



Biodiversity Annual Monitoring Report

Worthing Borough

1st April 2018 – 31st March 2019

Report ref: SxBRC/19/659

05/11/2019

Biodiversity Annual Monitoring Report

Introduction

The Biodiversity Annual Monitoring Report (AMR) is a product provided by the Sussex Biodiversity Record Centre (SxBRC) to all local authorities in East and West Sussex on a yearly basis. It is a retrospective look at the potential impacts on biodiversity of approved planning applications for the financial year.

Why this data matters

The Natural Environment and Rural Communities Act 2006 aims to make biodiversity a central consideration in policy and decision making processes, by placing a legal duty in Section 40 on every public body in exercising its functions, [to] "...have regard...to the purpose of conserving biodiversity." There is an expectation that public bodies when complying with this duty will refer to the list of habitats and species of principal importance in England (Section 41 list). These habitats and species should be treated as material considerations when making planning decisions.

It is also cemented in the National Planning Policy Framework (NPPF) that the planning system has an environmental role to play that is fundamental to achieving sustainable development. In particular the planning system should:

- Provide net gains in biodiversity (8, 170, 174)
- Take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure (171);
- Plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries (171)
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species (174)
- Identify suitable ways of mapping and monitoring biodiversity in local plans (174)
- The preparation and review of all policies should be underpinned by relevant and up-to-date evidence. (31)

The information in this report will help to assess how the local authority is performing at these duties.

SPECIES DATA

Table 3 provides the number of planning applications where designated species data exists within a 200 metre buffer. All species data is from 1980 onwards. The species data are grouped as follows:

European Protected Species (EPS)

The list of European Protected Species is taken from Schedule 2 and Schedule 4 of the Conservation (Natural Habitats &c.) Regulations 1994. It is an offence to deliberately kill, capture, or disturb a European Protected Species, or to damage or destroy the breeding site or resting place of such a species.

Otter records are not included in this report.

A list of European Protected Species can be found here: <http://naturenet.net/law/europe.html>

Wildlife & Countryside Act (1981) Species

Species included in Table 3 of the Biodiversity AMR are from the following Schedules/Parts of the Act:

Schedule 5 - Wild Animals

- Section 9 Part 1: intentional killing, injuring, taking

- Section 9 Part 4(a): damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection
- Section 9 Part 4(b): disturbance of animal occupying such a structure or place

A list of Schedule 5 species can be found here: <http://naturenet.net/law/sched5.html>

Schedule 8 - Plants

A list of Schedule 8 species can be found here: <http://naturenet.net/law/sched8.html>

Section 41 (S41) Species

Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006 requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

The S41 list is used to guide decision-makers in implementing their duty under section 40 of the Act, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

More details about the NERC Act can be found here: <http://bit.ly/1Nedj7X>

Bats

Bats are protected by European and UK legislation. It is an offence to:

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

Notable Birds

The list of 'Notable Birds' has been devised by the SxBRC in collaboration with the Sussex Ornithological Society (SOS). It consists of bird species that are particularly scarce or vulnerable to development in Sussex. The full list can be seen at the end of this report.

Rare Species

These species are from the Rare Species Inventory (RSI) devised by the SxBRC in collaboration with local experts. The list contains over 3,400 species, selected on the following criteria:

- 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.

Bat and bird records are not included in the RSI.

Invasive Non-Native Species (INNS)

An invasive non-native is defined as a species whose introduction and/or spread threatens biological diversity. Section 14 of the WCA (1981) is the principal legislation dealing with the release of non-native species. The list of INNS used in Sussex includes all those listed in Schedule 9 of the WCA and 26 other species not in this Schedule but which pose a particular risk in Sussex. A list of these additional species can be found at the end of this report.

Bird records are not included in the list of invasive non-native species used in this report.

Ancient & Veteran Trees

These records are from the Ancient Tree Hunt (a national survey carried out in 2007/2008) and Tree Register of the British Isles (a charity which collates and updates data on notable trees).

Black Poplars

The black poplar is naturally a tree of wet woodland and forested floodplains. Much black poplar habitat has been drained and cleared in the past, and there are now under 50 mature trees remaining in Sussex.

