

# Phase 1 Ecology Survey Stansted Arrivals Building October 2016



PASCALL +WATSON



# **RSK GENERAL NOTES**

Proi	iect	No.:	856786
110	CUL	110	000700

Title: Stansted Airport Arrivals Building – Preliminary Ecological Appraisal

Client: Stansted Airport Ltd

Date: October 2016

Office: Helsby

Status: Draft



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# **EXECUTIVE SUMMARY**

- 1. This report presents the results of a preliminary ecological appraisal to identify possible ecological constraints surrounding the proposed redevelopment of land for a proposed arrivals building at Stansted Airport.
- 2. The survey was completed on 4th October 2016. A background data search (BDS) was also carried out to obtain any historical records of notable species or nature conservation sites in the area.
- 3. The development site comprises roadside verges, amenity grassland and plantation woodland adjacent to an existing airport car park and hotels. It is bordered on all sides by car parks and roads with airport buildings beyond.
- 4. The habitats on the site are common and ubiquitous throughout the UK. They are not particularly species-rich or valuable botanically. No further botanical surveys are necessary as the current survey was adequate to fully assess the value of the habitats encountered.
- 5. The site has habitats suitable for nesting birds and restrictions regarding vegetation clearance are discussed.



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# **1** INTRODUCTION

# 1.1 Purpose of this Report

This report presents the results of a preliminary ecological appraisal to assess any ecological constraints surrounding the redevelopment of land for a proposed arrivals building at Stansted Airport (OS grid reference: TL 5585 2382).

# 1.2 Ecological Context

The development site is predominantly hardstanding, including access roads and car parks. These are bordered by amenity grassland and tree planting, ornamental beds and plantation woodland. There are areas of previously disturbed ground which are now colonising with ephemeral and short perennial vegetation. The site is bordered by roads and airport related development on all sides.

### 1.3 Structure of this Report

The remainder of this report is structured as follows:

- Section 2 describes the survey and assessment methods;
- Section 3 presents the survey results;
- Section 4 evaluates the results; and
- Section 5 lists the references.

Subsequent sections contain the appendices:

- Appendix A explains the protected species legislation;
- Appendix B provides details of noteworthy species;
- Appendix C provides details of the abbreviations used in the text; and
- Appendix D provides the Target Notes.



# 2 METHODS

### 2.1 General

The survey was carried out by Will Holden on 4<sup>th</sup> October 2016. Will is a senior consultant with over nine years' experience and a full member of the CIEEM. He is and experienced in botanical and protected species surveys (badger, bats, birds, great crested newt, otter and water vole).

In March 2012, CIEEM issued a document *Guidelines for Preliminary Ecological Assessment.* It aims to set standards for the levels of ecological survey so that developers and regulators (planning authorities and government agencies) may assess whether there has been a sufficient survey effort in a particular situation.

The PEA carried out for this site included:

- a background data search (gathering information from national websites; local record centres, councils *etc.*; and local wildlife groups); and
- a field survey using the extended Phase 1 Habitat Survey methodology; and
- a habitat assessment for protected species.

# 2.2 Background Data Search

A search was made in October 2016 for reference materials relating to the ecology of the Stansted Arrivals Building, and a list of sources is given in *Table 1*.

Information Obtained	Available From
Protected and Noteworthy species-records	Essex Field Club. Full results are given in Appendix E.
Designated site locations and citations	Natural England website
Designations and legal protection of noteworthy species	Joint Nature Conservation Committee (JNCC) website
Details of species and habitats listed on the LBAP	Essex BAP website http://essexbiodiversity.org.uk/biodiversity-action- plan

#### Table 1: Data Sources

A search was made for information on statutory designated sites (often internationally and nationally important sites for ecology) and non-statutory designated sites (often important in a local context) within 1 km of the site boundary. A search was also made for records of noteworthy species within the same 1 km area. Species included in the search parameters are:



- European protected species (listed on *Schedules 2* and *5* of *The Conservation of Habitats and Species* (Amendment) *Regulations 2012*);
- nationally protected species under *Schedules 1, 5* and *8* of *The Wildlife & Countryside Act 1981* and *The Protection of Badgers Act 1992*;
- species listed as Critically Endangered, Endangered or Vulnerable on the *IUCN* 2001 Red List
- all species listed on the RSPB *Birds of Conservation Concern 4* as Red or Amber;
- Nationally Rare or Nationally Scarce species;
- Notable invertebrates; and
- species of Principal Importance under *The Natural Environment and Rural Communities (NERC) Act (2006)* or are Priority Species under the Local Biodiversity Action Plan.

# 2.3 Phase 1 Habitat Survey

### 2.3.1 Introduction

The habitat survey centred on the Phase 1 Habitat Survey approach (Joint Nature Conservation Committee 2010) as extended for use in Environmental Impact Assessments (Institute of Environmental Assessment 1995). This involves the following elements.

- Habitat mapping using a set of standard colour codes to indicate habitat types on a Phase 1 Habitat Map (*Figure 1*).
- Description of features of possible ecological or nature conservation interest in notes relating to numbered locations on the Phase 1 Habitat Map, called 'Target Notes'. These are provided in *Appendix D*.

Basic Phase 1 Habitat Survey methods are described in detail in Joint Nature Conservation Committee (JNCC 2010). Plant nomenclature in this report follows Stace (2010) for native and naturalised species of vascular plant. Plant names in the text are given with scientific names first, followed by the English name in brackets.

#### 2.3.2 Invasive Plant Species

Phase 1 Habitat Survey does not involve exhaustive surveying for any individual plant species. But if invasive plant species, *e.g. Fallopia japonica* (Japanese Knotweed), *Heracleum mantegazzianum* (Giant Hogweed), *Impatiens glandulifera* (Indian Balsam), were seen during the normal course of the survey they were noted and reported here.



# 2.4 Habitat Assessment for Protected Vertebrates

#### 2.4.1 General

The suitability of the sites for protected animals was assessed. Taking into account the location and types of habitats at the site, assessment was carried out for:

- Badger;
- bats (several species); and
- nesting birds.

The site does not have any habitats suitable for Great Crested Newts, Reptile, Otter or Water Vole. Further details of the assessment methods are given below.

#### 2.4.2 Badger

The site and all suitable areas within 30 m were surveyed for signs of Badger (*Meles meles*) activity including setts, foraging signs, paths (runs) and latrines. The entire survey area was assessed to identify areas that might be used by Badgers for sett building or foraging, and incidental signs of Badger including setts, foraging signs, paths (runs) and latrines were noted.

### 2.4.3 Bats

The trees were assessed for their bat roosting potential with suitable features, including cracks, splits and rot holes recorded if found.

### 2.4.4 Nesting Birds

The site was assessed for its suitability to support breeding birds, giving consideration to factors such as cover, food, disturbance and other habitat requirements. Birds nest in a wide variety of habitats including scrub woodland, hedges and trees, as well as on open ground.

# 2.5 Validity of Data

According to Natural England advice, survey data up to two years old may be acceptable for medium to high impact schemes (*e.g.* housing developments), as long as the habitats have not changed significantly in that time period.

Where a European Protected Species licence is required after the grant of planning permission, Natural England expects applicants to check - by walk-over survey not more than three months before the submission of a licence application - that conditions have not changed significantly since the original surveys were carried out.



# 3 **RESULTS**

# 3.1 Background Data Search

### 3.1.1 Biodiversity Action Plans

The Essex LBAP lists 19 Habitat Action Plans and no Species Action Plans. There are no Local Habitat Plans that are relevant to the proposed development.

### 3.1.2 Designated Sites

There are no designated sites within 1 km of the site. The closest designated site is Elsenham Woods Site of Special Scientific Interest (SSSI) located 1100 m north of the site.

### 3.1.3 SSSI Impact Risk Zones

There are several SSSIs in the wider area, including Elsenham Woods SSSI, High Wood, Dunmow SSSI and Hatfield Forest SSSI. The site intersects SSSI Impact Risk Zones for these sites.

### 3.1.4 Other Notable Sites

There is one areas of ancient woodland within 1 km of the site boundary, namely Greenstreet Spring / Pigeon Wood 450 m to the north.

#### 3.1.5 Protected and Noteworthy Species

At least 34 noteworthy species are recorded from places within 1 km of the site boundary. Of these, 18 are birds, 3 are invertebrates, 6 are plants and at least 7 are mammals. Species that are protected by law under *Schedules 2 and 5 of The Conservation of Habitats and Species (Amendment) Regulations 2012, The Wildlife and Countryside Act 1981* or *The Protection of Badgers Act 1992* and have been recorded in the search area are listed in the table below; a full species list is given in *Appendix B*. Records with 2 figure grid references were considered to imprecise and have been removed.

Latin Name	Common Name	Designation	Most Recent	No of Records	Within 100m	Within 1km
Birds						
Alcedo atthis	Common Kingfisher	WCA1.1	2014	1		Ρ
Milvus milvus	Red Kite	WCA1.1	2013	1		Ρ
Turdus iliacus	Redwing	WCA1.1	2014	1		Р
Turdus pilaris	Fieldfare	WCA1.1	2014	1		Ρ
Tyto alba	Barn Owl	WCA1.1	2013	1	Ρ	Ρ

#### Table 2: Protected Species Records within 1 km of the Site Boundary



Latin Name	Common Name	Designation	Most Recent	No of Records	Within 100m	Within 1km
Mammals						
Meles meles	Badger	BA	2010	1		$\boxtimes$
Nyctalus leisleri	Leisler's Bat	EPS(Sch2), WCA5	1994	1		$\boxtimes$
Nyctalus noctula	Noctule Bat	EPS(Sch2), WCA5	2007	1		$\boxtimes$
Pipistrellus pipistrellus	Common Pipistrelle	EPS(Sch2), WCA5	2008	14		$\boxtimes$
Pipistrellus pygmaeus	Soprano Pipistrelle	EPS(Sch2), WCA5	2008	2		$\boxtimes$
Pipistrellus sp.	a Pipistrelle bat	EPS(Sch2), WCA5	2011	2		$\boxtimes$
Plecotus auritus	Brown Long-eared Bat	EPS(Sch2), WCA5	2011	7		$\boxtimes$

Note - P relates to records with 4 figure grid references that could potentially be anywhere within a 1 km square.

# 3.2 Habitats

### 3.2.1 Amenity Grassland

The borders of the site include areas of amenity grassland along road verges and adjacent to buildings. These are found at *Target Notes 1, 7* and *8*. The amenity grassland areas have a short, dense sward, grazed by rabbits and dominated by *Festuca rubra* (Red Fescue) and scattered *Holcus lanatus* (Yorkshire-fog). Broad-leaved herbs are limited in diversity and include *Achillea millefolium* (Yarrow), *Helminthotheca echioides* (Bristly Oxtongue) and *Trifolium repens* (White Clover). There are several ornamental trees in these areas including *Betula* sp (a Birch), *Fagus sylvatica* (Beech), *Pinus* sp (a Pine) and *Sorbus aria* (Common Whitebeam).

Adjacent to the grassland at *Target Note 1* is an ornamental bed containing *Lavandula angustifolia* (Garden Lavender) and *Tamarix gallica* (Tamarisk).

### 3.2.2 Rough Grassland

The northern end of the site is an area of sparse rough grassland behind an airside security fence (*Target Note 3*). This includes *Dactylis glomerata* (Cock's-foot), *Festuca rubra* (Red Fescue) and *Holcus lanatus* (Yorkshire-fog), but is more heavily dominated by broad-leaved herbs including *Blackstonia perfoliata* (Yellow-wort), *Cirsium arvense* (Creeping Thistle) and *Urtica dioica* (Common Nettle).

### 3.2.3 Ephemeral and Short Perennial Vegetation

There are areas of the site, typically road verges, which appear to have been recently (within the last year) cleared of vegetation (*Target Note 2*). These still have large areas of bare ground but are now becoming colonised by ephemeral and short perennial vegetation including *Helminthotheca echioides* (Bristly Oxtongue), *Rumex obtusifolius* (Broad-leaved Dock) and *Urtica dioica* (Common Nettle).

There is a larger expanse of steep embankment which has similar ephemeral and short perennial vegetation (*Target Note 5*) which appears to have become established over a



longer time frame. This is dominated by *Dipsacus fullonum* (Teasel) but has wetter areas at the base of the slope which include *Carex pendula* (Pendulous Sedge) and *Juncus inflexus* (Hard Rush).

### 3.2.4 Plantation Woodland

The centre of the site has a patch of ornamental plantation woodland adjacent to a car park (*Target Note 4*). This is all *c*.10-20 years old. It is dense and dominated by *Acer campestre* (Field Maple) with some *Populus alba* (White Poplar) and *Rhamnus catharticus* (Buckthorn).

### 3.2.5 Hedgerow

There is a short section of hedgerow at the top of an embankment (*Target Note 6*). This is *c*.1 m high and 1 m wide and gappy. It has a wooden fence in the centre. The hedgerow is dominated by *Corylus avellana* (Hazel) and *Ligustrum ovalifolium* (Garden Privet). The ground beneath is bare earth.

#### 3.2.6 Trees

There are many ornamental trees across the site. These include *Betula pendula* (Silver Birch), *Betula* sp (a Birch), *Carpinus betulus* (Hornbeam), *Corylus avellana* (Hazel), *Fagus sylvatica* (Beech), *Pinus* sp (a Pine), *Sorbus aria* (Common Whitebeam) and *Tilia* sp (a Lime).

### 3.3 Non-native Invasive Plant Species

No invasive species were recorded on the site.

### 3.4 Assessment for Protected Species

#### 3.4.1 Badgers

The amenity grassland is suitable habitat for foraging Badger. No evidence of Badger activity was recorded during the survey and no Badger setts were recorded.

### 3.4.2 Bats

The site is not suitable for bat foraging and there are no trees suitable for roosting bats. The trees are generally young and in good condition.

#### 3.4.3 Nesting Birds

The plantation woodland and scattered trees offer suitable habitat for nesting birds.



# **4 EVALUATION**

# 4.1 Designated Sites

No impacts on any designated sites are anticipated, due to their distance from the site.

However, the site is within the SSSI Impact Risk Zone for several Sites of Special Scientific Interest. The development is part of airport operations and therefore Natural England must be consulted prior to development, to be allowed to assess the impacts, if any, on any Sites of Special Scientific Interest.

# 4.2 Habitats and Plants

The habitats on the site are common and ubiquitous throughout the country. They are not particularly species-rich or valuable botanically. No further botanical surveys are necessary as the current survey was adequate to fully assess the value of the habitats encountered.

# 4.3 Protected Species

### 4.3.1 Badgers

No signs of Badger were recorded on the site. No further action is required with regard to this species. It is considered highly unlikely that Badgers will move in to this site due to the highly urban nature of the surrounding landscape (airfield, car parks and major roads).

### 4.3.2 Bats

There are no habitats suitable for foraging or roosting bats. No further action is required with regard to this species.

### 4.3.3 Nesting Birds

The plantation woodland, ornamental planting and scattered trees are suitable for nesting birds. If these areas are to be cleared, this must be carried out outside the bird breeding season (March to August inclusive). If this is not possible, the habitats must be checked for nests by a suitably qualified ecologist immediately prior to removal. Any nests that are discovered must be left undisturbed until the young have fledged.



# 5 **REFERENCES**

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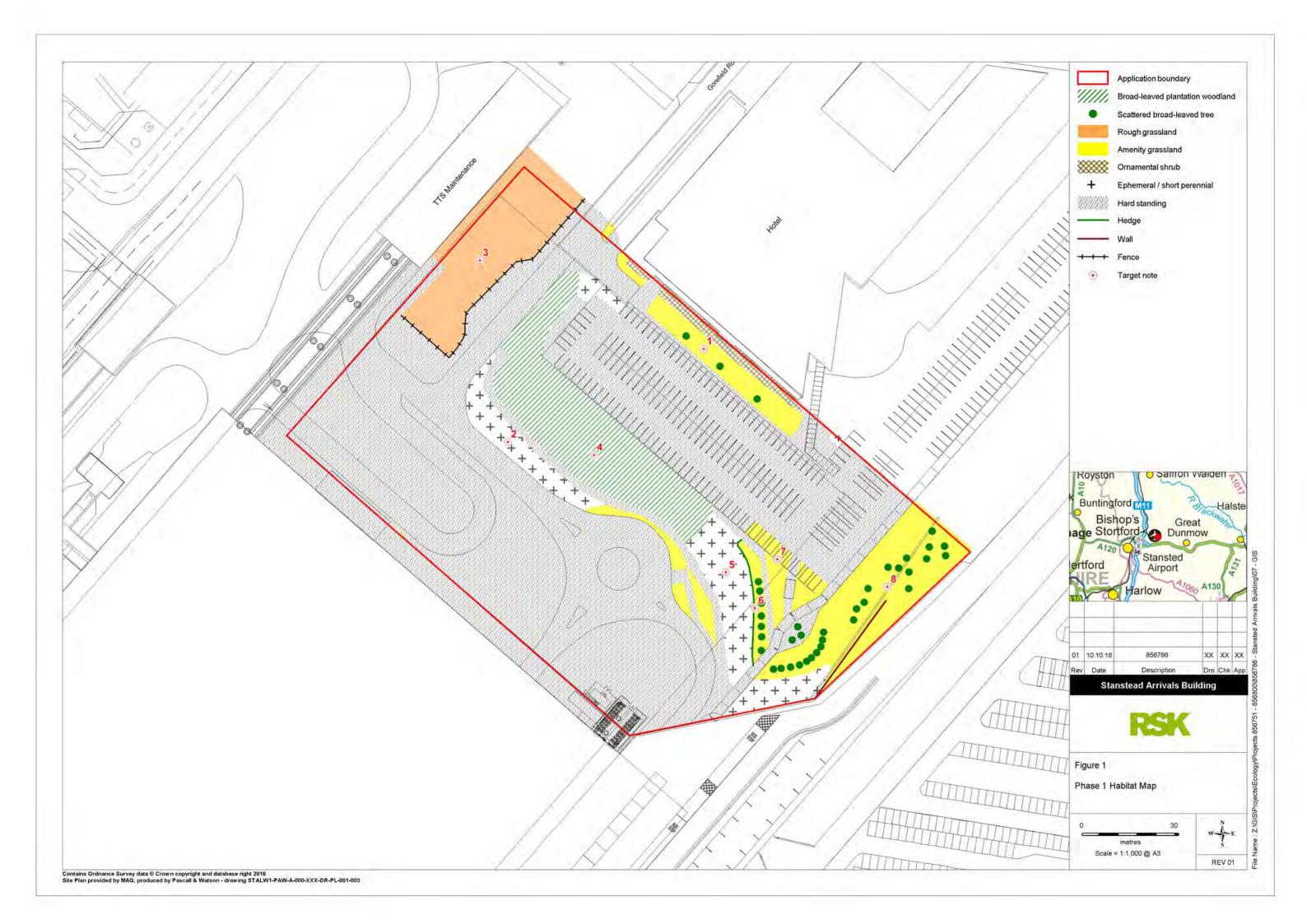
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# 6 **FIGURES**

Figure 1 – Phase 1 Habitat Survey Map





# **APPENDIX A – RELEVANT LEGISLATION**

### **Badgers**

*Meles meles* (Badger) is protected in Britain under the Protection of Badgers Act 1992 and Schedule 6 of the Wildlife and Countryside Act 1981 (as amended).

