensis                      | Parsley-piert              | flowering plant | 13/07/2005 | 19/06/2011 | 2            |
| Rosa                                  | Rose                       | flowering plant | 11/05/2004 | 09/07/2004 | 3            |
| Rosa canina agg.                      | Dog Rose                   | flowering plant | 11/06/1982 | 13/05/2010 | 23           |
| Rosa arvensis                         | Field-rose                 | flowering plant | 15/05/1975 | 13/05/2010 | 20           |
| Rosa canina                           | Dog-rose                   | flowering plant | 27/06/1995 | 22/10/2009 | 6            |
| Rosa micrantha                        | Small-flowered Sweet-briar | flowering plant | 31/12/1999 | -          | 1            |
| Rosa tomentosa                        | Harsh Downy-rose           | flowering plant | 05/06/2011 | -          | 2            |
| Rhamnus cathartica                    | Buckthorn                  | flowering plant | 25/09/1996 | -          | 1            |
| Frangula alnus                        | Alder Buckthorn            | flowering plant | 11/06/1982 | 13/05/2010 | 15           |
| Ulmus                                 | Elm                        | flowering plant | 14/05/2005 | 13/07/2005 | 3            |
| Ulmus glabra                          | Wych Elm                   | flowering plant | 14/05/2005 | 11/06/2005 | 2            |
| Cannabis sativa                       | Hemp                       | flowering plant | 31/12/1989 | -          | 1            |
| Humulus lupulus                       | Нор                        | flowering plant | 24/05/2007 | 19/06/2011 | 3            |
| Urtica dioica                         | Common Nettle              | flowering plant | 30/05/1981 | 13/05/2010 | 41           |
| Nothofagus obliqua                    | Roble                      | flowering plant | 31/10/1990 | -          | 1            |
| Fagus sylvatica                       | Beech                      | flowering plant | 05/04/1976 | 13/05/2010 | 50           |
| Castanea sativa                       | Sweet Chestnut             | flowering plant | 11/06/1982 | 02/08/2008 | 24           |
| Quercus                               | Oak                        | flowering plant | 05/04/1976 | 31/12/2002 | 6            |
| Quercus cerris                        | Turkey Oak                 | flowering plant | 17/08/2004 | 13/05/2010 | 2            |
| Quercus ilex                          | Evergreen Oak              | flowering plant | 31/10/1997 | 31/12/2006 | 2            |
| Quercus petraea                       | Sessile Oak                | flowering plant | 31/10/1998 | 31/05/2004 | 2            |
| Quercus robur                         | Pedunculate Oak            | flowering plant | 30/05/1981 | 13/05/2010 | 54           |
| Quercus rubra                         | Red Oak                    | flowering plant | 17/08/2004 | 22/10/2009 | 3            |
| Betula                                | Birch                      | flowering plant | 31/05/1992 | 31/12/2002 | 3            |
| Betula pendula                        | Silver Birch               | flowering plant | 11/06/1982 | 13/05/2010 | 27           |
| Betula pubescens                      | Downy Birch                | flowering plant | 11/06/1982 | 27/09/2009 | 22           |
| Betula pubescens subsp. pubescens     | Downy Birch                | flowering plant | 13/05/2010 | -          | 1            |
| Alnus glutinosa                       | Alder                      | flowering plant | 30/05/1981 | 08/07/2013 | 44           |
| Carpinus betulus                      | Hornbeam                   | flowering plant | 17/06/1982 | 10/06/2008 | 8            |
| Corylus avellana                      | Hazel                      | flowering plant | 15/05/1975 | 13/05/2010 | 46           |
| Bryonia dioica                        | White Bryony               | flowering plant | 14/05/2005 | -          | 1            |
| Oxalis acetosella                     | Wood-sorrel                | flowering plant | 15/05/1975 | 13/05/2010 | 29           |
| Oxalis corniculata                    | Procumbent Yellow-sorrel   | flowering plant | 31/05/2004 | 19/06/2011 | 2            |
| Mercurialis perennis                  | Dog's Mercury              | flowering plant | 15/05/1975 | 23/01/2010 | 28           |
| Euphorbia amygdaloides                | Wood Spurge                | flowering plant | 05/02/1969 | 13/05/2010 | 20           |
| Euphorbia amygdaloides subsp. robbiae | Spurge                     | flowering plant | 23/12/2004 | 23/01/2010 | 2            |
| Euphorbia helioscopia                 | Sun Spurge                 | flowering plant | 09/07/2004 | -          | 1            |
| Euphorbia peplus                      | Petty Spurge               | flowering plant | 11/05/2004 | 09/09/2008 | 5            |
| Euphorbia platyphyllos                | Broad-leaved Spurge        | flowering plant | 31/12/1974 | 31/12/1991 | 3            |

| Latin Name                                     | Common Name                   | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|-------------------------------|-----------------|------------|------------|--------------|
| Populus  | Poplar                        | flowering plant | 17/06/1982 | 13/05/2010 | 2            |
| Populus alba                                   | White Poplar                  | flowering plant | 11/05/2004 | -          | 1            |
| Populus nigra                                  | Black-poplar                  | flowering plant | 17/06/1982 | 30/11/2004 | 6            |
| Populus nigra x deltoides = P. x canadensis    | Hybrid Black-poplar           | flowering plant | 13/07/2005 | 01/09/2008 | 2            |
| Populus tremula                                | Aspen                         | flowering plant | 11/06/1982 | 19/06/2011 | 10           |
| Salix  | Willow                        | flowering plant | 31/12/2002 | -          | 2            |
| Salix alba                                     | White Willow                  | flowering plant | 11/06/1982 | 01/09/2008 | 4            |
| Salix aurita                                   | Eared Willow                  | flowering plant | 17/06/1982 | -          | 1            |
| Salix caprea                                   | Goat Willow                   | flowering plant | 11/06/1982 | 22/10/2009 | 23           |
| Salix caprea subsp. sphacelata                 | Willow                        | flowering plant | 13/05/2010 | -          | 1            |
| Salix caprea x cinerea = S. x reichardtii      | Willow                        | flowering plant | 13/07/2005 | -          | 1            |
| Salix cinerea                                  | Common Sallow                 | flowering plant | 11/06/1982 | 11/11/2009 | 17           |
| Salix cinerea subsp. oleifolia                 | Rusty Willow                  | flowering plant | 20/07/1995 | 13/05/2010 | 11           |
| Salix fragilis                                 | Crack-willow                  | flowering plant | 27/06/1995 | 13/07/2005 | 4            |
| Salix fragilis x alba = S. x rubens            | Hybrid Crack-willow           | flowering plant | 10/06/2008 | -          | 2            |
| Salix viminalis                                | Osier                         | flowering plant | 19/06/2011 | -          | 1            |
| Viola  | Violet                        | flowering plant | 25/03/1991 | -          | 1            |
| Viola arvensis                                 | Field Pansy                   | flowering plant | 13/07/2005 | -          | 1            |
| Viola hirta                                    | Hairy Violet                  | flowering plant | 02/07/1982 | 25/09/1996 | 2            |
| Viola odorata                                  | Sweet Violet                  | flowering plant | 14/07/1982 | 03/04/2009 | 2            |
| Viola odorata var. dumetorum                   |                               | flowering plant | 03/04/2009 | 11/03/2011 | 2            |
| Viola palustris                                | Marsh Violet                  | flowering plant | 15/05/1975 | 04/09/2011 | 10           |
| Viola reichenbachiana                          | Early Dog-violet              | flowering plant | 31/05/2004 | 02/04/2012 | 3            |
| Viola riviniana                                | Common Dog-violet             | flowering plant | 11/06/1982 | 02/04/2012 | 27           |
| Linum catharticum                              | Fairy Flax                    | flowering plant | 02/07/1982 | 31/05/2004 | 2            |
| Linum usitatissimum                            | Flax                          | flowering plant | 26/06/2004 | -          | 1            |
| Hypericum androsaemum                          | Tutsan                        | flowering plant | 15/05/1975 | 09/09/2008 | 11           |
| Hypericum calycinum                            | Rose-of-Sharon                | flowering plant | 04/09/2011 | -          | 1            |
| Hypericum hirsutum                             | Hairy St John's-wort          | flowering plant | 19/06/2011 | -          | 1            |
| Hypericum humifusum                            | Trailing St John's-wort       | flowering plant | 02/07/1982 | 04/09/2011 | 12           |
| Hypericum maculatum                            | Imperforate St John's-wort    | flowering plant | 18/06/1982 | 27/08/2011 | 3            |
| Hypericum perforatum                           | Perforate St John's-wort      | flowering plant | 30/05/1981 | 29/09/2007 | 12           |
| Hypericum pulchrum                             | Slender St John's-wort        | flowering plant | 16/06/1982 | 29/09/2007 | 17           |
| Hypericum tetrapterum                          | Square-stalked St John's-wort | flowering plant | 05/07/1964 | 08/07/2013 | 14           |
| Geranium dissectum                             | Cut-leaved Crane's-bill       | flowering plant | 31/10/1985 | 13/03/2007 | 8            |
| Geranium endressii x versicolor = G. x oxonian | Druce's Crane's-bill          | flowering plant | 31/12/1997 | 13/07/2009 | 3            |
| Geranium lucidum                               | Shining Crane's-bill          | flowering plant | 05/06/2011 | -          | 1            |
| Geranium molle                                 | Dove's-foot Crane's-bill      | flowering plant | 13/07/2005 | -          | 1            |
| Geranium pratense                              | Meadow Crane's-bill           | flowering plant | 31/12/1999 | -          | 1            |
| Geranium robertianum                           | Herb-Robert                   | flowering plant | 15/05/1975 | 23/01/2010 | 28           |
| Lythrum portula                                | Water-purslane                | flowering plant | 05/08/2006 | 04/09/2011 | 4            |
| Lythrum salicaria                              | Purple-loosestrife            | flowering plant | 21/06/1993 | 11/11/2009 | 6            |
| Epilobium                                      | Willowherb                    | flowering plant | 25/03/1991 | 22/06/2005 | 2            |
| Epilobium ciliatum                             | American Willowherb           | flowering plant | 20/07/1995 | 13/07/2009 | 9            |

| Latin Name                                   | Common Name                     | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|---------------------------------|-----------------|------------|------------|--------------|
| Epilobium hirsutum                           | Great Willowherb                | flowering plant | 30/05/1981 | 11/11/2009 | 17           |
| Epilobium lanceolatum                        | Spear-leaved Willowherb         | flowering plant | 30/06/1982 | -          | 1            |
| Epilobium montanum                           | Broad-leaved Willowherb         | flowering plant | 15/05/1975 | 11/11/2009 | 20           |
| Epilobium obscurum                           | Short-fruited Willowherb        | flowering plant | 31/05/2004 | 27/08/2008 | 5            |
| Epilobium palustre                           | Marsh Willowherb                | flowering plant | 22/06/2005 | 11/11/2009 | 6            |
| Epilobium parviflorum                        | Hoary Willowherb                | flowering plant | 31/08/1985 | 13/07/2009 | 9            |
| Epilobium tetragonum                         | Square-stalked Willowherb       | flowering plant | 17/06/1982 | 19/06/2011 | 6            |
| Chamerion angustifolium                      | Rosebay Willowherb              | flowering plant | 11/06/1982 | 02/08/2008 | 19           |
| Oenothera glazioviana                        | Large-flowered Evening-primrose | flowering plant | 17/08/2006 | -          | 1            |
| Circaea lutetiana                            | Enchanter's-nightshade          | flowering plant | 15/05/1975 | 13/05/2010 | 30           |
| Aesculus carnea                              | Red Horse-chestnut              | flowering plant | 20/05/2005 | -          | 1            |
| Aesculus hippocastanum                       | Horse-chestnut                  | flowering plant | 30/06/1982 | 09/04/2007 | 10           |
| Acer campestre                               | Field Maple                     | flowering plant | 15/05/1975 | 28/08/2010 | 21           |
| Acer platanoides                             | Norway Maple                    | flowering plant | 20/07/1995 | 22/10/2009 | 2            |
| Acer pseudoplatanus                          | Sycamore                        | flowering plant | 18/06/1982 | 19/06/2011 | 18           |
| Malva moschata                               | Musk-mallow                     | flowering plant | 20/07/1995 | 04/09/2011 | 7            |
| Malva sylvestris                             | Common Mallow                   | flowering plant | 31/05/2004 | 19/06/2011 | 5            |
| Tilia cordata                                | Small-leaved Lime               | flowering plant | 31/05/2004 | 13/05/2010 | 3            |
| Tilia platyphyllos x cordata = T. x europaea | Lime                            | flowering plant | 27/06/1995 | 11/06/2005 | 4            |
| Erysimum cheiri                              | Wallflower                      | flowering plant | 13/07/2005 | -          | 1            |
| Arabidopsis thaliana                         | Thale Cress                     | flowering plant | 11/05/2004 | 19/06/2011 | 3            |
| Camelina sativa                              | Gold-of-pleasure                | flowering plant | 31/12/1989 | -          | 1            |
| Capsella bursa-pastoris                      | Shepherd's-purse                | flowering plant | 11/05/2004 | 11/08/2006 | 9            |
| Barbarea intermedia                          | Medium-flowered Winter-cress    | flowering plant | 31/12/1988 | 19/06/2011 | 2            |
| Barbarea vulgaris                            | Winter-cress                    | flowering plant | 09/07/2004 | 05/06/2011 | 3            |
| Rorippa nasturtium-aquaticum agg.            | Water Cress                     | flowering plant | 18/06/1982 | 21/06/1993 | 3            |
| Rorippa nasturtium-aquaticum                 | Water-cress                     | flowering plant | 30/05/1981 | 11/05/2004 | 2            |
| Cardamine amara                              | Large Bitter-cress              | flowering plant | 11/05/2004 | 16/06/2006 | 2            |
| Cardamine flexuosa                           | Wavy Bitter-cress               | flowering plant | 15/05/1975 | 13/05/2010 | 27           |
| Cardamine hirsuta                            | Hairy Bitter-cress              | flowering plant | 18/04/2004 | 06/04/2010 | 7            |
| Cardamine pratensis                          | Cuckooflower                    | flowering plant | 05/07/1964 | 13/05/2010 | 30           |
| Lepidium coronopus                           | Swine-cress                     | flowering plant | 31/05/2004 | 19/06/2011 | 3            |
| Lepidium didymum                             | Lesser Swine-cress              | flowering plant | 19/06/2011 | -          | 1            |
| Lunaria annua                                | Honesty                         | flowering plant | 13/07/2005 | -          | 1            |
| Lobularia maritima                           | Sweet Alison                    | flowering plant | 23/12/2004 | 31/12/2006 | 2            |
| Brassica napus                               | Rape                            | flowering plant | 28/04/2008 | -          | 2            |
| Sinapis arvensis                             | Charlock                        | flowering plant | 17/09/2005 | 04/09/2011 | 3            |
| Hirschfeldia incana                          | Hoary Mustard                   | flowering plant | 05/07/2009 | -          | 1            |
| Raphanus raphanistrum subsp. raphanistrum    | Wild Radish                     | flowering plant | 13/07/2005 | 19/06/2011 | 2            |
| Sisymbrium officinale                        | Hedge Mustard                   | flowering plant | 31/05/2004 | 15/10/2009 | 5            |
| Alliaria petiolata                           | Garlic Mustard                  | flowering plant | 11/06/1982 | 13/05/2010 | 13           |
| Cochlearia danica                            | Danish Scurvygrass              | flowering plant | 08/04/2006 | -          | 1            |
| Persicaria amphibia                          | Amphibious Bistort              | flowering plant | 31/05/2004 | 19/06/2011 | 2            |
| Persicaria bistorta                          | Common Bistort                  | flowering plant | 11/06/1982 | 31/05/2004 | 2            |

| Latin Name                                 | Common Name            | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|------------------------|-----------------|------------|------------|--------------|
| Persicaria hydropiper                      | Water-pepper           | flowering plant | 11/06/1982 | 28/08/2010 | 14           |
| Persicaria lapathifolia                    | Pale Persicaria        | flowering plant | 21/08/2007 | -          | 1            |
| Persicaria maculosa                        | Redshank               | flowering plant | 18/06/1982 | 01/09/2007 | 14           |
| Polygonum aviculare agg.                   | Knotgrass agg.         | flowering plant | 09/07/2004 | 13/07/2005 | 6            |
| Polygonum arenastrum                       | Equal-leaved Knotgrass | flowering plant | 18/08/2005 | 04/09/2011 | 3            |
| Polygonum aviculare                        | Knotgrass              | flowering plant | 11/08/2006 | 01/09/2007 | 4            |
| Fallopia japonica                          | Japanese Knotweed      | flowering plant | 31/05/2004 | 19/06/2011 | 5            |
| Fallopia sachalinensis                     | Giant Knotweed         | flowering plant | 31/10/1984 | -          | 1            |
| Rumex acetosa                              | Common Sorrel          | flowering plant | 05/07/1964 | 11/11/2009 | 19           |
| Rumex acetosella                           | Sheep's Sorrel         | flowering plant | 02/07/1982 | 04/09/2011 | 8            |
| Rumex acetosella subsp. acetosella         | Sheep's Sorrel         | flowering plant | 17/08/2004 | -          | 1            |
| Rumex conglomeratus                        | Clustered Dock         | flowering plant | 05/07/1964 | 19/06/2011 | 6            |
| Rumex crispus                              | Curled Dock            | flowering plant | 27/06/1995 | 05/07/2009 | 10           |
| Rumex obtusifolius                         | Broad-leaved Dock      | flowering plant | 15/05/1975 | 06/07/2007 | 15           |
| Rumex sanguineus                           | Wood Dock              | flowering plant | 11/06/1982 | 13/05/2010 | 22           |
| Moehringia trinervia                       | Three-nerved Sandwort  | flowering plant | 15/05/1975 | 29/05/2006 | 12           |
| Stellaria alsine                           | Bog Stitchwort         | flowering plant | 30/05/1981 | 05/08/2006 | 11           |
| Stellaria graminea                         | Lesser Stitchwort      | flowering plant | 05/07/1964 | 08/07/2013 | 26           |
| Stellaria holostea                         | Greater Stitchwort     | flowering plant | 15/05/1975 | 17/06/2006 | 16           |
| Stellaria media                            | Common Chickweed       | flowering plant | 30/06/1982 | 04/09/2011 | 11           |
| Stellaria neglecta                         | Greater Chickweed      | flowering plant | 16/07/1982 | -          | 1            |
| Cerastium fontanum                         | Common Mouse-ear       | flowering plant | 05/07/1964 | 08/07/2013 | 21           |
| Cerastium glomeratum                       | Sticky Mouse-ear       | flowering plant | 11/05/2004 | 27/09/2009 | 7            |
| Sagina apetala subsp. apetala              | Annual Pearlwort       | flowering plant | 31/12/1995 | 17/08/2004 | 2            |
| Sagina procumbens                          | Procumbent Pearlwort   | flowering plant | 31/05/2004 | 05/03/2010 | 9            |
| Scleranthus annuus                         | Annual Knawel          | flowering plant | 31/12/1990 | 31/12/1993 | 2            |
| Spergula arvensis                          | Corn Spurrey           | flowering plant | 03/09/2007 | 27/03/2011 | 2            |
| Spergularia rubra                          | Sand Spurrey           | flowering plant | 17/08/2004 | -          | 1            |
| Silene dioica                              | Red Campion            | flowering plant | 30/05/1981 | 28/06/2009 | 15           |
| Lychnis flos-cuculi                        | Ragged-Robin           | flowering plant | 05/07/1964 | 08/07/2013 | 16           |
| Chenopodium album                          | Fat-hen                | flowering plant | 09/07/2004 | 04/09/2011 | 8            |
| Chenopodium ficifolium                     | Fig-leaved Goosefoot   | flowering plant | 09/09/2008 | 13/07/2009 | 2            |
| Chenopodium polyspermum                    | Many-seeded Goosefoot  | flowering plant | 05/07/2007 | 13/07/2009 | 3            |
| Chenopodium rubrum                         | Red Goosefoot          | flowering plant | 11/08/2006 | 27/09/2009 | 2            |
| Atriplex patula                            | Common Orache          | flowering plant | 21/08/2007 | 13/07/2009 | 2            |
| Atriplex prostrata                         | Spear-leaved Orache    | flowering plant | 09/07/2004 | 27/08/2008 | 6            |
| Phytolacca latbenia                        | Pokeweed               | flowering plant | 31/10/1986 | -          | 1            |
| Claytonia sibirica                         | Pink Purslane          | flowering plant | 31/12/1993 | -          | 1            |
| Montia fontana                             | Blinks                 | flowering plant | 11/06/1982 | 02/07/1982 | 3            |
| Cornus sanguinea                           | Dogwood                | flowering plant | 15/05/1975 | 05/07/2009 | 11           |
| Impatiens glandulifera                     | Indian Balsam          | flowering plant | 11/06/2005 | 18/08/2005 | 3            |
| Impatiens parviflora                       | Small Balsam           | flowering plant | 11/05/2004 | 19/06/2011 | 4            |
| Primula veris                              | Cowslip                | flowering plant | 15/05/1975 | 19/06/2011 | 5            |
| Primula veris x vulgaris  = P. x polyantha | False Oxlip            | flowering plant | 13/04/2009 | -          | 1            |

| Latin Name                          | Common Name           | Taxon Group     | First Date | Last Date  | No. of Rec's |
|-------------------------------------|-----------------------|-----------------|------------|------------|--------------|
| Primula vulgaris                    | Primrose              | flowering plant | 15/05/1975 | 13/05/2010 | 36           |
| Lysimachia nemorum                  | Yellow Pimpernel      | flowering plant | 15/05/1975 | 04/09/2011 | 26           |
| Lysimachia nummularia               | Creeping-Jenny        | flowering plant | 11/06/1982 | 04/09/2011 | 6            |
| Lysimachia punctata                 | Dotted Loosestrife    | flowering plant | 28/06/2009 | -          | 1            |
| Anagallis arvensis                  | Scarlet Pimpernel     | flowering plant | 18/06/1982 | 15/10/2009 | 7            |
| Anagallis arvensis subsp. arvensis  | Scarlet Pimpernel     | flowering plant | 31/05/2004 | 04/09/2004 | 3            |
| Anagallis tenella                   | Bog Pimpernel         | flowering plant | 30/05/1981 | 11/11/2009 | 4            |
| Cyclamen coum                       | Eastern Sowbread      | flowering plant | 31/12/1994 | 04/03/2003 | 2            |
| Cyclamen hederifolium               | Sowbread              | flowering plant | 23/01/2010 | -          | 1            |
| Rhododendron ponticum               | Rhododendron          | flowering plant | 11/06/1982 | 13/05/2010 | 29           |
| Calluna vulgaris                    | Heather               | flowering plant | 11/06/1982 | 04/09/2011 | 17           |
| Erica cinerea                       | Bell Heather          | flowering plant | 11/06/1982 | 30/08/2009 | 3            |
| Erica tetralix                      | Cross-leaved Heath    | flowering plant | 17/08/2004 | -          | 1            |
| Gaultheria shallon                  | Shallon               | flowering plant | 31/12/1994 | -          | 1            |
| Vaccinium myrtillus                 | Bilberry              | flowering plant | 10/03/1962 | 04/01/2009 | 9            |
| Sherardia arvensis                  | Field Madder          | flowering plant | 23/12/2004 | 13/07/2005 | 2            |
| Galium aparine                      | Cleavers              | flowering plant | 30/05/1981 | 13/05/2010 | 26           |
| Galium mollugo                      | Hedge Bedstraw        | flowering plant | 25/03/1991 | -          | 1            |
| Galium palustre                     | Marsh-bedstraw        | flowering plant | 05/07/1964 | 13/05/2010 | 26           |
| Galium palustre subsp. elongatum    | Great Marsh-bedstraw  | flowering plant | 31/12/1995 | 24/05/2007 | 2            |
| Galium palustre subsp. palustre     | Common Marsh-bedstraw | flowering plant | 31/05/2004 | 08/07/2013 | 8            |
| Galium saxatile                     | Heath Bedstraw        | flowering plant | 11/06/1982 | 04/09/2011 | 13           |
| Galium uliginosum                   | Fen Bedstraw          | flowering plant | 18/06/1982 | 19/06/2004 | 3            |
| Centaurium erythraea                | Common Centaury       | flowering plant | 02/07/1982 | 02/08/2008 | 9            |
| Centaurium erythraea var. erythraea |                       | flowering plant | 11/08/2006 | 29/09/2007 | 4            |
| Blackstonia perfoliata              | Yellow-wort           | flowering plant | 02/07/1982 | -          | 1            |
| Vinca major                         | Greater Periwinkle    | flowering plant | 22/03/2006 | 03/04/2009 | 3            |
| Vinca minor                         | Lesser Periwinkle     | flowering plant | 18/04/2004 | 15/03/2010 | 4            |
| Convolvulus arvensis                | Field Bindweed        | flowering plant | 31/05/2004 | 19/06/2011 | 5            |
| Calystegia pulchra                  | Hairy Bindweed        | flowering plant | 31/12/1995 | -          | 1            |
| Calystegia sepium                   | Hedge Bindweed        | flowering plant | 31/05/2004 | 28/08/2010 | 7            |
| Calystegia silvatica                | Large Bindweed        | flowering plant | 31/05/2004 | 13/07/2009 | 6            |
| Solanum dulcamara                   | Bittersweet           | flowering plant | 30/05/1981 | 19/06/2011 | 17           |
| Solanum nigrum                      | Black Nightshade      | flowering plant | 23/08/2004 | 04/09/2011 | 5            |
| Fraxinus                            |                       | flowering plant | 04/05/2006 | -          | 1            |
| Fraxinus excelsior                  | Ash                   | flowering plant | 15/05/1975 | 13/05/2010 | 43           |
| Ligustrum vulgare                   | Wild Privet           | flowering plant | 02/07/1982 | 31/12/2006 | 7            |
| Digitalis purpurea                  | Foxglove              | flowering plant | 15/05/1975 | 13/05/2010 | 29           |
| Veronica                            | Speedwell             | flowering plant | 25/03/1991 | -          | 1            |
| Veronica anagallis-aquatica         | Blue Water-Speedwell  | flowering plant | 20/07/1995 | -          | 1            |
| Veronica arvensis                   | Wall Speedwell        | flowering plant | 11/05/2004 | 05/06/2011 | 6            |
| Veronica beccabunga                 | Brooklime             | flowering plant | 30/05/1981 | 11/11/2009 | 19           |
| Veronica chamaedrys                 | Germander Speedwell   | flowering plant | 15/05/1975 | 13/05/2010 | 23           |
| Veronica filiformis                 | Slender Speedwell     | flowering plant | 18/04/2004 | 06/04/2010 | 6            |

