Sussex Nature Recovery

A collective blueprint for targeted action

west sussex county council

West Sussex Local Nature Recovery Strategy

Statement of Biodiversity Priorities
Part 3 – Priority Species

June 2026

Cover image

Adonis blue

Illustrations

Contents

Section 1.

About the LNRS

Halnaker tree tunnel

1.1 Preface

This document is one of four that comprises the Local Nature Recovery Strategy (LNRS) for West Sussex and is Part 3 of its Statement of Biodiversity Priorities.

Local Nature Recovery Strategies are a new system of spatial plans for nature introduced by the Environment Act 2021. 48 strategies are being developed across England. Each covers a county (or equivalent) area and is led by a 'Responsible Authority' (RA), which in this instance is West Sussex County Council (WSCC).

Local Nature Recovery Strategies aim to develop and agree the priorities for nature's recovery in collaboration with local stakeholders including residents, farmers, community groups, organisations and businesses. They provide a set of practical actions that can deliver the priorities and map where actions to create or enhance habitats could be implemented to deliver the greatest benefit for nature and the wider environment. As documents that have been developed through collaboration and consultation with a wide range of stakeholders, they can be used to help target investment and action where it is needed most to support nature's recovery across each LNRS area.

1.2 The other parts of this LNRS

Part 1 of the West Sussex LNRS provides important background for the contents of the rest of the strategy:

- A summary of how we developed this Local Nature Recovery Strategy;
- An overview of the important habitats and species in West Sussex, their extent, condition and the pressures they face;
- A snapshot of the views of local people, expressed through our surveys;
- What is already happening – some of the organisations, partnerships, projects and groups that are working for nature in West Sussex.

Part 2 sets out the **priorities** for nature's recovery for West Sussex and the action (or '**measure**') for each that will be needed to deliver these priorities. As required by LNRS government guidance, they focus primarily on **habitats**.

Part 4 provides additional technical detail about how we developed this strategy.

Read all the Parts of the LNRS on the Sussex Nature Recovery website.

West Sussex
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 1 – Context & Description of Strategy Area

West Sussex
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 2 – Priorities, Measures and the Local Habitat Map

West Sussex
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 3 – Priority Species

West Sussex, East Sussex and Brighton & Hove
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 4 – Technical Methods

Section 2.

Introduction

Lesser spotted woodpecker

This section complements the habitat priorities in Part 2 and sets out the **priority species** for nature's recovery for West Sussex and the actions (or '**measures**') for each that will be needed to deliver these priorities.

As for habitat priorities, our approach to species was guided by a set of broad **principles** (Part 2). These principles illustrate that success will require tackling this challenge as a complex problem that requires actions by different stakeholders at different scales and through varying techniques. They reflect the understanding and expertise of stakeholders across our LNRS area of the different elements that need to be in place if we are to achieve real progress over the years ahead.

The document sets out the need for species recovery, and details the process followed in West Sussex, which was broadly in line with non-statutory advice provided by Defra.

It then lists the **priority species** that have been shortlisted for the LNRS area, and how some have been grouped into **priority species assemblages**◊. It then sets out the measures required to support their recovery.

Pink waxcap © iStock.com/weinkoetz

Words underlined in purple with a diamond symbol ◊ are defined in the Glossary

Section 3.

Species Recovery

Lapwing
© iStock.com/CreativeNature_nl

Species abundance and diversity serve as crucial indicators of the health of the natural environment. The government has set legally binding targets to:

- Halt the decline in species abundance by the end of 2030;
- Increase species abundance by the end of 2042 so that it is greater than in 2022 and at least 10% greater than in 2030;
- Reduce the risk of species extinction by 2042, when compared to the risk of species extinction in 2022.

The LNRS is a new tool for driving the national ambition to increase species abundance and reduce risk of species extinction, by planning for more, bigger, better and joined-up habitat to support species recovery and resilience.

Wildlife rescue and rehabilitation organisations play a vital role on the frontline of nature recovery, supporting both species conservation and community engagement. Wildlife rescues often provide unique, on-the-ground insight into the pressures facing our wildlife. They are often the first responders to the consequences of habitat loss, road expansion, domestic predation, pollution and extreme weather. Their work therefore sits at the heart of nature recovery. Every animal successfully returned to the wild helps maintain ecosystem balance and supports the biodiversity goals set out in the LNRS.

For a list of specialist organisations who can help with injured birds and animals, please see: Sussex Wildlife Trust: Who can help with injured wildlife?

Round-headed rampion © iStock.com/phalder

Section 4.

Prioritisation Process

Nightingale

4.1 Creation of Species Longlist

The first step in the process was to create a "species longlist". The list was selected against nationally set criteria.

- Any native species which have been assessed as Red List *Threatened* or *Near Threatened* against International Union for the Conservation of Nature (IUCN) criteria at GB scale.
- Any native species which have not been formally assessed against IUCN Red List criteria but where strong evidence is provided to show that they would meet the criteria for Threatened status in GB.
- Any native species considered to be nationally extinct that re-establish themselves or are rediscovered.
- Any native species which the government's nature advisor, Natural England, suggest as suitable candidates for conservation translocations or any native species already subject to translocation efforts that, on Natural England's advice, need to be scaled up to maximise success.
- Other species of local significance which have not yet been Red List assessed or lack approved Red Lists but for which there is strong evidence to show (or in the absence of this, authoritative expert opinion) that they would meet criteria for Threatened Status.

Red lists are a globally recognised way of identifying the threat of extinction to species, using the internationally accepted guidelines developed by the International Union for Conservation of Nature (IUCN). Many, but not all, species groups have Red Lists, which assign the following classes to species depending on factors including rate of decline, population size, area of distribution and degree of fragmentation.

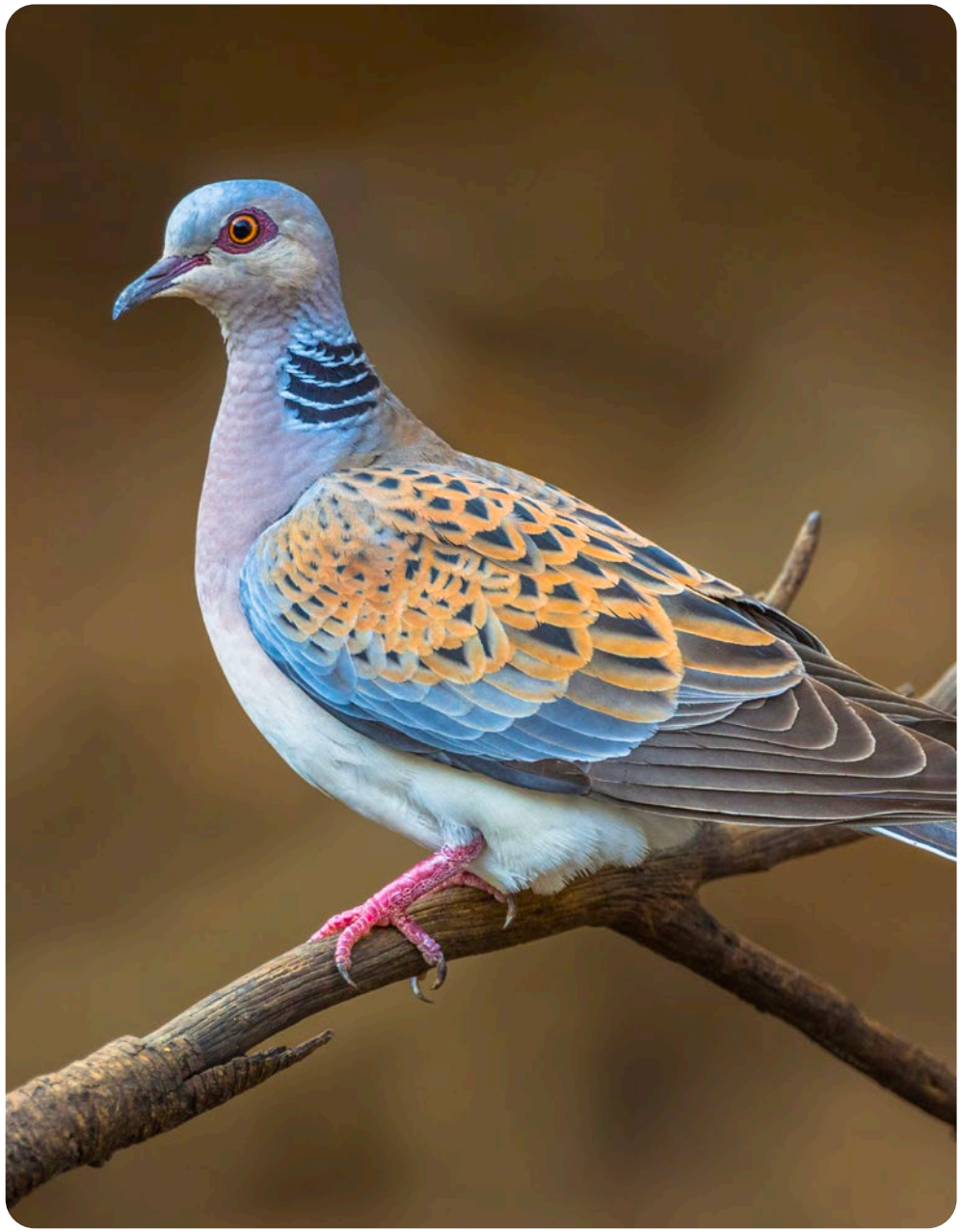
- **Extinct:** There is no reasonable doubt that the last individual of the species has died.
- **Extinct in the Wild:** The species only exists in captivity or naturalised populations outside its original range.
- **Critically Endangered:** The species faces an extremely high risk of extinction in the wild.
- **Endangered:** The species faces a very high risk of extinction in the wild.
- **Vulnerable:** The species faces a high risk of extinction in the wild.
- **Near Threatened:** The species is close to qualifying for a threatened category or is likely to qualify in the near future.
- **Least Concern:** The species faces a low risk of extinction in the wild.
- **Data Deficient:** There is inadequate information to assess the species' extinction risk.
- **Not Evaluated:** The species has not yet been evaluated for its extinction risk.

The species longlist was sorted into taxa[◊] and shared with County Recorders and local experts. County Recorders are skilled and dedicated volunteers, each one an expert in their own particular field, with a primary role to verify the accuracy of species records received. Some species were added if the area is considered to be particularly important for them, and/or if there is not currently a red list for that group. This resulted in a 'definitive longlist' for the LNRS area.

Meetings were held between January to June 2024 with local organisations, and local representatives from national organisations[1], who have been involved in species prioritisation exercises. This was to understand what has already been done with respect to species recovery across Sussex to avoid duplication of effort and to ensure locally important species were included in the longlist.

The resultant longlist was created by the Sussex Biodiversity Record Centre (SxBRC) by searching for species that fit the nationally set criteria listed above within local records. The date of the most recent record and the number of records was collated for these species and the lists were organised into taxa (species groups) and shared with the County Recorders in July 2024. This review provided an opportunity to add species to the longlist where they were felt to be of local significance (as above), and to gain expert opinion on and justification for which of the species should be included in the longlist. **The resultant longlist included 899 species.**

1 Organisations involved included Buglife, SxBRC, South Downs National Park Authority, Environment Agency, Natural England, Sussex Wildlife Trust, Chichester Harbour Conservancy, High Weald National Landscape, Forestry Commission, Weald to Waves, Royal Society for the Protection of Birds, Species Recovery Trust, West Sussex County Council and West Sussex County Council.



Turtle dove © iStock.com/CreativeNature_nl

4.2 Prioritisation to Shortlist

The next stage was to create a "shortlist" containing those individual species that the LNRS will focus on supporting. Some of these species share similar habitat management requirements, and these were grouped into assemblages.

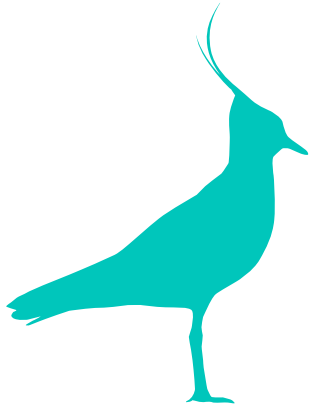
There are County Recorders for the majority of the taxa, and species atlases for Sussex have recently been published for flora, birds, Odonata (dragonflies and damselflies), Lepidoptera (butterflies and moths) and bees. Feedback from the County Recorders, alongside the best available information on species ecological needs, national distribution, local distribution and abundance from SxBRC and species atlases, was used to assign species to one of the categories A to G in Table 1.

Common toad © iStock.com/MikeLane45

Table 1. Species advice: identifying species which LNRS can best support.

