

# Desktop Biodiversity Report

Land at Knepp Estate + 2km buffer

ESD/11/569

Prepared for Hannah Welsh (Knepp Castle Estate) 19th December 2011



# Sussex Biodiversity Record Centre report regarding land at Knepp Castle Estate + 2km buffer 19/12/2011

# Prepared for Hannah Welsh Knepp Castle Estate ESD/11/569

# The following information is enclosed within this report:

Maps	<b>✓</b>
Sussex Protected Species Register	<b>✓</b>
Sussex Bat Inventory	<b>✓</b>
Sussex Bird Inventory	<b>✓</b>
UK BAP Species Inventory	<b>✓</b>
Sussex Rare Species Inventory	<b>✓</b>
Sussex Invasive Alien Species	<b>✓</b>
Environmental Survey Directory	✓
SNCI H18 - Kneppmill Pond, the River Adur & Lancing  SSSI None	Brook.
Other Designations/Ownership	
Environmental Stewardship Agreement	

Ancient tree; Ancient woodland; Lowland fen; Reedbed;

**Habitats** 

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 the 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 the SxBRC at the time of printing. The 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 the 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**

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# **Impartiality**

The SxBRC functions as custodian of biological data. Our role is to collect, manage and disseminate wildlife 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.

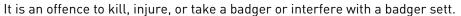
# Supplying records

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 website for more details: <a href="http://sxbrc.org.uk/biodiversity/recording/#sending-records">http://sxbrc.org.uk/biodiversity/recording/#sending-records</a>

# **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).



"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 1960's, 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 the SxBRC. Permission to release record details will be required from the Sussex Wetland Landscapes Project and the 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

The 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 the SxBRC if further information is needed.

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

# Birds

The SxBRC holds approximately one million bird records provided by the Sussex Ornithological Society (SOS). Non-commercial enquiries will not include breeding season records of 15 Schedule 1 birds and three other species which are classed as sensitive in Sussex. Commercial enquiries 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. This has been created with ecological consultants in mind.



# 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. Below are the details of all layers which we currently use in our maps.

Designated sites	
Area of Outstanding Natural Beauty (AONB)	Downloaded from NE website.
Country Park	Downloaded from NE website.
Local Nature Reserve (LNR)	Downloaded from NE website.
Marine Site of Nature Conservation 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.
Regionally Important Geological/Geomorphological Site (RIGS)	Data supplied by the Booth Museum, Brighton and digitised by SxBRC in April 2009.
Site of Nature Conservation Importance (SNCI)	Data 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 (national survey carried out in 2007/2008) and Tree Register of the British Isles (a charity which collates and updates data on notable trees).
Ancient woodland	Downloaded from NE website.
Black poplar	Dataset created by SxBRC based upon species records arising from Sussex Wetland Landscapes Project.
Coastal & floodplain grazing marsh	Dataset 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.
	<u> </u>

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	Dataset 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

SWT Sussex Wildlife Trust

SxBRC Sussex Biodiversity Record Centre

WSCC West Sussex County Council

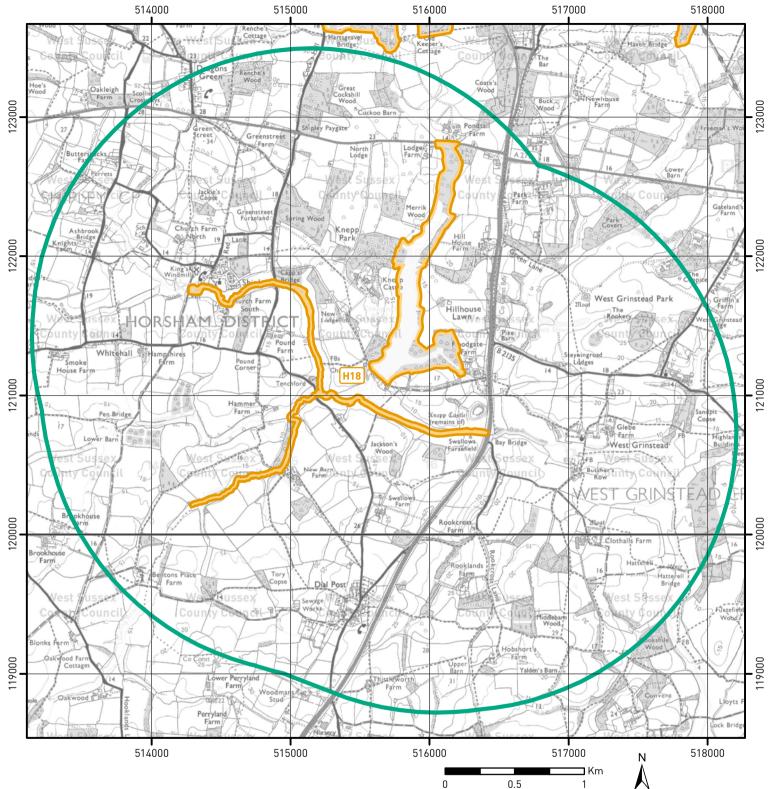
For further information on GIS datasets downloaded from the Natural England website, visit: <a href="https://www.gis.naturalengland.org.uk">www.gis.naturalengland.org.uk</a>

# Designated Site Map (ESD/11/569): Land at Knepp Estate + 2km buffer

Prepared for Hannah Welsh (Knepp Castle Estate) - 19/12/2011



Woods Mill, Henfield, W Sussex BN5 9SD Tel: 01273 497 558/557 Email: sxbrc@sussexwt.org.uk Website: www.sxbrc.org.uk



Key to Map:



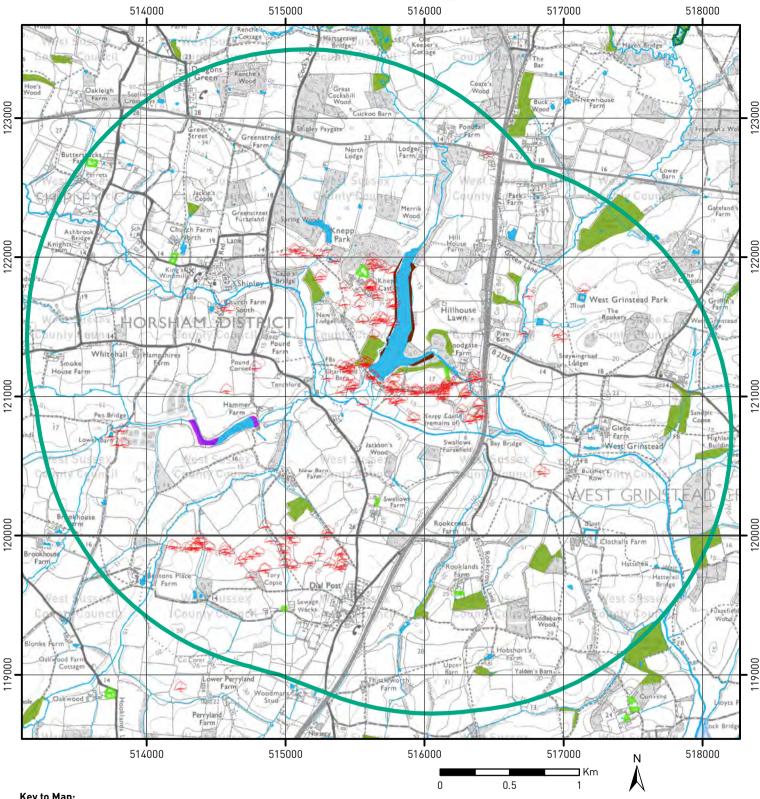
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RAMSAR, Special Area of Conservation (SAC), Special Protection Area (SPA), National Park, Area of Outstanding Natural Beauty (AONB), National Nature Reserve (NNR), Site of Special Scientific Interest (SSSI), Local Nature Reserve (LNR) and Country Park 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 Council. Notable Road Verge data supplied by East and West Sussex County Councils. Regionally Important Geological/Geomorphological Sites (RIGS) data provided by Booth Museum of Natural History (on behalf of Sussex RIGS Group). © Crown Copyright. All rights reserved 2011.

# **Habitat Map (ESD/11/569):** Land at Knepp Estate + 2km buffer

Prepared for Hannah Welsh (Knepp Castle Estate) - 19/12/2011





### Key to Map:

2km buffer

Ancient/veteran tree

Ancient woodland

Coastal & floodplain grazing marsh

Ghyll woodland

Lowland fen

Open Water

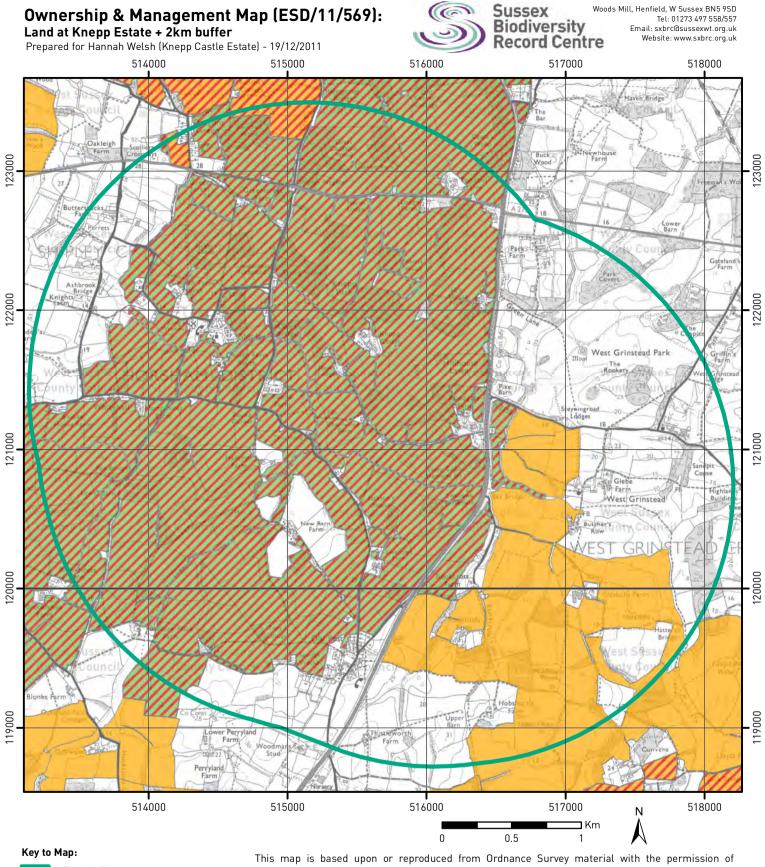
Reedbed

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 Otters & Rivers Partnership. 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). © Crown Copyright. All rights reserved 2011.

This map contains ancient woodland data revised under the Weald and Downs Ancient Woodland Program (2010) on behalf of Natural England. Whilst every effort has been made to make this revision as accurate as possible, the inventories contain limitations and remain provisional. Further revisions are also pending within East Sussex. 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.



2km buffer

Environmental Stewardship Agreements:

Ownership & Management Map (ESD/11/569):

Higher Level Stewardship (HLS) Entry Level Stewardship (ELS)

Organic ELS

Organic ELS plus HLS

ELS plus HLS

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Woods Mill. Henfield, W Sussex BN5 9SD

Tel: 01273 497 558/557 Email: sxbrc@sussexwt.org.uk

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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

# **SUMMARY REPORT**

# Land at Knepp Estate + 2km buffer

19 December 2011 ESD/11/569 Search Area:

Hannah Welsh (Knepp Castle Estate)

### W&CA Schedule 5 and 8 (not including bats, badgers or birds)

European Protected SpeciesNumber of species recorded22BatsNumber of species recorded10BirdsNumber of species recorded133Number of BoCC Red list species recorded23Number of BoCC Amber list species recorded50Number of W&CA Schedule 1 species recorded24Number of excluded significant breeding bird records - please contact SOS177BAP species (not including bats or birds)Number of species recorded23Rare Species (not including bats, birds or otters)53Invasive Alien Species53Number of species recorded12	Number of species recorded	9
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Invasive Alien Species	Rare Species (not including bats, birds or otters)	
·	Number of species recorded	53
Number of species recorded 12	Invasive Alien Species	
	Number of species recorded	12

# SUSSEX PROTECTED SPECIES REGISTER

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.

Records of these species and where they have been recorded are held on the Record Centre's database and are included in desktop biodiversity reports. PSR data are updated weekly.

Some species are both protected <u>and</u> rare and therefore show up in the PSR and the Rare Species Inventory (RSI) reports. Reports to enquirers may reflect this relationship between rarity and protection, with records for the same species at a given location appearing in both reports.

# 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. Some sites however 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.
- 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 might 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.

# Wildlife Protection Legislation in England

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

### European law

**The Bern Convention** on the Conservation of European Wildlife and Natural Habitats (1979) was aimed at ensuring conservation and protection of all wild plants and animals, increasing cooperation between states, and affording special protection to the most vulnerable or threatened species. It is implemented by the EU Birds Directive (Council Directive 79/409/EEC) and the EU Habitats Directive (Council Directive 92/43/EEC).

**ANNEX II** lists animal and plant species whose conservation requires the designation of special areas of conservation.

**ANNEX IV** lists animal and plant species in need of strict protection.

**ANNEX V** lists animal and plant species whose taking in the wild and exploitation may be subject to management measures.

# 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="https://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:

- **S9(1)** Protection limited to intentional killing, injury or taking.
- **S9(2)** Protection limited to possessing and controlling
- **S9(4a)** Protection limited to damaging, destroying or obstructing access to any structure or place used by the animal for shelter or protection.
- **S9(4b)** Protection limited to disturbing the animal while it is occupying any structure or place which it uses for shelter or protection.
- S9(5) Protection limited to selling, offering for sale, possessing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from such an animal. This includes Common Frogs, Pool Frogs, Common Toads and both Smooth and Palmate Newts. Records of these species are not kept on the Protected Species Register.

### 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: www.naturenet.net/law/sched8.html

### Legislation protecting bats

Please refer to the explanation sheet of the Sussex Bat Inventory within your SxBRC biodiversity report, or visit our website: www.sxbrc.org.uk/biodiversity/speciesinventories

### Legislation protecting birds

Please refer to the explanation sheet of the Sussex Bird Inventory within your SxBRC biodiversity report, or visit our website: <a href="https://www.sxbrc.org.uk/biodiversity/speciesinventories">www.sxbrc.org.uk/biodiversity/speciesinventories</a>

# Legislation protecting badgers and otters

Please refer to the information sheets at the start of the report for information on badger and otter records in Sussex.

# Protected species (excluding birds) found in Sussex Unless indicated, all parts of the section apply

8	Buellia asterella	Starry Breck-lichen	5	Gryllus campestris	Field Cricket
8	Caloplaca luteoalba	Orange-fruited Elm lichen	5	Hydrochara caraboides	Lesser Silver Water Beetle
8	Catapyrenium psomoroides	Tree Psoromoides	5	Papilio machaon	Swallowtail Butterfly
8	Cladonia convoluta	a lichen	5	Argynnis adippe	High Brown Fritillary
8	Gyalecta ulmi	Elm Gyalecta	5	Thalera fimbrialis	Sussex Emerald
8	Heterodermia leucomelos	Ciliate Strap-lichen	5	Chirocephalus diaphanus	Fairy Shrimp
8	Lecanactis hemisphaerica	Churchyard Lecanactis	5	Gammarus insensibilis	Lagoon Sand Shrimp
8	Squamarina lentigera	Scaly Breck-lichen	5 <b>* \$</b>	Austropotamobius pallipes	Freshwater Crayfish
8	Teloschistes flavicans	Golden Hair-lichen	5	Dolomedes plantarius	Fen Raft Spider
8	Hericium erinaceum	a basidiomycete fungus	5	Triturus cristatus	Great Crested Newt
8	Lamprothamnium papulosum	Foxtail stonewort	5 <b>* \$</b>	Anguis fragilis	Slow-worm
8	Acaulon triquetrum	Triangular Pygmy-moss	5	Coronella austriaca	Smooth Snake
8	Barbula glauca	Glaucous Beard-moss	5	Lacerta agilis	Sand Lizard
8	Bartramia stricta	Rigid Apple-moss	5 <b>* \$</b>	Lacerta vivipara	Viviparous Lizard
8	Drepanocladus vernicosus	Slender Green Feather-moss	5 <b>* \$</b>	Natrix natrix	Grass Snake
8	Micromitrium tenerum	Millimetre Moss	5 <b>* \$</b>	Vipera berus	Adder
8	Rhynchostegium rotundifolium	Round-leaved Feather-moss	5 <b>x</b>	Barbastella barbastellus	Barbastelle
8	Trichomanes speciosum	Killarney Fern	5 <b>x</b>	Eptesicus serotinus	Serotine
8	Ajuga chamaepitys	Ground-pine	5 <b>x</b>	Myotis bechsteini	Bechstein's Bat
8	Althaea hirsuta	Rough Marsh-mallow	5 <b>x</b>	Myotis brandti	Brandt's Bat
8	Alyssum alyssoides	Small Alison	5 <b>x</b>	Myotis daubentoni	Daubenton's Bat
8	Bupleurum baldense	Small Hare's-ear	5 <b>x</b>	Myotis myotis	Greater Mouse-eared Bat
8	Chenopodium vulvaria	Stinking Goosefoot	5 <b>x</b>	Myotis mystacinus	Whiskered Bat
8	Crepis foetida	Stinking Hawk's-beard	5 <b>x</b>	Myotis nattereri	Natterer's Bat
8	Dianthus armeria	Deptford Pink	5 <b>x</b>	Nyctalus leisleri	Leisler's Bat
8	Eryngium campestre	Field Eryngo	5 <b>x</b>	Nyctalus noctula	Noctule
8	Filago lutescens	Red-tipped Cudweed	5 <b>x</b>	Pipistrellus nathusii	Nathusius' Pipistrelle
8	Filago pyramidata	Broad-leaved Cudweed	5 <b>x</b>	Pipistrellus pipistrellus	Common Pipistrelle
8	Fumaria reuteri	Martin's Ramping-fumitory	5 <b>x</b>	Pipistrellus pygmeus	Soprano Pipistrelle
8	Gentianella anglica	Early Gentian	5 <b>x</b>	Plecotus auritus	Brown Long-eared Bat
8 <b>x</b> #		Bluebell	5 <b>x</b>	Plecotus austriacus	Grey Long-eared Bat
8	Lactuca saligna	Least Lettuce	5 <b>x</b>	Rhinolophus ferrumequinum	Greater Horseshoe Bat
8	Lythrum hyssopifolia	Grass-poly	5 <b>x</b>	Vespertilio murinus	Parti-coloured Bat
8	Melampyrum arvense	Field Cow-wheat	5	Arvicola terrestris	Water Vole
8	Mentha pulegium	Pennyroyal	5	Muscardinus avellanarius	Common Dormouse
8	Orobanche artemisiae-campestris	Oxtongue Broomrape	5	Balaenoptera physalus	Fin Whale
8	Petrorhagia nanteuilii	Childing Pink	5	Delphinus delphis	Common Dolphin
8	Phyteuma spicatum	Spiked Rampion	5	Globicephala melaena	Pilot Whale
8	Polygonum maritimum	Sea Knotgrass	5	Lagenorhynchus acutus	White-Sided Dolphin
8	Pulicaria vulgaris	Small Fleabane Greater Yellow-rattle	5	Orcinus orca	Killer Whale
8	Rhinanthus angustifolius		5	Stenella caeruleoalbus	Blue-White Dolphin
8	Salvia pratensis	Meadow Clary	5	Stenella coeruleoalba	Striped Dolphin
8	Cephalanthera rubra	Red Helleborine	5	Tursiops truncatus	Bottle-Nosed Dolphin
8	Damasonium alisma	Starfruit	5	Phocoena phocoena	Common Porpoise
8	Himantoglossum hircinum	Lizard Orchid	5 <b>x</b>	Lutra lutra	Otter
8	Leersia oryzoides	Cut-grass	5 <b>x</b>	Meles meles	Badger
8	Ophrys sphegodes	Early Spider-orchid		December at included in DCD accept	
8	Schoenoplectus triqueter	Triangular Club-rush		Records not included in PSR report	
5	Clavopsella navis	Brackish Hydroid	<ul><li>Sch.5 section 9 (part 1)</li><li>\$ Sch.5 section 9 (part 5)</li></ul>		
5	Edwardsia ivelli	Ivell's Edwardsia	# Sch.8 section13 (part 2)		
5	Nematostella vectensis	Starlet Sea Anemone		•	
5	Alkamaria romijini	Tentacled lagoon-worm			
5	Hirudo medicinalis	Medicinal Leech			
5	Decticus verrucivorus	Wart Biter			