| Latin Name                              | Common Name                  | Taxon Group     | First Date | Last Date  | No. of Rec's |
|---|------------------------------|-----------------|------------|------------|--------------|
| Veronica hederifolia                    | Ivy-leaved Speedwell         | flowering plant | 21/06/1993 | 23/01/2010 | 6            |
| Veronica hederifolia subsp. hederifolia | Ivy-Leaved Speedwell         | flowering plant | 18/04/2004 | 20/05/2005 | 4            |
| Veronica hederifolia subsp. lucorum     | Ivy-Leaved Speedwell         | flowering plant | 11/05/2004 | 23/04/2009 | 4            |
| Veronica montana                        | Wood Speedwell               | flowering plant | 15/05/1975 | 17/04/2008 | 26           |
| Veronica officinalis                    | Heath Speedwell              | flowering plant | 18/06/1982 | 04/09/2011 | 9            |
| Veronica persica                        | Common Field-speedwell       | flowering plant | 09/07/2004 | 04/09/2011 | 7            |
| Veronica polita                         | Grey Field-speedwell         | flowering plant | 23/12/2004 | 04/09/2011 | 3            |
| Veronica serpyllifolia                  | Thyme-leaved Speedwell       | flowering plant | 30/05/1981 | 28/08/2010 | 14           |
| Cymbalaria muralis                      | Ivy-leaved Toadflax          | flowering plant | 18/08/2005 | -          | 1            |
| Kickxia elatine                         | Sharp-leaved Fluellen        | flowering plant | 23/12/2004 | 25/08/2008 | 2            |
| Kickxia spuria                          | Round-leaved Fluellen        | flowering plant | 21/08/2007 | -          | 1            |
| Linaria purpurea                        | Purple Toadflax              | flowering plant | 13/07/2005 | 04/09/2011 | 3            |
| Linaria vulgaris                        | Common Toadflax              | flowering plant | 04/09/2011 | -          | 1            |
| Plantago lanceolata                     | Ribwort Plantain             | flowering plant | 15/05/1975 | 23/01/2010 | 19           |
| Plantago major                          | Greater Plantain             | flowering plant | 11/06/1982 | 13/07/2005 | 18           |
| Plantago major subsp. major             | Greater Plantain             | flowering plant | 17/08/2004 | 04/09/2004 | 3            |
| Littorella uniflora                     | Shoreweed                    | flowering plant | 31/12/1999 | 28/12/2007 | 11           |
| Callitriche                             | Water-starwort               | flowering plant | 11/06/2005 | 02/08/2008 | 21           |
| Callitriche stagnalis                   | Common Water-Starwort        | flowering plant | 12/07/2004 | 15/07/2005 | 2            |
| Callitriche obtusangula                 | Blunt-fruited Water-starwort | flowering plant | 11/06/2005 | -          | 1            |
| Callitriche stagnalis                   | Common Water-starwort        | flowering plant | 31/05/2004 | 13/05/2010 | 6            |
| Verbascum nigrum                        | Dark Mullein                 | flowering plant | 20/07/1995 | -          | 2            |
| Scrophularia auriculata                 | Water Figwort                | flowering plant | 30/05/1981 | 08/07/2013 | 17           |
| Scrophularia nodosa                     | Common Figwort               | flowering plant | 30/05/1981 | 13/05/2010 | 22           |
| Buddleja davidii                        | Butterfly-bush               | flowering plant | 11/05/2004 | 05/06/2011 | 7            |
| Stachys arvensis                        | Field Woundwort              | flowering plant | 23/08/2004 | -          | 2            |
| Stachys officinalis                     | Betony                       | flowering plant | 15/05/1975 | 08/07/2013 | 31           |
| Stachys palustris                       | Marsh Woundwort              | flowering plant | 31/05/2004 | 09/07/2004 | 2            |
| Stachys sylvatica                       | Hedge Woundwort              | flowering plant | 11/06/1982 | 13/05/2010 | 24           |
| Lamium album                            | White Dead-nettle            | flowering plant | 17/08/2004 | 14/05/2005 | 2            |
| Lamium galeobdolon                      | Yellow Archangel             | flowering plant | 15/05/1975 | 04/05/2006 | 13           |
| Lamium galeobdolon subsp. argentatum    | Yellow Archangel             | flowering plant | 31/12/2000 | 27/03/2011 | 10           |
| Lamium galeobdolon subsp. montanum      | Yellow Archangel             | flowering plant | 11/05/2004 | 13/05/2010 | 15           |
| Lamium purpureum                        | Red Dead-nettle              | flowering plant | 18/04/2004 | 23/01/2010 | 9            |
| Galeopsis tetrahit agg.                 | Common Hemp-Nettle agg.      | flowering plant | 30/05/1981 | 28/08/2010 | 8            |
| Galeopsis bifida                        | Bifid Hemp-nettle            | flowering plant | 23/08/2004 | 06/09/2009 | 4            |
| Galeopsis tetrahit                      | Common Hemp-nettle           | flowering plant | 17/06/1982 | 13/05/2010 | 13           |
| Scutellaria galericulata                | Skullcap                     | flowering plant | 11/06/1982 | 08/07/2013 | 8            |
| Scutellaria minor                       | Lesser Skullcap              | flowering plant | 11/06/1982 | 30/06/2006 | 7            |
| Teucrium scorodonia                     | Wood Sage                    | flowering plant | 15/05/1975 | 28/02/2008 | 26           |
| Ajuga reptans                           | Bugle                        | flowering plant | 15/05/1975 | 13/05/2010 | 32           |
| Glechoma hederacea                      | Ground-ivy                   | flowering plant | 30/05/1981 | 13/05/2010 | 31           |
| Prunella vulgaris                       | Selfheal                     | flowering plant | 16/06/1982 | 11/11/2009 | 24           |
| Melissa officinalis                     | Balm                         | flowering plant | 04/09/2011 | -          | 1            |

| Latin Name                                     | Common Name                     | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|---------------------------------|-----------------|------------|------------|--------------|
| Clinopodium vulgare                            | Wild Basil                      | flowering plant | 09/07/2004 | 01/09/2007 | 2            |
| Origanum vulgare                               | Wild Marjoram                   | flowering plant | 02/07/1982 | -          | 1            |
| Lycopus europaeus                              | Gypsywort                       | flowering plant | 05/07/1964 | 13/05/2010 | 18           |
| Mentha aquatica                                | Water Mint                      | flowering plant | 05/07/1964 | 08/07/2013 | 34           |
| Mentha arvensis                                | Corn Mint                       | flowering plant | 11/06/1982 | 28/08/2010 | 12           |
| Mentha arvensis x aquatica = M. x verticillata | Whorled Mint                    | flowering plant | 31/05/2004 | 30/08/2009 | 3            |
| Mentha pulegium                                | Pennyroyal                      | flowering plant | 31/12/1991 | 30/09/2005 | 7            |
| Mentha requienii                               | Corsican Mint                   | flowering plant | 31/12/2000 | -          | 1            |
| Mentha spicata                                 | Spear Mint                      | flowering plant | 31/12/1999 | 28/11/2005 | 3            |
| Mimulus guttatus                               | Monkeyflower                    | flowering plant | 31/10/1989 | -          | 1            |
| Euphrasia officinalis agg.                     | Eyebright                       | flowering plant | 23/08/2002 | -          | 1            |
| Euphrasia anglica                              | Small-flowered Sticky Eyebright | flowering plant | 31/10/1983 | 01/09/2008 | 4            |
| Euphrasia nemorosa                             | Eyebright                       | flowering plant | 17/08/2004 | 04/09/2011 | 2            |
| Odontites vernus                               | Red Bartsia                     | flowering plant | 27/06/1995 | 04/09/2011 | 5            |
| Odontites vernus subsp. serotinus              | Red Bartsia                     | flowering plant | 31/05/2004 | 23/08/2004 | 3            |
| Rhinanthus minor                               | Yellow-rattle                   | flowering plant | 05/07/1964 | 13/07/2005 | 6            |
| Lathraea clandestina                           | Purple Toothwort                | flowering plant | 31/12/2000 | -          | 1            |
| llex aquifolium                                | Holly                           | flowering plant | 11/06/1982 | 13/05/2010 | 35           |
| Campanula poscharskyana                        | Trailing Bellflower             | flowering plant | 01/09/2008 | -          | 1            |
| Campanula rotundifolia                         | Harebell                        | flowering plant | 17/09/2005 | -          | 1            |
| Wahlenbergia hederacea                         | Ivy-leaved Bellflower           | flowering plant | 18/06/2004 | 24/08/2009 | 8            |
| Menyanthes trifoliata                          | Bogbean                         | flowering plant | 31/10/1988 | -          | 1            |
| Arctium  | Burdock                         | flowering plant | 22/10/2009 | -          | 1            |
| Arctium minus                                  | Lesser Burdock                  | flowering plant | 11/06/1982 | 13/07/2009 | 21           |
| Arctium nemorosum                              | Wood Burdock                    | flowering plant | 16/07/1988 | 27/08/2011 | 5            |
| Creeping thistle                               |                                 | flowering plant | 30/05/1981 | 22/10/2009 | 19           |
| Cirsium dissectum                              | Meadow Thistle                  | flowering plant | 30/05/1981 | 20/07/1995 | 3            |
| Cirsium palustre                               | Marsh Thistle                   | flowering plant | 05/07/1964 | 08/07/2013 | 36           |
| Spear thistle                                  |                                 | flowering plant | 17/06/1982 | 11/11/2009 | 22           |
| Hardhead                                       | Common Knapweed                 | flowering plant | 05/07/1964 | 08/07/2013 | 26           |
| Lapsana communis                               | Nipplewort                      | flowering plant | 11/06/1982 | 09/09/2008 | 13           |
| Hypochaeris radicata                           | Cat's-ear                       | flowering plant | 17/06/1982 | 01/09/2007 | 17           |
| Leontodon autumnalis                           | Autumn Hawkbit                  | flowering plant | 15/07/2005 | 19/06/2011 | 8            |
| Leontodon hispidus                             | Rough Hawkbit                   | flowering plant | 20/07/1995 | 05/07/2009 | 3            |
| Leontodon saxatilis                            | Lesser Hawkbit                  | flowering plant | 18/08/2005 | 21/08/2007 | 4            |
| Picris echioides                               | Bristly Oxtongue                | flowering plant | 27/06/1995 | 01/09/2008 | 5            |
| Picris hieracioides                            | Hawkweed Oxtongue               | flowering plant | 01/09/2008 | -          | 1            |
| Tragopogon pratensis                           | Goat's-beard                    | flowering plant | 05/06/2011 | -          | 1            |
| Tragopogon pratensis subsp. pratensis          | Goat's-Beard                    | flowering plant | 01/07/2005 | -          | 1            |
| Sonchus arvensis                               | Perennial Sow-thistle           | flowering plant | 16/07/1982 | 13/07/2009 | 8            |
| Sonchus asper                                  | Prickly Sow-thistle             | flowering plant | 31/05/2004 | 28/06/2009 | 8            |
| Sonchus oleraceus                              | Smooth Sow-thistle              | flowering plant | 11/05/2004 | 19/06/2011 | 8            |
| Lactuca serriola                               | Prickly Lettuce                 | flowering plant | 02/07/1982 | _          | 1            |
| Mycelis muralis                                | Wall Lettuce                    | flowering plant | 11/05/2004 | 19/06/2011 | 4            |

| Latin Name                                   | Common Name            | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|------------------------|-----------------|------------|------------|--------------|
| Taraxacum                                    | Dandelion Agg.         | flowering plant | 31/01/2004 | 13/05/2010 | 10           |
| Taraxacum aggregate                          |                        | flowering plant | 11/05/2005 | 23/01/2010 | 5            |
| Taraxacum officinale agg.                    | Dandelion              | flowering plant | 30/05/1981 | 27/06/1995 | 7            |
| Crepis capillaris                            | Smooth Hawk's-beard    | flowering plant | 18/06/1982 | 09/09/2008 | 12           |
| Crepis vesicaria                             | Beaked Hawk's-beard    | flowering plant | 31/12/2006 | 10/06/2008 | 2            |
| Pilosella aurantiaca                         | Fox-and-cubs           | flowering plant | 11/05/2004 | _          | 1            |
| Pilosella aurantiaca subsp. carpathicola     | Fox and Cubs           | flowering plant | 11/05/2004 | -          | 1            |
| Pilosella officinarum                        | Mouse-ear-hawkweed     | flowering plant | 02/07/1982 | 19/06/2011 | 4            |
| Hieracium                                    | Hawkweed               | flowering plant | 17/06/1982 | 18/06/1982 | 2            |
| Hieracium aggregatum                         | Hawkweed               | flowering plant | 09/07/2004 | 21/08/2007 | 6            |
| Hieracium exotericum                         | Hawkweed               | flowering plant | 11/06/1982 | -          | 1            |
| Hieracium pollichiae                         | Hawkweed               | flowering plant | 31/12/1998 | 14/07/2009 | 4            |
| Hieracium sabaudum                           | Sharp-toothed Hawkweed | flowering plant | 31/12/1994 | 21/08/2007 | 9            |
| Hieracium trichocaulon                       | Hawkweed               | flowering plant | 09/07/2004 | _          | 2            |
| Hieracium umbellatum                         | Hawkweed               | flowering plant | 31/12/1997 | 17/08/2004 | 2            |
| Hieracium umbellatum subsp. umbellatum       | Hawkweed               | flowering plant | 17/08/2004 | _          | 1            |
| Filago vulgaris                              | Common Cudweed         | flowering plant | 16/07/1982 | -          | 1            |
| Gnaphalium uliginosum                        | Marsh Cudweed          | flowering plant | 11/06/1982 | 25/11/2007 | 11           |
| Pulicaria dysenterica                        | Common Fleabane        | flowering plant | 05/07/1964 | 08/07/2013 | 26           |
| Solidago                                     | Goldenrod              | flowering plant | 23/08/2002 | -          | 1            |
| Solidago virgaurea                           | Goldenrod              | flowering plant | 15/05/1975 | 27/09/2009 | 18           |
| Aster agg.                                   |                        | flowering plant | 19/06/2011 | -          | 1            |
| Aster laevis x novi-belgii = A. x versicolor | Late Michaelmas-daisy  | flowering plant | 17/09/2004 | -          | 1            |
| Erigeron karvinskianus                       | Mexican Fleabane       | flowering plant | 04/09/2011 | -          | 1            |
| Conyza sumatrensis                           | Guernsey Fleabane      | flowering plant | 05/07/2007 | -          | 1            |
| Bellis perennis                              | Daisy                  | flowering plant | 30/05/1981 | 23/01/2010 | 14           |
| Tanacetum parthenium                         | Feverfew               | flowering plant | 27/08/2008 | 05/07/2009 | 2            |
| Artemisia vulgaris                           | Mugwort                | flowering plant | 23/08/2004 | 01/09/2008 | 3            |
| Achillea millefolium                         | Yarrow                 | flowering plant | 25/03/1991 | 15/03/2010 | 16           |
| Achillea ptarmica                            | Sneezewort             | flowering plant | 05/07/1964 | 08/07/2013 | 9            |
| Anthemis arvensis                            | Corn Chamomile         | flowering plant | 31/12/2001 | -          | 1            |
| Anthemis cotula                              | Stinking Chamomile     | flowering plant | 31/12/2000 | -          | 1            |
| Leucanthemella serotina                      | Autumn Oxeye           | flowering plant | 31/12/1996 | -          | 1            |
| Leucanthemum vulgare                         | Oxeye Daisy            | flowering plant | 27/06/1995 | 29/09/2007 | 6            |
| Matricaria discoidea                         | Pineappleweed          | flowering plant | 31/05/2004 | 30/08/2009 | 9            |
| Matricaria recutita                          | Scented Mayweed        | flowering plant | 23/08/2004 | 19/06/2011 | 3            |
| Tripleurospermum inodorum                    | Scentless Mayweed      | flowering plant | 11/05/2004 | 11/08/2006 | 8            |
| Senecio aquaticus                            | Marsh Ragwort          | flowering plant | 31/10/2000 | -          | 1            |
| Senecio erucifolius                          | Hoary Ragwort          | flowering plant | 05/07/1964 | 04/09/2011 | 8            |
| Ragwort                                      |                        | flowering plant | 11/06/1982 | 11/11/2009 | 21           |
| Senecio sylvaticus                           | Heath Groundsel        | flowering plant | 31/05/2004 | 16/06/2006 | 2            |
| Senecio vulgaris                             | Groundsel              | flowering plant | 11/05/2004 | 23/01/2010 | 11           |
| Tussilago farfara                            | Colt's-foot            | flowering plant | 02/07/1982 | 31/03/2007 | 8            |
| Petasites fragrans                           | Winter Heliotrope      | flowering plant | 31/01/2004 | 25/11/2007 | 3            |

| Latin Name                                   | Common Name              | Taxon Group     | First Date | Last Date  | No. of Rec's |
|--|--------------------------|-----------------|------------|------------|--------------|
| Bidens cernua                                | Nodding Bur-marigold     | flowering plant | 25/11/2007 | -          | 1            |
| Bidens tripartita                            | Trifid Bur-marigold      | flowering plant | 31/05/2004 | 25/11/2007 | 2            |
| Eupatorium cannabinum                        | Hemp-agrimony            | flowering plant | 02/07/1982 | 01/09/2008 | 5            |
| Adoxa moschatellina                          | Moschatel                | flowering plant | 27/03/2011 | -          | 1            |
| Sambucus nigra                               | Elder                    | flowering plant | 11/06/1982 | 13/05/2010 | 29           |
| Viburnum lantana                             | Wayfaring-tree           | flowering plant | 27/06/1995 | -          | 1            |
| Viburnum opulus                              | Guelder-rose             | flowering plant | 15/05/1975 | 13/05/2010 | 19           |
| Symphoricarpos albus                         | Snowberry                | flowering plant | 28/11/2005 | 01/09/2008 | 2            |
| Leycesteria formosa                          | Himalayan Honeysuckle    | flowering plant | 10/06/2008 | -          | 1            |
| Lonicera nitida                              | Wilson's Honeysuckle     | flowering plant | 23/12/2004 | 25/11/2007 | 2            |
| Lonicera periclymenum                        | Honeysuckle              | flowering plant | 05/02/1969 | 13/05/2010 | 37           |
| Valerianella dentata                         | Narrow-fruited Cornsalad | flowering plant | 31/12/1995 | -          | 1            |
| Valeriana dioica                             | Marsh Valerian           | flowering plant | 05/07/1964 | 21/06/1993 | 6            |
| Valeriana officinalis                        | Common Valerian          | flowering plant | 18/06/1982 | 13/05/2010 | 6            |
| Dipsacus fullonum                            | Wild Teasel              | flowering plant | 13/07/2005 | -          | 1            |
| Dipsacus pilosus                             | Small Teasel             | flowering plant | 02/07/1982 | -          | 1            |
| Succisa pratensis                            | Devil's-bit Scabious     | flowering plant | 11/06/1982 | 08/07/2013 | 20           |
| Hedera helix                                 | lvy                      | flowering plant | 15/05/1975 | 13/05/2010 | 25           |
| Hedera helix subsp. helix                    | Common Ivy               | flowering plant | 11/05/2004 | 23/08/2004 | 6            |
| Hydrocotyle vulgaris                         | Marsh Pennywort          | flowering plant | 05/07/1964 | 08/07/2013 | 11           |
| Sanicula europaea                            | Sanicle                  | flowering plant | 10/03/1962 | 29/09/2007 | 15           |
| Anthriscus sylvestris                        | Cow Parsley              | flowering plant | 15/05/1975 | 23/01/2010 | 18           |
| Conopodium majus                             | Pignut                   | flowering plant | 15/05/1975 | 25/02/2007 | 7            |
| Pimpinella saxifraga                         | Burnet-saxifrage         | flowering plant | 31/08/1985 | 04/09/2011 | 6            |
| Aegopodium podagraria                        | Ground-elder             | flowering plant | 11/05/2004 | 13/03/2007 | 10           |
| Oenanthe crocata                             | Hemlock Water-dropwort   | flowering plant | 30/05/1981 | 08/07/2013 | 23           |
| Silaum silaus                                | Pepper-saxifrage         | flowering plant | 20/05/2005 | -          | 1            |
| Conium maculatum                             | Hemlock                  | flowering plant | 05/06/2011 | -          | 1            |
| Sison amomum                                 | Stone Parsley            | flowering plant | 29/09/2007 | 19/06/2011 | 2            |
| Angelica sylvestris                          | Wild Angelica            | flowering plant | 05/07/1964 | 13/05/2010 | 31           |
| Pastinaca sativa                             | Wild Parsnip             | flowering plant | 30/08/2009 | -          | 1            |
| Heracleum mantegazzianum                     | Giant Hogweed            | flowering plant | 31/05/2004 | 28/06/2009 | 3            |
| Heracleum sphondylium                        | Hogweed                  | flowering plant | 15/05/1975 | 13/07/2005 | 23           |
| Torilis japonica                             | Upright Hedge-parsley    | flowering plant | 31/05/2004 | 04/09/2011 | 7            |
| Daucus carota                                | Carrot                   | flowering plant | 02/08/2008 | -          | 1            |
| Daucus carota subsp. carota                  | Wild Carrot              | flowering plant | 02/08/2008 | -          | 1            |
| Pulmonaria officinalis                       | Lungwort                 | flowering plant | 18/06/1982 | 09/04/2007 | 2            |
| Symphytum officinale x asperum = S. x upland | Russian Comfrey          | flowering plant | 31/05/2004 | 28/06/2009 | 3            |
| Pentaglottis sempervirens                    | Green Alkanet            | flowering plant | 11/05/2004 | 24/05/2007 | 6            |
| Myosotis arvensis                            | Field Forget-me-not      | flowering plant | 11/05/2004 | 19/06/2011 | 8            |
| Myosotis discolor                            | Changing Forget-me-not   | flowering plant | 31/05/2004 | -          | 1            |
| Myosotis laxa                                | Tufted Forget-me-not     | flowering plant | 18/06/1982 | 13/07/2005 | 5            |
| Myosotis ramosissima                         | Early Forget-me-not      | flowering plant | 14/07/1982 | -          | 1            |
| Myosotis scorpioides                         | Water Forget-me-not      | flowering plant | 30/05/1981 | 11/11/2009 | 12           |

| Latin Name                             | Common Name               | Taxon Group                  | First Date | Last Date  | No. of Rec's |
|--|---------------------------|------------------------------|------------|------------|--------------|
| Myosotis secunda                       | Creeping Forget-me-not    | flowering plant              | 11/06/2005 | _          | 1            |
| Myosotis sylvatica                     | Wood Forget-me-not        | flowering plant              | 11/05/2004 | 23/04/2009 | 3            |
| Omphalodes verna                       | Blue-eyed-Mary            | flowering plant              | 31/12/1973 | -          | 1            |
| Erpobdella testacea                    |                           | annelid                      | 16/02/2011 | 01/03/2011 | 2            |
| Glossiphonia complanata                |                           | annelid                      | 01/03/2011 | -          | 1            |
| Alopecosa pulverulenta                 |                           | spider (Araneae)             | 02/04/2012 | -          | 1            |
| Gammarus pulex                         |                           | crustacean                   | 03/10/2000 | 01/03/2011 | 3            |
| Armadillidium vulgare                  | Common Pill Woodlouse     | crustacean                   | 04/04/2005 | 20/06/2005 | 3            |
| Asellus aquaticus                      | Water hog lice/slaters    | crustacean                   | 03/10/2000 | -          | 1            |
| Ligidium hypnorum                      | Woodlouse                 | crustacean                   | 27/08/1997 | -          | 1            |
| Oniscus asellus                        |                           | crustacean                   | 27/08/1997 | 09/05/2005 | 5            |
| Philoscia muscorum                     |                           | crustacean                   | 27/08/1997 | -          | 1            |
| Porcellio scaber                       |                           | crustacean                   | 27/08/1997 | -          | 1            |
| Trichoniscus pusillus                  |                           | crustacean                   | 27/08/1997 | 04/04/2005 | 2            |
| Cladocera                              |                           | crustacean                   | 03/10/2000 | -          | 1            |
| Ostracoda                              | Mussel Shrimp             | crustacean                   | 03/10/2000 | -          | 1            |
| Apion frumentarium                     |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Cantharis cryptica                     |                           | insect - beetle (Coleoptera) | 18/07/1996 | -          | 1            |
| Rhagonycha fulva                       | Common Red Soldier Beetle | insect - beetle (Coleoptera) | 20/07/1995 | 18/07/1996 | 3            |
| Bembidion (Ocydromus) deletum          |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Bembidion (Trepanedoris) doris         |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Notiophilus biguttatus                 |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Pterostichus (Argutor) diligens        |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Pterostichus (Platysma) niger          |                           | insect - beetle (Coleoptera) | 05/04/1976 | -          | 1            |
| Pterostichus (Steropus) madidus        | Rain-Clock                | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Trechus (Trechus) obtusus              |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Rutpela maculata                       |                           | insect - beetle (Coleoptera) | 08/07/2013 | -          | 1            |
| Cerylon ferrugineum                    |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Neocrepidodera transversa              |                           | insect - beetle (Coleoptera) | 18/07/1996 | -          | 1            |
| Coccinella septempunctata              | 7-spot Ladybird           | insect - beetle (Coleoptera) | 20/07/1995 | -          | 3            |
| Psyllobora vigintiduopunctata          | 22-spot Ladybird          | insect - beetle (Coleoptera) | 20/07/1995 | -          | 3            |
| Ceutorhynchus cochleariae              |                           | insect - beetle (Coleoptera) | 06/05/1980 | -          | 1            |
| Ceutorhynchus pervicax                 |                           | insect - beetle (Coleoptera) | 06/05/1980 | -          | 1            |
| Hylesinus varius                       | Ash Bark Beetle           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Platambus maculatus                    |                           | insect - beetle (Coleoptera) | 03/10/2000 | -          | 1            |
| Stictonectes lepidus                   |                           | insect - beetle (Coleoptera) | 31/12/1956 | -          | 1            |
| Elmis aenea                            |                           | insect - beetle (Coleoptera) | 16/02/2011 | 01/03/2011 | 3            |
| Limnius volckmari                      |                           | insect - beetle (Coleoptera) | 03/10/2000 | -          | 1            |
| Lampyris noctiluca                     | Glow-worm                 | insect - beetle (Coleoptera) | 31/07/1968 | -          | 1            |
| Axinotarsus marginalis                 |                           | insect - beetle (Coleoptera) | 18/07/1996 | -          | 1            |
| Meloe                                  | Oil Beetle                | insect - beetle (Coleoptera) | 25/03/2012 | -          | 1            |
| Rhizophagus (Rhizophagus) bipustulatus |                           | insect - beetle (Coleoptera) | 05/04/1976 | -          | 2            |
| Rhizophagus (Rhizophagus) perforatus   |                           | insect - beetle (Coleoptera) | 27/08/1997 | -          | 1            |
| Carpophilus sexpustulatus              |                           | insect - beetle (Coleoptera) | 05/04/1976 | -          | 1            |