Category	Description	Benefit from LNRS?	Suitable priority species?
A: Needs more/bigger/ better-connected habitat	• Species likely to markedly benefit from general creation, expansion and improved connectivity of good quality habitats in the strategy area and do not need to be singled out for specific LNRS measures. • Species with high recovery potential that do not require specific or targeted recovery measures.	Yes	Probably not
B: Needs targeted habitat management	• Species with specific requirements for habitat quality, structure, conditions or processes above and beyond category A. • Species may require specific configurations or complexes or connected or nearby habitat(s), either at site level or across large areas/multiple sites. This may include habitat connectivity measures for species needing support to track climate change. • Causes of decline can be addressed with new or improved management practices.	Yes	Yes
C: Needs improvement in environmental quality	• Species primarily limited by one or more pressures beyond site level that can be mitigated at LNRS scale or wider scales through collaboration with neighbouring RAs. • E.g. better catchment water quality, improved spatial planning or air pollution sources, mitigation of recreational disturbance.	Yes	Yes
D: Needs bespoke conservation action/s	• Species requiring additional, tailored measures which can be spatially indicated on the local habitat map. • Species may need multiple coordinated actions to bring about recovery, including combinations of local actions and national actions, where LNRS could address the former. • Examples of bespoke, spatially targetable local actions include conservation translocations (such as assisted colonisation for climate change adaptation), control of invasive species, and localised surveys. • **NB** Species requiring bespoke measures which cannot be mapped should be assigned to category E.	Yes	Yes

Category	Description	Benefit from LNRS?	Suitable priority species?
E: Needs better evidence base/on-the-ground action not a priority	• Species for which there is insufficient evidence or understanding regarding drivers of decline, required recovery actions, and range/population levels. • Species for which the current priority is other than on-the-ground actions, e.g. research of ex-situ action.	Unknown	No
F: Needs action outside England	• Species with low (or very low) recovery potential due to factors constraining recovery beyond English borders. • Evidence shows that action in England is highly unlikely to improve species' prospects. • This category is likely to apply only to migratory species (e.g. Afro-Palearctic migratory birds affected by hunting).	No	No
G: Vagrants/occasional visitors	• Species currently outside their normal breeding or wintering range or normal migration route, without an extant population in the strategy area, and which are not suitable for conservation translocation.	No	No



West Sussex is a well recorded county, as demonstrated by there being over 12 million species records in the database held by SxBRC. As such, for the majority of species groups, the balance of probability is that if there have been no records for the past 20 years, the species is unlikely to be present in most cases. Species for which the most recent records were from 2004 or earlier were therefore excluded from the shortlist (effectively assigned category E on the grounds of needing a better evidence base). However, this date cut-off was not applied to lichens (as there has not been a dedicated County Recorder for the group for some years, and it may therefore have been under-recorded) or to fungi (as the fruiting bodies can lie dormant for several years).

Species which are present but which do not require targeted action over and above that proposed for habitats or are widespread were assigned to category A on the grounds that they would likely benefit from general habitat improvements. In other words, they are supported by other LNRS measures.

If species were considered to meet the criteria for categories B to D, they were provisionally shortlisted, with this categorisation further refined through consideration of additional criteria provided in the advice, listed in Table 2. These included whether species were considered iconic of the strategy area, where West Sussex is a stronghold, or whether their recovery locally would contribute to recovery at a national level.

Some species, often urban, which did not meet the national criteria of being 'near threatened' or above were included where there was strong support for them from the public surveys, e.g. glow-worm; these species meet the additional criteria set out in the Species Advice which recognises that some species can be a great hook for wider public and stakeholder engagement with the LNRS, and that Responsible Authorities may wish to consider the depth of public interest in species and the opportunities this presents for encouraging broad local participation in the LNRS process. It is important to note that most national criteria focus on rarity and species in semi-natural habitats, whereas urban habitats have a differing range of iconic, indicator, classic and often much-loved species. Urban areas are also where there is most development and thus loss of wildlife.

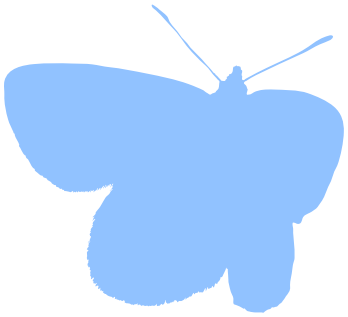
Some species assigned to categories B to D in Table 1 would benefit from similar management measures, and were therefore grouped together into assemblages, with measures developed for them.

Grey long-eared bat © iStock.com/CreativeNature_nl

Table 2. Species advice: additional criteria.

Para 4.3	• Local significance • Not red listed but expert opinion would meet 'threatened' • Candidates for conservation translocation • Iconic/local champion species • Flagship/indicator for wider ecosystem improvement
Para 2.2	• Public interest/local participation
Para 6.2	• Assemblages (groups of species that share similar habitat management requirements)
Para 6.3	• Urgency • Deliverability – how feasible is it to deliver • Contributions to national species recovery – is species of national/international significance? *Should* prioritise species/assemblages which are only found in strategy area (local interpretation – stronghold) • Cross-boundary considerations – any opportunities to join up recovery plans across boundaries? • Maximising benefits – would recovery bring about other benefits? Keystone species◊/assemblages. • Pre-existing initiatives.

Justification for categorisation, along with measures for shortlisted species and assemblages was again shared with County Recorders and local species experts to ensure it was robust. The lists and measures were also reviewed by the Working Group, Supporting Authorities, the Technical Review Panel, and other individuals/ organisations with species expertise.



Female hedgehog with hoglets © iStock.com/slowmotiongli

Section 5.

Priority Species

Torpid dormouse in nest

The list of Priority Species was developed as a result of months of data collation and review, working with the SxBRC, local and national experts and County Recorders, key partners delivering species recovery programmes and national species organisations. The process of prioritisation was led by government advice and local expertise, but also drew on the many responses to our public surveys to better understand which species are most highly valued by the local community.

The LNRS Priority Species list contains the individual species and assemblages (groups of species that share similar management requirements) that the LNRS will focus on supporting. **Of the 899 species on the longlist, 166 were shortlisted, demonstrating the richness of biodiversity in the LNRS area.**

Some species were shortlisted as indicators of healthy ecosystems. For example, the **hazel dormouse** is considered a flagship species◊; where they occur, the habitat is usually very suitable for a wide range of other species. They are also important bioindicators◊ as they are particularly sensitive to habitat and population fragmentation, so their presence is an indicator of habitat integrity and sustainable populations of other sensitive species[2]. They are normally found in highly diverse deciduous woodland, and are also frequently found in species-rich hedgerow and scrub.

Similarly, the **water vole** is a flagship species for rivers and wetland; protecting, restoring and enhancing the habitats they rely on will also be helping a wealth of other wetland species. The water vole has experienced one of the fastest declines of any native mammal in the 20th century. Our populations are critically low and it is estimated that we have lost over 90% in the last 30 years. They only remaining large populations in West Sussex are on Chichester Coastal Plain, with a reintroduced population on the River Arun that has bred with the remnant Arun valley populations[3].

The **Adonis blue** butterfly is a downland specialist and is one of the most characteristic species of unimproved chalk grassland in southern England. The caterpillars are entirely dependent on horseshoe vetch which is common in well grazed, species-rich chalk turf on south-facing slopes of the South Downs[4]. It has undergone a major decline through its entire range, but despite its restricted distribution, it can be seen in large numbers on good sites.

Water vole © iStock.com/Rachel Bennett

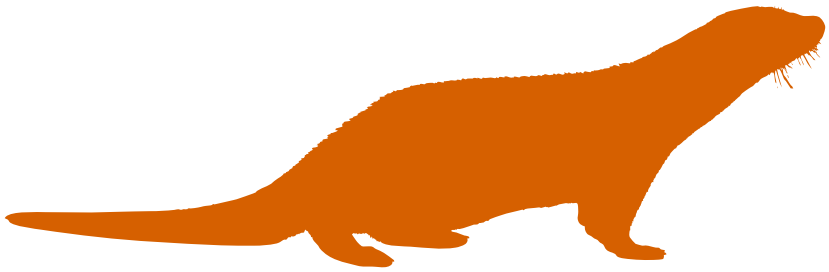
2 Bright, P., P. Morris & T. Mitchell-Jones, 2006. *The dormouse conservation handbook*. 2nd edition.
3 Water Vole: Sussex Wildlife Trust
4 Sussex Butterfly Conservation: Species

Most of our priority species have been shortlisted because West Sussex is particularly important for them locally, nationally or even internationally. For example, the populations of **childing pink** at Pagham Harbour are the only ones remaining on mainland Britain and the most northerly in Europe. There are three extended populations, each of which can support many thousands of plants in some years. Chichester Harbour supports 12% of the west European population of wintering **brent goose**, and Ebernoe Common is internationally important for its populations of **barbastelle** and **Bechstein's bat**.

The **field cricket** has long been considered the most endangered cricket species in the British Iles, restricted to just a handful of sites in the south of England, with small, isolated populations in West Sussex, Dorset, Surrey and Hampshire. A successful 'Back from the Brink' project in 2017 included the restoration of 10ha of heathland at the RSPB's Pulborough Brooks reserve, and translocation of crickets into the newly restored heath. Surveys have shown that the species is now breeding there, and the species continues to be a focus for the Species Recovery Trust. The **pearl-bordered fritillary** butterfly was once widespread and abundant, but a lack of woodland management leading to the loss of its preferred foodplant led to a dramatic decline, and by 2015, it was down to just two sites in West Sussex. The "Fritillaries for the Future" project launched by Butterfly Conservation reintroduced the species to Standsted Forest and initiated a programme of rotational coppicing at Rewell Wood, with this now being the most reliable site in West Sussex to find the species[5].

Of our 166 Priority Species, 115 were grouped into 19 assemblages, leaving 51 species which require their own bespoke measures. 394 species were 'scoped out', either because they are no longer likely to be present, or there is insufficient evidence or understanding of their decline, required actions or range and population levels, or because they are relatively common and widespread and are not a priority for on-the-ground action. 339 species were not shortlisted as, although important locally, they will be well supported by habitat measures within the wider LNRS. These species, and the measures that will support them, can be seen in Appendix 3A along with the species that were scoped out, with justification for their categorisation.

All Priority Species are listed in Table 3, followed by measures for the individual species and species assemblages. The lists are broadly in taxonomic order, from the most to the least complex organisms, animals and then plants, and then alphabetically by common name.

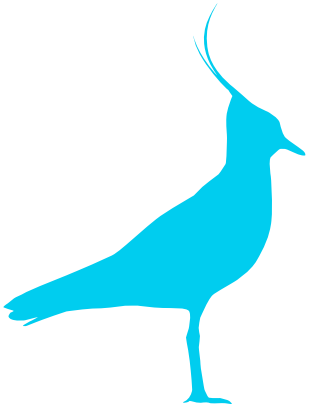


5 Sussex Butterfly Conservation: Species

Table 3. Priority species for the West Sussex LNRS area.

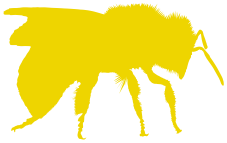
Species Group	Common Name	Scientific Name	Assemblage
Mammals (excluding bats)	Beaver	*Castor fiber*	
	European otter	*Lutra lutra*	Streams and rivers
	European water vole	*Arvicola amphibius*	
	Harbour seal	*Phoca vitulina*	
	Hazel dormouse	*Muscardinus avellanarius*	
	Pine marten	*Martes martes*	
	West European hedgehog	*Erinaceus europaeus*	
Bats	Bechstein's bat	*Myotis bechsteineii*	Woodland bats
	Greater horseshoe bat	*Rhinolophus ferrumequinum*	
	Grey long-eared bat	*Plecotus austriacus*	
	Greater mouse-eared bat	*Myotis myotis*	
	Western barbastelle	*Barbastella barbastellus*	Woodland bats
Birds	Corn bunting	*Emberiza calandra*	Farmland birds
	Cuckoo	*Cuculus canorus*	Farmland birds
	Dark-bellied brent goose	*Branta bernicla bernicla*	
	Dartford warbler	*Curruca undata*	Heathland birds

Species Group	Common Name	Scientific Name	Assemblage
Birds	Eurasian honey-buzzard	*Pernis apivorus*	Woodland birds
	Grey partridge	*Perdix perdix*	Farmland birds
	Hawfinch	*Coccothraustes coccothraustes*	Woodland birds
	House martin	*Delichon urbicum*	Urban birds
	Lapwing	*Vanellus vanellus*	Breeding waders – wet grassland and heathland
	Lesser spotted woodpecker	*Dryobates minor comminutus*	Woodland birds
	Linnet	*Linaria cannabina*	Farmland birds
	Little tern	*Sternula albifrons*	Shore birds – breeding and migrating/winter
	Marsh harrier	*Circus aeruginosus*	
	Marsh tit	*Poecile palustris*	Woodland birds
	Mediterranean gull	*Ichthaetus melanocephalus*	Shore birds – breeding and migrating/winter
	Nightingale	*Luscinia megarhynchos*	Woodland birds
	Nightjar	*Caprimulgus europaeus*	Heathland birds
	Redshank	*Tringa tetanus*	Breeding waders – wet grassland and heathland
	Ringed plover	*Charadrius hiaticula*	Shore birds – breeding and migrating/winter
	Sandwich tern	*Thalasseus sandvicensis*	Shore birds – breeding and migrating/winter



Species Group	Common Name	Scientific Name	Assemblage
Birds	Skylark	*Alauda arvensis*	Farmland birds
	Spotted flycatcher	*Muscicapa striata*	Woodland birds
	Starling	*Sturnus vulgaris*	Urban birds
	Stone-curlew	*Burhinus oedicnemus*	Farmland birds
	Swift	*Apus apus*	Urban birds
	Tree pipit	*Anthus trivialis*	Heathland birds
	Turtle dove	*Streptopelia turtur*	Farmland birds
	White-tailed eagle	*Haliaeetus albicilla*	
	Yellowhammer	*Emberiza citrinella*	Farmland birds
Amphibians & reptiles	Adder	*Viper berus*	
	Common toad	*Bufo bufo*	Ponds for amphibians
	Great crested newt	*Triturus cristatus*	Ponds for amphibians
	Sand lizard	*Lacerta agilis*	Dry heaths with sand and gravel exposures
	Smooth snake	*Coronella austriaca*	Dry heaths with sand and gravel exposures
Fish	Brook lamprey	*Lampetra planeri*	Streams and rivers
	Brown/Sea trout	*Salmo trutta*	Streams and rivers
	Bullhead	*Cottus gobio*	Streams and rivers