Worthing Borough area (ha)	3378.29	Area of approved planning applications (ha)	4.18	(43 applications)
West Sussex area (ha)	202361.68	% of Worthing Borough infringed by planning applications	0.12	

Table 1. Designated sites and reserves		Area of designation / reserve in West Sussex (ha)	% of West Sussex	Area of designation / reserve in Worthing Borough (ha)	% of Worthing Borough	Area of designation / reserve in Worthing Borough infringed by planning applications (ha)	% of designation / reserve in Worthing Borough infringed by planning applications	Number of planning applications within or abutting designation / reserve
Inter-national	Ramsar	3724.95	1.84	0.00	0.00	0.00	0.00	0
	Special Area of Conservation (SAC)	3672.08	1.81	0.00	0.00	0.00	0.00	0
	Special Protection Area (SPA)	3746.33	1.85	0.00	0.00	0.00	0.00	0
National	Area of Outstanding Natural Beauty (AONB)	25958.71	12.83	0.00	0.00	0.00	0.00	0
	National Nature Reserve (NNR)	221.50	0.11	0.00	0.00	0.00	0.00	0
	National Park	81247.97	40.15	814.80	24.12	0.00	0.00	0
	Site of Special Scientific Interest (SSSI)	8310.00	4.11	42.92	1.27	0.00	0.00	0
Local	Country Park	320.52	0.16	0.00	0.00	0.00	0.00	0
	Local Geological Site (LGS)	1573.99	0.78	2.87	0.09	0.00	0.00	0
	Local Nature Reserve (LNR)	2074.37	1.03	0.00	0.00	0.00	0.00	0
	Local Wildlife Site (LWS)	10569.16	5.22	363.79	10.77	0.00	0.00	0
	Notable Road Verge	136.91	0.07	0.00	0.00	0.00	0.00	0
Reserve/Property	Environmental Stewardship Agreement *	35279.18	17.43	403.15	11.93	0.00	0.00	0
	National Trust	5065.97	2.50	31.55	0.93	0.00	0.00	0
	RSPB Reserve	1425.73	0.70	0.00	0.00	0.00	0.00	0
	Sussex Wildlife Trust Reserve	742.61	0.37	0.00	0.00	0.00	0.00	0
	Woodland Trust	67.89	0.03	0.00	0.00	0.00	0.00	0

* This only applies to 'live' Environmental Stewardship Agreements. Environmental Stewardship Agreements include: Entry Level Stewardship, Entry Level plus Higher Level Stewardship, Higher Level Stewardship, Organic Entry Level plus Higher Level Stewardship and Organic Entry Level Stewardship.

All statistics are based on information held at the Sussex Biodiversity Record Centre as at 01/10/19. Note that designated sites may overlap therefore the totals shown in the designated site table do not necessarily reflect the total percentage of the district covered by designated sites. Please inform us if you believe the data shown to be inaccurate.

Table 2. Habitats *	Area of habitat in West Sussex (ha)	% of West Sussex	Area of habitat in Worthing Borough (ha)	% of Worthing Borough	Area of habitat in Worthing Borough infringed by planning applications (ha)	% of habitat in Worthing Borough infringed by planning applications	Number of planning applications within or abutting habitat
Ancient woodland	21373.67	10.56	67.48	2.00	0.00	0.00	0
Coastal & floodplain grazing marsh	4389.36	2.17	0.00	0.00	0.00	0.00	0
Coastal saltmarsh	357.04	0.18	0.00	0.00	0.00	0.00	0
Coastal sand dunes	31.52	0.02	0.00	0.00	0.00	0.00	0
Coastal vegetated shingle	124.93	0.06	6.95	0.21	0.00	0.00	0
Deciduous woodland	30111.06	14.88	182.79	5.41	0.00	0.00	0
Ghyll woodland	1992.74	0.98	0.00	0.00	0.00	0.00	0
Intertidal chalk	0.00	0.00	0.00	0.00	0.00	0.00	0
Intertidal mudflat	1758.88	0.87	75.94	2.25	0.00	0.00	0
Lowland calcareous grassland	2736.04	1.35	98.55	2.92	0.00	0.00	0
Lowland fen	194.74	0.10	0.00	0.00	0.00	0.00	0
Lowland heathland	1506.50	0.74	0.07	0.00	0.00	0.00	0
Lowland meadow	193.42	0.10	0.00	0.00	0.00	0.00	0
Maritime cliff and slope	0.00	0.00	0.00	0.00	0.00	0.00	0
Reedbed	60.11	0.03	0.00	0.00	0.00	0.00	0
Saline lagoon	44.16	0.02	0.00	0.00	0.00	0.00	0
Traditional orchard	139.66	0.07	0.48	0.01	0.00	0.00	0
Wood-pasture & parkland	7057.91	3.49	21.13	0.63	0.00	0.00	0