Mole Cricket

5

Gryllotalpa gryllotalpa



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

# SUSSEX PROTECTED SPECIES REGISTER REPORT

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

### Land at Knepp Estate + 2km buffer

19 December 2011 ESD/11/569 Hannah Welsh (Knepp Castle Estate)

### 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; 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
TQ148233	SARG Sussex Amphibian & Reptile Grp	01/01/1991	Renches Wood-3, West Sussex (VC13)

# 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; 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
TQ136221	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	27/03/1995	Knepp Castle Estate, West Sussex (VC13)
TQ143232	Adrian Janes	08/08/2002	Land adjacent to 8 Dragons Lane, Dragons Green, Shipley, West Sussex (VC13)
TQ145219	Alf Simpson MBE	22/04/2006	Allotment, Red Lane, Shipley, West Sussex (VC13)
TQ155220	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	26/04/1995	Knepp Castle Estate, West Sussex (VC13)
TQ157220	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	19/08/1994	Knepp Castle Estate, West Sussex (VC13)
TQ157223	SARG Sussex Amphibian & Reptile Grp	28/09/1987	Kneppe Castle Estate, West Sussex (VC13)
TQ158221	SARG Sussex Amphibian & Reptile Grp	01/03/1989	Kneppe Castle Estate, West Sussex (VC13)
TQ163215	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	01/01/1992	West Grinstead, West Sussex (VC13)
TQ165221	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	01/01/1991	1 Tea Caddy Cotts., Worthing Road, A24 W Grinstead, 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; 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
TQ143232	Adrian Janes	2000	Land adjacent to 8 Dragons Lane, Dragons Green, Shipley, West Sussex (VC13)
TQ1522	SARG Sussex Amphibian & Reptile Grp	15/03/1990	Knepp Castle Estate, West Sussex (VC13)
TQ155220	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	06/05/1995	Knepp Castle Estate, West Sussex (VC13)
TQ155221	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	06/07/1995	Knepp Mill Pond Nursery, West Sussex (VC13)
TQ157215	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	01/05/1995	Knepp Mill Pond, West Sussex (VC13)
TQ157220	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	31/03/1994	Knepp Castle Estate, West Sussex (VC13)
TQ157223	SARG Sussex Amphibian & Reptile Grp	17/06/1989	Kneppe Castle Estate, West Sussex (VC13)
TQ158221	SARG Sussex Amphibian & Reptile Grp	01/03/1989	Kneppe Castle Estate, West Sussex (VC13)

# Arvicola terrestris

# 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

Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ1409620789	Frances Southgate	18/05/2005	Knepp Estate
TQ1460321729	Frances Southgate	17/06/2005	Knepp Estate
TQ1470621791	Frances Southgate	17/06/2005	Knepp Estate
TQ1472620848	Frances Southgate	18/05/2005	Knepp Estate
TQ1479120829	Frances Southgate	18/05/2005	Knepp Estate
TQ1481021818	Frances Southgate	17/06/2005	Knepp Estate
TQ1501720859	Frances Southgate	18/05/2005	Knepp Estate
TQ1502021791	Frances Southgate	17/06/2005	Knepp Estate
TQ1502220857	Frances Southgate	18/05/2005	Knepp Estate
TQ1506720851	Frances Southgate	18/05/2005	Knepp Estate
TQ1508221773	Frances Southgate	17/06/2005	Knepp Estate
TQ1518921492	Frances Southgate	17/06/2005	Knepp Estate
TQ1520621978	Frances Southgate	17/06/2005	Knepp Estate
TQ1529522144	Frances Southgate	17/06/2005	Knepp Estate
TQ15352215	Frances Southgate	17/06/2005	Knepp Estate
TQ1559721152	Frances Southgate	18/05/2005	Knepp Estate
TQ1561621052	Frances Southgate	18/05/2005	Knepp Estate
TQ1561921117	Frances Southgate	18/05/2005	Knepp Estate
TQ1562020963	Frances Southgate	18/05/2005	Knepp Estate
TQ1563221161	Frances Southgate	18/05/2005	Knepp Estate
TQ1567520885	Frances Southgate	18/05/2005	Knepp Estate
TQ1572621426	Frances Southgate	18/05/2005	Knepp Estate
TQ1577921581	Frances Southgate	18/05/2005	Knepp Estate
TQ158208	Frances Southgate	14/01/2005	Knepp Castle Estate, Knepp Estate
TQ158215	Recorder @ Ecological Services	03/06/2009- 15/06/2009	Knepp Mill Pond
TQ1588420801	Frances Southgate	18/05/2005	Knepp Estate
TQ163207	Frances Southgate	14/01/2005	Knepp Castle Estate, Knepp Estate

### 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; 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
TQ1423	N T Fryer	1969	VC13 West Sussex, West Sussex (VC13)

4 (	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 in the UK (17 of which are known to be breeding here), all of which have been recorded in Sussex, although some more frequently than others and at different times of the year:

Barbastella barbastellus Barbastelle Nyctalus leisleri Leisler's Eptesicus serotinus Serotine Nyctalus noctula Noctule

Myotis alcathoePipistrellus nathusii Nathusius's pipistrelleMyotis bechsteinii Bechstein'sPipistrellus pipistrellus Common pipistrelleMyotis brandtii Brandt'sPipistrellus pygmaeus Soprano pipistrelle

Myotis daubentonii Daubenton's Plecotus auritus Brown long-eared
Myotis myotis Greater mouse-eared Plecotus austriacus Grey long-eared

Myotis mystacinus Whiskered Rhinolophus ferrumequinum Greater horseshoe

Myotis nattereri Natterer's Rhinolophus hipposideros Lesser horseshoe

Three other bat species have been recorded in Sussex as migrants or vagrants: Savi's pipistrelle (Hypsugo savii), Kuhl's pipistrelle (Pipistrellus kuhlii) and parti-coloured bat (Vespertilio murinus).

Five species are included in Annex II of the EU Habitats Directive: Barbastelle, Bechstein's, greater mouse-eared, 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, 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 baby 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; under the Wildlife & Countryside Act 1981 (WCA) in the UK (to implement the Berne Convention) and the Habitats Directive in the EU, which is implemented in the UK through the The Conservation of Habitats and Species Regulations 2010. 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 not 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: <a href="www.bats.org.uk">www.bats.org.uk</a>
Bat helpline: 0845 1300 228
Email: enquiries@bats.org.uk

### **Natural England**

The government body responsible for issuing licences for work that may affect bats or their roosts.

Website: www.naturalengland.org.uk

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: www.sussexbatgroup.org.uk

Tel: 01903 816298

Email: <a href="mailto:contact@sussexbatgroup.org.uk">contact@sussexbatgroup.org.uk</a>



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

# 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).

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### **Key to Indicators**

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

### Land at Knepp Estate + 2km buffer

19 December 2011 ESD/11/569

Hannah Welsh (Knepp Castle Estate)

Common Name	Latin Name	No of Records	M/S H FR MR UR D
Bat sp.	Chiroptera	4	
Brown Long-eared Bat	Plecotus auritus	9	
Daubenton's Bat	Myotis daubentonii	1	
Long-eared sp.	Plecotus	5	
Natterer's Bat	Myotis nattereri	2	
Noctule Bat	Nyctalus noctula	1	
Pipstrelle sp.	Pipistrellus	8	
Serotine	Eptesicus serotinus	5	
Soprano Pipstrelle (55 kHz)	Pipistrellus pygmaeus	1	
Whiskered Bat	Myotis mystacinus	2	



Woods Mill, Henfield, West Sussex BN5 9SD

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

Web: sxbrc.org.uk

# SUSSEX BAT INVENTORY REPORT

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).

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#### Key to Indicators

M/S	Mating/Swarming
Н	Hibernaculum
FR	Feeding Roost
MR	Maternity Roost
UR	<b>Unspecified Roost</b>
D	Droppinas

### Land at Knepp Estate + 2km buffer

19 December 2011 ESD/11/569

Hannah Welsh (Knepp Castle Estate)

# Chiroptera

# Bat sp.

Chiroptera (from the ancient Greek for 'wing hand') is the natural group, or order, that covers all the bats. In Britain we have 14 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/S H FR MR UR D	Abundance	Notes
10/03/1994	Clothalls Farm, West Grinstead, Horsham, West Sussex (VC13)	TQ172200	NE Bat Worker	Building Inspection		1 Present	Rentokil enquiry - timber treatment proposed - evidence of bats.
03/09/1992	Sand Barn, Dial Post, Horsham, West Sussex (VC13)	TQ1519	NE Bat Worker	Building Inspection			Bats found under hanging tiles.
01/09/1991	Greenstreet Barn, Shipley, West Sussex (VC13)	TQ147228	NE Bat Worker	Building Inspection			Bats flew off when wall demolished exposing roost.

02/12/1972	Hampshire Cottage, Shipley CP	TQ138213	S.H. Buckenham	Field Observation		Order Roost	Record from correspondence file passed to SxBRC from Dr Stebbings. Record relates to letter from S.H. Buckenham stating that unknown bat species found to be roosting under tiles on front of 18th Centuary half tiled house.
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# 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/S H FR MR UR D	Abundance	Notes
11/09/2007	Shipley Parish Church, Shipley, West Sussex (VC13)	TQ145218	NE Bat Worker	Building Inspection			Species identified by droppings.
29/04/2004	Knights Farm House, Smithers Hill Lane, Shipley, West Sussex (VC13)	TQ135221	NE Bat Worker	Building Inspection		2 Present	
01/06/1992	St Mary's Church, Shipley, West Sussex (VC13)	TQ145216	NE Bat Worker	Building Inspection			
30/09/1987	St Mary's Church, Shipley, West Sussex (VC13)	TQ145216	NE Bat Worker	Building Inspection			
15/09/1987	Village Church, Shipley, West Sussex (VC13)	TQ145218	Recorder @ Sussex Bat Group	Building Inspection			May have found Whiskered Bat as well. Large colony of Natterer's Bats found in the area.

# Myotis daubentonii

# Daubenton's Bat

A medium-sized to small bat of woodland, usually near water (this species was sometimes known as the 'water bat'). It feeds largely on chironomid midges, caddis flies and mayflies. Summer roosts are in tree holes, semi-underground sites and occasionally buildings. During winter it hibernates in caves, mine tunnels, cellars and similar places. Widespread in Britain and apparently increasing in parts of its range and recorded throughout Sussex.

Date	Location	Grid Reference	Recorder	Sampling Method	M/S H FR MR UR D	Abundance	Notes
13/08/2003	Kneppmill Pond, West Sussex (VC13)	TQ156212	David King	Aural bat detector		Bat(s) Present	

# Myotis mystacinus

# **Whiskered Bat**

Very similar to Brandt's bat (Myotis brandtii) and only separated from that species in 1970. On average slightly smaller and with small anatomical differences. Summer roosts are mainly in buildings and trees, while winter roosts are often in tunnels and caves. Generally more common and widespread than Brandt's bat, the whiskered bat is found throughout the British Isles to the southern parts of Scotland. Widely distributed in both West Sussex and East Sussex.

Date	Location	Grid Reference	Recorder	Sampling Method	M/S H FR MR UR D	Abundance	Notes
30/09/1987	St Mary's Church, Shipley, West Sussex (VC13)	TQ145216	NE Bat Worker	Building Inspection			
02/10/1985	The Old Vicarage, Shipley, West Sussex (VC13)	TQ140219	Tony Hutson	Building Inspection		1 Roosting	The Old Vicarage; in boarded part of roof

# Myotis nattereri

# Natterer's Bat

A medium-sized bat with long ears inhabiting woodland and mixed farmland, often flying near water. In summer it roosts in old buildings, barns and hollow trees and it hibernates in caves, mines and other underground places. Found throughout much of the British Isles, but generally scarce. The UK population of Natterer's bats may be of international importance and it is widespread in Sussex.

Date	Location	Grid Reference	Recorder	Sampling Method	M/S H FR MR UR D	Abundance	Notes
02/08/1988	Church Farm, Shipley, West Sussex (VC13)	TQ142221	NE Bat Worker	Building Inspection		60 Juvenile	Young with adults.
20/07/1988	Shipley Lane Verge, West Sussex (VC13)	TQ142221	Dagmar Junghanns	Unspecified		59 Present	Church Farm North, hollow breezeblock farm building; colony disturbed by demolition of wall.

# Nyctalus noctula Noctule Bat BAP

A large bat of woodlands and wetland that sometimes occurs in towns. Summer roosts are usually in trees, where it can also hibernate. Other hibernation sites can be in rock fissures, bat boxes and sometimes buildings. Widespread, but declining in Sussex and in both England and Wales generally.

Date	Location	Grid Reference	Recorder	Sampling Method	M/S H FR MR UR D	Abundance Notes
13/08/2003	Kneppmill Pond, West Sussex (VC13)	TQ156212	David King	Aural bat detector		Bat(s) Present

# 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/S H FR MR UR D	Abundance	Notes
11/09/2007	Shipley Parish Church, Shipley, West Sussex (VC13)	TQ145218	NE Bat Worker	Building Inspection			Bat detector used.
13/09/2005	Trollards Barn, Knepp Castle Estate, West Grinstead, West Sussex (VC13)	TQ155211	NE Bat Worker	Building Inspection		25 Present	Bats in living space, noise, smell. Exclusion method given.
30/06/2004	6 The Green, Dial Post, Horsham, RH13 8QS., West Sussex (VC13)	TQ153195	NE Bat Worker	Building Inspection		28 Present	
13/08/2003	Kneppmill Pond, West Sussex (VC13)	TQ156212	David King	Aural bat detector		Bat(s) Present	
01/07/1995	West Grinstead Church, West Sussex (VC13)	TQ171208	David King	Building Inspection			
01/07/1994	Field House Farm, Dial Post, nr. Horsham, West Sussex (VC13)	TQ152189	Recorder @ Sussex Bat Group	Grounded Bat		1 injuredmale	Caught and injured. Arm had to be amputated.
01/06/1992	St Mary's Church, Shipley, West Sussex (VC13)	TQ145216	NE Bat Worker	Building Inspection			
07/07/1989	4 Kings Platt, Shipley, West Sussex (VC13)	TQ145219	NE Bat Worker	Building Inspection		50 Present	Bats in roof space and cavity wall.

# Pipistrellus pygmaeus

# Soprano Pipstrelle (55 kHz)

**BAP** 

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/S H FR MR UR D	Abundance	Notes
13/08/2003	Kneppmill Pond, West Sussex (VC13)	TQ156212	David King	Aural bat detector		Bat(s) Present	

# 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/S H FR MR UR D	Abundance	Notes
11/09/2007	Shipley Parish Church, Shipley, West Sussex (VC13)	TQ145218	NE Bat Worker	Building Inspection			Bat detector used.
29/04/2004	Knights Farm House, Smithers Hill Lane, Shipley, West Sussex (VC13)	TQ135221	NE Bat Worker	Building Inspection		2 Present	
13/08/2003	7 Church Close, Shipley, West Sussex (VC13)	TQ145219	NE Bat Worker	Building Inspection		4 Present	
01/07/1995	West Grinstead Church, West Sussex (VC13)	TQ171208	David King	Aural bat detector		Bat(s) Present	
03/11/1986	Shipley Church, West Sussex (VC13)	TQ145218	NE Bat Worker	Building Inspection			Identified from droppings. Have used church for years, but are fouling altar.