Species Group	Common Name	Scientific Name	Assemblage
Fish	European eel	*Anguilla anguilla*	Streams and rivers
	River lamprey	*Lampetra fluviatilis*	Streams and rivers
	Sea lamprey	*Petromyzon marinus*	Streams and rivers
Crustaceans	White-clawed crayfish	*Austropotamobius pallipes*	
Spiders	A spider	*Araniella alpica*	
	A spider	*Araniella displicata*	
	A spider	*Centromerus albidus*	
	A spider	*Euophrys petrensis*	Dry heaths with sand and gravel exposures
	A spider	*Hygrolycosa rubrofasciata*	
	A spider	*Lathys heterophthalma*	Dry heaths with sand and gravel exposures
	A spider	*Micaria silesiaca*	Dry heaths with sand and gravel exposures
	A spider	*Pardosa paludicola*	
	A spider	*Philodromus emarginatus*	
	A spider	*Xysticus luctuosus*	
	Gentle groove-head spider	*Tapinocyba mitis*	Dry heaths with sand and gravel exposures

Species Group	Common Name	Scientific Name	Assemblage
Ants, bees & wasps	A wasp	*Diodontus insidiosus*	Dry heaths with sand and gravel exposures
	A wasp	*Ectemnius borealis*	
	Brown-banded carder bee	*Bombus humilis*	Chalk grassland
	Heath potter wasp	*Eumenes coarctatus*	
	Moss carder bee	*Bombus muscorum*	Chalk grassland
	Red-shanked carder bee	*Bombus ruderarius*	Chalk grassland
	Sea aster bee	*Colletes halophilus*	Coastal grazing marsh and upper saltmarsh
	Small Bear-clawed nomad bee	*Nomada baccata*	
	Southern bronze furrow bee	*Halictus confusus*	Dry heaths with sand and gravel exposures
Beetles	Cosnard's net-winged beetle	*Erotides cosnardi*	
	Glow-worm	*Lampyris noctiluca*	
	Stag beetle	*Lucanus cervus*	
	Variable chafer	*Gnorimus variabilis*	
	Wood (heath) tiger beetle	*Cicindela sylvatica*	Dry heaths with sand and gravel exposures

Species Group	Common Name	Scientific Name	Assemblage
Butterflies & moths	Adonis blue	*Polyommatus bellargus*	Chalk grassland
	Chalk hill blue	*Polyommatus coridon*	Chalk grassland
	Duke of Burgundy	*Hamearis lucina*	Chalk grassland
	Large gold case-bearer	*Coleophora vibicella*	
	Pearl-bordered fritillary	*Boloria euphrosyne*	
	Silver spotted skipper	*Hesperia comma*	Chalk grassland
	Small blue	*Cupido minimus*	Chalk grassland
Crickets & grasshoppers	Field cricket	*Gryllus campestris*	
Dragonflies & damselflies	Brilliant emerald	*Somatochlora metallica*	
	Common club-tail	*Gomphus vulgatissimus*	Streams and rivers
	Emerald damselfly	*Lestes sponsa*	
Flies	A true fly	*Miltogramma germari*	Shingle and sand dune
True Bugs	A planthopper	*Tettigometra impressopunctata*	Chalk grassland
	A true bug	*Chlamydatus (Eurymerocoris) evanescens*	Shingle and sand dune
	Pondweed leafhopper	*Erotettix cyane*	
	Scarlet shieldbug	*Eurydema (Rubrodorsalium) dominulus*	Open deciduous woodland

Species Group	Common Name	Scientific Name	Assemblage
Molluscs	A mollusc	*Euglesa pseudosphaerium*	Grazing marsh molluscs
	Cheese snail	*Helicodonta obvoluta*	
	Common oyster	*Ostrea edulis*	
	Defolin's lagoon snail	*Caecum armoricum*	
	Depressed river mussel	*Pseudanodonta complanata*	Streams and rivers
	Heath snail	*Helicella itala*	Chalk grassland
	Lagoon spire snail	*Semisalsa stagnorum*	
	Looping snail	*Truncatella subcylindrica*	
	Ramshorn snail	*Anisus (Disculifer) vorticulus*	Grazing marsh molluscs
	Swollen spire snail	*Mercuria tachoensis*	
Moss animals	Crystal moss-animal	*Lophopus crystallinus*	

Species Group	Common Name	Scientific Name	Assemblage
Higher Plants	Annual knawel	*Scleranthus annuus*	Rare arable plants
	Basil thyme	*Clinopodium acinos*	Chalk grassland
	Bird's-nest orchid	*Neottia nidus-avis*	Open deciduous woodland
	Borrer's saltmarsh-grass	*Puccinellia fasciculata*	Coastal grazing marsh and upper saltmarsh
	Burnt orchid	*Neotinea ustulate*	Chalk grassland
	Chalk milkwort	*Polygala calcarean*	Chalk grassland
	Childing pink	*Petrorhagia nanteuilii*	Shingle and sand dune
	Corn buttercup	*Ranunculus arvensis*	Rare arable plants
	Cut-grass	*Leersia oryzoides*	
	Field fleawort	*Tephroseris integrifolia*	Chalk grassland
	Field gromwell	*Lithospermum arvense*	Rare arable plants
	Frog orchid	*Coeloglossum viride*	Chalk grassland
	Frosted orache	*Atriplex laciniata*	Shingle and sand dune
	Grass-poly	*Lythrum hyssopifolia*	
	Hairy rock-cress	*Arabis hirsuta*	Chalk grassland
	Lesser marshwort	*Apium inundatum*	

Species Group	Common Name	Scientific Name	Assemblage
Higher Plants	Little-robin	*Geranium purpureum*	Shingle and sand dune
	Man orchid	*Orchis anthropophora*	Chalk grassland
	Marsh clubmoss	*Lycopodiella inundata*	
	Musk orchid	*Herminium monorchis*	Chalk grassland
	Narrow-leaved helleborine	*Cephalanthera longifolia*	Open deciduous woodland
	Parsley water-dropwort	*Oenanthe lachenalii*	Coastal grazing marsh and upper saltmarsh
	Petty whin	*Genista anglica*	
	Round-headed rampion	*Phyteuma orbiculare*	Chalk grassland
	Saltmarsh goosefoot	*Chenopodium chenopodioides*	Coastal grazing marsh and upper saltmarsh
	Saltwort	*Salsola kali*	Shingle and sand dune
	Sea barley	*Hordeum marinum*	Coastal grazing marsh and upper saltmarsh
	Sea clover	*Trifolium squamosum*	Coastal grazing marsh and upper saltmarsh
	Sea knotgrass	*Polygonum maritimum*	Shingle and sand dune
	Sea rocket	*Cakile maritima*	Shingle and sand dune
	Sea-kale	*Crambe maritima*	Shingle and sand dune
	Shepherd’s-needle	*Scandix pecten-veneris*	Rare arable plants

Species Group	Common Name	Scientific Name	Assemblage
Higher Plants	Slender hare's-ear	*Bupleurum tenuissimum*	Coastal grazing marsh and upper saltmarsh
	Spreading hedge-parsley	*Torilis arvensis*	Rare arable plants
	Upright chickweed	*Moenchia erecta*	
	White helleborine	*Cephalanthera damasonium*	Open deciduous woodland
Mosses	Curly beardless-moss	*Weissia condensa*	Chalk grassland
	Rusty fork-moss	*Dicranum spurium*	
	Sterile beardless-moss	*Weissia sterilis*	Chalk grassland
Stoneworts	Great tassel stonewort	*Tolypella prolifera*	
Lichens	A lichen	*Cladonia rei*	
	A lichen	*Lecanora quercicola*	Open parkland mature and veteran tree lichens
	A lichen	*Lecanora sublivescens*	Open parkland mature and veteran tree lichens
	A lichen	*Pertusaria pustulata*	Open parkland mature and veteran tree lichens
Fungi	Beautiful bonnet	*Mycena renati*	Deciduous woodland and wood pasture fungi
	Bilious bolete	*Boletus legaliae*	Deciduous woodland and wood pasture fungi
	Citrine waxcap	*Hygrocybe citrinovirens*	Waxcap grassland fungi
	Coral tooth	*Hericium coralloides*	Deciduous woodland and wood pasture fungi

Species Group	Common Name	Scientific Name	Assemblage
Fungi	Crimson waxcap	*Hygrocybe punicea*	Waxcap grassland fungi
	Dingy waxcap	*Neohygrocybe ingrata*	Waxcap grassland fungi
	Dusky bolete	*Porphyrellus porphyrosporus*	Deciduous woodland and wood pasture fungi
	Excentric pinkgill	*Entoloma excentricum*	Waxcap grassland fungi
	Felted pinkgill	*Entoloma griseocyaneum*	Waxcap grassland fungi
	Gilded bolete	*Aureoboletus gentilis*	Deciduous woodland and wood pasture fungi
	Glistening waxcap	*Gloioxanthomyces vitellinus*	Waxcap grassland fungi
	Lilac pinkgill	*Entoloma porphyrophaeum*	Waxcap grassland fungi
	Mealy pinkgill	*Entoloma prunuloides*	Waxcap grassland fungi
	Pink waxcap	*Porpolomopsis calyptriformis*	Waxcap grassland fungi
	Splendid waxcap	*Hygrocybe splendidissima*	Waxcap grassland fungi
	Tawny bolete	*Aureoboletus moravicus*	Deciduous woodland and wood pasture fungi
	Toasted waxcap	*Cuphophyllus colemannianus*	Waxcap grassland fungi

Section 6.

Priority Species Measures

Emerald damselfly

Abbreviations

The abbreviations used at the start of the information section summarise any conservation status, and are as follows:

- **Legal Protection** Under international and/or national conventions/legislation.

International Union for Conservation of Nature (IUCN) Red List (Great Britain):

- **EX** Extinct
- **EW** Extinct in the Wild
- **CR** Critically Endangered
- **EN** Endangered
- **VU** Vulnerable
- **NT** Near Threatened
- **LC** Least Concern
- **R** Rare (pre 1994 Red List)
- **NR** Nationally Rare, occurring in 15 or fewer hectads (10km x 10km square) in Great Britain (GB) or England (England).
- **NR (marine)** Nationally Rare marine species, occurring in eight or fewer hectads in Great Britain.
- **NS** Nationally scarce, recorded in 16-100 hectads but not included in one of the Red List Categories.
- **BoCC Red, Amber or Green** Birds of Conservation Concern.
- **S41** Species listed under Section 41 of the Natural Environment and Rural Communities Act.
- **Sussex Rare** Species assessed as being particularly rare in Sussex by local species experts.

Some measures, although critical, cannot be addressed directly by the Local Nature Recovery Strategy as they related to supporting mechanisms, processes and functions. These 'enabling measures' are shown in italics.

Note: the Threatened Species Recovery Actions 2025 baseline has recently been published and includes additional measures for some priority species.

Common seal © Hugh Clark FRPS/Sussex Wildlife Trust

6.1 Individual Species Measures

Species	Information	Measures
Mammals (excluding bats)		
Beaver *Castor fiber*	EN. Critically endangered in England. Used to be widespread in Britain but hunted to extinction. Important components of river and wetland ecosystems. Candidate for local conservation introductions.	**1.** Improve the condition of riparian habitats in the strategy area (ideally ensuring at least 20m of space next to watercourses with suitable habitats including a mosaic of woodland, trees, shrub, grasses and water dependent vegetation) to support the future establishment of a beaver population and their natural spread and to promote coexistence. **Enabling measures** **2.** *Collaborate with beaver management groups to foster a positive, cooperative relationship between landowners and beavers, ensuring coexistence and the maximisation of ecological and natural water management benefits. This may include educational workshops, practical support and guidance on sustainable management strategies.*
European water vole *Arvicola amphibius*	Legal protection, S41, EN, Sussex Rare. Found throughout Britain. Long term decline, disappearing from 94% of former sites. Populations in Sussex critically low; estimated that over 90% lost in last 30 years. Chichester Coastal Plain plus re-introduced population on River Arun	**1.** Eradication of non-native American mink. **2.** Improve habitat networks and connectivity around key populations. **3.** Create suitable habitat on edges of floodplains to provide refuge habitat during floods. **4.** Bank side management – increase the occurrence of bank side trees/ hedges/reeds/scrub patches along linear watercourse to provide seasonal food and refuge habitat, plus sensitive, graded cuts on bankside vegetation to encourage female dispersal. **5.** Create non-linear wetlands (vertical habitats such as reedbeds, fens etc). **Enabling measures** **6.** *Pollution control.* **7.** *Increase survey effort in non-linear sites which are particularly important in winter.* PTES: Helping water voles on your land

Species	Information	Measures
Harbour seal *Phoca vitulina*	Legal protection, S41. Population in the Solent often visit Chichester Harbour. The only known rookery◊ in the Eastern English Channel.	**1.** Support ongoing conservation work within Chichester Harbour. **Enabling measures** **2.** *Protect known colony by reducing disturbance through e.g. wardening, raising awareness etc.*
Hazel dormouse *Muscardinus avellanarius*	Legal protection, VU, S41. Occurs mainly in southern England, especially Devon, Sussex and Kent. West Sussex is a stronghold for the species.	**1.** Create structural diversity and increase light levels in woodland, e.g. through active coppicing, creating glades and opening up rides. **2.** Cut hedgerows (where connected to woodland sites/other suitable habitat) on three-year cycle, alternating sides. PTES: Managing small woodlands for dormice
Pine marten *Martes martes*	Legal protection, S41. Once widespread across the UK, hunting and woodland clearance meant the species restricted to Scottish Highlands and pockets of Wales and northern England by the 20th century. Population is spreading across Scotland but remains very rare in England and Wales. Sussex Wildlife Trust working in partnership with Kent Wildlife Trust and Wildwood Trust to assess the feasibility of restoring them to the South East.	**1.** Create, improve and connect woodland habitats to support future establishment of a pine marten population and its natural spread. **Enabling measures** **2.** *Provide training and guidance to landowners, farmers, gamekeepers and hunters to raise awareness of effective predator-proofing of game or poultry pens, and the risks of incidental trapping and killing during control of other species (i.e. fox, grey squirrel control) in areas where the species is present, and where potential reintroductions may occur.*