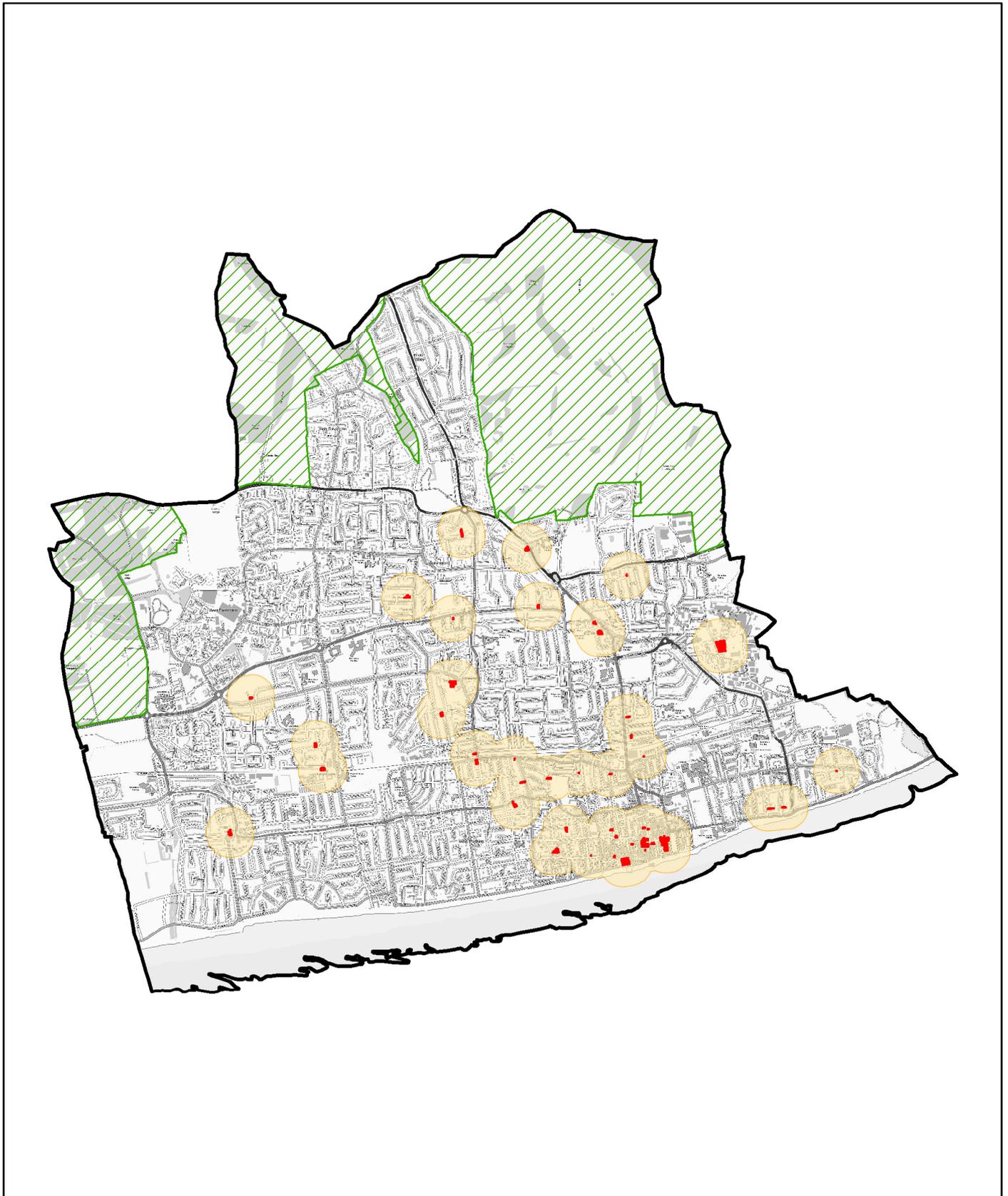
Table 3. Species Data # (1980 onwards)	Number of records in West Sussex	Number of records in Worthing Borough	No. of planning applications with species records within 200m buffer	% of planning applications with species records within 200m buffer
European Protected species	18039	137	11	25.58
Wildlife & Countryside Act species	34250	299	24	55.81
Section 41 species	331528	24887	43	100.00
Bats	14220	109	11	25.58
Notable birds	184473	9439	43	100.00
Rare species (excludes bats and birds)	53026	1887	40	93.02
Invasive non-native species	11640	1282	31	72.09
Ancient Tree Hunt	2695	6	9	20.93
Tree Register	378	0	0	0.00
Black Poplar	17	0	0	0.00