The legislation affords protection to Badgers and Badger setts, and makes it a criminal offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

### **Bats**

All species of British bat are protected by The Wildlife and Countryside Act 1981 (as amended) extended by the Countryside and Rights of Way Act 2000. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst is occupies a bat roost.

Bats are also European Protected Species listed on The Conservation of Habitats and Species Regulations 2010. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats, including in particular any disturbance which is likely (a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) hibernate or migrate, where relevant; or (b) to affect significantly the local distribution or abundance of the species to which they belong.
- · damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

### Birds

#### Birds general protection

All species of bird are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). The protection was extended by the CRoW Act.



The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

#### Birds (specially protected species)

Certain species of bird are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive protection under Sections 1(4) and 1(5) of the Act. The protection was extended by the CRoW Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.



# APPENDIX B – NOTEWORTHY SPECIES RECORDS

*Table 3* displays noteworthy species records that are located within 1 km of the site boundary. These species records were obtained from the Essex Field Club. The Latin and common names for species are given as well as their level of designation. A glossary defining abbreviations used in the table is given in *Table 4, Appendix C*. If a species is not included in the table below it does not necessarily mean the species is absent from the search area, but rather that data-holding organizations do not have records of it in these locations.

Latin Name	Common Name	Designation
Birds		
Alauda arvensis	Sky Lark	S41, Red
Alcedo atthis	Common Kingfisher	WCA1.1, Amber
Anas platyrhynchos	Mallard	Amber
Delichon urbicum	Common House Martin	Amber
Falco tinnunculus	Common Kestrel	Amber
Hirundo rustica	Barn Swallow	Amber
Milvus milvus	Red Kite	WCA1.1, Amber
Motacilla cinerea	Grey Wagtail	Red
Phylloscopus trochilus	Willow Warbler	Amber
Picus viridis	Green Woodpecker	Amber
Poecile palustris	Marsh Tit	S41, Red
Prunella modularis	Dunnock	S41, Amber
Pyrrhula pyrrhula	Bullfinch	S41, Amber
Sturnus vulgaris	Common Starling	S41, Red
Turdus iliacus	Redwing	WCA1.1, Red
Turdus philomelos	Song Thrush	S41, Red
Turdus pilaris	Fieldfare	WCA1.1, Red
Tyto alba	Barn Owl	WCA1.1, Amber
Plants		
Cyperus longus	Galingale	NS
Euphorbia exigua	Dwarf Spurge	ENG BSBI RDB(VU)
Myriophyllum verticillatum	Whorled Water-milfoil	GB RDB(VU)
Silene noctiflora	Night-flowering Catchfly	GB RDB(VU), ENG BSBI RDB(VU)
Spergula arvensis	Corn Spurrey	GB RDB(VU), ENG BSBI RDB(VU)
Trifolium ochroleucon	Sulphur Clover	ENG BSBI RDB(VU), NS
Inverterbates		
Agrochola litura	Brown-spot Pinion	S41



Latin Name	Common Name	Designation
Ectemnius sexcinctus	a digger wasp	Notable:B
Ennomos fuscantaria	Dusky Thorn	S41
Mammals		
Dama dama	Fallow Deer	DA
Meles meles	Badger	BA
Nyctalus leisleri	Leisler's Bat	EPS(Sch2), WCA5
Nyctalus noctula	Noctule Bat	EPS(Sch2), WCA5, S41
Pipistrellus pipistrellus	Common Pipistrelle	EPS(Sch2), WCA5
Pipistrellus pygmaeus	Soprano Pipistrelle	EPS(Sch2), WCA5, S41
<i>Pipistrellus</i> sp.	a Pipistrelle bat	EPS(Sch2), WCA5
Plecotus auritus	Brown Long-eared Bat EPS(Sch2), WCA5	



# **APPENDIX C – ABBREVIATIONS**

Table 4 displays abbreviations of protected species legislation.

Table 4: Glossary of Abbreviations Used in this Report:

Code	Full Title	Explanation
Amber	Amber list	Amber listed species have a population status in the UK of medium conservation concern.
BA	The Protection of Badgers Act 1992	Legislation making it an offence to kill, injure or take a Badger, or to damage or interfere with a sett unless a licence is obtained from a statutory authority.
BAP	Biodiversity Action Plan	A plan that identifies threats to significantly important species and habitats, and sets out targets and actions to enhance or maintain biodiversity.
DA	The Deer Act 1991	All wild deer with the exception of Muntjac ( <i>Muntiacus reevesi</i> ) and Chinese Water deer ( <i>Hydropotes inermis</i> ) are protected by a closed season.
ENG BSBI RDB	A Vascular Plant Red List for England	A list published in 2014 by the Botanical Society of Britain and Ireland of the red list status of plants in England. Measured against standardised IUCN criteria.
ENG BSBI RDB(CR)	Critically Endangered	A BSBI Red List designation for species at an extremely high risk of extinction.
ENG BSBI RDB(EN)	Endangered	A BSBI Red List designation for species at a very high risk of extinction.
ENG BSBI RDB(VU)	Vulnerable	A BSBI Red List designation for species at high risk of extinction.
EPS (Sch 2)	European Protected Species (Schedule 2)	European protected animal species (listed on <i>Schedules 2</i> of <i>The Conservation of Habitats and Species</i> (Amendment) <i>Regulations 2012</i> )
EPS (Sch 5)	European Protected Species (Schedule 5)	European protected plant species (listed on <i>Schedules 5</i> of <i>The Conservation of Habitats and Species</i> (Amendment) <i>Regulations 2012</i> )
GB RDB	Red Data Book Species	Species identified in one of the UK Red Data 2001.
GB RDB(CR)	Critically Endangered	An IUCN Red List designation for species at an extremely high risk of extinction.
GB RDB(EN)	Endangered	An IUCN Red List designation for species at a very high risk of extinction.
GB RDB(VU)	Vulnerable	An IUCN Red List designation for species at high



Code	Full Title	Explanation
		risk of extinction.
HAP	Habitat Action Plan	A plan that identifies threats to a priority habitat and sets out targets and actions to enhance or maintain that habitat.
IUCN	International Union for Conservation of Nature and Natural Resources (also known as The World Conservation Union)	A worldwide partnership and conservation network to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.
LBAP	Local Biodiversity Action Plan	A plan that identifies threats to locally important species and habitats, and sets out targets and actions in Species Action Plans and Habitat Action Plans to enhance or maintain biodiversity at the county or regional level.
LHAP	Local Habitat Action Plan	A plan that identifies threats to a locally important priority habitat and sets out targets and actions to enhance or maintain that habitat.
LSAP	Local Species Action Plan	A plan that identifies threats to locally important species, and sets out targets and actions to prevent losing that species from the local area.
Notable	Scarce and threatened invertebrates	Invertebrate species which are estimated to occur within the range of 16 to 100 10km squares but subdivision into Notable A and Notable B categories is not possible as there is insufficient information available).
Notable:A	Scarce and threatened invertebrates	Taxa which do not fall within Red Data Book categories but which are none-the-less uncommon in Great Britain and thought to occur in 30 or fewer 10km squares of the National Grid or, for less well-recorded groups, within seven or fewer vice-counties.
Notable: B	Scarce and threatened invertebrates	Taxa which do not fall within Red Data Book categories but which are none-the-less uncommon in Great Britain and thought to occur in between 31 and 100 10km squares of the National Grid or, for less-well recorded groups between eight and twenty vice-counties.
NN	Nationally Notable	Designation for invertebrate taxa that are thought to be notably important in the UK.
NR	Nationally Rare	Species in 15 or fewer hectads in Great Britain.
NS	National Scarce	Species in 16-100 hectads in Great Britain.
Red	Red List	Red listed species have a population status in the UK with high conservation concern.
SAP	Species Action Plan	A plan that identifies threats to significantly important species, and sets out targets and actions to prevent losing that species to extinction.



Code	Full Title	Explanation
S41	Species of Principal Importance	Species of Principal Importance in England under The Natural Environment and Rural Communities (NERC) Act (2006)
UKBAP	UK Biodiversity Action Plan	A plan that identifies threats to locally important species and habitats, and sets out targets and actions in Species Action Plans and Habitat Action Plans to enhance or maintain biodiversity in the UK.
WCA	<i>The Wildlife and Countryside Act 1981</i> (as amended)	Containing 4 Parts and 17 Schedules, the Act covers protection of wildlife (birds, and some animals and plants), the countryside, National Parks, and the designation of protected areas, and public rights of way. All wild plants in Britain are protected from intentional uprooting by an unauthorized person, but land owners, land occupiers, persons authorized by either of these or persons authorized in writing by the Local Authority for the area are exempt. Protection for some species may be limited to certain Sections of the Act ( <i>e.g.</i> S13(2).
WCA1	Schedule 1 of <i>The</i> <i>Wildlife and</i> <i>Countryside Act</i> <i>1981</i> (as amended)	This Schedule lists birds protected by special penalties at all times, but virtually all wild birds have some protection in law. Acts which are prohibited for all wild birds (except derogated 'pest' species) include intentional killing, injuring or taking; taking, damaging or destroying nests in use or being built; taking or destroying eggs; possessing or having control of (with certain exceptions but including live for dead birds, parts or derivative); setting or permitting certain traps, weapons, decoys or poisons. Selling, offering or exposing for sale, possessing or transporting for sale any live wild bird, egg or part of an egg or advertising any of these for sale, or dead wild bird including parts or derivatives are also prohibited. Many birds must be formally registered and ringed if kept in captivity. Schedule I WCA birds are additionally protected from intentional or reckless disturbance while building a nest, or when such a bird is in, on or near a nest containing eggs or young, or intentional or reckless disturbance of dependent young.
WCA5	Schedule 5 of <i>The</i> <i>Wildlife and</i> <i>Countryside Act</i> <i>1981</i> (as amended)	Schedule 5 animals are protected from intentional killing, injuring or taking; possessing (including parts or derivatives); intentional or reckless damage, destruction or obstruction of any structure or place used for shelter or protection; selling, offering or exposing for sale, possessing or transporting for the purpose of



Code	Full Title	Explanation
		sale (alive or dead, including parts or derivatives). Protection of some species is limited to certain Sections of the Act ( <i>e.g.</i> S9(1), S9(4a), S9(4b), S9(5)).
WCA8	Schedule 8 of <i>The</i> <i>Wildlife and</i> <i>Countryside Act</i> <i>1981</i> (as amended)	Plants and fungi protected from intentional picking, uprooting, destroying, trading (including parts or derivatives), <i>etc</i> .



# **APPENDIX D – BOTANICAL TARGET NOTES**

The following botanical Target Notes relate to locations given in Figure 1.

*Target Note 1* – An amenity grassland verge between a car park and hotel. The sward is short and dense (*c*.5 cm high) and dominated by *Festuca rubra* (Red Fescue) and *Holcus lanatus* (Yorkshire-fog). There are many broad-leaved herbs, including *Achillea millefolium* (Yarrow), *Anagallis arvensis ssp. arvensis* (Scarlet Pimpernel), *Cirsium arvense* (Creeping Thistle), *Geranium robertianum* (Herb-Robert), *Geranium* sp (a Crane's-bill), *Helminthotheca echioides* (Bristly Oxtongue), *Senecio jacobaea* (Common Ragwort), *Taraxacum sect. Ruderalia* (Common Dandelion) and *Trifolium repens* (White Clover).

There is a bed of ornamental shrubs along the north-eastern boundary, dominated by *Lavandula angustifolia* (Garden Lavender) and *Tamarix gallica* (Tamarisk) as well as a row of ornamental *Betula* sp (a Birch).

*Target Note 2* – An area of ephemeral and short perennial vegetation as well as large patches of bare earth. This appears to be colonising areas which have recently been cleared. The vegetation is sparse and includes *Chenopodium album* (Fat-hen), *Festuca rubra* (Red Fescue), *Geranium* sp (a Crane's-bill), *Helminthotheca echioides* (Bristly Oxtongue), *Myosotis* sp (a Forget-me-not), *Rumex obtusifolius* (Broad-leaved Dock), *Solanum nigrum* (Black Nightshade) and *Urtica dioica* (Common Nettle).

*Target Note 3* – Rough grassland behind the airfield security fence. This has an open, sparse sward dominated by *Dactylis glomerata* (Cock's-foot). Also present are *Festuca rubra* (Red Fescue) and *Holcus lanatus* (Yorkshire-fog). Broad-leaved herbs dominate, including *Blackstonia perfoliata* (Yellow-wort), *Cirsium arvense* (Creeping Thistle), *Helminthotheca echioides* (Bristly Oxtongue), *Rhamnus catharticus* (Buckthorn), *Rosa canina* (Dog-rose) and *Urtica dioica* (Common Nettle).

*Target Note 4* – A large area of ornamental and plantation woodland forming screening planting adjacent to a car park. The woodland is predominantly young and semi-mature trees and is dense with no field layer. It is dominated by *Acer campestre* (Field Maple) with scattered *Corylus avellana* (Hazel), *Pinus* sp (a Pine), *Populus alba* (White Poplar), *Rhamnus catharticus* (Buckthorn), *Rosa canina* (Dog-rose) and *Sambucus nigra* (Elder).

*Target Note 5* – A steep embankment of predominantly bare ground but including some patches of colonising ephemeral and short perennial vegetation. This is dominated by *Dipsacus fullonum* (Teasel). There are also wetter areas at the base of the embankment which have patches of *Carex pendula* (Pendulous Sedge), *Carex* sp (a Sedge) and *Juncus inflexus* (Hard Rush). The remainder of the slope includes *Cirsium arvense* (Creeping Thistle), *Epilobium hirsutum* (Great Willowherb), *Holcus lanatus* (Yorkshire-fog), *Potentilla reptans* (Creeping Cinquefoil), *Primula vulgaris* (Primrose), *Ranunculus repens* (Creeping Buttercup), *Rumex obtusifolius* (Broad-leaved Dock), *Senecio jacobaea* (Common Ragwort), *Urtica dioica* (Common Nettle) and *Viola riviniana* (Common Dog-violet).

*Target Note 6* – A small, gappy hedgerow around a wooden fence. This is *c.* 1 m high and 1 m wide. It is dominated by *Ligustrum ovalifolium* (Garden Privet) with some *Acer* 



*campestre* (Field Maple), *Corylus avellana* (Hazel) and *Rhamnus catharticus* (Buckthorn). The field layer is bare earth.

*Target Note 7* – An area of very short, rabbit grazed amenity grassland adjacent to a car park and footpath. The sward is dense and dominated by *Festuca rubra* (Red Fescue). Also present are *Plantago major* (Greater Plantain), *Potentilla reptans* (Creeping Cinquefoil), *Ranunculus repens* (Creeping Buttercup), *Trifolium repens* (White Clover) and *Veronica chamaedrys* (Germander Speedwell).

*Target Note 8* – A large expanse of amenity grassland along a road verge and embankment at the eastern corner of the site. This has a short, dense sward *c*.5 cm high and is dominated by *Holcus lanatus* (Yorkshire-fog) with some *Festuca rubra* (Red Fescue). Other species present include *Bellis perennis* (Daisy), *Carex* sp (a Sedge), *Cirsium arvense* (Creeping Thistle), *Plantago lanceolata* (Ribwort Plantain), *Ranunculus repens* (Creeping Buttercup) and *Trifolium repens* (White Clover). There are scattered ornamental trees including *Betula pendula* (Silver Birch), *Corylus avellana* (Hazel), *Fagus sylvatica* (Beech), *Pinus* sp (a Pine), *Sorbus aria* (Common Whitebeam) and *Tilia* sp (a Lime).



# APPENDIX E – ESSEX FIELD CLUB DATA REPORT

# **Essex Recorders partnership Datasearch Report**

# **Essex Field Club**

In partnership with Basildon Council Buglife Butterfly Conservation Essex Amphibian & Reptile Group Essex Bat Group Essex Birdwatching Society



Registered Charity Number 1113963

for proposals affecting small sites, or buildings or barns such as residential house extension, loft extension, barn conversion or similar which may affect protected species

Bio and Geodiversity data regarding

856786 Stansted Radius 1km from TL55852382 Customer Reference: P0262038

On behalf of

Miss Ruth Gregory RSK

EFC2425, 04 Oct 2016

When information from this report is provided to a planning authority or as part of a desk study to support an Environmental Statement or planning application, then the report must be provided in full and not changed or redacted.

The Essex Field Club, Registered Charity Number 1113963.

Registered Office: Green Centre, Wat Tyler Country Park, Pitsea Hall Lane, Pitsea, Basildon, Essex SS16 4UH Website: www.essexfieldclub.org.uk. Email: datasearch@essexfieldclub.org.uk or Phone: 01375 371571



# **Essex Recorders partnership**

# **Essex Field Club**

In partnership with Basildon Council Buglife Butterfly Conservation Essex Amphibian & Reptile Group Essex Bat Group Essex Birdwatching Society



Registered Charity Number 1113963

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# Essex Recorders partnership Datasearch Report

Project: 856786 Stansted Search Area: Radius 1km from TL55852382 Our Reference: EFC2425 Customer Reference: P0262038 Dated: 04 Oct 2016

On behalf of:

### Miss Ruth Gregory RSK

This report was compiled using records held by the County Recorders of the Essex Field Club, Basildon Council, Buglife, Butterfly Conservation, Essex Amphibian & Reptile Group, Essex Bat Group, Essex Birdwatching Society and available at the time of creation.

Enclosed within this report is the following information specific to the enquiry site area:

All of a Buzz in Thames Gateway Sites	✓	
B-lines		
Nature Improvement Areas	•	
Special Areas of Conservation	✓	
Special Protection Areas	✓	
Ramsar Sites		
Marine Conservation Zones	•	
Sites of Special Scientific Interest details	✓	
Local Nature Reserves	✓	
Country Parks	✓	
Common Land	✓	
Ancient Woodland Inventory	✓	
Traditional Orchard Inventory	✓	
Priority Habitat Inventory	✓	
Invertebrate Assemblage Information	✓	
Protected Species	✓	
Priority Section 41 Species	•	
National Red List and Scarce Species	•	
Essex Red Data List Species	✓	
All Species Records		
Invasive Species	✓	
Geological Sites	✓	

# 1. Introduction

Biological species recording is largely undertaken by committed naturalists on a voluntary basis and on land with public access. Recording is much more rarely undertaken for planning and development purposes, or such data subsequently provided to centralised biological recording specialists, the County Recorders. Desk studies can therefore only ever provide guidance on what is already known about the species recorded in an area, and absence of species records for a search area does not mean they may not occur. For any site with potential nature conservation significance a full ecological site appraisal should be undertaken and species surveys carried out to complement the information contained in this report.

#### Copyrights

Ownership of the data used in this report remains with the original recorder, Essex Field Club and the Essex Recorders partnership. Copyright of this report remains the property of the Essex Recorders partnership and reproduction is strictly prohibited, except as part of a desk study to support a planning application, when the data use restrictions must be included.

All site boundaries have been mapped using Ordnance Survey OS OpenData subject to the OS OpenData Licence. Persons viewing this material should contact Ordnance Survey for advice if they wish to licence Ordnance Survey data for their own use.

#### Data accuracy

The Essex Recorders partnership does not guarantee the accuracy of any information supplied and shall have no liability for any loss, damage or expense incurred as the result of reliance on any information supplied.