Species	Information	Measures
West European hedgehog *Erinaceus europaeus*	S41, VU. Widespread but has undergone significant decline. Scored highly in public consultations – champion species for urban habitats and gardens.	**1.** Improve connectivity between gardens by creating access points at the bottom of fences, or planting hedgerows as boundaries. **2.** Create wildlife friendly gardens, e.g. by planting shrubs and hedges, encouraging insects with wildflowers and scrub habitat, creating compost, log and leaf piles. **3.** Install hedgehog houses. **Enabling measures** **4.** *Research rural hedgehog populations.* **5.** *Develop planning guidance for West Sussex to encourage access fences or penetrable boundaries within new development.* British Hedgehog Preservation Society: Helping hedgehogs Hedgehog Street: Hedgehog-friendly garden features The Wildlife Trusts: Help a hedgehog RSPCA: Hedgehogs in the garden Hedgehog Street: Britain's National Hedgehog Conservation Strategy

Species	Information	Measures
Bats		
Greater horseshoe bat *Rhinolophus ferrumequinum*	Legal protection, S41. Has shown a marked decline – estimated that the species has declined by over 90% in last 100 years. Rare in Britain and now confined largely to South West England and South Wales. Key species: Important hibernation and maternity colony showing range expansion into West Sussex with land management key to conservation and further population increase and expansion. Benefits of greater horseshoe land management likely to also benefit serotine. Woodland for foraging, caves, tunnels etc for roosting.	**1.** Protect known roost sites through advice to landowners and monitoring. **2.** Appropriate management of surrounding environment to provide adequate food resource. **3.** Ensure succession and continuity of roost sites through encouraging new roost sites in close proximity to existing. **Enabling measures** **4.** *Encourage widespread greater horseshoe bat-friendly farming via targeted advice to farmers/landowners. This would include maintaining/ creating smaller fields surrounded by mature hedges and tree-lines, and encouraging hay production rather than sileage. Mixed farming should be encouraged to minimise fertiliser need. A reduction in endectocide use should also be discussed (e.g. by rotating livestock to reduce need: cattle in summer, sheep in winter) or find alternative in species range.* **5.** *Long-term monitoring to inform conservation.*
Grey long-eared bat *Plecotus austriacus*	Legal protection, EN. Southern European species, with distribution extending to southern England. In England, restricted to a few colonies in Sussex, Hampshire, Isle of Wight, Dorset, Devon and Somerset. Key species. Grassland meadows and woodland edge for foraging, roosts in buildings.	**1.** Monitor and protect (e.g. through raising awareness with landowners) known roost sites, retain as many potential roost sites as practically possible, and ensure a succession or continuity of potential roost sites for the future. **2.** Create a good network of habitats for roosting, feeding and commuting, avoiding isolating any areas currently used for feeding and ensure good connectivity between sites. **Enabling measures** **3.** *Reduce pesticide use within foraging areas to improve insect diversity.*

Species	Information	Measures
Greater mouse-eared bat *Myotis myotis*	Legal protection, CR. Rarest bat in Britain, but not resident with no maternity sites found for many years. Only two individuals of this species in the UK, both in West Sussex. Thought to be crossing the Channel to hibernate. Possible that there are undiscovered summer roosts in southern England. Key species: Hibernation roost protection key. Habitats: tunnels (hibernation roost); woodland edge, pasture/grassland, agricultural land (foraging).	**1.** Protect hibernation roost e.g. through raising awareness with landowners. **2.** Create, enhance and manage supporting foraging habitat for the species including woodland edges, pasture/grassland and agricultural land, especially in proximity to known hibernation roost and historic maternity roost site.
Birds		
Dark-bellied brent goose *Branta bernicla bernicla*	S41, BoCC Red. Very common winter visitor and passage migrant. Chichester Harbour holds about 80% of birds wintering in Sussex. Stronghold for the species and considered iconic.	**1.** Work with farmers to provide suitable crop or set aside pasture in winter months for geese to feed on. **2.** Create and manage diverse coastal grasslands and marshes with ditches and scrapes of lagoons. **3.** Ideally leave grasslands ungrazed over winter. **Enabling measures** **4.** *Reduce recreational disturbance through education.*
Marsh harrier *Circus aeruginosus*	Legal protection, BoCC Amber. Scarce passage migrant and winter visitor; very scarce breeder since 2004. Marshes and reedbeds.	**1.** Maintain/enhance water quality in wetland and rivers around known sites e.g. by providing appropriate buffers, reducing the use of chemicals etc. **2.** Manage reedbeds by e.g. grazing, cutting, scrub control etc.
White-tailed eagle *Haliaeetus albicilla*	Legal protection, BoCC Amber. Rare vagrant. Reintroduction project on the Isle of Wight. Considered iconic. Coastal & wetland.	**Enabling measures** *Survey/monitoring to assess success of reintroduction programme and to inform future management.*

Species	Information	Measures
Amphibians & reptiles		
Adder *Viper berus*	Legal protection, S41 Found throughout UK, with patchy distribution, but absent from Ireland. 90% of adder populations surveyed have declined in the UK and has been declared extinct in some counties. Prefers lighter sandy soils, with favoured habitats in Sussex including heathland, acid and chalk grasslands, woodland clearings, rides and edges, field edges and some brownfield sites. Requires dry, open, sunny areas with adjacent dense ground cover, wetter areas around ponds, lakes and bogs, and hibernation sites on south-facing slopes. Iconic species of heathland and downland landscapes of Sussex.	In addition to habitat measures: **1.** Create hibernacula in suitable locations within structurally diverse habitat. **Enabling measures** **2.** *Avoid releasing gamebirds in areas that have notable reptile populations (information on reptile species that may be present on a site can be obtained from Sussex Biodiversity Record Centre or Protected Landscape land advisors).* Amphibian and Reptile Conservation: Reptile habitat management handbook Gamebird & Wildlife Conservation Trust: Guidelines for sustainable gamebird releasing

Species	Information	Measures
Crustaceans		
White-clawed crayfish *Austropotamobius pallipes*	Legal protection, S41, EN, Sussex Rare. Only freshwater crayfish in Britain. Under threat and declining throughout European range. In lowland England, tends to be confined to clean, base-rich watercourses.	**1.** Consider the establishment of ark sites to maintain the population. **2.** Investigate and correct sources of poor water quality or water resource issues and enhancement of habitat, e.g. **a.** Reduce risk of pollution through reduction in chemical use and creation of buffer zones. **b.** Maintain water levels and ensure stable flow regime with pools and glides. **c.** Maintain/create variety of refuges within channel, e.g. cobbles and boulders, submerged tree roots, soft banks. **d.** Maintain stands of submerged vegetation and ensure habitat not dominated by algae such as blanket weed. **e.** Maintain areas of undercut, vertical bank, with overhanging vegetation. **Enabling measures** **3.** *Survey to know current distribution.* **4.** *Follow CHECK-CLEAN-DRY principles if entering watercourses to limit transfer of crayfish plague.* **5.** *Inform landowners, developers and other stakeholders of presence.* Buglife: Ark sites for crayfish NNSS: Check Clean Dry
Spiders		
A spider *Araniella alpica*	EN, NR. Widespread but uncommon. Especially yew and beech woodland. Potentially an old population at Heyshott Down which would be important in a national context for this species. Records from the 19th century and 2012.	**Enabling measures** **1.** *Localised survey of historic site to assess presence and inform future management.* **2.** *Ensure site managers are aware of species past/recent presence and vulnerability on their sites.*

Species	Information	Measures
A spider *Araniella displicata*	NT, NR, Sussex Rare. Confined to South East England, restricted to a few sites. Found in pine woodlands, associated with heather.	**1.** Retain pines on/near heathland. **Enabling measures** **2.** *Targeted re-survey of former and nearby sites, using standardised methodology to assess current status.*
A spider *Centromerus albidus*	NR. Most records from Surrey and Hampshire. Only GB record in over 50 years is from Amberley Chalk Pits in 2021, so West Sussex is an important stronghold for it.	**Enabling measures** *Localised survey of historic site to assess presence and inform future management.*
A spider *Hygrolycosa rubrofasciata*	EN, NR. Most records from Suffolk, Norfolk & Cambridgeshire. Only one record, with slight question mark, now 13 years old. Unknown if significant population. This is a species in real trouble nationally, so some priority is needed in reassessing possible sites.	**Enabling measures** **1.** *Localised survey of historic site to assess presence and inform future management.* **2.** *Ensure site managers are aware of species past/recent presence and vulnerability on their sites.*
A spider *Pardosa paludicola*	EN, NR. Few records nationally. The population at Ebernoe Common and Butcherlands is the largest known nationally – the spider is particularly abundant on the arable reversion at Butcherlands (all recent records held by SxBRC) and has more recently been recorded from another rewilding site at Biddenfield (NE pers comm, record not held by SxBRC). Preferred habitat (peat/fens) restricted in West Sussex.	**1.** Ensure maintenance of high water tables in known sites. **Enabling measures** **2.** *Targeted survey of all recorded sites and similar nearby habitat using standardised methodology to assess current status.*

Species	Information	Measures
A spider *Philodromus emarginatus*	VU, NR. Known from only six locations since 1992. Very local and appears to have undergone major long-term decline.	**1.** Maintain old semi-natural pine on heathland. **Enabling measures** **2.** *Targeted survey of all recorded sites and similar nearby habitat using standardised methodology to assess current status.*
A spider *Xysticus luctuosus*	EN, NR. Widespread but scattered. Occurs among local low plants and bushes in woods therefore understorey important. The Graffam Common 2017 record for this is really important – one of only two nationally this Century.	**Enabling measures** **1.** *Localised survey of historic site to assess presence and inform future management.* **2.** *Ensure site managers are aware of species past/recent presence and vulnerability on their sites.*
Ants, bees & wasps		
A wasp *Ectemnius borealis*	Sussex Rare. Most restricted range of all British species in genus, known only from western West Sussex and east Hampshire, north to Surrey border.	**1.** Ensure woodland management retains dead wood. **2.** Coppice woodland to encourage rich ground flora including umbellifers.
Heath potter wasp *Eumenes coarctatus*	Sussex Rare. South Devon to East Sussex and north to Buckinghamshire. Very localised.	Manage heathland to maintain sources of water and patches of exposed wet clay for construction of nest pots.
Small bear-clawed nomad bee *Nomada baccata*	Mainly restricted to central southern England (Dorset, Hampshire, Surrey and West Sussex). No records since 2008. Recorded at Ambersham Common, Iping Common, Weavers Down.	**Enabling measures** *Survey to establish presence, abundance and distribution and to inform management.*

Species	Information	Measures
Beetles		
Cosnard's net-winged beetle *Erotides cosnardi*	S41, EN, NR, Sussex Rare. Saproxylic mainly on dead or dying beech, freshly cut stumps may be of benefit. Subject of conservation project by Species Recovery Trust.	**1.** Management should ensure that dead beech wood is not cleared. **2.** Maintain longevity of existing old beech trees (dead and alive). **3.** Allow natural regeneration/plant beech. **4.** Consider veteranising younger trees. **Enabling measures** **5.** *Increase survey and monitoring.* Back From The Brink: Cosnard's net-winged beetle The Species Recovery Trust: Cosnard's net-winged beetle
Glow-worm *Lampyris noctiluca*	LC. Iconic species. Well distributed and relatively common in West Sussex, although concern that it is declining and it has been lost from some sites. Found in low growing vegetation, often at the base of hedgerows, in grasslands and woodland edges. Hides away in crevices under stones or bark during the day.	**1.** Maintain dark corridors at and adjoining known sites. **2.** Avoid strimming vegetation at the base of hedgerows during mating season (June to July).
Stag beetle *Lucanus cervus*	Legal protection, NS, S41, Sussex Rare. Large and iconic species that is widely distributed in West Sussex, but the majority of records come from urban centres located on southern edge of The South Downs. Larvae take three to four years to fully develop.	**1.** Ensure undisturbed deadwood is available for larvae in suburban parks and gardens as well as in woodlands in wider countryside. **2.** Create stag beetle log pyramids in gardens and suitable greenspaces. Woodland Wildlife Toolkit > Stag beetle PTES: Stag beetle facts PTES: How to build a log pyramid for stag beetles
Variable chafer *Gnorimus variabilis*	S41, EN, NR. Restricted to just two locations in UK, Windsor Great Park and Parham Park in West Sussex. Larvae feed in the interface between red-rotten wood and heart wood of ancient oak and beech.	**1.** Management must allow for dead and decaying ancient trees to remain in-situ and for trees to be allowed to reach extreme age by avoidance of soil compaction or allowing younger trees to shade-out older ones. **2.** Plant beech and oak to supply future tree hosts.