| Latin Name                               | Common Name                 | Taxon Group                     | First Date | Last Date  | No. of Rec's |
|--|-----------------------------|---------------------------------|------------|------------|--------------|
| Glischrochilus (Librodor) quadriguttatus |                             | insect - beetle (Coleoptera)    | 05/04/1976 | -          | 1            |
| Oedemera (Oedemera) lurida               |                             | insect - beetle (Coleoptera)    | 18/07/1996 | -          | 1            |
| Oedemera (Oedemera) nobilis              | Swollen-thighed Beetle      | insect - beetle (Coleoptera)    | 08/07/2013 | -          | 1            |
| Ptinella errabunda                       |                             | insect - beetle (Coleoptera)    | 30/04/1978 | -          | 1            |
| Acidota cruentata                        |                             | insect - beetle (Coleoptera)    | 05/04/1976 | -          | 1            |
| Aleochara                                |                             | insect - beetle (Coleoptera)    | 05/04/1976 | -          | 1            |
| Gabrius splendidulus                     |                             | insect - beetle (Coleoptera)    | 05/04/1976 | -          | 1            |
| Ocypus (Ocypus) olens                    | Devil's Coach-horse         | insect - beetle (Coleoptera)    | 27/08/1997 | -          | 1            |
| Phloeocharis subtilissima                |                             | insect - beetle (Coleoptera)    | 30/04/1978 | -          | 1            |
| Phloeonomus pusillus                     |                             | insect - beetle (Coleoptera)    | 05/04/1976 | -          | 1            |
| Staphylinus dimidiaticornis              |                             | insect - beetle (Coleoptera)    | 06/05/2013 | -          | 1            |
| Chironomidae                             | Non-biting midge            | insect - true fly (Diptera)     | 16/02/2011 | -          | 2            |
| Ptychoptera longicauda                   | Phantom crane flies         | insect - true fly (Diptera)     | 07/06/1996 | -          | 1            |
| Simuliidae                               | Black flies                 | insect - true fly (Diptera)     | 16/02/2011 | 01/03/2011 | 2            |
| Simulium ornatum complex                 |                             | insect - true fly (Diptera)     | 31/12/2002 | -          | 2            |
| Simulium noelleri                        |                             | insect - true fly (Diptera)     | 31/12/2002 | -          | 1            |
| Episyrphus balteatus                     | Marmalade Hoverfly          | insect - true fly (Diptera)     | 27/08/1997 | -          | 1            |
| Rhingia campestris                       |                             | insect - true fly (Diptera)     | 21/04/2011 | -          | 1            |
| Xylota sylvarum                          |                             | insect - true fly (Diptera)     | 08/07/2013 | -          | 1            |
| Tipulidae                                | Cranefly                    | insect - true fly (Diptera)     | 16/02/2011 | -          | 1            |
| Ctenophora atrata                        |                             | insect - true fly (Diptera)     | 31/12/1960 | -          | 1            |
| Baetis rhodani                           |                             | insect - mayfly (Ephemeroptera) | 03/10/2000 | 01/03/2011 | 3            |
| Serratella ignita                        | Blue-winged Olive           | insect - mayfly (Ephemeroptera) | 01/03/2011 | -          | 1            |
| Ephemera danica                          | Grey Drake                  | insect - mayfly (Ephemeroptera) | 03/10/2000 | -          | 1            |
| Ephemera vulgata                         |                             | insect - mayfly (Ephemeroptera) | 16/02/2011 | 01/03/2011 | 2            |
| Rhithrogena semicolorata                 |                             | insect - mayfly (Ephemeroptera) | 01/03/2011 | -          | 1            |
| Habrophlebia fusca                       |                             | insect - mayfly (Ephemeroptera) | 01/03/2011 | -          | 1            |
| Leptophlebia                             |                             | insect - mayfly (Ephemeroptera) | 03/10/2000 | -          | 1            |
| Coreus marginatus                        | Dock Bug                    | insect - true bug (Hemiptera)   | 27/08/1997 | -          | 1            |
| Palomena prasina                         | Green Shieldbug             | insect - true bug (Hemiptera)   | 27/08/1997 | -          | 1            |
| Andrena (Andrena) fucata                 |                             | insect - hymenopteran           | 07/06/1996 | -          | 1            |
| Andrena (Andrena) helvola                |                             | insect - hymenopteran           | 08/05/1994 | -          | 1            |
| Andrena (Hoplandrena) scotica            |                             | insect - hymenopteran           | 27/04/1996 | -          | 1            |
| Andrena (Leucandrena) barbilabris        |                             | insect - hymenopteran           | 08/05/1994 | -          | 1            |
| Andrena (Micrandrena) minutula           |                             | insect - hymenopteran           | 27/04/1996 | 18/07/1996 | 2            |
| Andrena (Micrandrena) semilaevis         |                             | insect - hymenopteran           | 07/06/1996 | -          | 1            |
| Andrena (Micrandrena) subopaca           |                             | insect - hymenopteran           | 10/08/1979 | 27/04/1996 | 3            |
| Andrena (Oreomelissa) coitana            |                             | insect - hymenopteran           | 10/08/1979 | -          | 2            |
| Andrena (Simandrena) dorsata             |                             | insect - hymenopteran           | 27/04/1996 | 18/07/1996 | 2            |
| Andrena (Trachandrena) haemorrhoa        | Early Mining Bee            | insect - hymenopteran           | 27/04/1996 | -          | 1            |
| Andrena (Zonandrena) flavipes            | Yellow Legged Mining Bee    | insect - hymenopteran           | 27/04/1996 | 18/07/1996 | 2            |
| Apis mellifera                           | Honey Bee                   | insect - hymenopteran           | 20/07/1995 | -          | 2            |
| Bombus (Bombus) terrestris               | Buff-Tailed Bumble Bee      | insect - hymenopteran           | 10/08/1979 | 27/08/1997 | 2            |
| Bombus (Melanobombus) lapidarius         | Large Red Tailed Bumble Bee | insect - hymenopteran           | 10/08/1979 | 27/08/1997 | 2            |

| Latin Name                              | Common Name             | Taxon Group           | First Date | Last Date  | No. of Rec's |
|---|-------------------------|-----------------------|------------|------------|--------------|
| Bombus (Psithyrus) vestalis             | Vestal Cuckoo Bee       | insect - hymenopteran | 08/05/1994 | _          | 1            |
| Bombus (Pyrobombus) pratorum            | Early Bumble Bee        | insect - hymenopteran | 08/05/1994 | 27/08/1997 | 3            |
| Bombus (Subterraneobombus) subterraneus | Short-haired Bumble Bee | insect - hymenopteran | 11/04/1948 | -          | 1            |
| Bombus (Thoracobombus) pascuorum        | Common Carder Bee       | insect - hymenopteran | 08/05/1994 | 27/08/1997 | 2            |
| Colletes (Colletes) daviesanus          |                         | insect - hymenopteran | 13/07/1947 | -          | 1            |
| Halictus (Halictus) rubicundus          |                         | insect - hymenopteran | 27/04/1996 | -          | 1            |
| Hylaeus (Hylaeus) communis              | Common Yellow Face Bee  | insect - hymenopteran | 07/06/1996 | 18/07/1996 | 2            |
| Lasioglossum (Dialictus) morio          | Brassy Mining Bee       | insect - hymenopteran | 27/04/1996 | 07/06/1996 | 2            |
| Lasioglossum (Evylaeus) albipes         |                         | insect - hymenopteran | 07/06/1996 | 18/07/1996 | 2            |
| Lasioglossum (Evylaeus) fratellum       |                         | insect - hymenopteran | 10/08/1979 | -          | 1            |
| Lasioglossum (Evylaeus) malachurum      |                         | insect - hymenopteran | 27/04/1996 | 18/07/1996 | 2            |
| Lasioglossum (Evylaeus) parvulum        |                         | insect - hymenopteran | 08/05/1994 | 27/04/1996 | 2            |
| Lasioglossum (Evylaeus) punctatissimum  |                         | insect - hymenopteran | 07/06/1996 | -          | 1            |
| Lasioglossum (Evylaeus) villosulum      | Shaggy Mining Bee       | insect - hymenopteran | 07/06/1996 | -          | 1            |
| Nomada flava                            |                         | insect - hymenopteran | 08/05/1994 | -          | 1            |
| Nomada flavoguttata                     |                         | insect - hymenopteran | 27/04/1996 | 07/06/1996 | 2            |
| Nomada goodeniana                       | Gooden's Nomad Bee      | insect - hymenopteran | 27/04/1996 | -          | 1            |
| Nomada marshamella                      | Marsham's Nomad Bee     | insect - hymenopteran | 07/06/1996 | -          | 1            |
| Nomada ruficornis                       | Red-Horned Nomad Bee    | insect - hymenopteran | 27/04/1996 | -          | 1            |
| Nomada rufipes                          | Golden-Rod Nomad Bee    | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Nomada sheppardana                      | Dark Nomad Bee          | insect - hymenopteran | 07/06/1996 | -          | 1            |
| Osmia (Chalcosmia) caerulescens         | Blue Mason Bee          | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Sphecodes ephippius                     |                         | insect - hymenopteran | 08/05/1994 | -          | 1            |
| Sphecodes geoffrellus                   |                         | insect - hymenopteran | 07/06/1996 | -          | 1            |
| Sphecodes gibbus                        |                         | insect - hymenopteran | 07/06/1996 | -          | 1            |
| Sphecodes monilicornis                  |                         | insect - hymenopteran | 27/04/1996 | -          | 1            |
| Chrysis angustula                       |                         | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Trichrysis cyanea                       |                         | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Crossocerus (Crossocerus) elongatulus   | Slender Digger Wasp     | insect - hymenopteran | 13/07/1947 | -          | 1            |
| Crossocerus (Crossocerus) ovalis        |                         | insect - hymenopteran | 10/08/1979 | -          | 1            |
| Ectemnius (Hypocrabro) continuus        |                         | insect - hymenopteran | 12/08/1979 | 18/07/1996 | 2            |
| Ectemnius (Metacrabro) lituratus        |                         | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Lindenius albilabris                    |                         | insect - hymenopteran | 12/08/1979 | 18/07/1988 | 2            |
| Mimumesa dahlbomi                       |                         | insect - hymenopteran | 18/07/1988 | -          | 1            |
| Passaloecus gracilis                    |                         | insect - hymenopteran | 10/08/1978 | -          | 1            |
| Passaloecus singularis                  |                         | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Psenulus pallipes                       | Pale Footed Black Wasp  | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Trypoxylon attenuatum                   | Slender Wood Borer Wasp | insect - hymenopteran | 18/07/1996 | -          | 1            |
| Trypoxylon figulus                      | Black Wood Borer Wasp   | insect - hymenopteran | 18/07/1996 | _          | 1            |
| Lasius platythorax                      |                         | insect - hymenopteran | 07/06/1996 | -          | 1            |
| Myrmica ruginodis                       |                         | insect - hymenopteran | 08/05/1994 | 27/08/1997 | 2            |
| Arachnospila (Ammosphex) anceps         |                         | insect - hymenopteran | 10/08/1979 | _          | 1            |
| Priocnemis (Umbripennis) coriacea       |                         | insect - hymenopteran | 23/05/1937 | -          | 1            |
| Priocnemis (Umbripennis) perturbator    |                         | insect - hymenopteran | 08/05/1994 | -          | 1            |

| Latin Name                               | Common Name         | Taxon Group           | First Date | Last Date  | No. of Rec's |
|--|---------------------|-----------------------|------------|------------|--------------|
| Dolichovespula (Pseudovespula) norwegica | Norwegian Wasp      | insect - hymenopteran | 10/08/1979 | -          | 1            |
| Vespula (Paravespula) vulgaris           | Common Wasp         | insect - hymenopteran | 20/07/1995 | -          | 1            |
| Nematopogon schwarziellus                | Sandy Long-horn     | insect - moth         | 28/05/2012 | -          | 1            |
| Cybosia mesomella                        | Four-dotted Footman | insect - moth         | 17/06/1983 | 01/07/1983 | 3            |
| Diaphora mendica                         | Muslin Moth         | insect - moth         | 17/05/1990 | 26/05/2012 | 4            |
| Eilema sororcula                         | Orange Footman      | insect - moth         | 26/05/2012 | -          | 1            |
| Miltochrista miniata                     | Rosy Footman        | insect - moth         | 10/06/1990 | -          | 1            |
| Spilosoma lubricipeda                    | White Ermine        | insect - moth         | 01/07/1983 | 26/05/2012 | 9            |
| Spilosoma luteum                         | Buff Ermine         | insect - moth         | 11/06/1983 | 26/05/2012 | 11           |
| Tyria jacobaeae                          | Cinnabar            | insect - moth         | 16/06/1984 | 26/05/2012 | 5            |
| Anthophila fabriciana                    | Common Nettle-tap   | insect - moth         | 24/06/2009 | -          | 1            |
| Cataclysta lemnata                       | Small China-mark    | insect - moth         | 15/07/2008 | -          | 1            |
| Ebulea crocealis                         | Ochreous Pearl      | insect - moth         | 08/07/2013 | -          | 1            |
| Scoparia ambigualis                      | Common Grey         | insect - moth         | 26/05/2012 | -          | 1            |
| Drepana falcataria                       | Pebble Hook-tip     | insect - moth         | 17/06/1983 | 26/05/2012 | 7            |
| Drepana falcataria subsp. falcataria     | Pebble Hook-tip     | insect - moth         | 11/06/1983 | 06/06/1994 | 3            |
| Falcaria lacertinaria                    | Scalloped Hook-tip  | insect - moth         | 11/06/1983 | 26/05/2012 | 9            |
| Ochropacha duplaris                      | Common Lutestring   | insect - moth         | 06/06/1994 | -          | 1            |
| Tethea or                                | Poplar Lutestring   | insect - moth         | 17/06/1983 | 26/05/2012 | 7            |
| Tethea or subsp. or                      | Poplar Lutestring   | insect - moth         | 11/06/1983 | 14/06/1984 | 2            |
| Tetheella fluctuosa                      | Satin Lutestring    | insect - moth         | 11/06/1983 | 26/05/2012 | 8            |
| Thyatira batis                           | Peach Blossom       | insect - moth         | 17/06/1983 | 06/06/1994 | 6            |
| Watsonalla binaria                       | Oak Hook-tip        | insect - moth         | 11/06/1983 | 26/05/2012 | 6            |
| Watsonalla cultraria                     | Barred Hook-tip     | insect - moth         | 26/05/2012 | -          | 1            |
| Agonopterix umbellana                    | Gorse Flat-body     | insect - moth         | 26/06/1938 | -          | 1            |
| Calliteara pudibunda                     | Pale Tussock        | insect - moth         | 11/06/1983 | 26/05/2012 | 12           |
| Euclidia glyphica                        | Burnet Companion    | insect - moth         | 20/07/1995 | -          | 1            |
| Herminia grisealis                       | Small Fan-foot      | insect - moth         | 01/07/1983 | 10/06/1990 | 2            |
| Hypena proboscidalis                     | Snout               | insect - moth         | 01/07/1983 | 10/06/1990 | 2            |
| Rivula sericealis                        | Straw Dot           | insect - moth         | 14/06/1984 | 08/07/2013 | 3            |
| Scoliopteryx libatrix                    | Herald              | insect - moth         | 23/05/1990 | -          | 1            |
| Zanclognatha tarsipennalis               | Fan-foot            | insect - moth         | 01/07/1983 | -          | 1            |
| Eriocrania chrysolepidella               | Small Hazel Purple  | insect - moth         | 31/12/1790 | 31/12/1970 | 2            |
| Aethalura punctulata                     | Grey Birch          | insect - moth         | 14/06/1984 | 19/05/2010 | 4            |
| Alcis repandata                          | Mottled Beauty      | insect - moth         | 18/06/1983 | 01/07/1983 | 2            |
| Angerona prunaria                        | Orange Moth         | insect - moth         | 10/06/1990 | -          | 1            |
| Asthena albulata                         | Small White Wave    | insect - moth         | 17/06/1986 | -          | 1            |
| Biston betularia                         | Peppered Moth       | insect - moth         | 11/06/1983 | 24/07/1996 | 8            |
| Bupalus piniaria                         | Bordered White      | insect - moth         | 16/06/1984 | 10/06/1990 | 2            |
| Cabera exanthemata                       | Common Wave         | insect - moth         | 17/06/1983 | 19/05/2010 | 3            |
| Cabera pusaria                           | Common White Wave   | insect - moth         | 11/06/1983 | 26/05/2012 | 10           |
| Campaea margaritata                      | Light Emerald       | insect - moth         | 26/05/2012 | -          | 1            |
| Camptogramma bilineata subsp. bilineata  | Yellow Shell        | insect - moth         | 01/07/1983 | -          | 1            |
| Chloroclysta siterata                    | Red-green Carpet    | insect - moth         | 26/05/2012 | _          | 1            |

| Latin Name                          | Common Name           | Taxon Group   | First Date | Last Date  | No. of Rec's |
|-------------------------------------|-----------------------|---------------|------------|------------|--------------|
| Chloroclysta truncata               | Common Marbled Carpet | insect - moth | 11/06/1983 | 26/05/2012 | 4            |
| Chloroclystis v-ata                 | V-pug                 | insect - moth | 17/06/1986 | 19/05/2010 | 3            |
| Cidaria fulvata                     | Barred Yellow         | insect - moth | 01/07/1983 | -          | 1            |
| Colostygia pectinataria             | Green Carpet          | insect - moth | 18/06/1983 | 26/05/2012 | 7            |
| Comibaena bajularia                 | Blotched Emerald      | insect - moth | 01/07/1983 | -          | 1            |
| Cosmorhoe ocellata                  | Purple Bar            | insect - moth | 18/06/1983 | 26/05/2012 | 4            |
| Cyclophora albipunctata             | Birch Mocha           | insect - moth | 14/06/1984 | 17/05/1990 | 3            |
| Cyclophora linearia                 | Clay Triple-lines     | insect - moth | 14/06/1984 | -          | 1            |
| Ecliptopera silaceata               | Small Phoenix         | insect - moth | 11/06/1983 | 26/05/2012 | 4            |
| Electrophaes corylata               | Broken-barred Carpet  | insect - moth | 11/06/1983 | 26/05/2012 | 9            |
| Epirrhoe alternata                  | Common Carpet         | insect - moth | 16/06/1984 | 26/05/2012 | 4            |
| Epirrhoe alternata subsp. alternata | Common Carpet         | insect - moth | 14/06/1984 | 06/06/1994 | 2            |
| Epirrhoe rivata                     | Wood Carpet           | insect - moth | 16/06/1984 | -          | 1            |
| Euchoeca nebulata                   | Dingy Shell           | insect - moth | 17/06/1983 | 26/05/2012 | 7            |
| Euphyia unangulata                  | Sharp-angled Carpet   | insect - moth | 17/06/1988 | 19/05/2010 | 4            |
| Eupithecia abbreviata               | Brindled Pug          | insect - moth | 19/05/2010 | 26/05/2012 | 2            |
| Eupithecia centaureata              | Lime-speck Pug        | insect - moth | 10/06/1990 | -          | 1            |
| Eupithecia exiguata                 | Mottled Pug           | insect - moth | 23/05/1990 | 26/05/2012 | 3            |
| Eupithecia exiguata subsp. exiguata | Mottled Pug           | insect - moth | 11/06/1983 | 06/06/1994 | 3            |
| Eupithecia lariciata                | Larch Pug             | insect - moth | 01/07/1983 | 06/06/1994 | 3            |
| Eupithecia pulchellata              | Foxglove Pug          | insect - moth | 14/06/1984 | 26/05/2012 | 5            |
| Eupithecia subfuscata               | Grey Pug              | insect - moth | 11/06/1983 | 19/05/2010 | 3            |
| Eupithecia tripunctaria             | White-spotted Pug     | insect - moth | 14/06/1984 | 17/05/1990 | 3            |
| Eupithecia vulgata                  | Common Pug            | insect - moth | 10/06/1990 | 26/05/2012 | 2            |
| Hydrelia flammeolaria               | Small Yellow Wave     | insect - moth | 17/06/1983 | 26/05/2012 | 6            |
| Hydriomena impluviata               | May Highflyer         | insect - moth | 11/06/1983 | 26/05/2012 | 11           |
| Hylaea fasciaria                    | Barred Red            | insect - moth | 01/07/1983 | -          | 1            |
| Hypomecis punctinalis               | Pale Oak Beauty       | insect - moth | 11/06/1983 | 26/05/2012 | 10           |
| Hypomecis roboraria                 | Great Oak Beauty      | insect - moth | 01/07/1983 | 26/05/2012 | 4            |
| Idaea straminata                    | Plain Wave            | insect - moth | 01/07/1983 | -          | 1            |
| Idaea subsericeata                  | Satin Wave            | insect - moth | 17/06/1983 | -          | 1            |
| Jodis lactearia                     | Little Emerald        | insect - moth | 14/06/1984 | 17/06/1986 | 2            |
| Lobophora halterata                 | Seraphim              | insect - moth | 19/05/2010 | 26/05/2012 | 2            |
| Lomaspilis marginata                | Clouded Border        | insect - moth | 11/06/1983 | 26/05/2012 | 12           |
| Lomographa bimaculata               | White-pinion Spotted  | insect - moth | 11/06/1983 | 19/05/2010 | 6            |
| Lomographa temerata                 | Clouded Silver        | insect - moth | 11/06/1983 | 06/06/1994 | 7            |
| Macaria alternata                   | Sharp-angled Peacock  | insect - moth | 16/06/1984 | -          | 1            |
| Macaria liturata                    | Tawny-barred Angle    | insect - moth | 17/06/1983 | 06/06/1994 | 6            |
| Macaria notata                      | Peacock Moth          | insect - moth | 11/06/1983 | 26/05/2012 | 7            |
| Melanthia procellata                | Pretty Chalk Carpet   | insect - moth | 01/07/1983 | 10/06/1990 | 2            |
| Menophra abruptaria                 | Waved Umber           | insect - moth | 19/05/2010 | _          | 1            |
| Odontopera bidentata                | Scalloped Hazel       | insect - moth | 11/06/1983 | 26/05/2012 | 8            |
| Opisthograptis luteolata            | Brimstone Moth        | insect - moth | 01/07/1983 | 26/05/2012 | 7            |
| Paradarisa consonaria               | Square Spot           | insect - moth | 11/06/1983 | 19/05/2010 | 6            |

| Latin Name                            | Common Name           | Taxon Group        | First Date | Last Date  | No. of Rec's |
|---------------------------------------|-----------------------|--------------------|------------|------------|--------------|
| Parectropis similaria                 | Brindled White-spot   | insect - moth      | 11/06/1983 | 06/06/1994 | 8            |
| Perconia strigillaria                 | Grass Wave            | insect - moth      | 01/07/1983 | 16/06/1984 | 2            |
| Perizoma affinitata                   | Rivulet               | insect - moth      | 16/06/1984 | -          | 1            |
| Perizoma flavofasciata                | Sandy Carpet          | insect - moth      | 17/06/1986 | 06/06/1994 | 2            |
| Petrophora chlorosata                 | Brown Silver-line     | insect - moth      | 11/06/1983 | 19/05/2010 | 9            |
| Plagodis dolabraria                   | Scorched Wing         | insect - moth      | 11/06/1983 | 26/05/2012 | 12           |
| Pseudopanthera macularia              | Speckled Yellow       | insect - moth      | 18/05/1985 | -          | 1            |
| Pterapherapteryx sexalata             | Small Seraphim        | insect - moth      | 18/06/1983 | 26/05/2012 | 5            |
| Rheumaptera undulata                  | Scallop Shell         | insect - moth      | 01/07/1983 | -          | 1            |
| Scopula floslactata                   | Cream Wave            | insect - moth      | 11/06/1983 | 17/05/1990 | 6            |
| Scopula floslactata form floslactata  | Cream Wave            | insect - moth      | 06/06/1994 | -          | 1            |
| Selenia tetralunaria                  | Purple Thorn          | insect - moth      | 20/07/1995 | 19/05/2010 | 2            |
| Thera britannica                      | Spruce Carpet         | insect - moth      | 17/06/1986 | 19/05/2010 | 2            |
| Thera firmata                         | Pine Carpet           | insect - moth      | 16/06/1984 | -          | 1            |
| Thera obeliscata                      | Grey Pine Carpet      | insect - moth      | 11/06/1983 | 26/05/2012 | 8            |
| Timandra comae                        | Blood-Vein            | insect - moth      | 17/05/1990 | 08/07/2013 | 2            |
| Xanthorhoe designata                  | Flame Carpet          | insect - moth      | 18/06/1983 | 14/06/1984 | 2            |
| Xanthorhoe fluctuata                  | Garden Carpet         | insect - moth      | 01/07/1983 | 17/06/1986 | 3            |
| Xanthorhoe montanata                  | Silver-ground Carpet  | insect - moth      | 17/06/1983 | 26/05/2012 | 6            |
| Xanthorhoe montanata subsp. montanata | Silver-ground Carpet  | insect - moth      | 11/06/1983 | 14/06/1984 | 2            |
| Xanthorhoe spadicearia                | Red Twin-spot Carpet  | insect - moth      | 14/06/1984 | 26/05/2012 | 4            |
| Phyllonorycter coryli                 | Nut Leaf Blister Moth | insect - moth      | 24/06/2009 | -          | 1            |
| Phyllonorycter maestingella           | Beech Midget          | insect - moth      | 24/06/2009 | -          | 1            |
| Phyllonorycter quercifoliella         | Common Oak Midget     | insect - moth      | 24/06/2009 | -          | 1            |
| Hepialus hecta                        | Gold Swift            | insect - moth      | 01/07/1983 | 29/05/1990 | 3            |
| Hepialus humuli                       | Ghost Moth            | insect - moth      | 01/07/1983 | -          | 1            |
| Hepialus humuli subsp. humuli         | Ghost Moth            | insect - moth      | 14/06/1984 | -          | 1            |
| Hepialus lupulinus                    | Common Swift          | insect - moth      | 11/06/1983 | 06/06/1994 | 8            |
| Erynnis tages                         | Dingy Skipper         | insect - butterfly | 01/05/1997 | 09/07/1998 | 6            |
| Ochlodes sylvanus                     | Large Skipper         | insect - butterfly | 10/07/1985 | 08/07/2013 | 21           |
| Pyrgus malvae                         | Grizzled Skipper      | insect - butterfly | 05/06/1997 | 17/06/1998 | 3            |
| Thymelicus lineola                    | Essex Skipper         | insect - butterfly | 01/08/1996 | 18/07/1999 | 5            |
| Thymelicus sylvestris                 | Small Skipper         | insect - butterfly | 20/07/1995 | 24/07/2010 | 31           |
| Gastropacha quercifolia               | Lappet                | insect - moth      | 01/07/1983 | -          | 1            |
| Macrothylacia rubi                    | Fox Moth              | insect - moth      | 16/05/1984 | 16/06/1984 | 2            |
| Aricia agestis                        | Brown Argus           | insect - butterfly | 15/05/1998 | -          | 1            |
| Celastrina argiolus                   | Holly Blue            | insect - butterfly | 08/08/1996 | 10/05/2008 | 9            |
| Celastrina argiolus subsp. britanna   | Holly Blue            | insect - butterfly | 20/07/1995 | -          | 2            |
| Lycaena phlaeas                       | Small Copper          | insect - butterfly | 31/08/1979 | 24/07/2010 | 18           |
| Neozephyrus quercus                   | Purple Hairstreak     | insect - butterfly | 31/08/1979 | 24/07/2010 | 10           |
| Polyommatus icarus                    | Common Blue           | insect - butterfly | 16/06/1984 | 25/05/2011 | 42           |
| Pseudatemelia subochreella            | Straw-coloured Tubic  | insect - moth      | 28/05/2012 | -          | 1            |
| Stigmella aurella                     | Golden Pigmy          | insect - moth      | 30/01/2012 | -          | 3            |
| Abrostola tripartita                  | Spectacle             | insect - moth      | 11/06/1983 | 26/05/2012 | 5            |

