



MKA
ECOLOGY

Biodiversity Study

Stansted Mountfitchet, Essex

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CONTENTS

1.	INTRODUCTION	4
1.1.	Aims and objectives	4
1.2.	Study area and local context	4
1.3.	Legislation and policy	5
2.	METHODOLOGY	8
2.1.	Desktop study	8
2.2.	UK Habitat Classification	8
2.3.	The urban environment.....	9
2.4.	Stakeholder and volunteer engagement.....	9
3.	RESULTS	12
3.1.	The geological setting.....	12
3.2.	The ecological setting	12
3.3.	The study area	19
4.	THREATS	57
5.	OPPORTUNITIES AND ACTIONS	59
6.	RECOMMENDATIONS	76
7.	REFERENCES	79
8.	APPENDICES	82



1. INTRODUCTION

1.1. Aims and objectives

In 2024 MKA Ecology Ltd was commissioned by Sustainable Stansted to undertake a biodiversity study of the parish of Stansted Mountfitchet in Essex. The aims of the study were as follows;

- Undertake a habitat assessment of the study area to establish a biodiversity baseline
- Identify key areas for enhancement
- Identify a suite of appropriate biodiversity enhancements
- Develop a pack to inform residents of appropriate biodiversity enhancements
- Engage the local community in nature conservation and restoration

This report represents the findings of the study which was conducted during 2024 and 2025 through desktop studies, field visits and various stakeholder exercises. This included mapping and gathering data of the habitats present within Stansted Mountfitchet, conducted by volunteers under the guidance of professional ecologists.

The study supports Sustainable Stansted's broader mission to '*improve the local environment, promote biodiversity, help local households to reduce energy use and support the Uttlesford District Council's target of reaching net-zero carbon emissions by 2030*'. Biodiversity can play a critical role in achieving this mission as it performs a valuable role in any sustainable development providing inherent interest, as well as a wide range of other ecosystem services and benefits such as water management, well-being and place making.

1.2. Study area and local context

The study area location is shown on the map in Figure 1. It comprises the entirety of Stansted Mountfitchet parish which lies between Elsenham to the north-east, Stansted Airport to the south-east, Bishops Stortford to the south-west and Manuden to the north-west. The study area is bisected by the M11 and the Cambridge to Liverpool Street rail line and Stansted Airport spur.

The area is characterised by various land uses, including transport, industry and widespread arable agriculture interspersed with settlements. Of particular note is Stansted Airport which plays a significant role in the area's economy. Stansted Mountfitchet contains a range of habitats, some of which are of ecological value. Of note are a number of Local Wildlife Sites including the pockets of ancient woodland at Durrel's, Houghtey and Alsa Woods, as well as Aubrey Buxton Nature Reserve and Turner's Spring which are also of ecological importance. Other habitats such as scrub, grassland, waterbodies and hedgerows make contributions to the local biodiversity.

Stansted Mountfitchet has undergone significant development over time with the location of Stansted Airport bringing rapid growth to the surrounding villages. Despite this, there are existing habitats within the wider landscape which provide evidence of former land use including the woodlands. Additionally, the widespread arable fields bordered by hedgerows are likely of considerable antiquity and of pre-18th century origin (Uttlesford District Council, 2006). Stansted Mountfitchet itself is also centred on its castle and medieval market-place.

1.3. Legislation and policy

The relevant national legislation considered within the scope of this document includes the following:

- The Wildlife and Countryside Act 1981;
- The Conservation of Habitats and Species Regulations 2010;
- Natural Environment and Rural Communities (NERC) Act 2006.

Further information is provided in Appendix 1, including levels of protection granted to the protected species which are discussed as constraints and opportunities within this document.

In addition to national legislations there is a raft of national and local policies relating to biodiversity. These can be helpful in determining appropriate biodiversity interventions which help to deliver policy targets at a local and national level. A selection of relevant policies and documents include:

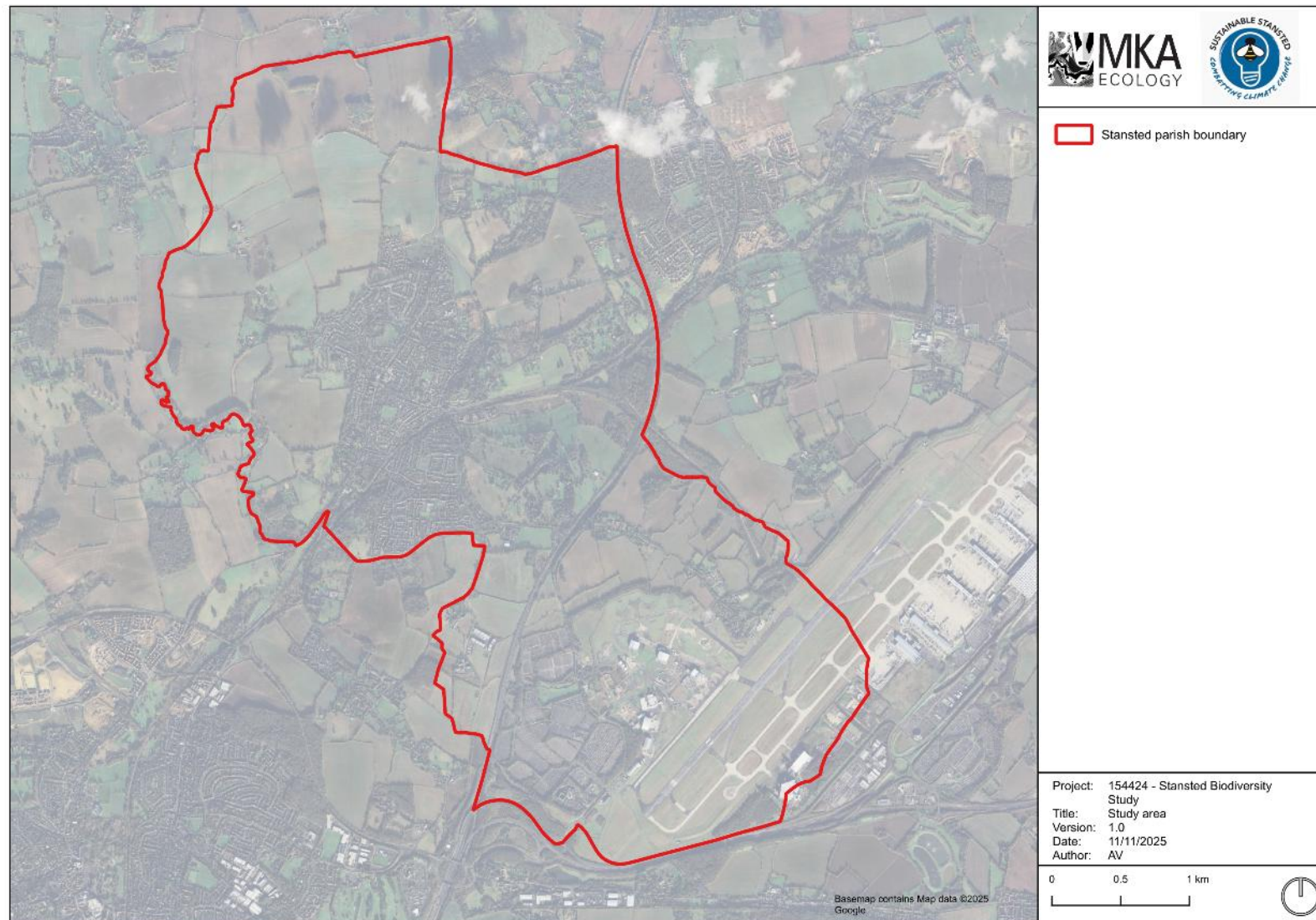
- Uttlesford District Council Climate Change and Biodiversity Action Plan (Uttlesford District Council, 2025);
- Uttlesford Green and Blue Infrastructure Strategy (Land Use Consultants, 2023); and
- Essex Local Nature Recovery Strategy (Essex County Council, 2025).

These documents set out local biodiversity priorities and identify priority habitats and species actions which can be enacted to ensure they are conserved and enhanced.

Of particular significance is the Essex Local Nature Recovery Strategy (LNRS). The primary purpose of the LNRS is to identify locations to create or improve habitat most likely to provide the benefit for nature and the wider environment. The Essex LNRS identifies where new habitats, such as woodlands, grasslands, freshwater areas, river buffers, coastal and marine zones, and urban habitats, can be created. Opportunity maps highlight these areas and suggest actions for nature recovery within them. Therefore the LNRS is crucial in informing appropriate actions for Sustainable Stansted and ensuring these are coordinated with conservation efforts across the region.

The LNRS also addresses key species in the county. It identified a list of threatened Priority Species Shortlist along with the specific habitat interventions that they need. These species should be targeted wherever possible in the work of Sustainable Stansted.

Figure 1: Boundary of Stansted Mountfitchet study area



2. METHODOLOGY

2.1. Desktop study

The desktop study comprised a review of available biodiversity data, with a focus on designated sites and habitats. In addition, a data search was undertaken to identify records of protected and notable species within the study area. These records were obtained from Essex Field Club.

2.2. UK Habitat Classification

The habitat surveys followed the methodology of the UK Habitat Classification (professional) version 2.0 (hereafter UKHab; UK Habitat Classification Working Group, 2023). The primary classification builds on existing habitat and botanical classifications (e.g., Phase 1, NVC). Habitats are described through an increasingly detailed hierarchy until a match is found. This methodology was selected as it allows all habitats to be assigned, regardless of surveyor experience. For inexperienced surveys it is still possible to assign a broad habitat type at Level 2 (for example grassland, woodland or wetland). For more experienced surveyors it is possible to assign a detailed habitat type up to Level 5 (for example *Arrhenatherum* neutral grassland, oak-hornbeam forests or purple moor-grass meadows).

Data were digitally recorded onto a Samsung Tablets or Apple ipads in a Geographic Information System (GIS), in this instance QField, following a modified UK Habs colour mapping palette. Habitat parcels were mapped by assigning UK Habs codes to pre-existing OS polygons, modifying these where necessary. Small parcels corresponding to buildings, urban settlement or private gardens were assigned either urban or 'NULL'.

The study area was divided into survey sections, shown in Figure 2. This was to assist volunteers by creating manageable survey areas to avoid duplication. The urban section was not surveyed using UKHab because of the challenges concerning access and, more generally, a lack of habitats to survey.

Desk-based mapping using aerial imagery was undertaken for some areas due to access and logistical constraints (for example the significant area formed by Stansted Airport, or the larger tracts of arable farmland). Habitats were only mapped to hierarchy Level 2, designating a broad ecosystem type such as grassland, woodland or wetland. Where feasible higher levels in the hierarchy were assigned with caution. Furthermore, additional possible hedgerows and lines of trees were identified using aerial imagery across all survey parcels.

Rivers and hedgerows polygon areas were removed from total summed area as these habitats were calculated separately as linear features.

2.3. The urban environment

An alternative approach was taken in the urban parts of Stansted Mountfitchet. Here, two sites were selected by the volunteer group that might be suitable for enhancement. A key criterion in decision-making was whether these locations were in public ownership and therefore appropriate for locally developed and publicly funded enhancement strategies.

2.4. Stakeholder and volunteer engagement

A key aim of the project was to engage the local community in nature conservation. This was achieved in a number of ways;

- Volunteer recording;
- Engagement events; and
- Resident's biodiversity pack.

Volunteer recording

In order to deliver the habitat assessment over a large scale the mapping was undertaken by volunteers. Volunteers received training in both the UKHab methodology, and the use of digital data capture during fieldwork to ensure accurate capture of large mapping datasets. The volunteers who very kindly assisted with significant time, dedication and perseverance were;

- Fiona Neathey
- Allen MacPherson
- Kate Allen
- Emma Thomas
- Helen and Alexander Scott

Engagement events

Engagement events were held in Stansted Mountfitchet to raise awareness of biodiversity, the project and Sustainable Stansted. These events were on 6 September 2025 and 5 October 2024.

