



In partnership with

Basildon Council

Buglife

Butterfly Conservation

Essex Amphibian & Reptile Group

Essex Bat Group

Essex Recorders partnership Datasearch Report

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

Biodiversity data regarding
Garnetts Wood
Radius 1km from TL6357118380

On behalf of

Miss Gemma Holmes
Place Services

EFC0, 15 Jul 2014

When 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 given in full and not changed or redacted.

The Essex Field Club, Registered Charity Number 1113963.

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Essex Field Club



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Essex Recorders partnership Datasearch Report

Project: Garnetts Wood

Search Area: Radius 1km from TL6357118380

Our Reference: EFC0

Customer Reference: N/A

Dated: 15 Jul 2014

On behalf of:

Miss Gemma Holmes

Place Services

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 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	<input checked="" type="checkbox"/>
Nature Improvement Areas	<input checked="" type="checkbox"/>
Special Areas of Conservation	<input checked="" type="checkbox"/>
Special Protection Areas	<input checked="" type="checkbox"/>
Ramsar Sites	<input checked="" type="checkbox"/>
Marine Conservation Zones	<input checked="" type="checkbox"/>
Sites of Special Scientific Interest details	<input checked="" type="checkbox"/>
Local Nature Reserves	<input checked="" type="checkbox"/>
Country Parks	<input checked="" type="checkbox"/>
Common Land	<input checked="" type="checkbox"/>
Ancient Woodland Inventory	<input checked="" type="checkbox"/>
Traditional Orchard Inventory	<input checked="" type="checkbox"/>
Invertebrate Assemblage Information	<input checked="" type="checkbox"/>
Protected Species	<input checked="" type="checkbox"/>
Priority Section 41 Species	<input checked="" type="checkbox"/>
National Red List and Scarce Species	<input checked="" type="checkbox"/>
Essex Red Data List Species	<input checked="" type="checkbox"/>
Invasive Species	<input checked="" type="checkbox"/>
All Species Records	<input type="checkbox"/>

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.

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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 put into the public domain as part of a desk study to support an Environmental Statement or planning application, then the report must not be changed or redacted, but given in full. 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.