# Plecotus auritus

# **Brown Long-eared Bat**

**BAP** 

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/S H FR MR UR D	Abundance	Notes
20/09/1994	Clothalls Farm, Bassles Lane, West Grinstead, West Sussex (VC13)	TQ172199	NE Bat Worker	Building Inspection		1 Adult; 8 Juvenile	
01/06/1992	St Mary's Church, Shipley, West Sussex (VC13)	TQ145216	NE Bat Worker	Building Inspection			
30/09/1987	St Mary's Church, Shipley, West Sussex (VC13)	TQ145216	NE Bat Worker	Building Inspection			
29/09/1987	Hobshorts Farmhouse, West Grinstead, West Sussex (VC13)	TQ165193	NE Bat Worker	Visual		40 Present	Up to 60 present. Owners want to move colony to work on timbers.
15/09/1987	Village Church, Shipley, West Sussex (VC13)	TQ145218	Recorder @ Sussex Bat Group	Building Inspection			
17/06/1987	Lodge Farm House, West Sussex (VC13)	TQ160227	Tony Hutson	Building Inspection		3 Present	Lodge Farm House; possible roost in roof apex.
18/11/1986	Lodge Farm House, West Grinstead, West Sussex (VC13)	TQ160227	NE Bat Worker	Building Inspection		12 Present	About 30 present 4 years earlier.
21/10/1986	Village Church, Shipley, West Sussex (VC13)	TQ145218	Recorder @ Sussex Bat Group	Building Inspection		present Urine Stains	Droppings and urine on altar.
02/10/1985	The Old Vicarage, Shipley, West Sussex (VC13)	TQ140219	Tony Hutson	Building Inspection		1 Roosting	The Old Vicarage; in boarded part of roof

# SUSSEX BIRD INVENTORY

The SxBRC holds approximately one million bird records provided by the Sussex Ornithological Society (SOS). These records range from 1990 to 2009. We are confident that this information will aid developers, consultants and members of the public to make informed decisions as birds are important indicator species of key habitats and can be more easily monitored than many other species groups.



N.B. The SxBRC does not hold <u>all</u> SOS bird data. Records within the breeding season of 15 Schedule 1 birds and three other species which are classed as sensitive in Sussex are <u>not</u> included in our biodiversity reports. Any breeding season records of these species within your search area will be flagged up at the top of the Sussex Bird Inventory. It is critical that you contact the SOS directly for further information as the birds in question will be protected by law and may be affected if you are carrying out potentially damaging operations. (Email: <u>conservation@sos.org.uk</u>)

The list of Schedule 1 and other sensitive birds for which only the SOS holds breeding data for is available on our website: <a href="https://www.sxbrc.org.uk/enquiries/SOS-excluded-data.pdf">www.sxbrc.org.uk/enquiries/SOS-excluded-data.pdf</a>

# Birds, their statuses and the law

### Wildlife and Countryside Act

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. Details of Schedule 2 and Schedule 3 can be found on:

www.rspb.org.uk/ourwork/policy/wildbirdslaw/birdsandlaw/wca/schedules.asp

### 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.

### **Nesting birds**

It is an offence under Section 1 of the Wildlife and Countryside Act of 1981 to intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.

### 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 (see nesting birds section above). 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, and Barn Owls, House Martins and Swallows are Amber listed (see overleaf for details). Roofs are also important for Swifts.

For further information about birds and the law contact the RSPB: www.rspb.org.uk or phone 01767 680551.

### **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.

For more information about agri-environment schemes visit:

www.defra.gov.uk/erdp/schemes/es or www.rspb.orq.uk/ourwork/farming/policy/index.asp

### **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. Visit <a href="https://www.ukbap.org.uk">www.ukbap.org.uk</a> for more information.

### Sussex Biodiversity Action Plan Species

Barn Owl is the only bird to have a Sussex Biodiversity Action Plan, however Skylark, Song Thrush and Swift each have a Species Statement for Sussex. These can be viewed on the Sussex Biodiversity Partnership website: <a href="https://www.biodiversitysussex.org">www.biodiversitysussex.org</a>

### 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 at: <a href="https://www.opsi.gov.uk/acts/acts2006/ukpqa">www.opsi.gov.uk/acts/acts2006/ukpqa</a> 20060016 en 1

#### 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, Green and Amber into which each of the species has been placed. Forty species are Red-listed, 121 are Amber-listed and 86 are Green-listed. You will see an icon next to a species within the bird report indicating which category it is in. 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 (if we get over 20% of a European species' population breeding in the UK for example).

- **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. Please see the Schedule 1 birds section on page 1. A green icon will <u>not</u> appear in our reports but the status will be listed with any bird records.

This information has been obtained from 'Birds of Conservation Concern 3' (BoCC3) which can be downloaded from the RSPB website: www.rspb.orq.uk/wildlife/birdquide/status explained.asp

#### **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. For more information about the EU Birds Directive and its annexes please visit: www.birdlife.org/action/awareness/eu birds directive/what

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.

### **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.

For more information about the Red List visit: www.redlist.org



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

# 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). 177 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 Knepp Estate + 2km buffer

19 December 2011 ESD/11/569

Hannah Welsh (Knepp Castle Estate)

Common Name	Latin Name	First Date	Last Date	No. of Rec's	Total Abundance	Max. Abundance
Bar-headed Goose	Anser indicus	14/09/1992	22/07/1998	2	2	1
Wood Duck	Aix sponsa	15/08/1996	11/03/2005	5	5	1
Mute Swan	Cygnus olor	12/01/1990	10/05/2010	122	689	9
Hottentot Teal	Anas hottentota	05/11/1993	-	1	1	1
Cinnamon Teal	Anas cyanoptera	14/01/1991	-	2	2	1
Tundra Swan	Cygnus columbianus	16/01/1993	05/12/1999	11	58	7
Whooper Swan	Cygnus cygnus	25/09/1999	-	1	1	1
Greater White-fronted Goose	Anser albifrons	21/11/1999	-	1	1	1
Greylag Goose	Anser anser	12/03/1993	19/07/2010	40	1001	97
Greater Canada Goose	Branta canadensis	12/01/1990	10/05/2010	177	4141	93
Barnacle Goose	Branta leucopsis	15/09/1996	03/01/2008	2	3	2
Common Shelduck	Tadorna tadorna	28/04/1995	-	1	3	3
Mandarin Duck	Aix galericulata	23/12/1991	12/10/2010	29	62	9
Eurasian Wigeon	Anas penelope	12/01/1990	25/03/2010	139	9094	91
Gadwall	Anas strepera	12/01/1993	12/03/2010	112	781	9
Eurasian Teal	Anas crecca	02/04/1990	05/04/2010	122	3911	96
Mallard	Anas platyrhynchos	12/01/1990	15/11/2010	344	9524	92
Northern Pintail	Anas acuta	12/01/1991	24/01/1999	15	58	8

Common Name	Latin Name	First Date	Last Date	No. of Rec's	Total Abundance	Max. Abundance
Northern Shoveler	Anas clypeata	12/02/1991	03/01/1999	27	132	9
Red-crested Pochard	Netta rufina	18/01/1993	26/02/2000	11	15	2
Common Pochard	Aythya ferina	12/02/1990	13/03/2005	119	3818	9
Tufted Duck	Aythya fuligula	12/01/1990	12/10/2010	86	354	9
Greater Scaup	Aythya marila	07/01/1996	08/01/1996	2	2	1
Common Scoter	Melanitta nigra	11/04/1996	-	1	1	1
Common Goldeneye	Bucephala clangula	12/01/1990	20/02/1999	5	12	4
Smew	Mergellus albellus	17/02/1996	-	2	2	1
Goosander	Mergus merganser	28/01/1996	03/01/1997	4	7	3
Ruddy Duck	Oxyura jamaicensis	08/01/1995	18/10/1998	3	3	1
Red-legged Partridge	Alectoris rufa	29/04/1990	25/05/2005	7	10	2
Grey Partridge	Perdix perdix	14/01/1991	24/03/2009	2	3	2
Common Pheasant	Phasianus colchicus	18/09/2007	17/02/2008	6	7	2
Little Grebe	Tachybaptus ruficollis	12/01/1990	18/01/2006	27	53	4
Great Crested Grebe	Podiceps cristatus	12/01/1990	15/11/2010	305	1218	9
Great Cormorant	Phalacrocorax carbo	12/02/1990	15/11/2010	228	1459	9
Little Egret	Egretta garzetta	16/03/2007	17/06/2010	3	3	1
Grey Heron	Ardea cinerea	13/03/1990	15/11/2010	258	1248	9
Red Kite	Milvus milvus	04/11/2010	-	1	1	1
Eurasian Marsh Harrier	Circus aeruginosus	26/04/1995	-	1	1	1
Eurasian Sparrowhawk	Accipiter nisus	21/02/1990	06/11/2009	10	13	4
Common Buzzard	Buteo buteo	01/01/1993	15/11/2010	67	103	5
Osprey	Pandion haliaetus	12/04/1996	16/08/2002	3	3	1
Common Kestrel	Falco tinnunculus	05/04/1991	15/12/2009	32	45	4
Eurasian Hobby	Falco subbuteo	09/09/1993	01/10/1995	4	7	2
Peregrine Falcon	Falco peregrinus	13/02/1997	10/01/2000	3	3	1
Water Rail	Rallus aquaticus	03/10/1993	05/12/1999	2	3	2
Common Moorhen	Gallinula chloropus	01/04/1990	15/11/2010	156	735	9
Common Coot	Fulica atra	12/01/1990	01/05/2009	127	1937	92
Northern Lapwing	Vanellus vanellus	06/12/1994	15/05/2008	11	379	70
Common Snipe	Gallinago gallinago	09/09/1993	05/03/2008	19	159	9
Eurasian Woodcock	Scolopax rusticola	10/02/1994	27/03/2008	5	5	1
Common Redshank	Tringa totanus	25/08/2010	-	1	0	0
Green Sandpiper	Tringa ochropus	27/08/1994	13/04/1996	11	14	2
Common Sandpiper	Actitis hypoleucos	10/05/1992	09/05/2009	14	52	6
Black-headed Gull	Larus ridibundus	19/02/1993	24/02/2010	24	4686	6
Mew Gull	Larus canus	18/12/1995	11/03/2005	3	77	37
Herring Gull	Larus argentatus	01/01/1993	05/03/2008	4	270	63
Black Tern	Chlidonias niger	15/09/1995	-	1	1	1

Common Name	Latin Name	First Date	Last Date	No. of Rec's	Total Abundance	Max. Abundance
Common Tern	Sterna hirundo	16/04/1996	22/05/2007	3	3	1
Arctic Tern	Sterna paradisaea	26/09/1999	-	1	1	1
Stock Pigeon	Columba oenas	05/11/1993	01/08/2010	27	96	5
Common Wood Pigeon	Columba palumbus	14/01/1991	16/01/2009	30	2604	6
Eurasian Collared Dove	Streptopelia decaocto	08/01/1993	12/01/2008	12	712	85
European Turtle Dove	Streptopelia turtur	04/05/1995	20/05/2010	15	19	3
Common Cuckoo	Cuculus canorus	17/04/1993	21/05/2010	24	25	2
Barn Owl	Tyto alba	04/10/1993	31/12/2009	10	34	25
Little Owl	Athene noctua	16/08/1993	02/04/2010	18	34	4
Tawny Owl	Strix aluco	27/10/1994	23/07/2010	6	6	1
Common Swift	Apus apus	16/06/2002	13/07/2009	9	120	50
Common Kingfisher	Alcedo atthis	07/05/1990	12/10/2010	25	32	3
Eurasian Wryneck	Jynx torquilla	27/08/2002	-	1	1	1
Green Woodpecker	Picus viridis	14/09/1992	17/12/2010	32	31	2
Great Spotted Woodpecker	Dendrocopos major	01/05/1990	23/07/2010	24	28	3
Lesser Spotted Woodpecker	Dendrocopos minor	01/01/1993	18/04/2008	15	20	2
Wood Lark	Lullula arborea	16/04/2008	18/06/2010	6	7	2
Sky Lark	Alauda arvensis	29/09/1997	13/06/2007	13	40	5
Sand Martin	Riparia riparia	17/09/1994	-	1	10	10
Barn Swallow	Hirundo rustica	16/10/1993	10/04/2009	24	498	60
House Martin	Delichon urbicum	16/10/1993	13/08/2010	34	694	9
Meadow Pipit	Anthus pratensis	26/03/1994	06/05/2005	3	44	25
Yellow Wagtail	Motacilla flava	20/09/1993	26/09/1999	3	5	3
Grey Wagtail	Motacilla cinerea	01/05/1990	18/07/2006	21	41	6
Pied Wagtail	Motacilla alba	27/09/1993	15/11/2010	28	141	5
Winter Wren	Troglodytes troglodytes	02/01/2003	19/07/2010	20	20	2
Hedge Accentor	Prunella modularis	05/05/2003	17/02/2008	16	22	4
European Robin	Erithacus rubecula	05/05/2003	23/07/2010	41	49	2
Common Nightingale	Luscinia megarhynchos	05/07/1991	20/05/2010	36	51	9
Black Redstart	Phoenicurus ochruros	28/10/1995	-	1	1	1
Whinchat	Saxicola rubetra	08/05/1995	09/05/1995	2	2	1
Stonechat	Saxicola torquata	14/10/1995	28/10/1995	2	2	1
Common Blackbird	Turdus merula	05/05/2003	17/12/2010	83	110	4
Fieldfare	Turdus pilaris	18/10/1993	15/11/2010	17	1695	750
Song Thrush	Turdus philomelos	29/04/1993	23/07/2010	19	35	2
Redwing	Turdus iliacus	24/09/1993	17/12/2010	14	676	80
Mistle Thrush	Turdus viscivorus	18/01/2006	08/10/2009	10	16	4
Common Grasshopper Warbler	Locustella naevia	30/07/2000	-	1	1	1
Sedge Warbler	Acrocephalus schoenobaenus	13/06/2002	16/07/2003	2	3	2

Common Name	Latin Name	First Date	Last Date	No. of Rec's	Total Abundance	Max. Abundance
Eurasian Reed Warbler	Acrocephalus scirpaceus	22/07/1993	17/06/2010	25	43	4
Blackcap	Sylvia atricapilla	29/04/1990	10/05/2008	18	20	3
Garden Warbler	Sylvia borin	08/05/1995	21/06/2005	5	6	2
Lesser Whitethroat	Sylvia curruca	06/05/2005	01/06/2007	3	3	2
Common Whitethroat	Sylvia communis	20/04/1993	21/05/2010	18	44	8
Common Chiffchaff	Phylloscopus collybita	01/05/1990	01/05/2009	36	52	5
Willow Warbler	Phylloscopus trochilus	05/05/2003	20/04/2010	4	4	1
Goldcrest	Regulus regulus	23/05/2005	27/08/2006	2	2	1
Firecrest	Regulus ignicapilla	15/05/2008	-	1	1	1
Spotted Flycatcher	Muscicapa striata	01/06/1994	04/07/2007	12	21	2
Long-tailed Tit	Aegithalos caudatus	24/10/2000	15/11/2010	6	28	6
Blue Tit	Cyanistes caeruleus	05/05/2003	12/10/2010	53	82	4
Great Tit	Parus major	05/05/2003	25/08/2010	31	52	7
Coal Tit	Periparus ater	23/05/2005	21/06/2005	2	4	3
Willow Tit	Poecile montanus	01/05/1993	-	1	1	1
Marsh Tit	Poecile palustris	01/01/1993	21/06/2005	3	3	1
Wood Nuthatch	Sitta europaea	15/01/1995	23/07/2010	20	44	4
Eurasian Treecreeper	Certhia familiaris	17/02/2008	-	1	1	1
Great Grey Shrike	Lanius excubitor	09/03/2005	-	1	1	1
Eurasian Jay	Garrulus glandarius	05/05/2003	10/05/2010	16	27	6
Black-billed Magpie	Pica pica	05/05/2003	18/11/2008	20	39	6
Eurasian Jackdaw	Corvus monedula	22/07/1993	17/12/2010	76	1979	80
Rook	Corvus frugilegus	28/02/1994	29/03/2010	49	1141	8
Carrion Crow	Corvus corone	14/12/2003	08/06/2009	18	31	5
Common Starling	Sturnus vulgaris	03/10/1993	10/05/2008	11	628	80
House Sparrow	Passer domesticus	26/01/1994	01/09/2010	22	152	8
Chaffinch	Fringilla coelebs	17/01/1993	13/08/2010	75	770	70
Brambling	Fringilla montifringilla	02/12/2005	27/03/2008	3	3	1
European Greenfinch	Carduelis chloris	08/01/1993	16/12/2007	11	876	90
European Goldfinch	Carduelis carduelis	03/04/1997	16/12/2009	8	20	6
Eurasian Siskin	Carduelis spinus	21/12/1993	09/04/2006	4	36	3
Common Linnet	Carduelis cannabina	02/04/2002	04/01/2009	8	828	750
Lesser Redpoll	Carduelis cabaret	17/10/1993	14/04/2009	2	24	4
Common Crossbill	Loxia curvirostra	04/11/1993		1	5	5
Common Bullfinch	Pyrrhula pyrrhula	01/01/1997	23/07/2010	9	14	4
Yellowhammer	Emberiza citrinella	18/12/1995	21/05/2010	27	64	7
Reed Bunting	Emberiza schoeniclus	01/01/1993	20/05/2010	21	26	4



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

### SUSSEX BIRD INVENTORY REPORT

### Land at Knepp Estate + 2km buffer

19 December 2011 ESD/11/569 Hannah Welsh (Knepp Castle Estate)

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.

Anser indicus Bar-headed Goose

First Date Last Date No. of Records

14/09/1992 22/07/1998

Aix sponsa Wood Duck

First Date Last Date No. of Records

# 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

12/01/1990 10/05/2010 122

# Anas hottentota Hottentot Teal

First Date Last Date No. of Records

05/11/1993 -

# Anas cyanoptera Cinnamon Teal

First Date Last Date No. of Records

14/01/1991 - 2

# Cygnus columbianus

# **Tundra Swan**





A scarce winter visitor and scarce passage migrant increasingly threatened by loss of habitat. This is the smallest of the UK's swans and is all white apart from a yellow bill with black tip. It can be found on low-lying wet pastures, flooded grasslands, saltmarshes, lakes and reservoirs where it feeds on leaves, shoots and roots.

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

16/01/1993 05/12/1999 11

# Cygnus cygnus Whooper Swan





A very scarce winter visitor and passage migrant commoner further north in Britain. Feeds in wet areas, such as flooded fields, on aquatic plants, grass, grain and potatoes.