| Latin Name                     | Common Name               | Taxon Group   | First Date | Last Date  | No. of Rec's |
|--------------------------------|---------------------------|---------------|------------|------------|--------------|
| Acronicta aceris               | Sycamore                  | insect - moth | 06/06/1994 | -          | 1            |
| Acronicta alni                 | Alder Moth                | insect - moth | 11/06/1983 | 17/05/1990 | 5            |
| Acronicta leporina             | Miller                    | insect - moth | 17/06/1983 | 10/06/1990 | 6            |
| Acronicta megacephala          | Poplar Grey               | insect - moth | 17/06/1986 | 10/06/1990 | 3            |
| Acronicta psi                  | Grey Dagger               | insect - moth | 01/07/1983 | 17/06/1986 | 2            |
| Acronicta rumicis              | Knot Grass                | insect - moth | 01/07/1983 | 19/05/2010 | 6            |
| Agrotis exclamationis          | Heart & Dart              | insect - moth | 17/06/1983 | 10/06/1990 | 6            |
| Agrotis ipsilon                | Dark Sword-grass          | insect - moth | 10/06/1990 | -          | 1            |
| Agrotis puta                   | Shuttle-shaped Dart       | insect - moth | 01/07/1983 | 26/05/2012 | 5            |
| Agrotis segetum                | Turnip Moth               | insect - moth | 01/07/1983 | -          | 1            |
| Anaplectoides prasina          | Green Arches              | insect - moth | 01/07/1983 | 10/06/1990 | 2            |
| Apamea crenata                 | Clouded-bordered Brindle  | insect - moth | 11/06/1983 | 01/07/1983 | 2            |
| Apamea epomidion               | Clouded Brindle           | insect - moth | 10/06/1990 | -          | 1            |
| Apamea monoglypha              | Dark Arches               | insect - moth | 01/07/1983 | 10/06/1990 | 2            |
| Apamea sordens                 | Rustic Shoulder-knot      | insect - moth | 18/06/1983 | 16/06/1984 | 3            |
| Autographa gamma               | Silver Y                  | insect - moth | 01/07/1983 | 28/07/2010 | 3            |
| Autographa pulchrina           | Beautiful Golden Y        | insect - moth | 11/06/1983 | 06/06/1994 | 5            |
| Axylia putris                  | Flame                     | insect - moth | 16/06/1984 | 26/05/2012 | 5            |
| Caradrina morpheus             | Mottled Rustic            | insect - moth | 10/06/1990 | -          | 1            |
| Charanyca trigrammica          | Treble Lines              | insect - moth | 14/06/1984 | 10/06/1990 | 4            |
| Colocasia coryli               | Nut-tree Tussock          | insect - moth | 17/06/1986 | 19/05/2010 | 2            |
| Conistra vaccinii              | Chestnut                  | insect - moth | 05/04/1976 | 19/05/2010 | 2            |
| Cucullia umbratica             | Shark                     | insect - moth | 06/06/1994 | -          | 1            |
| Diachrysia chrysitis           | Burnished Brass           | insect - moth | 10/06/1990 | -          | 1            |
| Diarsia brunnea                | Purple Clay               | insect - moth | 01/07/1983 | 10/06/1990 | 2            |
| Diarsia mendica                | Ingrailed Clay            | insect - moth | 18/06/1983 | -          | 1            |
| Diarsia mendica subsp. mendica | Ingrailed Clay            | insect - moth | 17/06/1983 | 26/05/2012 | 5            |
| Diarsia rubi                   | Small Square-spot         | insect - moth | 11/06/1983 | 10/06/1990 | 5            |
| Dypterygia scabriuscula        | Bird's Wing               | insect - moth | 29/05/1990 | 10/06/1990 | 2            |
| Elaphria venustula             | Rosy Marbled              | insect - moth | 11/06/1983 | 06/06/1994 | 7            |
| Euplexia lucipara              | Small Angle Shades        | insect - moth | 16/06/1984 | 06/06/1994 | 4            |
| Lacanobia oleracea             | Bright-Line Brown-Eye     | insect - moth | 16/06/1984 | 10/06/1990 | 3            |
| Lacanobia thalassina           | Pale-shouldered Brocade   | insect - moth | 11/06/1983 | 26/05/2012 | 8            |
| Lacanobia w-latinum            | Light Brocade             | insect - moth | 17/05/1990 | 10/06/1990 | 3            |
| Lycophotia porphyrea           | True Lover's Knot         | insect - moth | 11/06/1983 | 16/06/1984 | 3            |
| Melanchra persicariae          | Dot Moth                  | insect - moth | 01/07/1983 | 06/06/1994 | 2            |
| Melanchra pisi                 | Broom Moth                | insect - moth | 11/06/1983 | 26/05/2012 | 8            |
| Mythimna comma                 | Shoulder-striped Wainscot | insect - moth | 16/06/1984 | -          | 1            |
| Mythimna pallens               | Common Wainscot           | insect - moth | 10/06/1990 | -          | 1            |
| Noctua comes                   | Lesser Yellow Underwing   | insect - moth | 01/07/1983 | -          | 1            |
| Noctua pronuba                 | Large Yellow Underwing    | insect - moth | 01/07/1983 | 10/06/1990 | 3            |
| Ochropleura plecta             | Flame Shoulder            | insect - moth | 11/06/1983 | 26/05/2012 | 12           |
| Oligia fasciuncula             | Middle-barred Minor       | insect - moth | 10/06/1990 | -          | 1            |
| Oligia strigilis               | Marbled Minor             | insect - moth | 01/07/1983 | -          | 1            |

| Latin Name                            | Common Name                     | Taxon Group        | First Date | Last Date  | No. of Rec's |
|---------------------------------------|---------------------------------|--------------------|------------|------------|--------------|
| Orthosia cerasi                       | Common Quaker                   | insect - moth      | 19/05/2010 | -          | 1            |
| Orthosia gothica                      | Hebrew Character                | insect - moth      | 17/05/1990 | 19/05/2010 | 3            |
| Orthosia incerta                      | Clouded Drab                    | insect - moth      | 17/05/1990 | 19/05/2010 | 2            |
| Phlogophora meticulosa                | Angle Shades                    | insect - moth      | 11/06/1983 | 06/06/1994 | 4            |
| Polia nebulosa                        | Grey Arches                     | insect - moth      | 01/07/1983 | 10/06/1990 | 2            |
| Protodeltote pygarga                  | Marbled White Spot              | insect - moth      | 18/06/1983 | 26/05/2012 | 7            |
| Rusina ferruginea                     | Brown Rustic                    | insect - moth      | 01/07/1983 | 06/06/1994 | 5            |
| Shargacucullia verbasci               | Mullein                         | insect - moth      | 16/06/1984 | 10/06/1990 | 3            |
| Xestia c-nigrum                       | Setaceous Hebrew Character      | insect - moth      | 16/06/1984 | 26/05/2012 | 2            |
| Nycteola revayana                     | Oak Nycteoline                  | insect - moth      | 23/05/1990 | -          | 1            |
| Pseudoips prasinana                   | Green Silver-lines              | insect - moth      | 11/06/1983 | 06/06/1994 | 3            |
| Pseudoips prasinana subsp. britannica | Green Silver-lines              | insect - moth      | 17/06/1983 | 26/05/2012 | 6            |
| Cerura vinula                         | Puss Moth                       | insect - moth      | 16/06/1984 | 26/05/2012 | 3            |
| Clostera curtula                      | Chocolate-tip                   | insect - moth      | 17/06/1983 | 26/05/2012 | 4            |
| Drymonia dodonaea                     | Marbled Brown                   | insect - moth      | 11/06/1983 | 26/05/2012 | 10           |
| Drymonia ruficornis                   | Lunar Marbled Brown             | insect - moth      | 17/06/1983 | -          | 1            |
| Furcula bicuspis                      | Alder Kitten                    | insect - moth      | 16/06/1984 | 26/05/2012 | 5            |
| Furcula furcula                       | Sallow Kitten                   | insect - moth      | 14/06/1984 | 26/05/2012 | 3            |
| Notodonta dromedarius                 | Iron Prominent                  | insect - moth      | 11/06/1983 | 19/05/2010 | 10           |
| Notodonta ziczac                      | Pebble Prominent                | insect - moth      | 11/06/1983 | 26/05/2012 | 11           |
| Odontosia carmelita                   | Scarce Prominent                | insect - moth      | 19/05/2010 | -          | 1            |
| Peridea anceps                        | Great Prominent                 | insect - moth      | 11/06/1983 | 26/05/2012 | 8            |
| Phalera bucephala                     | Buff-tip                        | insect - moth      | 17/06/1983 | 10/06/1990 | 8            |
| Pheosia gnoma                         | Lesser Swallow Prominent        | insect - moth      | 17/06/1983 | 26/05/2012 | 8            |
| Pheosia tremula                       | Swallow Prominent               | insect - moth      | 18/06/1983 | 26/05/2012 | 5            |
| Pterostoma palpina                    | Pale Prominent                  | insect - moth      | 11/06/1983 | 26/05/2012 | 8            |
| Ptilodon capucina                     | Coxcomb Prominent               | insect - moth      | 11/06/1983 | 26/05/2012 | 11           |
| Ptilodon cucullina                    | Maple Prominent                 | insect - moth      | 26/05/2012 | -          | 1            |
| Stauropus fagi                        | Lobster Moth                    | insect - moth      | 11/06/1983 | 26/05/2012 | 12           |
| Aglais urticae                        | Small Tortoiseshell             | insect - butterfly | 09/07/1995 | 28/07/2010 | 51           |
| Apatura iris                          | Purple Emperor                  | insect - butterfly | 21/07/1983 | 31/12/2000 | 2            |
| Aphantopus hyperantus                 | Ringlet                         | insect - butterfly | 10/07/1985 | 08/07/2013 | 45           |
| Argynnis paphia                       | Silver-washed Fritillary        | insect - butterfly | 31/08/1979 | 05/08/2010 | 30           |
| Boloria selene                        | Small Pearl-bordered Fritillary | insect - butterfly | 17/06/1983 | -          | 1            |
| Coenonympha pamphilus                 | Small Heath                     | insect - butterfly | 09/07/1995 | 11/07/1999 | 8            |
| Inachis io                            | Peacock                         | insect - butterfly | 11/06/1982 | 28/07/2010 | 64           |
| Limenitis camilla                     | White Admiral                   | insect - butterfly | 31/08/1979 | 28/07/2010 | 15           |
| Maniola jurtina                       | Meadow Brown                    | insect - butterfly | 16/07/1982 | 08/07/2013 | 148          |
| Maniola jurtina subsp. insularis      | Meadow Brown                    | insect - butterfly | 10/07/1985 | -          | 1            |
| Pararge aegeria                       | Speckled Wood                   | insect - butterfly | 11/06/1982 | 03/08/2011 | 152          |
| Polygonia c-album                     | Comma                           | insect - butterfly | 18/06/1982 | 01/06/2011 | 74           |
| Pyronia tithonus                      | Hedge Brown                     | insect - butterfly | 09/07/1995 | 30/07/2011 | 119          |
| Pyronia tithonus subsp. britanniae    | Hedge Brown                     | insect - butterfly | 20/07/1995 | -          | 3            |
| Vanessa atalanta                      | Red Admiral                     | insect - butterfly | 09/07/1995 | 06/11/2010 | 73           |

| Latin Name                             | Common Name                      | Taxon Group                     | First Date | Last Date  | No. of Rec's |
|--|----------------------------------|---------------------------------|------------|------------|--------------|
| Vanessa cardui                         | Painted Lady                     | insect - butterfly              | 01/08/1996 | 20/09/2009 | 25           |
| Anthocharis cardamines                 | Orange-tip                       | insect - butterfly              | 18/05/1985 | 23/04/2011 | 59           |
| Colias croceus                         | Clouded Yellow                   | insect - butterfly              | 08/08/1996 | 23/08/2002 | 5            |
| Gonepteryx rhamni                      | Brimstone                        | insect - butterfly              | 11/06/1982 | 30/06/2011 | 73           |
| Pieris brassicae                       | Large White                      | insect - butterfly              | 30/06/1982 | 24/07/2010 | 104          |
| Pieris napi                            | Green-veined White               | insect - butterfly              | 09/07/1995 | 28/07/2010 | 43           |
| Pieris rapae                           | Small White                      | insect - butterfly              | 09/07/1995 | 30/07/2011 | 122          |
| Plutella xylostella                    | Diamond-back Moth                | insect - moth                   | 26/05/2012 | -          | 1            |
| Deilephila elpenor                     | Elephant Hawk-moth               | insect - moth                   | 17/06/1983 | 10/06/1990 | 5            |
| Deilephila porcellus                   | Small Elephant Hawk-moth         | insect - moth                   | 17/06/1986 | 10/06/1990 | 4            |
| Hyloicus pinastri                      | Pine Hawk-moth                   | insect - moth                   | 11/06/1983 | 10/06/1990 | 6            |
| Laothoe populi                         | Poplar Hawk-moth                 | insect - moth                   | 11/06/1983 | 26/05/2012 | 9            |
| Mimas tiliae                           | Lime Hawk-moth                   | insect - moth                   | 14/06/1984 | 26/05/2012 | 5            |
| Smerinthus ocellata                    | Eyed Hawk-moth                   | insect - moth                   | 01/07/1983 | 10/06/1990 | 4            |
| Tinea trinotella                       | Bird's-nest Moth                 | insect - moth                   | 28/05/2012 | -          | 1            |
| Emmetia marginea                       | Bordered Carl                    | insect - moth                   | 30/01/2012 | -          | 3            |
| Clepsis consimilana                    | Privet Twist                     | insect - moth                   | 24/06/2009 | -          | 1            |
| Epiblema scutulana                     | Thistle Bell                     | insect - moth                   | 26/05/2012 | -          | 1            |
| Eulia ministrana                       | Brassy Twist                     | insect - moth                   | 26/05/2012 | -          | 1            |
| Zygaena filipendulae subsp. stephensi  | Six-spot Burnet                  | insect - moth                   | 12/07/1984 | -          | 1            |
| Zygaena lonicerae                      | Narrow-bordered Five-spot Burnet | insect - moth                   | 11/06/1983 | -          | 1            |
| Zygaena lonicerae subsp. latomarginata | Narrow-bordered Five-spot Burnet | insect - moth                   | 17/06/1983 | 01/07/1984 | 3            |
| Sialis lutaria                         | Alder Fly                        | insect - alderfly (Megaloptera) | 01/03/2011 | -          | 1            |
| Odonata                                | Indet Dragon/Damselfly           | insect - dragonfly (Odonata)    | 31/12/2010 | -          | 1            |
| Aeshna cyanea                          | Southern Hawker                  | insect - dragonfly (Odonata)    | 31/12/1974 | 27/08/1997 | 13           |
| Aeshna grandis                         | Brown Hawker                     | insect - dragonfly (Odonata)    | 31/12/1974 | 09/07/2007 | 11           |
| Aeshna mixta                           | Migrant Hawker                   | insect - dragonfly (Odonata)    | 31/12/1900 | 31/12/1978 | 3            |
| Anax imperator                         | Emperor Dragonfly                | insect - dragonfly (Odonata)    | 31/12/1960 | 31/08/1995 | 7            |
| Calopteryx splendens                   | Banded Demoiselle                | insect - dragonfly (Odonata)    | 30/06/1994 | -          | 2            |
| Calopteryx virgo                       | Beautiful Demoiselle             | insect - dragonfly (Odonata)    | 30/06/1993 | 13/06/2003 | 5            |
| Coenagrion puella                      | Azure Damselfly                  | insect - dragonfly (Odonata)    | 31/12/1974 | 09/07/2007 | 20           |
| Enallagma cyathigerum                  | Common Blue Damselfly            | insect - dragonfly (Odonata)    | 31/12/1977 | 09/07/2007 | 20           |
| Erythromma najas                       | Red-eyed Damselfly               | insect - dragonfly (Odonata)    | 31/12/1974 | 13/06/2003 | 10           |
| Ischnura elegans                       | Blue-tailed Damselfly            | insect - dragonfly (Odonata)    | 31/12/1974 | 09/07/2007 | 18           |
| Pyrrhosoma nymphula                    | Large Red Damselfly              | insect - dragonfly (Odonata)    | 31/12/1974 | 13/06/2003 | 15           |
| Cordulegaster boltonii                 | Golden-ringed Dragonfly          | insect - dragonfly (Odonata)    | 07/10/1978 | -          | 1            |
| Cordulia aenea                         | Downy Emerald                    | insect - dragonfly (Odonata)    | 29/06/1986 | -          | 1            |
| Somatochlora metallica                 | Brilliant Emerald                | insect - dragonfly (Odonata)    | 13/06/2003 | -          | 1            |
| Lestes sponsa                          | Emerald Damselfly                | insect - dragonfly (Odonata)    | 31/12/1978 | -          | 1            |
| Libellula depressa                     | Broad-bodied Chaser              | insect - dragonfly (Odonata)    | 30/06/1993 | -          | 3            |
| Sympetrum striolatum                   | Common Darter                    | insect - dragonfly (Odonata)    | 31/12/1974 | 13/06/2003 | 4            |
| Platycnemis pennipes                   | White-legged Damselfly           | insect - dragonfly (Odonata)    | 09/07/2007 | -          | 1            |
| Chorthippus albomarginatus             | Lesser Marsh Grasshopper         | insect - orthopteran            | 08/08/1996 | 05/09/2005 | 2            |
| Chorthippus brunneus                   | Field Grasshopper                | insect - orthopteran            | 20/07/1995 | 27/08/1997 | 3            |

| Latin Name                       | Common Name                  | Taxon Group                       | First Date | Last Date  | No. of Rec's |
|----------------------------------|------------------------------|-----------------------------------|------------|------------|--------------|
| Chorthippus parallelus           | Meadow Grasshopper           | insect - orthopteran              | 20/07/1995 | 23/08/2002 | 5            |
| Omocestus viridulus              | Common Green Grasshopper     | insect - orthopteran              | 20/07/1995 | 05/09/2005 | 6            |
| Conocephalus fuscus              | Long-winged Cone-head        | insect - orthopteran              | 08/08/1996 | 05/09/2005 | 5            |
| Leptophyes punctatissima         | Speckled Bush-cricket        | insect - orthopteran              | 08/07/2013 | -          | 1            |
| Metrioptera roeselii             | Roesel's Bush-cricket        | insect - orthopteran              | 15/07/2008 | 08/07/2013 | 2            |
| Pholidoptera griseoaptera        | Dark Bush-cricket            | insect - orthopteran              | 20/07/1995 | 23/08/2002 | 3            |
| Siphonoperla torrentium          |                              | insect - stonefly (Plecoptera)    | 06/11/1998 | 10/05/1999 | 3            |
| Leuctra hippopus                 |                              | insect - stonefly (Plecoptera)    | 23/07/1999 | -          | 2            |
| Leuctra nigra                    |                              | insect - stonefly (Plecoptera)    | 10/05/1999 | -          | 1            |
| Nemouridae                       |                              | insect - stonefly (Plecoptera)    | 16/02/2011 | -          | 1            |
| Nemoura cambrica                 |                              | insect - stonefly (Plecoptera)    | 01/03/2011 | -          | 1            |
| Agapetus fuscipes                |                              | insect - caddis fly (Trichoptera) | 01/03/2011 | -          | 1            |
| Silo nigricornis                 |                              | insect - caddis fly (Trichoptera) | 16/02/2011 | -          | 1            |
| Hydropsyche angustipennis        |                              | insect - caddis fly (Trichoptera) | 03/10/2000 | 01/03/2011 | 2            |
| Hydropsyche siltalai             |                              | insect - caddis fly (Trichoptera) | 16/02/2011 | 01/03/2011 | 2            |
| Lepidostoma hirtum               |                              | insect - caddis fly (Trichoptera) | 01/03/2011 | -          | 1            |
| Leptoceridae                     |                              | insect - caddis fly (Trichoptera) | 01/03/2011 | -          | 1            |
| Athripsodes albifrons            |                              | insect - caddis fly (Trichoptera) | 16/02/2011 | -          | 1            |
| Limnephilidae                    |                              | insect - caddis fly (Trichoptera) | 16/02/2011 | -          | 1            |
| Halesus radiatus                 |                              | insect - caddis fly (Trichoptera) | 01/03/2011 | -          | 1            |
| Limnephilus rhombicus            |                              | insect - caddis fly (Trichoptera) | 01/03/2011 | -          | 1            |
| Plectrocnemia conspersa          |                              | insect - caddis fly (Trichoptera) | 03/10/2000 | -          | 1            |
| Sericostoma personatum           |                              | insect - caddis fly (Trichoptera) | 16/02/2011 | 01/03/2011 | 2            |
| Lithobius (Lithobius) variegatus |                              | centipede                         | 27/08/1997 | -          | 1            |
| Glomeris marginata               | Pill Millipede               | millipede                         | 27/08/1997 | -          | 1            |
| Tachypodoiulus niger             | White-legged Snake Millipede | millipede                         | 27/08/1997 | -          | 1            |
| Anguilla anguilla                | European Eel                 | bony fish (Actinopterygii)        | 15/08/2001 | -          | 1            |
| Barbatula barbatula              | Stone Loach                  | bony fish (Actinopterygii)        | 15/08/2001 | -          | 1            |
| Gobio gobio                      | Gudgeon                      | bony fish (Actinopterygii)        | 15/08/2001 | -          | 1            |
| Phoxinus phoxinus                | Minnow                       | bony fish (Actinopterygii)        | 15/08/2001 | -          | 1            |
| Perca fluviatilis                | Perch                        | bony fish (Actinopterygii)        | 15/08/2001 | -          | 1            |
| Salmo trutta subsp. fario        | Brown Trout                  | bony fish (Actinopterygii)        | 15/08/2001 | -          | 1            |
| Cottus gobio                     | Bullhead                     | bony fish (Actinopterygii)        | 31/12/2001 | -          | 1            |
| Bufo bufo                        | Common Toad                  | amphibian                         | 01/03/1993 | 08/10/2011 | 11           |
| Rana temporaria                  | Common Frog                  | amphibian                         | 01/01/1993 | 31/12/2010 | 12           |
| Lissotriton vulgaris             | Smooth Newt                  | amphibian                         | 01/03/1994 | 31/08/2010 | 5            |
| Triturus cristatus               | Great Crested Newt           | amphibian                         | 01/01/1993 | 24/10/2013 | 15           |
| Lampetra                         | Lamprey Sp.                  | jawless fish (Agnatha)            | 31/12/2001 | -          | 1            |
| Capreolus capreolus              | Roe Deer                     | terrestrial mammal                | 28/03/1966 | 02/07/2007 | 6            |
| Dama dama                        | Fallow Deer                  | terrestrial mammal                | 31/08/1965 | 05/04/2004 | 11           |
| Muntiacus reevesi                | Chinese Muntjac              | terrestrial mammal                | 20/05/1990 | 31/12/2000 | 2            |
| Sus scrofa                       | Wild Boar                    | terrestrial mammal                | 31/05/2000 | -          | 1            |
| Vulpes vulpes                    | Red Fox                      | terrestrial mammal                | 31/12/1966 | 31/08/2010 | 20           |
| Meles meles                      | Badger                       | terrestrial mammal                | 31/12/1962 | 25/06/2007 | 18           |

| Latin Name                         | Common Name                 | Taxon Group        | First Date | Last Date  | No. of Rec's |
|------------------------------------|-----------------------------|--------------------|------------|------------|--------------|
| Mustela erminea                    | Stoat                       | terrestrial mammal | 06/06/1965 | 12/05/1998 | 4            |
| Mustela nivalis                    | Weasel                      | terrestrial mammal | 31/12/1965 | 11/08/1991 | 4            |
| Neovison vison                     | American Mink               | terrestrial mammal | 20/09/1985 | 10/03/2009 | 3            |
| Chiroptera                         | Bat sp.                     | terrestrial mammal | 01/07/1991 | 08/09/2002 | 8            |
| Eptesicus serotinus                | Serotine                    | terrestrial mammal | 15/09/1986 | 26/07/2010 | 2            |
| Myotis                             | Unidentified Bat            | terrestrial mammal | 13/09/2007 | -          | 1            |
| Myotis bechsteinii                 | Bechstein's Bat             | terrestrial mammal | 26/06/2005 | 11/07/2008 | 2            |
| Pipistrellus                       | Pipstrelle sp.              | terrestrial mammal | 21/07/2005 | 12/05/2011 | 8            |
| Common Pipistrelle (45 kHz)        |                             | terrestrial mammal | 21/07/2005 | 09/07/2012 | 12           |
| Pipistrellus pygmaeus              | Soprano Pipstrelle (55 kHz) | terrestrial mammal | 15/08/2007 | 29/07/2011 | 7            |
| Plecotus                           | Long-eared sp.              | terrestrial mammal | 04/09/2006 | 04/06/2007 | 4            |
| Plecotus auritus                   | Brown Long-eared Bat        | terrestrial mammal | 31/12/1986 | 01/08/2013 | 17           |
| Macropus rufogriseus               | Red-necked wallaby          | terrestrial mammal | 31/12/1969 | -          | 1            |
| Erinaceus europaeus                | West European Hedgehog      | terrestrial mammal | 31/12/1965 | 31/12/2010 | 4            |
| Neomys fodiens                     | Eurasian Water Shrew        | terrestrial mammal | 31/08/1998 | -          | 1            |
| Sorex araneus                      | Eurasian Common Shrew       | terrestrial mammal | 31/08/1998 | 17/02/2001 | 2            |
| Talpa europaea                     | European Mole               | terrestrial mammal | 12/12/1969 | 26/05/2010 | 133          |
| Lepus europaeus                    | Brown Hare                  | terrestrial mammal | 12/05/1999 | 25/06/2007 | 4            |
| Oryctolagus cuniculus              | European Rabbit             | terrestrial mammal | 06/04/1997 | 26/05/2010 | 28           |
| Apodemus flavicollis               | Yellow-necked Mouse         | terrestrial mammal | 18/01/1970 | 31/12/2000 | 2            |
| Arvicola amphibius                 | European Water Vole         | terrestrial mammal | 03/07/1965 | 31/12/1990 | 2            |
| Rattus norvegicus                  | Brown Rat                   | terrestrial mammal | 31/10/2000 | 13/09/2002 | 3            |
| Muscardinus avellanarius           | Hazel Dormouse              | terrestrial mammal | 21/04/2009 | 14/09/2012 | 10           |
| Sciurus carolinensis               | Eastern Grey Squirrel       | terrestrial mammal | 31/12/1935 | 26/05/2010 | 132          |
| Sciurus vulgaris                   | Eurasian Red Squirrel       | terrestrial mammal | 30/09/1999 | -          | 1            |
| Anguis fragilis                    | Slow-worm                   | reptile            | 01/04/1995 | 02/05/2010 | 5            |
| Natrix natrix                      | Grass Snake                 | reptile            | 01/01/1987 | 02/05/2010 | 13           |
| Zootoca vivipara                   | Common Lizard               | reptile            | 02/05/2010 | 25/07/2010 | 2            |
| Vipera berus                       | Adder                       | reptile            | 01/05/1990 | 17/06/1999 | 5            |
| Sphaeriidae                        | Pea & orb mussels           | mollusc            | 16/02/2011 | 01/03/2011 | 2            |
| Sphaerium                          |                             | mollusc            | 03/10/2000 | -          | 1            |
| Potamopyrgus antipodarum           | Jenkins' Spire Snail        | mollusc            | 16/02/2011 | 01/03/2011 | 2            |
| Deroceras (Deroceras) reticulatum  | Grey Field Slug             | mollusc            | 27/08/1997 | -          | 1            |
| Macrogastra (Pseudovestia) rolphii | Rolph's Door Snail          | mollusc            | 31/12/1995 | -          | 1            |
| Cochlicopa cf. lubrica             | Slippery Moss Snail         | mollusc            | 27/08/1997 | -          | 1            |
| Zonitoides (Zonitoides) excavatus  | Hollowed Glass Snail        | mollusc            | 27/08/1997 | -          | 1            |
| Cepaea (Cepaea) hortensis          | White Lipped Snail          | mollusc            | 27/08/1997 | -          | 1            |
| Cornu aspersum                     | Common Garden Snail         | mollusc            | 27/08/1997 | -          | 1            |
| Ashfordia granulata                |                             | mollusc            | 31/12/1990 | -          | 1            |
| Monacha (Monacha) cantiana         | Kentish Snail               | mollusc            | 27/08/1997 | -          | 1            |
| Trochulus (Trochulus) hispidus     | Hairy Snail                 | mollusc            | 27/08/1997 | -          | 1            |
| Leiostyla (Leiostyla) anglica      | English Chrysalis Snail     | mollusc            | 31/12/1989 | -          | 1            |
| Limax maximus                      | Great Grey Slug             | mollusc            | 27/08/1997 | -          | 1            |
| Radix balthica                     | Wandering Snail             | mollusc            | 01/03/2011 | -          | 1            |

| Latin Name                      | Common Name   | Taxon Group            | First Date | Last Date  | No. of Rec's |
|---------------------------------|---------------|------------------------|------------|------------|--------------|
| Aegopinella nitidula            |               | mollusc                | 27/08/1997 | -          | 1            |
| Oxychilus (Oxychilus) alliarius | Garlic Snail  | mollusc                | 27/08/1997 | -          | 1            |
| Oxychilus (Oxychilus) cellarius | Cellar Snail  | mollusc                | 27/08/1997 | -          | 1            |
| Ancylus fluviatilis             | River limpets | mollusc                | 01/03/2011 | -          | 1            |
| Spermodea lamellata             |               | mollusc                | 13/04/1974 | 31/12/1989 | 2            |
| Phenacolimax major              |               | mollusc                | 21/04/1973 | 19/04/1974 | 2            |
| Polycelis                       |               | flatworm (Turbellaria) | 03/10/2000 | -          | 1            |



## **Sussex Environmental Survey Directory**

Report on behalf of Katherine Daniel (Balcombe Parish Council) regarding land at Balcombe Parish.

Our Ref: ESD/14/74

Date: 13-Feb-14

The Sussex Environmental Survey Directory (ESD) was initiated in 1990 as a tool to report on biological surveys that had taken place in Sussex. The directory now contains information on over 2,000 surveys covering over 22,000 sites. This report details what surveys have been carried out on specific sites and directs the enquirer to where this information is held. The Record Centre does not hold copies of all the reports that it refers enquirers to, but simply directs the enquirer to organisations or individuals who do.