The Essex Recorders partnership can only provide information based on the data held by us. In particular, the absence of records for a species does not necessarily indicate that the species itself is absent, merely that it not been recorded, that we have not received records for it or the data are unavailable in suitable format at this time.

#### Access and use of data

The data provided in this report must not be added to a permanent database without the prior permission of the Essex Recorders partnership or copyright holder. Resale or transfer to third parties is strictly prohibited.

When information in this report is put into the public domain as part of a desk study or Environmental Statement to support a planning application, then the report must be provided in full and not changed or redacted. Data must not be used without inclusion of the data use restrictions.

When publishing information derived from these data, the Essex Field Club, Essex Recorders partnership and any other copyright holders and the date of receipt must be acknowledged.

The data held by the Essex Recorders partnership is updated regularly and will become out-of-date. If you intend to use this data after a period of six months please contact us to confirm that we have no new records.

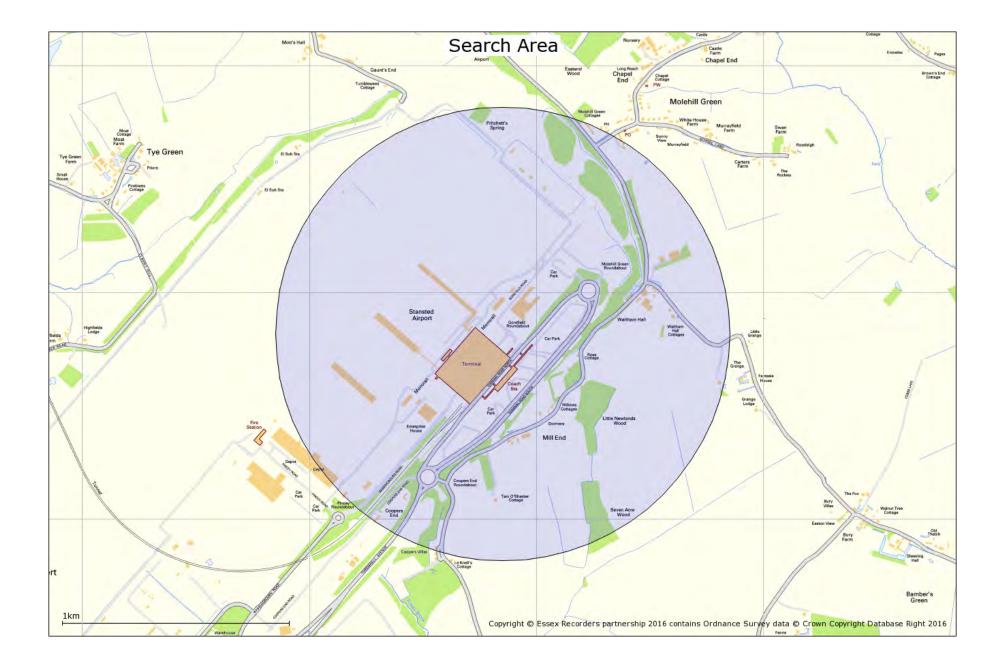
#### Designations

Except for Essex designations included in the Essex Biodiversity Action Plan or Essex Red Data List, or where otherwise indicated, designations used in this report are derived from the Joint Nature Conservation Committee (JNCC) Master list regardless of the status of the species in the county.

# 2. Data available through the Essex Recorders partnership

This report provides access to the following species datasets:

Data Provider	Species Group	County Coverage
EFC/Essex Amphibian & Reptile Group	amphibians and reptiles	County data
Essex Field Club	honey bee and bumblebees	Available county data
Essex Field Club	bees and wasps	County data
Essex Field Club	ants	County data
Essex Field Club	beetles	Available county data
Essex Field Club	centipedes and millipedes	County data
Essex Field Club	hoverflies	Available county data
Essex Field Club	soldier flies and allies	County data
Essex Field Club	flies (other)	County data
Essex Field Club	grasshoppers, crickets and	County data
	allies	
Essex Field Club/Butterfly Conservation	butterflies	County data
Essex Field Club/Essex Moth Group	larger moths	County data
Essex Field Club/Essex Moth Group	micro-moths	County data
Essex Field Club	leafhoppers and allies	Available county data
Essex Field Club	true bugs	Available county data
Essex Field Club	spiders	County data
Essex Field Club	harvestmen	County data
Essex Field Club	pseudoscorpions	County data
Essex Field Club	flowering plant	Available county data
Essex Field Club	woodlice	County data
Essex Field Club	dragonflies & damselflies	County data 2000-2006 +
		other data sample
Essex Field Club	non-vascular plants	Available county data
Essex Field Club	other Hymenoptera	County data
Essex Field Club	molluscs	Sample of data
Essex Field Club	lichens	Sample of data
Essex Field Club	fungi	Available county data
Essex Field Club	other mammals	County data
Essex Field Club	bats	County data
Essex Field Club	Invasive species	Available data
Essex Field Club	birds	Small number of records
Essex Field Club	slime moulds	Small number of records
EFC Schemes	EFC Schemes records	EFC Schemes records
Essex Bat Group	bats	Dataset
Essex Birdwatching Society	birds, with incorporated	County data for 2013
	Birdtrack data	



# Sections on site designations

The following sections provide data on site designations in relation to the datasearch request search area. For statutory designated conservation sites, these are provided on maps expanded to cover a 5km radius.

We cannot currently provide information on Local Wildlife Sites. For these contact the local authority or see www.localwildlifesites.org.uk/ and www.essexwt.org.uk/protecting-wildlife/local-wildlife-sites

# 3. All of a Buzz in the Thames Gateway

No All of a Buzz in the Thames Gateway sites are identified in relation to the search area

# 4. Nature Improvement Areas (NIAs)

See www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/default.aspx Nature Improvement Areas (NIAs) were introduced by the Government's Natural Environment White Paper to 'enhance and reconnect nature on a significant scale' in England.

Nature Improvement Areas encompass areas of land that include natural features and wildlife habitats but also include roads, housing developments and other man-made elements. They are areas that have been identified for their opportunities to restore nature at a landscape-scale alongside other land-uses.

These areas will become much better places for wildlife – creating more and better-connected habitats at a landscape scale, providing space for wildlife to thrive and adapt to climate change.

They will help people as well as wildlife – through enhancing a wide range of benefits that nature provides, such as recreation opportunities, flood protection, cleaner water and carbon storage.

NIAs should enhance existing ecological networks by:

- Increasing the number of wildlife sites
- Increasing the size of existing wildlife sites
- Improving connectivity between sites
- Creating wildlife corridors
- Improving the management of existing wildlife sites

The twelve initial NIAs extend from Morecambe Bay in the North West to the Wild Purbeck in the South West. One affecting Essex is the Greater Thames Marshes NIA in the south of the county.

#### No Nature Improvements Areas are identified near the search area

## 5. B-Lines network

Map shows routes within the B-Lines network, identified by Buglife and a wide range of conservation and landowner partners. B-Lines aims to coordinate the delivery of wildflower-rich habitats to aid pollinator movement across the landscape. For more information visit www.buglife.org.uk/b-lines

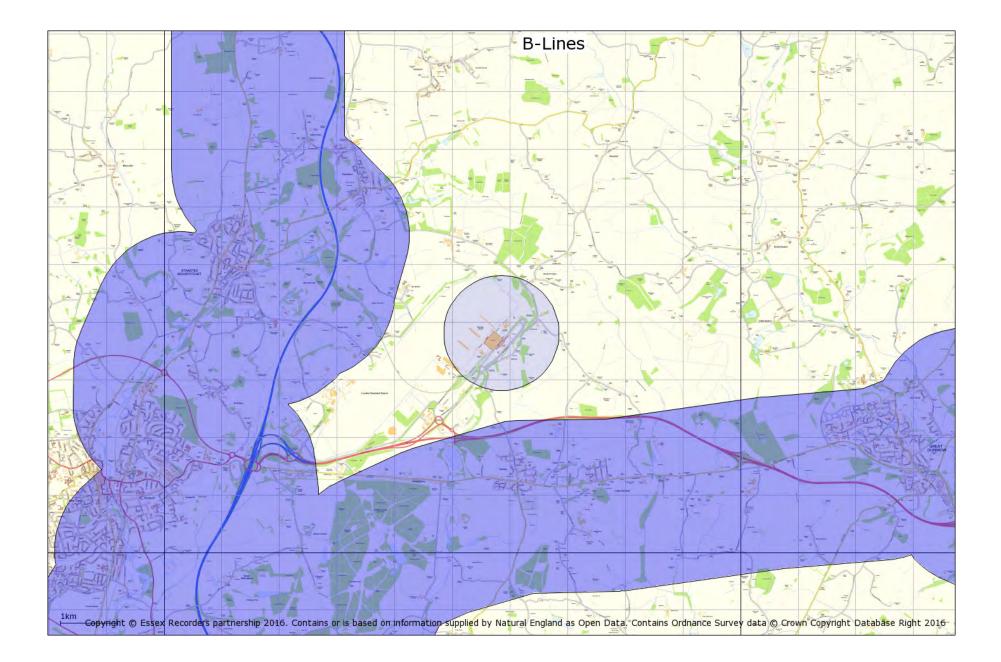
B-Lines is a landscape scale initiative to enhance declining pollinator populations by connecting up the best remaining wildflower-rich habitats through the creation or restoration of wildflower habitats. B-Lines was identified as a method to reverse pollinator declines in the National Pollinator Strategy's Implementation Plan, by aiding their movement across the fragmented landscape.

B-Lines are 3km corridors within which wildflower habitat restoration and creation can be focused and co-ordinated to maximise gains for pollinators. Habitat can be delivered by organisations, landowners, businesses, communities or individuals. Contribution to the B-Lines can be achieved through a variety of wildflower enhancement methods, such as habitat restoration (e.g. scrub clearance/re-introducing management/green haying), wildflower meadow creation in species poor grasslands, wildlife gardens, landowners entering agri-environment schemes, orchard planting, disturbance management and brownfield habitat creation, bee friendly formal planting, living roofs, etc.

Where relevant, planning applications in or around B-Lines should consider what they can contribute to the growing resources of pollinators in B-Lines. This will help to ensure that mitigation proposals align with ongoing work in the surrounding area for pollinators. It is important to note, however, that any planning applications should seek to protect and enhance the wildlife interests of all taxonomic groups and habitats, not pollinators and their requirements in isolation.

Buglife's online B-Lines hub includes an interactive map where habitat work can be uploaded to collate information on wildflower enhancements across the UK, as well as specific pollinator advice.

#### B-Lines identified in relation to the search area are shown on the map.



## 6. Special Areas of Conservation

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A Special Area of Conservation (SAC) is an area which has been given special protection under the European Union's Habitats Directive. SACs provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.

See www.naturalengland.org.uk/ourwork/conservation/designations/sac/

No Special Area/s of Conservation are identified in relation to the search area

## 7. Special Protection Areas

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A Special Protection Area (SPA) is an area of land, water or sea which has been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within the European Union. SPAs are European designated sites, classified under the European Wild Birds Directive which affords them enhanced protection.

See www.naturalengland.org.uk/ourwork/conservation/designations/spa/

#### No Special Protection Area/s are identified in relation to the search area

## 8. Ramsar sites

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Ramsar sites are wetlands of international importance, designated under the Ramsar Convention.

Wetlands are defined as areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.

Ramsar sites may also incorporate riparian (banks of a stream, river, pond or watercourse) and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands.

#### What is the Ramsar Convention?

The Ramsar Convention is an international agreement signed in Ramsar, Iran, in 1971, which provides for the conservation and good use of wetlands. The UK Government ratified the Convention and designated the first Ramsar sites in 1976.

See www.naturalengland.org.uk/ourwork/conservation/designations/ramsars/

#### No Ramsar Site/s are identified in relation to the search area

## 9. Marine Conservation Zone/s

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Marine Conservation Zones (MCZs) are a type of Marine Protected Area. They protect areas that are important to conserving the diversity of nationally rare or threatened habitats and/or species and those places containing habitats and/or species that are representative of the biodiversity in our seas.

The Marine and Coastal Access Act 2009 (Part 5) enables Defra Ministers to designate and protect Marine Conservation Zones (MCZs). These are a type of marine protected area, which will exist alongside European marine sites [Special Areas of Conservation (SACs) and Special Protected Areas (SPAs)], SSSIs and Ramsar sites to form an ecologically coherent network of marine protected areas.

See http://www.naturalengland.gov.uk/ourwork/marine/mpa/mcz/default.aspx

#### No Marine Conservation Zone/s are identified in relation to the search area

## **10. National Nature Reserves**

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England's National Nature Reserves (NNRs) represent many of the finest wildlife and geological sites in the country. Our first NNRs emerged in the postwar years alongside the early National Parks, and have continued to grow since then.

Natural England is the body empowered to declare NNRs in England, the Reserves being a selection of the very best parts of England's Sites of Special Scientific Interest. It is this underlying designation which gives NNRs their strong legal protection. The majority also have European nature conservation designations.

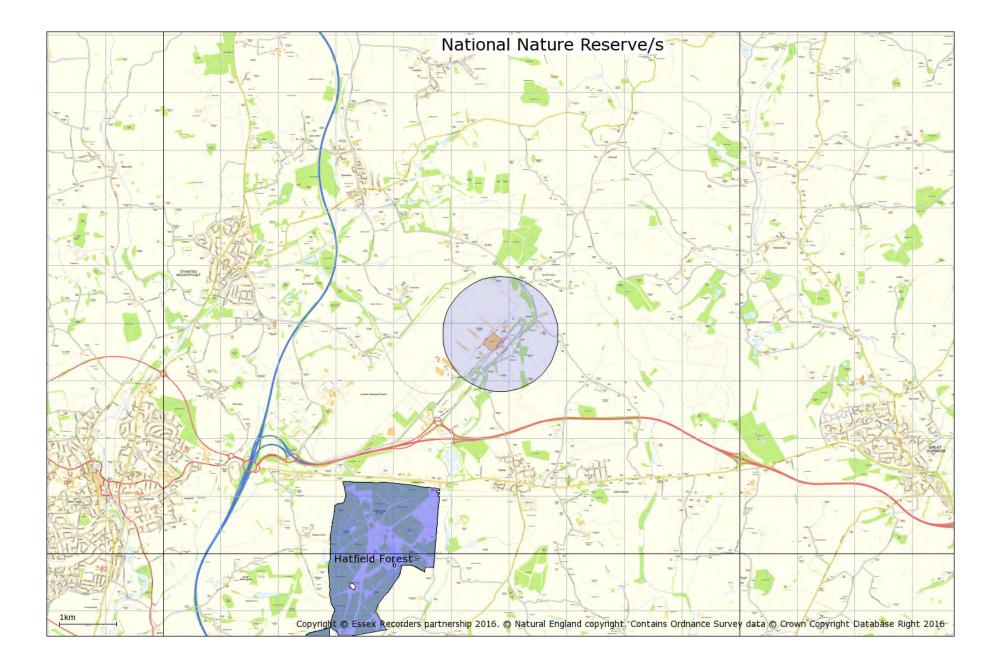
Nearly every type of vegetation is found in England's NNRs, from coastal salt-marshes, dunes and cliffs to downlands, meadows and the subtle variations of our native woodlands. Scarce and threatened habitats such as chalk downs, lowland heaths and bogs and estuaries are conserved in NNRs.

Many NNRs contain nationally important populations of rare flowers, ferns and mosses, butterflies and other insects, and of course nesting and wintering birds. Examples include unique alpine plants at Upper Teesdale and the beautiful field of fritillary lilies at North Meadow, Cricklade, Wiltshire.

See www.naturalengland.org.uk/ourwork/conservation/designations/nnr/default.aspx

#### There is 1 National Nature Reserve/s identified in relation to the search area.

Hatfield Forest



## **11. Sites of Special Scientific Interest**

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There are over 4,100 Sites of Special Scientific Interest (SSSIs) in England, covering around 7% of the country's land area. Over half of these sites, by area, are internationally important for their wildlife, and designated as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites. Many SSSIs are also National Nature Reserves (NNRs) or Local Nature Reserves (LNRs).

SSSIs are the country's very best wildlife and geological sites. They include some of our most spectacular and beautiful habitats - large wetlands teeming with waders and waterfowl, winding chalk rivers, gorse and heather-clad heathlands, flower-rich meadows, windswept shingle beaches and remote uplands moorland and peat bog.

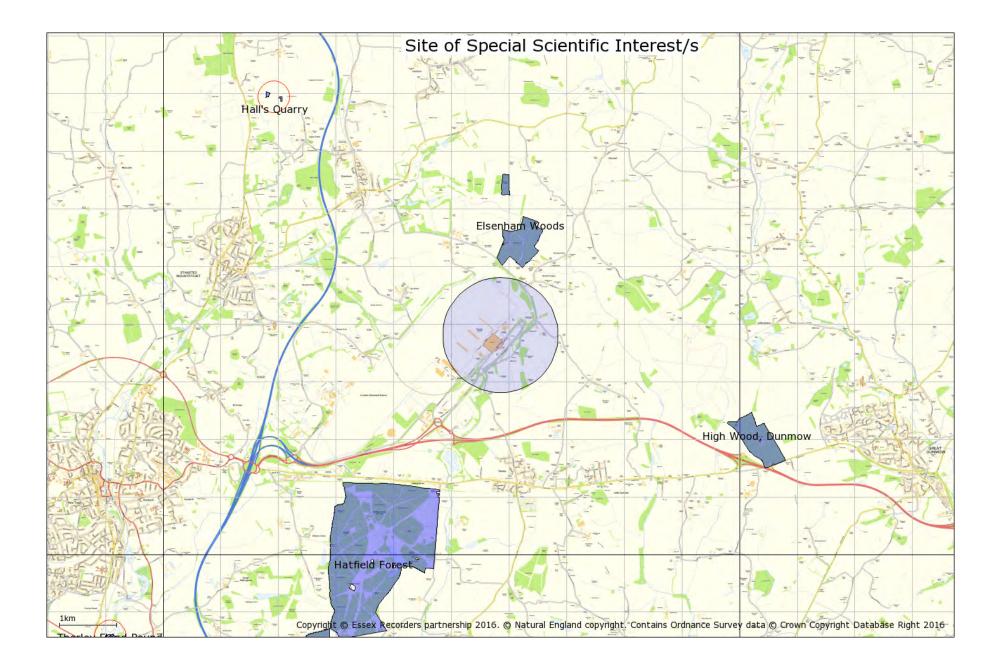
It is essential to preserve our remaining natural heritage for future generations. Wildlife and geological features are under pressure from development, pollution, climate change and unsustainable land management. SSSIs are important as they support plants and animals that find it more difficult to survive in the wider countryside. Protecting and managing SSSIs is a shared responsibility, and an investment for the benefit of future generations.

See www.sssi.naturalengland.org.uk/Special/sssi/index.cfm

For information on SSSI Impact Risk Zones (IRZs) see http://www.magic.gov.uk/Metadata\_for\_magic/SSSI%20IRZ%20User%20Guidance%20v1.9%20MA GIC%2003November2014.pdf

#### There are 5 Site of Special Scientific Interest/s identified in relation to the search area.

Elsenham Woods Hall's Quarry Hatfield Forest High Wood, Dunmow Thorley Flood Pound



## 12. Local Nature Reserves

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Local Nature Reserve (or LNR) is a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006, by principal local authorities.