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

25/09/1999 - 1

# Anser albifrons Greater White-fronted Goose BAP

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

First Date No. of Records

21/11/1999 - 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

12/03/1993 19/07/2010 40

# **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

12/01/1990 10/05/2010 177

# Branta leucopsis

### **Barnacle Goose**



A very scarce winter visitor; often in severe weather; and an increasingly common feral resident. It is a medium-sized sociable goose that feeds on leaves, stems, roots and seeds.

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

15/09/1996 03/01/2008 2

### Tadorna tadorna

### Common Shelduck

A fairly common winter visitor and passage migrant and a scarce but regular breeding species. This large duck has a red bill and black head and is recorded mainly in coastal areas, but also from reservoirs and gravel pits where it feeds on invertebrates, small shellfish and aquatic snails.

Bern Convention Appendix 2; Convention on Migratory Species; Appendix 2

First Date Last Date No. of Records

28/04/1995 -

# 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

23/12/1991 12/10/2010 29

### 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

12/01/1990 25/03/2010 139

# 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

12/01/1993 12/03/2010 112

#### 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

02/04/1990 05/04/2010 122

# Anas platyrhynchos Mallard



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

First Date Last Date No. of Records

12/01/1990 15/11/2010 344

## Anas acuta Northern Pintail





A duck that is a fairly common winter visitor to coastal estuaries and lagoons in Sussex. It has also been recorded in summer, as a passage migrant and it has bred in our area. The Pintail is slim, elegant and so-called because of its elongated tail feathers. It feeds on a variety of small invertebrates and plants.

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

12/01/1991 24/01/1999 15

## 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

12/02/1991 03/01/1999 27

### Netta rufina

### **Red-crested Pochard**

Possibly a rare winter visitor and passage migrant to Sussex although most records probably relate to escaped or feral birds. Males in breeding plumage show a bright orange head and red beak. They feed on stems, roots and seeds of aquatic vegetation at lakes and gravel pits with reed-fringed edges.

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

First Date Last Date No. of Records

18/01/1993 26/02/2000 11

## 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

12/02/1990 13/03/2005 119

# Aythya fuligula Tufted Duck



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

12/01/1990 12/10/2010 86

# Aythya marila Greater Scaup







This diving duck is a scarce winter visitor and passage migrant mainly recorded along the coast especially in hard weather. It is rare in summer. It feeds on shellfish, crustacea and small insects.

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; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

First Date Last Date No. of Records

07/01/1996 08/01/1996 2

# 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 large-scale 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; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

First Date Last Date No. of Records

11/04/1996 - 1

## 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

12/01/1990 20/02/1999 5

### Mergellus albellus

#### Smew



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

First Date Last Date No. of Records

17/02/1996 - 2

## Mergus merganser Goosander

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

28/01/1996 03/01/1997 4

## 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

08/01/1995 18/10/1998 3

#### 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

29/04/1990 25/05/2005 7

## 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 Rve 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; UK Biodiversity Action Plan priority species

First Date Last Date No. of Records

14/01/1991 24/03/2009 2

#### 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

18/09/2007 17/02/2008

## 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 dependant on suitable water levels for successful breeding.

Bird Population Status - amber

First Date Last Date No. of Records

12/01/1990 18/01/2006 27

## 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

12/01/1990 15/11/2010 305

#### 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

12/02/1990 15/11/2010 228

# 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

16/03/2007 17/06/2010 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

13/03/1990 15/11/2010 258

## 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

04/11/2010 - 1

## Circus aeruginosus

## **Eurasian Marsh Harrier**





This bulky raptor is the largest of the Harriers, and is a scarce spring and autumn passage migrant, and a very scarce winter visitor. It bred for the first time in 2004. Usually found in and around wetland habitats such as reedbeds and marshes, where it can feed on small birds and mammals. It has recovered well from historic declines, however it is still a bird of conservation concern

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

26/04/1995 - 1

## 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

21/02/1990 06/11/2009 10

#### Buteo buteo

#### **Common Buzzard**

A fairly common but localised resident and passage migrant and possible winter 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

01/01/1993 15/11/2010 67

## 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

12/04/1996 16/08/2002 3

#### 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

05/04/1991 15/12/2009 32

### 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 that 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

09/09/1993 01/10/1995

### Falco peregrinus

## Peregrine Falcon



Scarce breeding resident, passage migrant and winter visitor usually nesting on cliffs. This large and powerful falcon is well-known 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

13/02/1997 10/01/2000 3

#### 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

03/10/1993 05/12/1999 2

### 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

01/04/1990 15/11/2010 156

#### 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

12/01/1990 01/05/2009 127

## 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; UK Biodiversity Action Plan priority species

**First Date Last Date** No. of Records

06/12/1994 15/05/2008 11

## Gallinago gallinago

## Common Snipe



Now a very scarce breeder and fairly common winter visitor favouring poorly drained pasture. The UK population of Snipe has undergone particularly steep declines in lowland wet grassland in the past twenty-five years. It is a plump medium-sized wader with short legs and a long bill used to probe for small invertebrates, including worms and insect larvae. Males display by flying high in the air and then dropping steeply producing a noise by vibrating their tail feathers.

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

**First Date Last Date** No. of Records

09/09/1993 05/03/2008

### 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

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

**First Date Last Date** No. of Records

10/02/1994 27/03/2008 5

### Tringa totanus

### Common Redshank



A medium-sized wader with a long red bill and long red legs. It is a scarce resident in wetlands close to rivers, and a fairly common winter visitor and passage migrant. Its preferred habitats are wet grassland, estuaries and saltmarshes where it can feed on insects, earthworms, molluscs and crustaceans. Most breeding sites in Sussex are within protected areas, such as nature reserves, which employ specific management for breeding waders.

Bird Population Status - amber; 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)

First Date Last Date No. of Records

25/08/2010 -

### 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

27/08/1994 13/04/1996 11

## Actitis hypoleucos

## **Common Sandpiper**



This smallish wader is a fairly common passage migrant, recognised by its bobbing motion and high pitched call. A few regularly winter and has bred at least once. This wader is most commonly seen on muddy margins along rivers, and around pools and reservoirs

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

First Date Last Date No. of Records

10/05/1992 09/05/2009 14

#### Larus 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

19/02/1993 24/02/2010 24

#### 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

18/12/1995 11/03/2005 3

### Larus argentatus

### **Herring Gull**

BAP



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

First Date Last Date No. of Records

01/01/1993 05/03/2008 4

## Chlidonias niger Black Tern





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)

15/09/1995 -

### Sterna hirundo Common Tern



Fairly common breeding summer visitor and common passage migrant. This medium sized white and grey tern has a black cap and a red beak. It breeds on the coast on shingle and on man made rafts on inland waterbodies. It feeds on fish caught both at sea and on fresh water.

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

First Date Last Date No. of Records

16/04/1996 22/05/2007 3

# Sterna paradisaea Arctic Tern



The Arctic Tern's status is uncertain as it is difficult to separate from the Common Tern in the field, but probably a fairly common spring and autumn passage migrant. Mainly recorded from the coast, but sometimes inland. This medium-sized Tern feeds mainly on fish so it depends on a healthy marine environment; some colonies have been affected by fish shortages. It probably has the longest migration of all birds.

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

26/09/1999 - 1

# 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

05/11/1993 01/08/2010 27

### 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

14/01/1991 16/01/2009 3

# 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

08/01/1993 12/01/2008 12

### 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; UK Biodiversity Action Plan priority species

First Date Last Date No. of Records

04/05/1995 20/05/2010 15

#### 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; UK Biodiversity Action Plan priority species

First Date Last Date No. of Records

17/04/1993 21/05/2010 24

## 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)

First Date Last Date No. of Records

04/10/1993 31/12/2009 10

#### 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

16/08/1993 02/04/2010 18

#### 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

27/10/1994 23/07/2010 6

### 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

16/06/2002 13/07/2009

#### 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

07/05/1990 12/10/2010 25

#### Jynx torquilla

### **Eurasian Wryneck**







A brown sparrow-sized scarce passage migrant that ceased to be a breeding species in Sussex around 1920. It looks nothing like the other members of the woodpecker family. Most modern records are between August and October. Most often seen in coastal areas with short grass, occasionally more inland garden lawns where it feeds on ants.

Bern Convention Appendix 2; Bird Population Status - red; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

First Date Last Date No. of Records

27/08/2002 - 1

#### 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

14/09/1992 17/12/2010 32

#### 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

01/05/1990 23/07/2010 24

## Dendrocopos minor

## Lesser Spotted Woodpecker





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

First Date Last Date No. of Records

01/01/1993 18/04/2008 15

### 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; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 (Schedule 1 Part 1)

First Date Last Date No. of Records

16/04/2008 18/06/2010 6

### Alauda arvensis Sky Lark

BAP





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; UK Biodiversity Action Plan priority species

First Date Last Date No. of Records

29/09/1997 13/06/2007 13

## 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

17/09/1994 -

### 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

16/10/1993 10/04/2009 24

### **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

16/10/1993 13/08/2010 34

# 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

26/03/1994 06/05/2005 3

# 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

First Date Last Date No. of Records

20/09/1993 26/09/1999 3

#### 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

01/05/1990 18/07/2006 21

#### 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

27/09/1993 15/11/2010 28

## 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

02/01/2003 19/07/2010 20

#### 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

First Date Last Date No. of Records

05/05/2003 17/02/2008 18

#### Erithacus rubecula

## **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

05/05/2003 23/07/2010 41

## 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

05/07/1991 20/05/2010 36

### Phoenicurus ochruros Black Redstart





Rare resident; fairly common passage migrant and scarce winter visitor. A recent colonist of the British Isles and first recorded as breeding on the cliffs near Hastings (1923). This robin-sized bird can be found in coastal area where it feeds on insects, spiders, berries and seeds.

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

First Date Last Date No. of Records

28/10/1995 - 1

#### 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 eyestripe.

Bern Convention Appendix 2; Bird Population Status - amber

First Date Last Date No. of Records

08/05/1995 09/05/1995 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

14/10/1995 28/10/1995 2

### 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

05/05/2003 17/12/2010 83

# 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

18/10/1993 15/11/2010 17

# Turdus philomelos Song Thrush





A 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

First Date Last Date No. of Records

29/04/1993 23/07/2010 19

## 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

24/09/1993 17/12/2010 14

## 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

18/01/2006 08/10/2009 10

## Locustella naevia

## Common Grasshopper Warbler







Very scarce and declining summer visitor and fairly common passage migrant which has a high, insect-like reeling song. Most recent records are from the Downs and the Rye Bay area, but it has been recorded right across our two counties. Nests are usually in lowland areas of damp rough grassland, scrub and fen and it feeds on insects.

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

First Date Last Date No. of Records

30/07/2000 -

### 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

13/06/2002 16/07/2003 2

## 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

22/07/1993 17/06/2010 25

## 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

29/04/1990 10/05/2008 18

## 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

08/05/1995 21/06/2005 5

### 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

06/05/2005 01/06/2007 3

## 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

20/04/1993 21/05/2010 18

## 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

01/05/1990 01/05/2009 36

## 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

05/05/2003 20/04/2010 4

## 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

23/05/2005 27/08/2006 2

# 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

15/05/2008 -

#### 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; UK Biodiversity Action Plan priority species

First Date Last Date No. of Records

01/06/1994 04/07/2007 12

### 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.

24/10/2000 15/11/2010 6

## Cyanistes caeruleus Blue Tit

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

05/05/2003 12/10/2010 53

## Parus major Great 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 No. of Records

05/05/2003 25/08/2010 3

# 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

23/05/2005 21/06/2005 2

### Poecile montanus Willow Tit

**BAP** 



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

First Date Last Date No. of Records

01/05/1993 - 1

# Poecile palustris Marsh Tit

BAP



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

First Date Last Date No. of Records

01/01/1993 21/06/2005

### 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

15/01/1995 23/07/2010

#### Certhia familiaris

### **Eurasian Treecreeper**

20

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 No. of Records

17/02/2008 -

#### 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

09/03/2005 -

# 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

05/05/2003 10/05/2010 16

## 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

05/05/2003 18/11/2008 20

#### 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

22/07/1993 17/12/2010 76

## 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

28/02/1994 29/03/2010 49

#### 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 Last Date No. of Records

14/12/2003 08/06/2009 18

## 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

First Date Last Date No. of Records

03/10/1993 10/05/2008 11

### 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; UK Biodiversity Action Plan priority species

First Date Last Date No. of Records

26/01/1994 01/09/2010 22

### 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

17/01/1993 13/08/2010 75

## 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)

02/12/2005 27/03/2008 3

#### 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

08/01/1993 16/12/2007 11

## 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

03/04/1997 16/12/2009 8

## Carduelis spinus

### **Eurasian Siskin**

A yellow-green and black bird that is a common winter visitor, 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

21/12/1993 09/04/2006

#### Carduelis cannabina Common Linnet

BAP



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.

R

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

First Date Last Date No. of Records

02/04/2002 04/01/2009

## Carduelis cabaret Lesser Redpoll

ΔP



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; UK Biodiversity Action Plan priority species

First Date Last Date No. of Records

17/10/1993 14/04/2009 2

### Loxia curvirostra Common Crossbill



A chunky finch with a large head and bill, it is a scarce visitor occurring in large numbers in irruption 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 No. of Records

04/11/1993 -

## 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

First Date Last Date No. of Records

01/01/1997 23/07/2010 9

#### Emberiza citrinella

#### Yellowhammer







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 cheeeeese" 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; UK Biodiversity Action Plan priority species

**First Date Last Date** No. of Records

21/05/2010 18/12/1995

#### 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; UK Biodiversity Action Plan priority species

**First Date Last Date** No. of Records

01/01/1993 20/05/2010 21

## BIODIVERSITY ACTION PLAN SPECIES INVENTORY

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 UKBAP list was updated in 2007 and now contains **1,149 species** and **65 habitats**. The new list replaces the previous one, with the majority of original species being reselected. 123 species did not meet the new criteria (at least 13 have met their UK BAP targets).

Further information on the UKBAP and details of the species and habitat action plans can be found at: <a href="https://www.ukbap.org.uk">www.ukbap.org.uk</a>

Given the importance of the UK BAP in stimulating action and mobilising resources, it is important that the list is reviewed periodically. The 2007 list was a result of such a review made by the Biodiversity Reporting and Information Group (BRIG), with JNCC as chair and secretariat. The aim was to ensure a focus on the correct priorities for action by considering emerging priorities, conservation successes, new drivers and the large amount of new information.

#### 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. To achieve this, Local Biodiversity Action Plans (LBAP) have been established and there are currently over 160 at some stage of development in the UK. In Sussex, the LBAP is co-ordinated by the Sussex Biodiversity Partnership and contains 473 species, 39 of which are birds. Details of the species and habitats included in the local plan can be found at <a href="https://www.biodiversitysussex.org">www.biodiversitysussex.org</a>

(Contact: Laurie Jackson, Conservation Officer. 01273 497551 or email biodiversityofficer@sussexwt.org.uk)

### 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 at: www.opsi.gov.uk/acts/acts2006/ukpga 20060016 en 1



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

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

### Land at Knepp Estate + 2km buffer

19 December 2011 ESD/11/569 Hannah Welsh (Knepp Castle Estate)

### Anaptychia ciliaris subsp. ciliaris

N

Mainly on bark of nutrient-rich, well-lit, mature, broad-leaved trees, rarely on more or less calcareous rocks and tombstones. Widespread in Sussex but decreasing.

#### licher

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

Grid ReferenceRecorderDateLocalityTQ1522Francis Rose1967 - 1969Knepp Castle Park

### Carex vulpina

## True Fox-sedge

N

This nationally rare native sedge of southern lowland England grows on river banks, ditch sides and damp meadows on heavy clay soils which are sometimes flooded in winter. Most of the extant populations are in Kent and Sussex, though it is currently confined to West Sussex in our area. Separation from false fox-sedge, Carex otrubae, is difficult.

#### flowering plant

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

Grid Reference	Recorder	Date	Locality
TQ12L	Alan Knapp;K.A. Knapp	26/09/2008	Shipley/Dragons Green area, West Sussex (VC13)

#### Oenanthe fistulosa

# Tubular Water-dropwort

N

A local plant of shallow water in ditches, ponds and canals. Widespread, mostly near the coast, in East and West Sussex.

#### flowering plant

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

Grid Reference	Recorder	Date	Locality
TQ151210	Kate Ryland	24/05/2007	Knepp, nr Swallows lane, Knepp Estate
TQ153211	Marion Lee / Finch	19/07/1991	River Adur, Knepp Castle Estate

### Sium latifolium

## Greater Water-parsnip

N

An aquatic perennial now generally found in ditches, growing amongst other emergent species, or in reedswamp. A declining species currently known from several sites in West Sussex but only two in East Sussex.

#### flowering plant

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

Grid Reference	Recorder	Date	Locality
TQ11Z	SPASU	1725 - 1978	West Sussex (VC13)

## Ranunculus tripartitus

#### Three-lobed Crowfoot

N

An annual of shallow water bodies in open sites which are flooded in winter but summer-dry. In south east England it is also found in pools in coppiced woodland. Currently known from a single site in West Sussex and several in East Sussex, though its status in some of these needs to be checked.

#### flowering plant

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

Grid Reference	Recorder	Date	Locality
TQ11P	Anon @ Sussex Bot. Rec. Soc.;V&J	1999	Dial Post, West Sussex (VC13)
	V&JH		

### Lucanus cervus

Stag Beetle

Ν

A beetle of broadleaved woodland, parks, other pasture woodland and gardens. The larvae live in the decaying wood of deciduous trees, often in roots and stumps. Widely recorded from West Sussex but rare in East Sussex and apparently absent from much of the vice-county.

#### insect - beetle (Coleoptera)

Habitats Directive Annex 2 - non-priority species; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.5a; 9.5b)

Grid Reference	Recorder	Date	Locality
TQ159214	Bill Shelton	14/06/2004	Park Road, Henfield CP
TQ172222	Paul James	14/07/2008	Steyning, Steyning Cricket Ground, Steyning CP

#### Thecla betulae

## Brown Hairstreak

N

A butterfly requiring sloe scrub in which to breed. Widely, but very thinly, distributed in West Sussex, but gone from the east and generally in decline nationally.