Resident's biodiversity pack

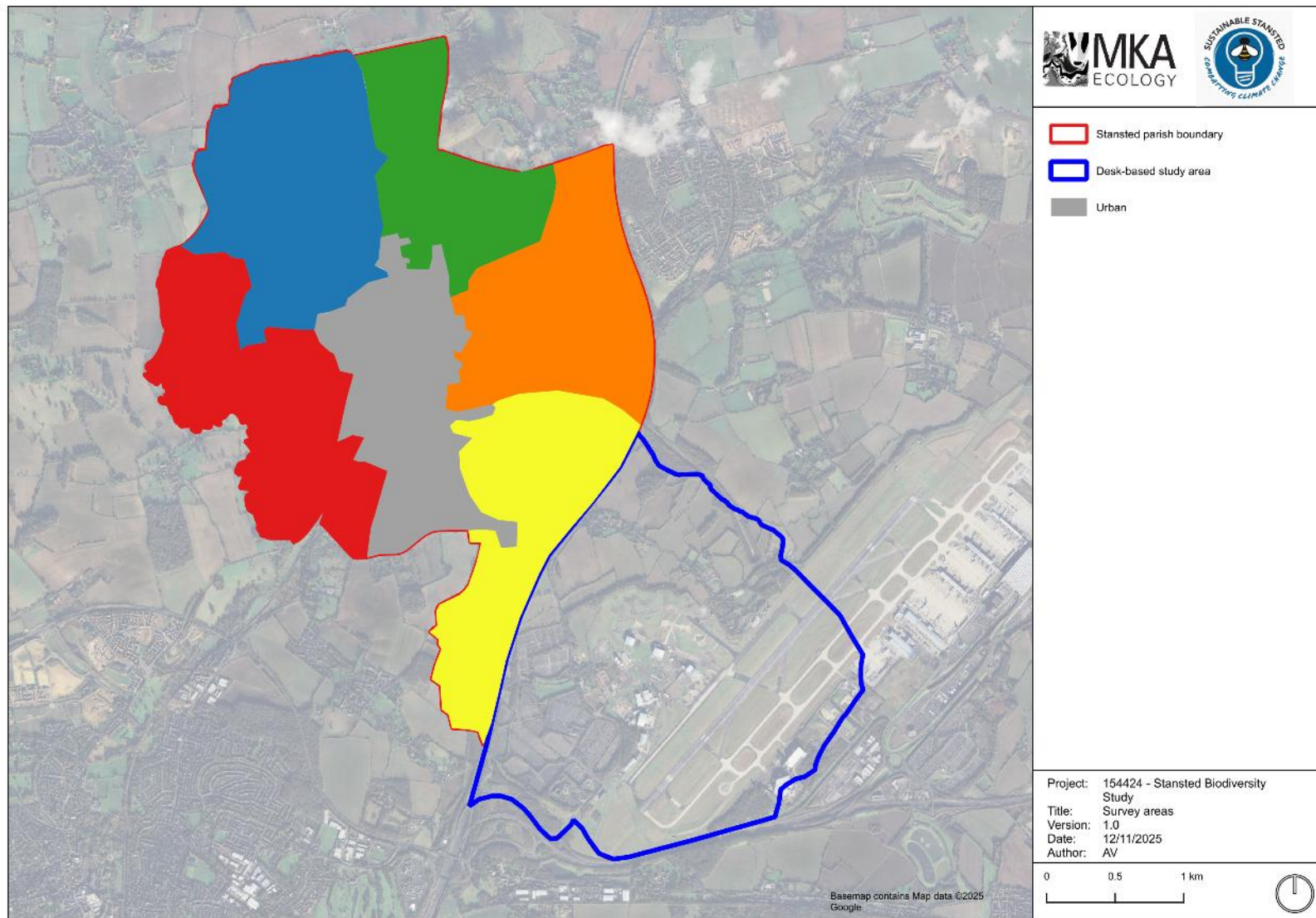
Using data from the project, and biodiversity advice more widely a resident's biodiversity pack was produced which described a variety of different wildlife friendly projects and products that can be added to urban gardens to give nature the helping hand that it needs. This pack can be accessed here;

<https://sustainablestansted.org/wp-content/uploads/2025/09/residents-guide-stansted-mountfitchet-1.pdf>



Volunteer field visit to Durrell's Wood area

Figure 2: Boundary of Stansted Mountfitchet survey areas



3. RESULTS

3.1. The geological setting

The surface geology of the Stansted Mountfitchet area is influenced by glacial activity and historical river systems, with superficial deposits comprising glacial till, as well as alluvial sands and gravels in former river channels and valley floors. The underlying bedrock geology in the wider region includes chalk, London Clay, and boulder clay. The soil type is predominantly lime-rich loamy and clayey soils with impeded drainage, which can support base-rich pastures, chalky boulder clay ancient woodland (LandIS, 2025). Freely draining slightly acid but base-rich soils are also present, particularly in land surrounding watercourses. There are floodplain soils immediately surrounding Stansted Brook (LandIS, 2025).

3.2. The ecological setting

Stansted Mountfitchet lies within the National Character Area (NCA) 86; South Suffolk and North Essex Clayland (Natural England, 2014). This area is an ancient landscape of wooded arable countryside with an undulating chalky boulder clay plateau and small river valleys that dissect the plateau. There is a complex network of old species-rich hedgerows, ancient woodland and parklands and meadows with streams and rivers. Traditional irregular field patterns are still present over much of the area and the widespread fertile, chalky-clay soils give the vegetation a less calcareous character. Semi-natural habitats are also of particular importance and include sparsely scattered, small lowland meadows and ancient woodland.

The habitats within Stansted Mountfitchet and its wider landscape very closely reflect the key characteristics of the NCA, particularly by the widespread arable fields bordered by hedgerows, pockets of ancient woodland and rivers and streams present.

The desktop study identified a range of sites designated for their nature conservation in the landscape around Stansted Mountfitchet. Table 1 provides a summary of statutorily designated areas that can be said to form part of the same ecological network as the study area. Figure 3 shows the location of these areas. Present are statutorily designated sites such as Local Nature Reserves (LNR), National Nature Reserves and Sites of Special Scientific Interest (SSSI), the latter two types being some of the most important locations in the country.

Table 2 provides details of the non-statutorily designated sites and this includes eleven Local Wildlife Sites (LoWS). These are presented in Figure 4.

Table 1: Statutory designated sites associated with the study area

Site name	Distance and direction	Reasons for selection
Hatfield Forest SSSI and NNR	0.49km south	Medieval royal hunting forest with veteran trees that date over 1000 years old and hosts over 3,500 species including bats, badgers and orchids.
Flitch Way LNR	0.3km south	Former railway line which includes areas of open grassland and supports several protected species including great crested newts <i>Triturus cristatus</i> , slow-worm <i>Anguis fragilis</i> , common toad <i>Bufo bufo</i> , common pipistrelle bat <i>Pipistrellus pipistrellus</i> and brown hare <i>Lepus europaeus</i> . It provides excellent connectivity for biodiversity through the landscape.

Table 2: Non-statutory designated sites associated with the study area

Site name	Reasons for selection
Houghtey Wood LoWS.	Ancient woodland.
Alsa Wood LoWS.	Ancient woodland.
Alsa Lodge Pit	Supports a notable invertebrate assemblage.
Aubrey Buxton Nature Reserve LoWS	Broad-leaved deciduous woodland and ponds supporting great crested newt.
Durrel's Wood LoWS	Broad-leaved deciduous woodland and large pond.
Stansted Marsh LoWS	Old wet woodland, fen, willow plantation and grassland supporting good botanical diversity adjacent to the River Stort.
The Mount, Stansted LoWS	Grazed grassland supporting good botanical diversity.
Turner's Spring and The Bourne LoWS	Broad-leaved deciduous woodland surrounding wet grassland. The woodland is associated with records of several ancient woodland indicators.
Belmer Road Special Roadside Verge LoWS	Wildflower-rich verge with Nationally Scarce sulphur clover <i>Trifolium ochroleucon</i> .
Stocking Wood LoWS	Ancient woodland remnant.
Round Coppice LoWS	Ancient woodland remnant.
Long Border LoWS	Ancient woodland remnant.

Defra's Magic Maps were consulted for the presence of priority habitats which are thought to occur in the area. These priority habitats are known as Habitats of Principal Importance, and they are listed as such on the Natural Environment and Rural Communities Act (2006). They are considered to be some

of the most important habitat types in the UK. The Habitats of Principal Importance identified by Magic Maps includes:

- Ancient woodland
- Lowland deciduous woodland
- Wood-pasture and parkland
- Chalk streams

Figure 3: Location of statutory designated areas in relation to Stansted Mountfitchet

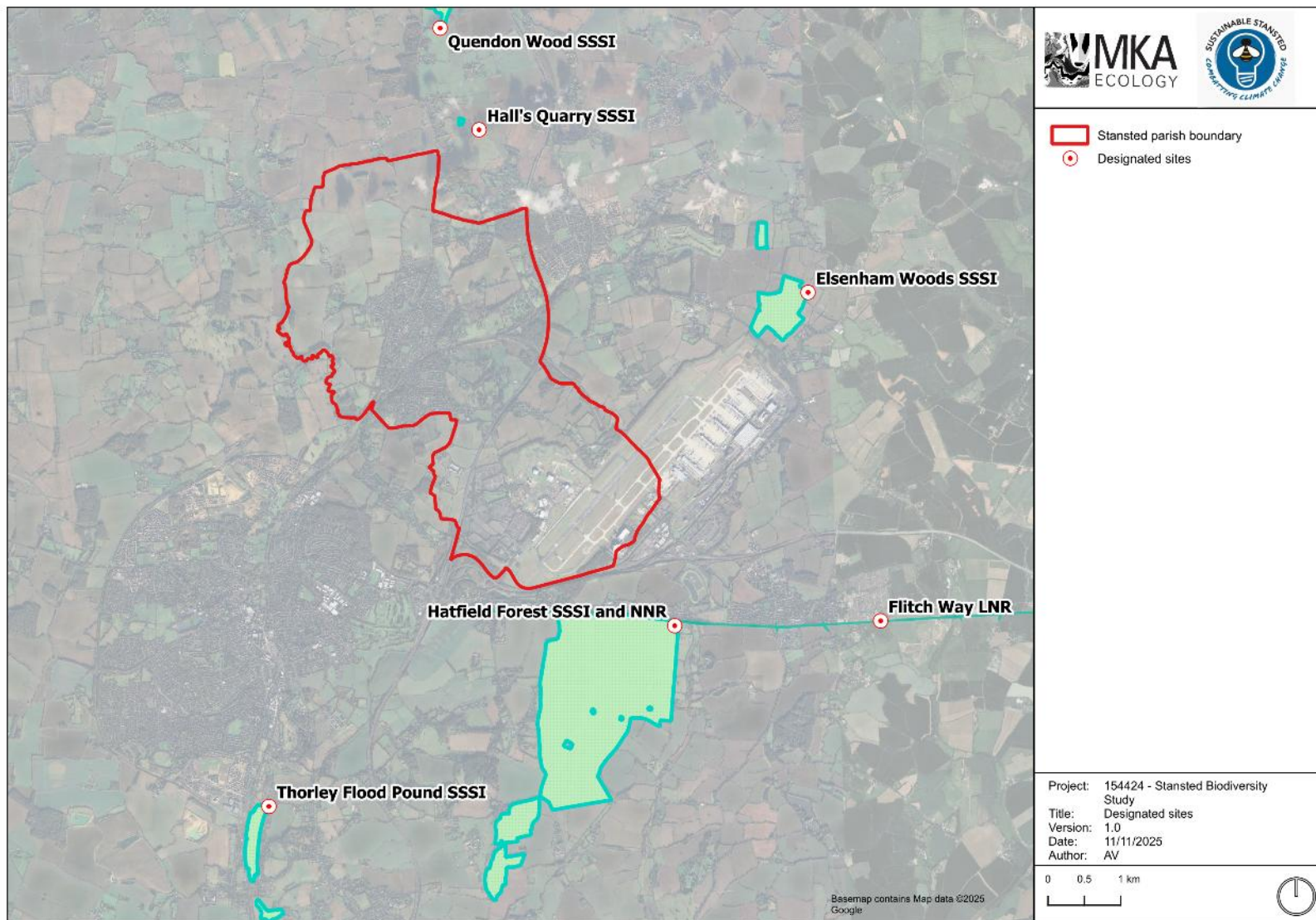


Figure 4: Location of non-statutory designated areas in relation to Stansted Mountfitchet