Species	Information	Measures
Butterflies & moths		
Large gold case-bearer *Coleophora vibicella*	S41, Sussex Rare. Only extant Sussex population severely impacted by the failure of a sluice gate at Great Deep causing saltwater inundation and destruction of habitat. Thorney Island.	**1.** Encourage the growth of dyer's greenweed *Genista tinctoria* on and adjacent to known site through appropriate management, aiming to create a sward height of 5-10cm interspersed with tussocky areas by November. **2.** Stocking density should be low (maximum 0.75 livestock units per ha or less April and May, 1 livestock unit per ha June to October and no grazing November to February inclusive). **3.** Scrub clearance and replacement fencing at extant colonies. Butterfly Conservation: Dyer's Greenweed – a key plant for moths and other insects – factsheet
Pearl-bordered fritillary *Boloria euphrosyne*	Legal protection, S41, VU, Sussex Rare. Early successional species that frequents recently coppiced coupes where Viola spp. is abundant in newly opened field layer. Decline has been entirely down to loss of traditional woodland management practices.	**1.** Cut an annual succession of very well-connected coppice coupes in hazel or sweet chestnut. **2.** Rotational management of bracken stands along ride margins and within open spaces, to create thin carpets of litter, but prevent the build-up of tall blankets of standing bracken trash. Butterfly Conservation: Pearl-bordered fritillary
Crickets & grasshoppers		
Field cricket *Gryllus campestris*	Legal protection, S41, VU, NR, Sussex Rare. Long considered the most endangered cricket species in the British Isles, occurring only in southern England. Declining. By the 1990s it was reduced to single surviving colony in West Sussex. Translocated to Pulborough Brooks in 2018 and its population has expended/translocated to other nearby suitable sites. Recorded at Pulborough Brooks, Arundel Park SSSI, Coates Castle SSSI.	**1.** Restoration of suitable heathland habitat including scrub removal and creation of bare ground. **2.** Increase connectivity between known and potential sites. **Enabling measures** **3.** *Establish an annual monitoring and advice scheme to tailor habitat management.* Back from the Brink Project: Field Cricket – Increasing habitat and starting new populations

Species	Information	Measures
Dragonflies & damselflies		
Brilliant emerald *Somatochlora metallica*	VU, Sussex Rare National rarity, found in western Scotland and South East England, where restricted primarily to Berkshire, Surrey and Sussex. West Sussex is a key area. Species relatively scarce with stronghold in High Weald. Found in ponds and ditches.	**1.** Create and maintain clean, shaded ponds with some overhanging trees. **2.** Control parrot's feather. British Dragonfly Society: Brilliant emerald
Emerald damselfly *Lestes sponsa*	LC. Declining nationally. The status of this species in West Sussex is uncertain but perhaps declining and it should be placed on the 'concern list'. Needs shallow standing water (bog pools, ponds and ditches).	**1.** Create shallow ponds with vegetation that retain water late in season **Enabling measures** **2.** *Annual counts from selected sites.*
Flies		
A true fly *Nephrotoma sullingtonensis*	EN, Sussex Rare. Sussex iconic. Sullington Warren SSSI is the only known site. Dependant on hot, dry, sandy heathland slopes.	**1.** Maintain heathland rides through site. **2.** Seek to expand existing habitat into neighbouring areas. **Enabling measures** **3.** *Survey and monitor.*

Species	Information	Measures
True bugs		
Pondweed leafhopper *Erotettix cyane*	S41, Sussex Rare. Only found at six ponds in South East England at only three sites: two in Sussex, one in Surrey. Exclusively found in ponds on only food plant, broad-leaved pondweed *Potamogeton natans*.	**1.** Maintain and monitor known pond sites. **2.** Ensure surrounding land management maintains high water quality. **3.** Pond creation and/or restoration (including inoculation of new ponds with pondweed where necessary) in vicinity of known sites to facilitate natural dispersal and spreading of risk. **Enabling measures** **4.** *Autecological research to establish life history features.* Freshwater Habitats Trust: Pondweed leafhopper Auchenorrhyncha Recording Scheme for Britain & Ireland > Pond leafhopper
Molluscs		
Cheese snail *Helicodonta obvoluta*	VU, NR, Sussex Rare. All but one of the known English populations found in South Downs National Park west of River Arun, of which >60% within West Sussex. Old semi-natural deciduous hanger woodlands. Presence often linked to other scarce and/or local inverts and plants.	Maintain traditional woodland practices.
Common oyster *Ostrea edulis*	S41. In the UK and Ireland, populations have declined by 95% and oyster reefs are among the most threatened marine habitats in Europe. In Chichester Harbour, sex ratio heavily skewed towards male, suggesting they are under significant environmental stressors.	**1.** Follow recommendations from Solent Wild Oysters Restoration Project to inform fishery restoration and ongoing management within Chichester Harbour. **Enabling measures** **2.** *Survey and monitor, following strict biosecurity measures.* Native Oyster Network: Facilitating the restoration of Native Oysters across the UK and Ireland Blue Marine Foundation: Solent Wild Oysters Restoration Project

Species	Information	Measures
Defolin's lagoon snail *Caecum armoricum*	Legal protection, NR (marine). Pagham Harbour supports one of the few populations of this protected species in England. The species is now restricted to a small lagoon on the north entrance to the harbour but subject to loss (may have gone) due to coastal erosion.	**1.** Create new lagoons in location of existing/historic records. **Enabling measures** **2.** *Survey to establish continued presence.*
Lagoon spire snail *Semisalsa stagnorum*	CR, NR, S41. The only known UK population is found in West Sussex living in a single very weakly brackish lagoon on Thorney Island (so not a salt marsh or estuarine species) surrounded by Phragmites. Long-term habitat management may be essential to retain the single, vulnerable population. This species is assessed as CR in the 2014 Red Data Book (RDB) so there is a special responsibility to conserve this species.	**1.** Prevent major salinity changes. **2.** Maintain open water through management of reedbed encroachment. **3.** Manage adjacent land to ensure no eutrophication. **Enabling measures** **4.** *Identify potential risks to site and reduce or eliminate them.* **5.** *Survey and monitor population.* Journal of Conchology (2020): Willing & Rowson – Discovery of the first recorded live population in the UK of the lagoon spire snail

Species	Information	Measures
Looping snail *Truncatella subcylindrica*	NT, NR, Sussex Rare. The population at Pagham Harbour is large and together with those on the Dorset Fleet form the UK strongholds. In West Sussex it is also present scattered around Chichester Harbour (not fully surveyed). Found in shingle amongst rotting vegetation and fine sediment at a depth of c. 15cm, at high water mark and more rarely in muddy habitats under stones at the high water mark. Often associated with *Suaeda maritima*, *S. vera* and *Aptriplex (Halimione) portulacoides*. A species dependent upon relatively undisturbed, upper shore shingle/gravel and so at risk from beach/upper shore management operations.	**1.** Maintain suitable habitat at high water mark, e.g. through natural processes. **2.** Exclude the movement of beach management works and storage of materials/equipment in known sites. **Enabling measures** **3.** *Raise awareness of species with beach managers.* **4.** *Monitor populations.*
Swollen spire snail *Mercuria tachoensis*	S41, VU, NR. West Sussex supports one of the most extensive and robust populations in the UK.	**1.** Maintain tidal cycle in occupied part of river. **2.** Limit saline intrusion.
Moss animals		
Crystal moss-animal *Lophopus crystallinus*	S41. Since 2024, colonies only recorded at three sites, one of which is in West Sussex. Recently recorded at Burton Mill Pond.	**1.** Maintain suitable conditions at known site, including: **a.** Maintain presence of woody debris and emergent vegetation; **b.** Maintain flow of water; **c.** Maintain mesotrophic to hypereutrophic conditions. **2.** Create stream-fed ponds within current or historical distribution in predominantly low intensity catchments.

Species	Information	Measures
Higher plants		
Cut-grass *Leersia oryzoides*	Legal protection, S41, EN, NR, Sussex Rare. Apart from a small colony in Surrey and re-introduced populations in Surrey and Hampshire, all extant sites in the British Isles (BI) are in West Sussex. Found in margins of ditches, ponds and rivers, open wet grassland, marsh and damp mud.	**1.** Maintain existing habitat inside and peripheral to protected sites.[6] **2.** Restore hydrology on protected sites. **3.** Management to reduce dense vegetation. **Enabling measures** **4.** *Water pollution reduction and mitigation.*
Grass-poly *Lythrum hyssopifolia*	Legal protection, S41, EN, NR, Sussex Rare. Currently only known from handful of sites in the UK. Rare in West Sussex. Found in wet ruts and hollows in arable fields. Recorded from Thorney Island, Chichester Harbour.	**1.** Maintain conditions at known sites. A species of dynamic temporary wetland habitats. **2.** Investigate translocations and potential habitat enhancement and expansion.
Lesser marshwort *Apium inundatum*	VU, Sussex Rare. Rare in Sussex. Although never common, formerly known from number of ponds on Wealden commons scattered across Sussex. Decreasing. Found in shallow ditches and ponds. Recorded at Iping Common, Fittleworth, Broadmere Common.	**1.** Maintain and safeguard small farm ponds and grazed commons. **2.** Create new small ponds in suitable locations.

6 Note: relevant consents/assents from e.g. Natural England will be needed for work impacting protected sites.

Species	Information	Measures
Marsh clubmoss *Lycopodiella inundata*	S41, EN, NS, Sussex Rare. Main populations found in southern England, in the New Forest, and on heaths in Hampshire and Surrey. Rare in West Sussex. Recorded at Trotton Common, Wheatsheaf Common, Graffham Common. Found on damp heathland, bare peaty soil.	**1.** Protect site and maintain managed heath and hydrology. **2.** Create areas of bare exposed peat to boost regeneration. **3.** Expand habitat to improve connectivity. **4.** Investigate selective reintroductions to suitable sites close to existing sites where conditions are suitable (reintroductions are being explored by the Species Recovery Trust in collaboration with Natural England). **Enabling measures** **5.** *Protect known site through education and raised awareness.*
Petty whin *Genista anglica*	NT (GB), VU (England). Predominantly lowland. Nationally, dramatic decline since 1960s. Rare in West Sussex and steady decrease and dwindling to extinction. Found on heathland and sandy commons. Recorded from Heyshott Common, Copthorne Common, Henfield Common.	Graze sites to reduce encroachment by bracken and scrub.
Upright chickweed *Moenchia erecta*	VU. Occasional in Britain, predominantly in southern England and Wales. Rare in West Sussex. In some sites, present in abundance but has disappeared in some locations where vegetation has become denser and coarser. Found on heathland, acid grassland, coastal sand. Records from West Wittering, Lower Greensand.	**1.** Maintain short grazed or mown turf with some disturbance to maintain open areas. **2.** Remove scrub.

Species	Information	Measures
Mosses		
Rusty fork-moss *Dicranum spurium*	S41. Rare moss of heathland, both dry and wet. Suffered severe decline in England but recent records from five sites in West Sussex.	**1.** Maintain open heath canopy with patches of bare peaty soil. **Enabling measures** **2.** *Survey to establish distribution and abundance.*
Stoneworts		
Great tassel stonewort *Tolypella prolifera*	S41, EN, Sussex Rare. Not seen in any of its four Sussex ditches (one on the Adur Brooks, three in the Arun Valley) lately due to lack of ditch maintenance. Ditch clearance would benefit a whole suite of other species which are declining.	**1.** Ditch clearance at known sites to remove silt and provide bare mineral sediment. **2.** Maintenance of low nutrient ditches within unimproved grazing marsh setting. Ditches need cyclic clearance and the species benefits from desilting together with “pulling” of the ditch sides so that they are moderately to steeply shelving and well scraped. Deweeding is often not sufficient and longer intervals between clearance (5-7 years) probably favours seed/spore species, such as this, over those with vegetative propagules such as *Elodea* spp.. Application of nutrients to adjacent fields needs to be minimised and any such applications kept well clear of ditches. Livestock grazing of banks is often beneficial in keeping down bank vegetation and encouraging “pulling” of the banks during clearance maintenance. **Enabling measures** **3.** *Monitor to assess presence/absence.*
Lichens		
A lichen *Cladonia rei*	NT, NR, Sussex Rare. Probably overlooked but uncommon and largely recorded from southern and eastern England. Can occasionally be abundant on high quality heathland.	**1.** Graze wet and dry heath whilst maintaining structural diversity. **2.** Grazing levels should be appropriate to site’s hydrological conditions. **3.** Seek to expand habitat to improve connectivity.

6.2 Assemblage Measures

Coastal Habitats

Breeding and Migrating/Wintering Shore Birds Assemblage

Measures

- Create network of new breeding areas including use of nesting rafts (e.g. tern rafts) using appropriate materials and predator-resistant designs, shingle islands, and scrapes and pools to benefit species all year.
- Support and allow shingle/sand habitats to renaturalise to create shingle features.
- Potential for some managed realignment and creation of new saltmarsh.

Enabling measures

- *Protect from disturbance and predators through education, fencing etc. Wardening is key.*
- *Protection of foraging areas linked to intertidal and shallow coastal waters.*
- *Monitor populations.*

Species	Additional Information & Resources
Little tern *Sternula albifrons*	Legal protection, BoCC Amber. Scarce breeding summer visitor and fairly common passage migrant. Only breeds at Chichester Harbour and Pagham Harbour and declining. Concerted effort required to reverse decline.
Mediterranean gull *Ichthyaetus melanocephalus*	Legal protection, Notable Bird, BoCC Amber. Fairly common winter visitor and passage migrant; scarce breeder. Breeding in Chichester Harbour and Pagham Harbour.
Ringed plover *Charadrius hiaticula*	BoCC Red. Scarce breeder; fairly common passage migrant and winter visitor. Breeding pairs restricted to short stretches of coast, almost always on shingle beaches.
Sandwich tern *Thalasseus sandvicensis*	BoCC Amber. Fairly common although localised breeding summer visitor and common passage migrant; very scarce winter visitor. No breeding in Chichester Harbour for the past decade, with breeding effort concentrated at Pagham Harbour (significant breeding colony - several hundred pairs as of 2025) and linked sites.

Coastal Grazing Marsh & Upper Saltmarsh Assemblage

Measures

- Maintain existing habitat inside and peripheral to protected sites and expand through positive management where possible.[7]
- Work with natural processes and allow space to roll back saltmarsh due to sea level rise increase. Identify managed realignment sites.
- Where appropriate, light grazing, aiming for low levels of disturbance/trampling, which could damage the flora and fauna and contribute to erosion.
- Expand areas of grazing marsh by re-introducing appropriate water level management on improved grassland and arable land. Target to ensure the expansion and linkage of existing sites and to promote functioning coastal floodplains.