#### insect - butterfly

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.5a; 9.5b)

Grid Reference	Recorder	Date	Locality
TQ144196	David Buckingham	21/07/1995	Wickwood, Tory Copse, Dial Post
TQ148203	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ149199	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ152197	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ152203	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ157198	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ158221	David Buckingham	26/08/1995	Pleasure Grounds, Knepp Castle

## Cupido minimus Small Blue N

Britain's smallest butterfly. Found in discrete colonies in a number of places along the Downs from East to West Sussex.

#### insect - butterfly

IUCN (2001) - Lower risk - near threatened; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England; 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
TQ155225	Rich Howorth	26/07/2006	Knepp Castle Estate, Knepp Estate

## Limenitis camilla White Admiral

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; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

Grid Reference	Recorder	Date	Locality
TQ146234	David Buckingham	29/06/1995	Renches Wood, Knepp Estate
TQ1521	Philip Clarkson-Webb	18/07/1996	Knepp Castle, Shipley
TQ155225	Rich Howorth	18/07/2007	Knepp Castle Estate, Knepp Estate
TQ158221	David Buckingham	01/10/1995	Pleasure Grounds, Knepp Castle
TQ1820	Jim Steedman; Judith Steedman	14/07/1995	West Grinstead, Furzfield Wood

*Timandra comae* 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; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

Grid Reference	Recorder	Date	Locality
TQ14942249	Ben Rainbow	25/08/2010	Pound Lane Verge, Shipley CP

# *Tyria jacobaeae* Cinnabar N

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; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

Grid Reference	Recorder	Date	Locality
TQ151209	Kate Ryland	24/05/2007	Knepp, nr Swallows lane, Knepp Estate

Diarsia rubi

# Small Square-spot

N

A brown noctuid moth which flies in early and again in late summer. Larvae eat a wide variety of low-growing plants. Widespread and often abundant in Sussex.

#### insect - moth

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

Grid Reference Recorder Date Locality

TQ156219 Simon Curson 23/08/1995 Knepp Estate, West Sussex (VC13)

### Atethmia centrago

#### Centre-barred Sallow

N

An orange and brown noctuid moth of woodlands and hedgerows on the wing in late summer and early autumn. Larvae feed on ash. Widespread in Sussex.

#### insect - moth

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

Grid Reference Recorder Date Locality

TQ156219 Simon Curson 23/08/1995 Knepp Estate, West Sussex (VC13)

## Amphipyra tragopoginis

#### Mouse Moth

Ν

A widespread moth in the British Isles, but one that is in marked decline. Very widely recorded in Sussex.

#### insect - moth

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

Grid Reference Recorder Date Locality

TQ156219 Simon Curson 23/08/1995 Knepp Estate, West Sussex (VC13)

### Hydraecia micacea

### Rosy Rustic

N

A widespread noctuid moth, but one that is in marked decline in the British Isles. Larvae feed in the larger roots of a variety of plants such as docks. Very widely recorded in Sussex.

#### insect - moth

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

Grid Reference Recorder Date Locality

TQ156219 Simon Curson 23/08/1995 Knepp Estate, West Sussex (VC13)

#### Anguilla anguilla

### European Eel

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; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

Grid Reference Recorder Date Locality

TQ1530020900 EA - Environment Agency 14/07/2006 Tenchford Bridge, Knepp Estate

#### Triturus cristatus

#### **Great Crested Newt**

Ν

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; 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
TQ148233	SARG Sussex Amphibian & Reptile Grp	01/01/1991	Renches Wood-3, West Sussex (VC13)

**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; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.5a; 9.5b)

<b>Grid Reference</b>	Recorder	Date	Locality
TQ136207	SARG Sussex Amphibian & Reptile Grp	27/02/1994	Lower Barn, West Sussex (VC13)
TQ143196	SARG Sussex Amphibian & Reptile Grp	21/03/1994	Bentons Place Cottage-1, West Sussex (VC13)
TQ144196	SARG Sussex Amphibian & Reptile Grp	21/03/1994	Bentons Place Cottage-2, West Sussex (VC13)
TQ152222	SARG Sussex Amphibian & Reptile Grp	26/02/1994	Knepp duckpond, West Sussex (VC13)

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; 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
TQ136221	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	27/03/1995	Knepp Castle Estate, West Sussex (VC13)
TQ143232	Adrian Janes	08/08/2002	Land adjacent to 8 Dragons Lane, Dragons Green, Shipley, West Sussex (VC13)
TQ145219	Alf Simpson MBE	22/04/2006	Allotment, Red Lane, Shipley, West Sussex (VC13)
TQ155220	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	26/04/1995	Knepp Castle Estate, West Sussex (VC13)
TQ157220	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	19/08/1994	Knepp Castle Estate, West Sussex (VC13)
TQ157223	SARG Sussex Amphibian & Reptile Grp	28/09/1987	Kneppe Castle Estate, West Sussex (VC13)
TQ158221	SARG Sussex Amphibian & Reptile Grp	01/03/1989	Kneppe Castle Estate, West Sussex (VC13)
TQ163215	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	01/01/1992	West Grinstead, West Sussex (VC13)
TQ165221	SARG Sussex Amphibian & Reptile Grp;Dennis Dey	01/01/1991	1 Tea Caddy Cotts., Worthing Road, A24 W Grinstead, West Sussex (VC13)

Natrix natrix Grass Snake N

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; 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 Refer	rence Recorder	Date	Locality
TQ143232	Adrian Janes	2000	Land adjacent to 8 Dragons Lane, Dragons Green, Shipley, West Sussex (VC13)
TQ1522	SARG Sussex Amphibian &	Reptile Grp 15/03/1990	Knepp Castle Estate, West Sussex (VC13)
TQ155220	SARG Sussex Amphibian & Grp;Dennis Dey	Reptile 06/05/1995	Knepp Castle Estate, West Sussex (VC13)
TQ155221	SARG Sussex Amphibian & Grp;Dennis Dey	Reptile 06/07/1995	Knepp Mill Pond Nursery, West Sussex (VC13)
TQ157215	SARG Sussex Amphibian & Grp;Dennis Dey	Reptile 01/05/1995	Knepp Mill Pond, West Sussex (VC13)
TQ157220	SARG Sussex Amphibian & Grp;Dennis Dey	Reptile 31/03/1994	Knepp Castle Estate, West Sussex (VC13)
TQ157223	SARG Sussex Amphibian &	Reptile Grp 17/06/1989	Kneppe Castle Estate, West Sussex (VC13)
TQ158221	SARG Sussex Amphibian &	Reptile Grp 01/03/1989	Kneppe Castle Estate, West Sussex (VC13)

## Erinaceus europaeus

## West European Hedgehog

Ν

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; Sussex Biodiversity Action Plan Species; UK Biodiversity Action Plan priority species

<b>Grid Reference</b>	Recorder	Date	Locality
TQ143229	Rich Howorth	17/07/2006	Dragons Green
TQ1522	Martin Port	01/05/1966	West Grinstead, West Sussex (VC13)

#### Arvicola terrestris

### 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

Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ1409620789	Frances Southgate	18/05/2005	Knepp Estate
TQ1460321729	Frances Southgate	17/06/2005	Knepp Estate
TQ1470621791	Frances Southgate	17/06/2005	Knepp Estate
TQ1472620848	Frances Southgate	18/05/2005	Knepp Estate
TQ1479120829	Frances Southgate	18/05/2005	Knepp Estate
TQ1481021818	Frances Southgate	17/06/2005	Knepp Estate
TQ1501720859	Frances Southgate	18/05/2005	Knepp Estate
TQ1502021791	Frances Southgate	17/06/2005	Knepp Estate
TQ1502220857	Frances Southgate	18/05/2005	Knepp Estate
TQ1506720851	Frances Southgate	18/05/2005	Knepp Estate
TQ1508221773	Frances Southgate	17/06/2005	Knepp Estate
TQ1518921492	Frances Southgate	17/06/2005	Knepp Estate
TQ1520621978	Frances Southgate	17/06/2005	Knepp Estate
TQ1529522144	Frances Southgate	17/06/2005	Knepp Estate
TQ15352215	Frances Southgate	17/06/2005	Knepp Estate
TQ1559721152	Frances Southgate	18/05/2005	Knepp Estate
TQ1561621052	Frances Southgate	18/05/2005	Knepp Estate
TQ1561921117	Frances Southgate	18/05/2005	Knepp Estate
TQ1562020963	Frances Southgate	18/05/2005	Knepp Estate
TQ1563221161	Frances Southgate	18/05/2005	Knepp Estate
TQ1567520885	Frances Southgate	18/05/2005	Knepp Estate
TQ1572621426	Frances Southgate	18/05/2005	Knepp Estate
TQ1577921581	Frances Southgate	18/05/2005	Knepp Estate
TQ158208	Frances Southgate	14/01/2005	Knepp Castle Estate, Knepp Estate
TQ158215	Recorder @ Ecological Services	03/06/2009- 15/06/2009	Knepp Mill Pond
TQ1588420801	Frances Southgate	18/05/2005	Knepp Estate
TQ163207	Frances Southgate	14/01/2005	Knepp Castle Estate, Knepp Estate

### Muscardinus avellanarius

### Hazel Dormouse

Ν

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; 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
TQ1423	N T Fryer	1969	VC13 West Sussex, West Sussex (VC13)

<sup>5</sup> Confidential records exist for this enquiry area. Please contact the record centre if you require further information.

## SUSSEX RARE SPECIES INVENTORY

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 Inventory forms part of a larger database of Sussex records (over 3 million records). No attempt is made to include every record for every rare species. 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.
- Some species are protected <u>and</u> rare and therefore show up in reports on both these categories.
- 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 *Coenagrion pulchellum* 

Downy Emerald Cordulea aenea

RSI records are updated weekly with advice and records provided by taxonomic experts. A full RSI species list is available on request.

#### Confidential Records

The SxBRC holds a few records that are confidential. Confidentiality can be for a variety of reasons but usually to benefit the site or the species. Full details of these records are not disclosed but the enquirer is referred back to the SxBRC if further information is needed. Please see the end of your RSI report for any reference to confidential records found within your enquiry area.

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: <a href="https://www.sxbrc.org.uk/biodiversity/publications">www.sxbrc.org.uk/biodiversity/publications</a>

#### **IUCN** Categories of Rarity

The following is a summary of the IUCN categories of rarity. For a full listing and explanation see www.iucnredlist.org/info/categories\_criteria2001

#### 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.

#### Codes and abbreviations used in RSI

VC 13 West Sussex (with the Watsonian boundaries of 1852)
VC 14 East Sussex (with the Watsonian boundaries of 1852)
BBCSSB British Butterfly Conservation Society, Sussex Branch
SAMLL Sussex Atlas of Mosses, Liverworts, and Lichens

SPASU Sussex Plant Atlas and Supplement SBRS Sussex Botanical Recording Society



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

#### SUSSEX RARE SPECIES INVENTORY REPORT

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

Land at Knepp Estate + 2km buffer

19 December 2011

ESD/11/569

Hannah Welsh (Knepp Castle Estate)

Hygrocybe intermedia

Fibrous Waxcap

fungus

Sussex Rare Species Inventory Species

**Grid Reference** TQ1521

Recorder Peter Marren

Locality

Knepp Castle

Hygrocybe cantharellus

Goblet Waxcap

October 2006

fungus

Sussex Rare Species Inventory Species

**Grid Reference** TQ1521

Recorder Peter Marren Date

Date

Locality

October 2006

Knepp Castle

Hygrocybe irrigata

Slimy Waxcap

fungus

Sussex Rare Species Inventory Species

**Grid Reference** 

Recorder

Date

Locality

TQ1521

Peter Marren

October 2006 Knepp Castle

### Solenopsora candicans

A lichen of sunny, exposed hard rocks, especially limestones and churchyard monuments. Common in central southern and north west England, rather scattered elsewhere. Recorded in our area from Rustington, West Grinstead and Shipley, all in West Sussex though according to Dobson (2000) there are a number of East Sussex records as well.

#### lichen

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ145218	SAMLL	1950 - 2001	West Sussex (VC13)
TQ171207	SAMLL	1950 - 2001	West Sussex (VC13)

# Melanelia disjuncta

A lichen that grows on hard, sunlit rocks. Mainly from upland Britain but also coastal. In our area recorded only from granite slabs in Stopham churchyard, West Sussex. 1992.

#### lichen

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ145218 Francis Rose 12/09/1989 Shipley Churchyard

# 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

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ1522 Sussex Lichen Recording Group 07/03/2009 Knepp Castle Park

# Gyalecta flotowii

On alkaline, nutrient-rich bark of broad-leaved trees, especially elm and ash, throughout the British Isles. Recorded from several parklands in East and West Sussex prior to 1991, but possibly now extinct due to Dutch elm disease.

#### lichen

IUCN (2001) - Lower risk - near threatened; Sussex Rare Species Inventory Species

 Grid Reference
 Recorder
 Date
 Locality

 TQ1522
 Francis Rose
 1967 - 1969
 Knepp Castle Park

# Collema polycarpon

A local lichen of hard exposed limestones. Mainly from northern England, Wales and Scotland, but recorded in our area from a chest tomb in Shipley churchyard and from West Grinstead churchyard, both in West Sussex. 1990-1994.

#### lichen

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ145218 Simon Davey 14/04/1994 West Sussex (VC13)

# Ramalina fraxinea

A lichen of nutrient-rich bark in exposed, well-lit sites. Very sensitive to sulphur dioxide pollution and now rare in many places. Widespread in Britain and recorded in our area since 1969 in several suitable sites across East and West Sussex. 1969-1994

#### lichen

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ1522 Sussex Lichen Recording Group 26/11/2005 Knepp Castle Park

#### Pertusaria flavicans

A lichen of hard coastal, rocks though sometimes found inland. Frequent in the north and west of the British Isles. In our area recorded from Fittleworth and Ashurst churches in West Sussex and Battle Abbey and an unspecified location in East Sussex. 1989-1993.

#### lichen

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ145218	Francis Rose	18/10/1993	Shipley Churchyard
TQ171206	Francis Rose	01/06/1973	St. George's Churchyard, West Grinstead

### Ricciocarpos natans

# Fringed Heartwort

A terrestrial or floating lowland thallose liverwort of stagnant or slow-flowing water and intermittently exposed wet mud. Often associated with duckweed (Lemna spp.). Recorded from scattered localities in the British Isles and in our area from the river Ems and Knepp Castle in West Sussex and Cuckfield in East Sussex.

#### liverwort

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ12K	SAMLL	1950 - 1995	West Sussex (VC13)

# Adiantum capillus-veneris

### Maidenhair Fern

This fern is at the northern extent of its range in Britain, and must be considered an introduction in Sussex. It favours warm damp masonry. The largest colony occurs at Ashburnham Place, near Battle in East Sussex. In West Sussex it is still to be found in the grotto of Highdown Gardens.

#### fern

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ11Z	SPASU	1725 - 1979	West Sussex (VC13)

### Carex elata

# Tufted-sedge

Very rare, now only known from a single location on the bank of the river Adur in West Sussex.

#### flowering plant

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ11U	Anon @ Sussex Bot. Rec. Soc.	1992	West Sussex (VC13)
TQ176205	Anon @ Sussex Bot. Rec. Soc.	14/06/1992	West Sussex (VC13)
TQ177202	Frances Abraham	30/06/2000	West Sussex (VC13)

# Carex vulpina

# True Fox-sedge

This nationally rare native sedge of southern lowland England grows on river banks, ditch sides and damp meadows on heavy clay soils which are sometimes flooded in winter. It is currently confined to West Sussex in our area. Separation from false fox-sedge, Carex otrubae, is difficult

#### flowering plant

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

Grid Reference	Recorder	Date	Locality
TQ12L	Alan Knapp:K.A. Knapp	26/09/2008	West Sussex (VC13)

# Fritillaria meleagris

# Fritillary

#### flowering plant

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ12R SPASU 1872 - 1990 West Sussex (VC13)

### Sium latifolium

### Greater Water-parsnip

An aquatic perennial now generally found in ditches, growing amongst other emergent species, or in reedswamp. A declining species currently known from several sites in West Sussex but only two in East Sussex.

#### flowering plant

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

Grid Reference Recorder Date Locality

TQ11Z SPASU 1725 - 1978 West Sussex (VC13)

# Rorippa amphibia

# Great Yellow-cress

A perennial of emergent vegetation along the edges of streams and rivers, by lakes and ponds and in other swampy ground. Still locally frequent in parts of the Arun Valley, but it may have gone from areas in the Adur Valley where it was formerly known. In East Sussex it persists in a few scattered sites.

#### flowering plant

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ1370222199	C. M. Holt;Sylvia Simkin	27/09/2007	West Sussex (VC13)
TQ15212124	Alan Knapp;C.M.P. Ryland	17/08/2005	West Sussex (VC13)
TQ158216	Jacqueline Thompson	26/08/2009- 11/11/2009	West Sussex (VC13)
TQ164207	Kate Ryland	2006	Adur River

# Chenopodium glaucum

#### Oak-leaved Goosefoot

A rare plant of dung-heaps, farmyards and fields. Most of the recent reports come from the Lower Greensand of West Sussex. Not seen in East Sussex since 1986.

#### flowering plant

IUCN (2001) - Vulnerable; Sussex Rare Species Inventory Species

<b>Grid Reference</b>	Recorder	Date	Locality
TQ1359721983	Alan Knapp;Nick Sturt;K.A. Knapp;Elizabeth Sturt	03/08/2006	West Sussex (VC13)
TQ1360122028	Alan Knapp;Nick Sturt;K.A. Knapp:Flizabeth Sturt	03/08/2006	West Sussex (VC13)

# Dipsacus pilosus

# Small Teasel

A biennial herb plant of woodland edges, stream and river banks and other habitats, usually on damp, calcareous soils. Rather rare in Sussex but increasing in some parts of the west of our area, mainly around Arundel and Little Bognor.