* Changes in habitat extent year on year may well be a reflection of improved datasets and should not be assumed to be habitat expansion or contraction. Many habitat datasets overlap with one another, e.g. lowland meadow may be classed as grazing marsh and recorded in both inventories. [#]Badger and otter records are not included. Rare species does not include bat or bird records. Some species appear in more than one category. The Sussex Notable Bird Inventory is based on a list of species that are particularly scarce or vulnerable to development in Sussex. Please see species list at end of report for more information. Ancient Tree Hunt and Tree Register of the British Isles datasets include a degree of overlap (i.e. on occasion the same tree may be recorded in both datasets).

Worthing Borough

Approved Planning Applications
1st April 2018 to 31st March 2019

Prepared on 05/11/2019



Key to Map:

-  Approved planning application
-  200m buffer zone
-  Worthing Borough
-  South Downs National Park

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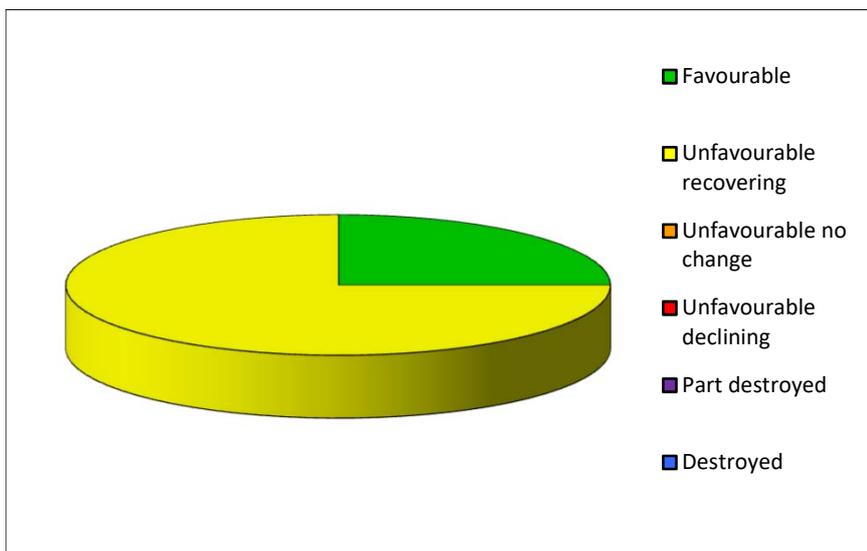