The directory is updated on a weekly basis and also contains summary data on the county's ornithological data, (courtesy of the Sussex Ornithological Society) and on the county's geological sites (courtesy of the Booth Museum).

| Survey Name      | Ardingly Reservoir Survey - the First Seven Weeks - (99)   |
|------------------|--|
| Survey Author    | ARGENT, Nigel  |
| Survey Comment   | A survey to record initial bird data from the Ardingly Reservoir. A report in the S.O.S. newsletter No.64. |
| Date             | 1978   |
| Site Name        | Ardingly Reservoir TQ330293  |
| Site Comment     | Important for breeding and passage wetland birds.  |
| Copies Available | EN   |
|                  |  |

| Survey Name      | SOS Reservoirs Survey - (300)  |      |
|------------------|--|------|
| Survey Author    | Various  |      |
| Survey Comment   | Vegetation surveys of nine small reservoirs in Sussex. (Phase II). Species lists for various groups of invertebrates are also included. NB: results for some sites also held in SxBRC File Cabs, including sites 3055 [TQ23], 323 [TQ33], 1039 [SU92], | e    |
| Date             | 8.84   |      |
| Site Name        | Balcombe Mill Pond TQ317   | 7308 |
| Site Comment     | The pond is shallow on the west and north margins. The east bank is steep.   |      |
| Copies Available | WSCC, SxBRC File Cabs  |      |

| Survey Name      | Brief Survey of Proposed Reservoir, Ardingly - (306)  |          |
|------------------|---|----------|
| Survey Author    | GRIFFITHS, Ann  |          |
| Survey Comment   | A survey to assess the land to be flooded by the then proposed Ardingly Reservoir. The ecological information consists of a completed Biological Centre Record Card and some on WSCC Areas of Nature Conservation Value paper. There are also reports of meetings Southern Water Authority. |          |
| Date             | 11.75   |          |
| Site Name        | Ardingly Reservoir  | TQ330293 |
| Site Comment     | Important for breeding and passage wetland birds.   |          |
| Copies Available | WSCC  |          |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)  |  |
|------------------|---|--|
|                  |   |  |
| Survey Author    | BEALY, C. E., PARDON, B. J.   |  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.) |  |
| Date             | 1982  |  |
| Site Name        | Whitehouse & (Part of) Seyron WoodsTQ297293   |  |
| Site Comment     | Varied woodland with conifer plantation on side of a hill with a stream valley along the western<br>edge. Mostly south-facing with some west-facing areas. Mostly species-poor field layer with<br>some species-rich areas.   |  |
| Copies Available | EN, SxBRC Archive, WSCC   |  |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)   |
|------------------|--|
|                  |  |
| Survey Author    | BEALY, C. E., PARDON, B. J.  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.)          |
| Date             | 1982   |
| Site Name        | Balcombe Forest (East). TQ297320   |
| Site Comment     | Hazel-oak stand type including some ash. Well developed shrub layer. Most of wood managed.<br>Cleared centre with few mature oak & beech, young trees returning. Mainly birch & chestnut of<br>varied age & density. Scots pine, beech & birch with sparse shrub layer. Dense shrub layer of<br>rhododendron. Conifer & beech plantation in N. Much dead wood. |
| Copies Available | EN, SxBRC Archive, WSCC  |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)   |  |
|------------------|--|--|
| Survey Author    | BEALY, C. E., PARDON, B. J.  |  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.)                      |  |
| Date             | 1982   |  |
| Site Name        | Brantridge Forest TQ28232  |  |
| Site Comment     | Moderate north facing slopes. Stanford Brook flows into a small lake. Railway line at eastern edge. Mainly birch-oak. Fairly open. Birch regenerating freely. Some alder & buckthorn. Richest area in N.E. Species poor field layer. Much of central area a conifer plantation.  |  |
| Copies Available | EN, SxBRC Archive, WSCC  |  |
| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)   |  |
| Cumuou Authon    |  |  |
| Survey Author    | BEALY, C. E., PARDON, B. J.  |  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.)                      |  |
| Date             |  |  |
| Site Name        | Balcombe Forest (West) & Hourglass Wood (South)       TQ29431  |  |
| Site Comment     | S.W. facing hill-slope along stream valley. Varied area of woodland birch-oak and hazel-oak,<br>occasional beech. Wet valley alder wood. Moderately dense scrub layer, hazel coppice,<br>hawthorne & tree saplings. Frequent mosses.   |  |
| Copies Available | EN, SxBRC Archive, WSCC  |  |
| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)   |  |
| Survey Author    | BEALY, C. E., PARDON, B. J.  |  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.)                      |  |
| Date             | 1982   |  |
| Site Name        | Greentrees Farm Wood TQ29633   |  |
| Site Comment     | Mainly birch, some areas birch-oak & large areas of pure birch of mixed ages. N. facing slopes of stream valley include alder. Sparse shrub layer of elder, alder, buckthorn, Crab apple & large hawthorne trees locally frequent. Several large oak and beech trees. Much fallen & standing oak-beech and chestnut deadwood. Most of site falls within Worth Forest SSSI. |  |
|                  |  |  |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)  |                |
|------------------|---|----------------|
| Survey Author    | BEALY, C. E., PARDON, B. J.   |                |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts a incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, soils given for each site. Bird surveys were not carried out at every site. A joint vent and RSPB. (See Authors for a full list of recorders.) 1982   | situation, and |
| Site Name        | Monks Forest & Scott's, Sedgy & Southfield Gills  | TQ307318       |
| Site Comment     | Oak-hazel-ash along slopes of gills. Birch-oak woodland on gentler slopes. Bands of wet valley alder on flushed ground. Shrub layer well developed. Monks Forest mostly plantation conifer & chestnut. Some species rich patches. Bracken abundant where canopy more open. Streams fairly small, steep banks with carpets of mosses & liverworts. Epiphytic lichens noted. Includes most of SNCI M12. |                |
| Copies Available | EN, SxBRC Archive, WSCC   |                |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)  |  |
|------------------|---|--|
| Survey Author    | BEALY, C. E., PARDON, B. J.   |  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.)   |  |
| Date             | 1982  |  |
| Site Name        | Alder & Sedgy Woods, Balcombe (Part of SNCI M22)TQ318307  |  |
| Site Comment     | Mainly Alder along valley & stream to N part of reservoir. Slopes above the stream. Hazel-Oak & Oak-Hazel_Ash in Southfield Gill. Alderwood canopy; Oak standards. Shrub layer; Alder coppice; water-logged ground; sedges & ferns. Field layer species-rich. Veronica beccaburga near stream. Small boulders in the stream; some covered in liverworts. Sandstone outcrops with lichens & liverworts. Hay meadow species-rich on W. of wood. |  |
| Copies Available | EN, SxBRC Archive, WSCC   |  |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)  |  |
|------------------|---|--|
| Survey Author    | BEALY, C. E., PARDON, B. J.   |  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.) |  |
| Date             | 1982  |  |
| Site Name        | Lowerstaff & Chestnut Woods (Part of SNCI M22). TQ316315  |  |
| Site Comment     | Hazel-Oak stand type; also Hornbeam present in Lowerstaff Woods. Varied height & density of<br>shrub layer. Valley floor; Alderwood; Conifer plantation between two woods. Fairly species poor<br>field layer. A few Ash & Maple. Field layer more species rich in small Oak- Hazel- Ash wood.  |  |
| Copies Available | EN, SxBRC Archive, WSCC   |  |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)  |  |
|------------------|---|--|
| Survey Author    | BEALY, C. E., PARDON, B. J.   |  |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.) 1982  |  |
| Site Name        | The Warren (South-Western Part of), Paddockhurst Estate TQ31732   |  |
| Site Comment     | Mainly Oak-Hazel-Ash along stream valleys. Narrow strip of valley Alderwood.Hawthorn;<br>Blackthorn; Alder shrub layer. Dense Hazel coppice; Ash & Birch saplings. Field layer dense &<br>species-rich on valley bottom. Dogs Mercury; Wood Avens; Enchanters Nightshade. Streams<br>well shaded. Golden Saxifrage. (overlaps site 18,225 - The Warren, Balcombe). Most of site falls<br>within SNCI M22. |  |
| Copies Available | EN, SxBRC Archive, WSCC   |  |

| Survey Name      | Ecological Survey of Woodlands in NW Sussex-Vol. 2 (312)  |   |
|------------------|---|---|
|                  |   |   |
| Survey Author    | BEALY, C. E., PARDON, B. J.   |   |
| Survey Comment   | A detailed survey of woods in the Horsham area. Common mosses and liverworts as well as incidental sightings of Lepidoptera (butterflies) were recorded. Details of geology, situation, and soils given for each site. Bird surveys were not carried out at every site. A joint venture by SxWT and RSPB. (See Authors for a full list of recorders.) |   |
| Date             | 1982  |   |
| Site Name        | Great Wood, Forest Farm, Balcombe (Part of SNCI M22) TQ32331  | 7 |
| Site Comment     | Well structured Hazel- Oak woodland.Mature Oak standards. Well developed shrub layer.<br>Seedlings rare. N. end small stand of Alder. Follws line of stream. Ash frequency also increases<br>in this area. Large beech at s. end.   |   |
| Copies Available | EN, SxBRC Archive, WSCC   |   |

| Survey Name      | Survey of Mid-Sussex District Sportsgrounds & Cemeteries - (326)                      |           |
|------------------|---|-----------|
| Survey Author    | FINCH, Marion, CLARK, Louise  |           |
| Survey Comment   | Includes a vegetation survey of the Southway and the Fairfield Recreation Grounds. (F | Phase II) |
| Survey comment   | [SxBRC copy held in H2b box].   | nuse nj.  |
| Date             | 1991  |           |
| Site Name        | St Mary's Churchyard; Balcombe.   | TQ307309  |
| Site Comment     | A small village churchyard. Refer to Mid-Sussex District Council for ownership.       |           |
| Copies Available | SxBRC Boxes, SxBRC Digital  |           |

| Survey Name      | West Sussex Potential SNCI Project - (397)  |   |
|------------------|---|---|
|                  |   |   |
| Survey Author    | FINCH, Marion, CLARK, Louise  |   |
| Survey Comment   | A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly. |   |
| Date             | 1990-3.92   |   |
| Site Name        | Balcombe Lake, Walk & Lower Walk Woods (pSNCI) TQ31631  | 1 |
| Site Comment     | Potential SNCI. A mosaic of habitats with streams, woodland, rough and marshy grassland, wet scrub, open water and reedbed. Situated to the north of Balcombe. Much of site falls into SNCI M22.  |   |
| Copies Available | WSCC, EN/SSSI/SCI   |   |
| <b>C</b> N       |   |   |
| Survey Name      | Invertebrate Site Register - (480)  |   |

| Survey Author    | WILLING, Martin J, PARSONS, M.  |     |
|------------------|---|-----|
| Survey Comment   | The Invertebrate Site Register is a document listing sites which are important for invertebrates.<br>It is regularly updated and revised. Information for each site usually includes a site description,<br>the main invertebrate interest and some general comments. This is a collation of information<br>from a variety of sources. (Phase II) |     |
| Date             | -   |     |
| Site Name        | Balcombe Forest, Lake & Mill Area ISR Site TQ308  | 315 |
| Site Comment     | Partly a SWT reserve; and partly owned by the forestry commission. Alder and sallow carr within deciduous woodland. ISR-April 1982. Includes SNCI M12, & parts of M22, M39, M40.  |     |
| Copies Available | EN  |     |

| Survey Name      | Invertebrate Site Register - (480)  |
|------------------|---|
| Survey Author    | WILLING, Martin J, PARSONS, M.  |
| Survey Comment   | The Invertebrate Site Register is a document listing sites which are important for invertebrates.<br>It is regularly updated and revised. Information for each site usually includes a site description,<br>the main invertebrate interest and some general comments. This is a collation of information<br>from a variety of sources. (Phase II) |
| Date             | -   |
| Site Name        | Sandhole, Hollgrove & Furzefield Woods ISR Site, Ardingly TQ332293  |
| Site Comment     | Woodland; wet spring. ISR-April 1986  |
| Copies Available | EN  |

| Survey Name       | Invertebrate Site Register - (480)  |
|-------------------|---|
| Survey Name       | Inverteurate Site Negister - (400)  |
| Survey Author     | WILLING, Martin J, PARSONS, M.  |
| Survey Comment    | The Invertebrate Site Register is a document listing sites which are important for invertebrates.<br>It is regularly updated and revised. Information for each site usually includes a site description,<br>the main invertebrate interest and some general comments. This is a collation of information<br>from a variety of sources. (Phase II)   |
| Date              | -   |
| Site Name         | River's Wood ISR Site, Ardingly TQ330280  |
| Site Comment      | ISR - April '86   |
| Copies Available  | EN  |
| Survey Name       | Designated SNCIs (in West Sussex) - (500)   |
|                   |   |
| Survey Author     | WSCC  |
| Survey Comment    | All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected]. |
| Date              | 1990-   |
| Site Name         | Balcombe Marsh - SNCI M35 TQ315284  |
| Site Comment      | A small wet fen area with Sussex's only colony of Marsh Helleborine.  Not open to the public.<br>Overlaps with SWT Reserve.   |
| Copies Available  | EN, SWT, WSCC   |
| Survey Name       | Designated SNCIs (in West Sussex) - (500)   |
| Survey Author     | WSCC  |
| Survey Comment    | All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced).  |
| _                 | (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added<br>and 1 deleted. [NB: a number of additional sites are also included which are not designated, but<br>which were presumably considered for designation at some stage, or which were at some time<br>designated but which have since be deselected].   |
| Date              | and 1 deleted. [NB: a number of additional sites are also included which are not designated, but<br>which were presumably considered for designation at some stage, or which were at some time<br>designated but which have since be deselected].<br>1990-  |
| Date<br>Site Name | and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].   |
|                   | and 1 deleted. [NB: a number of additional sites are also included which are not designated, but<br>which were presumably considered for designation at some stage, or which were at some time<br>designated but which have since be deselected].<br>1990-  |

| Survey Name      | Designated SNCIs (in West Sussex) - (500)  |          |
|------------------|--|----------|
|                  |  |          |
| Survey Author    | WSCC   |          |
| Survey Comment   | All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each sit<br>was surveyed botanically, but additional information on other groups is included where known.<br>(A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced).<br>(Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were addee<br>and 1 deleted. [NB: a number of additional sites are also included which are not designated, but<br>which were presumably considered for designation at some stage, or which were at some time<br>designated but which have since be deselected]. | ed<br>ut |
| Date             | 1990-  |          |
| Site Name        | Balcombe Lake & Associated Woodlands - SNCI M22 TQ3163   | 11       |
| Site Comment     | A complex site consisting of wooded stream valleys; woodland blocks; a large lake and streams<br>The woodlands are particularly species-rich.  | s.       |
| Copies Available | EN, SWT, WSCC  |          |

| Survey Name      | Designated SNCIs (in West Sussex) - (500)   |   |
|------------------|---|---|
| Survey Author    | WSCC  |   |
| Survey Comment   | All SNCIs in West Sussex are covered here. All sites have management prescriptions. was surveyed botanically, but additional information on other groups is included where (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produc (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites w and 1 deleted. [NB: a number of additional sites are also included which are not design which were presumably considered for designation at some stage, or which were at so designated but which have since be deselected]. | e known.<br>ed).<br>ere added<br>nated, but |
| Date             | 1990-   |   |
| Site Name        | Balcombe Marsh SWT  | TQ315285                                    |
| Site Comment     | A small calcareous fen meadow which is very herb rich and has several scarce plants.  |   |
| Copies Available | EN, SWT, WSCC   |   |

| Survey Name      | Designated SNCIs (in West Sussex) - (500)   |                         |
|------------------|---|-------------------------|
| Survey Author    | WSCC  |                         |
| Survey Comment   | All SNCIs in West Sussex are covered here. All sites have management prescriptions. Eac<br>was surveyed botanically, but additional information on other groups is included where kno<br>(A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced).<br>(Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were a<br>and 1 deleted. [NB: a number of additional sites are also included which are not designate<br>which were presumably considered for designation at some stage, or which were at some t<br>designated but which have since be deselected]. | own.<br>added<br>d, but |
| Date             | 1990-   |                         |
| Site Name        | Balcombe Estate Rocks - SNCI M39 TQ2  | 291293                  |
| Site Comment     | Three discrete sites, grid refs: TQ291293, TQ299288 & TQ 318303.  |                         |
| Copies Available | EN, SWT, WSCC   |                         |

| Survey Name      | Designated SNCIs (in West Sussex) - (500)   |  |
|------------------|---|--|
|                  |   |  |
| Survey Author    | WSCC  |  |
| Survey Comment   | All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected]. |  |
| Date             | 1990-   |  |
| Site Name        | Rowhill & Station Pastures, Balcombe - SNCI M42 TQ303299  |  |
| Site Comment     | + TQ306301. Pastures on either side of Rocks Lane, both containing typical grassland plant species - largely unimproved.  |  |
| Copies Available | EN, SWT, WSCC   |  |

| Survey Name      | Designated SNCIs (in West Sussex) - (500)   |   |
|------------------|---|---|
| Survey Author    | WSCC  |   |
| Survey Comment   | All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected]. |   |
| Date             | 1990-   |   |
| Site Name        | Ardingly Reservoir & Loder Valley Nature Reserve - SNCI M40 TQ33029   | 5 |
| Site Comment     |   |   |
| Copies Available | EN, SWT, WSCC   |   |

| Survey Name      | Wintering Waterfowl Count Scheme - (506)   |           |
|------------------|--|-----------|
| Survey Author    | Various  |           |
| Survey Comment   | WWT covers inland sites and some coastal areas and sites are counted for waterfowl, rails<br>herons and Kingfishers every month over the winter. A summary of the results combined w<br>BTO's Estuary counts are published in "Wildfowl and Wetland Counts" each year. Informati<br>sites can be obtained via the above contact. | ,<br>vith |
| Date             | various  |           |
| Site Name        | Ardingly Reservoir TQ3   | 330293    |
| Site Comment     | Important for breeding and passage wetland birds.  |           |
| Copies Available | As contact   |           |

| Survey Name      | Sussex Wildlife Trust (SWT) Reserves - (650)  |            |
|------------------|---|------------|
| • • •            |   |            |
| Survey Author    | Various   |            |
| Survey Comment   | Various information collated by SWT over the years exists for each site. These sites are been at some stage) owned, leased or managed by the Trust. | e (or have |
| Date             | 1967-   |            |
| Site Name        | Balcombe Marsh SWT  | TQ315285   |
| Site Comment     | A small calcareous fen meadow which is very herb rich and has several scarce plants.  |            |
| Copies Available | SWT Res. Files  |            |

| Survey Name      | WSCC Areas of Nature Conservation Value - (700)  |               |
|------------------|--|---------------|
| Survey Author    | GRIFFITHS, Ann   |               |
| Survey Comment   | Brief descriptions of areas of conservation value. Records habitats present and sel<br>lists - mostly botanical with casual records of other groups. (Phase I) | ected species |
| Date             | 1970-1980  |               |
| Site Name        | Ardingly Reservoir AoNCV   | TQ330293      |
| Site Comment     | Rich meadowland, alder along valley sides. This site is now a reservoir.   |               |
| Copies Available | WSCC   |               |

| Survey Name      | West Sussex Notable Road Verges - (809)  |       |
|------------------|--|-------|
| Survey Author    | Various  |       |
| Survey Comment   | These roadside verges are noted as having conservation interest. All the records are collate<br>and the more significant sites will be designated. At most sites the significance is botanical.<br>[spp data extracted]. |       |
| Date             | 1975-  |       |
| Site Name        | Road Verge, Brantridge Lane, Staplefield TQ2   | 82283 |
| Site Comment     | A short stretch of the north road verge with a scarce plant.   |       |
| Copies Available | WSCC   |       |

| Survey Name      | Brief Survey of Upper Stumble Wood - (828)  |        |
|------------------|---|--------|
| Survey Author    | ROBERTS, Graham   |        |
| Survey Comment   | Completed woodland record card with notes, a bird list and a plant species list. (Phase II)     |        |
| Date             | 11.88   |        |
| Site Name        | Upper Stumble Wood (NE End of) TQ3  | 313300 |
| Site Comment     | A hazel coppice with birch trees. It has a stream with adjacent water-logged ground. Much wood. | dead   |
| Copies Available | WSCC  |        |

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| Survey Name      | Wealden Sandrock Survey 1995 - (911)  |    |
|------------------|---|----|
| Survey Author    | DAVEY, Simon  |    |
| Survey Comment   | Most of the Wealden Sandrock sites were visited to assess their lower plant communities. All sites visited have a site description and species list. Notes on higher plants and some areas not associated with the rocks, but in surrounding woods are given. A table is given which ranks how significant each site is for lower plants. An appendix gives site maps. (Phase II). [SxBRC copy (2 parts) also held in H1b box]. Data also used to generate Sand Rock Outcrop Inventory. | ,  |
| Date             | 1.95-4.95   |    |
| Site Name        | Northlands Farm Rocks Area, Balcombe TQ29029  | 73 |
| Site Comment     | Sandrocks running north with a easterly aspect; to the west of a ghull stream in Larch and Oak woodland. There is dense Willow by the stream.   |    |
| Copies Available | SxBRC Boxes, EN, SxBRC Archive  |    |

| Survey Author          | DAVEY, Simon   |  |
|------------------------|--|--|
| Survey Comment<br>Date | Most of the Wealden Sandrock sites were visited to assess their lower plant communities. All<br>sites visited have a site description and species list. Notes on higher plants and some areas not<br>associated with the rocks, but in surrounding woods are given. A table is given which ranks how<br>significant each site is for lower plants. An appendix gives site maps. (Phase II). [SxBRC copy (2<br>parts) also held in H1b box]. Data also used to generate Sand Rock Outcrop Inventory.<br>1.95-4.95 |  |
| Site Name              | Balcombe Mill Rocks, Northlands Wood TQ317304  |  |
| Site Comment           | Rocks in woodland next to reservoirs. They have a wide range of habitats and are important for bryophytes.   |  |
| Copies Available       | SxBRC Boxes, EN, SxBRC Archive   |  |

| Survey Name      | Wealden Sandrock Survey 1995 - (911)   |  |
|------------------|--|--|
| Survey Author    | DAVEY, Simon   |  |
| Survey Comment   | Most of the Wealden Sandrock sites were visited to assess their lower plar<br>sites visited have a site description and species list. Notes on higher plants<br>associated with the rocks, but in surrounding woods are given. A table is g<br>significant each site is for lower plants. An appendix gives site maps. (Pha-<br>parts) also held in H1b box]. Data also used to generate Sand Rock Outcro<br>1.95-4.95 | s and some areas not<br>iven which ranks how<br>se II). [SxBRC copy (2 |
| Site Name        | Rowhill Lane Rocks/Pilstye Wood  | TQ303292   |
| Site Comment     | Rocks set within coniferous woodland that has some Oak.  |  |
| Copies Available | SxBRC Boxes, EN, SxBRC Archive   |  |

| Survey Name                      | Wealden Sandrock Survey 1995 - (911)  |
|----------------------------------|---|
| Survey Author                    | DAVEY, Simon  |
| Survey Comment                   | Most of the Wealden Sandrock sites were visited to assess their lower plant communities. All sites visited have a site description and species list. Notes on higher plants and some areas not associated with the rocks, but in surrounding woods are given. A table is given which ranks how significant each site is for lower plants. An appendix gives site maps. (Phase II). [SxBRC copy (2 parts) also held in H1b box]. Data also used to generate Sand Rock Outcrop Inventory. 1.95-4.95 |
| Site Name                        | Coombehole Wood/Rocks Area NE of The White House TQ299290   |
|                                  |   |
| Site Comment<br>Copies Available | A woodland in a stream valley. It supports a very rich bryophyte flora on rocks along the stream<br>sides.<br>SxBRC Boxes, EN, SxBRC Archive  |

| Survey Name      | Sussex Churchyard Survey - (916)  |               |
|------------------|---|---------------|
| Survey Author    | DONOVAN, Pat  |               |
| Survey Comment   | Botanical survey of most of the churchyards in Sussex. The majority will have just a sp<br>but the ones with ecological significance have more detail. (Phase II). NB: Results held<br>SxBRC for some of sites covered (with details for each site filed according to grid squa<br>including ESD site nos. 841[TQ33], 1370 [TQ32], 4470 [TQ32], 4341 [SU90]., 4382 [TQ01].<br>also holds documents in BRC box H2b]. | d at<br>res), |
| Date             | 1980-   |               |
| Site Name        | St Mary's Churchyard; Balcombe.   | TQ307309      |
| Site Comment     | A small village churchyard. Refer to Mid-Sussex District Council for ownership.   |               |
| Copies Available | As contact, SxBRC File Cabs, SxBRC Boxes  |               |

| Survey Name      | Sussex Churchyard Survey - (916)  |                |
|------------------|---|----------------|
| Survey Author    | DONOVAN, Pat  |                |
| Survey Comment   | Botanical survey of most of the churchyards in Sussex. The majority will have just a sp<br>but the ones with ecological significance have more detail. (Phase II). NB: Results hel<br>SxBRC for some of sites covered (with details for each site filed according to grid squa<br>including ESD site nos. 841[TQ33], 1370 [TQ32], 4470 [TQ32], 4341 [SU90]., 4382 [TQ01]<br>also holds documents in BRC box H2b]. | d at<br>ires), |
| Date             | 1980-   |                |
| Site Name        | St Peter's Churchyard, Ardingly   | TQ339298       |
| Site Comment     |   |                |
| Copies Available | As contact, SxBRC File Cabs, SxBRC Boxes  |                |

| Survey Name      | Survey of Mid-Sussex District Sportsgrounds and Cemeteries - 2 - (917)  |           |
|------------------|---|-----------|
| Survey Author    | MUNDY, Rick.  |           |
| Survey Comment   | This survey of sportsgrounds etc. in Mid-Sussex District appears to be incomple sites for which there are notes are listed; the brief notes are of the botanical inte [SxBRC copy held in H2b box]. |           |
| Site Name        | Balcombe Recreation Ground - 3c/0001  | TQ309302  |
| Site Comment     | Amenity grassland within lines of trees around the edge; some of which have a hunderstorey (used as a football pitch - 1993).   | nerb-rich |
| Copies Available | SxBRC Boxes   |           |

| •                    | WARDS, R., FUNNELL, Mike.<br>ite visit with species lists of plants and some insect groups. An SNCI proposal. (Phase II)  |  |
|----------------------|---|--|
| •                    |   |  |
| Survey Comment A sit | ite visit with species lists of plants and some insect groups. An SNCI proposal. (Phase II)   |  |
|                      | A site visit with species lists of plants and some insect groups. An SNCI proposal. (Phase II)  |  |
| <b>Date</b> 7.95     | 5   |  |
| Site Name Row        | whill Meadow/Pasture, Balcombe (Component of SNCI M42) TQ303  |  |
|                      | A field with a steep South East facing slope. There is a stream and wetter area in the south-east corner. It has floral species characteristics of unimproved grassland. Proposed SNCI- Nov'95. |  |
| Copies Available WSC | CC  |  |
|                      |   |  |

| Survey Name      | Brief Survey of Station Meadow, Balcombe - (923)  |          |
|------------------|---|----------|
| Survey Author    | EDWARDS, R., FUNNELL, Mike.   |          |
| Survey Comment   | A site visit with species lists of plants and some insect groups. An SNCI proposal. (Pl | nase II) |
| Date             | 7.95  |          |
| Site Name        | Station Meadow/Pasture, Balcombe (Component of SNCI M42)                                | TQ306301 |
| Site Comment     | Two narrow fields running north-south. One edge is wooded and shady.                    |          |
| Copies Available | WSCC  |          |

| Survey Name            | Mollusc Survey with RIGS - (935)  |
|------------------------|---|
| Survey Author          | MILLAR, Amanda J.   |
| Survey Comment<br>Date | Mollusc surveys carried out on sites visited in the course of regionally important<br>geological/geomorphological sites (RIGS) survey. [SxBRC copy held in G8 Molluscs box].<br>1993-1995 |
| Site Name              | Coombehole Wood/Rocks Area NE of The White House TQ299290   |
| Site Comment           | A woodland in a stream valley. It supports a very rich bryophyte flora on rocks along the stream sides.   |
| Copies Available       | As contact, SxBRC Boxes   |