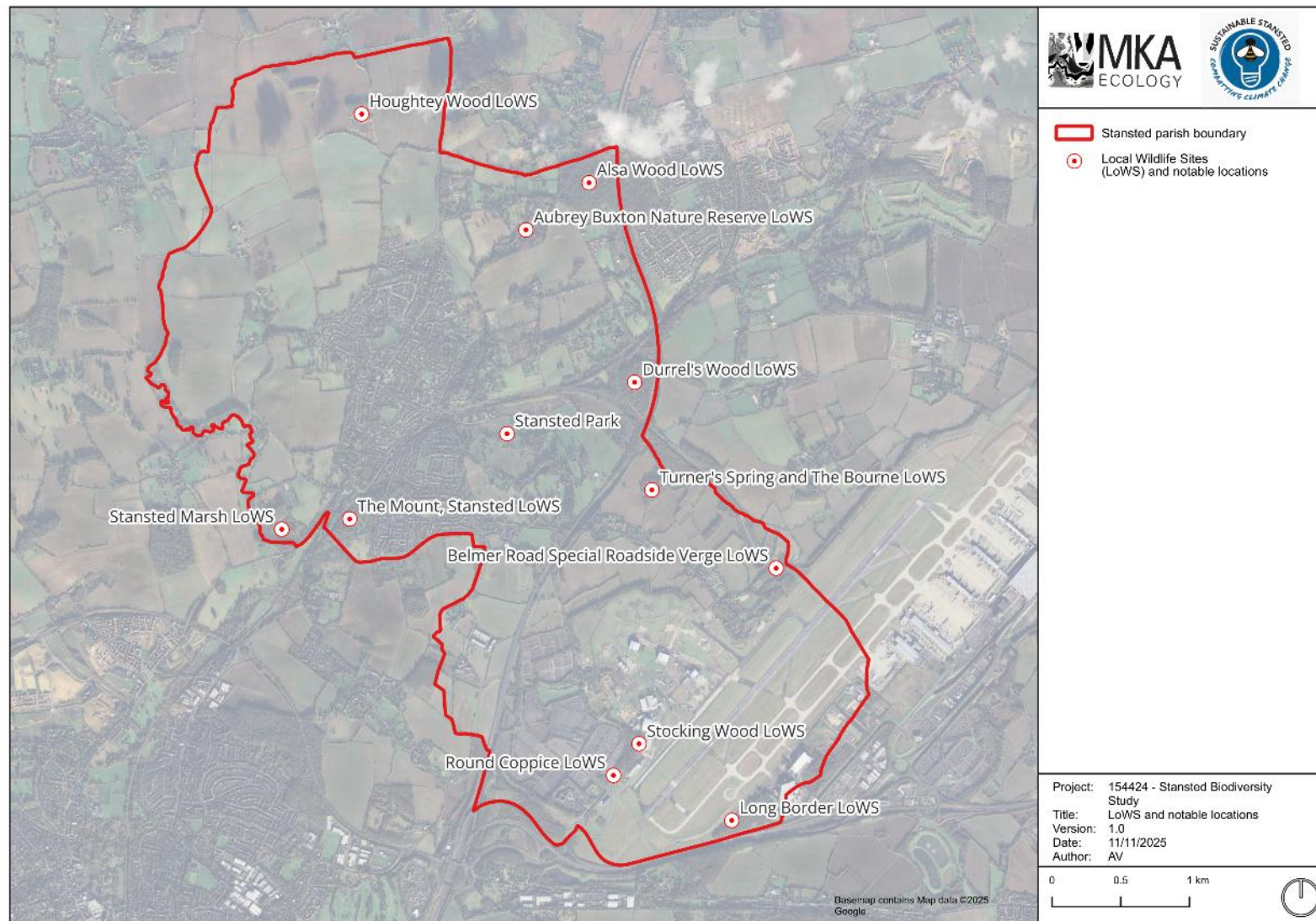
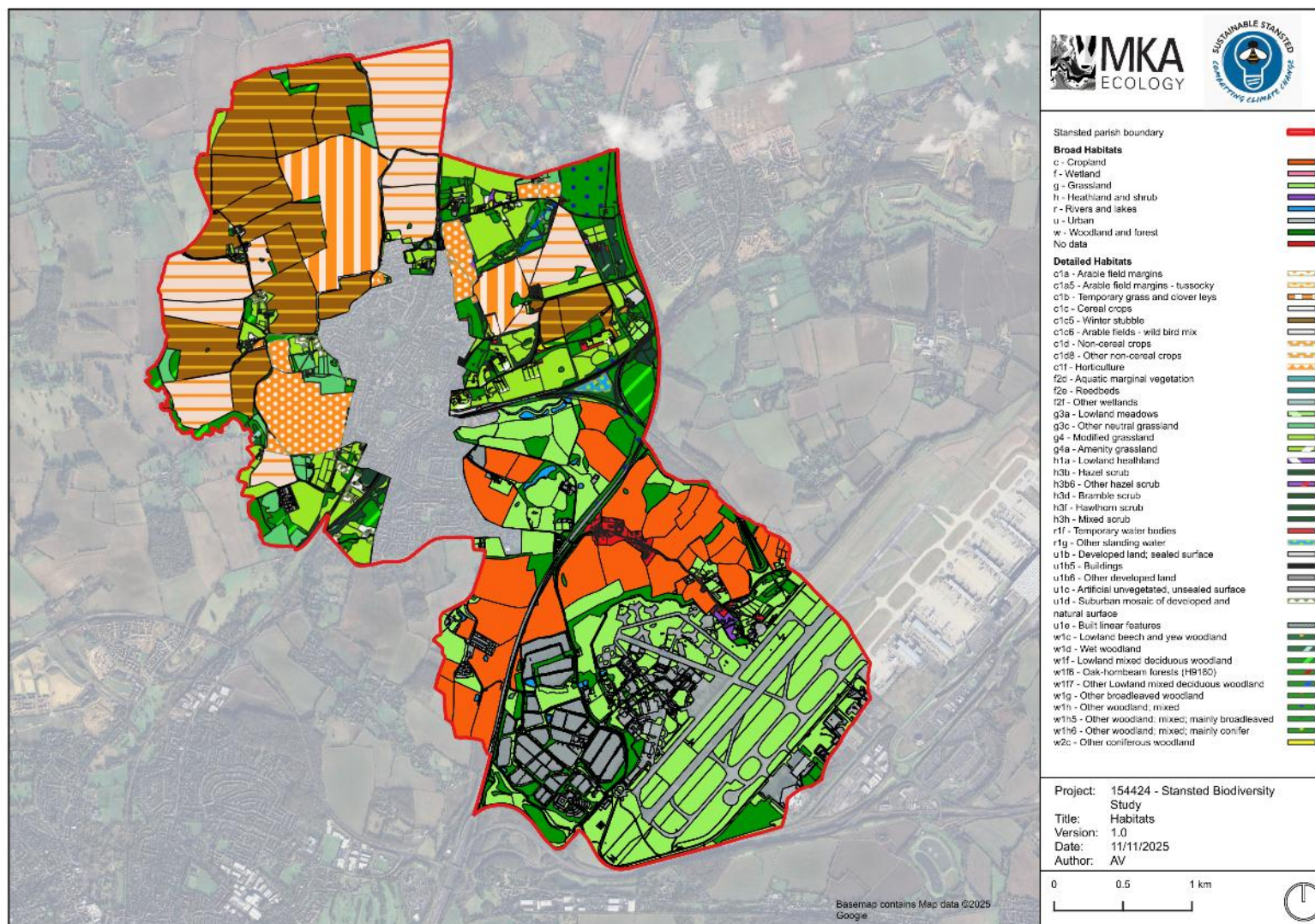


Figure 5: Habitat map for Stansted





Herb Paris, an ancient woodland indicator

3.3. The study area

The habitat map for Stansted is shown in Figure 4. The total areas of broad habitat types across Stansted are set out below in Table 3.

Table 3: Summary of broad area habitats

Broad habitat	Total Area (ha)
Cropland	590.16
Grassland	397.56
Urban/NULL	246.88
Woodland and forest	185.70
Heathland and shrub	20.01
Rivers and lakes	7.19
Wetland	0.14

Habitats

The following sections describe the existing habitat types present within the study area. Within this report, the focus has been placed on important semi-natural habitats. Urban habitats such as hardstanding and buildings and cropland have not been described in detail.

Woodland and scattered trees

Woodlands are shown in Figure 6. Ancient lowland mixed deciduous woodland, planted woodland and plantation woodland are present within the Stansted Mountfitchet area, with some reflected in designated areas selected for their conservation value, as described in Table 1. These parcels form part of a broader landscape-level rough corridor running north-south from Great Chesterford to Hatfield Forest (Land Use Consultants, 2023).

Alsa Wood LoWS and Durrell's Wood LoWS are located along the M11 corridor, with the motorway segmenting both parcels. New woodland planting has been undertaken along the motorway corridor creating some connectivity. Houghtey Wood LoWS is one of a number of small woodland parcels and copses scattered within the landscape of arable fields in the north-west of the survey area. Both Alsa Wood LoWS and Houghtey Wood LoWS are recorded as ancient woodland in the Ancient Woodland Inventory.

Lowland deciduous woodland is listed as a Habitat of Principal Importance. Ancient woodland is a Habitat of Principal Importance and also an irreplaceable habitat, making it one of the most valued and sensitive habitats in the UK.

Other notable woodland parcels include Aubrey Buxton Nature Reserve, the parkland surrounding Stansted Hall, and woodland bordering the River Stort and Stansted Brook. Small parcels of woodland and wooded gardens are also scattered broadly around residential and commercial properties. One area of woodland appears to have recently been cleared for development to the north-east of Stansted Mountfitchet.

Woodland in the south-east of the survey area largely comprises newly planted woodland around the boundaries of Stansted Airport and associated parking. Such new plantations would not qualify as Habitats of Principal Importance, but may do so in the future.

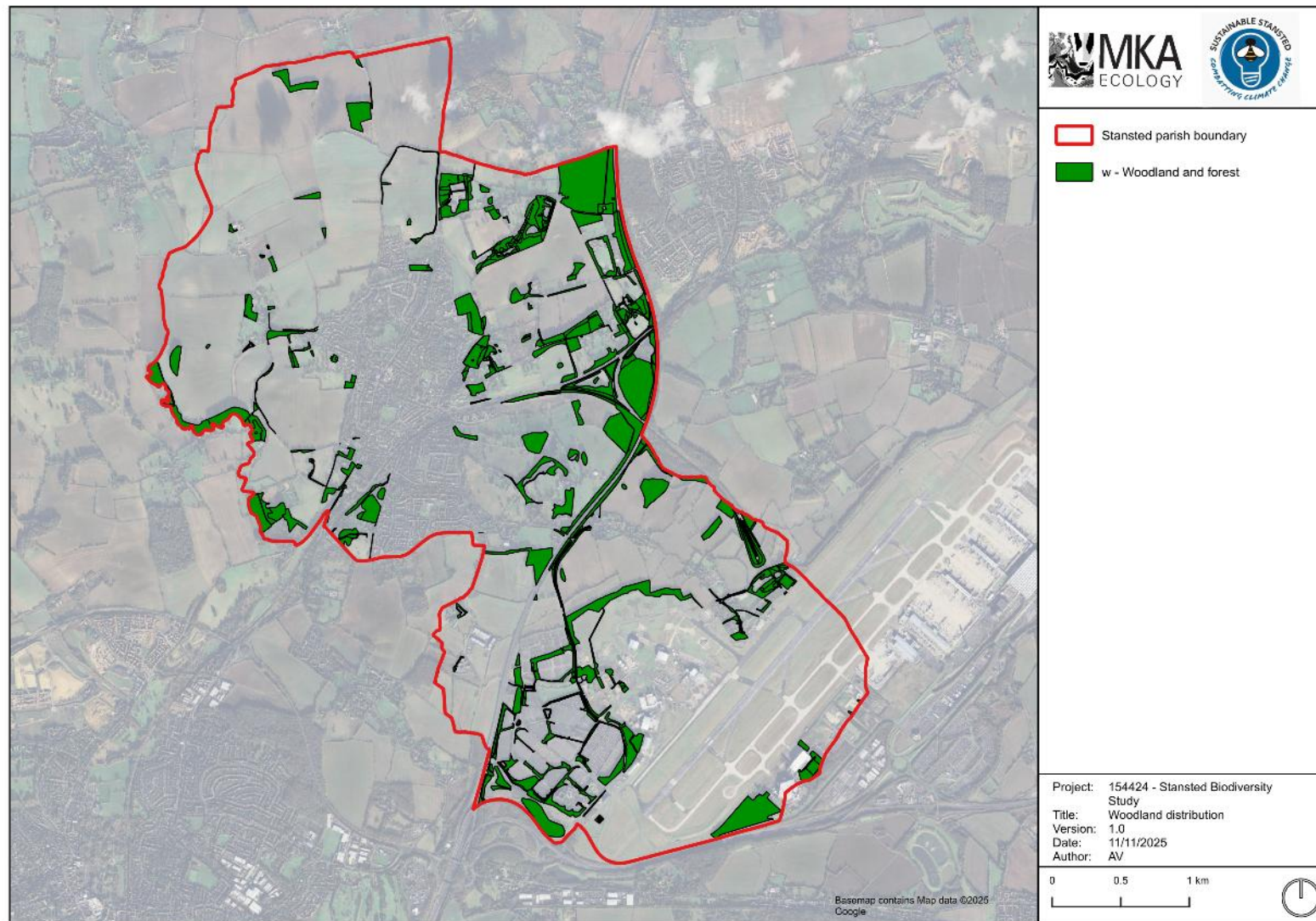
The woodlands are likely to provide foraging and refuge habitats for many faunal species, such as birds, bats and, within the semi-natural woodland in particular, invertebrates.

Some mapped woodland areas also comprise of wooded gardens and trees planted around private properties. While these areas do not provide the full range of niches and opportunities for species that a woodland does, they do provide valuable opportunities for nesting birds and foraging bats, particularly mature and veteran trees supporting cavities.