Local Nature Reserves (LNRs) are for both people and wildlife. They are places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it.

By declaring Local Nature Reserves (LNRs), local authorities can provide many benefits for both people and wildlife.

To:

• increase people's awareness and enjoyment of their natural environment

• provide an ideal environment for everyone to learn about and study nature

• help to build relationships with national and local nature conservation organisations and local people protect wildlife habitats and natural features provide a great opportunity for people to become involved in managing their local environment offer a positive use for land which they would prefer was left undeveloped make it possible to apply bye-laws which can help in managing and protecting the site.

See www.naturalengland.org.uk/ourwork/conservation/designations/lnr/

#### No Local Nature Reserve/s are identified in relation to the search area

## 13. Country Park/s

Natural England recognises country parks as significant places that contribute to England's accessible natural greenspace.

Many are located near or within towns and cities and therefore close to where people live. All provide a wide range of opportunities for recreation, health and education and improve the quality of life for their local communities.

Country Parks were established as a result of the 1968 Countryside Act and there are currently more than 400 sites that call themselves Country Parks in England. They are visited by over 70 million visitors a year.

They are public green spaces often at the edge of urban areas which provide places to enjoy the outdoors and experience nature in an informal semi-rural park setting. Country Parks normally have some facilities such as a car park, toilets, perhaps a cafe or kiosk, paths and trails, and visitor information. There is not necessarily public right of access, although most are publicly accessible; some charge entry others do not.

See www.naturalengland.gov.uk/ourwork/enjoying/places/countryparks/default.aspx

#### No Country Park/s are identified in relation to the search area

## 14. Open Country and Common Land

#### Conclusive Map Data of Open Country:

Created under the Countryside and Rights of Way (CROW) Act 2000, the Open Country (OC) data was digitised from OS MasterMap by the contractors Black and Veatch Consulting Limited on behalf of the Countryside Agency. It consists of all land that appears to the Countryside Agency to consist wholly or predominantly of mountain, moor, heath and down and is not registered common land. It includes any modifications determined by the Planning Inspectorate as a result of appeals. It includes areas of land that are excepted from the rights of access as specified in Part 1 of Schedule 1 of the CROW Act. It may be amended for certain errors under current error regulations. The map must be reviewed not more than 10 years after its issue in conclusive form.

#### Conclusive Map Data of Registered Common Land:

Created under the CROW Act 2000, the Registered Common Land (RCL) data was digitised from DNF Landline by the contractors Geodata on behalf of the Countryside Agency. It is a digitised copy of land registered as common land under the Commons Registration Act 1965. It includes any modifications determined by the Planning Inspectorate as a result of appeals. It includes areas of land that are excepted from the rights of access as specified in Part 1 of Schedule 1 of the CROW Act. It may be amended for certain errors under current error regulations. The map must be reviewed not more than 10 years after its issue in conclusive form.

Important Notes:

There is no right of access to land shown as OC or RCL until the relevant Commencement Order for the area becomes effective.

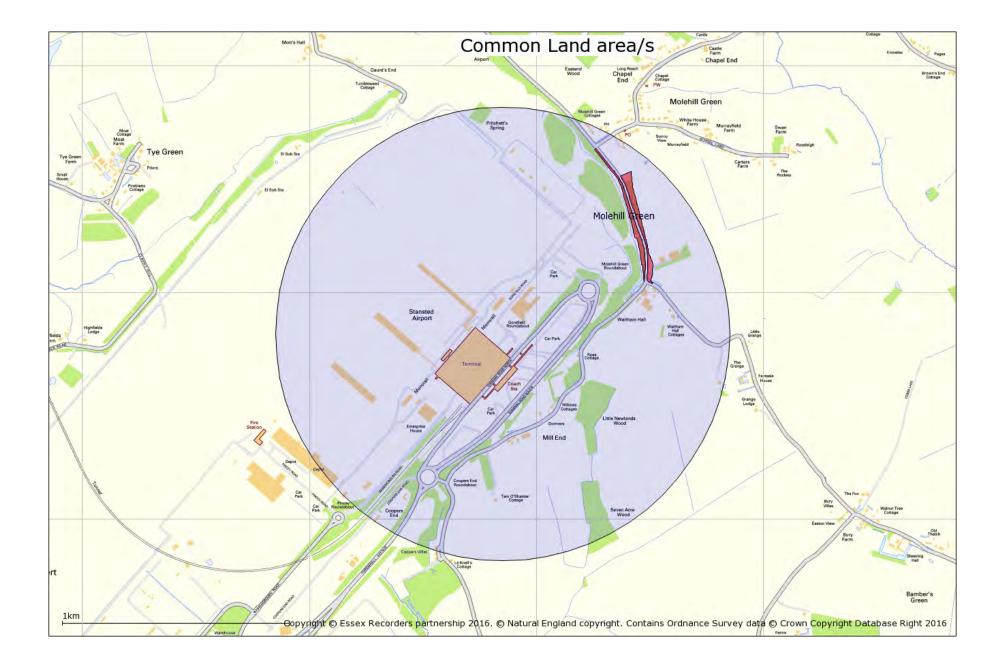
There is no right of access to land shown as OC or RCL where such land meets any of the descriptions of excepted land as specified in Part 1 of Schedule 1 of the CROW Act. This includes areas of land such as racecourses, aerodromes and military byelaw land.

There may be restrictions on the right of access in some areas of land. Under the CROW Act, landowners or tenants of access land have a 28-day allowance of restrictions each calendar year and can also apply for longer term restrictions. Digital data of restrictions to the rights of access will not be made available to third parties. All restrictions can be viewed on the website http://www.countrysideaccess.gov.uk. More information about restrictions can be found here: http://www.openaccess.gov.uk

#### No Open Country area/s are identified in relation to the search area

#### There is 1 Common Land area/s identified in relation to the search area. (Red polygon/s)

Molehill Green



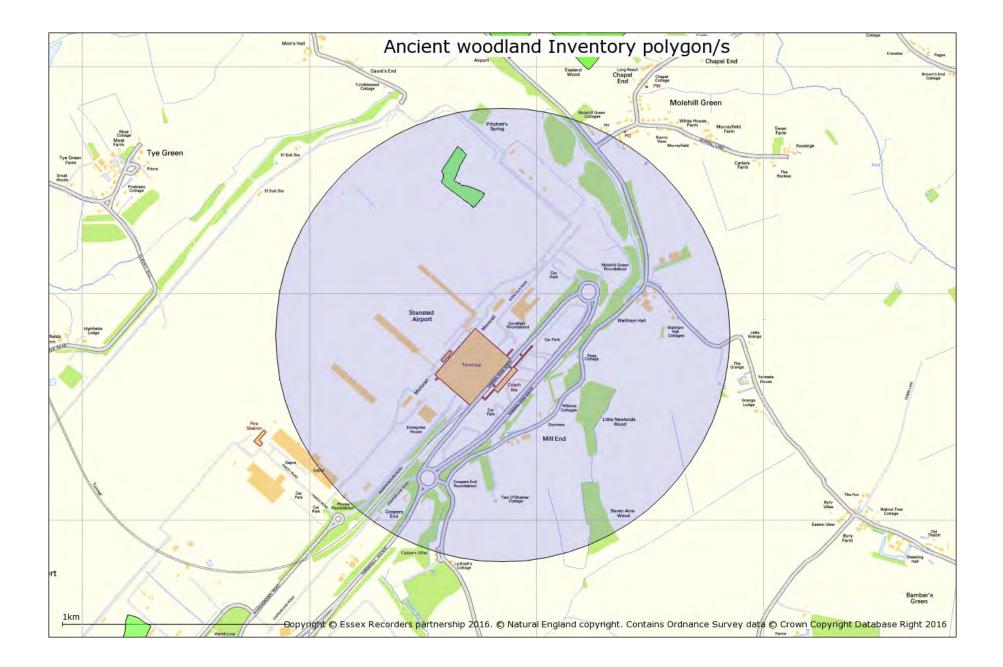
## **15. Ancient woodland Inventory**

Ancient Woodlands (England). © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right [2016]

Ancient woodland is land that has had a continuous woodland cover since at least 1600 AD and may be ancient semi-natural woodland (ASNW), which retains a native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally, or plantation on ancient woodland sites (PAWS) where the original tree cover has been felled and replaced by planting, often with conifers, and usually over the last century.

See www.naturalengland.org.uk/about\_us/whatwedo/partnership/casestudies/ancientwoodland.aspx

Ancient woodland Inventory polygon/s identified in relation to the search area are shown on the map.



## 16. Traditional Orchard Inventory

Natural England Traditional Orchard Inventory (Provisional) for England© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right [2016]

#### Definitions

#### **Traditional Orchard**

For the purpose of the inventory, Traditional Orchards are defined as sites where at least five fruit trees must be present with no more than 20m between their crown edges. Traditional Orchards are managed in a low intensity way with the orchard floor grazed or mown for hay and with little or no chemical input.

#### The Traditional Orchard Inventory for England

The inventory identifies Traditional Orchard sites in England. Traditional Orchards are located using aerial photography, Ordnance Survey MasterMap, external datasets compiled from historic surveys, and ground survey ("ground-truthing"). The information recorded about each orchard and stored on the Inventory Database includes its grid reference, its area in hectares, management features of the site and its condition (based on condition assessment criteria).

#### Limitations of the Traditional Orchard Inventory:

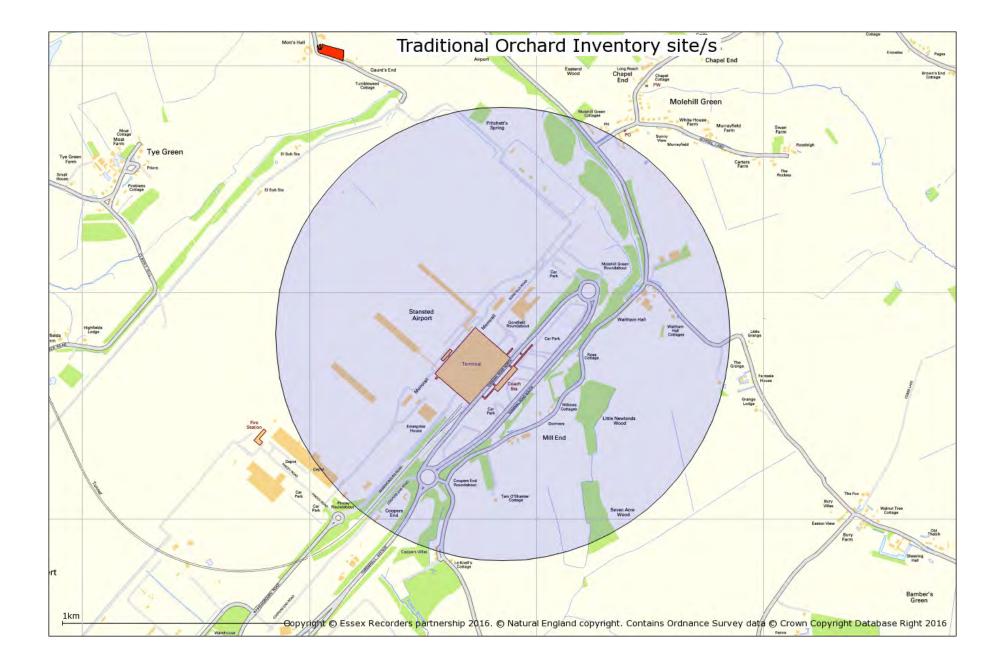
The inventory is classed as 'provisional' because it is under a constant system of review and is updated as new information is received or actual changes are recorded. If you have information that would help Natural England to update the inventory please let them know.

#### Traditional Orchards HAP Definition

Traditional orchards are defined, for priority habitat purposes, as groups of fruit and nut trees planted on vigorous rootstocks at low densities in permanent grassland; and managed in a low intensity way. Cobnut plats are also included.

The minimum size of a traditional orchard is defined as five trees with crown edges less than 20m apart. However, the potential biological and genetic interest of sites with fewer trees, such as relict orchards and individual trees within gardens is noted. Where appropriate these should be considered as potential restoration sites. It is recognised that other sites which fall outside the definition, such as organic bush orchards and fruit collections in walled gardens may also have biodiversity value, as well as historic, cultural and genetic importance.

#### There is 1 Traditional Orchard Inventory site/s identified in relation to the search area.



## **17. Priority Habitat Inventory**

Natural England Priority Habitat Inventory © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right [2016]

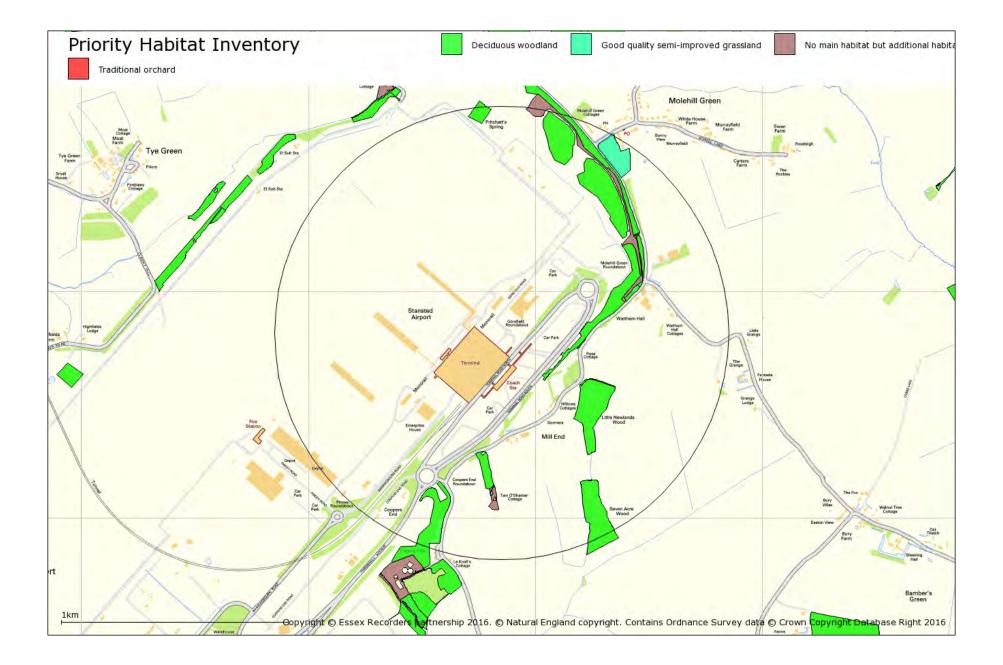
Natural England's Priority Habitats' Inventory (PHI) is a spatial dataset that describes the geographic extent and location of priority habitats in England. The PHI has been developed to replace twenty-four separate Biodiversity Action Plan (BAP) priority habitat inventories.

PHI maps habitats of principal importance for biodiversity in England. These were previously known as Biodiversity Action Plan priority habitats.

The PHI represents the best available information on priority habitats at an England-wide level; it is not and will never be a definitive dataset for priority habitats across England. As such it should be recognised that the PHI provides a generalised map of the priority habitats in an area.

Marine and freshwater habitats are not currently included, nor are Arable field margins, Hedgerows, Inland rock and scree habitats. Some other habitats, such as Open mosaic habitats on previously developed land and Wood-pasture and parkland are also not included in PHI, but have their own separate inventories.

Priority Habitat Inventory identified in relation to the search area are shown on the map.



# **Species data**

The following sections provide species data in accordance with the datasearch request. Please note that species records are included for all 1km squares crossed by the search area. This is because many records are made at 1km resolution, and they could have been recorded anywhere within the 1km square. The data is provided for the search area on this basis and not the wider area shown on the site designation maps.

Search polygons which are not a radius from a point include a 1km extension outside the polygon boundary extents. Search polygons made up of a corridor may however include data from a wider area as defined by the east, west, south and north edges of the area.

Natural England provides new standard advice on how to address invertebrates and their habitats within the planning system. The standard advice is hosted at http://habitatsurveys.esdm.co.uk/Data/Sites/1/media/invertebrate-standard-advice-fo r-essex-oct-2014.pdf

## **18. Invertebrate Assemblage Information**

This information is based on the use of Natural England's ISIS (2010) methodology. Assemblages are identified from records for the search area and 1km squares crossed by the search area. Please note: these assemblages are identified from existing data and the results only indicate significance already identified from untargeted survey. Specific targeted specialist survey work should be undertaken of the search area to further evaluate identified invertebrate assemblages and identify others which may be important.

#### Broad Assemblage Types

Invertebrate assemblages are helpful in identifying nature conservation significance of a recorded invertebrate fauna. The following Broad Assemblage Types are highlighted:

#### Broad Assemblage Types identified:

arboreal canopy	close to favourable condition
unshaded early successional mosaic	favourable condition
grassland & scrub matrix	close to favourable condition
shaded field & ground layer	important assemblage

#### Specific Assemblage Types

Specific Assemblage Types (SATs) are characterised by ecologically restricted species and are generally only expressed in lists from sites with conservation value. They have intrinsic value for nature conservation and are designed to be used in setting invertebrate conservation objectives on SSSIs (Lott, 2008).

#### Specific Assemblage Types identified:

heartwood decay	
bark & sapwood decay	
fungal fruiting bodies	
epiphyte fauna	
bare sand & chalk	
open short sward	
reedfen and pools	
scrub edge	
rich flower resource	
scrub-heath & moorland	

## **19. Protected Species**

Protected species have protection under national legislation such as the Wildlife and Countryside Act 1981 and European legislation such as the Habitats Directive.

Please note the following:

(1) If there is no record of a particular protected species, this does not signify that that the species is absent from the site in question. It may mean that it has not been recorded, that the site has not been surveyed for this species, or that data relating to its presence has not been made available to us.

(2) The presence of a protected species record does not mean that the species is still present. It means that the species was recorded at that time and place. The implications of the record should be further evaluated, and a survey to establish the current status may be required.

(3) The following summary of legislation is designed purely as a basic guide, if any action is to be taken regarding any of the protected species listed, then it is imperative that the full relevant legislation be consulted.

#### WILDLIFE PROTECTION LEGISLATION IN ENGLAND

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

#### European Law

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

The Bonn Convention on Migratory Species of Wild Animals (1979 & 1994) requires the protection of migratory animals. It was implemented by the EC Birds Directive (Council Directive 79/409/EEC) and the EC Habitats Directive (Council Directive 92/43/EEC).

The EC Habitats Directive aims to establish a network of protected areas in order to maintain the distribution and the abundance of threatened species and habitats. A number of species are listed in the annexes.

Annex II lists animals and plants whose conservation requires the designation of Special Areas of Conservation (SACs).

Annex IV lists animals and plants in need of strict protection. For the animals, this prohibits deliberate capture, killing, disturbance (especially during breeding period), destruction or taking of eggs from wild, and destruction or deterioration of breeding sites or resting places. For the plants, this prohibits deliberate picking, collecting, uprooting, cutting, destruction, and trade in entire plants or parts, at all stages of life.

Annex V lists animals and plants for which taking in the wild may be subject to management measures.

#### National Law

#### Wildlife and Countryside Act

The Wildlife and Countryside Act 1981 (as amended) is the main source of legal protection for wildlife in England and was strengthened by the Countryside and Rights of Way Act 2000. A statutory five-yearly review of Schedules 5 and 8 (protected wild animals and plants) is undertaken by the relevant authorities. Species protection is provided under Schedules 1, 5, 6 and 8:

Schedule 1 lists bird species that are rare, endangered, declining or vulnerable. The Schedule is divided into two parts. Part I lists birds which receive special protection, these birds receive additional protection from disturbance at the nest. Part II lists birds that receive the same level of special protection, but only during the breeding season.