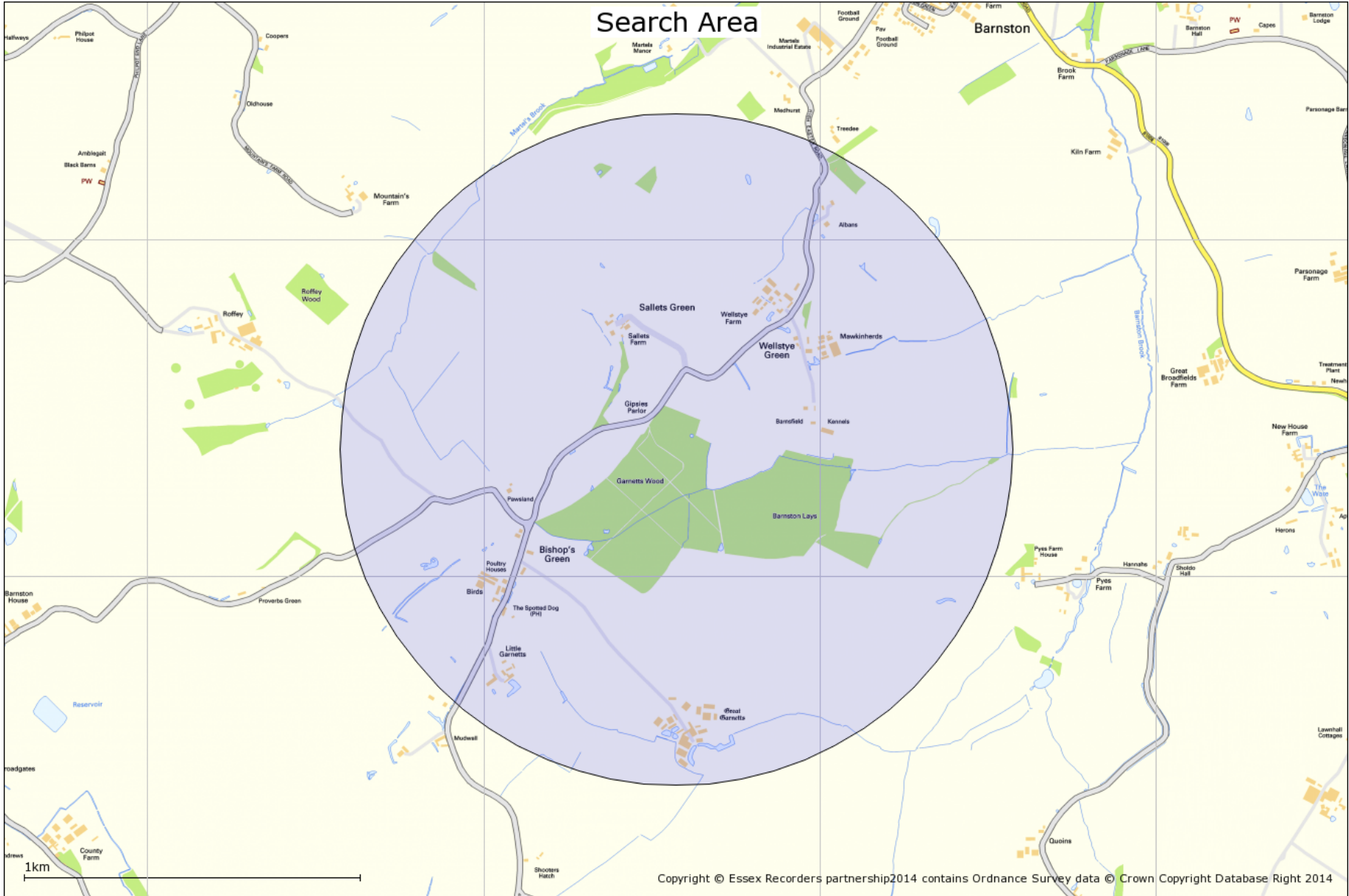
Designations

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 allies	County data
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	Invasive species	Available data
Essex Field Club	birds	Small number of records
EFC Schemes	EFC Schemes records	EFC Schemes records
Essex Bat Group	Essex Bat Group data	Dataset



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. 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

6. 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

7. 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

8. 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

9. 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

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

10. 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).

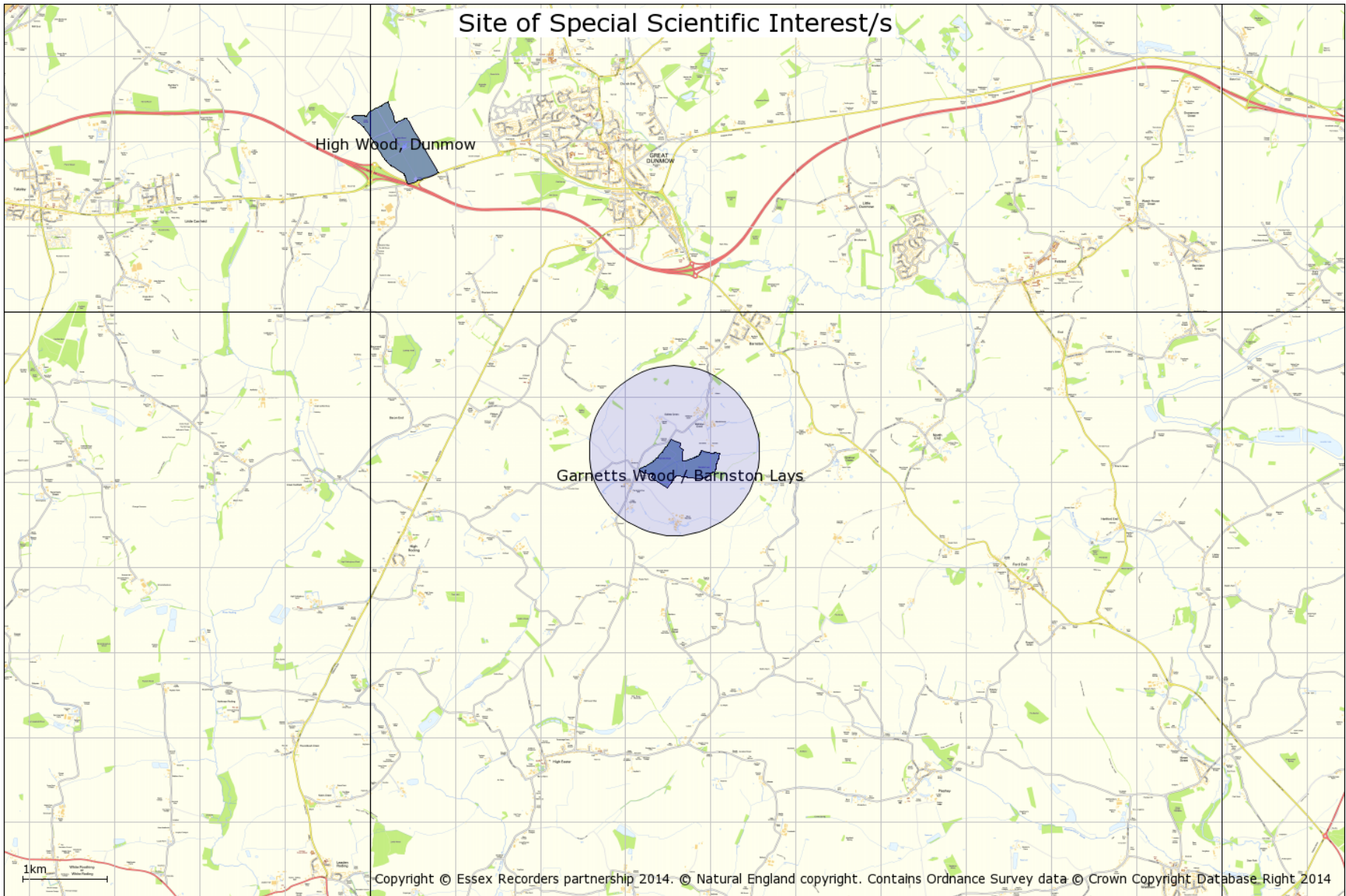
SSSIs are the country's very best wildlife and geological sites. They include some of our most spectacular and beautiful habitats - large wetlands teeming with waders and waterfowl, winding chalk rivers, gorse and heather-clad heathlands, flower-rich meadows, windswept shingle beaches and remote uplands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

There are 2 Site of Special Scientific Interest/s identified in relation to the search area.