#### flowering plant

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ178207	Anon @ Sussex Bot. Rec. Soc.;R I Hemsley	1986 - 2000	West Sussex (VC13)

# 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
TQ11J	SPASU	1725 - 1979	West Sussex (VC13)
TQ11P	SPASU	1725 - 1979	West Sussex (VC13)
TQ1463219602	Anon @ Sussex Bot. Rec. Soc.	03/03/2006	West Sussex (VC13)

# Lathyrus aphaca

# Yellow Vetchling

A rare annual and decreasing annual of open grassy habitats on chalk, limestone and calcareous clay soils, especially near the coast. Possibly a long-established introduction in England. Currently known in our area from only two sites in West Sussex near Brighton, and six in East Sussex, three of which are also in Brighton.

#### flowering plant

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

Grid Reference	Recorder	Date	Locality
TQ12V	SPASU	1872 - 1979	West Sussex (VC13)

#### Helleborus foetidus

# Stinking Hellebore

A short-lived perennial of shallow calcareous soils often in woodland glades or open scrub. Always rare in East Sussex, where it is doubtfully native; the only recent records are of garden escapes. In West Sussex most recent records are also of garden origin, but it still occurs as a presumed native in a few chalky woodland areas especially around Arundel and Houghton.

#### flowering plant

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ145230	Iris Simpson	February 2000	West Sussex (VC13)

# Ranunculus tripartitus

#### Three-lobed Crowfoot

An annual of shallow water bodies in open sites which are flooded in winter but summer-dry. In south east England it is also found in pools in coppiced woodland. Currently known from a single site in West Sussex and several in East Sussex, though its status in some of these needs to be checked.

#### flowering plant

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

Grid Reference	Recorder	Date	Locality
TQ11P	Anon @ Sussex Bot. Rec. Soc.;V&J V&JH	1999	West Sussex (VC13)

# Coenagrion pulchellum

# Variable Damselfly

A damselfly of fens, water meadows, marshes and shallow ponds as well as dykes and canals with slow-moving water. A scarce species in Sussex with strongholds on the Pevensey Levels, East Sussex, and to a lesser extent Amberley Wildbrooks, West Sussex. Scattered records from other sites.. Widespread elsewhere in England and Wales, and the southern-central lowlands of Scotland.

# insect - dragonfly (Odonata)

IUCN (2001) - Lower risk - near threatened; Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ12K	David Chelmick	1965 - 1978	West Sussex (VC13)
TQ1521	David Chelmick	1975	West Sussex (VC13)
TQ155212	A R Welstead; N I Welstead	1988	Knepp Mill Pond

### 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
TQ12K	David Chelmick	1965 - 1978	West Sussex (VC13)
TQ155212	A R Welstead;N I Welstead	1988	Knepp Mill Pond

#### Libellula fulva

### Scarce Chaser

A rare dragonfly of well-vegetated slow-moving rivers and, less frequently gravel pits and ponds. Confined in our area as a breeding species to West Sussex with its main population in the river Arun catchment. Elsewhere in the British Isles restricted to a few rivers and nearby lakes in southern and western England and East Anglia.

# insect - dragonfly (Odonata)

IUCN (2001) - Lower risk - near threatened; Sussex Rare Species Inventory Species

<b>Grid Reference</b>	Recorder	Date	Locality
TQ14232094	Ben Rainbow	04/06/2010	West Sussex (VC13)
TQ14672081	Ben Rainbow	04/06/2010	West Sussex (VC13)
TQ147208	James Worsley;Dave Sadler;David Chelmick;John Luck	17/06/2007	Knepp Estate - Hammer Pond
TQ1520	James Worsley;Dave Sadler;David Chelmick;John Luck;Phil Belden	17/06/2007	Knepp Estate - R Adur, E of bridge
TQ1620	James Worsley;Dave Sadler;David Chelmick;John Luck;Phil Belden	17/06/2007	Knepp Estate - R Adur, W of A24
TQ1718	Dave Sadler	26/06/1995	West Sussex (VC13)
TQ17851985	Paul Harmes	14/07/2010	River Adur - north of Lock Bridge

# Conocephalus fuscus

#### insect - orthopteran

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ14942249	Ben Rainbow	25/08/2010	Pound Lane Verge, Shipley CP

# Metrioptera roeselii

#### Roesel's Bush-cricket

insect - orthopteran

Sussex Rare Species Inventory Species

**Grid Reference** 

TQ14942249

Recorder

Ben Rainbow

Date

25/08/2010

Locality

Pound Lane Verge, Shipley CP

# Bembidion (Diplocampa) clarkii

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** 

TQ12K

Recorder Anon

Date

1872 - 1905

Locality

West Sussex (VC13)

# Pterostichus (Pseudomaseus) anthracinus

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** TQ1421

Recorder Anon

Date

Locality

1872 - 1905

West Sussex (VC13)

# Agonum (Agonum) versutum

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** 

TQ1421

Recorder Peter Hodge Date

Locality

1872 - 1905

West Sussex (VC13)

# Ophonus (Metophonus) rupicola

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** 

TQ1421

Recorder Anon

Date

Locality

1872 - 1905

West Sussex (VC13)

# Demetrias (Risophilus) imperialis

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** TQ159213

Recorder @ Colin Plant Associates

June 2009 -September 2009 Locality

Knepp Estate

# Microlestes minutulus

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** 

Recorder

TQ159213

Recorder @ Colin Plant Associates

Date

Locality

June 2009 - Knepp Estate

September 2009

# Ilyobates nigricollis

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** 

TQ1421

Recorder

Anon

Date

Locality

1872 - 1888 West Sussex (VC13)

# Aleochara (Ceranota) ruficornis

insect - beetle (Coleoptera)

Nationally Notable; Sussex Rare Species Inventory Species

**Grid Reference** 

TQ1421

Recorder

Anon

Date

1872 - 1905

Locality

West Sussex (VC13)

# Falagria sulcatula

insect - beetle (Coleoptera)

Nationally Notable; Sussex Rare Species Inventory Species

**Grid Reference** 

TQ1421

Recorder

Anon

Date

Locality

1872 - 1905

West Sussex (VC13)

# Stenus (Stenus) morio

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** 

TQ1421

**Recorder** Unknown Date

Locality

1872 - 1905

West Sussex (VC13)

#### Achenium humile

insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

**Grid Reference** 

TQ1421

Recorder

Anon

**Date** 1872 - 1905

**Locality**West Sussex (VC13)

# Lathrobium (Lathrobium) pallidum

#### insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ1421 Unknown 1872 - 1905 West Sussex (VC13)

#### Lucanus cervus

# Stag Beetle

A beetle of broadleaved woodland, parks, other pasture woodland and gardens. The larvae live in the decaying wood of deciduous trees, often in roots and stumps. Widely recorded from West Sussex but rare in East Sussex and apparently absent from much of the vice-county.

#### insect - beetle (Coleoptera)

Habitats Directive Annex 2 - non-priority species; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.5a; 9.5b)

Grid Reference	Recorder	Date	Locality
TQ159214	Bill Shelton	14/06/2004	Henfield CP
TQ172222	Paul James	14/07/2008	Steyning CP

#### Cantharis fusca

#### insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ1421 Anon 1872 - 1905 West Sussex (VC13)

# Rhagonycha translucida

#### insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

 Grid Reference
 Recorder
 Date
 Locality

 TQ1421
 Peter Hodge
 1872 - 1905
 West Sussex (VC13)

# Lycoperdina bovistae

#### insect - beetle (Coleoptera)

Sussex Rare Species Inventory Species

Grid Reference Recorder Date Locality

TQ1421 Peter Hodge 1872 - 1905 West Sussex (VC13)

#### Thecla betulae

#### Brown Hairstreak

A butterfly requiring sloe scrub in which to breed. Widely, but very thinly, distributed in West Sussex, but gone from the east and generally in decline nationally.

#### insect - butterfly

IUCN (2001) - Vulnerable; Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England; Sussex Biodiversity Action Plan Species; Sussex Rare Species Inventory Species; UK Biodiversity Action Plan priority species; Wildlife and Countryside Act 1981 Schedule 5 Sections (9.5a; 9.5b)

<b>Grid Reference</b>	Recorder	Date	Locality
TQ144196	David Buckingham	21/07/1995	Wickwood, Tory Copse, Dial Post
TQ148203	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ149199	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ152197	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ152203	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ157198	J.P. Gay	01/12/1996	Dial Post, Ashington
TQ158221	David Buckingham	26/08/1995	Pleasure Grounds, Knepp Castle

# Apatura iris

# Purple Emperor

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
TQ137197	Neil Hulme	16/07/2009	West Sussex (VC13)
TQ1820	Jim Steedman;Judith Steedman	14/07/1995	West Grinstead, Furzfield Wood

# Calamotropha paludella

# Bulrush Veneer

#### insect - moth

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ159213	Recorder @ Colin Plant Associates	June 2009 - September 2009	Knepp Estate

# Eudonia pallida

# Marsh Grey

### insect - moth

Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ159213	Recorder @ Colin Plant Associates	June 2009 -	Knepp Estate
		September 2009	

#### Atolmis rubricollis

#### Red-necked Footman

A black nationally local species of deciduous woodland in southern England, Wales and south west Scotland. In Sussex it is only found regularly in Rewell Woods at Arundel and it may still be in Houghton Forest. Caterpillars feed on lichens on trees in woodlands.

#### insect - moth

Sussex Rare Species Inventory Species

Grid ReferenceRecorderDateLocalityTQ159213Recorder @ Colin Plant AssociatesJune 2009 -Knepp Estate

September 2009

# Archanara sparganii

# Webb's Wainscot

A nationally scarce (b) species found in wetlands along the south and east coast of England. In Sussex it is very local and is found around the coastal wetlands at Rye, Pevensey, the Ouse valley, Amberley, Pagham Harbour and Chichester Harbour. Caterpillars feed on Bulrush and other tall wetland plants.

#### insect - moth

Sussex Rare Species Inventory Species

Grid ReferenceRecorderDateLocalityTQ156219Simon Curson23/08/1995West Sussex [VC13]TQ159213Recorder @ Colin Plant AssociatesJune 2009 - September 2009Knepp Estate

#### Lasius brunneus

#### insect - hymenopteran

Sussex Rare Species Inventory Species

Grid ReferenceRecorderDateLocalityTQ159213Recorder @ Colin Plant AssociatesJune 2009 -<br/>September 2009Knepp Estate

# Lasioglossum (Evylaeus) malachurum

#### insect - hymenopteran

Sussex Rare Species Inventory Species

Grid ReferenceRecorderDateLocalityTQ159213Recorder @ Colin Plant AssociatesJune 2009 -Knepp Estate

September 2009

# Arvicola terrestris

# 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

Sussex Biodiversity Action Plan Species; Sussex Protected Species Register Species; Sussex Rare Species Inventory Species

Grid Reference	Recorder	Date	Locality
TQ1409620789	Frances Southgate	18/05/2005	Knepp Estate
TQ1460321729	Frances Southgate	17/06/2005	Knepp Estate
TQ1470621791	Frances Southgate	17/06/2005	Knepp Estate
TQ1472620848	Frances Southgate	18/05/2005	Knepp Estate
TQ1479120829	Frances Southgate	18/05/2005	Knepp Estate
TQ1481021818	Frances Southgate	17/06/2005	Knepp Estate
TQ1501720859	Frances Southgate	18/05/2005	Knepp Estate
TQ1502021791	Frances Southgate	17/06/2005	Knepp Estate
TQ1502220857	Frances Southgate	18/05/2005	Knepp Estate
TQ1506720851	Frances Southgate	18/05/2005	Knepp Estate
TQ1508221773	Frances Southgate	17/06/2005	Knepp Estate
TQ1518921492	Frances Southgate	17/06/2005	Knepp Estate
TQ1520621978	Frances Southgate	17/06/2005	Knepp Estate
TQ1529522144	Frances Southgate	17/06/2005	Knepp Estate
TQ15352215	Frances Southgate	17/06/2005	Knepp Estate
TQ1559721152	Frances Southgate	18/05/2005	Knepp Estate
TQ1561621052	Frances Southgate	18/05/2005	Knepp Estate
TQ1561921117	Frances Southgate	18/05/2005	Knepp Estate
TQ1562020963	Frances Southgate	18/05/2005	Knepp Estate
TQ1563221161	Frances Southgate	18/05/2005	Knepp Estate
TQ1567520885	Frances Southgate	18/05/2005	Knepp Estate
TQ1572621426	Frances Southgate	18/05/2005	Knepp Estate
TQ1577921581	Frances Southgate	18/05/2005	Knepp Estate
TQ158208	Frances Southgate	14/01/2005	Knepp Estate
TQ158215	Recorder @ Ecological Services	03/06/2009- 15/06/2009	Knepp Mill Pond
TQ1588420801	Frances Southgate	18/05/2005	Knepp Estate
TQ163207	Frances Southgate	14/01/2005	Knepp Estate

<sup>5</sup> 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 in a SxBRC report. 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 species, aggressive species, pest species, 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 Widlife and Countryside Act prohibits the release to the wild of animals which are listed in Schedule 9 (Part I). It also prohibits planting in the wild of plants listed in Schedule 9 (Part II) or otherwise causing them to grow there.

The spread and control of invasive species are covered by Article 8(h) of the Convention on Biological Diversity. The Global Invasive Species Programme was established to address concerns with alien invasive species, formulated in the Convention on Biological Diversity.

#### How to combat invasive species

The best way to limit the impact of invasive alien species is to prevent them from invading in the first place. If this fails, complete removal may still be feasible very early in an invasion. Priority, then, should be given to preventing entry; if entry has already taken place, actions should be undertaken to prevent establishment and spread. Where eradication is not feasible or cost-effective, containment and long term control measures should be considered.

The most appropriate response to an invasive alien species is best gauged on a species and site basis.

#### What to do if there is an invasive alien species on your site

If you have any of the plants listed in this report in your site, make sure that you dispose of them properly. Do not put them into local rivers, canals or ponds. The safest way of disposing of them is by burying, composting or burning. You should also avoid moving anything from one pond to another, including frogspawn, other pond plants or even just pond water. These plants can regenerate from a tiny fragment.

Investigate the recommended control for your species of concern.

If there are invasive alien species at your site that are not in this report please contact us on sxbrc@sussexwt.org.uk or 01273 497521 so that we can amend our records.



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

Email: sxbrc(dsussexwt.org.uk Web: sxbrc.org.uk

#### SUSSEX INVASIVE ALIEN SPECIES REPORT

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

#### Land at Knepp Estate + 2km buffer

19 December 2011 ESD/11/569 Hannah Welsh (Knepp Castle Estate)

### Azolla filiculoides

# Water Fern

An introduced floating fern of mainly standing waters first recorded in the UK in 1883. Described as posing a threat to native biodiversity in the Sussex Habitat Action Plan for standing fresh water.

#### fern

Grid Reference	Recorder	Date	Locality
TQ11U	Alan Knapp;Nick Sturt;Elizabeth Sturt	02/09/2005	W of Partridge Green, West Sussex (VC13)

#### Centranthus ruber

#### Red valerian

In small quantities this Mediterranean plant is of value to butterflies, moths, bees and other fauna, but it can become invasive and spread across areas like vegetated shingle. It is best, if possible, to remove dead flower heads to prevent seed from spreading. It was first recorded in the wild in Britain in 1763 and is common across Sussex.

#### flowering plant

Grid Reference	Recorder	Date	Locality
TQ11P	Anon @ Sussex Bot. Rec. Soc.	03/03/2006	Dial Post
TQ12F	C. M. Holt;Sylvia Simkin	18/10/2007	Jender's Farm, near Shipley, West Sussex (VC13)

# Crocosmia pottsii x aurea = C. x Montbretia crocosmiiflora

A well-known garden escape with orange flowers from South Africa. Widespread across Sussex. Listed on Schedule 9 of the Wildlife & Countryside Act 1981.

Grid Reference	Recorder	Date	Locality
TQ12V	Alan Knapp;K.A. Knapp	05/12/2008	Littleworth, West Sussex (VC13)

# 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	
T040F	0 14 11 1: 0 1 1 0: 11	40/40/0007	–	

TQ12F C. M. Holt;Sylvia Simkin 18/10/2007 Jender's Farm, near Shipley, West Sussex

(VC13)

# Hyacinthoides non-scripta x hispanica = H. x massartiana

# Hybrid bluebell

A species from Spain and Portugal that has been recorded as a garden escape since 1909 and occasionally becomes naturalised. Often confused with its more invasive hybrid with our native bluebell H. hispanica x H. non-scripta. Widespread in Sussex.

#### flowering plant

Scottish Biodiversity List of species of principal importance for biodiversity conservation; Wildlife and Countryside Act 1981 (Schedule 8)

Grid Reference	Recorder	Date	Locality
TQ11Z	Paul Harmes	15/02/2005	Partridge Green

# 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
TQ12G	C. M. Holt;Sylvia Simkin	27/09/2007	Coolham area, West Sussex (VC13)
TQ12L	C. M. Holt;Sylvia Simkin	22/09/2007	Dragon's Green, West Sussex (VC13)

# Lamiastrum galeobdolon subsp. argentatum

# Variegated 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.

<b>Grid Reference</b>	Recorder	Date	Locality
TQ12F	Alan Knapp;Nick Sturt;K.A. Knapp;Elizabeth Sturt	03/08/2006	SW of Shipley, West Sussex (VC13)
TQ12L	Alan Knapp	17/08/2005	NE of Shipley, West Sussex (VC13)
TQ12V	Alan Knapp	21/11/2006	Littleworth, West Sussex (VC13)

#### Mustela 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

<b>Grid Reference</b>	Recorder	Date	Locality
TQ148218	Unknown	1991	Lancing Brook
TQ1521	Graham Champion	20/06/1993	Knepp, West Sussex (VC13)
TQ153210	Unknown	1991	River Adur, Knepp Castle Estate
TQ157213	Unknown	1991	Knepp Mill Pond
TQ1572621426	Frances Southgate	18/05/2005	Knepp Estate
TQ162228	Unknown	1991	Knepp Mill Pond

# 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
TQ12G	Sylvia Simkin	2006	Coolham
TQ12Q	Alan Knapp	22/02/2004	West Grinstead Church, West Sussex (VC13)

# 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

<b>Grid Reference</b>	Recorder	Date	Locality
TQ11J	Nick Sturt; Elizabeth Sturt	24/09/2006	Oakwood area, West Sussex (VC13)
TQ11U	Alan Knapp;K.A. Knapp	24/10/2008	W of Partridge Green, West Sussex (VC13)
TQ11Z	Alan Knapp	02/09/2005	W of Partridge Green, West Sussex (VC13)
TQ12L	Alan Knapp	24/04/2005	N of Shipley, West Sussex (VC13)
TQ12Q	Alan Knapp	2005	Knepp Castle area, West Sussex (VC13)
TQ1821	Peter Follett	05/04/2003	West Grinstead, West Grinstead CP

# 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.

<b>Grid Reference</b>	Recorder	Date	Locality
TQ12Q	Alan Knapp	22/02/2004	West Grinstead, West Grinstead CP
TQ158216	Jacqueline Thompson	26/08/2009-	Site: 89, 90, 95, 113 Knepp Mill Pond,
		11/11/2009	Shipley, West Sussex (VC13)

# Robinia pseudoacacia

# False-acacia

A North American tree introduced in the 17th century and later widely planted. It is now regarded as a global invader and often classified as a weed tree as it spreads readily by seed and suckers and grows quickly. With climate change it is establishing itself in the British countryside as native oak and beech come under increased environmental stress.