Notable individual trees, particularly mature oaks, were noted within woodland parcels across the survey area. The Ancient Tree Inventory (Woodland Trust, N.D.) has records of a large number of ancient and veteran trees in the historical parkland south-east of the town, as well as a small number immediately south-west in the land surrounding Forest Hall Road.



Figure 6: Woodland distribution





Bluebells

Scrub

Scrub was primarily recorded along the M11, although understorey scrub and scattered scrub will also form part of woodland and grassland habitats more broadly (Figure 7). Scrub along the west side of the M11 strengthens the ecological corridor connecting Alsa Wood LoWS and Durrell's Wood LoWS. Species recorded include blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, with some areas dominated by bramble *Rubus fruticosus* agg.

Well-structured scrub habitats can provide excellent refuges and foraging opportunities for a wide variety of fauna species. The sunny sheltered locations, in combination with high nectar resources provide perfect conditions for many invertebrates such as butterflies and hoverflies. The dense growth is also critical for many nesting bird species, including notable species such as linnet *Linaria cannabina* which is on the UK Red List. Extensive areas of scrub, such as that close to Durrell's Wood LoWS are increasingly uncommon in our landscapes with so many land use pressures.

Hedgerows and Lines of trees

The length of hedgerows and lines of trees recorded by volunteers and in desk-based mapping are set out in Table 4.

Table 4: Summary of hedgerow and lines of trees

Hedgerow and lines of trees	Length recorded (km)
<i>Volunteer mapped</i>	
Native hedgerow	10.63
Native hedgerow with trees	0.34
Native hedgerow with ditch	0.84
Species rich native hedgerow	1.23
Native species rich hedgerow with trees	0.22
Native species rich hedgerow with trees and ditch	1.00
Non-native and ornamental hedgerow	0.26
Line of trees	0.69
<i>Desk mapped</i>	
Hedgerow or lines of trees	32.19

There is a strong network of linear hedgerow features across the study area which is characteristic of the area's historical land use and wider landscape character. Some hedgerows bordering arable fields may also be of pre-18th century origin (Uttlesford District Council, 2006).

There broadly appears to be a denser network of boundary hedgerows in the landscape to the south-east of Stansted Mountfitchet than in the arable land to the north-west. The condition of surveyed hedgerows varies, with some appearing denser associated with mature trees, while others have a

'leggy' appearance, where the absence of a low dense canopy impedes their function as wildlife corridors.

Hedgerows are of greater relative ecological value in these arable landscapes in providing commuting corridors for a wide range of species and connecting otherwise isolated parcels of land, such as Houghtey Wood LoWS.

Hedgerows longer than 20m are classified as a Habitat of Principal Importance.

A hedgerow with trees
recorded in the study area



Figure 7: Scrub distribution

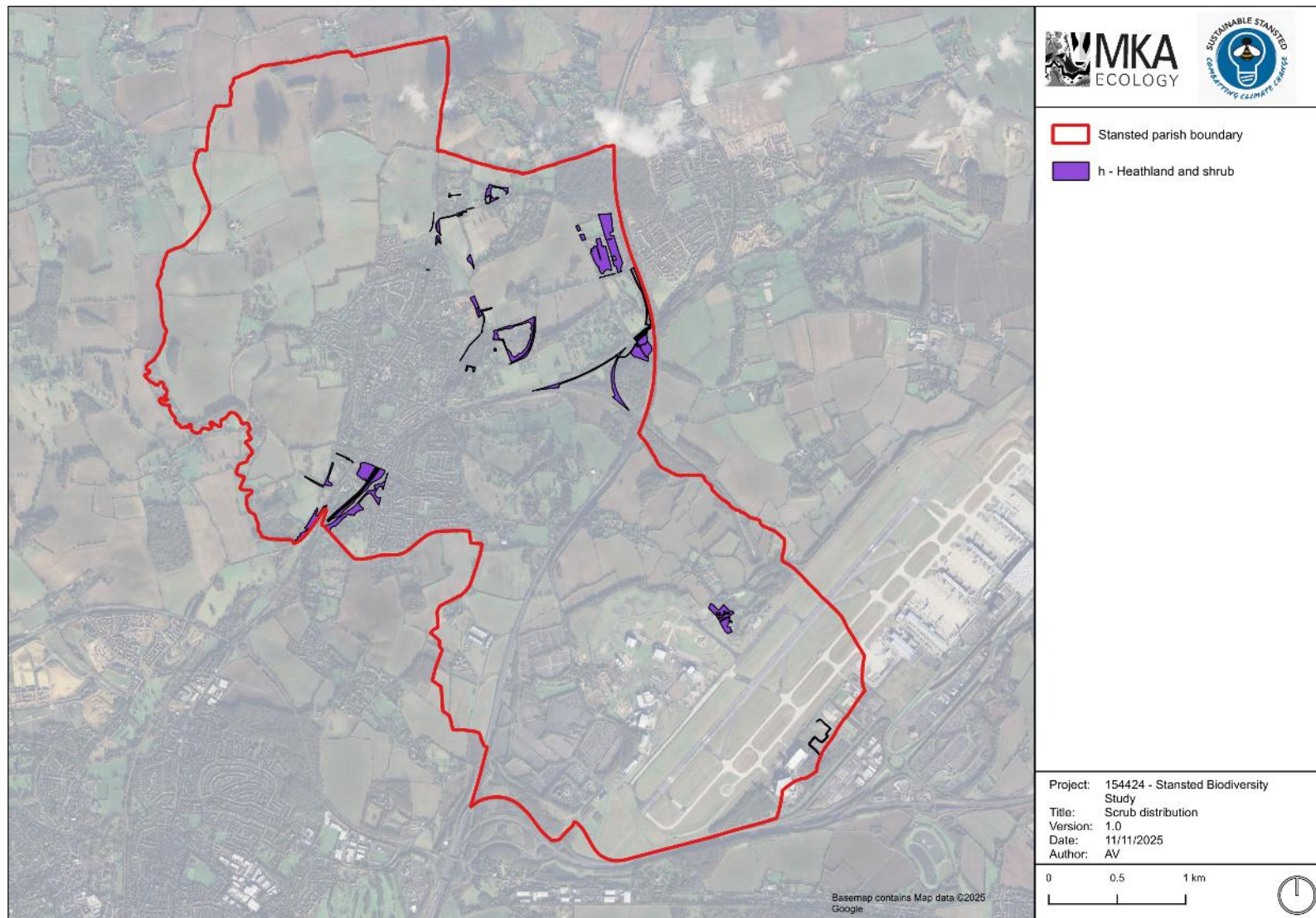
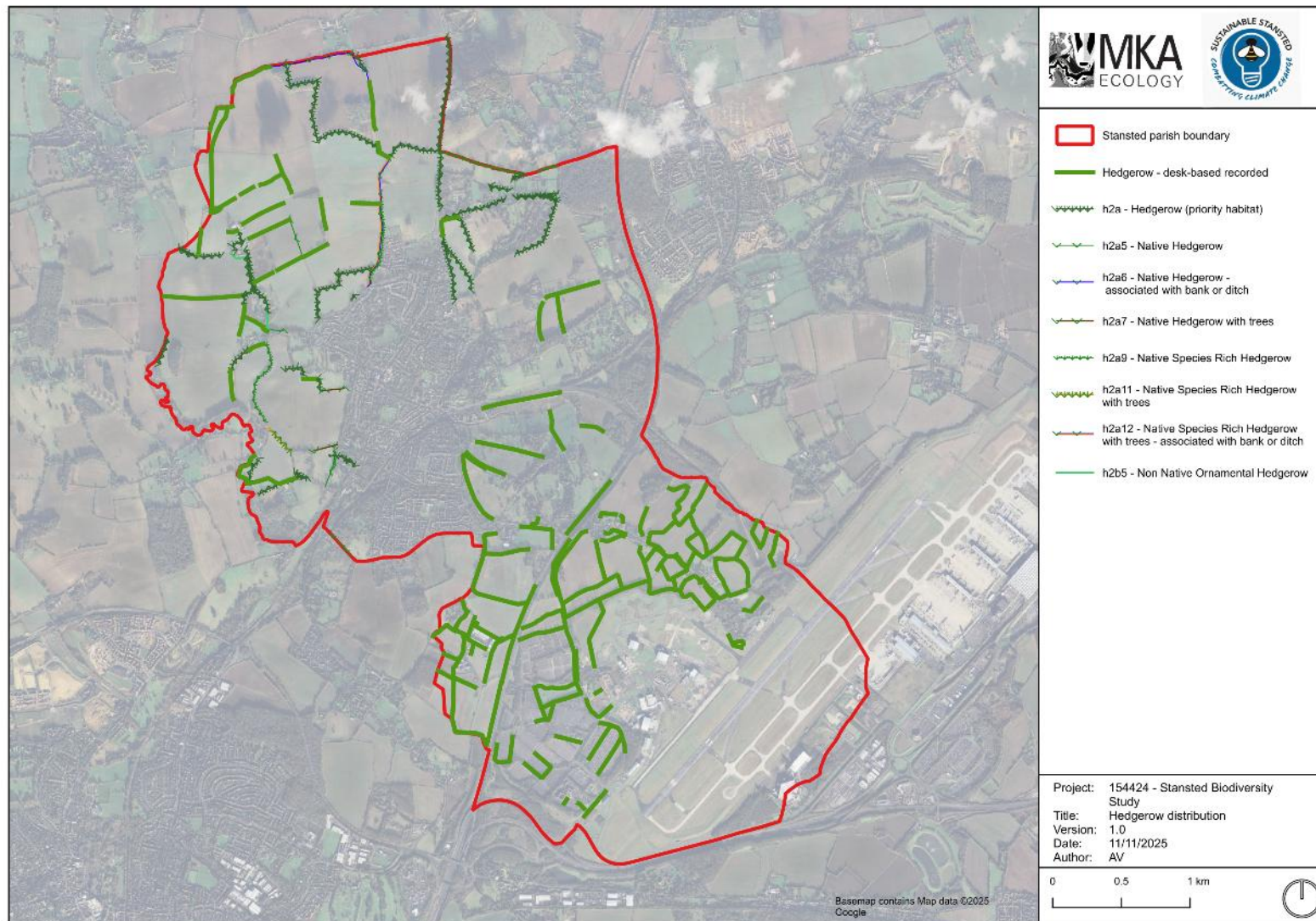


Figure 8: Hedgerow distribution



Quaking grass



Grassland

The majority of surveyed grassland was classified as modified or amenity grassland, located within a farming context, private gardens or parks. A small number of parcels of other neutral grassland are recorded, most notably south of Bentfield End Causeway, adjacent to the Stansted Brook, and adjacent to the River Stort. Older grasslands are present in the nature reserves at Turner's Spring and Aubrey Buxton Nature Reserve, the latter being home to adder's tongue fern *Ophioglossum vulgatum* which is indicative of older grasslands. These areas are shown on Figure 9.

Grassland management varies across parcels, with recorded management including pasture, orchards, road verges and grassland that has been left unmanaged to grow long. Surveys were not taken during the optimal season for assessing species diversity. However, only the grassland south-west of the sewage works is noted in the Priority Habitat index as good quality neutral grassland. Aerial imagery suggests that this land may now be used for tree planting.

Road verges can also provide important grassland habitats, as well as important biodiversity corridors. In particular in the parish is the Local Wildlife Site Belmer Road Special Roadside Verge which contains the Nationally Scarce sulphur clover, as well as other high quality grassland indicator species.

Parkland habitats, with mature and veteran trees oversailing grasslands, are of significant ecological value and they are designated as Habitats of Principal Importance in the UK. These areas provide niches for many invertebrates species in rotting deadwood, tree holes and grassland features. In combination with nectar resources in the grasslands these habitats can provide great diversity. Parkland habitats, and the relict veteran trees, occur in eastern Stansted Mountfitchet, particularly around Stansted Park.

Whilst modified and amenity grassland is generally species poor, it can provide some ecological value, for example they provide a good foraging resource for bird species such as starling *Sternus vulgaris* which is a Species of Principal Importance.

Ponds

A total of 21 ponds were recorded by volunteers, with a further 31 ponds identified in the desk-based assessment on OS Maps (Figure 10). The most notable concentrations are at Aubrey Buxton Nature Reserve, the land south of Bentfield Bower and Bentfield End Causeway; within the parkland south-east of Stansted Mountfitchet; south of Belmer Road adjacent to Stansted airport; and associated with the long-stay car parks at Stansted airport.

Many surveyed ponds are located within semi-natural habitat such as woodland or are bordered by trees, shrubs and aquatic marginal vegetations such as reeds *Phragmites australis*. Such settings will often increase the ecological value of a pond because many of the species depend on both the aquatic habitats and the surrounding terrestrial habitats.