Garnetts Wood / Barnston Lays
High Wood, Dunmow



11. 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

12. 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

13. 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.

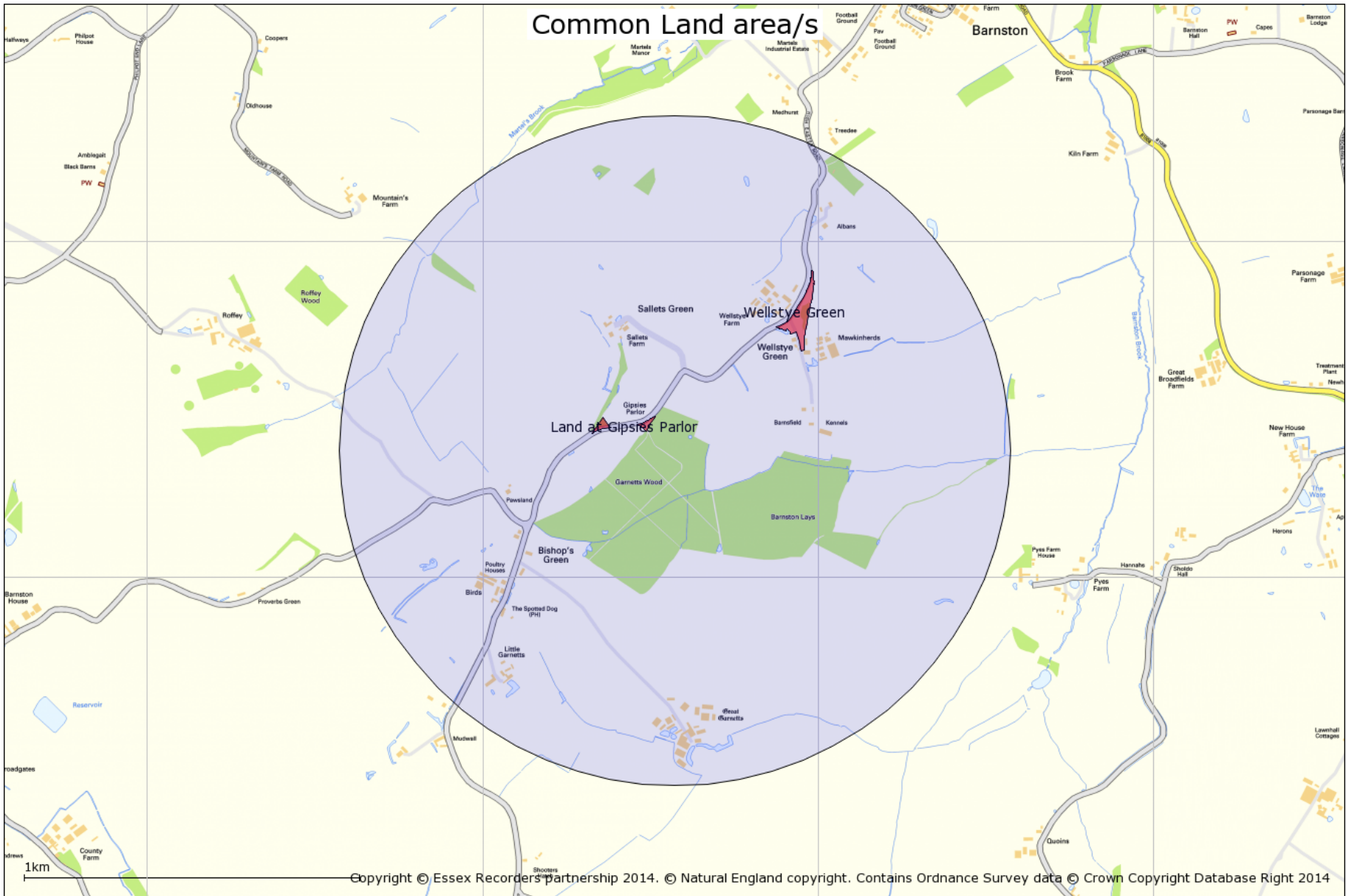
There is no right of access to land shown as OC or RCL where such land meets any of the descriptions of excepted land as specified in Part 1 of Schedule 1 of the CROW Act. This includes areas of land such as racecourses, aerodromes and military byelaw land.

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 are 2 Common Land area/s identified in relation to the search area. (Red polygon/s)