Schedule 5 protects animal (other than bird) species from certain actions, according to the sections of the Act under which they are listed:

- S9(1) prohibits the intentional killing, injury or taking.
- S9(2) protection is limited to possessing and controlling.
- S9(4a) prohibits the damaging, destroying or obstructing access to any place used by the animal for shelter or protection.
- S9(4b) prohibits disturbing the animal while it is occupying any structure or place which it uses for shelter or protection.
- S9(5) prohibits the selling, offering for sale, possessing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from such an animal. Species on this Schedule do not appear on the PSI.

Schedule 6 lists animals that may not be killed by certain methods. Even humane trapping for research requires a licence.

Schedule 8 lists plant species for which it is prohibited to intentionally pick, uproot, destroy, trade in, or possess (for the purposes of trade).

Under the Wildlife and Countryside Act, all wild plants in Britain are protected from intentional uprooting by an unauthorised person. Landowners, land occupiers, persons authorised by either of these, or persons authorised in writing by the Local Authority for the area are exempt from this, except for Schedule 8 species.

#### **Conservation Regulations**

The Conservation of Habitats and Species Regulations 2010 (as amended) transpose the EC Habitats Directive into national law. In addition to enabling the designation of SACs, the regulations also provide species protection:

Schedule 2 protects the listed animals from deliberate capture, killing, disturbance or trading in.

Schedule 4 protects the listed plants from picking, collecting, uprooting, destroying or trading in.

These actions can be made lawful through the granting of licences by the appropriate authorities. Licences may be granted for a number of purposes, but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild the population of the species concerned.

#### Protection of Badgers Act

The Protection of the Badgers Act prohibits the killing, injuring or taking of badgers and damage or interference with a badger sett, unless licensed to do so by a statutory authority.

#### International and European Obligations

In the UK, species receiving protection under international legislation and agreements are protected through the Wildlife and Countryside Act, so are not shown separately in the BMERC notable species lists. For reference, the relevant categories are shown below.

#### Bern Convention on the Conservation of European Wildlife and Natural Habitats

The Bern Convention aims to ensure the conservation of wild flora and fauna species and their habitats.

- Appendix 1 (strictly protected flora) Plants for which contracting parties will prohibit deliberate picking, collecting, cutting or uprooting.
- Appendix 2 (strictly protected fauna) Animals for which contracting parties will prohibit deliberate capture, possession, killing, damage to or destruction of breeding or resting sites, disturbance or destruction or taking of eggs.
- Appendix 3 (protected fauna) Animals for which contracting parties will include closed seasons and regulate their sale, keeping for sale, transport for sale or offering for sale of live and dead wild animals. (Not included in Notable Species List).

#### Bonn Convention on Migratory Species

The Bonn Convention aims to conserve terrestrial, marine and avian migratory species throughout their range.

- Appendix 1 (migratory species threatened with extinction) Species for which contracting parties will strictly protect and endeavour to conserve or restore the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them.
- Appendix 2 (migratory species that need or would benefit from international co-operation) -Species for which contracting parties will be encouraged to conclude global or regional agreements for the conservation and management of individual species or, more often, of a group of species. (Not included in Notable Species List).

#### The EC Council Directive on the Conservation of Wild Birds

The Birds Directive provides a framework for the conservation and management of all wild birds in Europe. As well as designating important sites for birds as Special Protection Areas, birds are generally protected from deliberate killing or capture and destruction of or damage to their nests or eggs, and deliberate disturbance. Allowances are made for game birds.

## Protected Species Table

Source	Taxon	Group	Vernacular	Status	Location	Position	Records	Latest
Essex Birdwatching Society	Alauda arvensis	bird	Sky Lark	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Alcedo atthis	bird	Common Kingfisher	Bern Convention: Appendix 2, Birds Directive: Annex 1, Wildlife and Countryside Act 1981: Schedule 1 Part 1	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Anas platyrhynchos	bird	Mallard	Birds Directive: Annex 2.1, Convention on Migratory Species: AEWA Annex II, Convention on Migratory Species: Appendix 2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Ardea cinerea	bird	Grey Heron	Convention on Migratory Species: AEWA Annex II	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Ardea cinerea	bird	Grey Heron	Convention on Migratory Species: AEWA Annex II	Mobile-TL5523	TL5523	1	2014
Essex Birdwatching Society	Athene noctua	bird	Little Owl	Bern Convention: Appendix 2, EC Cites: Annex A	Essex Great Chesterford M11 Jct 9	TL5524	1	2013
Essex Birdwatching Society	Buteo buteo	bird	Common Buzzard	Convention on Migratory Species: Appendix 2, EC Cites: Annex A	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Buteo buteo	bird	Common Buzzard	Convention on Migratory Species: Appendix 2, EC Cites: Annex A	Elsenham Hall, near Stansted Mountfitchett	TL5425	1	2014
Essex Birdwatching Society	Columba livia	bird	Common Pigeon	Birds Directive: Annex 2.1, EC Cites: Annex A	stansted airport (rail and bus station area), essex	TL5523	1	2014
Essex Birdwatching Society	Columba palumbus	bird	Common Wood Pigeon	Birds Directive: Annex 2.1	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Columba palumbus	bird	Common Wood Pigeon	Birds Directive: Annex 2.1	stansted airport (rail and bus station area), essex	TL5523	1	2014
Essex Birdwatching Society	Corvus corone	bird	Carrion Crow	Birds Directive: Annex 2.2	stansted airport (rail and bus station area), essex	TL5523	1	2014

Essex	Corvus frugilegus	bird	Rook	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Birdwatching								
Society								
Essex	Corvus frugilegus	bird	Rook	Birds Directive: Annex 2.2	stansted airport	TL5523	1	2014
Birdwatching					(rail and bus station			
Society					area), essex			
Essex	Corvus frugilegus	bird	Rook	Birds Directive: Annex 2.2	Essex, Stansted	TL5523	1	2014
Birdwatching					Airport			
Society								
Essex	Corvus monedula	bird	Western Jackdaw	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Birdwatching								
Society								
Essex	Cyanistes caeruleus	bird	Blue Tit	Bern Convention: Appendix 2	Elsenham	TL5425	1	2014
Birdwatching								
Society								
Essex Field	Dama dama	terrestrial mammal	Fallow Deer	Bern Convention: Appendix 3	TL564242	TL564242	1	1999
Club								
Essex Field	Dama dama	terrestrial mammal	Fallow Deer	Bern Convention: Appendix 3	TL546221	TL546221	2	2004
Club								
Essex Field	Dama dama	terrestrial mammal	Fallow Deer	Bern Convention: Appendix 3	TL558249	TL558249	2	2006
Club								
Essex Field	Dama dama	terrestrial mammal	Fallow Deer	Bern Convention: Appendix 3	TL556249	TL556249	1	2006
Club								
Essex Field	Dama dama	terrestrial mammal	Fallow Deer	Bern Convention: Appendix 3	TL565242	TL565242	1	2003
Club								
Essex Field	Dama dama	terrestrial mammal	Fallow Deer	Bern Convention: Appendix 3	TL554225	TL554225	2	2005
Club								
Essex	Delichon urbicum	bird	Common House	Bern Convention: Appendix 2	Elsenham Hall,	TL5425	1	2013
Birdwatching			Martin		near Stansted			
Society					Mountfitchett			
Essex	Dendrocopos major	bird	Great Spotted	Bern Convention: Appendix 2	Elsenham	TL5425	1	2014
Birdwatching			Woodpecker					
Society								
Essex	Dendrocopos major	bird	Great Spotted	Bern Convention: Appendix 2	Elsenham Hall	TL5425	1	2014
Birdwatching			Woodpecker					
Society								

Essex Field Club	Eptesicus serotinus	terrestrial mammal	Serotine	Bern Convention: Appendix 2, Convention on Migratory Species: Appendix 2, Convention on Migratory Species: EUROBATS Annex I, Habitats Directive: Annex 4, The Conservation (Nature Habitats, etc.) Regulations (NI) 1995: Schedule 2, The Conservation of Habitats and Species Regulations 2010: Schedule 2, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4b, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4c, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5a, Wildlife and	TL540240	TL540240	2	2002
Essex Birdwatching	Erithacus rubecula	bird	European Robin	Countryside Act 1981: Schedule 5 Section 9.5b Bern Convention: Appendix 2	Essex, Stansted Airport	TL5523	1	2014
Society Essex Birdwatching Society	Erithacus rubecula	bird	European Robin	Bern Convention: Appendix 2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Falco tinnunculus	bird	Common Kestrel	Bern Convention: Appendix 2, Convention on Migratory Species: Appendix 2, EC Cites: Annex A	Essex Great Chesterford M11 Jct 9	TL5524	1	2013
Essex Birdwatching Society	Falco tinnunculus	bird	Common Kestrel	Bern Convention: Appendix 2, Convention on Migratory Species: Appendix 2, EC Cites: Annex A	Elsenham Hall	TL5425	1	2014
Essex Birdwatching Society	Gallinula chloropus	bird	Common Moorhen	Birds Directive: Annex 2.2, Convention on Migratory Species: AEWA Annex II, Convention on Migratory Species: Appendix 2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Garrulus glandarius	bird	Eurasian Jay	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Hirundo rustica	bird	Barn Swallow	Bern Convention: Appendix 2	Elsenham Hall, near Stansted Mountfitchett	TL5425	1	2013
Essex Field Club	Meles meles	terrestrial mammal	Badger	Bern Convention: Appendix 3, Protection of Badgers Act: Protection of Badgers Act (1992)	TL566247	TL566247	1	2014

Essex Field Club	Meles meles	terrestrial mammal	Badger	Bern Convention: Appendix 3, Protection of Badgers Act: Protection of Badgers Act (1992)	TL565239	TL565239	1	2010
Essex Birdwatching Society	Milvus milvus	bird	Red Kite	Birds Directive: Annex 1, Convention on Migratory Species: Appendix 2, EC Cites: Annex A, Global Red list status: Near Threatened, Wildlife and Countryside Act 1981: Schedule 1 Part 1	Elsenham Hall, near Stansted Mountfitchett	TL5425	1	2013
Essex Birdwatching Society	Motacilla cinerea	bird	Grey Wagtail	Bern Convention: Appendix 2	Elsenham	TL5425	1	2014
Essex Field Club	Mustela erminea	terrestrial mammal	Stoat	Bern Convention: Appendix 3	TL541241	TL541241	2	1997
Essex Field Club	Nyctalus leisleri	terrestrial mammal	Leisler's Bat / Lesser Noctule Bat	Bern Convention: Appendix 2, Convention on Migratory Species: Appendix 2, Convention on Migratory Species: EUROBATS Annex I, Habitats Directive: Annex 4, The Conservation (Nature Habitats, etc.) Regulations (NI) 1995: Schedule 2, The Conservation of Habitats and Species Regulations 2010: Schedule 2, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4b, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4c, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5a, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5b	TL557237	TL557237	1	1994

Essex Field Club Essex Field	Nyctalus noctula	terrestrial mammal	Noctule Bat	Bern Convention: Appendix 2, Convention on Migratory Species: Appendix 2, Convention on Migratory Species: EUROBATS Annex I, Habitats Directive: Annex 4, The Conservation (Nature Habitats, etc.) Regulations (NI) 1995: Schedule 2, The Conservation of 	TL540241 TL562232	TL540241		2002
Club				<ul> <li>Convention on Migratory Species:</li> <li>Appendix 2, Convention on Migratory</li> <li>Species: EUROBATS Annex I, Habitats</li> <li>Directive: Annex 4, The Conservation</li> <li>(Nature Habitats, etc.) Regulations (NI)</li> <li>1995: Schedule 2, The Conservation of</li> <li>Habitats and Species Regulations</li> <li>2010: Schedule 2, Wildlife and</li> <li>Countryside Act 1981: Schedule 5</li> <li>Section 9.4b, Wildlife and Countryside</li> <li>Act 1981: Schedule 5 Section 9.4c,</li> <li>Wildlife and Countryside Act 1981:</li> <li>Schedule 5 Section 9.5a, Wildlife and</li> <li>Countryside Act 1981: Schedule 5</li> </ul>				
Essex Field Club	Ophrys apifera	flowering plant	Bee Orchid	EC Cites: Annex B	Elsenham, Moat Farm	TL5424	1	2015
Essex Field Club	Ophrys apifera	flowering plant	Bee Orchid	EC Cites: Annex B	Takeley NW	TL5623	1	1997
Essex Field Club	Ophrys apifera	flowering plant	Bee Orchid	EC Cites: Annex B	Elsenham, Takeley & Stansted L NW	TL5423	1	1996
Essex Birdwatching Society	Parus major	bird	Great Tit	Bern Convention: Appendix 2	Elsenham	TL5425	1	2014

Essex Birdwatching Society	Phalacrocorax carbo	bird	Great Cormorant	Convention on Migratory Species: AEWA Annex II	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Phasianus colchicus	bird	Common Pheasant	Birds Directive: Annex 2.1	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Pica pica	bird	Eurasian Magpie	Birds Directive: Annex 2.2	stansted airport (east of hotel section), essex	TL5623	1	2014
Essex Birdwatching Society	Pica pica	bird	Eurasian Magpie	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Pica pica	bird	Eurasian Magpie	Birds Directive: Annex 2.2	stansted airport (long boundary road east section), essex	TL5623	1	2014
Essex Birdwatching Society	Picus viridis	bird	European Green Woodpecker	Bern Convention: Appendix 2	Elsenham Hall	TL5425	1	2014
Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern Convention: Appendix 3, Convention on Migratory Species: Appendix 2, Convention on Migratory Species: EUROBATS Annex I, Habitats Directive: Annex 4, The Conservation (Nature Habitats, etc.) Regulations (NI) 1995: Schedule 2, The Conservation of Habitats and Species Regulations 2010: Schedule 2, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4b, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4c, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5a, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5b	TL562234	TL562234	1	2007

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL563245	TL563245	1	2006
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL544249	TL544249	4	2006
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL565240	TL565240	1	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL554249	TL554249	1	2006
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
			Wildlife and Countryside Act 1981:					
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL559233	TL559233	2	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL562228	TL562228	2	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
			Schedule 5 Section 9.5a, Wildlife and					
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL563241	TL563241	1	2006
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL542236	TL542236	2	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
			Schedule 5 Section 9.5a, Wildlife and					
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL565238	TL565238	1	2007
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL554225	TL554225	2	2007
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL565248	TL565248	1	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Bat	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	Takeley	TL567247	1	2008
Group				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL557233	TL557233	2	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL561234	TL561234	1	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL562247	TL562247	1	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL541245	TL541245	1	2015
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
		1	1	Section 9.5b		1	1	1

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL563247	TL563247	1	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL553226	TL553226	4	2012
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL565242	TL565242	1	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL557223	TL557223	3	2008
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Bern Convention: Appendix 2, Bern	TL559248	TL559248	1	2006
Club				Convention: Appendix 3, Convention on				
				Migratory Species: Appendix 2,				
				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Bern Convention: Appendix 2,	TL553226	TL553226	2	2012
Club				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2				
Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Bern Convention: Appendix 2,	TL565247	TL565247	1	2008
Club				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2				
Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Bern Convention: Appendix 2,	TL565238	TL565238	1	2007
Club				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2				

Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Bern Convention: Appendix 2,	TL554225	TL554225	2	2007
Club				Convention on Migratory Species:				
				EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
Essex Field	Disistrallus es		Disistralla escaisa	2010: Schedule 2	TL566242	TL566242	4	2011
	Pipistrellus sp.	terrestrial mammal	Pipistrelle species	Convention on Migratory Species: Appendix 2, The Conservation (Nature	1L300242	1L300242		2011
Club				Habitats, etc.) Regulations (NI) 1995:				
				Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Pipistrellus sp.	terrestrial mammal	Pipistrelle species	Convention on Migratory Species:	TL564239	TL564239	1	2006
Club				Appendix 2, The Conservation (Nature				
				Habitats, etc.) Regulations (NI) 1995:				
				Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL559245	TL559245	1	2008
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
			Countryside Act 1981: Schedule 5					
				Section 9.5b				
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL564248	TL564248	1	2008
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
			Schedule 5 Section 9.5a, Wildlife and					
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL565248	TL565248	1	2008
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Bat	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	Bishops	TL568221	1	2013
Group			Bat	Convention on Migratory Species:	Stortford,Warish			
				Appendix 2, Convention on Migratory	Hall, Warish Hall			
					Lane, Takeley			
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
			Section 9.4b, Wildlife and Countryside					
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
			Schedule 5 Section 9.5a, Wildlife and					
				Countryside Act 1981: Schedule 5				
			1	Section 9.5b				

Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL557223	TL557223	3	2008
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
			S	Countryside Act 1981: Schedule 5				
				Section 9.5b				
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL564239	TL564239	1	2007
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
			Schedule 5 Section 9.5a, Wildlife and					
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL565240	TL565240	1	2008
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
			Countryside Act 1981: Schedule 5					
				Section 9.5b				
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL555238	TL555238	1	1998
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
			Schedule 5 Section 9.5a, Wildlife and					
				Countryside Act 1981: Schedule 5				
1				Section 9.5b				

Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL562247	TL562247	1	2008
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
				Act 1981: Schedule 5 Section 9.4c,				
				Wildlife and Countryside Act 1981:				
				Schedule 5 Section 9.5a, Wildlife and				
			Countryside Act 1981: Schedule 5					
			_	Section 9.5b				
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Bern Convention: Appendix 2,	TL564249	TL564249	1	2008
Club			Bat	Convention on Migratory Species:				
				Appendix 2, Convention on Migratory				
				Species: EUROBATS Annex I, Habitats				
				Directive: Annex 4, The Conservation				
				(Nature Habitats, etc.) Regulations (NI)				
				1995: Schedule 2, The Conservation of				
				Habitats and Species Regulations				
				2010: Schedule 2, Wildlife and				
				Countryside Act 1981: Schedule 5				
				Section 9.4b, Wildlife and Countryside				
			Act 1981: Schedule 5 Section 9.4c,					
			Wildlife and Countryside Act 1981:					
			Schedule 5 Section 9.5a, Wildlife and					
				Countryside Act 1981: Schedule 5				
				Section 9.5b				

Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Bern Convention: Appendix 2, Convention on Migratory Species: Appendix 2, Convention on Migratory Species: EUROBATS Annex I, Habitats Directive: Annex 4, The Conservation (Nature Habitats, etc.) Regulations (NI) 1995: Schedule 2, The Conservation of Habitats and Species Regulations 2010: Schedule 2, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4b, Wildlife and Countryside Act 1981: Schedule 5 Section 9.4c, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5a, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5b	TL566242	TL566242	1	2011
Essex Birdwatching Society	Poecile palustris	bird	Marsh Tit	Bern Convention: Appendix 2	Elsenham Hall	TL5425	1	2014
Essex Birdwatching Society	Prunella modularis	bird	Dunnock	Bern Convention: Appendix 2	Elsenham	TL5425	1	2014
Essex Field Club	Ruscus aculeatus	flowering plant	Butcher's-broom	Habitats Directive: Annex 5	Elsenham (Tye Green) SW	TL5424	1	1997
Essex Birdwatching Society	Sitta europaea	bird	Eurasian Nuthatch	Bern Convention: Appendix 2	Elsenham Hall	TL5425	1	2014
Essex Field Club	Sorex minutus	terrestrial mammal	Pygmy Shrew	Bern Convention: Appendix 3	TL542248	TL542248	4	2005
Essex Birdwatching Society	Sturnus vulgaris	bird	Common Starling	Birds Directive: Annex 2.2	Essex, Stansted Airport	TL5523	1	2014
Essex Birdwatching Society	Sturnus vulgaris	bird	Common Starling	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Troglodytes troglodytes	bird	Winter Wren	Bern Convention: Appendix 2	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Turdus iliacus	bird	Redwing	Birds Directive: Annex 2.2, Wildlife and Countryside Act 1981: Schedule 1 Part 1	Elsenham	TL5425	1	2014

Essex	Turdus merula	bird	Common Blackbird	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Birdwatching								
Society								
Essex	Turdus philomelos	bird	Song Thrush	Birds Directive: Annex 2.2	Elsenham	TL5425	1	2014
Birdwatching								
Society								
Essex	Turdus pilaris	bird	Fieldfare	Birds Directive: Annex 2.2, Wildlife and	Elsenham	TL5425	1	2014
Birdwatching				Countryside Act 1981: Schedule 1 Part				
Society				1				
Essex	Tyto alba	bird	Barn Owl	Bern Convention: Appendix 2, EC	Stansted Airport	TL5523	2	2013
Birdwatching				Cites: Annex A, Wildlife and				
Society				Countryside Act 1981: Schedule 1 Part				
				1				

## 20. UK Biodiversity Action Plan Priority Section 41 Species

Biodiversity, or biological diversity, is the whole variety of life on Earth. The Convention on Biological Diversity (CBD) came about as a result of the 1992 Earth Summit. As one of 168 countries to sign up to the CBD, the UK was required to develop a national strategy for the conservation of biodiversity; the UK Biodiversity Action Plan (UKBAP) was born.