Ponds can be classified as a Habitat of Principal Importance under the NERC Act (2006) if they meet certain criteria, such as supporting protected species, namely great crested newt *Triturus cristatus*, or a Species of Principal Importance such as common toad *Bufo bufo*. Ponds at Aubrey Buxton Nature Reserve are thought to contain great crested newt which is a highly protected species at a national and international level with the UK providing one of Europe's key populations. In addition, records of great crested newt have been recorded at Gorsefield Rural Studies and Outdoor Centre which supports suitable terrestrial and aquatic habitat for this species.

Rivers, streams and ditches

The lengths of rivers and streams are presented in Table 5 and shown in Figure 11.

Table 5: Summary of rivers and streams

Rivers and streams	Length recorded
Other rivers and streams	13.85

The River Stort and Stansted Brook are the key water-ways in the area around Stansted Mountfitchet. Ugley Brook, which runs north-to-south on the eastern boundary of Stansted Mountfitchet and the Bourne, which runs south-east to north-west both join Stansted Brook before it passes through the centre of the town. Stansted Brook then joins with the River Stort which forms the western boundary of the survey area. The River Stort is a chalk stream and is therefore classified as a Habitat of Principal Importance. Chalk streams are an incredibly rare habitat type, with approximately 200 worldwide and 85% of these occurring in the UK. These habitats are very sensitive to pressures such as pollution, excessive sedimentation and water extraction. The River Stort is currently classified as being in moderate ecological condition, while Stansted Brook is classified as being in poor ecological condition, indicating existing environmental pressures within the catchment.

In this context, additional development within the area has the potential to increase pressure on the water environment, particularly through increased water demand and abstraction, as well as potential impacts on water quality. It is therefore important that such impacts are considered at an early stage in the planning process, at a strategic and local level, with appropriate measures implemented to minimise effects on these sensitive habitats.

The combination of the river and its surrounding naturalised habitats form a cohesive ecological network that is of importance within the area and the wider landscape. In particular, the River Stort provides connectivity to habitats of significant biodiversity value such as Thorley Flood Pound SSSI (located 6km south-west of Stansted Mountfitchet) and Little Hallingbury Marsh SSSI (located 8km south-west of Stansted Mountfitchet). Both sites comprise ecologically valuable habitats such as wet grassland and fen.



Other habitats

The survey area is dominated by arable cropland, particularly to the north-east of Stansted Mountfitchet. These land parcels are of relatively low ecological value. However, it was noted that in some locations, a grass or stubble border had been left around the field, providing valuable foraging habitat for birds and mammals within the arable landscape. Furthermore, this farmed landscape is of importance to specialist species, particularly birds, including skylark *Alauda arvensis*, yellowhammer *Emberiza citrinella* and grey partridge *Perdix perdix*, all of which are on the UK Red List.

The town of Stansted Mountfitchet itself is dominated by buildings, hardstanding and residential properties and gardens. Whilst these built structures are generally of lower ecological value they do have the potential to support protected and notable species such as roosting bats and nesting birds. The garden habitats will provide resources for generalist bird species, as well as nectar, pollen and shelter for a wide range of invertebrates. Garden ponds and wilders areas, such as nettle patches or scrub, are also likely to be important resources for biodiversity in this urban environment.

Figure 9: Grassland distribution

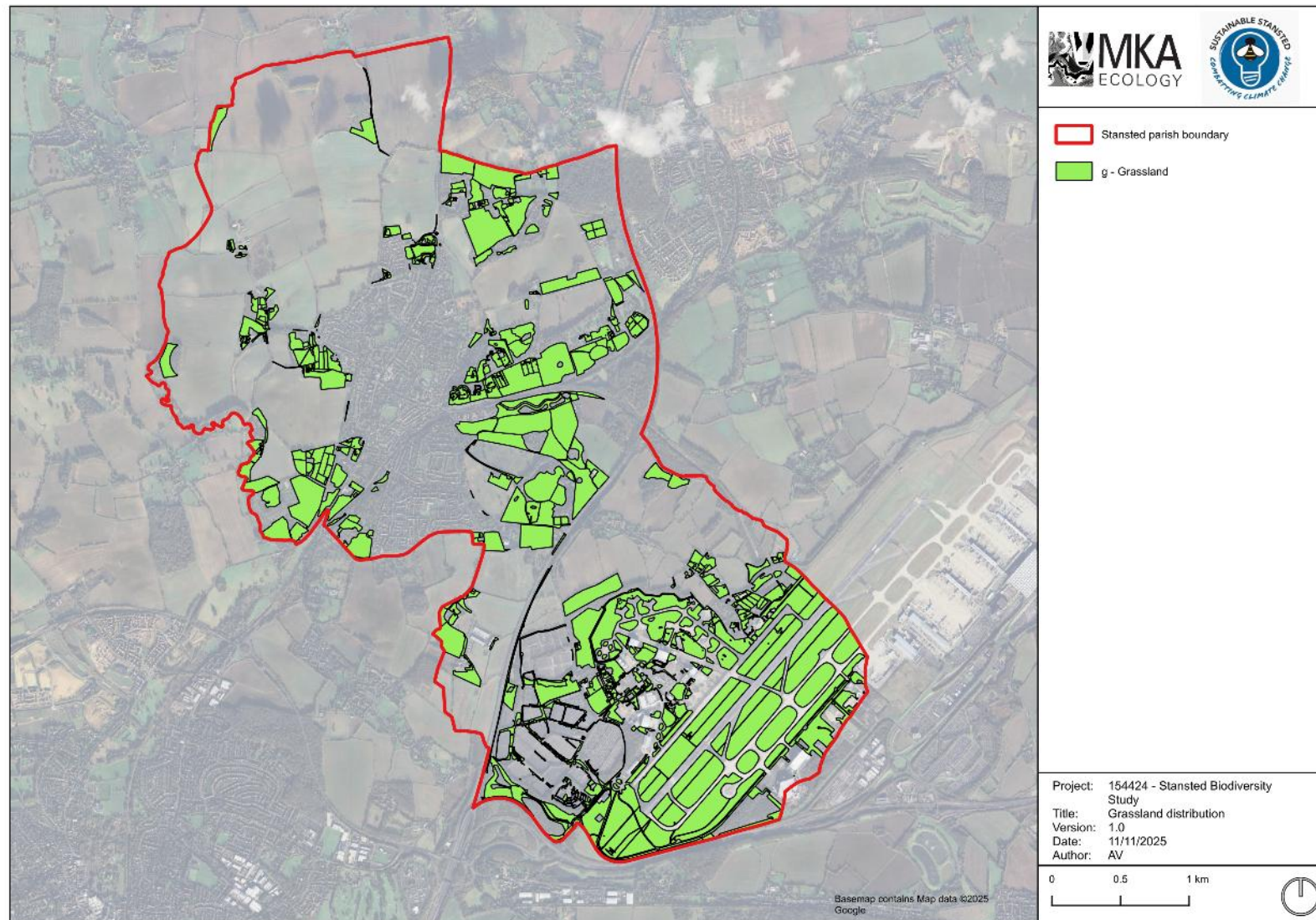


Figure 10: Pond distribution

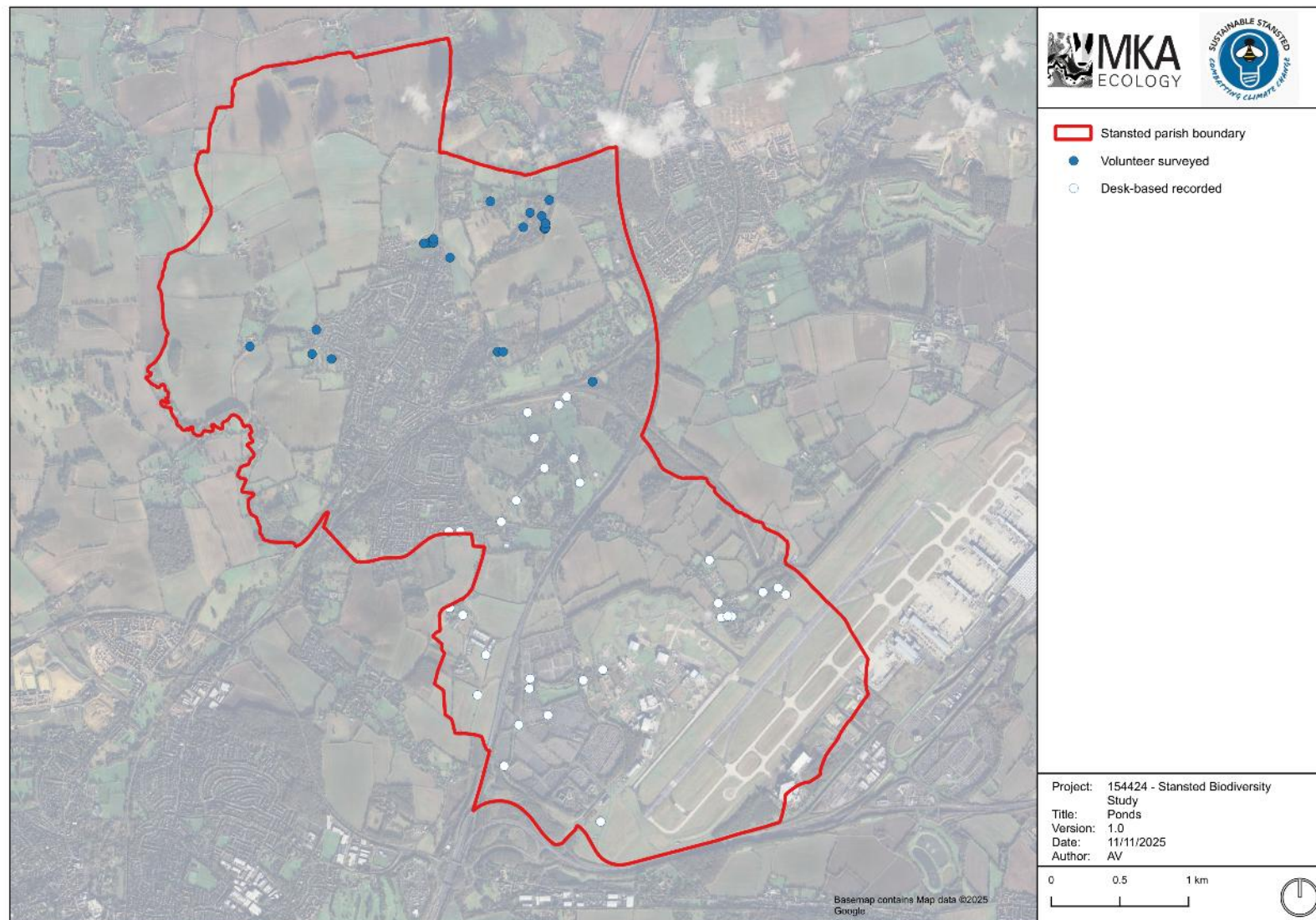
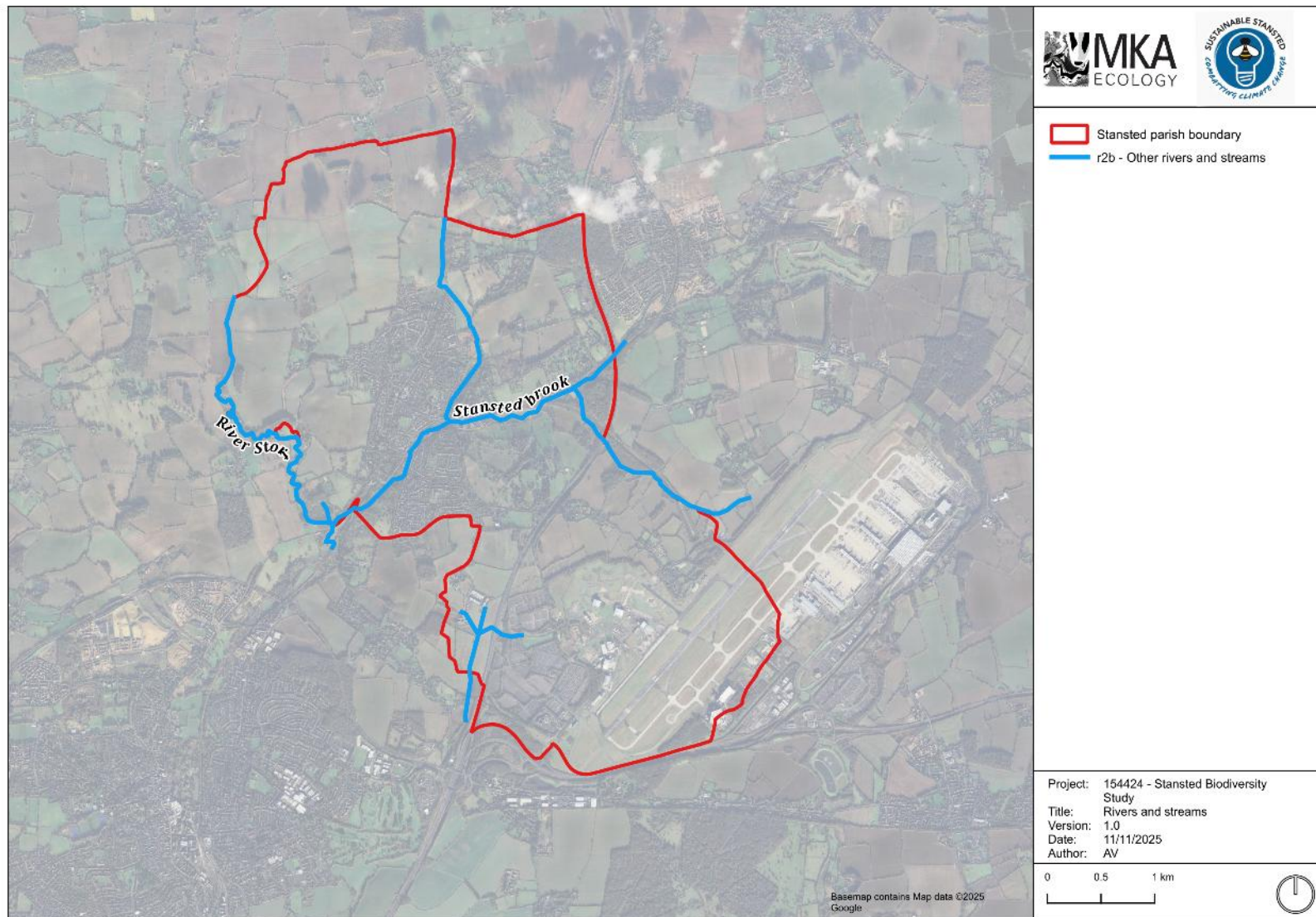