Land at Gipsies Parlor
Wellstye Green



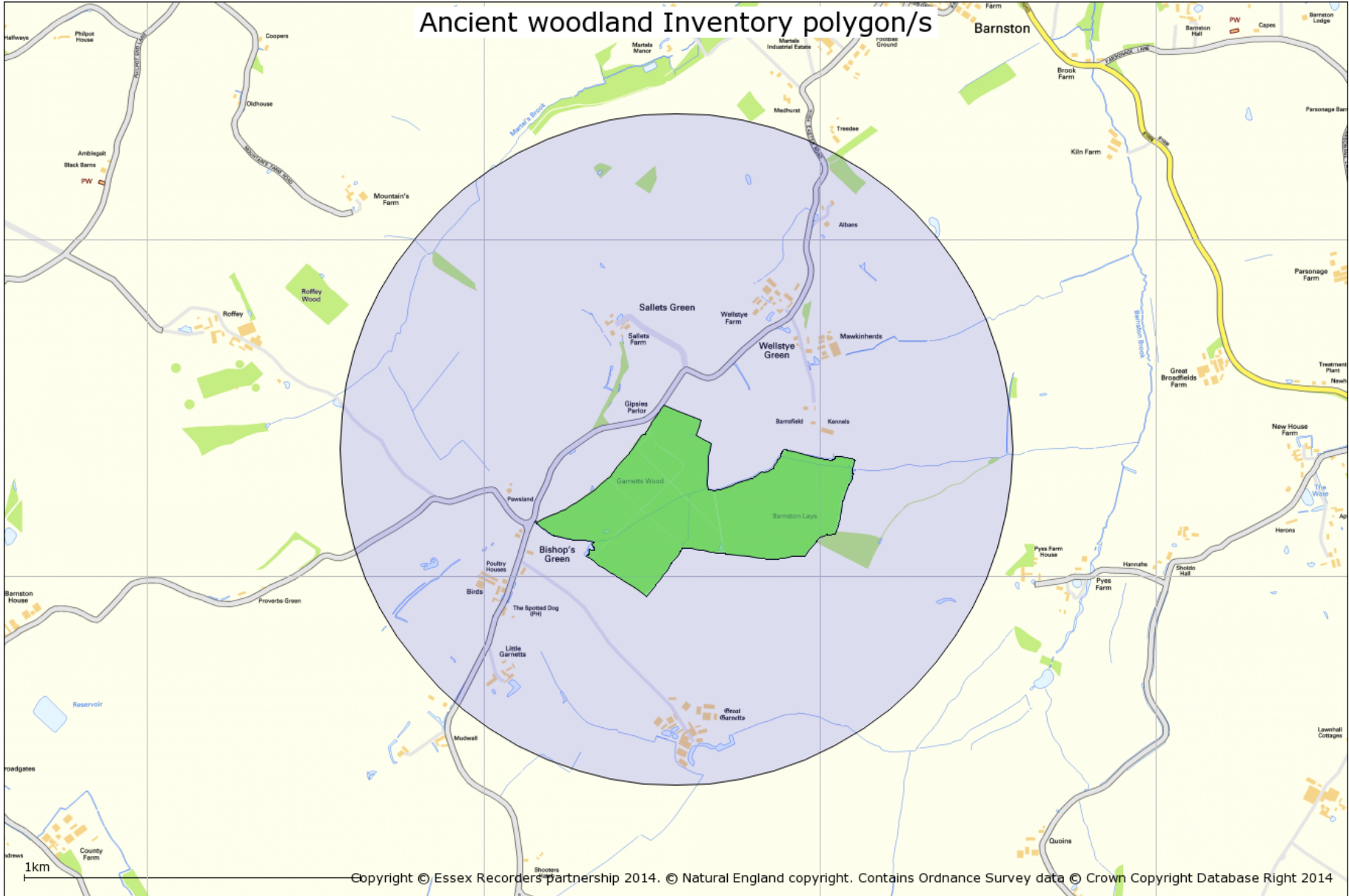
14. Ancient woodland Inventory

Ancient Woodlands (England). © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right [2014]

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.



15. Traditional Orchard Inventory

Natural England Traditional Orchard Inventory (Provisional) for England© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right [2014]

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 us to update the inventory please let us know.