| Survey Name            | Tunbridge Filmy-Fern in SE England - (939)  |    |
|------------------------|---|----|
| Survey Author          | RICH, Tim, RICHARDSON, Sarah  |    |
| Survey Comment<br>Date | A survey to assess the survival of the fern after the 1987 storm. All known sites surveyed and population sizes counted. (Phase II). [SxBRC copy held in G1/2/3 box].<br>1994 |    |
| Site Name              | Balcombe Mill Rocks, Northlands Wood TQ3173   | 04 |
| Site Comment           | Rocks in woodland next to reservoirs. They have a wide range of habitats and are important for bryophytes.  |    |
| Copies Available       | SxBRC Boxes   |    |

| Survey Name      | Tunbridge Filmy-Fern in SE England - (939)  |
|------------------|---|
| Survey Author    | RICH, Tim, RICHARDSON, Sarah  |
| Survey Comment   | A survey to assess the survival of the fern after the 1987 storm. All known sites surveyed and population sizes counted. (Phase II). [SxBRC copy held in G1/2/3 box]. |
| Date             | 1994  |
| Site Name        | Rowhill Lane Rocks/Pilstye Wood TQ303292  |
| Site Comment     | Rocks set within coniferous woodland that has some Oak.   |
| Copies Available | SxBRC Boxes   |
|                  |   |

| Survey Name            | Tunbridge Filmy-Fern in SE England - (939)   |         |
|------------------------|--|---------|
| Survey Author          | RICH, Tim, RICHARDSON, Sarah   |         |
| Survey Comment<br>Date | A survey to assess the survival of the fern after the 1987 storm. All known sites surveyed population sizes counted. (Phase II). [SxBRC copy held in G1/2/3 box]. 1994 | l and   |
| Site Name              |  | Q290293 |
| Site Comment           | Replanted ancient woodland in shallow north-south running valley. Locally there is seve storm damage.  | re      |
| Copies Available       | SxBRC Boxes  |         |

| Survey Name      | Preliminary Survey of the Edges of Ardingly Reservoir - (950)   |          |
|------------------|---|----------|
| Survey Author    | DOLPHIN ECOLOGICAL SURVEYS  |          |
| Survey Comment   | A preliminary botanical survey to assess the quality of the site. It did not produce a full list, but picked out key and characteristic species with a view to implementing a managelan. Management recommendations are given. (Phase II) |          |
| Date             | 7.95  |          |
| Site Name        | Ardingly Reservoir (North East Edge of)   | TQ326297 |
| Site Comment     | Much of the site is improved or semi-improved grassland, willow scrub and woodland.<br>parts of SNCI M40.   | Includes |
| Copies Available | WSCC  |          |

| Survey Name      | SSSI Data Collation - (1000)   |  |
|------------------|--|--|
|                  |  |  |
| Survey Author    | ENGLISH NATURE   |  |
| Survey Comment   | All information for SSSIs is held with EN. Detailed information on most groups of plants and<br>animals is held for each site. This includes de-notified SSSIs, but not proposed SSSIs. The<br>information is updated fairly often by monitoring or additional surveys. NOTE: Groups covered<br>varies with site. (Phase II/III) |  |
| Date             | 1949-  |  |
| Site Name        | Worth Forest SSSI TQ299331   |  |
| Site Comment     | This area of ancient Wealden gilll woodland contains an example of a base-poor, springline<br>alder wood, this being a nationally uncommon woodland type. The site also supports a rich<br>community of lichens.   |  |
| Copies Available | EN   |  |

| Survey Name      | Pond Creation Letters - (1071)  |          |
|------------------|---|----------|
| Survey Author    | CURRELL, Peter  |          |
| Survey Comment   | Letters with ideas for pond creation and notes on plant species seen on brief site visits | 5.       |
| Date             | 7.97  |          |
| Site Name        | Field W of Balcombe Wood (Pond Creation Site at)  | TQ321276 |
| Site Comment     |   |          |
| Copies Available | WSCC  |          |

| Survey Name      | Survey of the Fields at Cherry Lane - (1077)           |          |
|------------------|--|----------|
| <b>6</b> • • •   |  |          |
| Survey Author    | CURRELL, Peter   |          |
| Survey Comment   | Notes on wildlife seen and management recommendations. |          |
| Date             | 5.97   |          |
| Site Name        | Fields at Hillside, E of Cherry Lane, Cuckfield Rural  | TQ302280 |
| Site Comment     | Botanically poor fields                                |          |
| Copies Available | WSCC   |          |

| Survey Name      | Nightjars, Woodlarks and Dartford Warblers in E & W Sussex and Wealden Heaths - (1172)   |
|------------------|--|
| Survey Author    | PAPAZOGLOU, Fontini, BURGESS, Dave   |
| Survey Comment   | A survey of Nightjar (Caprimulgus europeus), Woodlark (Lullula arborea) and Dartford Warbler<br>(Sylvia undata) for number and distribution between 1991 and 1997 for West and East Sussex.<br>Seven sites supported all three species.  |
| Date             | 1991-97  |
| Site Name        | Oldhouse Warren & Cowdray Forest TQ298335  |
| Site Comment     | Site is part of Paddockhurst Estate and includes Cowdray Forest. Afforested heathland and young conifer plantation. Area to north of bridleway is largely coniferous plantation with some areas of sweet chestnut coppice + areas of heathland habitat. Area to south of bridleway has a number of mature broadleaf plantations + natural wet woodland (SSSI) + sweet chestnut coppice. Area to south of stream has mature coniferous and broadleaf woodland. Area supports one nightjar and two - three woodlark territories. |
| Copies Available | WSCC, EN/SSSI/SCI  |
| Survey Name      | Nightjars, Woodlarks and Dartford Warblers in E & W Sussex and Wealden Heaths - (1172)   |
| Survey Author    | PAPAZOGLOU, Fontini, BURGESS, Dave   |
| Survey Comment   | A survey of Nightjar (Caprimulgus europeus), Woodlark (Lullula arborea) and Dartford Warbler<br>(Sylvia undata) for number and distribution between 1991 and 1997 for West and East Sussex.<br>Seven sites supported all three species.  |
| Date             | 1991-97  |
| Site Name        | The Warren & Balcombe Wood, Paddockhurst Estate TQ322323   |
| Site Comment     | Afforested heathland and young conifer plantation. Supports two woodlark territories. See also<br>18,225 - Paddockhurst Estate - The Warren.   |

Copies Available

WSCC, EN/SSSI/SCI

| Survey Name      | Worth Abbey Estate Survey and Management Plan - (1179) |          |
|------------------|--|----------|
| Survey Author    | DOLPHIN ECOLOGICAL SURVEYS                             |          |
| Survey Comment   | A detailed survey and a management plan. (Phase II)    |          |
| Date             | 1998   |          |
| Site Name        | Worth Abbey Estate                                     | TQ317338 |
| Site Comment     | Potential SNCI   |          |
| Copies Available | WSCC   |          |

| Survey Name      | West Sussex Woodlarks Survey - (1183)   |                               |
|------------------|---|-------------------------------|
|                  |   |                               |
| Survey Author    | BURGESS, Dave   |                               |
| Survey Comment   | Annual Survey of Woodlarks + Dartford Warbler. Records also at SOS.   |                               |
| Date             | 1996, 1998, 2000  |                               |
| Site Name        | Oldhouse Warren & Cowdray Forest  | TQ298335                      |
| Site Comment     | Site is part of Paddockhurst Estate and includes Cowdray Forest. Afforested heathlar<br>young conifer plantation. Area to north of bridleway is largely coniferous plantation w<br>areas of sweet chestnut coppice + areas of heathland habitat. Area to south of bridlew<br>number of mature broadleaf plantations + natural wet woodland (SSSI) + sweet chest<br>coppice. Area to south of stream has mature coniferous and broadleaf woodland. Are<br>one nightjar and two - three woodlark territories. | vith some<br>way has a<br>nut |
| Copies Available | WSCC, EN/SSSI/SCI   |                               |

| Survey Name      | West Sussex Woodlarks Survey - (1183)   |            |
|------------------|---|------------|
| Survey Author    | BURGESS, Dave   |            |
| Survey Comment   | Annual Survey of Woodlarks + Dartford Warbler. Records also at SOS.   |            |
| Date             | 1996, 1998, 2000  |            |
| Site Name        | The Warren & Balcombe Wood, Paddockhurst Estate   | TQ322323   |
| Site Comment     | Afforested heathland and young conifer plantation. Supports two woodlark territories 18,225 - Paddockhurst Estate - The Warren. | . See also |
| Copies Available | WSCC, EN/SSSI/SCI   |            |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)   |                                      |
|------------------|--|--------------------------------------|
| Survey Author    | LEE DONALD ASSOCIATES  |                                      |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is a<br>each section is treated as a discrete site. Only macrophyte (large aquatic<br>are described in detail. DAFOR scale is used to describe abundance. De<br>handrawn maps. Bank profiles and vegetation structure are visually pres | plants) communities<br>tailed OS and |
| Date             | Jan 1995   |                                      |
| Site Name        | River Ouse, Section 126  | TQ333283                             |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles  |                                      |
| Copies Available | EA. SWT  |                                      |

|                     | River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)  |
|---------------------|---|
| Survey Author LE    | EE DONALD ASSOCIATES  |
| ea<br>are           | River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m sections<br>ach section is treated as a discrete site. Only macrophyte (large aquatic plants) communities<br>re described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>andrawn maps. Bank profiles and vegetation structure are visually presented. |
| Date Ja             | in 1995   |
| Site Name Riv       | ver Ouse, Section 127 TQ32828   |
| Site Comment 50     | 00m stretch of river noting macrophytes and river profiles  |
| Copies Available EA | A, SWT  |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)  |          |
|------------------|---|----------|
|                  |   |          |
| Survey Author    | LEE DONALD ASSOCIATES   |          |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m each section is treated as a discrete site. Only macrophyte (large aquatic plants) comr are described in detail. DAFOR scale is used to describe abundance. Detailed OS and handrawn maps. Bank profiles and vegetation structure are visually presented. | nunities |
| Date             | Jan 1995  |          |
| Site Name        | River Ouse, Section 128   | TQ324279 |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles   |          |
| Copies Available | EA, SWT   |          |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)  |                              |
|------------------|---|------------------------------|
| Survey Author    | LEE DONALD ASSOCIATES   |                              |
|                  | A River Corridor Survey of the River Ouse Catchment. The catchment is split i<br>each section is treated as a discrete site. Only macrophyte (large aquatic plan<br>are described in detail. DAFOR scale is used to describe abundance. Detailed<br>handrawn maps. Bank profiles and vegetation structure are visually presente | nts) communities<br>d OS and |
| Date             | Jan 1995  |                              |
| Site Name        | River Ouse, Section 129   | TQ320278                     |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles   |                              |
| Copies Available | EA, SWT   |                              |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)  |        |
|------------------|---|--------|
| Survey Author    | LEE DONALD ASSOCIATES   |        |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m sec<br>each section is treated as a discrete site. Only macrophyte (large aquatic plants) communi<br>are described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>handrawn maps. Bank profiles and vegetation structure are visually presented. |        |
| Date             | Jan 1995  |        |
| Site Name        | Rive Ouse, Section 130 TQ3  | 315280 |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles   |        |
| Copies Available | EA, SWT   |        |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)  |          |
|------------------|---|----------|
|                  |   |          |
| Survey Author    | LEE DONALD ASSOCIATES   |          |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m each section is treated as a discrete site. Only macrophyte (large aquatic plants) comr are described in detail. DAFOR scale is used to describe abundance. Detailed OS and handrawn maps. Bank profiles and vegetation structure are visually presented. | nunities |
| Date             | Jan 1995  |          |
| Site Name        | River Ouse, Section 131   | TQ315284 |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles   |          |
| Copies Available | EA, SWT   |          |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)   |                              |
|------------------|--|------------------------------|
| Survey Author    | LEE DONALD ASSOCIATES  |                              |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split<br>each section is treated as a discrete site. Only macrophyte (large aquatic pla<br>are described in detail. DAFOR scale is used to describe abundance. Detaile<br>handrawn maps. Bank profiles and vegetation structure are visually presented | nts) communities<br>d OS and |
| Date             | Jan 1995   |                              |
| Site Name        | River Ouse, Section 132  | TQ311283                     |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles  |                              |
| Copies Available | EA, SWT  |                              |

|                      | River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)   |
|----------------------|--|
| Survey Author LEI    | E DONALD ASSOCIATES  |
| eac<br>are           | River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m sections<br>ich section is treated as a discrete site. Only macrophyte (large aquatic plants) communities<br>e described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>indrawn maps. Bank profiles and vegetation structure are visually presented. |
| Date Jar             | n 1995   |
| Site Name Riv        | ver Ouse, Section 133 TQ30628  |
| Site Comment 500     | Om stretch of river noting macrophytes and river profiles  |
| Copies Available EA, | A, SWT   |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)   |    |
|------------------|--|----|
|                  |  |    |
| Survey Author    | LEE DONALD ASSOCIATES  |    |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m sections<br>each section is treated as a discrete site. Only macrophyte (large aquatic plants) communities<br>are described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>handrawn maps. Bank profiles and vegetation structure are visually presented. | 5, |
| Date             | Jan 1995   |    |
| Site Name        | River Ouse, Section 134 TQ30228  | 31 |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles  |    |
| Copies Available | EA, SWT  |    |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)  |                                |
|------------------|---|--------------------------------|
| Survey Author    | LEE DONALD ASSOCIATES   |                                |
| ·                | A River Corridor Survey of the River Ouse Catchment. The catchment is split<br>each section is treated as a discrete site. Only macrophyte (large aquatic pla<br>are described in detail. DAFOR scale is used to describe abundance. Detail<br>handrawn maps. Bank profiles and vegetation structure are visually present | ants) communities<br>ed OS and |
| Date             | Jan 1995  |                                |
| Site Name        | River Ouse, Section 135   | TQ298280                       |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles   |                                |
| Copies Available | EA, SWT   |                                |

| Survey Name A       | River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)   |     |
|---------------------|--|-----|
| Survey Author       | EE DONALD ASSOCIATES   |     |
| ea<br>ar            | River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m section<br>ach section is treated as a discrete site. Only macrophyte (large aquatic plants) communities<br>re described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>andrawn maps. Bank profiles and vegetation structure are visually presented. |     |
| Date Ja             | an 1995  |     |
| Site Name Ri        | iver Ouse, Section 136 TQ2942  | 280 |
| Site Comment 50     | 00m stretch of river noting macrophytes and river profiles   |     |
| Copies Available EA | A, SWT   |     |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 2 - (2110)  |          |
|------------------|---|----------|
|                  |   |          |
| Survey Author    | LEE DONALD ASSOCIATES   |          |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500r<br>each section is treated as a discrete site. Only macrophyte (large aquatic plants) com<br>are described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>handrawn maps. Bank profiles and vegetation structure are visually presented. | munities |
| Date             | Jan 1995  |          |
| Site Name        | Ouse Trib., Bentley Farm, Section 1   | TQ311278 |
| Site Comment     | 500m stretch of river noting macrophytes and river profiles   |          |
| Copies Available | EA, SWT   |          |

| Survey Name            | A River Corridor Survey, River Ouse Catchment, Volume 3 - (2111)  |          |
|------------------------|---|----------|
| Survey Author          | LEE DONALD ASSOCIATES   |          |
| Survey Comment<br>Date | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500r<br>each section is treated as a discrete site. Only macrophyte (large aquatic plants)comr<br>are described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>handrawn maps. Bank profiles and vegetation structure are visually presented.<br>Jan 1995 | nunities |
| Site Name              | River Ouse, Shell Brook, Section 1  | TQ335284 |
| Site Comment           | 500m stretch of the main river was surveyed listing macrophytes and noting profiles.<br>Management recomendations also given.   |          |
| Copies Available       | EA, SWT   |          |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 3 - (2111)  |          |
|------------------|---|----------|
| Survey Author    | LEE DONALD ASSOCIATES   |          |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m each section is treated as a discrete site. Only macrophyte (large aquatic plants)commare described in detail. DAFOR scale is used to describe abundance. Detailed OS and handrawn maps. Bank profiles and vegetation structure are visually presented. | nunities |
| Date             | Jan 1995  |          |
| Site Name        | River Ouse, Shell Brook, Section 2  | TQ335287 |
| Site Comment     | 500m stretch of the main river was surveyed listing macrophytes and noting profiles.<br>Management recomendations also given.   |          |
| Copies Available | EA, SWT   |          |

| Survey Name      | A River Corridor Survey, River Ouse Catchment, Volume 3 - (2111)   |          |
|------------------|--|----------|
| Survey Author    | LEE DONALD ASSOCIATES  |          |
| Survey Comment   | A River Corridor Survey of the River Ouse Catchment. The catchment is split into 500m sections,<br>each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities<br>are described in detail. DAFOR scale is used to describe abundance. Detailed OS and<br>handrawn maps. Bank profiles and vegetation structure are visually presented. |          |
| Date             | Jan 1995   |          |
| Site Name        | River Ouse, Shell Brook, Section 3   | TQ333289 |
| Site Comment     | 500m stretch of the main river was surveyed listing macrophytes and noting profiles.<br>Management recomendations also given.  |          |
| Copies Available | EA, SWT  |          |

| Survey Name      | Botanical Survey of Selected Heathland or Potential Heathland Sites - (1287)   |      |
|------------------|--|------|
| Survey Author    | WHEELER, Belinda   |      |
| Survey Comment   | A record of botanical species, indicating relative abundance, problem species and any rare or uncommon species in selected heathland sites. Plus recommended management practice.                                      |      |
| Date             | 8.98   |      |
| Site Name        | Paddockhurst Estate (Entrance Ride & Plantation to South). TQ30  | 3339 |
| Site Comment     | Mown ride dominated by agrostis and clover, with interesting heathland flora at end of ride.<br>Indicators of wet heath. Some mown and some unmown strips within the plantation, both with<br>typical heathland flora. |      |
| Copies Available | WSCC   |      |

| Survey Name      | Botanical Survey of Selected Heathland or Potential Heathland Sites - (1287)   |  |
|------------------|--|--|
|                  |  |  |
| Survey Author    | WHEELER, Belinda   |  |
| Survey Comment   | A record of botanical species, indicating relative abundance, problem species and any rare or uncommon species in selected heathland sites. Plus recommended management practice.  |  |
| Date             | 8.98   |  |
| Site Name        | Paddockhurst Estate (Failed Coppice Block, Oldhouse Warren) TQ293339   |  |
| Site Comment     | Large block, which had been planted with sweet chestnut for coppicing but largely failed due to damp. Wide range of species characteristic of wet and dry heathland. Block slopes east to west. Some important spp. rare to area. Important that site is not destroyed by planting/drainage etc. |  |
| Copies Available | WSCC   |  |

| Survey Name                      | Flora of St Leonards, Tilgate, Worth & Adjoining Forests (AWJ Code B7) - (1319)  |  |
|----------------------------------|--|--|
| Survey Author                    | JONES, A. W.   |  |
| Survey Comment<br>Date           | A detailed botanical survey of the flora of St Leonards, Tilgate, Worth and adjoining forests (vol<br>1-3). (Phase III).  Vol 1 - Introduction and Habitats; vol 2 - Systematic list; vol 3 - Tables.<br>1973-1977 |  |
| Site Name                        | St Leonard's, Tilgate, Worth & adjoining Forests (Balcombe Division) TQ300320  |  |
| Site Comment<br>Copies Available | As contact   |  |

| Survey Name      | Flora of St Leonards, Tilgate, Worth & Adjoining Forests (AWJ Code B7) - (1319)   |  |
|------------------|---|--|
| Survey Author    | JONES, A. W.  |  |
| Survey Comment   | A detailed botanical survey of the flora of St Leonards, Tilgate, Worth and adjoining forests (vol 1-3). (Phase III). Vol 1 - Introduction and Habitats; vol 2 - Systematic list; vol 3 - Tables. |  |
| Date             | 1973-1977   |  |
| Site Name        | St Leonard's, Tilgate, Worth & adjoining Forests (Worth Division) TQ297297  |  |
| Site Comment     |   |  |
| Copies Available | As contact  |  |

| Survey Name      | Flora of St Leonards, Tilgate, Worth & Adjoining Forests (AWJ Code B7) - (1319)   |   |
|------------------|---|---|
| Survey Author    | JONES, A. W.  |   |
| Survey Comment   | A detailed botanical survey of the flora of St Leonards, Tilgate, Worth and adjoining forests (vol<br>1-3). (Phase III).  Vol 1 - Introduction and Habitats; vol 2 - Systematic list; vol 3 - Tables. |   |
| Date             | 1973-1977   |   |
| Site Name        | St Leonard's, Tilgate, Worth & adjoining Forests (Priory Division) TQ317325   | ō |
| Site Comment     |   |   |
| Copies Available | As contact  |   |

| Survey Name      | Flora of St Leonards, Tilgate, Worth & Adjoining Forests (AWJ Code B7) - (1319)   |  |
|------------------|---|--|
| Survey Author    | JONES, A. W.  |  |
| Survey Comment   | A detailed botanical survey of the flora of St Leonards, Tilgate, Worth and adjoining forests (vol<br>1-3). (Phase III).  Vol 1 - Introduction and Habitats; vol 2 - Systematic list; vol 3 - Tables. |  |
| Date             | 1973-1977   |  |
| Site Name        | St Leonard's, Tilgate, Worth & adjoining Forests (Stonehall Division) TQ322295  |  |
| Site Comment     |   |  |
| Copies Available | As contact  |  |
|                  |   |  |

| Survey Name            | Flora of River's Wood, Ardingly (AWJ Code B5) - (1321)   |  |
|------------------------|--|--|
| Survey Author          | JONES, A. W.   |  |
| Survey Comment<br>Date | A detailed botanical survey of the flora of River's Wood, Ardingly, Sussex. (Phase III). Mostly<br>woodland habitat but also includes Ouse riverside and grassland. Survey conducted in office<br>lunch hours. [AWJ Code B5].<br>1975-1980 |  |
| Site Name              | River's Wood (AWJ Area B5), Ardingly TQ330280  |  |
| Site Comment           | Mainly woodland but includes Ouse riverbank and adjacent grassland. NB AWJ = A W Jones.  |  |
| Copies Available       | As contact   |  |

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| Survey Name      | Paddockhurst Estate, West Sussex - Botanical Survey - (1391)   |          |
|------------------|--|----------|
|                  |  |          |
| Survey Author    | WHEELER, Belinda   |          |
| Survey Comment   | A botanical survey of three areas of Paddockhurst Estate to identify areas of heathland habitat under forest plantation, to survey rides supporting heath species and to identify the priority rides for enhancement. [SxBRC copy filed under TQ33].   |          |
| Date             | 6.99 - 10.99   |          |
| Site Name        | Oldhouse Warren & Cowdray Forest   | TQ298335 |
| Site Comment     | Site is part of Paddockhurst Estate and includes Cowdray Forest. Afforested heathland and young conifer plantation. Area to north of bridleway is largely coniferous plantation with some areas of sweet chestnut coppice + areas of heathland habitat. Area to south of bridleway has a number of mature broadleaf plantations + natural wet woodland (SSSI) + sweet chestnut coppice. Area to south of stream has mature coniferous and broadleaf woodland. Area supports one nightjar and two - three woodlark territories. |          |
| Copies Available | WSCC, SxBRC File Cabs  |          |

| Survey Name      | Paddockhurst Estate, West Sussex - Botanical Survey - (1391)   |  |
|------------------|--|--|
| Survey Author    | WHEELER, Belinda   |  |
| Survey Comment   | A botanical survey of three areas of Paddockhurst Estate to identify areas of heathland habitat under forest plantation, to survey rides supporting heath species and to identify the priority rides for enhancement. [SxBRC copy filed under TQ33]. |  |
| Date             | 6.99 - 10.99   |  |
| Site Name        | Paddockhurst Estate (The Warren) TQ318325  |  |
| Site Comment     | Afforested heathland. Plantation and rides supporting heathland habitat. Eastern area is sweet chestnut coppice. See also 1960 - The Warren/Balcombe Wood.   |  |
| Copies Available | WSCC, SxBRC File Cabs  |  |

| Survey Name      | Survey of Ardingly College Sports Field - (1399)  |  |
|------------------|---|--|
| Survey Author    | CURSON, Simon   |  |
| Survey Comment   | A survey of Ardingly College Sports Field - frequently cut amenity grassland bordered by silver birch and alder woodland shaws along river bank - management suggestions to make an area suitable for otters, barn owls, kingfisher and grey wagtail. |  |
| Date             | 25.1.99   |  |
| Site Name        | Ardingly College Sports Field TQ33428'  |  |
| Site Comment     | Frequently cut amenity grassland bordered by silver birch and alder woodland shaws along river bank. Management suggestions to make area suitable for otters, barn owls, kingfisher and grey wagtail.   |  |
| Copies Available | As contact  |  |

| Survey Name      | Survey of North Park, Borde Hill Estate - (1401)  |          |
|------------------|---|----------|
| Survey Author    | CURSON, Simon   |          |
| Survey Comment   | A study that determined the sited to be not very species rich grassland with potenti-<br>improved grassland. Management recommendation are included - two brown hare<br>could breed here. |          |
| Date             | 12.5.99   |          |
| Site Name        | North Park, Borde Hill Estate   | TQ320272 |
| Site Comment     | Large areas of open grassland - not very species-rich + some arable land.   |          |
| Copies Available | As contact  |          |

| Survey Name      | Survey of Open Spaces and Recreation Grounds in Mid-Sussex (I) - (1428)   |          |
|------------------|---|----------|
| Survey Author    | MUNDY, Rick.  |          |
| Survey Comment   | A botanical survey of 31 sites giving a short description of the site, species found and conservation interest for each.            |          |
| Date             | 11.92 - 2.93  |          |
| Site Name        | Balcombe Recreation Ground - 3c/0001  | TQ309302 |
| Site Comment     | Amenity grassland within lines of trees around the edge; some of which have a herb-riunderstorey (used as a football pitch - 1993). | ch       |
| Copies Available | SWT   |          |

| Survey Name      | Evaluation of the Headwaters of River Mole - (1486)  |  |
|------------------|--|--|
|                  |  |  |
| Survey Author    | DAVIDSON, Charlotte  |  |
| Survey Comment   | Evaluation of 7 specific sites on stretches of the headwaters of the River Mole sampled for invertebrates, fish and water voles, plus River Habitat Surveys (each over 500m) .   |  |
| Date             | 6.7.99 - 10.8.99   |  |
| Site Name        | River Mole Headwaters: Cowdray Forest Stream River Habitat (W of TQ301333  |  |
| Site Comment     | River habitat survey site (500m stretch) for R Mole headwaters evaluation. Area of ancient semi-<br>natural and ancient replanted woodland - deciduous and coniferous - fairly open. NB:<br>boundaries estimated since exact location of site not provided: site has been digitised by taking<br>section 250m above and below grid ref for related Sample Point (see site 3499). |  |
| Copies Available | WSCC   |  |

| Survey Name      | Evaluation of the Headwaters of River Mole - (1486)   |
|------------------|---|
| Survey Author    | DAVIDSON, Charlotte   |
| Survey Comment   | Evaluation of 7 specific sites on stretches of the headwaters of the River Mole sampled for invertebrates, fish and water voles, plus River Habitat Surveys (each over 500m) .  |
| Date             | 6.7.99 - 10.8.99  |
| Site Name        | River Mole Headwaters: Cowdray Forest Stream River Habitat (Parish TQ291334   |
| Site Comment     | Lane Area)<br>River habitat survey site (500m stretch) for R Mole headwaters evaluation. Area of ancient semi-<br>natural and ancient replanted woodland - deciduous and coniferous - fairly open. NB<br>boundaries estimated since exact location of site not provided: site has been digitised by taking<br>section 250m above and below grid ref for related Sample Point (see site 3510). |
| Copies Available | WSCC  |

| Survey Name      | Evaluation of the Headwaters of River Mole - (1486)  |  |
|------------------|--|--|
|                  |  |  |
| Survey Author    | DAVIDSON, Charlotte  |  |
| Survey Comment   | Evaluation of 7 specific sites on stretches of the headwaters of the River Mole sampled for invertebrates, fish and water voles, plus River Habitat Surveys (each over 500m) .   |  |
| Date             | 6.7.99 - 10.8.99   |  |
| Site Name        | River Mole Headwaters: Brantridge Forest Stream River Habitat TQ284321   |  |
| Site Comment     | River Habitat survey site (500m stretch) for R Mole headwaters evaluation. Area of ancient replanted woodland and some ancient semi-natural. NB boundaries estimated since exact location of site not provided: site has been digitised by taking sections 250m above and below grid ref for related Sample Point (see site 3377). |  |
| Copies Available | WSCC   |  |