Grid Reference	Recorder	Date	Locality
TQ158215	Louise Scott (Clark); Marion Lee / Finch	12/07/1991	Knepp Mill Pond



Woods Mill, Henfield, West Sussex BN5 9SD Tel: 01273 497 558 / 557 Fax: 0203 070 0709

Email: sxbrc@sussexwt.org.uk Website: sxbrc.org.uk

# **Sussex Environmental Survey Directory**

Report on behalf of Hannah Welsh (Knepp Castle Estate) regarding land at Knepp Estate + 2km buffer.

Our Ref: ESD/11/569 Date: 19-Dec-11

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	SOS Reservoirs Survey - (300)	
Survey Author	Various	
Survey Comment	Vegetation surveys of nine small reservoirs in Sussex. (Phase II). Species lists for vari groups of invertebrates are also included. NB: results for some sites also held in SxE Cabs, including sites 3055 [TQ23], 323 [TQ33], 1039 [SU92],	
Date	8.84	
Site Name	Kneppmill Pond / Lake (Part of SNCI H18)	TQ158218
Site Comment	A large; old lake with a scarce Hemiptera and scarce plant.	
Copies Available	WSCC, SxBRC File Cabs	

Survey Name	Amphibians in Sussex - A Site Inventory - (334)	
Survey Author	BANKS, Brian, ELLIOTT, M.	
Survey Comment	A survey of many ponds in Sussex for their breeding amphibians. Data taken from a sureport entitled 'Amphibians in Sussex - A Site Inventory'. [SxBRC copy held in box G6].	•
Date	1980-1989	
Site Name	Renche's Wood Amphibian Site	TQ148233
Site Comment		
Copies Available	EN, SxBRC Archive, WSCC	

**Survey Name** Badger Sett Survey of Knepp Castle Estate - (351) **Survey Author** BUCKINGHAM, D. W. An ongoing survey of the badger activity on the estate. A record is made of the number of holes **Survey Comment** and the level of use. Constant monitoring on at least a monthly basis is anticipated. (A copy of this survey is held by the Mid Sussex Badger Protection Group - contact Sandra Barker (0435) 866701). Date 3.94-4.94 Site Name Knepp Castle Estate TQ145215

**Site Comment** A large estate near Horsham with woodland, many fields, some streams and Knepp Mill Pond which has alder carr and reed-beds surrounding it. There is a Heronry. Site includes SNCI H30

and H18.

As contact Copies Available

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	Lands bordering Lancing Brook, Shipley (pSNCI) TQ149205	
Site Comment	Potential SNCI. Brook running between improved pasture which is lined with willow, alder, good vegetation and some scrub. Good diversity of aquatic spp.	
Copies Available	WSCC, EN/SSSI/SCI	

Survey Name	West Sussex Potential SNCI Project - (397)	
Survey Author	FINCH, Marion, CLARK, Louise	
Survey Comment  Date	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. 1990-3.92	
Site Name	Lands bordering Hammer Pond, Shipley (pSNCI) TQ144	4206
Site Comment	Potential SNCI. NB "Hammer Pond" is name of stream! Overgrown stream with adjacent improved pasture and rough grassland. Section covered is from Pen Bridge in the west, to Hammer Farm in the east. Shallow pool at East end.	
Copies Available	WSCC, EN/SSSI/SCI	

West Sussex Potential SNCI Project - (397) **Survey Name** 

FINCH, Marion, CLARK, Louise **Survey Author** 

A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, **Survey Comment** 

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

River Adur Lands: Knepp Castle to Shipley (pSNCI) Site Name

TQ153211

**Site Comment** Some mature trees along river bank, surrounding improved fields and some rough pasture.

Includes parts of SNCI H18.

WSCC, EN/SSSI/SCI Copies Available

West Sussex Potential SNCI Project - (397) **Survey Name** 

FINCH, Marion, CLARK, Louise **Survey Author** 

**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 Kneppmill Pond, River Adur & Lancing Brook - SNCI H18 TQ152214

**Site Comment** A large pond with associated tall fen margins and up-valley area which is partly wooded and

> partly wetland. The woods are mainly mixed broadleaved but there is also a small larch plantation. This site along with part of the Adur and Lancing Brook make up SNCI H18.

WSCC, EN/SSSI/SCI Copies Available

**Survey Name** Invertebrate Site Register - (480)

**Survey Author** WILLING, Martin J, PARSONS, M.

The Invertebrate Site Register is a document listing sites which are important for invertebrates. **Survey Comment** 

> It is regularly updated and revised. Information for each site usually includes a site description, the main invertebrate interest and some general comments. This is a collation of information

from a variety of sources. (Phase II)

Date

Kneppmill Pond/Knepp Lake ISR Site Site Name

TQ160215

**Site Comment** One of the oldest lakes in Sussex. The east side has a marshy margin grading into carr. ISR-

April 1982.

ΕN Copies Available

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 Horsham Common Woodland Complex, Southwater - SNCI H30

TQ158238

TQ152214

Site Comment A diverse woodland complex; mixed woodland; coniferous plantation; streams; a pond and a

herb-rich meadow.

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 Kneppmill Pond, River Adur & Lancing Brook - SNCI H18

Site Comment A large pond with associated tall fen margins and up-valley area which is partly wooded and

partly wetland. The woods are mainly mixed broadleaved but there is also a small larch plantation. This site along with part of the Adur and Lancing Brook make up SNCI H18.

Copies Available EN, SWT, WSCC

Designated SNCIs (in West Sussex) - (500) **Survey Name** 

**Survey Author WSCC** 

All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site **Survey Comment** 

> 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

Site Name River Adur & Lancing Brook (Part of SNCI H18) TQ153210

**Site Comment** A 3.2km. stretch of the river Adur with abundant and diverse aquatic and bankside vegetation.

All of this site is part of an SNCI and it includes part of Lancing Brook. This site along with

Kneppmill Pond make up SNCI H18.

EN, SWT, WSCC Copies Available

**Survey Name** Wintering Waterfowl Count Scheme - (506)

Various **Survey Author** 

WWT covers inland sites and some coastal areas and sites are counted for waterfowl, rails, **Survey Comment** 

> herons and Kingfishers every month over the winter. A summary of the results combined with BTO's Estuary counts are published in "Wildfowl and Wetland Counts" each year. Information on

sites can be obtained via the above contact.

Date various

Site Name Kneppmill Pond / Lake (Part of SNCI H18) TQ158218

**Site Comment** A large; old lake with a scarce Hemiptera and scarce plant.

As contact Copies Available

River Stretches of Known Conservation Interest - (560) Survey Name

**Survey Author ENGLISH NATURE** 

A report that identifies stretches of river in Sussex which are of known conservation interest. **Survey Comment** 

The interest of each area is stated. This report is EN's comments on 'Review of Southern Water

Authorities River Water Quality Objectives'.

Date

River Adur & Lancing Brook (Part of SNCI H18) Site Name

TQ153210

**Site Comment** A 3.2km. stretch of the river Adur with abundant and diverse aquatic and bankside vegetation.

All of this site is part of an SNCI and it includes part of Lancing Brook. This site along with

Kneppmill Pond make up SNCI H18.

**Copies Available** 

ΕN

**Survey Name** Survey of Unimproved Grassland in West Sussex (Vol 2) - (618)

Survey Author ALLWRIGHT, R.

Survey Comment These sites were surveyed, classified and a grassland recording card filled out. These original

results on each site are not included in the final published report. Details of four sites in E Sussex that were also surveyed are also in the same box in a separate envelope. (At EN they are in the W Sussex Grassland Survey box in the library). (Phase II). [SxBRC copy held in H7a box].

Date 6.88-8.88

Site Name Knepp Castle Estate (Unimproved Grassland Survey Glade B) TQ157219

**Site Comment** A woodland glade rather than a meadow.It is locally important.

Copies Available EN, SxBRC Boxes, WSCC

Survey Name Investigation of Amphibian Status on the Knepp Castle Estate - (653)

Survey Author BUCKINGHAM, D. W.

Survey Comment Each of 61 ponds was visited in the day and at least once at night. Certain ponds were netted. A

pond questionnaire relating to the sites physical attributes was completed e.g. Vegetation cover,

whether it dries out at all etc.

**Date** 1991-1994

Site Name Knepp Castle Estate TQ145215

Site Comment A large estate near Horsham with woodland, many fields, some streams and Knepp Mill Pond

which has alder carr and reed-beds surrounding it. There is a Heronry. Site includes SNCI H30

and H18.

Copies Available As contact

**Survey Name** Brief Survey of Alder Copse - (723)

Survey Author ROBERTS, Graham

Survey Comment A completed woodland record card. (Phase II)

**Date** 10.88

Site Name Alder Copse, Southwater (Part of SNCI H30) TQ157236

Site Comment A Hazel and Hornbeam coppice with Oak standards. It is owned by Knepp Castle Estate and used

for game management and commercial forestry (1988). It also has a pond.

Copies Available WSCC

Survey Name	Brief Survey of Renche's Wood - (724)
Survey Author	ROBERTS, Graham
•	A completed woodland record card. (Phase II)
Date	11.88

Site Name Renche's Wood (W Part of) TQ147233 **Site Comment** Owned by Knepp Castle and managed by the Sussex Ornithological Society. A Hazel coppice with

Oak standards. Wild service present. It has wide; grassy mown rides and two ponds.

WSCC **Copies Available** 

Survey Name	Brief Survey of Hoe's Wood - (725)	
Survey Author	ROBERTS, Graham	
Survey Comment	A completed woodland record card, plant species list, site description and evaluation with suggested management. Including notes on butterflies and birds seen.	
Date	5.89	
Site Name	Hoe's Wood, Shipley TQ1322	233
Site Comment	A narrow strip of Oak; Ash and Maple with wild service present and a good shrub and ground layer.	
Copies Available	WSCC	

Survey Name	Provisional Odonata Sites - West Sussex - (837)	
Survey Author	Unknown	
Survey Comment	A table describing the more significant sites in W Sussex for dragonflies. It gives the number of species recorded at each site, a note on the general ecology and a note on the special dragonfly interest. It does not give any full species lists for the sites.	
Date		
Site Name	Kneppmill Pond / Lake (Part of SNCI H18)	TQ158218
Site Comment	A large; old lake with a scarce Hemiptera and scarce plant.	
Copies Available	WSCC	

Survey Name	Provisional Odonata Sites - West Sussex - (837)
Survey Author	Unknown
Survey Comment	A table describing the more significant sites in W Sussex for dragonflies. It gives the number of species recorded at each site, a note on the general ecology and a note on the special dragonfly interest. It does not give any full species lists for the sites.
Date	

Site Name River Adur (Lock Bridge to Bines Bridge, Pinlands)

Site Comment A sluggish lowland river somewhat improved with wiers and banks. It has a wide range of the

TQ179184

common dragonfly species.

Copies Available WSCC

Survey Name	Potential Key Dragonfly Sites - West Sussex - (838)	
Survey Author	WELSTEAD, A. R., WELSTEAD, N. I.	
Survey Comment	A table summarising the last year that each species was seen on each site. Abstracted Biological Records Centre at Monks Wood.	d from
Date	1970-1988	
Site Name	Kneppmill Pond / Lake (Part of SNCI H18)	TQ158218
Site Comment	A large; old lake with a scarce Hemiptera and scarce plant.	
Copies Available	SxBRC Digital, WSCC	

Survey Name	Potential Key Dragonfly Sites - West Sussex - (838)	
Survey Author	WELSTEAD, A. R., WELSTEAD, N. I.	
Survey Comment	A table summarising the last year that each species was seen on each site. Abstracted from Biological Records Centre at Monks Wood.	
Site Name		TQ179184
Site Comment	A sluggish lowland river somewhat improved with wiers and banks. It has a wide range of the common dragonfly species.	
Copies Available	SxBRC Digital, WSCC	

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 species list,

but the ones with ecological significance have more detail. (Phase II). NB: Results held at SxBRC for some of sites covered (with details for each site filed according to grid squares), including ESD site nos. 841[TQ33], 1370 [TQ32], 4470 [TQ32], 4341 [SU90]., 4382 [TQ01]. [SxBRC

also holds documents in BRC box H2b].

**Date** 1980-

Site Name St George's Churchyard, West Grinstead TQ171207

Site Comment The churchyard in the hamlet of West Grinstead.

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 species list,

but the ones with ecological significance have more detail. (Phase II). NB: Results held at SxBRC for some of sites covered (with details for each site filed according to grid squares), including ESD site nos. 841[TQ33], 1370 [TQ32], 4470 [TQ32], 4341 [SU90]., 4382 [TQ01]. [SxBRC

also holds documents in BRC box H2b].

**Date** 1980-

Site Name St M Churchyard, Partridge Green TQ189195

**Site Comment** 

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 species list,

but the ones with ecological significance have more detail. (Phase II). NB: Results held at SxBRC for some of sites covered (with details for each site filed according to grid squares), including ESD site nos. 841[TQ33], 1370 [TQ32], 4470 [TQ32], 4341 [SU90]., 4382 [TQ01]. [SxBRC

also holds documents in BRC box H2b].

**Date** 1980-

Site Name St Mary's Churchyard, Shipley TQ145218

**Site Comment** 

Copies Available As contact, SxBRC File Cabs, SxBRC Boxes

**Survey Name** Herpetological Site Atlas for Sussex - (957)

Survey Author DEY, Dennis et al

**Survey Comment** An atlas showing distribution, in East and West Sussex, of reptiles and amphibians. Information

on each species is displayed on 1km square grid maps for each county. Distribution of assemblages of species are also shown in the same format. Specific sites are prioritised as significant for amphibians and sites supporting Great Crested Newts are listed for both counties.

(Phase II). [SxBRC copy held in box E6].

**Date** 1993

Site Name Well Land Farm Ponds, W Grinstead TQ187213

**Site Comment** Great Crested Newt site. Identified as priority site for amphibians.

Copies Available SxBRC Boxes

Survey Name Plant List for St George's Churchyard, West Grinstead - (1002)

Survey Author HERZIG, Harroit

**Survey Comment** A species list for the churchyard. [SxBRC copy filed under TQ12].

**Date** 1988

Site Name St George's Churchyard, West Grinstead TQ171207

**Site Comment** The churchyard in the hamlet of West Grinstead.

Copies Available SxBRC File Cabs

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Joles Farm, West Grinstead. TQ189197

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/37

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Brickpit east of Bentons Place, West Grinstead. TQ142197

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/17

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name E of St Michaels Church, Partridge Green TQ189194

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/182

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Partridge Green, West Grinstead. TQ187193

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/208

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Sands Wood, West Grinstead. TQ159183

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/18

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name SW of Jolesfield House, Partridge Green TQ185195

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/181

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name E of Bay Bridge, near Knepp Castle TQ164207

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/46

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Cowfold Road, West Grinstead. TQ168227

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/58

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Hobshorts Farm TQ165191

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/176

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name W of Lodge Farm TQ153228

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/95

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Glebe Farm, Nuthurst TQ173207

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/07

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Dial Post TQ155195

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/173

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Jolesfield Common, West Grinstead. TQ188204

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/61

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name N of Lock Farm TQ176185

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/179

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Green Street TQ143228

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/86

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Knepp Castle, Shipley. TQ154221

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/56

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Worthing Road, West Grinstead. TQ166223

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/57

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Gastons Barn, Shipley. TQ145191

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/21

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Brookhouse Farm, Shipley TQ133200

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/10

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Oakleigh Farm TQ135231

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/83

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Bakers Farm, Shipley TQ132239

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/43

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Hoes Farm, east of Coolham, Shipley. TQ130230

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/52

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Dial Post, West Grinstead. TQ155195

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/15

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Hoes Wood TQ132235

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/82

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Worthing Road TQ165236

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/103

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name by Shipley Church TQ145218

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/04

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name East of Elder Farm, West Grinstead. TQ163182

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/19

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Renches Wood TQ147232

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/92

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name N of Old Keepers Cottage TQ159238

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/102

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name S of Hoes Farm, Green Street TQ131225

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/81

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name near Eder Farm TQ158180

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/174

Copies Available BMONH

**Survey Name** Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name W of Lodge Farm TQ154228

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/98

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Bay Bridge, nr Knepp Castle, Nuthurst TQ164207

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/08

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Bentons Place, Shipley. TQ139197

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ11/16

Copies Available BMONH

Survey Name Sussex Geological Sites Survey - (1126)

Survey Author Various

Survey Comment An ongoing survey of the geological sites of Sussex containing Regionally Important Geological

Sites (RIGS) and County Geological Sites (COGS).