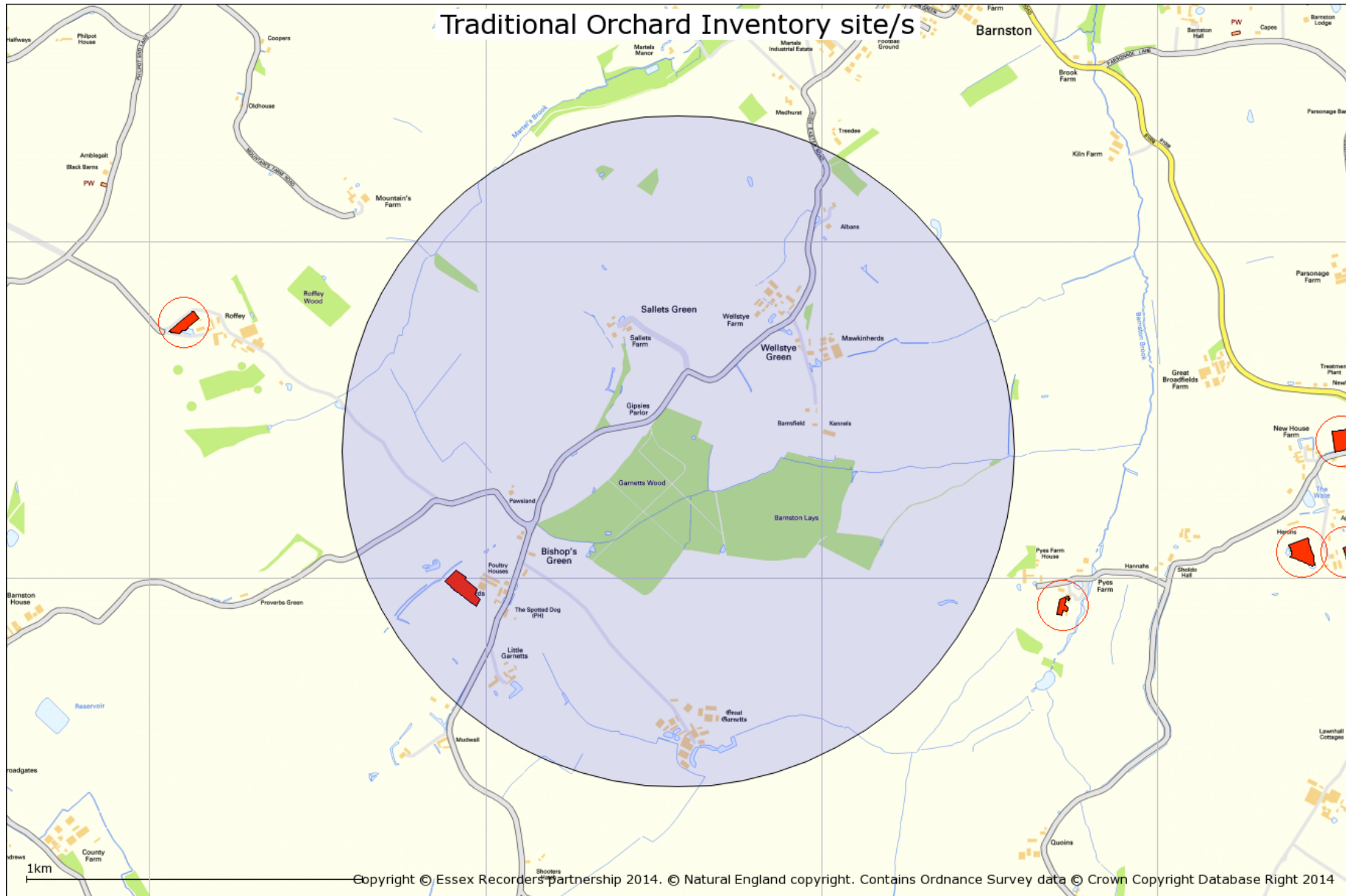
Traditional Orchards HAP Definition

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 are 6 Traditional Orchard Inventory site/s identified in relation to the search area.

Traditional Orchard Inventory site/s



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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.

16. 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
wood decay	close to favourable condition
unshaded early successional mosaic	important assemblage
grassland & scrub matrix	important assemblage
shaded field & ground layer	important assemblage
permanent wet mire	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	
open short sward	
scrub edge	
rich flower resource	favourable condition

17. 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 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 Field Club	<i>Apatura iris</i>	insect - butterfly	Purple Emperor	Wildlife and Countryside Act 1981: Schedule 5 Section 9.5a, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5b	Garnetts Wood	TL6318	1	2011
EFC/EARG	<i>Bufo bufo</i>	amphibian	Common Toad	Bern Convention: Appendix 3, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5a, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5b	Great Dunmow (pinpoint)	TL637180	1	2013
Essex Field Club	<i>Hyacinthoides non-scripta</i>	flowering plant	Bluebell / Wild Hyacinth	Wildlife and Countryside Act 1981: Schedule 8	Garnetts Wood, Barnston	TL6318	2	1999
Essex Field Club	<i>Hyacinthoides non-scripta</i>	flowering plant	Bluebell / Wild Hyacinth	Wildlife and Countryside Act 1981: Schedule 8	County Farm, High Roding	TL6217	1	2010
Essex Field Club	<i>Satyrrium w-album</i>	insect - butterfly	White-letter Hairstreak	Wildlife and Countryside Act 1981: Schedule 5 Section 9.5a, Wildlife and Countryside Act 1981: Schedule 5 Section 9.5b	Barnston	TL61P	1	1997
EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Bern Convention: Appendix 2, Habitats Directive: Annex 2 - non-priority species, Habitats Directive: Annex 4, 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	Great Dunmow (pinpoint)	TL636184	1	2013

EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Bern Convention: Appendix 2, Habitats Directive: Annex 2 - non-priority species, Habitats Directive: Annex 4, 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	Great Dunmow (pinpoint)	TL637180	1	2013
EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Bern Convention: Appendix 2, Habitats Directive: Annex 2 - non-priority species, Habitats Directive: Annex 4, 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	Salletts Green Barnston Dunmow	TL635187	2	2007

18. 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
EFC/EARG	<i>Bufo bufo</i>	amphibian	Common Toad	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Great Dunmow (pinpoint)	TL637180	1	2013
Essex Field Club	<i>Coenonympha pamphilus</i>	insect - butterfly	Small Heath	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Roffey, Essex	TL6218	1	2004
Essex Field Club	<i>Lasiommata megera</i>	insect - butterfly	Wall	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Parkers Croft, High Easter Rd, Barnston, Essex CM6 1ND	TL6318	13	1992
Essex Field Club	<i>Satyrrium w-album</i>	insect - butterfly	White-letter Hairstreak	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Barnston	TL61P	1	1997
Essex Field Club	<i>Timandra comae</i>	insect - moth	Blood-vein	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41	Garnetts Wood	TL6318	1	1992
EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41, Essex BAP: EBAP	Great Dunmow (pinpoint)	TL637180	1	2013
EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41, Essex BAP: EBAP	Salletts Green Barnston Dunmow	TL635187	2	2007

EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Biodiversity Action Plan UK list of priority species: Priority Species, Biodiversity Lists - England: England NERC S.41, Essex BAP: EBAP	Great Dunmow (pinpoint)	TL636184	1	2013
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19. 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. Insufficiently 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 (lc)