The UKBAP is the result of contributions involving a wide range of people and organisations, enabling the identification of species and habitats that are listed as priorities for conservation action. A 2007 review of the UKBAP has resulted in 1149 species and 65 habitats being listed as conservation priorities. For more information see www.ukbap.org.uk.

In addition to the national priorities and targets, action is also being taken at local level. The Essex Biodiversity Project is responsible for implementing the Essex Biodiversity Action Plan, which has 28 priority species and 15 priority habitats currently listed. For more information see www.essexbiodiversity.org.uk.

## The UK BAP

(from Explanatory Note by Defra and Natural England on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 - Habitats and Species of Principal Importance in England)

The England Biodiversity List has been developed to meet the requirements of Section 41 of the Natural Environment and Rural Communities Act (2006). This legislation requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity.

The S41 list will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions. In particular:

- Regional Planning Bodies and Local Planning Authorities will use it to identify the species and habitats that should be afforded priority when applying the requirements of National Planning Policy framework (NPPF) and PPS9 Circular to maintain, restore and enhance species and habitats.
- Local Planning Authorities will use it to identify the species and habitats that require specific consideration in dealing with planning and development control, recognising that under NPPF and PPS9 Circular the aim of planning decisions should be to avoid harm to all biodiversity.
- All Public Bodies will use it to identify species or habitats that should be given priority when implementing the NERC Section 40 duty.

### Habitats of Principal Importance

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that have been identified as requiring action in the UK Biodiversity Action Plan (UK BAP). They range from habitats such as upland hay meadows to lowland mixed deciduous woodland and from freshwater habitats such as ponds to marine habitats such as subtidal sands and gravels.

### **Species of Principal Importance**

There are 943 species of principal importance included on the S41 list. These are the species found

in England which have been identified as requiring action under the UK BAP. In addition, the Hen Harrier has also been included on the List because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England.

#### Relationship with the UK Biodiversity List of Species and Habitats

The UK BAP list of priority species and habitats is an important reference source and will be the focus for conservation action across the UK over the next decade. It has been used to draw up the species and habitats of principal importance in England under S41 of the NERC Act.

The revised UK BAP list of priority species and habitats can be downloaded from the UK Biodiversity Website: http://www.ukbap.org.uk/NewPriorityList.aspx

#### Relationship with the biodiversity duty under Section 40 of the NERC Act

There is a general biodiversity duty in the NERC Act (Section 40) which requires every public body in the exercising of its functions to 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'.

There is no direct relationship between the Section 41 duty on the Secretary of State to publish the list and promote the taking of steps to conserve the habitats and species on it, and the Section 40 duty on public bodies to have regard to the purpose of conserving biodiversity. Importantly:

(a) Biodiversity, as covered by the Section 40 duty includes all biodiversity and not just the habitats and species of principal importance. However, there is an expectation that public bodies would refer to the S41 list when complying with the section 40 duty.

(b) The duty on the Secretary of State to promote the taking of steps by others is not restricted to public bodies.

Defra guidance for local authorities and public bodies on implementing the biodiversity duty in the NERC Act draws attention to the S41 list, emphasising that local authorities and public bodies have a role to play in ensuring the protection of these species and habitats. Copies of the guidance can be downloaded from:

http://archive.defra.gov.uk/environment/biodiversity/documents/pa-guid-english.pdf

#### Essex Biodiversity Action Plan

The Essex Biodiversity Project was set up in 1999 for the purpose of implementing the Essex BAP, one of the 162 local BAPs in the UK. These were formed following the UK's signature to the Convention on Biological Diversity (1992) and the subsequent need for action to conserve biodiversity at a local level.

The overall aim of the Essex Biodiversity Project is to protect, conserve and enhance the variety of wildlife species and habitats in Essex through the successful implementation of the Essex Biodiversity Action Plan.

# UK BAP Priority, Section 41 and Essex BAP Species Table

Source	Taxon	Group	Vernacular	Status	Location	Position	Records	Latest
Essex Field Club	Acronicta psi	insect - moth	Grey Dagger	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Acronicta psi	insect - moth	Grey Dagger	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Acronicta psi	insect - moth	Grey Dagger	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1940
Essex Field Club	Acronicta rumicis	insect - moth	Knot Grass	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Agrochola litura	insect - moth	Brown-spot Pinion	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	2	1969
Essex Field Club	Agrochola litura	insect - moth	Brown-spot Pinion	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Saffron Walden	TL554237	1	2006
Essex Field Club	Agrochola litura	insect - moth	Brown-spot Pinion	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Agrochola lychnidis	insect - moth	Beaded Chestnut	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Agrochola lychnidis	insect - moth	Beaded Chestnut	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Agrochola lychnidis	insect - moth	Beaded Chestnut	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1969

Essex Birdwatching Society	Alauda arvensis	bird	Sky Lark	Biodiversity Lists - England: England NERC S.41, Essex BAP: EBAP	Elsenham	TL5425	1	2014
Essex Field Club	Allophyes oxyacanthae	insect - moth	Green-brindled Crescent	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	2	1969
Essex Field Club	Allophyes oxyacanthae	insect - moth	Green-brindled Crescent	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Allophyes oxyacanthae	insect - moth	Green-brindled Crescent	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Amphipoea oculea	insect - moth	Ear Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1961
Essex Field Club	Amphipoea oculea	insect - moth	Ear Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Amphipyra tragopoginis	insect - moth	Mouse Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Amphipyra tragopoginis	insect - moth	Mouse Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1961
Essex Field Club	Amphipyra tragopoginis	insect - moth	Mouse Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Apamea anceps	insect - moth	Large Nutmeg	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1977
Essex Field Club	Apamea anceps	insect - moth	Large Nutmeg	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Aubrey Buxton N.R., Stansted	TL52	1	1979

Essex Field	Apamea anceps	insect - moth	Large Nutmeg	Biodiversity Action Plan UK list of	Henham	TL52	1	1940
Club				priority species: Priority Species, Biodiversity Lists - England: England NERC S.41				
Essex Field Club	Apamea anceps	insect - moth	Large Nutmeg	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Apamea remissa	insect - moth	Dusky Brocade	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Apamea remissa	insect - moth	Dusky Brocade	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Aporophyla lutulenta	insect - moth	Deep-brown Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1975
Essex Field Club	Arctia caja	insect - moth	Garden Tiger	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Arctia caja	insect - moth	Garden Tiger	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Arctia caja	insect - moth	Garden Tiger	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1979
Essex Field Club	Asteroscopus sphinx	insect - moth	Sprawler	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Asteroscopus sphinx	insect - moth	Sprawler	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	2	1979

Essex Field Club	Atethmia centrago	insect - moth	Centre-barred Sallow	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1940
Essex Field Club	Atethmia centrago	insect - moth	Centre-barred Sallow	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Brachylomia viminalis	insect - moth	Minor Shoulder-knot	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Brachylomia viminalis	insect - moth	Minor Shoulder-knot	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1969
Essex Field Club	Caradrina morpheus	insect - moth	Mottled Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Caradrina morpheus	insect - moth	Mottled Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Caradrina morpheus	insect - moth	Mottled Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1961
Essex Field Club	Caradrina morpheus	insect - moth	Mottled Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Aubrey Buxton N.R., Stansted	TL52	1	1979
Essex Field Club	Chiasmia clathrata	insect - moth	Latticed Heath	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Chiasmia clathrata	insect - moth	Latticed Heath	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940

Essex Field Club	Coenonympha pamphilus	insect - butterfly	Small Heath	Biodiversity Action Plan UK list of priority species: Priority Species,	Long Border Road, Stansted Airport	TL541220	1	2007
				Biodiversity Lists - England: England NERC S.41				
Essex Field Club	Coscinia cribraria	insect - moth	Speckled Footman	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Cossus cossus	insect - moth	Goat Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Birdwatching Society	Cuculus canorus	bird	Common Cuckoo	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Broxted, Essex	TL5625	1	2013
Essex Field Club	Diarsia rubi	insect - moth	Small Square-spot	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Diarsia rubi	insect - moth	Small Square-spot	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Diarsia rubi	insect - moth	Small Square-spot	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	3	1969
Essex Field Club	Diloba caeruleocephala	insect - moth	Figure of Eight	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Diloba caeruleocephala	insect - moth	Figure of Eight	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1974
Essex Field Club	Diloba caeruleocephala	insect - moth	Figure of Eight	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	2	1969

Essex Field Club	Ecliptopera silaceata	insect - moth	Small Phoenix	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England	Hatfield Forest	TL52	1	1969
Essex Field	Ecliptopera silaceata	insect - moth	Small Phoenix	NERC S.41 Biodiversity Action Plan UK list of	Bambers Green,	TL52	1	1974
Club				priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Takeley			
Essex Field Club	Ennomos erosaria	insect - moth	September Thorn	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1969
Essex Field Club	Ennomos erosaria	insect - moth	September Thorn	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Ennomos fuscantaria	insect - moth	Dusky Thorn	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1969
Essex Field Club	Ennomos fuscantaria	insect - moth	Dusky Thorn	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Ennomos fuscantaria	insect - moth	Dusky Thorn	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Ennomos fuscantaria	insect - moth	Dusky Thorn	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Saffron Walden	TL554237	1	2006
Essex Field Club	Eulithis mellinata	insect - moth	Spinach	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Eulithis mellinata	insect - moth	Spinach	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1969

Essex Field Club	Euxoa nigricans	insect - moth	Garden Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Euxoa nigricans	insect - moth	Garden Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1961
Essex Field Club	Euxoa nigricans	insect - moth	Garden Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Graphiphora augur	insect - moth	Double Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Graphiphora augur	insect - moth	Double Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1974
Essex Field Club	Graphiphora augur	insect - moth	Double Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Aubrey Buxton N.R., Stansted	TL52	1	1979
Essex Field Club	Graphiphora augur	insect - moth	Double Dart	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Hemistola chrysoprasaria	insect - moth	Small Emerald	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Hemistola chrysoprasaria	insect - moth	Small Emerald	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Hepialus humuli	insect - moth	Ghost Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940

Essex Field Club	Hoplodrina blanda	insect - moth	Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Hoplodrina blanda	insect - moth	Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	2	1961
Essex Field Club	Hoplodrina blanda	insect - moth	Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Hydraecia micacea	insect - moth	Rosy Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Hydraecia micacea	insect - moth	Rosy Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Lepus europaeus	terrestrial mammal	Brown Hare	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41, Essex BAP: EBAP	TL550220	TL550220	2	1997
Essex Field Club	Lycia hirtaria	insect - moth	Brindled Beauty	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Lycia hirtaria	insect - moth	Brindled Beauty	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Macaria wauaria	insect - moth	V-Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1977
Essex Field Club	Malacosoma neustria	insect - moth	Lackey	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1979

Essex Field Club	Malacosoma neustria	insect - moth	Lackey	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Malacosoma neustria	insect - moth	Lackey	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Melanchra persicariae	insect - moth	Dot Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1969
Essex Field Club	Melanchra persicariae	insect - moth	Dot Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Melanchra persicariae	insect - moth	Dot Moth	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Melanthia procellata	insect - moth	Pretty Chalk Carpet	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1961
Essex Field Club	Melanthia procellata	insect - moth	Pretty Chalk Carpet	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Melanthia procellata	insect - moth	Pretty Chalk Carpet	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Nyctalus noctula	terrestrial mammal	Noctule Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL562232	TL562232	2	2007
Essex Field Club	Nyctalus noctula	terrestrial mammal	Noctule Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL540241	TL540241	2	2002

Essex Field	Orthosia gracilis	insect - moth	Powdered Quaker	Biodiversity Action Plan UK list of	Bambers Green,	TL52	1	1974
Club				priority species: Priority Species, Biodiversity Lists - England: England	Takeley			
				NERC S.41				
Essex Field	Orthosia gracilis	insect - moth	Powdered Quaker	Biodiversity Action Plan UK list of	Hatfield Forest	TL52	1	1940
Club				priority species: Priority Species,				
				Biodiversity Lists - England: England				
				NERC S.41				
Essex Field	Pelurga comitata	insect - moth	Dark Spinach	Biodiversity Action Plan UK list of	Bambers Green,	TL52	1	1975
Club				priority species: Priority Species,	Takeley			
				Biodiversity Lists - England: England				
				NERC S.41				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL562228	TL562228	2	2008
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL565248	TL565248	1	2008
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL544249	TL544249	4	2006
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL559248	TL559248	1	2006
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL565240	TL565240	1	2008
Club			D Ditte		TI 5 440 45	TI 5 4 4 9 4 5		0045
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL541245	TL541245	1	2015
Club Essex Field	Divistuallus vivistuallus	terrestrial mammal	Common Dinistralla		TL557233	TL557233	2	2008
Essex Field	Pipistrellus pipistrellus	terrestriai mammai	Common Pipistrelle	ESSEX BAP: EBAP	1L007233	112557233	2	2008
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle		TL563247	TL563247	1	2008
Club				ESSEX DAF. EDAF	1L303247	1L303247	'	2000
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL554249	TL554249	1	2006
Club					12334249	12004249	'	2000
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL563241	TL563241	1	2006
Club					12000211	12000211	1.	2000
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL562234	TL562234	1	2007
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL553226	TL553226	4	2012
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL561234	TL561234	1	2008
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL565242	TL565242	1	2008
Club								
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL542236	TL542236	2	2008
Club								

Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL559233	TL559233	2	2008
Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL565238	TL565238	1	2007
Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL557223	TL557223	3	2008
Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL563245	TL563245	1	2006
Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL562247	TL562247	1	2008
Essex Bat Group	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	Takeley	TL567247	1	2008
Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP	TL554225	TL554225	2	2007
Essex Field Club	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL565238	TL565238	1	2007
Essex Field Club	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL553226	TL553226	2	2012
Essex Field Club	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL565247	TL565247	1	2008
Essex Field Club	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL554225	TL554225	2	2007
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL564239	TL564239	1	2007
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL559245	TL559245	1	2008
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL566242	TL566242	1	2011

Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL555238	TL555238	1	1998
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL565240	TL565240	1	2008
Essex Bat Group	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bishops Stortford,Warish Hall, Warish Hall Lane, Takeley	TL568221	1	2013
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL564248	TL564248	1	2008
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL562247	TL562247	1	2008
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL557223	TL557223	3	2008
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL565248	TL565248	1	2008
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	TL564249	TL564249	1	2008
Essex Field Club	Polia bombycina	insect - moth	Pale Shining Brown	priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Polia bombycina	insect - moth	Pale Shining Brown	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972

Essex Field Club	Polia bombycina	insect - moth	Pale Shining Brown	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1940
Essex Field Club	Rhizedra lutosa	insect - moth	Large Wainscot	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Scotopteryx chenopodiata	insect - moth	Shaded Broad-bar	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Scotopteryx chenopodiata	insect - moth	Shaded Broad-bar	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Scotopteryx chenopodiata	insect - moth	Shaded Broad-bar	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1961
Essex Field Club	Spilosoma lubricipeda	insect - moth	White Ermine	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Spilosoma lubricipeda	insect - moth	White Ermine	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1970
Essex Field Club	Spilosoma lubricipeda	insect - moth	White Ermine	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Aubrey Buxton N.R., Stansted	TL52	1	1979
Essex Field Club	Spilosoma lubricipeda	insect - moth	White Ermine	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Tholera cespitis	insect - moth	Hedge Rustic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1977

Essex Field Club	Tholera decimalis	insect - moth	Feathered Gothic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Tholera decimalis	insect - moth	Feathered Gothic	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	2	1969
Essex Field Club	Timandra comae	insect - moth	Blood-Vein	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Timandra comae	insect - moth	Blood-Vein	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	2	1961
Essex Field Club	Timandra comae	insect - moth	Blood-Vein	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Aubrey Buxton N.R., Stansted	TL52	1	1979
Essex Field Club	Timandra comae	insect - moth	Blood-Vein	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Henham	TL52	1	1940
Essex Field Club	Trichiura crataegi	insect - moth	Pale Eggar	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Bambers Green, Takeley	TL52	1	1974
Essex Field Club	Trichiura crataegi	insect - moth	Pale Eggar	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1940
Essex Birdwatching Society	Turdus philomelos	bird	Song Thrush	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41, Essex BAP: EBAP	Elsenham	TL5425	1	2014
Essex Field Club	Tyria jacobaeae	insect - moth	Cinnabar	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Hatfield Forest	TL52	1	1940

Essex Field	Tyta luctuosa	insect - moth	Four-spotted	Biodiversity Action Plan UK list of	Henham	TL52	1	1940
Club				priority species: Priority Species,				
				Biodiversity Lists - England: England				
				NERC S.41				
Essex Field	Watsonalla binaria	insect - moth	Oak Hook-tip	Biodiversity Action Plan UK list of	Hatfield Forest	TL52	1	1969
Club				priority species: Priority Species,				
				Biodiversity Lists - England: England				
				NERC S.41				
Essex Field	Watsonalla binaria	insect - moth	Oak Hook-tip	Biodiversity Action Plan UK list of	Bambers Green,	TL52	1	1973
Club				priority species: Priority Species,	Takeley			
				Biodiversity Lists - England: England				
				NERC S.41				
Essex Field	Xanthorhoe ferrugata	insect - moth	Dark-barred	Biodiversity Action Plan UK list of	Henham	TL52	1	1940
Club			Twin-spot Carpet	priority species: Priority Species,				
				Biodiversity Lists - England: England				
				NERC S.41				
Essex Field	Xanthorhoe ferrugata	insect - moth	Dark-barred	Biodiversity Action Plan UK list of	Bambers Green,	TL52	1	1973
Club			Twin-spot Carpet	priority species: Priority Species,	Takeley			
				Biodiversity Lists - England: England				
				NERC S.41				
Essex Field	Xanthorhoe ferrugata	insect - moth	Dark-barred	Biodiversity Action Plan UK list of	Hatfield Forest	TL52	2	1969
Club			Twin-spot Carpet	priority species: Priority Species,				
				Biodiversity Lists - England: England				
				NERC S.41				

## 21. Global & National Red List and Scarce Designations

## Red Data Book Species

National Red Data Book species are those falling within the Status categories defined in the British Red Data Books (Bratton, 1991; Shirt, 1987). These are internationally recognised species listed in the various Red Data Books published by, or under the auspices of, the International Union for the Conservation of Nature (IUCN). Species included may not be informally removed or transferred between categories. Nationally Endangered (RDB1) taxa are those considered to be in danger of extinction and whose survival is unlikely if the causal factors continue operating. These include species known from only a single locality since 1970, species restricted to habitats which are especially vulnerable, species which have shown a rapid and continuous decline in the last twenty years and are now estimated to exist in five or fewer ten km squares and species believed extinct but which would need protection if re-discovered. Nationally Vulnerable (RDB2) taxa are those that are believed likely to move into the Endangered category in the near future if the causal factors causing their decline continue operating. This includes species declining throughout their range, species in vulnerable habitats and species whose populations are low. Nationally Rare (RDB3) taxa are those with small populations that are not at present Endangered or Vulnerable, but are at risk. This includes species known or estimated to exist in only 15 or fewer post 1970 ten km squares. Insuffiently Known (RDBK) taxa are those suspected of falling into categories 1-3, but about which there is insufficient information to be certain.