Enabling measures

- *Raise awareness to adaptation and resilience*

Estuarine & Coastal Sciences Association: Tools and guidance

Species	Additional Information & Resources
Borrer's saltmarsh-grass *Puccinellia fasciculata*	S41, NT, NS, Sussex Rare. Local and decreasing on coasts in south and South East British Iles. Rare in West Sussex and most recent record c. 2007. Shingle, tidal river banks and other brackish habitats. Bracklesham.
Parsley water-dropwort *Oenanthe lachenalii*	NT. Distributed widely around the coastline of GB. Declining in inlands sites. Scarce, local in West Sussex. Appears to have decreased in Chichester and Pagham areas. Damp coastal grassland and marsh, rarely inland grassland and fen. Manhood Peninsula.

7 Note: relevant consents/assents from e.g. Natural England will be needed for work impacting protected sites.

Species	Additional Information & Resources
Saltmarsh goosefoot *Chenopodium (Oxybasis) chenopodioides*	NS, Sussex Rare. In mainland Britain, may now occur only in Thames Estuary, Kent and Sussex. Rare in Sussex.
Sea aster bee *Colletes halophilus*	S41, Notable A, Sussex Rare. Common in East Anglia and Thames estuary, occurs more sporadically along south coast of England. Strong evidence that it is expanding its range. Currently only known from two locations in county: Medmerry and West Wittering. Dependent on sea aster.
Sea barley *Hordeum marinum*	S41, VU, NS, Sussex Rare. Recorded around coast primarily in southern England and South Wales. Has decreased in Britain, particularly from The Wash northwards. Rare in West Sussex but formerly more frequent. Only extant colonies at Medmerry and Shoreham. Coastal grassland, shingle, tidal rivers.
Sea clover *Trifolium squamosum*	NS, Sussex Rare. Records predominantly restricted to southern England and Wales. Rare in West Sussex but still found in some quantity on several sites around Chichester Harbour and on Manhood Peninsula. Coastal – open brackish grassland; sand and shingle; seawalls and banks; tidal riverbanks.
Slender hare's-ear *Bupleurum tenuissimum*	S41, VU (GB), VU (England), NS, Sussex Rare. Vulnerable nationally, scarce in West Sussex. Saltmarsh. Thorney.

Shingle and Sand Dune Assemblage

Measures

- Maintain existing habitat inside and peripheral to protected sites and have regard to these species in the consideration of any coastal defence works.[8]
- Expand existing populations where possible by managing habitat adjacent to known locations.
- Manage and where possible eradicate invasive non-native species.

Enabling measures

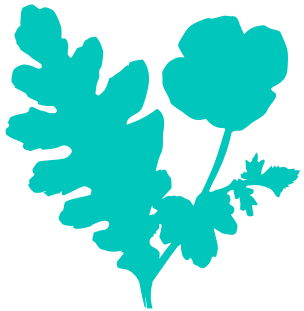
- *Educate to minimise disturbance from trampling and recreational pressures.*
- *Safeguard sparsely vegetated shingle from loss and damage and support coastal processes that support this habitat.*
- *Develop local policies to prevent further development of and encroachment on coastal sites.*

Buglife: Coastal vegetated shingle

Species	Additional Information & Resources
A true bug *Chlamydatus (Eurymerocoris) evanescens*	R. Although has become more widespread nationally, the species is restricted to the vegetated shingle at Shoreham. It feeds on *Sedum* sp.
Childing pink *Petrorhagia nanteuilii*	Legal protection, VU (GB), VU (England), NR, Sussex Rare. Still present as a native in Jersey, but West Sussex populations are now the only ones on mainland Britain and the most northerly in Europe.
Frosted orache *Atriplex laciniata*	Sussex Rare. Not listed nationally but scarce in Sussex. Numbers can vary according to the movement of sand and shingle and could re-appear at former sites in the future.
Little-robin *Geranium purpureum*	NR, NS, Sussex Rare. Confined to southern coasts in British Isles. Long known in Sussex but always rare.

8 Note: relevant consents/assents from e.g. Natural England will be needed for work impacting protected sites.

Species	Additional Information & Resources
Saltwort *Salsola kali*	VU. Widespread around coasts of British Isles. Had declined since 1960s with considerable loss in some areas, often due to recreational pressure. Rare in West Sussex.
Sea knotgrass *Polygonum maritimum*	Legal protection, EN (GB), VU (England), NR, Sussex Rare. Rare in the British Iles on southern coasts. Rare in West Sussex. Present at East Head.
Sea rocket *Cakile maritima*	Sussex Rare. Very locally frequent in Sussex. Can colonise new areas.
Sea-kale *Crambe maritima*	Locally common in Sussex, likely reflecting the fact that Sussex is a stronghold for the habitat. Useful as a habitat indicator. Considered iconic.



Sea-kale © iStock.com/Rob Wilkinson

Farmed Landscape & Soils

Farmland Birds

Measures

- Aim for a range of different crops and habitats including fallow areas throughout the year and retain areas of stubble.
- Create and manage set aside areas that could support a mosaic of scrub, species-rich grassland, rough grassland, beetle banks, some bare ground and ponds or small wader scrapes to provide water and muddy edges.
- Create flower rich arable margins.
- Manage hay meadows to produce a range of seeds for seed eating species.
- Create areas of scrub and avoid cutting all hedgerows annually to allow them to develop.
- For stone-curlew, create 1 ha to 5ha uncropped fallow plots with 30% bare ground. Retain plot until crop is harvested from late July. Monitor breeding while protecting nests and chicks.

Species	Additional Information & Resources
Corn bunting *Emberiza calandra*	S41, BoCC Red. Fairly common resident. Historic decline. Focus of conservation projects. RSPB: Corn bunting conservation – Advice for farmers
Cuckoo *Cuculus canorus*	S41, BoCC Red. Fairly common but declining summer visitor. Reasons for national decline poorly understood.
Grey partridge *Perdix perdix*	S41, BoCC Red. Scarce resident; much declined but benefiting locally through conservation effort. RSPB: Grey partridge conservation – Advice for farmers Game & Wildlife Conservation Trust: Conserving the grey partridge
Linnet *Linaria cannabina*	BoCC Red. Common but decreasing resident and partial migrant. Widespread and locally common but numbers nationally have declined.

Species	Additional Information & Resources
Skylark *Alauda arvensis*	BoCC Red. Slight increase in range but population in decline. Populations in non-agricultural habitats seem to have held up. Very common but declining resident in West Sussex and probably common passage migrant and winter visitor.
Stone-curlew *Burhinus oedicnemus*	Legal protection, S41, BoCC Amber. Scarce breeding summer visitor and passage migrant. Also found on chalky downland and grassy heaths.
Turtle dove *Treptopelia turtur*	S41, BoCC Red. Scarce and declining summer visitor and passage migrant. Breeding has drastically declined. Sussex holds c. 4.5% of the national population. River Adur catchment, Knepp. Operation Turtle Dove can support delivery through advisory work, sown plots, scrub-edge management, and provision of source populations in the Weald catchments. Operation Turtle Dove: Helping your local turtle doves
Yellowhammer *Emberiza citronella*	BoCC Red. Common resident. Declined, and dependent on management of arable margins and heathland.

Skylark © iStock.com/MikeLane45

Rare Arable Plants Assemblage

Measures

- Low-input arable management, adjacent to or on known sites.
- Cultivate margins in the spring between February and April or in the autumn between September and November.
- Do not apply any fertilisers or manures or pesticides except for herbicides to weed-wipe or spot-treat for the control of injurious weeds or invasive non-natives.

Plantlife: Managing arable farm land

Species	Additional Information & Resources
Annual knawel *Scleranthus annuus*	S41, EN (GB), EN (England). Generally lowland, has declined significantly throughout its range. Rare in West Sussex.
Corn buttercup *Ranunculus arvensis*	S41, CR (GB), EN (England), Sussex Rare. Archaeophyte◊. Formerly widespread across lowland England and Wales, extending to Scotland. Population declined by more than 80% across core range during 20th century. Rare in West Sussex and declining, as elsewhere in British Iles.
Field gromwell *Lithospermum arvense*	EN (GB), EN (England), Sussex Rare. Archaeophyte. Arable weed in Britain since Bronze Age, declined substantially since 1960s. Rare in West Sussex. Has decreased greatly although can appear in large numbers.
Shepherd's-needle *Scandix pecten-veneris*	S41, CR (GB), EN (England), Sussex Rare. Archaeophyte. Once an abundant arable weed, but now on the verge of extinction. Rare in West Sussex.
Spreading hedge-parsley *Torilis arvensis*	S41, EN, Nat Scarce, Sussex Rare. Archaeophyte. Formerly widely distributed across England as far north as Yorkshire, with majority of records in south and east. Distribution has significantly reduced. Scarce in West Sussex.

Species-rich Grasslands

Breeding Waders – Wet Grassland & Heathland Assemblage

Measures

- Restore and expand areas of wet meadow, heathland, mire and saltmarsh.
- Manage water levels appropriately.
- Graze (ideally cattle) to provide a mosaic of suitable sward heights for nesting and feeding.
- Minimise grazing during the breeding season to reduce chance of trampling from livestock.
- Create small wader scrapes, hollows and pools to provide muddy areas for feeding.
- Consider use of predator fencing to protect nests and chicks.

Enabling measures

- *Protection of foraging areas linked to intertidal and shallow coastal waters.*
- *Minimise disturbance from human activity during breeding season.*

International Multi-species Action Plan for the Conservation of Breeding Waders in Wet Grassland Habitats in Europe (2018-2028)

Species	Additional Information & Resources
Lapwing *Vanellus vanellus*	S41, BoCC Red. Scarce or fairly common resident and very common winter visitor. Coastal wetlands, rivers valleys and levels are core breeding areas, but pairs scattered across West Sussex Downs. Target conservation work has brought increases in breeding pairs, but recovery likely to be slow. Wintering birds spread more widely over Downs and along the coast than breeders but river valleys and wetlands still key areas. RSPB: Lapwing conservation – Advice for farmers
Redshank *Tringa totanus*	BoCC Amber. Scarce resident; common winter visitor and autumn passage migrant; fairly common spring migrant. Breeding pairs declined more steeply in Sussex than nationally. Wintering numbers declining but not as fast as nationally. RSPB: Redshank conservation – Advice for farmers

Chalk Grassland Assemblage

Measures

- Carefully timed and considered grazing with sheep or cattle, taking into account the range of species on each site, to maintain structural diversity with mixture of short turf, longer vegetation, small areas of scattered scrub and some bare ground. NOTE: the grazing regime should be modified where autumn ladies' tresses are present - grazing is not appropriate in these areas in August and September.
- Create structural diversity across the chalk landscape to support the different successional stages of chalk grassland and the species they support.
- For Duke of Burgundy, low density cattle grazing only, and allow development of very short, scattered scrub allowing growth of cowslip *Primula* (mainly *veris*) that will not desiccate by early summer while larvae still feeding.
- Avoid use of fertilisers to keep nutrient levels low.
- If necessary (if grazing not possible), a late summer cut with removal of arisings and control scattered scrub with cutting between November and February as required.
- Safeguard existing sites and seek to expand habitat to improve connectivity.

Enabling measures

- *Survey and monitor.*

Species	Additional Information & Resources
Adonis blue *Polyommatus bellargus*	Legal protection, NT, Sussex Rare. Thermophilic◊, requires short sward grassland with ants and horseshoe vetch. Iconic. Butterfly Conservation: Adonis blue factsheet
A planthopper *Tettigometra impressopunctata*	Sussex Rare. Scarce species restricted to high quality downland and calcareous dunes in southern England and Wales. Excellent indicator of high quality chalk grassland.
Basil thyme *Clinopodium acinos*	S41, VU (GB), VU (England). Thinly scattered across southern, central and eastern England, becoming increasingly common in northern England. Scarce in West Sussex.
Brown-banded carder bee *Bombus humilis*	S41, Sussex Rare. Intermittently present along south and west coasts of England and Wales. Significant decline during 20th Century, coinciding with loss of large areas of flower-rich grassland. Largely restricted to chalk grassland of South Downs.

Species	Additional Information & Resources
Burnt orchid *Neotinea ustulata*	S41, EN (GB), EN (England), NS, Sussex Rare. Distributed throughout central and south Europe and southern Sweden in the north. Rare in West Sussex, always local on downland, formerly more widespread. Now only known as small vulnerable colony.
Chalk hill blue *Polyommatus coridon*	Legal protection, NT. More widespread than the other chalk grassland blues, larvae feed on horseshoe vetch. Iconic.
Chalk milkwort *Polygala calcarea*	Sussex Rare. Infrequent and local plant in Britain, restricted to southern England. Rare in West Sussex. There has been a decline.
Curly beardless-moss *Weissia condensa*	S41, Sussex Rare. Needs well grazed steep chalk grassland, with closely grazed turf and bare areas. South Downs considered within top five National Character Areas for this species.
Duke of Burgundy *Hamearis lucina*	Legal protection, S41, EN, Sussex Rare. Nationally scarce and local but well established in West Sussex because of targeted habitat management. Provision of localised areas where the sward is highly heterogeneous and clumpy, on slopes with a northerly aspect. Light scrub is important for this species.
Field fleawort *Tephroseris integrifolia*	VU, NS, Sussex Rare. In the British Isles, restricted to southern England with core areas in Sussex and Wiltshire Downs. Rare in West Sussex and has always been scarcer than East Sussex. Rare to the west of the Adur.
Frog orchid *Coeloglossum viride*	S41, RedList GB post2001 VU, RedList ENG post2001 VU. Vulnerable nationally and scarce in Sussex. South Downs Natural Character Area considered within the top 5 for this species. Would benefit from targeted action.
Hairy rock-cress *Arabis hirsuta*	NT. Scarce in West Sussex. Usually in the most species-rich short dry turf. Decline since 1980s and several surviving colonies are small and vulnerable.