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 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 is 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 Field Club	<i>Apatura iris</i>	insect - butterfly	Purple Emperor	Red listing based on 2001 IUCN guidelines: Near Threatened	Garnetts Wood	TL6318	1	2011
Essex Field Club	<i>Araneus triguttatus</i>	spider (Araneae)		Rare and scarce species (not based on IUCN criteria) 2012: pNationally Scarce B	Garnetts Wood	TL6318	2	1991
Essex Field Club	<i>Choerades marginatus</i>	insect - true fly (Diptera)		Rare and scarce species (not based on IUCN criteria): Nationally Notable	Garnetts Wood	TL6318	1	2000
Essex Field Club	<i>Coenonympha pamphilus</i>	insect - butterfly	Small Heath	Red listing based on 2001 IUCN guidelines: Near Threatened	Roffey, Essex	TL6218	1	2004
Essex Field Club	<i>Entelecara congenera</i>	spider (Araneae)		Rare and scarce species (not based on IUCN criteria) 1990: Nationally Notable, Rare and scarce species (not based on IUCN criteria) 2012: pNationally Scarce B	Garnetts Wood	TL6318	2	1993
Essex Field Club	<i>Euphorbia exigua</i>	flowering plant	Dwarf Spurge	Red listing based on 2001 IUCN guidelines: Near Threatened	County Farm, High Roding	TL6217	1	2010
Essex Field Club	<i>Lasiommata megera</i>	insect - butterfly	Wall	Red listing based on 2001 IUCN guidelines: Near Threatened	Parkers Croft, High Easter Rd, Barnston, Essex CM6 1ND	TL6318	13	1992
Essex Field Club	<i>Lasius brunneus</i>	insect - hymenopteran	an ant	Rare and scarce species (not based on IUCN criteria): Nationally Notable A	Garnetts Wood	TL6318	1	1993
Essex Field Club	<i>Moebelia penicillata</i>	spider (Araneae)		Rare and scarce species (not based on IUCN criteria) 2012: pNationally Scarce B (Watching brief)	Garnetts Wood	TL6318	2	1989
Essex Field Club	<i>Phaonia mediterranea</i>	insect - true fly (Diptera)		Rare and scarce species (not based on IUCN criteria): Nationally Notable	Garnetts Wood	TL636183	1	2000

Essex Field Club	<i>Philodromus albidus</i>	spider (Araneae)		Rare and scarce species (not based on IUCN criteria) 1990: Nationally Notable	Garnetts Wood	TL6318	2	1993
Essex Field Club	<i>Philodromus praedatus</i>	spider (Araneae)		Rare and scarce species (not based on IUCN criteria) 1990: Nationally Notable	Garnetts Wood	TL6318	2	1993
Essex Field Club	<i>Robertus neglectus</i>	spider (Araneae)		Rare and scarce species (not based on IUCN criteria) 2012: pNationally Scarce B (Watching brief)	Garnetts Wood	TL636183	2	2000
Essex Field Club	<i>Satyrrium w-album</i>	insect - butterfly	White-letter Hairstreak	Red listing based on 2001 IUCN guidelines: Endangered	Barnston	TL61P	1	1997
Essex Field Club	<i>Tetragnatha pinicola</i>	spider (Araneae)		Rare and scarce species (not based on IUCN criteria) 1990: Nationally Notable	Garnetts Wood	TL6318	5	1993
Essex Field Club	<i>Trifolium ochroleucon</i>	flowering plant	Sulphur Clover	Rare and scarce species (not based on IUCN criteria): Nationally scarce, Red listing based on 2001 IUCN guidelines: Near Threatened	County Farm, High Roding	TL6217	1	2010

20. 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* as:

Essex Endangered

- Species known as a single population within a single post-1980 1km² 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 1km² 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 tetrads (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	<i>Apatura iris</i>	insect - butterfly	Purple Emperor	Essex Red Data List: Appendix, Essex Red Data List: pListed	Garnetts Wood	TL6318	1	2011
Essex Field Club	<i>Athyrium filix-femina</i>	fern	Lady Fern	Essex Red Data List: Listed	Garnetts Wood, Barnston	TL6318	1	1999
Essex Field Club	<i>Carex pallescens</i>	flowering plant	Pale Sedge	Essex Red Data List: Listed	Garnetts Wood, Barnston	TL6318	2	1999
Essex Field Club	<i>Choerades marginatus</i>	insect - true fly (Diptera)		Essex Red Data List: Listed	Garnetts Wood	TL6318	1	2000
Essex Field Club	<i>Compsilura concinnata</i>	insect - true fly (Diptera)		Essex Red Data List: pListed	Garnetts Wood	TL636183	1	2000
Essex Field Club	<i>Entelecara congenera</i>	spider (Araneae)		Essex Red Data List: Listed	Garnetts Wood	TL6318	2	1993
Essex Field Club	<i>Epilobium obscurum</i>	flowering plant	Short-fruited Willow-herb	Essex Red Data List: Listed	Garnetts Wood, Barnston	TL6318	1	1999
Essex Field Club	<i>Eumea linearicornis</i>	insect - true fly (Diptera)		Essex Red Data List: pListed	Garnetts Wood	TL636183	1	2000
Essex Field Club	<i>Lasius brunneus</i>	insect - hymenopteran	an ant	Essex Red Data List: Listed	Garnetts Wood	TL6318	1	1993
Essex Field Club	<i>Ribes nigrum</i>	flowering plant	Black Currant	Essex Red Data List: Listed	Garnetts Wood, Barnston	TL6318	1	1999
Essex Field Club	<i>Robertus neglectus</i>	spider (Araneae)		Essex Red Data List: Listed	Garnetts Wood	TL636183	2	2000
Essex Field Club	<i>Tetragnatha pinicola</i>	spider (Araneae)		Essex Red Data List: Listed	Garnetts Wood	TL6318	5	1993
Essex Field Club	<i>Trifolium ochroleucon</i>	flowering plant	Sulphur Clover	Essex Red Data List: Listed	County Farm, High Roding	TL6217	1	2010
EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Essex BAP: EBAP, Essex Red Data List: Listed	Great Dunmow (pinpoint)	TL637180	1	2013
EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Essex BAP: EBAP, Essex Red Data List: Listed	Salletts Green Barnston Dunmow	TL635187	2	2007