Figure 11: Rivers and streams distribution



Hoary plantain



Species

Plants and fungi

The only Essex LNRS Priority Species plants recorded within the proximity of the survey area is sulphur clover (Essex County Council, 2025), with historical records associated with Birchanger and Bishop's Stortford, as well as Belmer Road Special Roadside Verge. It is associated with chalky boulder-clays pastures, meadows and road verges but has declined due to habitat loss to arable conversion, road widening and eutrophication.

The habitats of greatest significance for plants within the survey boundary are likely to be remaining parcels of ancient woodland supporting ancient woodland indicator species, such as oxlip *Primula elatior* (recorded close to Durrel's Wood), bluebell *Hyacinthoides non-scripta* and dog's mercury *Mercurialis perennis*, sanicle *Sanicula europaea* and potentially herb-Paris *Paris quadrifolia* which grows in other woodlands in the area. It is possible that there may also be some hedgerows that have been established a long time that support notable species indicative of long continuity.

The data search also indicates that the woodland and grassland habitats within Aubrey Buxton Nature Reserve are important for supporting notable and protected plant species. These include records of oxlip and bluebell, as well as the Essex Red List species adder's-tongue fern *Ophioglossum vulgatum*, which has also been recorded at the site.

The underlying geology and soil type suggest the potential for the presence of chalk-loving and calcareous grassland species. Historical species records from the land around Bishops' Stortford and Hatfield Forest indicate the historical presence of calcareous grassland species such as quaking grass *Briza media* and hoary plantain *Plantago media*.

Evidence from the data search further supports this, with records including adder's-tongue fern and hoary plantain recorded within Aubrey Buxton Nature Reserve. Additionally, species assemblages recorded within the study area are indicative of historical calcareous grassland communities. A notable example is those recorded at The Mount LoWS comprising common knapweed *Centaurea nigra*, lady's bedstraw *Galium verum*, Yorkshire-fog *Holcus lanatus*, salad burnet *Sanguisorba minor*, meadow saxifrage *Saxifraga granulata*, cowslip *Primula veris*, pepper-saxifrage *Silene acaulis* and common restharrow *Ononis repens*.

The woodlands and old grasslands have good potential for notable fungi communities. During the field visits a stinkhorn fungus was observed. This species emits a foul, rotting-flesh smell to attract insects for spore dispersal, a characteristic that the surveyors can certainly attest to. Arable habitats can also host important plant species too, for example dwarf spurge *Euphorbia exigua* which is listed as Vulnerable.



Invertebrates

There are recent records of purple emperor *Apatura iris*, white-letter hairstreak *Satyrrium w-album*, and small heath *Coenonympha pamphilus* butterflies associated with Hatfield Forest south of the A120. These species could occur within the woodland and grasslands within Stansted Mountfitchet. For example, the data search identified a number of records of small heath associated with grassland habitats to the north of Stansted Airport.

Invertebrates benefit from a mosaic of habitat features, including bare ground, a high density of flowering plants, scrub, water and deadwood, within short proximity of each other. No areas resembling Open Mosaic Habitats on Previously Developed Land (OMH), an urban habitat of particular benefit to invertebrates, were noted during the survey. However, Alsa Lodge Pit LoWS, situated to the north of the study area, may support some similar habitats and this area is noted for its important invertebrate assemblage. This private area was not accessed during the field visits. The data search returned records of the bee wolf *Philanthus triangulum* at Alsa Lodge Pit LoWS. This species may be indicative of OMH, as the species excavates nesting burrows in sandy banks and substrates, features commonly associated with such habitats. Records of various mining bee species, which also depend on bare ground and loose substrates for nesting, were also recorded in this area, further suggesting the potential presence of OMH within Alsa Lodge Pit LoWS.

In the survey area, the parkland south-east of Stansted Mountfitchet may have the highest potential for a diverse assemblage of invertebrate species. This is because of the large number of ancient and veteran trees alongside naturalistic ponds and grasslands. This diverse structure of habitats provides excellent opportunities for invertebrates, particularly saproxylic species which thrive on deadwood. Similarly, the ancient woodlands and riverine habitats may also provide opportunities for specialist invertebrate species.

Stansted Mountfitchet falls within a B-Line corridor, part of the B-Lines network, identified by Buglife. B-Lines aims to coordinate the delivery of wildflower-rich habitats to aid pollinator movement across the landscape. The B-Line connects Bishop's Stortford to the south with Saffron Waldon to the north along the M11 corridor.

Artificial features for invertebrates noted by surveyors included bee hives for native bees just north of Alsa Street.

Beautiful demoiselle



Amphibians

With up to 50 potential ponds in the study area there are ample opportunities for amphibians. Terrestrial habitats, which adult amphibians will use for a large part of the year, are also widespread, particularly in the corridor of habitats west of the M11, although Stansted Brook and the railway lines may present a partial barrier to dispersal southwards into the parkland where the next highest density of ponds is located.

Great crested newts have been recorded at Aubrey Buxton Nature Reserve and at Gorsefield Rural Studies and Outdoor Activity Centre. This is one of the rarest amphibians in Europe, with the UK providing a stronghold for the species. The presence of this species at Gorsefield Rural Studies and Outdoor Activity Centre is of particular note given that this area is not a designated site and may be subject to future development pressure. Where present, development proposals must seek to avoid impacts through sensitive design, including the retention of ponds and surrounding terrestrial habitat and the maintenance and enhancement of habitat connectivity. Where impacts cannot be avoided, mitigation measures may be required and are likely to be subject to licensing.

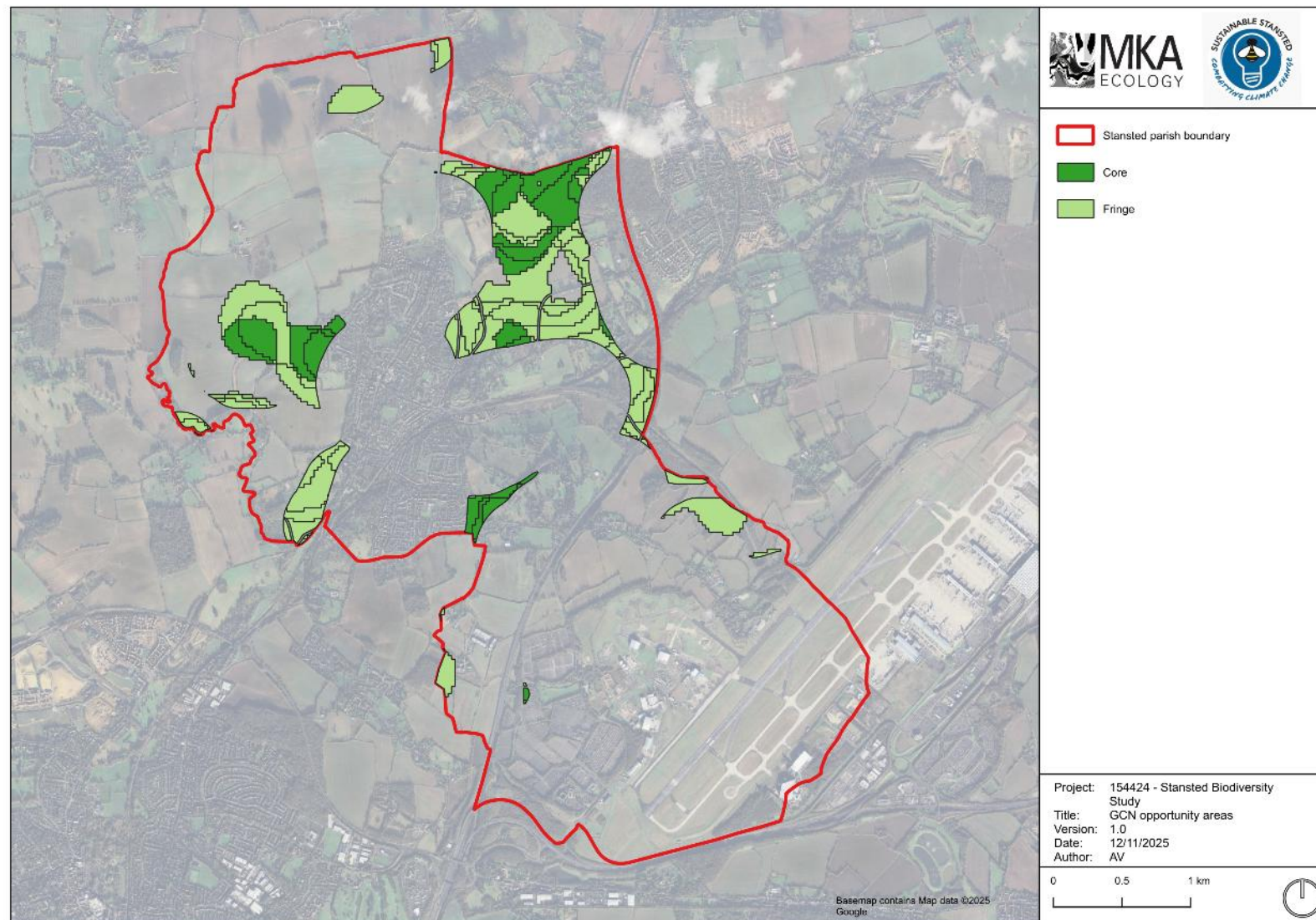
Great Crested Newt Opportunity Areas as identified by Natural England (2025) are shown in Figure 12. These are areas that are best suited for the creation of new ponds to support existing populations of great crested newt (core areas) and to support connectivity and dispersal within the landscape (fringe areas) and where opportunities may exist to create ponds funded by District Level Licensing. Within the survey area, these are largely centred around locations known to support great crested newt described above, as well as within Alsa Wood, land north of Church Road, and land around Bentfield Bower.

Other, more widespread, amphibian species are likely to occur through the study area including common toad *Bufo bufo*, common frog *Rana temporaria* and smooth newt *Lissotriton vulgaris*. Smooth newt, common toad and common frog have all been recorded in Aubrey Buxton Nature Reserve.



Common frog

Figure 12: Great crested newt opportunity areas



Reptiles

Reptiles benefit from a mosaic of open and dense habitats, such as rough grassland with scattered scrub and along the borders of scrub, woodland and hedgerows. Reptiles require dense vegetation in which to shelter but also require sunny areas to bask and warm up. There are several areas within the survey area that meet this description, particularly the mosaic of habitats west of the M11. Railsides and roadside embankments can represent valuable habitat and corridors for dispersal if they provide both rough open ground and dense cover. Therefore the complex of these features to the south-east of the study area are likely to be good locations for reptile species.

Species that may be present include slow-worms, grass snakes and common lizard. Slow-worms do sometimes inhabit gardens and allotments, while grass snakes are likely to be found in proximity to standing water bodies, watercourses and within wet grassland. There are also recent records of common lizard associated with Birchanger and Bishop's Stortford (Essex Field Club, 2024). The data search also returned records of slow-worm adjacent to the M11 in Birchanger. In addition, numerous records of grass snake were identified across the study area, including locations at Bentfield, Bishop's Stortford, Ugley Green and Birchanger.