Species	Additional Information & Resources
Heath snail *Helicella itala*	LC. Although only assessed as LC in the 2014 Red Data Book, states *"Records imply distinct decline over recent decades. Loss of populations in southern and central England are a cause for concern."* Very local in West Sussex, typically found on a few of the best chalk grassland sites where it indicates long-term sympathetic traditional management. Habitat management and habitat connectivity are key.
Man orchid *Orchis anthropophora*	S41, EN (GB), EN (England), NS, Sussex Rare. In the British Isles, most frequent in Surrey on North Downs, but rare elsewhere and at its northern European limit. Always rare in Sussex.
Moss carder bee *Bombus muscorum*	EN (European), S41. Widely distributed throughout Britain and Ireland but showing signs of continuing severe decline since 1970. In southern areas, largely retreated to coast.
Musk orchid *Herminium monorchis*	S41, VU (GB), EN (England), NS, Sussex Rare. Considered Regionally Extinct in Wales, now restricted to southern areas of England and is assessed as Endangered due to substantial and continuing decline. Rare across Sussex. Still good colonies on Didling Down, Heyshott Down and Ditchling.
Red-shanked carder bee *Bombus ruderarius*	S41. Catastrophic decline in abundance and distribution throughout British Isles. Scarce and declining in West Sussex.
Round-headed rampion *Phyteuma orbiculare*	NS, Sussex Rare. Occurs on downland in Wiltshire, Hants and Surrey, but nowhere so frequent as in Sussex – locally frequent in West Sussex. "Pride of Sussex".

Species	Additional Information & Resources
Silver-spotted skipper *Hesperia comma*	Legal protection, NT, Sussex Rare. Found on the chalk of southern England, including the North and South Downs, the Chilterns, Dorset, Hampshire and Wiltshire. Abundance has increased and geographical range is expanding with recent colonisations pushing the limits of its Sussex distribution westwards (Amberley and Burpham). Needs unimproved open chalk grasslands with short, patchy swards. Prefers warm, south-facing slopes. Butterfly Conservation: Silver-spotted skipper factsheet
Small blue *Cupido minimus*	Legal protection, S41, NT. Early successional member of chalk grassland assemblage. Periodic ground disturbance is critical – areas of hot bare chalk where kidney vetch is pioneer species required. Iconic. Butterfly Conservation: Small blue factsheet
Sterile beardless-moss *Weissia sterilis*	S41, Sussex Rare. Needs well grazed steep chalk grassland, with closely grazed turf and bare areas. South Downs considered within top five National Character Areas for this species.

Small blue © iStock.com/Ondrej Prosicky

Waxcap and Other Grassland Fungi Assemblage

Measures

- Note: West Sussex known to be important for waxcap grasslands, with sites often found in old cemeteries, on grazing pastures and in habitat mosaics including woodland and wood pasture and parkland. Often associated with ant hill grasslands as they both require long standing undisturbed and uncultivated land.
- Maintenance of existing habitat inside and peripheral to protected sites.[9]
- Traditional land management that created the necessary habitat for this species should be maintained and taken up at adjacent/nearby sites to expand habitat, including short-sward grazing or cutting and removing cut material, and no fertilisation, herbicides or ploughing.

Enabling measures

- *Raise awareness with landowner/manager.*
- *Survey and monitor.*

Plantlife: Waxcaps and grassland fungi - Guide to identification and management

Species	Additional Information & Resources
Citrine waxcap *Hygrocybe citrinovirens*	Widespread but rare throughout Europe. Widely distributed across UK, although apparently absent from eastern England.
Crimson waxcap *Hygrocybe punicea*	Sussex Rare. Widespread but generally rare throughout Europe. Similarly, widespread across UK.
Dingy waxcap **Neohygrocybe ingrata**	European distribution. Scattered records across UK in England, Wales, Scotland and Ireland. English records restricted to South East (East and West Sussex), west and North West England.
Excentric pinkgill *Entoloma excentricum*	Sussex Rare. Records highly fragmented but scattered across UK. Unknown if significant population.
Felted pinkgill *Entoloma griseocyaneum*	Sussex Rare. Rare but widespread in Europe. UK records scattered and widespread, although absent from East Anglia.

9 Note: relevant consents/assents from e.g. Natural England will be needed for work impacting protected sites.

Species	Additional Information & Resources
Glistening waxcap *Gloioxanthomyces vitellinus*	Rare but widespread in Europe. Widespread records across UK.
Lilac pinkgill *Entoloma porphyrophaeum*	Widespread across UK and recently recorded locally.
Mealy pinkgill *Entoloma prunuloides*	Sussex Rare. Uncommon in Britain and Ireland but widely distributed.
Pink waxcap *Porpolomopsis calyptriformis*	Sussex Rare. European distribution. Widespread across UK, rare in West Sussex.
Splendid waxcap *Hygrocybe splendidissima*	Widespread but generally rare throughout Europe, with largest populations in UK, Germany, Sweden, Denmark and Norway.
Toasted waxcap *Cuphophyllus colemannianus*	Globally vulnerable because of threats to habitat. European distribution. Widespread across UK.

Woodland, Hedgerow & Scrub

Deciduous Woodland and Wood Pasture Fungi

Measures

- Maintain woodland cover, reversing habitat fragmentation and expansion of existing habitat.
- Prioritise expansion/connection at known sites.
- Wood-banks and other earthworks should be retained and protected from damage.
- Retain deadwood within the site, both standing and fallen. Retain decaying wood of deciduous trees.
- Retain a conifer element in PAWS (plantations on ancient woodland sites) restoration.
- Sweet chestnut coppice with known toothed fungi communities should be retained and if possible managed along traditional methods of cutting on a 10 to 12-year rotation.
- Invasive rhododendron should be controlled or eliminated.

Enabling measures

- *Reduce levels of atmospheric nitrogen deposition.*
- *Raise awareness with landowner/manager and avoid tree felling at known locations.*
- *Survey and monitor.*

Woodland Wildlife Toolkit > Fungi

Species	Additional Information & Resources
Beautiful bonnet *Mycena renati*	S41. In Great Britain and Ireland, only recorded from England (Durham, mid-west Yorkshire, North East Yorkshire, North Lincolnshire, South Wiltshire and West Sussex). Saprophytic◊ fungi on beech.
Bilious bolete *Boletus (Rubroboletus) legaliae*	VU. Uncommon in southern England and Europe. Grows with oak and beech, often on neutral to acid soils. Unknown if a significant population, but shortlisted given recent record and extent of suitable habitat locally.
Coral tooth *Hericium coralloides*	S41, Sussex Rare. Fairly widespread in England, although not particularly common. Records largely confined to south and east England. Saprophytic fungi on beech. Shortlisted given extent of suitable habitat and relatively recent records from West Sussex.

Species	Additional Information & Resources
Dusky bolete *Porphyrellus porphyrosporus*	NT. Widespread in Europe, especially in north, but nowhere particularly common. Scarce, scattered records from UK across South East and South West England, Wales, northern England and Scotland.
Gilded bolete *Aureoboletus gentilis*	NT. Scattered records in South East, Wales, North East and Scotland. Needs better evidence base. Given historic presence, and extent of habitat in county, considered worthy of inclusion.
Tawny bolete *Boletus (Aureoboletus) moravicus*	VU. National Biodiversity Network (NBN) records predominantly confined to South East England. Unknown if significant population but given relatively recent record and extent of suitable habitat in county, shortlisted.

Coral tooth

Open Parkland Mature and Veteran Tree Lichens

Measures

- Maintain open well-lit conditions around mature and veteran native trees in locations that support these species by thinning regeneration (whilst being mindful of the need to retain some younger trees) and controlling invasive species such as ivy, holly and rhododendron.
- Remove or reduce sources of locally generated atmospheric pollutants, e.g. by reducing high stocking levels and by limiting fertilising of grasslands.
- If possible, convert arable land adjacent to veteran trees to pasture.
- Create new pollards out of younger trees and maintain them by periodic recutting.
- Necessary tree surgery of veteran trees may be needed to improve the stability of the tree and prolong its life without damaging the lichen.

Enabling measures

- *Monitor the habitat and species to ensure that the landowner is aware of the presence of these species.*
- *Survey suitable veteran trees.*

Woodland Wildlife Toolkit > Lichens.

Species	Additional Information & Resources
Lemon tart lichen *Lecanora sublivescens*	S41, NT, NS, Sussex Rare. Rare in Britain and internationally rare. Primarily a southern species. Well-lit trunks of mature or veteran oak or occasionally ash in parklands and wood pasture. Insufficient evidence but given historic presence and extent of suitable habitat locally, would likely benefit from habitat improvements. Back from the Brink: Lemon tart lichen
Oak rim lichen *Lecanora quercicola*	Rare in Britain. Primarily a southern species in GB. Well-lit trunks of mature or veteran oak trees. Insufficient evidence to assess local population but given historic presence and extent of suitable habitat locally, likely to benefit from habitat improvements. Back from the Brink: Oak rim lichen
A lichen *Pertusaria pustulata*	VU, NR, Sussex Rare. Rare and confined to southern England, but easily overlooked as *Pertusaria leioplaca*.

Open Deciduous Woodland Assemblage

Measures

- Coppice woodland to create open glades and rides with light shade.
- Ensure presence of beech with shady bare ground beneath. Plant young beech trees near existing populations and/or allow natural recolonisation.
- Avoid grazing.
- Maintain fallen dead wood.

Species	Additional Information & Resources
Bird's-nest orchid *Neottia nidus-avis*	NT (GB), VU (England). Widespread across most of Europe. In British Isles, generally lowland and has decreased. Occasional in West Sussex. Some new sites have been found but overall decrease.
Narrow-leaved helleborine *Cephalanthera longifolia*	S41, VU (GB), EN (England), NS, Sussex Rare. Declined nationally as well as in Sussex. Rare in West Sussex.
Scarlet shieldbug *Eurydema (Rubrodorsalium) dominulus*	R. Very scarce species which has declined considerably. Only a few recent records from parts of Kent and Sussex. Larvae feed on range of host plants (Brassicacae). Woodland rides & clearings.
White helleborine *Cephalanthera damasonium*	S41, VU (GB), VU (England). Locally fairly frequent – most frequent in more heavily wooded areas of western downs.

Woodland Bats Assemblage

Measures

- Monitor and protect (e.g. through raising awareness with landowners) all existing confirmed roost sites, retain as many potential roosts sites as practically possible, and ensure a succession or continuity of potential roost sites for the future.
- Create a good network of habitats for roosting, feeding and commuting, avoiding isolating any areas currently used for feeding and ensure good connectivity between sites. Woodland management is key.

Enabling measures

- *Promote and advise woodland owners and managers on management of roost trees and ensuring successional trees for future roost provision within range. As Bechstein's bat maternity colonies heavily rely on woodpecker hole roosts, woodpecker ecology also needs to be considered. This would include leaving/creating areas of rough grassland within which green woodpeckers can forage for ants.*
- *Reduce pesticide use within foraging areas to improve insect diversity.*

Bat Conservation Trust: Woodland specialists

Species	Additional Information & Resources
Bechstein's bat *Myotis bechsteinii*	Legal protection, S41. Very rare species, only found in southern Wales and parts of southern England. The UK is at the northernmost edge of its distribution range. Bechstein's bat is a woodland species similar to Barbastelle, favouring holes and crevices in trees in deciduous woodland to roost in. However, foraging range is less at 2km and is mainly confined to woodland habitat. Surrounding landscape restoration is important for boosting insect numbers.
Western barbastelle *Barbastella barbastellus*	Legal protection, VU, S41. Very rare, only found in southern and central England and Wales. Barbastelles are crevice dwelling bats that predominantly roost in trees associated with woodland that has a high proportion of standing dead or dying trees that provide the cracks and crevices they prefer to use as roosts. Barbastelles require moth-rich foraging habitats over a 7km range so an increase in the quality and availability of wetland and riparian habitat species-rich meadow and hedgerows is important.

Woodland Birds Assemblage

Measures

- Re-introduce coppicing, varying lengths of rotation to benefit different species, e.g. tree pipits like newly coppiced areas, whereas medium and long rotation will benefit other species. They should be reasonably sized blocks to create a coarse mosaic of larger patches of scrub and coppice for nightingale and other species.
- Create structural diversity by carrying out selective thinning to allow more light to reach the understorey, along with the widening of rides and creation of glades. Structural heterogeneity, managed open glades and understorey recovery are essential for lesser spotted woodpecker and spotted flycatcher.
- Remove invasive woody species (e.g. rhododendron and cherry laurel).
- Avoid heavy disturbance or a sudden/dramatic change in woodland structure.
- Improve connectivity in the wider landscape through creation of scrubby areas and hedgerows and soft edges between woodland and open habitats.
- Retain deadwood where possible.

Enabling measures

- *Control deer numbers.*
- *Monitor populations.*
- *Tackle recreational disturbance and predation by domestic pets through e.g. the creation or improvement of footpaths, fencing, interpretation and education, defensive planting (using thorny species) etc.*

Woodland Wildlife Toolkit > Birds

Species	Additional Information & Resources
Eurasian honey-buzzard *Pernis apivorus*	Legal protection, BoCC Amber. Very scarce breeding summer visitor and passage migrant. In 2025, estimated breeding population of 20-25 pairs, the most of any county in Britain. Provides excellent base for species to maintain robust population. BTO: Honey-buzzard
Hawfinch *Coccothraustes coccothraustes*	S41, BoCC Red. Fairly common but highly elusive and much declined breeding resident and in most years scarce passage migrant and winter visitor; occasionally more numerous.