EFC/EARG	<i>Triturus cristatus</i>	amphibian	Warty Newt / Great Crested Newt	Essex BAP: EBAP, Essex Red Data List: Listed	Great Dunmow (pinpoint)	TL636184	1	2013
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21. 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 targeted recording of these species in the future.

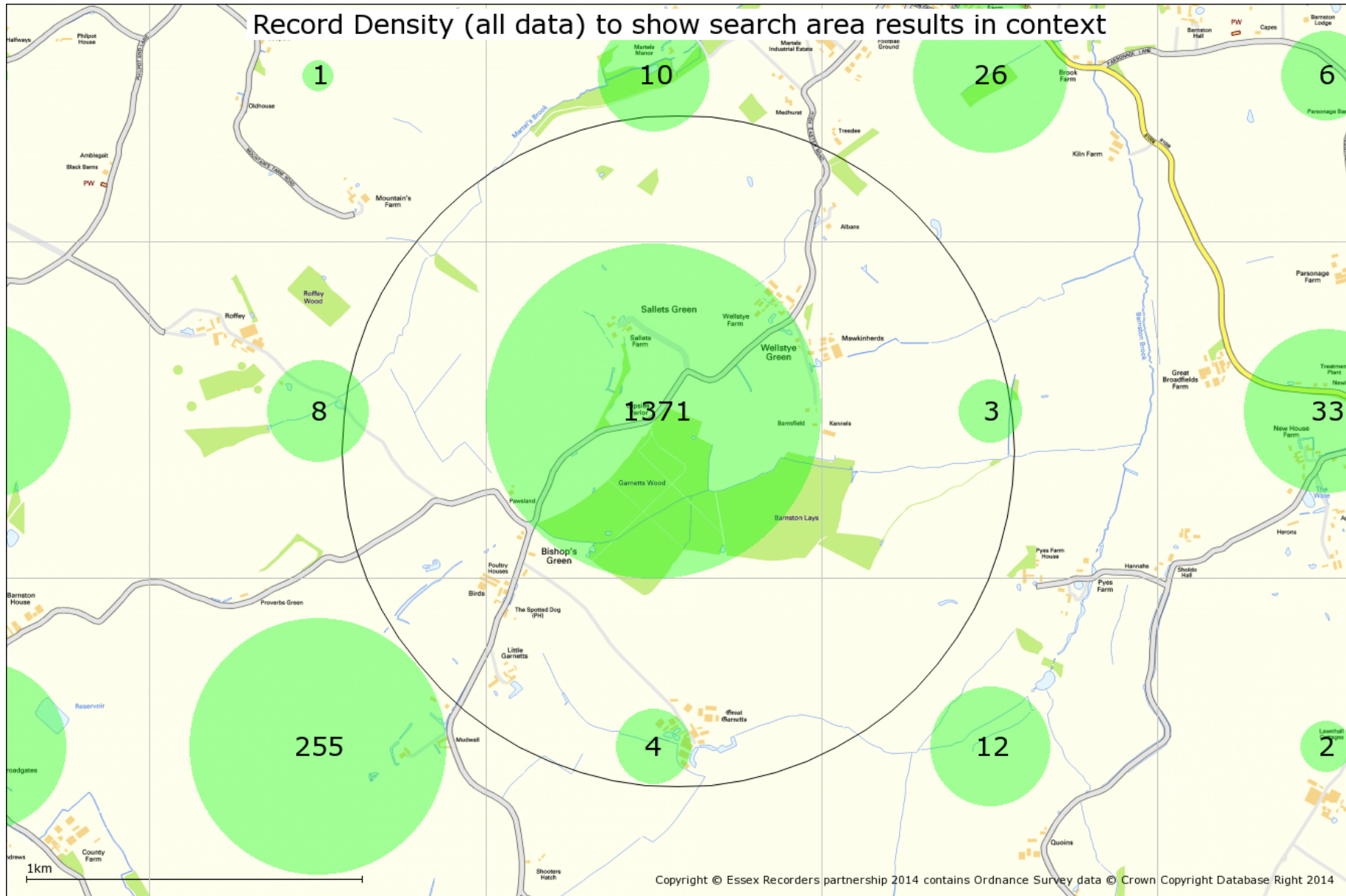
Where you have records of invasive species for the search area, please submit them to us by email to datasearch@essexfieldclub.org.uk or via our website at www.essexfieldclub.org.uk