Common lizard

Birds

Breeding habitats are widespread throughout Stansted Mountfitchet including all vegetated habitats which could support common species, and also less common and notable species such as song thrush *Turdus philomelos*, linnet and starling.

The presence of breeding birds in the urban environment should not be overlooked, particularly swift *Apus apus* and house sparrow *Passer domesticus* which are both notable species occurring in the area. Data search results indicate that swift records are largely associated with urban areas, including the residential parts of Stansted Mountfitchet, Elsenham, and the vicinity of Stansted Airport. House sparrow records show a similar pattern, being concentrated within residential areas of Stansted Mountfitchet. In addition, a record of grey wagtail *Motacilla cinerea* was returned from Stansted sewage works. Such sites can be of value in urban contexts, providing reliable foraging opportunities through abundant invertebrate resources, as well as warmer microclimates that may support overwintering birds.

Many of the other notable breeding species likely to occur in the area are more closely associated with the natural environment, for example barn owl *Tyto alba* which nests in both barns and mature trees. Protected raptor species such as hobby *Falco subbuteo* and red kite *Milvus milvus* may also nest in mature trees in more secluded and undisturbed parts of the survey area. The farmed environment is likely to provide breeding habitat for farmland birds such as skylark and yellowhammer. Other specialist species are likely to breed on the waterways, notably grey wagtail *Motacilla cinerea* and kingfisher *Alcedo atthis*.

The vegetated habitats at Stansted Mountfitchet will provide wintering cover and foraging opportunities for bird species, including winter migrants such as redwing and fieldfare. The buildings within the area may also provide some winter roosts for species such as pied wagtail *Motacilla alba* which will regularly gather in numbers to roost in urban areas in the winter months.

Table 2: Some notable bird species with potential to occur and data search records at Stansted Mountfitchet

Species	Systematic Name	Status	Breeding and foraging opportunities	Data search records
Barn Owl	<i>Tyto alba</i>	Schedule 1 ¹	Recently recorded at Stansted Airport	Recent records in Alsa Woods and cropland habitat adjacent to Stansted Mountfitchet village.
Bullfinch	<i>Pyrrhula pyrrhula</i>	SPI ³ Amber list ²	Nesting opportunities in scrub and hedgerows.	-

Species	Systematic Name	Status	Breeding and foraging opportunities	Data search records
			Forages in areas of rough grassland and nests in large cavities in mature trees or old farm buildings	
Dunnock	<i>Prunella modularis</i>	SPI Amber list ²	Nesting opportunities in scrub, hedgerows and tall ruderal vegetation.	Numerous records are present throughout the study area, with a notable concentration at Aubrey Buxton Nature Reserve.
Fieldfare	<i>Turdus pilaris</i>	Schedule 1 Red list	Potential winter visitor for foraging, particularly on berry-rich vegetation	Data search results indicate Fieldfare records at Aubrey Buxton Nature Reserve and within adjacent cropland surrounding Stansted Mountfitchet village and Bentfield Green. These records are associated with nearby hedgerows, which are likely utilised for foraging, particularly for hawthorn and blackthorn berries.
Grey Wagtail	<i>Motacilla cinerea</i>	Red list	Nesting opportunities in holes and crevices in walls by water ways	Multiple records were returned, primarily associated with Stansted Brook and the River Stour, with an additional record at Stansted sewage works.
Hobby	<i>Falco subbuteo</i>	Schedule 1	Foraging aerial invertebrates and small birds and nesting opportunities in old corvid nests	Records were returned for hobby, relating to overflying individuals within Stansted Mountfitchet village.

Species	Systematic Name	Status	Breeding and foraging opportunities	Data search records
House Sparrow	<i>Passer domesticus</i>	SPI Red list	Nesting opportunities in cavities in buildings	Breeding records within residential areas of Stansted Mountfitchet.
Kingfisher	<i>Alcedo atthis</i>	Schedule 1 Annex1 Amber list	Potential nesting opportunities in old pipes and tree holes along watercourses, potential foraging in water bodies	Few records returned, located in more secluded and potentially undisturbed areas of woodland near to Stansted Brook.
Linnet	<i>Linaria cannabina</i>	SPI Red list	Nesting opportunities in scrub habitats	Records associated with dense hedgerows located around Stansted Airport.
Redwing	<i>Turdus iliacus</i>	Schedule 1 Red list	Potential winter visitor for foraging, particularly on berry-rich vegetation	Most records returned for this species were located at Aubrey Buxton Nature Reserve. The woodland within this site supports various shrubs species that likely provide foraging sources such as hawthorn in the understorey.
Red Kite	<i>Milvus milvus</i>	Schedule 1	Foraging carrion. Potential nesting in mature trees.	A large number of records for red kite were returned by the data search with a high number located adjacent to the M11 in Elsenham, likely due to the abundance of carrion in this area.
Song Thrush	<i>Turdus philomelos</i>	SPI Red List Essex BAP	Nesting opportunities in scrub and woodland. Foraging opportunities in amenity grassland.	A large number of records for song thrush were returned and located at Aubrey Buxton Nature Reserve.

Species	Systematic Name	Status	Breeding and foraging opportunities	Data search records
				This site supports a mosaic of woodland, scrub, and grassland habitats, providing suitable foraging and nesting opportunities. Three of the records were also confirmed breeding records.
Skylark	<i>Alauda arvensis</i>	SPI Red List Essex BAP	Nesting opportunities in grassland and arable land.	Records of skylark were primarily located within Aubrey Buxton Nature Reserve, where areas of long sward grassland likely provide suitable nesting habitat. Records were also identified within the surrounding arable land.
Starling	<i>Sternus vulgaris</i>	SPI Red list	Nesting opportunities in building and mature trees	Multiple records were returned for starling and located across the study area. Notably, Stansted Mountfitchet village, Stansted Airport and Aubrey Buxton Nature Reserve.
Swift	<i>Apus apus</i>	SPI Amber list	Nesting opportunities in buildings	Data search results indicate that swift records are largely associated with urban areas, including the residential parts of Stansted Mountfitchet, Elsenham, and the vicinity of Stansted Airport. A number of

Species	Systematic Name	Status	Breeding and foraging opportunities	Data search records
				records were also located at Aubrey Buxton Nature Reserve.

¹ Schedule 1 of The Wildlife and Countryside Act 1981 (see Appendix 1)

² Birds of Conservation Concern (see Appendix 1)

³ Section 41 (NERC Act 2006) 'Species of Principal Importance' (see Appendix 1)

Bats

Of the 18 bat species that occur in the UK a large proportion of these are likely to occur in and around Stansted Mountfitchet. These species are shown in Table 3 together with information on their habitat preferences. Of these species the most notable is barbastelle, which is one of the rarest bat species in the UK. This species occurs sporadically throughout this part of Essex, and is highly likely to occur in and around Stansted Mountfitchet with the woodland habitats that are present.

Table 3: Bat species likely to occur in Stansted Mountfitchet

Species	Systematic Name	Rarity	Foraging and roosting opportunities
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Widespread	Roosting opportunities in crevices in a wide range of structures such as trees and buildings, including modern buildings. A generalist forager which will make use of most open greenspace. Widespread records through the area.
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	Widespread	Roosting opportunities in crevices in a wide range of structures such as trees and buildings, including modern buildings. A generalist forager which will make use of most open greenspace, particularly those with aquatic habitats. Widespread records through the area.
Nathusius's pipistrelle	<i>Pipistrellus nathusii</i>	Rarer	Roosting opportunities in crevices in trees and buildings. A generalist forager with a preference for large open water bodies.
Daubenton's bat	<i>Myotis daubentonii</i>	Widespread but not abundant	Roosting opportunities in crevices in trees and buildings. Foraging habitats closely associated with rivers, lakes and ponds. Occasional records through the area.

Species	Systematic Name	Rarity	Foraging and roosting opportunities
Natterer's bat	<i>Myotis nattereri</i>	Widespread but not abundant	Roosting opportunities in crevices and cavities in trees and buildings. Foraging habitat closely associated with broad-leaved woodland and open water sheltered by trees. Occasional records through the area.
Noctule	<i>Nyctalus noctula</i>	Widespread but not abundant	Roosting opportunities in holes in mature trees. Foraging in open environments over water, woodlands and grasslands. Occasional records through the area.
Leisler's bat	<i>Nyctalus leisleri</i>	Rarer	Roosting opportunities in holes in mature trees. Foraging often in woodlands but also open environments.
Brown long-eared bat	<i>Plecotus auritus</i>	Widespread	Roosting opportunities in open attic spaces and trees. A generalist foraging species but typically close to vegetated habitats and away from artificial light. Widespread records through the area.
Barbastelle	<i>Barbastellus barbastellus</i>	Rarest	Roosting opportunities in crevices in mature and veteran trees. Closely associated with roosts in woodlands, although will occasionally roost in buildings.

¹ Based on Reason and Wray *et al* (2023)

Foraging bats are likely to use a variety of habitats, including woodland, grassland, hedgerows, watercourses, ponds and residential gardens. Linear features such as mature hedgerows, lines of trees and watercourses are important for commuting throughout the landscape, especially in connecting isolated pockets of habitat. The sewage works and nearby river are likely to be of particular value to foraging bats due to the high volume of invertebrate fauna.

Bats show a very high fidelity to their roosting sites, which makes these very important for maintaining the conservation status of these species. Roost sites can occur in a variety of structures and throughout Stansted Mountfitchet this is likely to include buildings (in both the rural and built environment) and mature trees with features such as cracks, holes and hollows.

The data search returned 193 records comprising four bat species across Stansted Mountfitchet: Natterer's bat, noctule bat, soprano pipistrelle and common pipistrelle. Of these, 75 records relate to a confirmed Natterer's and common pipistrelle bat roosts within a rural residential area at Bentfield, likely associated with a building.

Several soprano pipistrelle records were also returned from this area. Approximately 500m to the west, Pennington Lane and its adjacent land have been identified by Stansted Parish Council as supporting high levels of bat activity. Pennington Lane, together with the surrounding arable landscape, support a well-connected network of linear features, including hedgerows and tree lines, which likely facilitate commuting between roost sites and key foraging habitats. The proximity of Pennington Lane to the confirmed roost and associated records indicates its potential importance for the local bat assemblage, particularly in relation to potential future development.

Additional records of common pipistrelle, soprano pipistrelle, and noctule bat were returned from Burton End and the area around Stansted Airport.

Badgers

Evidence of badger was recorded throughout the study area, and the species is likely to be relatively widespread. Due to issues surrounding persecution of this species these locations are not detailed in this report. This species is a generalist and will build setts in a wide variety of habitats, including the urban environment.

Other mammals

Other notable mammal species are likely to occur throughout the study area. Otter *Lutra lutra* was recorded on the field visits. Scats for this species were recorded on the Stansted Brook close to Durrell's Wood. Water vole *Arvicola amphibius* may occur along the slower flowing water ways, and the mosaic of cropland and grassland may also provide suitable habitat for brown hare *Lepus europaeus*, whilst woodland, cropland and riverbanks may support polecat *Mustela putorius*. Hedgehog *Erinaceus europaeus* are likely to be present through urban and urban fringe environments. These are all protected species, or Species of Principal Importance, and the data search returned records for each.

Fallow deer *Dama dama* is a widespread species in the region with large herds in the local area. These are a non-native species, and together with their non-native cousins muntjac *Muntiacus reevesi*, they present a considerable threat to our natural environment. These species often congregate in and around woodland habitats resulting in heavy grazing and browsing impacts on the woodlands which significantly impacts their condition, often stripping out some of the key woodland flora such as oxlip.

Important places

During the study it became apparent that there were areas that are of elevated significance, in terms of their biodiversity value, and their inherent value as beautiful places. The following list sets out some of the key biodiversity locations in Stansted Mountfitchet, but also those that have intrinsic natural beauty for visitors. These are shown on Figure 13.

Durrel's Wood, Turner's Spring and associated habitat mosaic: This mosaic of ancient woodland, grasslands, aquatic habitats, Stansted Brook, lakes and scrub combine to form a critical part of Stansted Mountfitchet's biodiversity resource.

River Stort: A chalk stream set within a naturalised valley providing habitat for a wide diversity of species and acting as a wildlife corridor.

Stansted Brook: Another waterway which bisects Stansted Mountfitchet, bringing biodiversity right into and through the urban area. An excellent wildlife corridor providing connectivity between key

Aubrey Buxton Reserve: An accessible Wildlife Trust reserve with woodland, old grasslands and ponds.

Stansted Park: The remnants of historical parkland associated with Stansted Hall including a large number of veteran and ancient trees set within grassland habitats.

Old orchard south of Bentfield Place (Pond Lane Orchard): A secluded overgrown orchard providing an oasis for wildlife.