SSSI Unit Condition

Based on information derived from Natural England

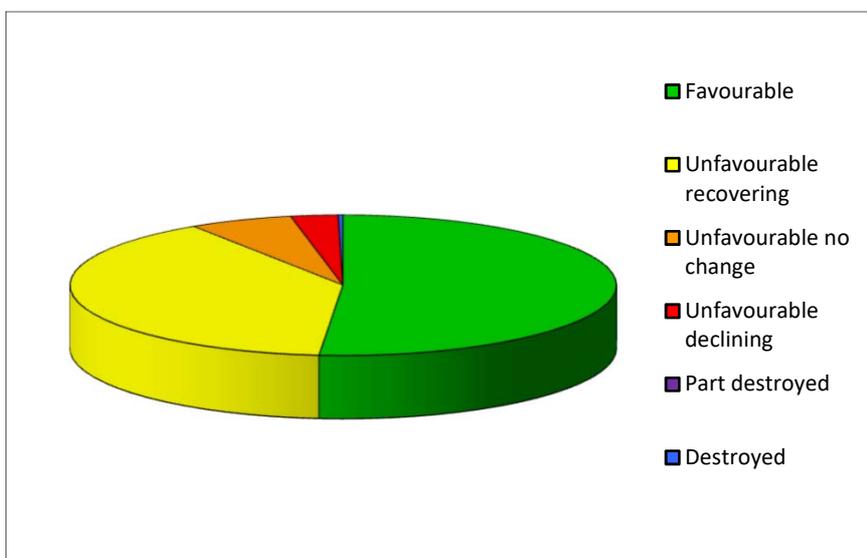
Prepared on 01/11/2019

SSSI Units in Worthing Borough



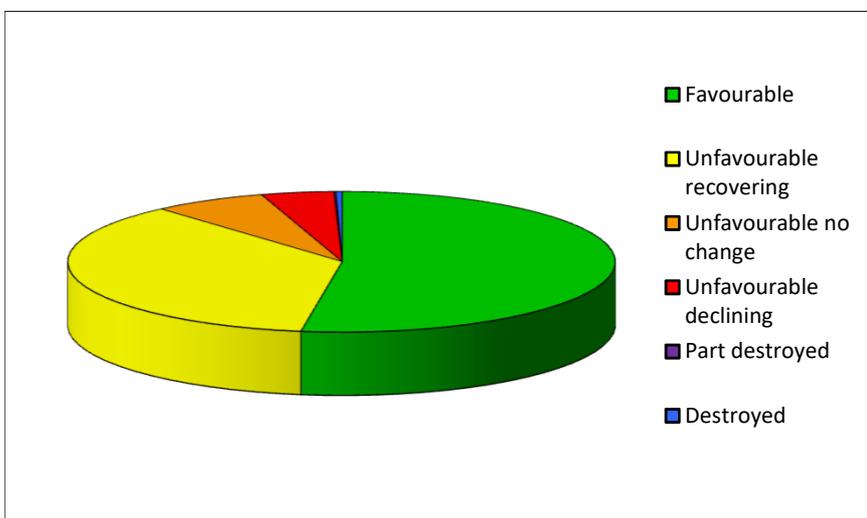
Condition	No. of Units	% of Units
Favourable	1	25.0
Unfavourable recovering	3	75.0
Unfavourable no change	0	0.0
Unfavourable declining	0	0.0
Part destroyed	0	0.0
Destroyed	0	0.0
Total no. of units	4	

SSSI Units in West Sussex



Condition	No. of Units	% of Units
Favourable	184	51.4
Unfavourable recovering	141	39.4
Unfavourable no change	22	6.1
Unfavourable declining	10	2.8
Part destroyed	0	0.0
Destroyed	1	0.3
Total no. of units	358	

SSSI Units in South East Region



Condition	No. of Units	% of Units
Favourable	2474	52.4
Unfavourable recovering	1705	36.1
Unfavourable no change	317	6.7
Unfavourable declining	202	4.3
Part destroyed	5	0.1
Destroyed	18	0.4
Total no. of units	4721	

Sussex Notable Bird List

The Sussex Notable Bird List consists of species that are particularly scarce or vulnerable to development. It includes species which are either on the Birds of Conservation Concern Red and Amber lists, NERC Section 41 or Schedule 1 species known to have bred in Sussex, have been recorded in summer and may breed in the future or have vulnerable overwintering populations in Sussex. Table 6 of the report will show records of these species based on selection criteria decided on by the Sussex Ornithological Society (SOS).

These records are not available to the general public due to the sensitivity of the data. The SOS has kindly shared these records with us, with the view that better planning decisions can be made with their availability.