Some families in Diptera (flies) have recently had new status reviews published (Falk, S.J. & Crossley, R., 2005; Falk, S.J. & Chandler, P., 2005). A brief outline of the revised IUCN criteria and their application, as summarised in these reviews, is given below.

#### EXTINCT (EX)

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

#### EXTINCT IN THE WILD (EW)

A taxon is Extinct in the wild when it is known to survive only in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A taxon is presumed extinct in the wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual) throughout its range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

#### CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future, as detailed by any of the criteria A to E. \*

#### ENDANGERED (EN)

A taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future, as defined by any of the criteria A to E. \*

#### VULNERABLE (VU)

A taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium term future, as defined by any of the criteria A to D. \*

### LOWER RISK (LR)

A taxon is Lower Risk when it has been evaluated but does not satisfy the criteria for any of the categories Critically Endangered, Endangered or Vulnerable. Taxa included in the Lower Risk category can be separated into three sub-categories:

#### **Conservation Dependent (cd)**

Taxa which are the focus of a continuing taxon-specific or habitat-specific conservation programme targeted towards the taxon in question, the cessation of which would result in the taxon qualifying for one of the threatened categories above within a period of five years.

#### Near Threatened (nt)

Taxa which do not qualify for Lower Risk (Conservation Dependent), but which are close to qualifying for Vulnerable.

#### Least Concern (Ic)

Taxa which do not qualify for Lower Risk (Conservation Dependent) or Lower Risk (Near Threatened).

#### DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct or indirect assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat or Lower Risk. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that a threatened category is appropriate.

#### NOT EVALUATED (NE)

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

## Nationally Scarce species

The concept of Nationally Scarce (Notable) species was introduced by Ball (1986). They are species which are estimated to occur within the range of 16 to 100 ten-kilometre squares of the British National Grid system since 1970 and are subdivided as follows: Notable/Na refers to species estimated to occur within the range of 16 to 30 10-kilometre squares of the National Grid System. Notable/Nb refers to species estimated to occur within the range of 16 to 30 10-kilometre squares of the National Grid System. Notable/Nb refers to species estimated to occur within the range 31 to 100 10-kilometre squares of the National Grid System. Diptera (flies) and some Coleoptera (beetles) are not separated. Categorisations have been revised for various taxonomic groups including Araneae (spiders) in Merrett (1990), aculeate Hymenoptera in Falk (1991a), Coleoptera in Hyman & Parsons (1992, 1994), Diptera in Falk (1991b), Hemiptera in Kirby (1992) and Pyralidae (Lepidoptera) in Parsons (1993).

The concept of nationally scarce (Notable) species is unaltered in the new status reviews (e.g. Falk, S.J. & Crossley, R., 2005; Falk, S.J. & Chandler, P., 2005), but the status is now known as Scarce.

In a new national spider review a 'Watching Brief' category in included for some species where the data available suggest a greater level of threat, but there is uncertainty about the evidence of decline. There are also a number of much more widespread and common species where the data suggest strong declines may be occurring. These have placed these in the 'Watching Brief' category outside of the national status review, but these species should be specifically monitored in the future to understand their status more satisfactorily.

# National Status Species Table

Source	Taxon	Group	Vernacular	Status	Location	Position	Records	Latest
Essex Birdwatching Society	Alauda arvensis	bird	Sky Lark	Red data categories - birds (not based on IUCN criteria): Bird Population Status - red	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Alcedo atthis	bird	Common Kingfisher	Red data categories - birds (not based on IUCN criteria): Bird Population Status - amber	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Anas platyrhynchos	bird	Mallard	Red data categories - birds (not based on IUCN criteria): Bird Population Status - amber	Elsenham	TL5425	1	2014
Essex Field Club	Bruchus atomarius	insect - beetle (Coleoptera)		Rare and scarce species (not based on IUCN criteria): Nationally Notable B	Hatfield Forest	TL52	1	1999
Essex Field Club	Coenonympha pamphilus	insect - butterfly	Small Heath	Red listing based on 2001 IUCN guidelines: Near Threatened	Long Border Road, Stansted Airport	TL541220	1	2007
Essex Field Club	Coscinia cribraria	insect - moth	Speckled Footman	Red Listing based on pre 1994 IUCN guidelines: Vulnerable	Bambers Green, Takeley	TL52	1	1972
Essex Birdwatching Society	Cuculus canorus	bird	Common Cuckoo	Red data categories - birds (not based on IUCN criteria): Bird Population Status - red	Broxted, Essex	TL5625	1	2013
Essex Field Club	Cyperus longus	flowering plant	Galingale	Rare and scarce species (not based on IUCN criteria): Nationally scarce, Red listing based on 2001 IUCN guidelines: Near Threatened	Elsenham (Tye Green) SW	TL5424	1	1997
Essex Birdwatching Society	Delichon urbicum	bird	Common House Martin	Red data categories - birds (not based on IUCN criteria): Bird Population Status - amber	Elsenham Hall, near Stansted Mountfitchett	TL5425	1	2013
Essex Field Club	Ectemnius sexcinctus	insect - hymenopteran	a digger wasp	Rare and scarce species (not based on IUCN criteria): Nationally Notable B	Takeley	TL564245	1	1997
Essex Field Club	Eilema complana	insect - moth	Scarce Footman	Red Listing based on pre 1994 IUCN guidelines: Rare	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Euphorbia exigua	flowering plant	Dwarf Spurge	Red listing based on 2001 IUCN guidelines: Near Threatened	Takeley, Broxted S SW	TL5624	1	1996
Essex Field Club	Euphorbia exigua	flowering plant	Dwarf Spurge	Red listing based on 2001 IUCN guidelines: Near Threatened	Elsenham (Tye Green) SW	TL5424	1	1997
Essex Birdwatching Society	Falco tinnunculus	bird	Common Kestrel	Red data categories - birds (not based on IUCN criteria): Bird Population Status - amber	Elsenham Hall	TL5425	1	2014
Essex Birdwatching Society	Falco tinnunculus	bird	Common Kestrel	Red data categories - birds (not based on IUCN criteria): Bird Population Status - amber	Essex Great Chesterford M11 Jct 9	TL5524	1	2013

Essex Field	Gymnetron veronicae	insect - beetle		Rare and scarce species (not based on	Takeley	TL52	1	1911
Club		(Coleoptera)		IUCN criteria): Nationally Notable B				
Essex Field	Malthodes crassicornis	insect - beetle		Red Listing based on pre 1994 IUCN	Takeley	TL52	1	1911
Club		(Coleoptera)		guidelines: Rare				
Essex	Motacilla cinerea	bird	Grey Wagtail	Red data categories - birds (not based	Elsenham	TL5425	1	2014
Birdwatching				on IUCN criteria): Bird Population				
Society				Status - amber				
Essex Field	Myriophyllum	flowering plant	Whorled	Red listing based on 2001 IUCN	Takeley NW	TL5623	1	1997
Club	verticillatum	•	Water-milfoil	guidelines: Vulnerable				
Essex Field	Orchesia micans	insect - beetle		Rare and scarce species (not based on	Gt Hallingbury	TL52	1	1911
Club		(Coleoptera)		IUCN criteria): Nationally Notable B				
Essex	Phylloscopus trochilus	bird	Willow Warbler	Red data categories - birds (not based	Mobile-TL5523	TL5523	1	2014
Birdwatching				on IUCN criteria): Bird Population				
Society				Status - amber				
Essex	Poecile palustris	bird	Marsh Tit	Red data categories - birds (not based	Elsenham Hall	TL5425	1	2014
Birdwatching				on IUCN criteria): Bird Population				
Society				Status - red				
Essex Field	Procraerus tibialis	insect - beetle		Red Listing based on pre 1994 IUCN	Hatfield Forest	TL52	2	1987
Club		(Coleoptera)		guidelines: Rare			-	
Essex	Prunella modularis	bird	Dunnock	Red data categories - birds (not based	Elsenham	TL5425	1	2014
Birdwatching				on IUCN criteria): Bird Population			·	
Society				Status - amber				
Essex	Pyrrhula pyrrhula	bird	Eurasian Bullfinch	Red data categories - birds (not based	Elsenham	TL5425	1	2014
Birdwatching		Sind	Eurasian Baimist	on IUCN criteria): Bird Population		1 20 120	1.	
Society				Status - amber				
Essex	Pyrrhula pyrrhula	bird	Eurasian Bullfinch	Red data categories - birds (not based	Elsenham Hall	TL5425	1	2014
Birdwatching		bild	Eurasian Buimien	on IUCN criteria): Bird Population		1 20420	1'	2014
Society				Status - amber				
Essex Field	Silene noctiflora	flowering plant	Night-flowering	Red listing based on 2001 IUCN	Elsenham, Takeley	TL5423	1	1996
Club		nowening plant	Catchfly	guidelines: Vulnerable	& Stansted L NW	120420	'	1330
Essex Field	Spergula arvensis	flowering plant	Corn Spurrey	Red listing based on 2001 IUCN	Elsenham (Tye	TL5424	1	1997
Club		nowening plant	Comopuney	guidelines: Vulnerable	Green) SW		1	1337
Essex	Sturnus vulgaris	bird	Common Starling	Red data categories - birds (not based	Essex, Stansted	TL5523	1	2014
Birdwatching		bild	Common Staning	on IUCN criteria): Bird Population	Airport	120020	1'	2014
Society				Status - red	Allport			
Essex	Sturnus vulgaris	bird	Common Starling	Red data categories - birds (not based	Elsenham	TL5425	1	2014
Essex Birdwatching		bild	Common Staning			110420	'	2014
0				on IUCN criteria): Bird Population				
Society Essex Field	Tuifeliume eebreleurer	flowering placet	Quinhum Claura :	Status - red		TI 5 400		1000
	Trifolium ochroleucon	flowering plant	Sulphur Clover	Rare and scarce species (not based on	Elsenham	TL5423	2	1996
Club				IUCN criteria): Nationally scarce, Red				
				listing based on 2001 IUCN guidelines:				
				Near Threatened				

Essex Field	Trifolium ochroleucon	flowering plant	Sulphur Clover	Rare and scarce species (not based on	Elsenham, Takeley	TL5423	1	1996
Club		-		IUCN criteria): Nationally scarce, Red	& Stansted L NW			
				listing based on 2001 IUCN guidelines:				
				Near Threatened				
Essex	Turdus iliacus	bird	Redwing	Red data categories - birds (not based	Elsenham	TL5425	1	2014
Birdwatching				on IUCN criteria): Bird Population				
Society				Status - red				
Essex	Turdus philomelos	bird	Song Thrush	Red data categories - birds (not based	Elsenham	TL5425	1	2014
Birdwatching				on IUCN criteria): Bird Population				
Society				Status - red				
Essex	Turdus pilaris	bird	Fieldfare	Red data categories - birds (not based	Elsenham	TL5425	1	2014
Birdwatching				on IUCN criteria): Bird Population				
Society				Status - red				
Essex Field	Tyta luctuosa	insect - moth	Four-spotted	Red Listing based on pre 1994 IUCN	Henham	TL52	1	1940
Club				guidelines: Vulnerable				

### 22. Essex Red Data List Species

#### Information contained in the Inventory

The Essex Red Data List was compiled in 2002 for English Nature (now Natural England), with the input of County Recorders and other county specialists and with an extensive period of consultation. The full list is available at www.essexfieldclub.org.uk/portal/p/Essex+Red+Data+List.

The list is an important compilation of Essex information, helping to inform and better enable biodiversity and planning decisions throughout the county. As an internet resource, the list has been updated, with changes listed on the website.

Inclusion of species on the list is guided by the following key criteria:

- In the national Red Data List (where one exists)
- Nationally Scarce/Notable (where there is an available definition and list).
- Species which are rare, declining and/or subject to a high degree of threat in Essex (and not in either of the above categories).

Depending on the degree of regional knowledge this is related to:

- Species recorded in few modern sites (X or fewer sites, since 19XX).
- Species with restricted distribution occurring in habitats under a high degree of threat nationally and/or within the county.
- More widespread species which have undergone a substantial decline in number or distribution since 19XX.
- Species which are extinct in Essex, and for which there is significant potential for re-establishment, either naturally or through intervention.

The values of X will vary for different taxonomic groups; County Recorders and other county specialists have used their knowledge to determine the threshold values for each particular taxonomic group in Essex.

In addition, Essex Red Data List Threat Statuses have been assigned to the Arachnida, aculeate Hymenoptera, Syrphidae, larger Brachycera, Orthoptera and Odonata taxonomic groups. These threat categories are defined<sup>\*</sup> as:

#### Essex Endangered

- Species known as a single population within a single post-1980 1km<sup>2</sup> or only from threatened or vulnerable sites in Essex.
- Species believed extinct in Essex.

#### Essex Vulnerable

- Species known from only two populations in Essex.
- Essex Rare species which are restricted to habitats or sites known to be under threat in Essex.
- Species which only occur at sites in Essex known to be vulnerable.
- Species which have shown a continuous decline over the last twenty years and are now known to exist in less than 1% of the covered post-1980 1km<sup>2</sup> in Essex.

#### Essex Threatened

- Essex Scarce species with a Frequency Ratio of less than 1.5 and Tetrad percentage of less than 1.0 indicating widely isolated populations within the county.
- Essex Scarce species which are restricted to habitats or sites known to be under threat in the county.
- Species which have shown a continuous decline over the last twenty years.

#### Regionally Important

- Species which are important in a national context because Essex contains a significant proportion of the national populations.
- Species which are important in a national context because they have a close association with a specific nationally threatened habitat included in the Biodiversity Action Plan.
- Species which are important in a national context because they are dominant in or peculiar to a specific habitat for which Essex contains a large percentage of the national habitat.

\* Detailed information is available at http://www.essexfieldclub.org.uk/portal/p/Essex+Red+Data+threat+statuses

Where a taxon not included in the list has been recorded from 6 or less of the 57 hectads (10km squares) covering the Watsonian VCs 18 and 19 it has been accorded a provisional Essex Red Data List status (pListed) here.

# Essex Red Species Table

Source	Taxon	Group	Vernacular	Status	Location	Position	Records	Latest
Essex Field Club	Achillea ptarmica	flowering plant	Sneezewort	Essex Red Data List: Listed	Takeley, Broxted S SW	TL5624	1	1996
Essex Birdwatching Society	Alauda arvensis	bird	Sky Lark	Essex BAP: EBAP, Essex Red Data List: Listed	Elsenham	TL5425	1	2014
Essex Field Club	Arctia caja	insect - moth	Garden Tiger	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Arctia caja	insect - moth	Garden Tiger	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Arctia caja	insect - moth	Garden Tiger	Essex Red Data List: Listed	Hatfield Forest	TL52	1	1979
Essex Field Club	Batophila aerata	insect - beetle (Coleoptera)		Essex Red Data List: Listed	Hatfield Forest	TL52	1	1990
Essex Field Club	Bruchus atomarius	insect - beetle (Coleoptera)		Essex Red Data List: Listed	Hatfield Forest	TL52	1	1999
Essex Field Club	Catarhoe rubidata	insect - moth	Ruddy Carpet	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Coscinia cribraria	insect - moth	Speckled Footman	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Cossus cossus	insect - moth	Goat Moth	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Cyperus longus	flowering plant	Galingale	Essex Red Data List: Listed	Elsenham (Tye Green) SW	TL5424	1	1997
Essex Birdwatching Society	Delichon urbicum	bird	Common House Martin	Essex Red Data List: Listed	Elsenham Hall, near Stansted Mountfitchett	TL5425	1	2013
Essex Field Club	Deltote uncula	insect - moth	Silver Hook	Essex Red Data List: pListed	Hatfield Forest	TL52	1	1940
Essex Field Club	Ectemnius sexcinctus	insect - hymenopteran	a digger wasp	Essex Red Data List: Listed	Takeley	TL564245	1	1997
Essex Field Club	Ennomos autumnaria	insect - moth	Large Thorn	Essex Red Data List: Listed	Hatfield Forest	TL52	1	1969
Essex Field Club	Ennomos autumnaria	insect - moth	Large Thorn	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Epilobium obscurum	flowering plant	Short-fruited Willowherb	Essex Red Data List: Listed	Takeley, Broxted S SW	TL5624	1	1996
Essex Field Club	Eptesicus serotinus	terrestrial mammal	Serotine	Essex Red Data List: Listed	TL540240	TL540240	2	2002
Essex Field Club	Eupithecia denotata	insect - moth	Campanula Pug	Essex Red Data List: Listed	Henham	TL52	1	1940