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

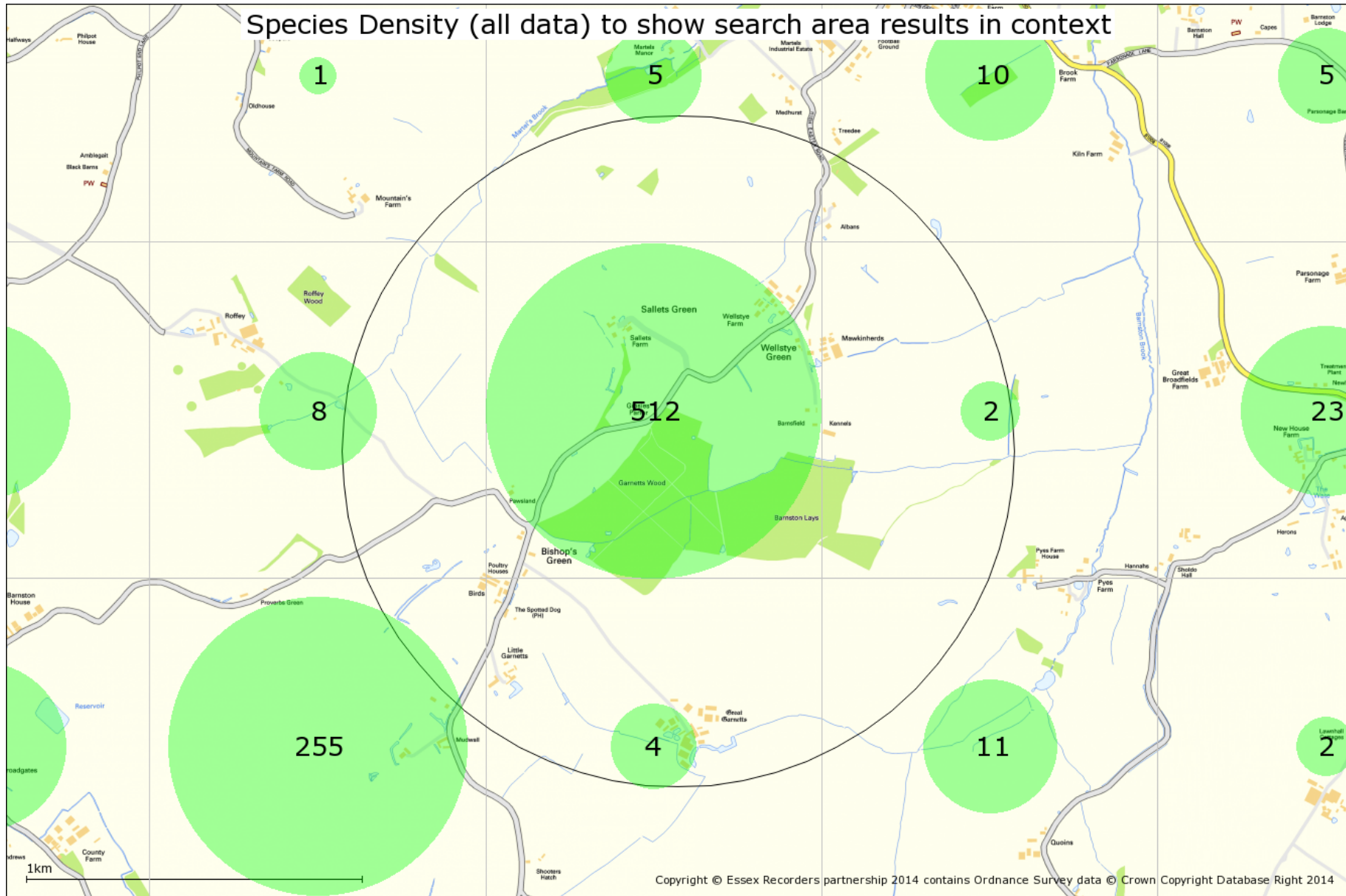
Invasive Species

Source	Taxon	Group	Vernacular	Location	Position	Records	Latest
Essex Field Club	<i>Muntiacus reevesi</i>	mammal	Muntjac Deer	TL642197	TL642197	2	2004

Record Density (all data) to show search area results in context



Species Density (all data) to show search area results in context



Appendix: Summary of record counts

Records of Scheduled Species

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

Protected Species Records	10
UK Biodiversity Action Plan / NERC S41 Species Records	21
Global & National Red List and Scarce Species Records	38
Essex Red Data List Species Records	24
Invasive Species Records	2

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.

Essex Bat Group	0
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Essex Field Club County Recorder counts

Aculeata	27
Aculeata: Apinae	6
Aculeata: Formicidae	7
Amphibians and reptiles	5
Araneae	516
Auchenorrhyncha	0
Birds	0
Coleoptera	1
Diptera: Larger Brachycera	6
Diptera: other groups	43
Diptera: Syrphidae	9
Fungi	9
Heteroptera	0
Hymenoptera: other groups	0
Isopoda	11
Lepidoptera: butterflies	193
Lepidoptera: macromoths	4
Lepidoptera: micromoths	61
Lichens	0
Mollusca	0
Myriapoda	0
Non-vascular plants	155
Odonata	9
Opiliones	27
Orthoptera group	0
Pseudoscorpiones	0
Vascular plants	535