## Survey Name EA National Fisheries Monitoring Programme: Fisheries Reports - (2786)

Survey Author ENVIRONMENT AGENCY

**Survey Comment** The National Fisheries Monitoring Programme (NFMP) was designed by the Agency to identify spatial and temporal trends and patterns in fish populations at a local and national level. The Sussex Area Ecological Appraisal Team have undertaken a programme of riverine fish population surveys to establish baseline data for each major watercourse in the Sussex area in line with the National Programme. 100m or 150m sections of river were sampled by either a single-catch or a 3-catch depletion using standard electric fishing techniques. Fisheries Reports (drawing upon data from as far back as approximately 1984) for each river provide info on species composition, population dynamics, biomass for each species, total fish biomass, length-weight relationship for each species, and length-age relationship for species of angling importance. 2005 Reports cover the rivers Arun, Adur, Cuckmere, Ouse, Rother, and Pevensey Levels. Date various Site Name River Ouse (EA Site OU05: Ardingly) TQ332283 Site Comment A 150m section at this location has been electrofished for the National Fisheries Monitoring Programme. EA, SxBRC Archive **Copies Available** 

| Survey Name      | Clay's Lake - Tree Roost Assessment Report - (3435)   |  |
|------------------|---|--|
| Survey Author    | ENVIRONMENT AGENCY  |  |
| Survey Comment   | A summary report of a tree bat roost potential survey in respect of approved plans for a new flood detention reservoir for the Upper Mole Flood Alleviation Scheme. No data to extract.   |  |
| Date             | 2010  |  |
| Site Name        | Clay's Lake - Upper Mole Flood Alleviation Scheme Tree Roost Survey TQ28832   |  |
| Site Comment     | Three connected patches of woodland trees surrounding the lake, identified as potential bat tree roost habitat. The lake is located approximately 1.5km south of the M23 between junctions 10 and 11 south of Crawley. A railway borders the east of the site. The lake is online with the Stanford Brook, a tributary of the Gatwick Stream that in turn flows into the River Mole. The site includes the works footprint of the Upper Mole Flood Alleviation Scheme, associated access routes and connected habitats. |  |
| Copies Available | SxBRC Digital   |  |
| Survey Name      | Clay's Lake - Dormouse Survey Report - (3436)   |  |
| Survey Name      |   |  |
| Survey Author    | ENVIRONMENT AGENCY  |  |
| Survey Comment   | The report of a survey for dormouse to determine the presence or likely absence of dormouse in areas affected by the proposed works and contiguous habitats, as identified in an associated Phase 1 survey report, in respect of approved plans for a new flood detention reservoir for the Upper Mole Flood Alleviation Scheme.  |  |
| Date             | 25.05 - 21.10.2010  |  |
| Site Name        | Clay's Lake - Upper Mole Flood Alleviation Scheme Dormouse Survey TQ28732   |  |
| Site Comment     | Area<br>Patches of hegerow and woodland identified as potential dormouse habitat by the lake which is<br>located approximately 1.5km south of the M23 between junctions 10 and 11 south of Crawley. A<br>railway borders the east of the site. The lake is online with the Stanford Brook, a tributary of the<br>Gatwick Stream that in turn flows into the River Mole. The site includes the works footprint of<br>the Upper Mole Flood Alleviation Scheme, associated access routes and connected habitats.           |  |
| Copies Available | SxBRC Digital   |  |
| Survey Name      | Clay's Lake - Great Crested Newt Survey Report - (3437)   |  |
| Curryov Author   | ENVIRONMENT AGENCY  |  |
| Survey Author    |   |  |
| Survey Comment   | A report great crested newt surveys of one pond in respect of areas affected by the proposed works for a new flood detention reservoir for the Upper Mole Flood Alleviation Scheme.   |  |
| Date             | 08.04 - 27.05.2010  |  |
| Site Name        | Clay's Lake - Upper Mole Flood Alleviation Scheme GCN Survey Area TQ28832   |  |
| Site Comment     | A pond north of the lake. The lake is located approximately 1.5km south of the M23 between junctions 10 and 11 south of Crawley. A railway borders the east of the site. The lake is online with the Stanford Brook, a tributary of the Gatwick Stream that in turn flows into the River Mole The site includes the works footprint of the Upper Mole Flood Alleviation Scheme, associated access routes and connected habitats.  |  |
| Copies Available | SxBRC Digital   |  |

| Survey Name      | Clay's Lake - Reptile Report - (3439)   |  |
|------------------|---|--|
|                  |   |  |
| Survey Author    | ENVIRONMENT AGENCY  |  |
| Survey Comment   | A report presenting a factual summary of the reptile work undertaken at Clay's Lake. The aim of the survey was to determine the presence or likely absence of reptiles in areas affected by the proposed works for a new flood detention reservoir for the Upper Mole Flood Alleviation Scheme.   |  |
| Date             | 18.04 - 28.09.2010  |  |
| Site Name        | Clay's Lake - Upper Mole Flood Alleviation Scheme Reptile Survey Area TQ288328  |  |
| Site Comment     | Patches of habitat identified as potentially suitable for reptiles. The lake is located<br>approximately 1.5km south of the M23 between junctions 10 and 11 south of Crawley. A railway<br>borders the east of the site. The lake is online with the Stanford Brook, a tributary of the Gatwick<br>Stream that in turn flows into the River Mole. The site includes the works footprint of the Upper<br>Mole Flood Alleviation Scheme, associated access routes and connected habitats. |  |
| Copies Available | SxBRC Digital   |  |

# **Glossary of Abbreviations**

## Organisations:

| BBCS     | British Butterfly Conservation Society<br>(now Butterfly Conservation) | www.sussex-butterflies.org.uk                |
|----------|--|--|
| BMONH    | Booth Museum of Natural History  | Tel: 03000 290900                            |
| BSBI     | Botanical Society of the British Isles                                 | www.bsbi.org.uk                              |
| BTO      | British Trust for Ornithology  | Tel: 01842 750050                            |
| EA       | Environment Agency   | Tel: 08708 506506 (Southern Regional Office) |
| EN       | English Nature (now Natural England)                                   | Tel: 03000 600 300 (Sussex Team)             |
| ESCC     | East Sussex County Council   | Tel: 01273 481621 (County Ecologist)         |
| FC       | Forestry Commission  | Tel: 01420 23337 (SE England)                |
| FWAG     | Farming and Wildlife Advisory Group                                    | Tel: 01273 891190 (Sussex Area)              |
| NCC      | Nature Conservancy Council (now NE)                                    | Contact NE                                   |
| NE       | Natural England  | Tel: 03000 600 300 (Sussex Team)             |
| NRA      | National Rivers Authority (now EA)                                     | Contact EA                                   |
| NT       | National Trust   | Tel: 01372 453401 (South East Office)        |
| RSPB     | Royal Society for the Protection of Birds                              | Tel: 01273 775333 (SE Regional Office)       |
| SBRS     | Sussex Botanical Recording Society                                     | www.sussexflora.org.uk                       |
| SOS      | Sussex Ornithological Society  | www.sos.org.uk                               |
| SxBRC    | Sussex Biodiversity Record Centre                                      | Tel: 01273 497521                            |
| SxWT/SWT | Sussex Wildlife Trust  | Tel: 01273 492630                            |
| WSCC     | West Sussex County Council   | Tel: 01243 756691 (County Ecologist)         |

## **Designations:**

| AONB   | Area of Outstanding Natural Beauty                    |
|--------|---|
| COGS   | County Geological/Geomorphological Site               |
| LNR    | Local Nature Reserve                                  |
| NNR    | National Nature Reserve                               |
| NP     | National Park   |
| RAMSAR | RAMSAR (internationally important wetlands)           |
| RIGS   | Regionally Important Geological/Geomorphological Site |
| SAC    | Special Area of Conservation                          |
| SNCI   | Site of Nature Conservation Importance                |
| SPA    | Special Protection Area                               |
| SSSI   | Site of Special Scientific Interest                   |

## Surveys:

| Phase I   | A broad habitat survey with a dominant species list and land use information.          |
|-----------|--|
| Phase II  | Mapping of vegetation communities with species lists and abundance/distribution.       |
| Phase III | A detailed survey including ecological processes and long term monitoring information. |
| NVC       | National Vegetation Classification.  |

# **MAP CITATION SHEETS**

Sites of Nature Conservation Importance (SNCIs) are non-statutory designations which are identified at a county level. They typically form a network of sites that are recognised to be of local conservation importance and are often included in Local Authority development plans. In other areas of the country they are sometimes called SINCs (Sites of Importance for Nature Conservation) or County Wildlife sites.

There are many sites within East and West Sussex and Brighton and Hove that are not recognised under the national designation of SSSI (Site of Special Scientific Interest) but are of considerable wildlife value due to the special interest of their flora or fauna. In May 1990 a Sussex-wide project was instigated to identify which non-designated sites were important for wildlife. The selected sites are now known as SNCIs. The aim of this identification was to protect such sites from land management changes, which may lessen their nature conservation interest, and to encourage sensitive management to maintain and enhance their importance.

Sites within both rural and urban areas were considered but the evaluation process considers two types of site under slightly different criteria:

- **Rural sites**, that may contain habitats such as heathland or ancient woodland, must be of county-wide importance.
- **Urban sites** must recognise the importance to safeguard important urban wildlife sites, to link all significant greenspaces and to ensure that people in towns have easy access to wildlife areas.

The selection of SNCIs was made, after extensive survey work, by a panel of expert ecologists. This panel included representatives from the relevant County Council, English Nature (now Natural England) and the Sussex Wildlife Trust. A range of specialists with either specific species knowledge or a sound knowledge of the county's ecology were also involved with the selection process. Assessment and identification of SNCIs is a continuing process with new sites being identified and others deleted as ecological knowledge of the total resource and specific sites increase.

In West Sussex SNCI selection is steered by the County Council, whereas in East Sussex it is steered by the District Councils. Currently there are over 600 SNCIs in Sussex.

Although SNCIs have no statutory protection they need to be considered in the planning process through Planning Policy Guidance such as PPG9 which refers to the Town & Country Planning Act 1990 Section 30. This states that nature conservation issues should be included in the surveys of local authority areas to ensure that the plans are based on fully adequate information about local species, habitats, geology and landform. Plans should be concerned not only with designated areas but also with other land of conservation value and the possible provision of new habitats.

SNCI site accounts outline the characteristics of the area based on its semi-natural vegetation and the underlying geology and are in three main sections :-

- Summary which highlights the nature conservation importance of the site
- Site description or site notes which gives further descriptive details about the site and its associated species
- **Management recommendations** which give a brief indication of the type of management that would best maintain the nature conservation interest of the site.

It is important to realise that classification as an SNCI in no way reduces the value of other wildlife sites. Sites of SNCI quality may not have been surveyed for various reasons. All areas of semi-natural vegetation are important to wildlife. Many rare plants and animals occur in seemingly otherwise uninteresting sites and may be overlooked by the survey.

## West Sussex

| Site Name:         | Sedgy & Scott's Gills            |            |                     |
|--------------------|----------------------------------|------------|---------------------|
| Site Ref:          | M12                              | Owner:     | Private             |
| District:          | Mid Sussex                       | Size (ha): | 11.5                |
| Parish:            | Balcombe                         | Date:      | Identified May 1992 |
| National Grid Ref: | TQ307317                         | Author:    | Louise Clark        |
| Habitat:           | Semi-natural woodland and stream |            |                     |

## Summary

These gill woodlands are situated on the edge of Monks Forest, now mostly plantation. Oak and Ash occur along the slopes with areas of Birch and Oak, typical on the more gentle slopes above. Throughout, there are bands of flushed ground where Alder is found. The stream banks support abundant mosses and liverworts and are bordered by species-rich ground flora.

## Site description

Along the slopes of these gills, Ash and Oak form a moderately dense canopy with occasional Alder on flushed ground. Tall Hazel coppice, Ash and occasional Hawthorn and Holly form a fairly dense shrub layer. The dense ground flora is dominated by Bramble *(Rubus fruticosus)* with locally frequent Bluebell *(Hyacinthoides non-scripta)*. There are also small species-rich patches which include Common Dog-violet *(Viola riviniana)*, Sanicle *(Sanicula europaea)* and Bugle *(Ajuga reptans)*. The flushed areas boast species such as Lady Fern *(Athyrium filix-femina)* and currant *(Ribes sp.)*.

There are also areas on more gentle slopes where the canopy consists of Oak, Downy Birch and occasional Sweet Chestnut, large Beech and Alder. Below these it is fairly open. There are scattered young Birch, Sweet Chestnut coppice and Holly. Bracken *(Pteridium aquilinum)* is locally frequent, and there is abundant leaf litter.

A good number of mosses and liverworts have been recorded in this woodland, often forming carpets on the ground and occurring in abundance in the flushed areas and near the streams. On the steep banks of the streams Hard Fern *(Blechnum spicant)* is locally frequent.

There are a good number of birds including Lesser Spotted Woodpecker, breeding Woodcock, Willow Warbler and Tree Pipit.

#### Management recommendations

Area of this woodland would benefit from the re-instigation of a coppicing regime. Standing and fallen dead wood should be left in place, and tracks kept open.

## West Sussex

| Site Name:         | Balcombe Lake & associated woodlands   |            |                     |
|--------------------|--|------------|---------------------|
| Site Ref:          | M22                                    | Owner:     | Private             |
| District:          | Mid Sussex                             | Size (ha): | 60.3                |
| Parish:            | Balcombe                               | Date:      | Identified May 1992 |
| National Grid Ref: | TQ316311                               | Author:    | Louise Clark        |
| Habitat:           | Semi-natural woodland, stream and lake |            |                     |

## Summary

This site is complex. It consists of a number of woodland blocks situated alongside wooded stream valleys. These form part of a large woodland complex, The Warren, much of which is now conifer plantation. Also, there is a large area of open water, Balcombe Lake. The woodlands are particularly species-rich and the lake and its associated habitats are of particular ornithological interest.

## Site description

Mostly the woodlands of this site consist of Oak and occasional Ash standards, over Hazel coppice. Hornbeam coppice occurs in some places and occasional Sweet Chestnut and Birch coppice in others. The ground flora is generally dominated by Bluebell *(Hyacinthoides non-scripta)*, Bracken *(Pteridium aquilinum)* and Bramble *(Rubus fruticosus)* with additional species such as Yellow Archangel *(Lamiastrum galeobdolon)*, Dog's Mercury *(Mercurialis perennis)* and Wood Melick *(Melica uniflora)*.

Along the stream valleys, Alder grown from coppice forms a dense canopy with occasional Birch and Willow. These areas are particularly species-rich, sedges *(Carex* spp.), Meadowsweet *(Filipendula ulmaria)*, Water Mint *(Mentha aquatica)* and Enchanter's Night-shade *(Circaea lutetiana)* are commonly found.

Balcombe Lake is a large area of open water. The margins are dominated by Common Reed *(Phragmites australis)* and Common Reedmace *(Typha latifolia)* which form extensive beds in some areas and merge with Willow and Alder on the edges. It is a traditional breeding site for Great Crested Grebe and Grey Wagtail. Also of particular note, is that Water Rail winter here.

Also included, are open flooded areas and a number of open grassy patches. These small habitats add diversity to the site, and provide for additional herbs, insects and birds.

## Management recommendations

Many of the woodland areas of this site would benefit from the re-introduction of a coppicing regime. Some areas of the stream valleys however, should be left undisturbed. Open areas, tracks and rides should be maintained to keep them open. The marginal vegetation and associated reedbeds of this lake also need management.

## West Sussex

| Site Name:         | Balcombe Marsh    |            |                     |
|--------------------|-------------------|------------|---------------------|
| Site Ref:          | M35               | Owner:     | Private             |
| District:          | Mid Sussex        | Size (ha): | 0.4                 |
| Parish:            | Balcombe          | Date:      | Identified May 1994 |
| National Grid Ref: | TQ315285          | Author:    | Graham Roberts      |
| Habitat:           | Neutral grassland |            |                     |

## Summary

Balcombe marsh is under private ownership but managed as a nature reserve by the Sussex Wildlife Trust. Although small, this calcareous fen-meadow is of exceptional importance botanically. Its extremely herbrich flora includes many uncommon species currently in a state of decline in southern England. For example, it is now the only known locality in West Sussex for the rare Marsh Helleborine *(Epipactis palustris).* 

## Site description

This tiny reserve is a fragment of unimproved meadow. It is surrounded by a wire fence which separates it from the adjacent improved grazing pasture.

The rich flora includes many notable species, particularly the Marsh Helleborine, Marsh-fragrant Orchid *(Gymnadenia conopsea* ssp. *densiflora)*, Marsh Valerian *(Valeriana dioica)*, Bog Pimpernel *(Anagallis tenella)*, Marsh Pennywort *(Hydrocotyle vulgaris)*, Flea Sedge *(Carex pulicaris)* and Carnation Sedge *(C. panicea)*. Over fifty flowering spikes of Marsh Helleborine were recorded in 1993. Unfortunately only one Marsh-fragrant Orchid was found. Other species of interest include Skullcap *(Scutellaria galericulata)*, Yellow Rattle *(Rhinanthus minor)*, Devil's-bit Scabious *(Succisa pratensis)*, Ragged-Robin *(Lychnis flos-cuculi)*, Jointed Rush *(Juncus articulatus)*, Wood Club-rush *(Scirpus sylvaticus)* and Quaking Grass *(Briza media)*.

Unfortunately coarse, rank herbage, consisting of competitive species such as Hemlock Water-dropwort *(Oenanthe crocata)*, Marsh Horsetail *(Equisetum palustre)*, Meadowsweet *(Filipendula ulmaria)*, Greater Tussock-sedge *(Carex paniculata)* and Common Reedmace *(Typha latifolia)*, is spreading, leaving only patches of herb-rich sward.

## Management recommendations

Re-introduction of carefully controlled grazing is strongly recommended in order to reduce the abundance of coarse vegetation. Further clearance of colonising scrub may also prove necessary.

## West Sussex

| Site Name:         | Balcombe Estate Rocks         |            |                     |
|--------------------|-------------------------------|------------|---------------------|
| Site Ref:          | M39                           | Owner:     | Private             |
| District:          | Mid Sussex                    | Size (ha): | 11.0                |
| Parish:            | Balcombe                      | Date:      | Identified May 1997 |
| National Grid Ref: | TQ291293, TQ299288 & TQ318303 | Author:    | Kate Ryland         |
| Habitat:           | Sandrock outcrops in woodland |            |                     |

## Summary

The Balcombe estate rocks occur in three separate sites to the east and southwest of Balcombe village. They are important for the ferns and lower plants that grow on them, some of which are very rare. The woodland around the rocks is of varied character but at one site the wood contains a good range of ancient woodland indicator plants.

## Site description

The rocks near Balcombe Mill outcrop near the edge of Ardingly reservoir within plantation woodland. The rare Tunbridge Filmy-fern *(Hymenophyllum tunbridgense)* occurs on several of the rocks here. The scarce oceanic liverwort *Harpanthus scutatus*, otherwise only known from upland Britain, is also found on these rocks along with a rich bryophyte flora including *Heterocladium heteropterum*, *Homalia trichomanoides*, *Scapania nemorosa*, *Pellia endiviifolia* and the very rare *Oxystegus tenuirostris*. The lichen flora includes the rare *Cystocoleus ebeneus*, *Leproloma vouauxii* and *Psilolechia lucida*. Of particular note is the presence of the gametophyte of Killarney Fern *(Trichomanes speciosum)* which is an extremely rare species.

The rocks in Coombehole Wood occur on both banks of a stream valley. They support some of the same rare species as the Balcombe Mill rocks along with other bryophytes such as *Hookeria lucens, Leucobryum glaucum, L. juniperoideum, Metzgeria furcata, Calypogeia integristipula* and *Diplophyllum albicans.* Coombehole wood itself is of ecological interest as it supports a rich fern flora including the Killarney Fern gametophyte and typical ancient woodland ground flora species including Yellow Archangel *(Lamiastrum galeobdolon),* Opposite-leaved Golden-saxifrage *(Chrysosplenium oppositifolium),* Wood Sorrel *(Oxalis acetosella)* and Three-nerved Sandwort *(Moehringia trinervia).* 

The rock outcrops at Northlands Farm are more notable for their ferns than for their bryophyte flora, although a range of mosses occur on the rocks. Tunbridge Filmy-fern is present here along with a colony of Hay-scented Buckler-fern (*Dryopteris aemula*) which is very rare in West Sussex.

## Management recommendations

Some of the rocks are becoming overgrown and their flora shaded out by Bramble and Bracken. A programme of clearance to create dappled shade on the rocks is desirable.

## West Sussex

| Site Name:         | Ardingly Reservoir & Loder Valley Nature Reserve |            |   |  |
|--------------------|--|------------|---|--|
| Site Ref:          | M40  | Owner:     | RBG Kew, South East Water & part<br>private |  |
| District:          | Mid Sussex                                       | Size (ha): | 131.4                                       |  |
| Parish:            | Ardingly & Balcombe                              | Date:      | Identified May 1997                         |  |
| National Grid Ref: | TQ330295   | Author:    | Kate Ryland                                 |  |
| Habitat:           | Reservoir, herb-rich grassland and woodland      |            |   |  |

## Summary

Ardingly Reservoir and the Loder Valley Nature Reserve are of importance to breeding and passage wetland birds. On the reservoir margins there are areas of herb-rich grassland and scrub. Within the Loder Valley are species-rich grassland, ancient and plantation woodland which contain several notable species.

## Site description

The expanse of open water at Ardingly Reservoir attracts good numbers of breeding wetland birds, notably Great Crested Grebe and Greylag Goose. Other species that occur here include Pochard, Tufted Duck, Cormorant, Wigeon, Gadwall, Lapwing and Green Sandpiper along with occasional Goldeneye and Redbreasted Merganser. In addition to these Sand Martin, Grey Wagtail, Sparrowhawk, Osprey and Hobby have all been recorded along with numerous woodland and hedgerow bird species.

The reservoir fringes include areas of marginal vegetation with various Rushes (Juncus spp.), Common Reedmace (Typha latifolia), Common Spike-rush (Eleocharis palustris), Branched Bur-reed (Sparganium erectum), Gipsywort (Lycopus europaeus), Meadowsweet (Filipendula ulmaria), Yellow Flag (Iris pseudacorus), Common Water-plantain (Alisma plantago-aquatica) and Reed Sweet-grass (Glyceria maxima). Notable marginal plants are Greater Tussock Sedge (Carex paniculata) and Flowering Rush (Butomus umbellatus).

Bands of herb-rich grassland around the reservoir contain species such as Common Knapweed (*Centaurea nigra*), Fescues (*Festuca* spp.), Sweet Vernal-grass (*Anthoxanthum odoratum*), Meadow Vetchling (*Lathyrus pratensis*), Common Bird's- foot-trefoil (*Lotus corniculatus*), Agrimony (*Agrimonia eupatoria*) and Fleabane (*Pulicaria dysenterica*). Of particular interest are the Common Spotted Orchids (*Dactylorhiza fuchsii*) in large numbers, Betony (*Stachys officinalis*) and Yellow Rattle (*Rhinanthus minor*) which occur in some areas.

In the Loder Valley the Hanging meadow is relatively recent in origin but contains some interesting plants including Common Adder's-tongue *(Ophioglossum vulgatum)*, Betony, Southern Marsh Orchid *(Dactylorhiza praetermissa)*, Ragged Robin *(Lychnis flos-cuculi)*, Tormentil *(Potentilla erecta)*, Common Milkwort *(Polygala vulgaris)*, Devil's-bit Scabious *(Succisa pratensis)* and Heath Speedwell *(Veronica officinalis)*. An unusual record is for the Chalkhill Blue butterfly here.

Woodland and scrub occur around the reservoir and within the reserve. Some is plantation but there is also ancient semi-natural woodland. In the Loder Valley the woodland contains populations of Thin-spiked Wood-sedge *(Carex strigosa)*, Violet Helleborine *(Epipactis purpurata)* and Ivy-leaved Bellflower *(Wahlenbergia hederacea)* as well as wet gills with flushes containing Alder *(Alnus glutinosa)*. Dormice and the Purple Emperor butterfly are present in these woods.

#### Management recommendations

The mosaic of semi-natural habitats should be maintained.

### SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

#### West Sussex

| Site Name:         | <b>Rowhill &amp; Station Pastures</b> |            |                     |
|--------------------|---------------------------------------|------------|---------------------|
| Site Ref:          | M42                                   | Owner:     | Private             |
| District:          | Mid Sussex                            | Size (ha): | 2.6                 |
| Parish:            | Balcombe                              | Date:      | Identified May 1997 |
| National Grid Ref: | TQ303299 & TQ306301                   | Author:    | Kate Ryland         |
| Habitat:           | Species-rich grassland                |            |                     |

#### Summary

The pastures lie on either side of Rocks Lane to the west of Balcombe station, separated by a stream valley. Both contain a range of typical grassland plant species and appear to be largely unimproved.

#### Site description

Rowhill pasture on the west of Rocks Lane occupies a steep southeast facing slope running down to the wooded stream valley. The most frequent grasses are Common Bent *(Agrostis capillaris)*, Yorkshire Fog *(Holcus lanatus)*, Red Fescue *(Festuca rubra)*, Sweet Vernal-grass *(Anthoxanthum odoratum)* and Crested Dog's-tail *(Cynosurus cristatus)*. Common Knapweed *(Centaurea nigra)* is the most prominent herb in the sward, but also present are Selfheal *(Prunella vulgaris)*, Common Bird's-foot-trefoil *(Lotus corniculatus)*, Fleabane *(Pulicaria dysenterica)*, Ox-eye Daisy *(Leucanthemum vulgare)* and Ribwort Plantain *(Plantago lanceolata)*. Notable species are Common Restharrow *(Ononis repens)* and Dark Mullein *(Verbascum nigrum)* which is most commonly found on the western Downs. A damp flush in the southeast corner of the field supports Water Mint *(Mentha aquatica)*, Blue Water Speedwell *(Veronica anagallis-aquatica)* and Silverweed *(Potentilla anserina)*. Bracken *(Pteridium aquilinum)*, Bramble *(Rubus fruticosus* agg.) and scrub are invasive in places.

Station pasture is a narrow area of grassland near the top of the west facing valley side and is divided in two by a fence. The dominant grasses are Common Bent, Yorkshire Fog and Sweet Vernal-grass, with Cocksfoot *(Dactylis glomerata)* and False Oat-grass *(Arrhenatherum elatius)* on the field edges. Typical forbs found in this field include Common Centaury *(Centaurium erythraea)*, Rough Hawkbit *(Leontodon hispidus)*, Common Bird's-foot-trefoil, Zig-zag Clover *(Trifolium medium)*, Selfheal and Creeping Buttercup *(Ranunculus repens)*. More notable species are Meadow Thistle *(Cirsium dissectum)*, Slender Bird's-foot-trefoil *(Lotus tenuis)* and Dark Mullein. This area is also subject to Bracken encroachment as well as Creeping Thistle *(Cirsium arvense)* and Ragwort *(Senecio jacobaea)* infestations in the northern part.

The fields provide a good habitat for invertebrates. 15 species of butterfly have been recorded including Purple Hairstreak and White Admiral which presumably breed in nearby woodland.

#### Management recommendations

Invasive Bracken, Bramble, Creeping Thistle and Ragwort should be controlled. Grazing pressure may be too light at present.

# SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

Sites of Special Scientific Interest (SSSIs) are areas notified under the Wildlife and Countryside Act 1981, as being of special interest for nature conservation. They represent the finest sites for wildlife and natural features supporting many characteristic, rare and endangered species, habitats and natural features. Notification as a SSSI is primarily a legal mechanism organised by Natural England and selected according to specific scientific criteria. *The Guidelines for the Selection of Biological SSSIs*, published in 1989 by the Joint Nature Conservation Council, set down the selection criteria for both biological and geological SSSIs.