**Date** 1960-1999

Site Name Maplehurst Fault TQ150232

Site Comment When enquiring at the Booth Museum of Natural History quote ref: TQ12/94

Copies Available BMONH

Survey Name A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities

are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 48 TQ146217

**Site Comment** 500m stretch of river, plant survey and river profile.

Copies Available EA, SWT, EN/LEWES/LIB

**Survey Name** A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 49 TQ142217

**Site Comment** 500m section of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Name A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

nandrawn maps. Bank profiles and vegetation structure are

Date Aug - Sept 1994

Site Name River Adur, Section 50 TQ139219

**Site Comment** 500m section of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

**Survey Name** A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities

are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 51 TQ135223

**Site Comment** 500m section of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

A River Corridor Survey, River Adur Catchment, Volume 1 - (2101) **Survey Name** 

LEE DONALD ASSOCIATES **Survey Author** 

A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections, **Survey Comment** 

> each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

River Adur, Section 52 TQ132223 Site Name

**Site Comment** 500m section of river, plant survey and river profile

EA, SWT, EN/LEWES/LIB Copies Available

A River Corridor Survey, River Adur Catchment, Volume 1 - (2101) **Survey Name** 

LEE DONALD ASSOCIATES **Survey Author** 

A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections, **Survey Comment** 

> each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Aug - Sept 1994 Date

TQ130225 Site Name River Adur, Section 54

**Site Comment** 500m section of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

**Survey Name** A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

LEE DONALD ASSOCIATES **Survey Author** 

A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections, **Survey Comment** 

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities

are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Aug - Sept 1994 Date

River Adur, Section 36 TQ179186 Site Name

**Site Comment** 500m stretch of river, plant survey and river profile

EA, SWT, EN/LEWES/LIB Copies Available

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 37 TQ179190

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Name A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Aug - Sept 1994

Date

Site Name River Adur, Section 38 TQ178195

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

**Survey Name** A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities

are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 39 TQ177199

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 40 TQ176204

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Name A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 41 TQ172205

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

**Survey Name** A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities

are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 42 TQ167206

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 43 TQ162207

Site Comment 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Name A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 44 TQ157208

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Name A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

**Date** Aug - Sept 1994

Site Name River Adur, Section 45 TQ153209

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 46 TQ152213

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

Survey Name A River Corridor Survey, River Adur Catchment, Volume 1 - (2101)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants)communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name River Adur, Section 47 TQ151217

**Site Comment** 500m stretch of river, plant survey and river profile

Copies Available EA, SWT, EN/LEWES/LIB

**Survey Name** A River Corridor Survey, River Adur Catchment, Volume 2 - (2102)

Survey Author LEE DONALD ASSOCIATES

Survey Comment A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections,

each section is treated as a discrete site. Only macrophyte (large aquatic plants) communities

are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Site Name Scolliers Bridge, Adur Trib., Section 1 TQ165209

**Site Comment** 500m section of river, plant survey and river profile

Copies Available EA, SWT

A River Corridor Survey, River Adur Catchment, Volume 2 - (2102) **Survey Name** 

LEE DONALD ASSOCIATES **Survey Author** 

A River Corridor Survey of the River Adur Catchment. The catchment is split into 500m sections, **Survey Comment** 

> each section is treated as a discrete site. Only macrophyte (large aquatic plants) communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and

handrawn maps. Bank profiles and vegetation structure are visually presented.

Date Aug - Sept 1994

Scolliers Bridge, Adur Trib., Section 2 TQ166213 Site Name

**Site Comment** 500m section of river, plant survey and river profile

EA, SWT Copies Available

A River Corridor Survey, Rivers Arun, Adur, Ouse and Cuckmere - (2104) **Survey Name** 

LEE DONALD ASSOCIATES **Survey Author** 

A River Corridor Survey of the Streams and Ditches that feed the rivers Arun, Adur, Ouse and **Survey Comment** 

> Cuckmere. The feeds are split into 500m sections, each section is treated as a discrete site. Only macrophyte (large aquatic plants) communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and handrawn maps. Bank profiles and vegetation

structure are visually presented.

Date Aug - Oct 1996

Site Name River Adur, New Barn Sewer, Section 1 TQ152210

500m stretch of the river was surveyed listing macrophytes and noting profiles. Management Site Comment

recomendations also given. Not part of the main river itself but a feed in waterway.

EA, SWT Copies Available

A River Corridor Survey, Rivers Arun, Adur, Ouse and Cuckmere - (2104) **Survey Name** 

LEE DONALD ASSOCIATES **Survey Author** 

**Survey Comment** A River Corridor Survey of the Streams and Ditches that feed the rivers Arun, Adur, Ouse and

> Cuckmere. The feeds are split into 500m sections, each section is treated as a discrete site. Only macrophyte (large aquatic plants) communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and handrawn maps. Bank profiles and vegetation

structure are visually presented.

Aug - Oct 1996 Date

Site Name River Adur, New Barn Sewer, Section 2

500m stretch of the river was surveyed listing macrophytes and noting profiles. Management

TQ150206

recomendations also given. Not part of the main river itself but a feed in waterway.

Copies Available EA, SWT

**Site Comment** 

A River Corridor Survey, Rivers Arun, Adur, Ouse and Cuckmere - (2104) **Survey Name** LEE DONALD ASSOCIATES **Survey Author** A River Corridor Survey of the Streams and Ditches that feed the rivers Arun, Adur, Ouse and **Survey Comment** Cuckmere. The feeds are split into 500m sections, each section is treated as a discrete site. Only macrophyte (large aquatic plants) communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and handrawn maps. Bank profiles and vegetation structure are visually presented. Aug - Oct 1996 **Date** TQ147204 Site Name River Adur, New Barn Sewer, Section 3 **Site Comment** 500m stretch of the river was surveyed listing macrophytes and noting profiles. Management recomendations also given. Not part of the main river itself but a feed in waterway. EA, SWT Copies Available **Survey Name** A River Adur Catchment Reactive RCS Survey - (2116) **ENVIRONMENT AGENCY Survey Author** The catchment is split into 300m or 500m sections, each section is treated as a discrete site. **Survey Comment** Only macrophyte (large aquatic plants) communities are described in detail. DAFOR scale is used to describe abundance. Detailed OS and handrawn maps. Bank profiles and vegetation

structure are visually presented. 1996 Date TQ137216 Site Name New Hampshire Sewer, Map 1 **Site Comment** Survey of stretch of river noting vegetation and profiles.

EA, SxBRC Archive Copies Available

Pesticide Use, Avian Food Resources and Bird Densities in Sussex - CONFIDENTIAL - (1397) **Survey Name ENGLISH NATURE Survey Author Survey Comment** Data on use of herbicides, foliar fungicides and insecticides on arable crops in Sussex, 1970 -1995. Began as the Partridge Survival Project - 1968. No detailed data on species. (JNCC Report 296). NB: this report is CONFIDENTIAL. 1970-1995 Date West Sussex between Rivers Adur & Arun TQ15\*20\* Site Name

Copies Available WSCC, EN

**Site Comment** 

**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 Adur (EA Sample Site u/s from Hatterell Weir) TQ177198

**Site Comment** Section of river or stream electrofished by EA.

Copies Available EA, SxBRC Archive

**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 Adur (Knepp Castle EA Sample Site) TQ155209

**Site Comment** Section of river or stream electrofished by EA.

Copies Available EA, SxBRC Archive

Survey Name Sussex Floodplain Woodland Assessment - (2812)

Survey Author DOLPHIN ECOLOGICAL SURVEYS

Survey Comment Aim of survey is to make a preliminary attempt to identify the characteristics of Sussex

floodplain woodlands, particularly their vascular plant assemblages and aspects of their structure. Assessments were based upon a combination of field survey and collation of existing data. A sample of floodplain woodland sites (10 in total) were selected for assessment, with at least one site from each major Sussex river catchment. [NB: Sites 20138, 20140, 20142 were not surveyed, but collated data is included in report]. [spp data extracted]. [SWT copy held by SORP,

TQ162225

SxBRC copy held in H1 box].

**Date** 28.07.05 - 17.09.05

Site Name Wet Woodland Area North of Kneppmill Pond

**Site Comment** A diverse area of floodplain woodland upstream of the mill pond on the Knepp Estate. [NB: site

boundaries estimated from description provided with ESD Survey 2812].

Copies Available SWT, SxBRC Boxes

**Survey Name** Weald Ponds Initiative Reply Slips - (2837)

Survey Author Various

Survey Comment Various reply slips completed by members of the public, landowners, etc. Slips include sections

for management, nature of surrounding land, plants & animals seen. Forms completed to varying degrees. Exact location of many ponds difficult to establish due to vague descriptions, lack of grid refs, etc (therefore some sites listed are best-guesses or approximations). [NB: those forms held at SxBRC are in "Pond Survey Info" box, although this collection may be

incomplete].

Date various

Site Name Popes Oak Farm Area, West Grinstead Park TQ177219

Site Comment GIS polygon is circle centred on farm buildings. Boundaries approximate to indicate roughly

area relating to farm.

Copies Available SxBRC Boxes

Survey Name Naturalistic Grazing on Knepp Castle Estate - Phase1: Baseline Survey & Scoping Report - (2840)

Survey Author GREENAWAY, Theresa

Survey Comment Scoping study aims to produce an outline habitat map of the Estate and a study of existing

biological records that together can be used to monitor subsequent changes to landscape and biodiversity over time under the naturalistic grazing regime. Study is essentially desk-based using published and unpublished material, site visits and discussions with the Estate Manager.

[an SxBRC Survey Unit report].

**Date** n/a

Site Name Knepp Castle Estate (2005 boundary) TQ155218

**Site Comment** Estate boundaries as at 2006.

Copies Available SxBRC Svy Unit

Survey Name	The Flora of the Pulborough to Cowfold District (AWJ Code L2) - (3243)	
Survey Author	JONES, A. W.	
Survey Comment	Habitats and frequency in each habitat area given for each species, and separate habitat li given in descending order of plants and comments on habitats; also detailed tables showing spread over survey divisions of each plant for each habitat.	
Date	2003-2009	
Site Name	Pulborough to Cowfold (AWJ Area L2)	132205
Site Comment	Additional parishes: Billingshurst, Thakeham, Shipley, Shermanbury, Ashurst, Ashington.	

Copies Available As contact

## Glossary of Abbreviations

## Organisations:

BBCS British Butterfly Conservation Society www.sussex-butterflies.org.uk

(now Butterfly Conservation)

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)

ESCC East Sussex County Council

FC Forestry Commission

FWAG Farming and Wildlife Advisory Group

Tel: 03000 600 300 (Sussex Team)

Tel: 01273 481621 (County Ecologist)

Tel: 01420 23337 (SE England)

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 (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.

A detailed survey including ecological processes and long term monitoring information.

NVC National Vegetation Classification.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

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 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.

### SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

#### West Sussex

Site Name: Kneppmill Pond, the River Adur & Lancing Brook

Site Ref: H18 Owner: Private

District: Horsham Size (ha): 33.8

Parish: Shipley Date: Identified May 1992

National Grid Ref: TQ152214 Author: Marion Finch

Habitat: Lake, tall fen, river, stream, semi-natural woodland and scrub

## **Summary**

Kneppmill Pond is a large area of open water with well-developed marginal vegetation and extensive tall fen. It is of County importance for wintering and breeding birds and includes a heronry.

The site includes a stretch of the River Adur, which has diverse emergent and aquatic vegetation, including several local species, and its tributary, Lancing Brook.

### Site description

The open water of the lake is surrounded by a wide band of marginal vegetation, dominated by Reedmace (*Typha* spp), Bulrush (*Scirpus lacustris*), Reed Canary-grass (*Phalaris arundinacea*) and Meadowsweet (*Filipendula ulmaria*). Other species include Yellow Loosestrife (*Lysimachia vulgaris*), Hemlock Water-dropwort (*Oenanthe crocata*) and Yellow Flag (*Iris pseudacorus*). The northern end is completely overgrown with similar species, forming extensive tall fen. Willow scrub and a strip of woodland with a mixed shrub layer and occasional exotic trees occur on the banks, and there is a small herb-rich clearing on the west bank.

The River Adur varies considerably within the site. Parts are well-vegetated with plants growing across the channel in places. Others are more open, with floating species such as Yellow Water-lily (*Nuphar lutea*), Duckweed (*Lemna* sp) and Floating Sweet-grass (*Glyceria fluitans*). Arrowhead (*Sagittaria sagittifolia*), Flowering-rush (*Butomus umbellatus*) and Bulrush occur amongst the marginal vegetation, and the local Tubular Water-dropwort (*Oenanthe fistulosa*) and Wood Club-rush (*Scirpus sylvaticus*) are present. Lancing Brook has a similarly diverse emergent and aquatic flora.

Kneppmill Pond is an important ornithological site as it includes a heronry, and supports large numbers of wintering wildfowl, and breeding Tufted Ducks, Great Crested Grebe and Mute Swan. Eight species of dragonfly have been recorded, including the local Variable Damselfly and Ruddy Darter.

## Management recommendations

The site is too complex to give detailed management recommendations here. Management aims should be to maintain the variety and quality of the habitats by preventing contamination or drying-up of the water bodies. Maintaining open water in the lake and ideally leaving a 'buffer zone' of unintensively managed land either side of the River and Brook.

## **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 intersting because of their great age.
- In ancient or post-mature stage of life.
- Have a large girth relative to others of the same species.

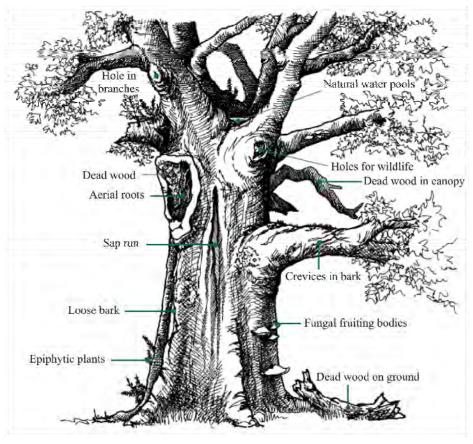
### Veteran trees

- 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.

### Characteristic features of an ancient tree include:



- A reducing crown height but one that is more widely spread through the aging process.
- A large girth by comparison with other trees of the same species.
- A hollowing trunk this may have one or more openings to the outside.
- Stag headedness i.e. branch dieback and deadwood in the upper canopy.
- Fruit bodies of heart-rot fungi.
- Sap runs or naturally forming water pockets in branch hollows.

### Characteristic features of a veteran tree

Source: Veteren Trees: A guide to good management. Natural England, 2000.

### 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.

In woodland ecosystems, fungi play an important role in recycling nutrients and in individual trees. Fungi can be extremely long lived; some species are known to grow continuously. The two main types of fungi associated with ancient trees are mycorrhizal (which form symbiotic relationships with the roots of trees) and decomposers. Ancient trees support many rare and threatened fungi species, for example *Sulphur polypore* - a specialised wood decay fungus.

Ancient trees are incredibly important to invertebrate life. Approximately 1,700 (6%) invertebrate species in the British Isles are dependent on decaying wood to complete their life cycles. The invertebrate community of a tree often changes as the decay process proceeds. Some invertebrates are more dependent on the type of decay than on the species of tree. Others depend on the species of fungi present.

Insects 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.

Bats particularly like woodland because of the abundance of insects and the variety of niches trees offer for bat roosts. All 17 species of bat found in the UK frequent woods, with a few being woodland specialists, such as the rare Bechstein's and Barbastelle bats. Old trees with splits, cracks, loose bark, holes and crevices are especially attractive to bats. Oak and beech trees seem to be preferred, but any tree species can be suitable.



## Ancient tree management

Many ancient trees are vulnerable and suffer from neglect or lack of awareness of their great importance to our heritage and wildlife. Threats to old trees include: root compaction from roads, buildings, vehicles and livestock; root severance by cultivation and development; felling for development work and 'safety' reasons; pests and diseases such as rhododendron and Phytopthora; and neglect of traditional techniques such as pollarding.

Active management may not involve actually doing much. Trees need to be checked regularly but management should only be carried out where necessary. When managing ancient trees it is important to think not just about the tree, but also about the management of the land surrounding it.

Planning Policy Statement 9 (PPS9) requires local authorities to avoid the loss of aged and veteran trees. Currently, few veteran trees are granted Tree Preservation Orders (TPO), as a TPO is not usually issued to a tree that is deemed 'dead, diseased, dying or decayed'. A veteran tree, however, may be given indirect protection if it is associated with a rare species.

## 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-tree-hunt.org.uk

(Illustrations courtesy of Natural England.)

## 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, wildliferich 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.

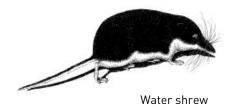
The original inventory was produced on a county-by-county basis in the 1980's and 1990's. At first it was a paper-based inventory, which was converted to a digital map in 2000. Subsequent revisions and versions are available as digital maps.

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.)

## 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: www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/fens
- Sussex Wetland Landscapes Project: www.sussexotters.org

(Illustrations courtesy of Natural England.)

## REEDBED

Reedbeds are wetlands dominated by stands of common reed where the water table is at or above ground level for most of the year. They tend to incorporate open water and ditches, and areas of wet grassland and carr woodland may also be associated with them.

### Why are they important?

- They provide important breeding and roosting habitat for birds including rare species such as bearded tit and Cetti's warbler.
- A number of invertebrates are recorded from reedbeds including moths, snails and beetles. Many of the species found are now uncommon.
- Reedbeds provide a refuge for shoals of fish, which in turn provide food for other species.



Bittern

#### Reedbeds in Sussex

The majority of reedbeds in Sussex are less than five hectares in size. The largest reedbed in Sussex is at Filsham, which is around 17 hectares.

### What are the threats?

- Drainage for farming and development, and over-abstraction of water.
- Water pollution can cause a loss of diversity and dominance by a few species.
- Flood defence measures can contribute to loss of reedbeds.
- A lack of management.

### Some associated species

- Bittern Botaurus stellaris
- Grass snake Natrix natrix
- Swollen spire snail Mercuria confusa
- Flame wainscot Mythimna flammea
- Common reed *Phragmites australis*
- Reed sweet-grass Glyceria maxima

### Further information

- Buglife: www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/reedbeds
- Sussex Wetland Landscapes Project: www.sussexotters.org

(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 fundi



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 traditional orchards can be found here: www.orchardnetwork.org.uk



# **Sussex Biodiversity Record Centre**

Woods Mill Henfield West Sussex BN5 9SD

Tel: 01273 497 553/521 Fax: 0203 070 0709

Email: sxbrc@sussexwt.org.uk Website: www.sxbrc.org.uk

The Sussex Biodiversity Record Centre is managed by the Sussex Wildlife Trust as a partnership project between East and West Sussex County Councils, Natural England, Environment Agency, South Downs Joint Committee, High Weald AONB Unit, Southern Water and Local Authorities throughout Sussex.