Species	Additional Information & Resources
Lesser spotted woodpecker *Dryobates minor comminutus*	S41, BoCC Red. Scarce and declining resident.
Marsh tit *Poecile palustris*	S41, BoCC Red. Very common resident. Nationally, appears to be a stabilisation of the population, but unlikely they will regain former population levels in Sussex.
Nightingale *Luscinia megarhynchos*	BoCC Red. Specific habitat requirements: coppiced woodland; dense scrub/thickets; wetland. Fairly common summer visitor and infrequently seen passage migrant. West and East Sussex are important UK counties for breeding, second only to Kent. West Sussex appears to be holding its own in the face of national declines. Stronghold for the species and considered iconic. BTO: Managing Scrub for Nightingales
Spotted flycatcher *Muscicapa striata*	S41, BoCC Red. Fairly common but declining summer visitor; scarce passage migrant in spring and fairly common in autumn. Main problems for West Sussex (and UK) birds relate to wintering ground and migration route. However, woodland management would help maximise breeding success.

Spotted flycatcher © iStock.com/birdsonline

Lowland Heathland & Sandstone Outcrops

Dry Heaths with Sand and Gravel Exposures Assemblage

Measures

- Low intensity grazing to provide some light poaching to create small pockets of bare peat and sandy ground with areas of sparse, short vegetation that are important to a variety of specialised species including invertebrates.
- Maintain all seral stages of heathland by rotational management.
- Maintain, create and enhance some mature heather and pine on heathland.

Enabling measures

- *Monitor populations.*

Species	Additional Information & Resources
A solitary wasp *Diodontus insidiosus*	R, Sussex Rare. Heathland districts, Dorset to Essex.
A spider *Euophrys petrensis*	NT, NR, Sussex Rare. Common on some heathland sites, but rather local. Recorded from only eight locations post-1992. Area of occupancy has declined by 68% from 25 hectads before 1992. Recent (2021) records from Iping Common. Former sites need re-evaluation.
A spider *Lathys heterophthalma*	VU, NR. Species only recorded from Surrey, West Sussex and Hampshire. All West Sussex records post 2023. West Sussex nationally important for the species. Distribution in Europe poorly known.
A spider *Micaria silesiaca*	NT, NR, Sussex Rare. Confined to southern half of England. Only three recent records (most recent 2023). However, the West Sussex population (Iping Common) is important, representing the southern edge of its main GB stronghold on the Surrey/Sussex/Hampshire heaths.

Species	Additional Information & Resources
Gentle groove-head spider *Tapinocyba mitis*	EN, NR, S41, Sussex Rare. Confined to small part of south-central England. Was frequent in heathland in West Sussex. SxBRC hold one recent (2019) record from Iping Common. NE specialist refers to additional records from Trotton Common. Appears to have declined massively. Records important in national context.
Sand lizard *Lacerta agilis*	Legal protection, S41, Sussex Rare. One of the UK's rarest reptiles. Patchy distribution with populations found in coastal areas in the south and west of the UK. Reintroduced to sites in West Sussex.
Smooth snake *Coronella austriaca*	Legal protection, S41, Sussex Rare. UK's rarest reptile. Only found on heathlands of Dorset, Hampshire, Surrey and West Sussex.
Southern bronze furrow bee *Halictus confuses*	R, Sussex Rare. Southern restricted species, recorded only from Dorset to Kent and north to West Norfolk. Very scarce in Sussex, restricted to handful of heaths on Lower Greensand. Ambersham, Midhurst and Iping Commons.
Wood/Heath tiger beetle *Cicindela sylvatica*	S41, EN, NS, Sussex Rare. In West Sussex only present in a few locations in the Greensand Heaths where diversity of successional stages present. Buglife: Heath tiger beetle species management factsheet Species Recovery Trust: Heath tiger beetle

Smooth snake © iStock.com/MLArduengo

Heathland Birds

Measures

- Improve connectivity within the wider landscape by connecting open areas to wide rides within woodlands and scrubby edges to woodlands.
- Restore open habitats within woodlands, especially heathland, with scattered trees. Ideally these areas should be grazed to create structural diversity and encourage invertebrates.

Enabling measures

- *Monitor populations especially those away from heathlands. These species breed in a range of habitats except for Dartford warbler which is primarily gorse and heathland, but some are found along the coast.*

Species	Additional Information & Resources
Dartford warbler *Curruca undata*	Legal protection, NT, BoCC Amber. Scarce to fairly common but localised resident. At northern limit of its European and World range. Stronghold for species and considered iconic. North Wealden Heaths.
Nightjar *Caprimulgus europaeus*	Legal protection, S41, BoCC Amber. Fairly common but localised summer visitor rarely seen on migration. Heaths relatively small and fragmented, limiting nesting opportunities and increasing risk of disturbance. Stronghold for the species and considered iconic.
Tree pipit *Anthus trivialis*	S41, BoCC Red. Widespread distribution from Northern Spain and GB in west to Eastern Europe, Russia and Siberia in east. Fairly common but local summer visitor and fairly common passage migrant in West Sussex. Significant decline in breeding population.

Wetlands (Rivers, Streams & Aquifers + Wetlands & Standing Water Bodies)

Amphibian Ponds Assemblage

Measures

- Restore ponds: de-silt, deepen, maintain water levels and improve water quality.
- Establish network of new ponds and scrapes, with range of sizes and depths.
- Maintain/extend undisturbed semi-natural habitat surrounding pond.
- Avoid stocking with fish.

Enabling measures

- *Establish toad crossing signage/patrols where roads cross migration routes.*
- *Develop planning policy/guidance on modifying kerbs/gully pots, installation of tunnels/culverts etc at key amphibian locations.*
- Note: great crested newt conservation strategy in place through District Licencing scheme.

Species	Additional Information & Resources
Common toad *Bufo bufo*	Legal protection, S41. Widespread in the UK but have declined by over 68% in last 30 years. Requires targeted habitat management.
Great crested newt *Triturus cristatus*	Legal protection, S41. Widespread but patchy distribution in the UK. Sussex is a stronghold for the species. Freshwater Habitats Trust: Newt Conservation Partnership

Great crested newt © iStock.com/MikeLane45

Grazing Marsh Molluscs

Measures

- Manage ditches to maintain high water quality and to reduce shade and vegetation cover.
- Maintain water levels in ditches across grazing marsh.
- Reduce grazing/provide buffer zones to reduce poaching and eutrophication.

Species	Additional Information & Resources
A mollusc *Euglesa pseudosphaerium*	LC, NS. Although only assessed as LC in the 2014 RDB this states, *"This species has a very local distribution within habitats that are vulnerable to inappropriate management, drainage and eutrophication hence susceptible to inappropriate management, drainage and local extinction. …. A candidate for Near Threatened".* Species indicative of best flood plain and coastal grazing marshes. Large populations in Arun Valley SAC are not only of local but also national importance.
Ramshorn snail *Anisus (Disculifer) vorticulus*	Legal protection, S41, VU, NR, Sussex Rare. The Arun Valley populations at Amberley Wild Brooks & Pulborough Brooks both form an SAC for the snail. These are nationally important and both subject to regular monitoring including in 2024. An iconic highly protected snail indicative of a rare and threatened habitat.

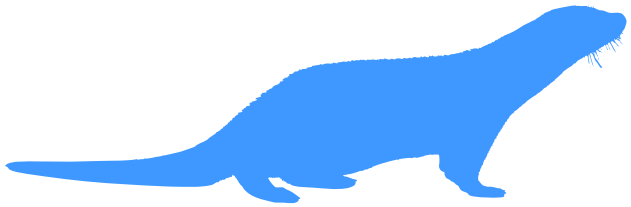
Streams & Rivers Assemblage

Measures

- Improve water quality and flow, with well-oxygenated water and clean gravels.
- Riparian tree planting where appropriate to increase shading of river channels and counter the effects of increased temperatures, but not where it shades out macrophytes.
- Establish passes to overcome or remove barriers to migration upriver and downstream.
- Note: Core habitat measure R1.2 overlaps directly within this assemblage and will contribute to the delivery of these assemblage measures.

Species	Additional Information & Resources
Brook lamprey *Lampetra planeri*	Legal protection, Sussex Rare. Widespread in the UK but has declined. Non-migratory.
Brown/Sea trout *Salmo trutta*	S41. Widespread. Sea trout and brown trout are same species: former is migratory spending most of its life at sea and returning to freshwater to spawn; latter spends all of its life in freshwater. Subspecies included in species given limited number of records for subspecies. Lowland rivers generally have limited populations, but West Sussex rivers appear to support reasonable and possibly unique populations.
Bullhead *Cottus gobio*	Legal protection, Sussex Rare. Good populations widely distributed in freshwaters across almost the whole of England and Wales. Native fish stocks in West Sussex struggling and are one of the main reasons for many West Sussex rivers failing to reach Good Ecological Status under Water Framework Directive. Predominantly due to barriers and lack of habitat.
Common club-tail *Gomphus vulgatissimus*	NT, Sussex Rare. In Britain, very localised along stretches of a few rivers. West Sussex hosts a very important and relatively stable population of this dragonfly on the River Arun and its tributaries.
Depressed river mussel *Pseudanodonta complanata*	Although only assessed as LC in the 2014 RDB: (1) the River Arun supports extensive populations (the mussel can, unusually be present in large numbers) extending over a considerable distance in the tidal river and (2) it seems to be a unionid mussel that (compared to other native unionids) is particularly sensitive to saline intrusion so making it a good indicator species. Freshwater Habitats Trust: Depressed river mussel

Species	Additional Information & Resources
European eel *Anguilla anguilla*	S41, CR. Widely distributed around British and Irish coasts. Found in rivers and estuaries. In common with global trend, West Sussex eel stocks have fallen by over 90%. OSPAR: European eel – Status assessment 2022
European otter *Lutra lutra*	Legal protection, S41, Sussex Rare. Have been endangered or extinct in nearly all of their native countries but now recovering across Europe. Slow to return to West Sussex and currently no known resident otters.
River lamprey *Lampetra fluviatilis*	Legal protection, S41, Sussex Rare. Widespread but rare in British Iles. Native fish stocks in Sussex struggling and are one of the main reasons for many West Sussex rivers failing to reach Good Ecological Status under Water Framework Directive. Predominantly due to barriers and lack of habitat.
Sea lamprey *Petromyzon marinus*	Legal protection, S41. Reasonably widespread in UK rivers. Still common in some places but has declined. Native fish stocks in West Sussex struggling and are one of the main reasons for many West Sussex rivers failing to reach Good Ecological Status under Water Framework Directive. Predominantly due to barriers and lack of habitat.



Urban Nature

Urban Birds Assemblage

Measures

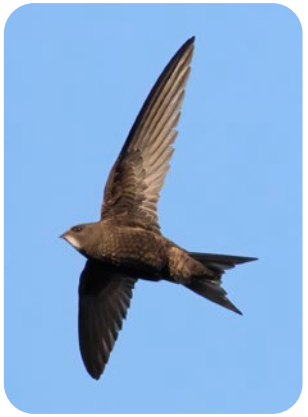
- Create and improve management of species rich grassland, wetland and pockets of scrub in urban areas and improve connectivity within the landscape.
- Encourage the incorporation of sustainable urban drainage systems (SuDS).
- Provide suitable nest boxes/cups for swifts and house martins where there are no natural nests present and preserve existing nest sites through partnership working.

Enabling measures

- *Engage with businesses and the public to educate them about these species and encourage their involvement in conservation of threatened urban bird species.*
- *Develop Sussex-wide guidance or standard planning conditions to encourage provision in new development (e.g.* Brighton & Hove City Council: Swift brick policy*).*
- *Note: swift bricks are considered a universal fix for small cavity-nesting bird species as they will also be used by house sparrows, starlings, great tits, blue tits and occasionally house martins and nuthatches. National Planning Practice Guidance is that developments should include swift bricks where possible, with the general aim of one nest box per unit.*

WWT and RSPB: Sustainable drainage systems guide

Species	Additional Information & Resources
House martin *Delichon urbicum*	BoCC Red. Common but declining summer visitor and abundant passage migrant. English population declines appear more severe in South East England.
Starling *Sturnus vulgaris*	S41, BoCC Red. Common but declining resident and very common to abundant winter visitor. Sussex holds c. 2.1% of GB population. Considered iconic. Steep decline.
Swift *Apus apus*	BoCC Red. Common summer visitor and passage migrant in West Sussex. Decline in breeding population. Scored highly in public surveys.



Swift
© iStock.com/Yuriy Balagula

LNRS Glossary

Archaeophyte
Non-native species that were introduced by humans, either intentionally or unintentionally, and because naturalised in Britain and Ireland between the start of the Neolithic period and AD1500.

Assemblage
A group of species that share similar requirements and are likely to benefit from the same recovery measures.

Bioindicators
Living organisms that give an indication of the health of an ecosystem. Some organisms are very sensitive to pollution in their environment, so if pollutants are present, the organism may change is morphology or behaviour, or it could die.

Flagship species
A species selected to act as an ambassador, icon or symbol for a defined habitat, issue, campaign or environmental cause. Focusing on conservation of that species can help support the status of other species which share its habitat.

Keystone species
A species that plays a pivotal role in how its ecosystem functions. Every ecosystem has certain species that are critical to the survival of other species in the system. An ecosystem may experience a dramatic shift if a keystone species is removed.

Rookery
A breeding place or colony of gregarious birds or animals such as seals.

Saprophytic
Obtaining food by absorbing dissolved organic matter.

Taxa
All life is divided into groups knows as taxa, where a single taxon represents a particular way of dividing up nature, e.g. a population of whales or a species of fish.

Thermophilic
Organisms that thrive at relatively high temperatures.

Beaver

Sussex Nature Recovery

A collective blueprint for targeted action

West Sussex
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 1 – Context & Description of Strategy Area

West Sussex
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 2 – Priorities, Measures and the Local Habitat Map

West Sussex
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 3 – Priority Species

West Sussex, East Sussex and
Brighton & Hove
Local Nature Recovery Strategy
Statement of Biodiversity Priorities
Part 4 – Technical Methods

View all the documents at:

SussexNatureRecovery.org.uk

west sussex county council

June 2026