Below is the list of species and the date ranges/criteria for their inclusion:

Species	Record type treated as notable in Sussex
Dark-bellied Brent Goose	All records
Mute Swan	Confirmed or probable breeding or late May - early July records
Bewick's Swan	All records
Whooper Swan	All records
White-fronted Goose	All records
European Greater White-fronted Goose	All records
Greenland Greater White-fronted Goose	All records
Common Shelduck	Confirmed or probable breeding or late May - early July records
Wigeon	Confirmed or probable breeding or late May - early July records
Gadwall	Confirmed or probable breeding or late May - early July records
Teal	Confirmed or probable breeding or late May - early July records
Mallard	Confirmed or probable breeding or late May - early July records
Pintail	Confirmed or probable breeding or late May - early July records
Garganey	Confirmed or probable breeding or late May - early July records
Shoveler	Confirmed or probable breeding or late May - early July records
Pochard	Confirmed or probable breeding or late May - early July records
Tufted Duck	Confirmed or probable breeding or late May - early July records
Scaup	All records
Common Scoter	All records
Little Egret	Confirmed or probable breeding records + roost
Purple Heron	All records
Bittern	All records
Little Bittern	All records
Spoonbill	All records
Black Grouse	All records
Grey Partridge	Confirmed or probable breeding or March - August records
Quail	Confirmed or probable breeding or March - August records
Red-throated Diver	All records
Black-throated Diver	All records
Great Northern Diver	All records
Little Grebe	Confirmed or probable breeding or late May - early August records
Slavonian Grebe	All records
Fulmar	Confirmed or probable breeding records
Balearic Shearwater	All records
Leach's Petrel	All records
Honey-buzzard	Information provided in summary only
Red Kite	Confirmed or probable breeding or March - August records + roost
White-tailed Eagle	All records
Marsh Harrier	Information provided in summary only
Hen Harrier	Roost
Pallid Harrier	All records
Montagu's Harrier	Information provided in summary only
Goshawk	Information provided in summary only
Golden Eagle	All records

Osprey	Mid-May to July records
Kestrel	Confirmed or probable breeding or May - July records
Merlin	All records
Hobby	Confirmed or probable breeding or April - August records
Gyr Falcon	All records
Peregrine	Information provided in summary only
Spotted Crane	Information provided in summary only
Corncrake	All records
Oystercatcher	Confirmed or probable breeding or late May - early July records
Little Ringed Plover	Confirmed or probable breeding or April - July records
Ringed Plover	Confirmed or probable breeding or late May - early July records
Dotterel	All records
Lapwing	Confirmed or probable breeding or April - June records
Black-winged Stilt	April to August records
Avocet	Confirmed or probable breeding or March - July records
Stone-curlew	Information provided in summary only
Common Sandpiper	Confirmed or probable breeding or late May - early July records
Snipe	Confirmed or probable breeding or April - July records
Curlew	Confirmed or probable breeding or April - July records
Woodcock	Confirmed or probable breeding or March - August records
Ruff	All records
Black-tailed Godwit	All records
Redshank	Confirmed or probable breeding or April - July records
Wood Sandpiper	All records
Red-necked Phalarope	All records
Little Gull	All records
Little Tern	Confirmed or probable breeding records
Mediterranean Gull	Confirmed or probable breeding records
Common Gull	Confirmed or probable breeding records
Lesser Black-backed Gull	Confirmed or probable breeding records
Yellow-legged Gull	Confirmed or probable breeding or April - June records
Herring Gull	Confirmed or probable breeding records
Great Black-backed Gull	Confirmed or probable breeding records
Black-headed Gull	Confirmed or probable breeding records
Kittiwake	Confirmed or probable breeding records
Black Tern	All records
Sandwich Tern	Confirmed or probable breeding records
Common Tern	Confirmed or probable breeding records
Roseate Tern	All records
Stock Dove	Confirmed or probable breeding or May - July records
Turtle Dove	Confirmed or probable breeding or May - July records
Cuckoo	Confirmed or probable breeding or May - July records
Barn Owl	All records
Snowy Owl	All records
Tawny Owl	Confirmed or probable breeding or May - July records
Long-eared Owl	Confirmed or probable breeding or March - July records + roost
Short-eared Owl	Confirmed or probable breeding or May - July records
Nightjar	Confirmed or probable breeding or May - July records
Swift	Confirmed or probable breeding records
Kingfisher	Confirmed or probable breeding or March - August records
Bee-eater	Confirmed or probable breeding or May - July records
Hoopoe	Confirmed or probable breeding or May - July records
Wryneck	Confirmed or probable breeding or May - July records
Green Woodpecker	Confirmed or probable breeding records
Lesser Spotted Woodpecker	All records
Aquatic Warbler	All records
Marsh Warbler	Information provided in summary only
Cetti's Warbler	Confirmed or probable breeding or March - August records