**Biological SSSIs** form a national network of wildlife sites. Sites are selected in such a way that the protection of each site, and hence the network, aims to conserve the minimum area of wildlife habitat necessary to maintain the natural diversity and distribution of Britain's native flora and fauna and the communities they comprise. Each site, therefore, is of national significance for its nature conservation value.

**Geological SSSIs** are sites chosen for their research value, the criterion being that they are of national or international importance. Geological conservation is concerned with the maintenance of our geological and geomorphological heritage.

There are over 4,000 SSSIs in England of which just under 150 are in Sussex. Natural England is responsible for identifying and protecting these sites. This is achieved, primarily, in partnership with SSSI owners and managers, and as a result the majority are in good condition and well managed.

Ever growing pressures on our landscape and countryside mean that SSSIs are an increasingly precious part of our natural heritage. Damaging SSSIs is unacceptable, either in the short or long term, and must be avoided if they are to remain the finest wildlife and natural heritage sites in England. Once lost, the special interest of a site may be difficult or impossible to restore or recreate. Owners and occupiers (i.e. landowners, tenants and commoners) of SSSIs must give Natural England written notice before initiating any operations likely to damage the site, or allowing someone else to carry out these activities. None of the operations listed in the notification documents may proceed without Natural England's consent.

Under the Countryside and Rights of Way Act 2000 (CROW) anyone who intentionally or recklessly destroys or damages any of the flora, fauna or geological or physiological features of an SSSI is guilty of an offence. They are liable, on summary conviction, of a fine of up to £20,000.

For more information on SSSIs visit the <u>Natural England website</u>.

### SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

| Site Name:                      | Worth Forest                |                        |      |
|---------------------------------|-----------------------------|------------------------|------|
| County:                         | West Sussex                 |                        |      |
| District:                       | Mid Sussex                  |                        |      |
| Local Planning Authority:       | Mid Sussex District Council |                        |      |
| Size:                           | 44.3 hectares (109.5 acres) |                        |      |
| National Grid Ref:              | TQ259331                    |                        |      |
| Date Notified (Under 1949 Act): | 1954                        | Date of last revision: | 1980 |
| Date Notified (Under 1981 Act): | 1986                        | Date of last revision: | -    |

**Other Information:** The site lies within the High Weald Area of Outstanding Natural Beauty.

#### **Reason for Notification**

This area of ancient Wealden ghyll woodland contains an example of a base-poor springline alder wood, this being a nationally uncommon woodland type. The site also supports a rich community of lichens.

The woodland lies on Tunbridge Wells Sand and Grinstead Clay, and is situated in a ghyll formed by a stream cutting down through the soft sandstone. Whereas the lower slopes and valley bottom are poorly drained, the upper slopes are drier and retain numerous old trees which support an uncommonly rich community of lichens, mosses and liverworts. At the west end of the site there is a small area of scrub on the valley slope.

Alder *Alnus glutinosa* and downy birch *Betula pubescens* are abundant in the valley bottom, where the field layer includes creeping soft-grass *Holcus mollis*, smooth-stalked sedge *Carex laevigata* and ferns such as lady-fern *Athyrium filix-femina*, narrow bucklerfern *Dryopteris carthusiana* and mountain fern *Oreopteris limbosperma*. On much of the steep lower slope the wet ground supports carpets of *Sphagnum* mosses with clumps of purple moor-grass *Molinia caerulea*. Two locally uncommon 'Atlantic' mosses, *Hyocomium flagellare* and *Rhytidiadelphus loreus* occur in the ghyll; species which are associated with ancient woodland in the Weald. Small-leaved lime *Tilia cordata* is also present, an uncommon tree in West Sussex on which the lichen *Lecidea cinnabarina* and moss *Dicranum tauricum* are found.

Much of the rest of the woodland consists of pedunculate oak-birch wood, with scattered elder *Sambucus nigra* and alder buckthorn *Frangula alnus*. Bracken *Pteridium aquilinum*, bluebell *Hyacinthoides non-scripta*, bramble *Rubus fruticosus* and wood sage *Teucrium scorodonia* are abundant.

Mature oak *Quercus robur* and beech *Fagus sylvatica* are present as standards in the woodland and also occasionally as pollards, marking old banks and walls. Old yew trees *Taxus baccata* also occur along these boundaries. The older trees, especially oak, are the chief supporters of epiphytic communities which include the lichens *Chaenotheca brunneola*, *Parmelia revoluta*, *Dimerella diluta*, *Pertusaria hemisphaerica*, the 'beardlichen' *Usnea subfloridana*, and the moss *Zygodon baumgartneri*.

### SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

#### Operations likely to damage the special interest

#### Site name: Worth Forest (OLD1001466)

#### Ref. No. Type of operation

- 1. Cultivation, including ploughing, rotovating, harrowing, and re-seeding.
- **2.** Grazing and changes in the grazing regime (including type of stock or intensity or seasonal pattern of grazing and cessation of grazing).
- **3.** Stock feeding and changes in stock feeding practice.
- **4.** Mowing or other methods of cutting vegetation and changes in the mowing or cutting regime (including hay making to silage and cessation).
- **5.** Application of manure, fertilisers and lime.
- **6.** Application of pesticides, including herbicides (weedkillers).
- 7. Dumping, spreading or discharge of any materials.
- 8. Burning.
- **9.** The release into the site of any wild, feral or domestic animal\*, plant or seed.
- **10.** The killing or removal of any wild animal\*, including pest control.
- **11.** The destruction, displacement, removal or cutting of any plant or plant remains, including tree, shrub, herb, hedge, dead or decaying wood, moss, lichen, fungus, leaf-mould, turf.
- 12. Tree and/or woodland management+ and changes in tree and/or woodland management+.
- **13a.** Drainage (including the use of mole, tile, tunnel or other artificial drains).
- **13b.** Modification of the structure of watercourses (eg rivers, streams, springs, ditches, dykes, drains), including their banks and beds, as by re-alignment, re-grading and dredging.
- **13c.** Management of aquatic and bank vegetation for drainage purposes.
- **14.** The changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).
- **15.** Infilling of ditches, dykes, drains, ponds, pools, marshes or pits.
- **20.** Extraction of minerals, including shingle, sand and gravel, topsoil, subsoil, shells and spoil.
- **21.** Construction, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines and cables, above or below ground.
- 22. Storage of materials.
- 23. Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
- 24. Modification of natural or man-made features, clearance of loose rock, scree or spoil and battering, buttressing, grading or seeding rock-faces, outcrops or cuttings, infilling of pits and quarries.
- **25.** Removal of geological specimens, including rock samples, minerals and fossils.
- **26.** Use of vehicles or craft likely to damage or disturb features of interest.
- 27. Recreational or other activities likely to damage or disturb features of interest.
- **28.** Game and waterfowl management and hunting practice.
- \* 'Animal' includes any mammal, reptile, amphibian, bird, fish or invertebrate.
- + Including afforestation, planting, clear and selective felling, thinning, coppicing, modification of the stand or underwood, changes in species composition, cessation of management.

### KEY NATIONAL AND INTERNATIONAL SITE DESIGNATIONS

#### National Nature Reserve (NNR)

National Nature Reserves are statutory reserves established under the Wildlife and Countryside Act 1981. NNRs may be owned by the relevant national body (e.g. Natural England in England) or established by agreement. A few are owned and managed by non-statutory bodies, for example the Sussex Wildlife Trust. NNRs cover a selection of the most important sites for nature conservation in the UK. There are six NNRs in Sussex.

#### Special Area of Conservation (SAC)

Special Areas of Conservation are sites designated by Member States under the EC Habitats Directive. The aim is to establish a European network of important high quality conservation sites that will make a significant contribution to conserving habitats and species considered to be most in need of conservation at a European level. There are 12 SAC sites in Sussex.

#### Special Protection Area (SPA)

Special Protection Areas are designated under the EC Birds Directive, to conserve the habitat of certain rare or vulnerable birds and regularly occurring migratory birds. Any significant pollution or disturbance to or deterioration of these sites has to be avoided. All SPAs are also designated as SSSIs. There are six SPA sites in Sussex.

#### Ramsar

Ramsar sites are designated under the Convention on Wetlands of International Importance. Under the Convention, each government must select its best wetlands according to very clear criteria, which include: a wetland that regularly supports 20,000 or more waterbirds; a wetland that regularly supports 1% of the individuals in a population of one species or subspecies of waterbird. Wetlands are broadly defined to include marsh, fen, peatland and water. All designated Ramsar sites are also designated as SSSIs. There are four Ramsar sites in Sussex.

#### **National Park**

National Parks are beautiful, spectacular and often dramatic expanses of countryside. In the UK people live and work in the National Parks and the farms, villages and towns are protected along with the landscape and wildlife. They differ from Areas of Outstanding Natural Beauty (AONBs) in that each National Park has its own authority for planning control and other services.

The creation of the South Downs National Park (SDNP) was confirmed on 12th November 2009 and came into being on 1st April 2010.

Further information can be found on the SDNP Authority website.

#### Area of Outstanding Natural Beauty (AONB)

Areas of Outstanding Natural Beauty are areas of high scenic quality that have statutory protection in order to conserve and enhance the natural beauty of their landscapes. They differ from National Parks in their more limited opportunities for extensive outdoor recreation and by the way they are managed. AONBs are designated by Natural England under the Countryside and Rights of Way Act 2000.

There are two AONBs in Sussex covering approx. 114,000 hectares; Chichester Harbour and High Weald. Each has an associated body concerned with the area's conservation:

Chichester Harbour Conservancy www.conservancy.co.uk

High Weald AONB Unit www.highweald.org

### Local Nature Reserve (LNR)

Local Nature Reserves are for both people and wildlife. All district and county councils have powers to acquire, declare and manage LNRs. To qualify for LNR status, a site must be of importance for wildlife, geology, education or public enjoyment. Some are also SSSIs. There are 36 LNRs in Sussex.

### **Country Park**

Country Parks were established as a result of the 1968 Countryside Act to provide a wide range of opportunities for recreation, health, education and improve the quality of life for local communities. Natural England recognises Country Parks as significant places that contribute to England's accessible natural green space. There are 11 Country Parks in Sussex, the details of which can be obtained from the local authorities.

### Local Geological Site (LGS)

Local Geological Sites are non-statutory sites that have been identified by local geoconservation groups as being of importance. They are also known as Regionally Important Geological/Geomorphological Sites (RIGGS). A potential LGS in Sussex is assessed by the Sussex Geodiversity Group and, if a site is duely recommended, is notified to the relevent local authority. By designating a LGS, the features identified then become a material consideration in any future development. There are over 120 LGS in Sussex.

#### Marine Site of Nature Conservation Importance (MSNCI)

Marine Sites of Nature Conservation Importance are non-statutory sites identified on account of the special interest of their marine habitats, the fauna and flora, or for unusual geological and geomorphological features. They are an extension of the series of terrestrial SNCIs. The identification of these sites is to highlight their importance for marine wildlife and to emphasise the risks of certain operations damaging their interest. There are 23 MSNCIs off the Sussex coast.

# Further information on many of the designations listed above can be found on the <u>Natural England</u> <u>website</u>.

# ANCIENT & VETERAN TREES

Ancient trees form a vital part of our landscape, heritage and biodiversity. They are scattered through most parts of the UK landscape where they are found in exceptionally large numbers compared with north east Europe. Ancient trees can be most easily found in the vestiges of the once extensive Royal Hunting Forests, such as Ashdown Forest, and medieval parks. Others occur in historic parkland, landscaped gardens, woodland, wood pasture and ancient wooded commons. There are also small groups and individual trees scattered around housing estates, urban parks, village greens and churchyards. Some ancient trees are found on farmland, usually in hedgerows or old boundary features.

In Sussex, some of the largest recorded girths belong to: the Queen Elizabeth oak of 12.67m at Cowdray Park, a yew of 8.5m in Wilmington churchyard; a beech of 8.4m on Ashdown Forest; and a sweet chestnut of 7.2m at Herstmonceux Castle.

There are different definitions for mature trees, depending mainly on their stage of life:

**Ancient trees**. Biologically, aesthetically or culturally interesting because of their great age; In ancient or post-mature stage of life; Have a large girth relative to others of the same species.

**Veteran trees**. Usually in the second or mature stage of life; Have important wildlife and habitat features including hollowing or associated decay fungi, holes, wounds and large dead branches.

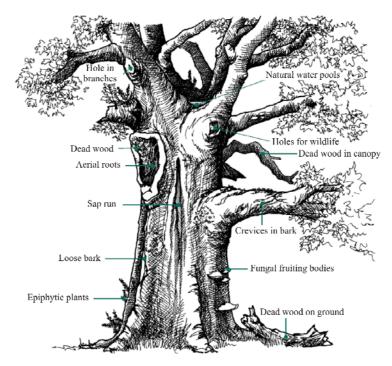
**Notable trees**. Locally important or of significance to the community; Specimen trees or considered to be the potential next generation of veteran trees.

#### Ancient tree ecology

Ancient trees are unique as a wildlife habitat because of the exceptionally species-rich communities associated with wood decay and the bare surfaces of trunks, bough and roots. Clusters of ancient trees are even more important because together they offer a wide range of niche homes for many specialist species in one small area.

Approximately 1,700 (6%) invertebrate species in the British Isles are dependent on decaying wood to complete their life cycles. Species associated with decaying wood include: rare click beetles such as the violet click beetle *Limoniscus violaceus*, the wasp mimic cranefly *Ctenophora flaveolata* and the oak longhorn beetle *Rhagium mordax*. The black-headed cardinal beetle *Pyrochroa coccinea* is an insect associated with veteran trees and old growth woodland.

Old trees with splits, cracks, loose bark, holes and crevices are especially attractive to bats and in particular to woodland specialists such as the rare Barbastelle and Bechstein's bat.



#### The Ancient Tree Hunt

The Ancient Tree Hunt is a nationwide search to map all of the old trees in the UK in order to plan for their active conservation. This project, led by the Woodland Trust in partnership with the Ancient Tree Forum and Tree Register of the British Isles, was launched in 2007.

Most of the trees recorded can be viewed on their website: www.ancient-treehunt.org.uk

Characteristic features of a veteran tree Source: Veteren Trees: A guide to good management. Natural England, 2000.

# ANCIENT WOODLAND

Ancient woodland is defined by Natural England as a site that has had a continuous woodland cover since at least 1600 AD. It is an irreplaceable, wildlife-rich habitat, and often includes important archaeological features.

Sussex is one of the most wooded parts of lowland Britain with ancient woodland covering approximately 39,000ha (10%) of the county. Bluebell woods associated with coppicing, open wood pasture associated with deer parks and the small Wealden woods in ghyll valleys are a key part of Sussex's distinctive and varied landscape.



The habitat can be placed into two broad categories:-

Ancient semi-natural woodland – woodland that retains a native tree and shrub

cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally. This covers all stands of ancient woodland which do not obviously originate from planting.

In terms of its nature conservation value, ancient semi-natural woodland is regarded as an important woodland type due to:

- The variety of native woodland plants and animals it supports, many of which are found only or mainly in ancient woodland.
- The natural and undisturbed water courses.
- The soils, which may never have been ploughed.
- The variety of woodland structure (often including very old trees and dead wood).
- The mosaic of semi-natural habitats such as grassland, heathland and marsh which may survive within the wood, often a result of past management practices.

**Plantations on ancient woodland sites** – woodland where the original tree cover has been felled and replaced by planting, often with conifers and usually this century.

In ancient replanted woodland the original woodland structure may have been substantially altered, water courses may have been displaced, soils may have been disturbed or drained and natural openings may have been planted up. However, these woods can still be important for nature conservation due to:

- The remnant ancient woodland species, which persist beneath the canopy or in areas where light levels are higher such as woodland rides or glades.
- The soil seed bank, which will often retain dormant ancient woodland plants.
- The potential for restoration to a semi-natural condition.

#### Other important terms:

**Primary woodland** constitutes the relicts of the natural tree cover which developed after the retreat of glaciation 10,000 years ago. Such woodland may have been managed by humans, but it has never been completely cleared of trees and converted to another land use.

**Ancient secondary woodland** is woodland that had developed on land which may have been open ground or farmland at some stage before the year 1600AD. Many ancient woods in West Sussex are likely to be of this type.

*Planning Policy Statement 9: Biodiversity & Geological Conservation (2005)* states that "ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated." Many ancient woodlands have some form of statutory protection and local planning authorities are advised to identify unprotected areas of ancient woodland.

Ancient woodland in Sussex can be identified by using the Ancient Woodland Inventory held by Natural England. The Ancient Woodland Inventory was set up in 1981 by the Nature Conservancy Council (now Natural England). Ancient woodland status is determined using information from historic Ordnance Survey and estate maps and information about the name of the wood, its shape, relief, internal boundaries and location relative to other features such as parish boundaries. Ground survey information such as flora and historical features plus aerial photography interpretation is also used when available.

Initially, the original inventory only included sites over two hectares in size. However, the inventory did contain some smaller sites due to the subsequent clearance of parts of larger woods. Furthermore, measuring techniques were less precise and more laborious than the latest digital methods so some smaller woods were accidentally included, whilst some larger woods were overlooked.

The original inventory was produced on a county-by-county basis in the 1980's and 1990's. At first it was a paper-based inventory, which was converted to a digital map in 2000. Subsequent revisions and versions are available as digital maps.

Advances in digital mapping techniques mean that it is now possible to map woodlands under two hectares with greater ease and accuracy. This has led to a revision of the Ancient Woodland Inventory within the South East. The surveys for the revision of the inventory for Sussex were completed in 2010 and have been adopted by Natural England. However, the inventory will always be classed as "provisional" because it is reviewed and updated as new information comes to light.

(Illustrations courtesy of Natural England.)

# GHYLL WOODLAND

Ghylls (or gills) are ancient steep-sided, wooded valleys created by streams cutting gullies into existing slopes. In the Sussex Weald, ghyll formation began in the Pleistocene period (pre 10,000 BC) by erosion of the sandstone making up the 'Hastings Beds'. Such ghylls occasionally contain outcrops of erosion resistant sandstone known as 'sandrock'.

Ghylls and sandrock outcrops create a microclimate similar to that of the Atlantic climate common to the west of England, but with different influences from the soil and geology. This microclimate is humid with a low frost incidence and for this reason our Sussex ghylls are strongholds for rare flora and fauna. Good examples of species adapted to this unique habitat are the Tunbridge filmy fern, the hay-scented buckler fern and bryophytes such as *Hyocomium armoricum*, *Dicranum scottianum* and *Scapania gracilis*. All of these species are rare in Britain and are found predominantly on the western seaboard of Wales.



Hard fern

The steep and rugged nature of these stream valleys has provided protection for this distinctive flora. Unlike much of the rest of the Sussex Weald, clearance and subsequent cultivation was not possible in the ghylls. The associated undisturbed woodland or scrubland can therefore often be regarded as 'ancient woodland'. In some cases there are remnants of original 'wildwood' as evidenced by the presence of indicator species such as small-leaved lime.

The hilly topography means that the land surrounding ghylls tends not to be intensively cultivated. As a consequence the water flowing in the streams is often relatively unpolluted and the delicate balance and biodiversity of this unique environment is maintained. Any contamination of the water supply, disruption to its flow or the invasion of exotic species such as rhododendron could do irreparable damage to this habitat.

Broadleaved woodland is a priority habitat for conservation in Sussex as it contains a higher number of UK Biodiversity Action Plan Priority Species than any other habitat. These species include dormouse, pearl bordered fritillary butterfly and the black-headed cardinal beetle.

Our ghyll woodlands are a particularly important feature of the Sussex Weald and are included in the Woodland Habitat Action Plan, which can be found at <u>www.biodiversitysussex.org</u>

#### **Objectives in the Habitat Action Plan include:**

- Maintain the extent and habitat quality of ghyll woodland.
- Reverse the trend of degradation in ghyll woodlands and ensure that they are managed to achieve conservation objectives.
- Replace non- native tree species on ancient woodland sites.
- Provide mechanisms to help clear invading rhododendron.
- Implement systems for the control of animals believed to cause damage to woodland, such as squirrel and deer.
- Identify where ghyll woods are located and recommend their optimum management for conservation.
- Ensure pollution is prevented wherever possible.
- Encourage planning departments to refuse permission for ghyll woodland development.

The Forestry Commissions' Woodland Improvement Grant provides some financial incentive for ghyll wood management. (Contact: The Forestry Commission, South East England Regional Office, 01420 23666.)

(Illustration courtesy of Natural England.)

# LOWLAND CALCAREOUS GRASSLAND

Lowland calcareous grasslands develop on shallow lime-rich soils generally overlying limestone rocks - in Sussex it occurs exclusively on chalk.

#### Why is it important?

- Chalk grassland can support over 50 species of flowering plant per square metre, including a number of nationally scarce species.
- Many species of rare invertebrates are found including hoverflies, molluscs and moths.
- Rare assemblages of mosses and lichens can be found on some chalk grasslands.
- The grasslands and associated patches of scrub provide breeding and feeding habitat for many birds including scarce species such as stone curlew.



Round-headed rampion

#### Lowland calcareous grassland in Sussex

The South Downs represents one of the major areas of chalk grassland in the UK. It is estimated that the habitat now covers only around 3% of the South Downs, where it is predominantly confined to steeper slopes. It continues to support a rich diversity of animals and plants including many rare species.

#### What are the threats?

- Agricultural intensification by use of fertilisers, liming, reseeding and ploughing.
- Lack of grazing stock results in dominance of coarse grasses and scrub, and a decline in overall botanical diversity.
- Recreation effects including disturbance of wildlife, compaction of soil, trampling and increased nutrients in soil. High public access can also cause conflicts where grazing animals are present.
- Isolation and fragmentation of sites reduces dispersal opportunities making species more susceptible to extinction.
- Losses can result from development including redevelopment of abandoned chalk quarries which can develop good quality grassland.

#### Some associated species

- Linnet Carduelis cannabina
- Whitethroat Sylvia communis
- Adonis blue *Polyommatus bellargus*
- Glow-worm Lampyris noctiluca
- Round-headed rampion *Phyteuma orbiculare*
- Yellow-wort Blackstonia perfoliata

#### Further information

- The Grasslands Trust: <u>www.grasslands-trust.org/index.php</u>
- Buglife: <a href="http://www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/lowlandcalcareousgrassland">www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/lowlandcalcareousgrassland</a>

(Illustration courtesy of Natural England.)

# LOWLAND FEN

Lowland fens are permanently waterlogged wetlands which receive water and nutrients from soil, rock and groundwater as well as rainfall.

#### Why are they important?

- Lowland fen has declined dramatically and the UK has a large proportion on the European resource.
- They have a mosaic of plant communities and some fens contain up to 550 species of higher plants.
- Lowland fen is important for invertebrates including aquatic beetles and dragonflies.

#### Lowland fens in Sussex

Current estimates put the total hectarage of fen in Sussex at under 100 hecatres. It is often found alongside other wetland habitats such as marshy grassland and carr woodland.

#### What are the threats?

- Drainage and conversion to intensive agriculture.
- Lack of management resulting in succession to scrub and woodland.
- Changes to hydrology resulting from excessive water abstraction and development.
- Isolation and fragmentation.
- Nutrient enrichment which can affect species composition.

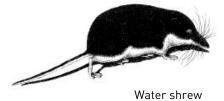
#### Some associated species

- Water shrew *Neomys fodiens*
- Reed bunting Emberiza schoeniclus
- Fen's wainscot Arenostola phragmitidis
- Scarce chaser Libellula fulva
- Sphagnum moss *Sphagnum* spp.
- Gypsywort Lycopus europaeus

#### Further information

- Buglife: <u>www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/fens</u>
- Sussex Wetland Landscapes Project: <u>www.sussexotters.org</u>

(Illustrations courtesy of Natural England.)



# LOWLAND HEATHLAND

Heathland is a largely open landscape occurring on impoverished, acidic soils. It is characterised by plants such as heathers and dwarf gorses of varying height, and usually occurs with areas of other habitat such as acid grassland and open water.

#### Why is it important?

- Heathland is often interspersed with bare ground, acid grassland, gorse, bracken, bog and scattered trees. This provides a range of habitat, increasing value to wildlife.
- A diversity of invertebrates is found with rare species including wasps, beetles and spiders. Areas of bare ground are often particularly important to invertebrates.
- There is a relatively low number of plants; however many rare species are found, particularly in the wetter areas, including white-beak sedge and bog asphodel.
- The rare smooth snake and sand lizard are found on some West Sussex heathlands.
- Several uncommon birds thrive on heathland including nightjar and stonechat.

#### Heathland in Sussex

Heathland in Sussex occurs mainly on the Wealden Greensand in West Sussex and in the High Weald of East Sussex, where Ashdown Forest contains the largest area of heathland remaining in South East England. The South Downs retain areas of chalk heath, a rare habitat that develops on acidic deposits overlying chalk, on which an interesting mix of chalk grassland and heathland plants are found.

#### What are the threats?

- Lack of management results in a simplified vegetation structure and dominance of scrub.
- Agricultural improvement, including use of chemicals and intensive-livestock farming.
- Isolation and fragmentation of sites reduces dispersal opportunities making species more susceptible to extinction.
- Development including mineral extraction and conversion to conifer plantation.
- Recreation can cause disturbance to breeding birds, enrichment of soil and a danger of fire damage.

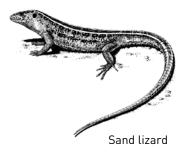
#### Some associated species

- Dartford warbler *Sylvia undata*
- Sand lizard *Lacerta agilis*
- Bog bush-cricket Metrioptera brachyptera
- Heath tiger beetle *Cicindela sylvatica*
- Bog pimpernel Anagallis tenella
- Heath bedstraw Galium saxatile

#### Further information

• Buglife: www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/lowlandheathland

(Illustration courtesy of Natural England.)



### **TRADITIONAL ORCHARDS**

Traditional orchards are areas of land on which a range of fruit and nut trees are cultivated that are managed in a low intensity way. Permanent grassland beneath the trees was traditionally grazed by livestock.

#### Why are they important?

- The mosaic of habitats such as hedgerows, dead wood and fruit trees make traditional orchards important for a wide range of species.
- Traditional orchards provide a the conditions needed for many bryophytes and lichens.
- Holes and crevices in old trees provide habitat for bats and nest sites for birds such as redstart and bullfinch.
- Dead and decaying wood makes traditional orchards hugely important for invertebrates, lichens and fungi.

#### Traditional orchards in Sussex

The traditional orchards inventory\* lists over 900 sites in Sussex covering an area of approximately 300 hectares. It is estimated that around half of these orchards are currently in a poor condition.

#### What are the threats?

- Changes in farming policy and markets has led to a decline in income from traditional orchard produce.
- A decline in the skills and knowledge to manage traditional orchards can lead to neglect.
- Loss of orchards can occur as fruit trees dying of old age are not replaced.
- Lack of protection under the current planning system.

#### Some associated species

- Lesser spotted woodpecker *Picoides minor*
- Noctule Nyctalus noctula
- Lichen running-spider *Philodromus margaritatus*
- Noble chafer *Gnorimus nobilis*
- Mistletoe *Viscum album*
- A lichen *Ramonia chrysophaea*

#### \* The Traditional Orchard Inventory for England

The traditional orchard data used in Sussex Biodiversity Record Centre reports are the result of a project run by the People's Trust for Endangered Species (PTES) on behalf of Natural England. The resulting inventory is based on combining exisiting survey data with aerial photograph interpretation, together with ground-truthing survey work by local volunteers. The inventory is provisional, and is still being refined and updated as new data becomes available. The project was completed in March 2011.

For the purpose of the inventory, traditional orchards are defined as sites where at least five fruit trees must be present with no more than 20m between their crown edges.

Further information on traditonal orchards can be found here: www.orchardnetwork.org.uk



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The Sussex Biodiversity Record Centre is managed by the Sussex Wildlife Trust as a partnership project. A list of our current funding partners can be found on our website: www.sxbrc.org.uk/about/partners



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