Essex Field Club	Eupithecia haworthiata	insect - moth	Haworth's Pug	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Eupithecia haworthiata	insect - moth	Haworth's Pug	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Eupithecia inturbata	insect - moth	Maple Pug	Essex Red Data List: Listed	Aubrey Buxton N.R., Stansted	TL52	1	1979
Essex Field Club	Eupithecia trisignaria	insect - moth	Triple-spotted Pug	Essex Red Data List: pListed	Hatfield Forest	TL52	1	1980
Essex Field Club	Eupithecia venosata	insect - moth	Netted Pug	Essex Red Data List: pListed	Aubrey Buxton N.R., Stansted	TL52	1	1979
Essex Field Club	Gastropacha quercifolia	insect - moth	Lappet	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1973
Essex Field Club	Gymnetron veronicae	insect - beetle (Coleoptera)		Essex Red Data List: Listed	Takeley	TL52	1	1911
Essex Field Club	Gymnophora arcuata	insect - true fly (Diptera)		Essex Red Data List: pListed	Hatfield Forest	TL52	1	1982
Essex Field Club	Hadena perplexa	insect - moth	Tawny Shears	Essex Red Data List: pListed	Bambers Green, Takeley	TL52	1	1974
Essex Field Club	Hadena perplexa	insect - moth	Tawny Shears	Essex Red Data List: pListed	Henham	TL52	1	1940
Essex Field Club	Hemaris fuciformis	insect - moth	Broad-bordered Bee Hawk-moth	Essex Red Data List: Listed	Hatfield Forest	TL52	1	1940
Essex Field Club	Hypena rostralis	insect - moth	Buttoned Snout	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Laspeyria flexula	insect - moth	Beautiful Hook-tip	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Laspeyria flexula	insect - moth	Beautiful Hook-tip	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Laspeyria flexula	insect - moth	Beautiful Hook-tip	Essex Red Data List: Listed	Hatfield Forest	TL52	2	1969
Essex Field Club	Laspeyria flexula	insect - moth	Beautiful Hook-tip	Essex Red Data List: Listed	Aubrey Buxton N.R., Stansted	TL52	1	1979
Essex Field Club	Lepus europaeus	terrestrial mammal	Brown Hare	Essex BAP: EBAP, Essex Red Data List: Listed	TL550220	TL550220	2	1997
Essex Field Club	Malthodes crassicornis	insect - beetle (Coleoptera)		Essex Red Data List: Listed	Takeley	TL52	1	1911
Essex Field Club	Megabunus diadema	harvestman		Essex Red Data List: Listed	Hatfield Fst Country Pk SSSI,N.T.	TL52	1	1982
Essex Field Club	Meles meles	terrestrial mammal	Badger	Essex Red Data List: Listed	TL565239	TL565239	1	2010
Essex Field Club	Meles meles	terrestrial mammal	Badger	Essex Red Data List: Listed	TL566247	TL566247	1	2014

Essex Field Club	Myriophyllum verticillatum	flowering plant	Whorled Water-milfoil	Essex Red Data List: Listed	Takeley NW	TL5623	1	1997
Essex Field	Nyctalus leisleri	terrestrial mammal	Leisler's Bat /	Essex Red Data List: Listed	TL557237	TL557237	1	1994
Club		lenestiai mammai	Lesser Noctule Bat	ESSEX Red Data LIST. LISTED	1237237	12337237	'	1994
Essex Field	Nyctalus noctula	terrestrial mammal	Noctule Bat	Essex Red Data List: Listed	TL562232	TL562232	2	2007
Club	,							
Essex Field	Nyctalus noctula	terrestrial mammal	Noctule Bat	Essex Red Data List: Listed	TL540241	TL540241	2	2002
Club								
Essex Field	Oidaematophorus	insect - moth	Dusky Plume	Essex Red Data List: pListed	Hatfield Forest	TL52	1	1979
Club	lithodactyla				Marsh			
Essex Field	Omocestus viridulus	insect - orthopteran	Common Green	Essex Red Data List: Listed	Molehill Green	TL564244	2	2002
Club			Grasshopper					
Essex Field	Omocestus viridulus	insect - orthopteran	Common Green	Essex Red Data List: Listed	Takeley Water	TL565235	2	2002
Club			Grasshopper		Tower		<u> </u>	
Essex Field	Orchesia micans	insect - beetle		Essex Red Data List: Listed	Gt Hallingbury	TL52	1	1911
Club		(Coleoptera)				TI 5500		4007
Essex Field	Pimpinella major	flowering plant	Greater	Essex Red Data List: Listed	Takeley L SE	TL5522	1	1997
Club Essex Field	Divistuallus vivistuallus		Burnet-saxifrage		TL562228	TL562228		
Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data List: Listed	12002228	11202228	2	2008
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Dinistrollo	Essex BAP: EBAP, Essex Red Data	TL565248	TL565248	1	2008
Club			Common ripistrelle	List: Listed	12303240	1L303240	1'	2000
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL544249	TL544249	4	2006
Club				List: Listed		12011210	·	2000
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle		TL559248	TL559248	1	2006
Club				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL565240	TL565240	1	2008
Club				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL541245	TL541245	1	2015
Club				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL557233	TL557233	2	2008
Club				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL563247	TL563247	1	2008
Club				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL554249	TL554249	1	2006
Club				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL563241	TL563241	1	2006
Club			<b>.</b>	List: Listed			<u> </u>	
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL562234	TL562234	1	2007
Club				List: Listed			<u> </u>	
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL553226	TL553226	4	2012
Club				List: Listed				

Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL561234	TL561234	1	2008
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle		TL565242	TL565242	1	2008
Club		terrestnar mammar		List: Listed		1L303242		2008
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL542236	TL542236	2	2008
Club Essex Field	Dinistrallus ninistrallus	terrestrial mammal	Common Pipistrelle	List: Listed Essex BAP: EBAP, Essex Red Data	TL559233	TL559233	2	2008
Club	Pipistrellus pipistrellus	terrestnar mammar	Common Pipistrelle	List: Listed	12559233	12009200	2	2008
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL565238	TL565238	1	2007
Club				List: Listed				
Essex Field Club	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL557223	TL557223	3	2008
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL563245	TL563245	1	2006
Club				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL562247	TL562247	1	2008
Club				List: Listed				
Essex Bat	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	Takeley	TL567247	1	2008
Group				List: Listed				
Essex Field	Pipistrellus pipistrellus	terrestrial mammal	Common Pipistrelle	Essex BAP: EBAP, Essex Red Data	TL554225	TL554225	2	2007
Club				List: Listed				
Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Essex Red Data List: Listed	TL565238	TL565238	1	2007
Club								
Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Essex Red Data List: Listed	TL553226	TL553226	2	2012
Club								
Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Essex Red Data List: Listed	TL565247	TL565247	1	2008
Club								
Essex Field	Pipistrellus pygmaeus	terrestrial mammal	Soprano Pipistrelle	Essex Red Data List: Listed	TL554225	TL554225	2	2007
Club								
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	TL564239	TL564239	1	2007
Club			Bat					
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	TL559245	TL559245	1	2008
Club			Bat					
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	TL566242	TL566242	1	2011
Club			Bat					-
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	TL555238	TL555238	1	1998
Club			Bat					
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	TL565240	TL565240	1	2008
Club			Bat					
Essex Bat	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	Bishops	TL568221	1	2013
Group			Bat		Stortford, Warish		. 	
p					Hall, Warish Hall			
					Lane, Takeley			
					Lane, rakeley			

Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Essex Red Data List: Listed	TL564248	TL564248	1	2008
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	TL562247	TL562247	1	2008
Club	Fiecolus aunius	terrestriar manimar	Bat				1	
Essex Field	Plecotus auritus	terrestrial mammal	Brown Long-eared	Essex Red Data List: Listed	TL557223	TL557223	3	2008
Club			Bat					
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Essex Red Data List: Listed	TL565248	TL565248	1	2008
Essex Field Club	Plecotus auritus	terrestrial mammal	Brown Long-eared Bat	Essex Red Data List: Listed	TL564249	TL564249	1	2008
Essex Field Club	Poa compressa	flowering plant	Flattened Meadow-grass	Essex Red Data List: Listed	Takeley L SE	TL5522	1	1997
Essex Field Club	Polia bombycina	insect - moth	Pale Shining Brown	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Polia bombycina	insect - moth	Pale Shining Brown	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Polia bombycina	insect - moth	Pale Shining Brown	Essex Red Data List: Listed	Hatfield Forest	TL52	1	1940
Essex Field Club	Procraerus tibialis	insect - beetle (Coleoptera)		Essex Red Data List: Listed	Hatfield Forest	TL52	2	1987
Essex Birdwatching Society	Pyrrhula pyrrhula	bird	Eurasian Bullfinch	Essex Red Data List: Listed	Elsenham	TL5425	1	2014
Essex Birdwatching Society	Pyrrhula pyrrhula	bird	Eurasian Bullfinch	Essex Red Data List: Listed	Elsenham Hall	TL5425	1	2014
Essex Field Club	Silaum silaus	flowering plant	Pepper-saxifrage	Essex Red Data List: Listed	Takeley, Broxted S SW	TL5624	1	1996
Essex Field Club	Silene noctiflora	flowering plant	Night-flowering Catchfly	Essex Red Data List: Listed	Elsenham, Takeley & Stansted L NW	TL5423	1	1996
Essex Field Club	Spaelotis ravida	insect - moth	Stout Dart	Essex Red Data List: Listed	Bambers Green, Takeley	TL52	1	1972
Essex Field Club	Spaelotis ravida	insect - moth	Stout Dart	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Field Club	Succisa pratensis	flowering plant	Devil's-bit Scabious	Essex Red Data List: Listed	Takeley, Broxted S SW	TL5624	1	1996
Essex Field Club	Trifolium ochroleucon	flowering plant	Sulphur Clover	Essex Red Data List: Listed	Elsenham	TL5423	2	1996
Essex Field Club	Trifolium ochroleucon	flowering plant	Sulphur Clover	Essex Red Data List: Listed	Elsenham, Takeley & Stansted L NW	TL5423	1	1996
Essex Birdwatching Society	Turdus philomelos	bird	Song Thrush	Essex BAP: EBAP, Essex Red Data List: Listed	Elsenham	TL5425	1	2014

Essex Field Club	Tyta luctuosa	insect - moth	Four-spotted	Essex Red Data List: Listed	Henham	TL52	1	1940
Essex Birdwatching Society	Tyto alba	bird	Barn Owl	Essex Red Data List: Listed	Stansted Airport	TL5523	2	2013

### 23. Invasive Species

#### Information about invasive species

Invasive species may threaten habitats and species with biodiversity and nature conservation value. Where invasive species are present, action may or may not be appropriate to control their spread or to eliminate them from sites and habitats.

Invasive Species Action Plans are used to help coordinate the response to key invasive non-native species across England, Scotland and Wales. The plans provide a short and strategic overview identifying the key aims, objectives and actions. They can be seen on the Defra website at https://secure.fera.defra.gov.uk/nonnativespecies/index.cfm?sectionid=92

#### Action on invasive species

The appropriate response to the presence of an invasive species will vary depending on the species and the degree to which it is or may in the future cause damage to the ecology at the location.

#### Identification of invasive species

Identification of invasive non-native species is an essential part of invasive species management and guidance can be found on the Defra website at https://secure.fera.defra.gov.uk/nonnativespecies/index.cfm?sectionid=47

#### Invasive species records

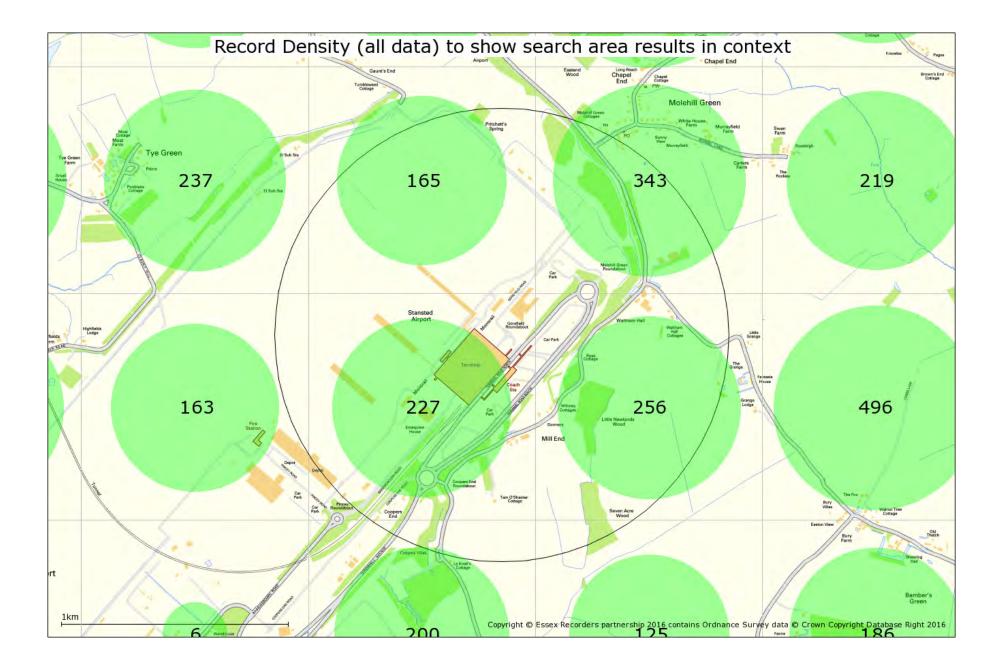
Most existing records of invasive species in Essex are made during general recording, although there are plans to encourage targetted recording of these species in the future.

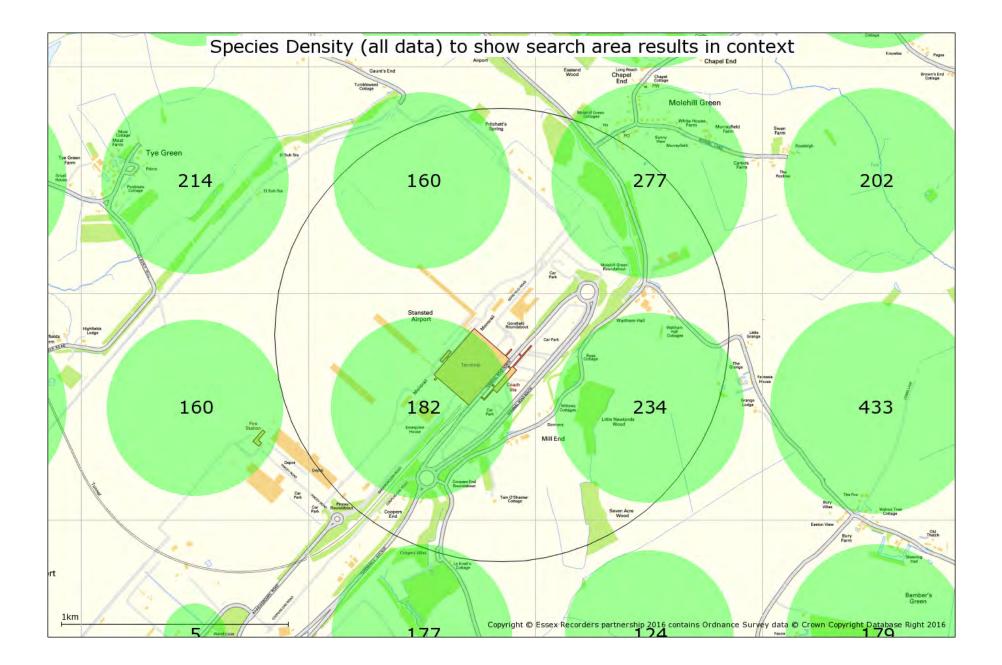
Where you have records of invasive species for the search area, please submit them to us by email to datasearch@essexfieldclub.org.uk or via our website at www.essexfieldclub.org.uk

Where invasive species have been recorded, their records are summarised in the following table.

# **Invasive Species**

Source	Taxon	Group	Vernacular	Location	Position	Records	Latest
Essex Field Club	Galega officinalis	flowering plant	Goat's-rue	Elsenham (Tye Green) SW	TL5424	1	1997
Essex Field Club	Muntiacus reevesi	mammal	Muntjac Deer	TL564242	TL564242	1	1999
Essex Field Club	Muntiacus reevesi	mammal	Muntjac Deer	TL542241	TL542241	2	1997
Essex Field Club	Muntiacus reevesi	mammal	Muntjac Deer	TL551221	TL551221	3	1998
Essex Field Club	Solidago canadensis	flowering plant	Canadian Goldenrod	Takeley, Broxted S SW	TL5624	1	1996





# **Summary of Species Record Counts**

#### **Records of Scheduled Species**

Records in scheduled categories as detailed in this report are enumerated below.

Protected Species Records	132
Priority / NERC S41 Species Records	189
Global & National Red List and Scarce Species Records	38
Essex Red Data List Species Records	130
Invasive Species Records	8

#### Records used in preparing this report

Counts below are for all records within the designated search area used in the preparation of this report This table is for your information only and is intended to show the relative contribution from each taxonomic group, even if excluded from the results by the desk study criteria requested.

Essex Bat Group	2
Essex Birdwatching Society	60

Essex Field Club County Recorder counts

Aculeata	8
Aculeata: Apinae	0
Aculeata: Formicidae	1
Amphibians and reptiles	0
Araneae	44
Auchenorrhyncha	0
Bats	61
Birds	0
Coleoptera	7
Diptera: Larger Brachycera	2
Diptera: other groups	1
Diptera: Syrphidae	6
Fungi	2
Heteroptera	3
Hymenoptera: other groups	0
Isopoda	3
Lepidoptera: butterflies	23
Lepidoptera: macromoths	809
Lepidoptera: micromoths	26
Lichens	0
Mammals	44
Mollusca	0
Myriapoda	4
Non-vascular plants	5
Odonata	1
Opiliones	2
Orthoptera group	16
Pseudoscorpiones	0
Slime moulds	0
Vascular plants	1492

### **Geological Site Information**

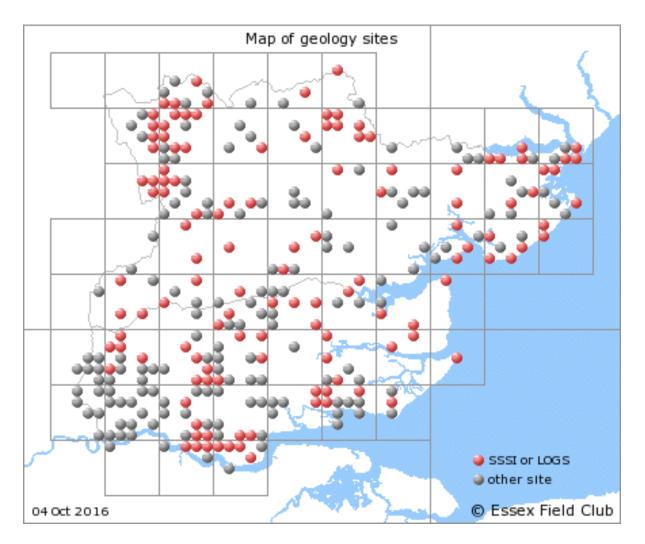
The geological site database includes and describes geological sites which are of regional or local importance for their scientific, historical and/or educational value unlike the strictly scientific criteria applied to the SSSIs (Sites of Special Scientific Interest) which are of national importance. These are not 'second tier' sites but sites of regional and local value in their own right.

Some of these sites are being designated as Local Geological Sites (LOGS), formerly called Regionally Important Geological Sites, or have the potential to be so designated, and these sites are marked as such. Existing SSSIs which have been designated for their geological importance are also included in this database.

Note: Some of the sites in the geological site database are solely of historical interest as a record of an important or interesting discovery. There are also sites which are not strictly geological but nevertheless have a geological connection, for example buildings constructed of local stone. These sites have not been included in this report.

Although many of the sites listed are publicly accessible, inclusion of a site in this database does not imply any rights of access. Permission to visit must always be obtained from the relevant landowner.

There are no geological Sites of Special Scientific Interest, Potential Local Geological or Designated Local Geological Sites identified in relation to the search area.



### Additional geological Site Information

The following general geological sites have also been identified. Further information is available from www.essexfieldclub.org.uk/portal/p/A-Z+Geological+Site+Index

No general geological sites are identified in relation to the search area

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