Grasshopper Warbler	Confirmed or probable breeding or May - July records
Savi's Warbler	Information provided in summary only
Wood Warbler	Confirmed or probable breeding or April - August records
Willow Warbler	Confirmed or probable breeding records
Woodlark	Confirmed or probable breeding or February - August records
Skylark	Confirmed or probable breeding or April - July records
Sand Martin	Confirmed or probable breeding records
Swallow	Confirmed or probable breeding records
House Martin	Confirmed or probable breeding records
Tree Pipit	Confirmed or probable breeding or May - July records
Meadow Pipit	Confirmed or probable breeding or May - July records
Yellow Wagtail	Confirmed or probable breeding or May - June records
Blue-headed Wagtail	Confirmed or probable breeding or May - June records
Grey Wagtail	Confirmed or probable breeding or May - June records
Dunnock	Confirmed or probable breeding records
Nightingale	Confirmed or probable breeding records
Bluethroat	All records
Black Redstart	May - July records
Redstart	Confirmed or probable breeding or April - July records
Whinchat	Confirmed or probable breeding or May - July records
Wheatear	Confirmed or probable breeding or May - July records
Ring Ouzel	All records
Song Thrush	Confirmed or probable breeding records
Mistle Thrush	Confirmed or probable breeding records
Spotted Flycatcher	Confirmed or probable breeding records
Pied Flycatcher	Confirmed or probable breeding or May - July records
Whitethroat	Confirmed or probable breeding records
Dartford Warbler	Confirmed or probable breeding or March - August records
Bearded Tit	Confirmed or probable breeding or March - August records
Firecrest	Confirmed or probable breeding or May - August records
Willow Tit	All records
Marsh Tit	Confirmed or probable breeding or April - July records
Red-backed Shrike	Information provided in summary only
Chough	All records
Starling	Confirmed or probable breeding records
House Sparrow	Confirmed or probable breeding records
Tree Sparrow	All records
Lesser Redpoll	Confirmed or probable breeding or May - July records
Linnet	Confirmed or probable breeding records
Twite	All records
Serim	All records
Common Crossbill	Confirmed or probable breeding or February - June records
Bullfinch	Confirmed or probable breeding records
Hawfinch	All records
Yellowhammer	Confirmed or probable breeding records
Cirl Bunting	All records
Reed Bunting	Confirmed or probable breeding records
Corn Bunting	All records

Sussex Invasive Non-Native Species (INNS)

An invasive non-native species (INNS) is defined as a species whose introduction and/or spread threatens biological diversity. The INNS table includes records of non-native species listed in Schedule 9 of the Wildlife & Countryside Act 1981 (WCA) and 26 other species not in this Schedule but which pose a particular risk in Sussex. These additional species are:

Scientific name	Common name
<i>Pseudorasbora parva</i>	Topmouth Gudgeon
<i>Leucaspis delineates</i>	Sunbleak
<i>Amsinckia micrantha</i>	Common Fiddleneck
<i>Centranthus ruber</i>	Red Valerian
<i>Gaultheria shallon</i>	Shallon
<i>Hyacinthoides hispanica</i>	Spanish Bluebell
<i>Nymphoides peltata</i>	Fringed Water-lily
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Hyacinthoides non-scripta x hispanica = H. x massartiana</i>	Hybrid Bluebell
<i>Lemna minuta</i>	Least Duckweed
<i>Acaena novae-zelandiae</i>	Pirri-pirri-bur
<i>Lysichiton americanus</i>	American Skunk Cabbage
<i>Cortaderia selloana</i>	Pampas Grass
<i>Quercus ilex</i>	Evergreen Oak
<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Lilioceris lili</i>	Lily Beetle
<i>Cameraria ohridella</i>	Horse-Chestnut Leaf-miner
<i>Campylopus introflexus</i>	Heath Star Moss
<i>Trachemys scripta</i>	Red-eared Terrapin
<i>Lithobates catesbeianus</i>	American Bullfrog
<i>Styela clava</i>	Leathery Sea Squirt
<i>Dreissena polymorpha</i>	Zebra Mussel
<i>Dreissena rostriformis bugensis</i>	Quagga Mussel
<i>Lymantria dispar</i>	Gypsy Moth
<i>Thaumetopoea processionea</i>	Oak Processionary Moth