Gorsefield Rural Studies and Outdoor Centre and surrounding habitats: An excellent mosaic of habitats with woodland, grasslands, scrub and ponds.

Airport viewing area off Belmer Road: An area of grassland and scrub and hedgerows rich in invertebrates, particularly butterflies.

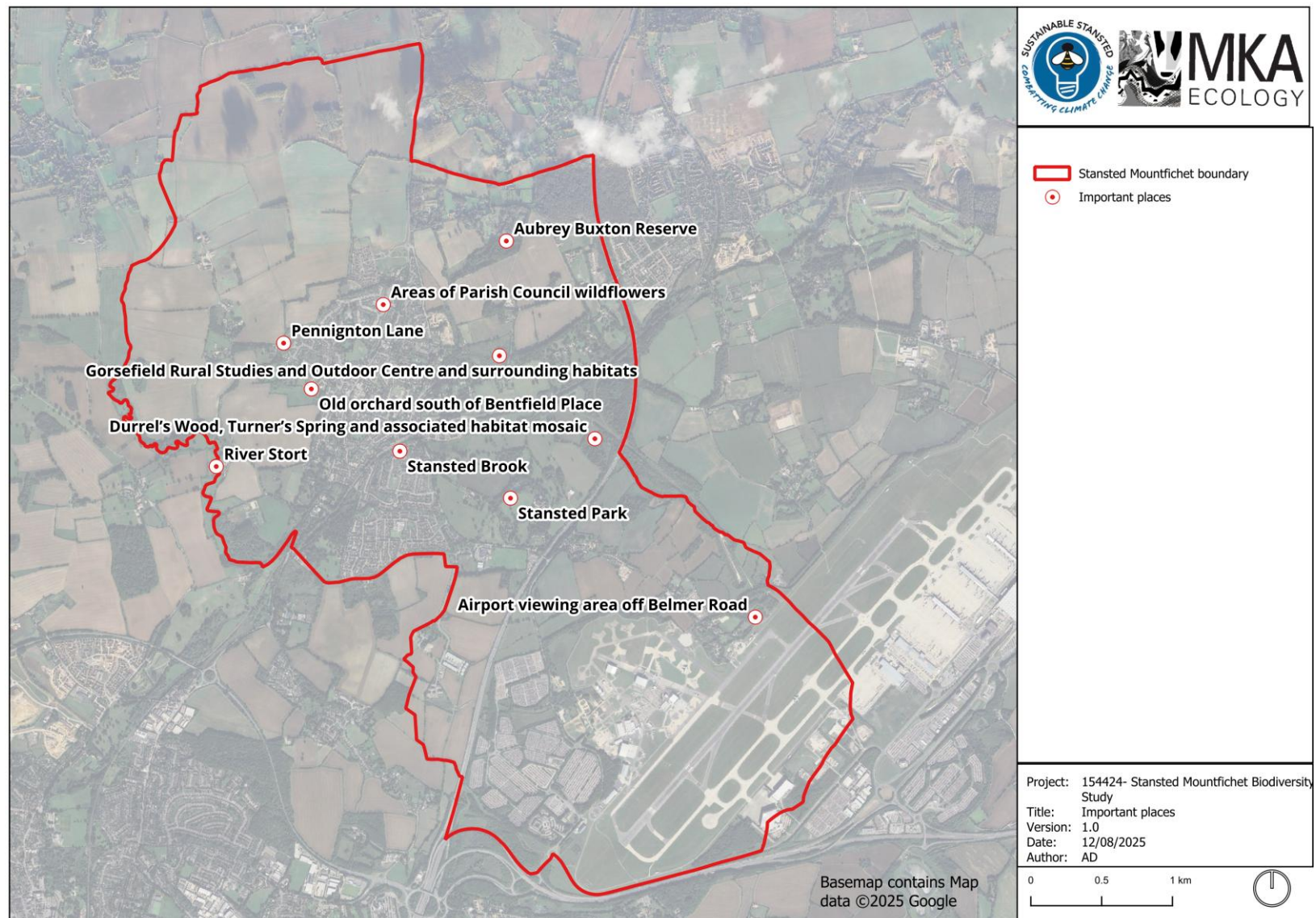
Areas of Parish Council wildflowers: On Rainsford Road and High Lane these are trial areas for wildflowers in the urban parts of the study area.

Pennington Lane and adjacent land: Supports a notable local population of bats.

Enchanter's nightshade at Aubrey Buxton Reserve



Figure 13: Important places at Stansted Mountfitchet



4. THREATS

The UK 'The State of Nature Report 2023' (Burns *et al.*, 2023) highlights the abundance of 753 terrestrial and freshwater species that are monitored has fallen by 19% since 1970. In that period the UK distributions of 4,979 invertebrate species have on average decreased by 13%. Similarly, the distributions of 54% of flowering plant species and 59% of bryophyte species have declined. Habitats have fared no better. Biodiversity is under threat worldwide, across the UK, and locally. Biodiversity is negatively impacted by a wide variety of factors, these include;

Climate change: Causes shifts in species' geographical ranges, alters migration and breeding patterns, and increases the frequency of extreme weather events like droughts and floods, which damage habitats. This results in phenological disruption in ecosystems, for example invertebrate prey availability becoming out of sync with predator requirements.

Development: Urban expansion, housing, and infrastructure projects (roads, railways) causing habitat loss and fragmented habitats leading to a significant cumulative impact.

Pollution: Entering the environment through various pathways resulting in direct harm to organisms and habitats, or resulting in nutrient enrichment which negatively impacts the balance of sensitive habitat types.

Changes in agricultural practices: Intensive farming practices have led to habitat destruction (e.g., loss of 97% of wildflower meadows), widespread use of pesticides and fertilisers, and a shift to monocultures, severely impacting species like farmland birds and pollinators.

Wildlife disease: In a more connected world the movement of goods and people also facilitates the spread of diseases and pests (e.g., ash dieback).

Invasive species: The introduction and spread of invasive species (e.g. grey squirrel and Japanese knotweed) outcompete or prey on native species, causing significant declines and economic damage.

Recreational impacts: As local populations grow so will visits to our natural environment. Unless carefully managed these can cause habitat degradation and disturbance of wildlife. In particular dog walking can result in significant disruption to wildlife (e.g. dogs off leads in woodland in springtime disrupt nesting attempts of ground nesting birds, which includes many warbler species), fouling results in nutrient deposition which alters sensitive habitats and flea treatments can have significant impact on aquatic invertebrates if treated dogs are allowed in ponds and watercourses.

These are not issues which are remote or removed from Stansted Mountfitchet. All of these will almost certainly be directly impacting the biodiversity of the parish right now.

5. OPPORTUNITIES AND ACTIONS

Biodiversity plays a fundamental role in all our lives. It has an intrinsic value that enhances and enriches our experience of the world around us, and our cultural interpretation of this. This intrinsic value has been recognised by humans for a considerable period, and until relatively recently this fact has been a key driver for conservation. Now a significant and growing evidence base is demonstrating that biodiversity provides far more value to our lives than was previously recognised. This was brought to the fore in 2021 with The Dasgupta Review (HM Treasury, 2021), published by the Treasury, which states;

‘Our economies, livelihoods and well-being all depend on our most precious asset: Nature’

The Dasgupta Review highlights the myriad of benefits that nature and biodiversity provide and it recognises the financial significance of these. These benefits include a raft of ecosystem services such as carbon sequestration, flood alleviation, urban cooling and natural cycles for clean and healthy air, soils and water. A healthy and biodiverse environment also has positive outcomes for recreation and place making, which have knock on effects for health and well-being, and the consequential positive effects on our economy with healthy and happy communities. The benefits mean a better quality of life for all of us. It is therefore right that we maximise the opportunities to conserve and enhance biodiversity. This section sets out opportunities for this in Stansted Mountfitchet.

It is recognised that many of the opportunities set out below require significant stakeholder engagement across the parish, and cannot be enacted by Sustainable Stansted alone. However, it is hoped that Sustainable Stansted can collaborate with stakeholders to deliver these opportunities. In terms of householders across the parish a biodiversity resident guide has been published. This pack can be accessed here;

<https://sustainablestansted.org/wp-content/uploads/2025/09/residents-guide-stansted-mountfitchet-1.pdf>

Habitats

Woodland and scattered trees

A primary aim should be the retention, protection and enhancement of all existing woodlands in the parish, particularly the ancient woodlands. Sensitive traditional management practices should be encouraged, such as coppicing, to maintain a healthy woodland structure and ground flora. Developing projects to control the impacts of deer browsing on woodlands would have significant benefits for the biodiversity of the parish, although these would not be without their own challenges to implement.

The land north-east and south-west of Stansted Mountfitchet has been identified as some of the most significant locations within Uttlesford in the LNRS for woodland creation and enhancement, with the intent to create greater connectivity between existing woodland parcels. Uttlesford District Council have also identified locations for woodland creation and natural succession in the habitat corridor to the east of Stansted Mountfitchet up to Alsa Wood, as well as along Stansted Brook, Ugley Brook and at Stansted Park south of Dairy Lane (Essex Country Council, 2025). The land in these areas is mostly comprised of grassland with some arable fields.

A wide diversity of tree and shrub species should be considered within new planting as this will help to reduce the impacts of potential future diseases. New woodland also shouldn't be planted on areas of high diversity and good quality grassland. Where woodland creation opportunities exist next to established woodland, allowing succession to occur naturally with intermediate habitats of mosaic of scrub and grassland should be considered. This will ensure that the developing woodland is perfectly suited to that environment.

In the urban environment tree planting can improve canopy cover. Street trees should be considered where space is limited. These can enhance biodiversity value, provide habitat for a wide diversity of species, and they can make a meaningful contribution to urban cooling which will become increasingly important as our climate changes. They also add significant value in terms of place making and enhancing aesthetics.

In urban areas the creation of new mini woodlands could be considered. Techniques such as the Miyawaki Method are increasingly common in urban areas. This uses specific planting techniques (ground works to reduce compaction and dense, layered planting) to encourage fast growth woodland in small areas (Local Government Association, 2025 and Creating Tomorrows Forests, 2025).

Veteran and ancient trees are irreplaceable habitats providing habitat for numerous species from fungi to invertebrates to birds to mammals. Currently, the majority of veteran and ancient trees recorded in the Ancient Tree Inventory (Woodland Trust, N.D.) are located in the parkland south-east of the town as well as a small number immediately south-west in the land surrounding Forest Hall Road. Citizen scientists could survey other areas within and surrounding Stansted Mountfitchet to record and add additional trees to the Ancient Tree Inventory.

Scrub

Scrub is considered to be a valuable ecological component in creating a habitat mosaic within a landscape, providing a key transitional habitat which is of significant value to invertebrates. It also provides habitat for nesting birds and other notable species such as hedgehog.

Within the Essex LNRS, scrub creation is identified as a lower priority within the survey boundary than in other areas of Essex, with scrub creation not recommended within most of the survey areas, as these

have been identified as strategic areas for high quality grassland creation. This is because scrub can encroach upon grassland and shade out grassland species.

The main strategic locations identified for scrub creation within the LNRS are:

- Surrounding Houghtey Wood LWS;
- Within the grassland parcels south of Bentfield End Causeway;
- East of Digby Wood;
- South of Budy Lodge Lane, likely in association with woodland planted along the boundary of Stansted Airport.

Scrub planting should be varied and native species should be selected. These species should serve a range of purposes such as providing nectar (hawthorn) or berries (Guelder rose). In order to provide maximum benefit scrub should be managed to create a variety of structures. The scrub should be of various heights and densities and edges should be scalloped. This can ensure that a wide variety of microclimates can be created for invertebrate species.

In addition to the strategic locations identified, small areas of scrub planting could be particularly beneficial within the urban areas of Stansted Mountfitchet where they can provide oases of cover in otherwise difficult environments for wildlife. This is particularly the case for house sparrow which is a local and national priority species. The combination of ground level scrub, living roofs and integrated bird boxes has potential to be particularly effective in encouraging thriving bird populations in the built environment.

Hedgerows and Lines of Trees

Native hedgerows are Habitats of Principal Importance, and those associated with other features such as trees and ditches are of even more biodiversity value. Opportunities for hedgerow creation should be sought across the parish, as should opportunities to improve the condition of existing hedgerows which would involve filling gaps or adding species diversity.

Typically, these habitats fall within the agricultural landscapes around Stansted Mountfitchet and therefore habitat creation and enhancement will require engagement with the relevant landowners and farmers.

Hedgerows and Lines of Trees provide valuable habitats for a wide range of flora and fauna, particularly in areas of agricultural which are otherwise of lower ecological value. However, they also hold significant value as wildlife corridors, in particular for bat species which rely on strong linear structures in the landscape for use with their echolocation. In order to maximise the value of new hedgerow creation or enhancement opportunities for creating habitat linkages should be a key consideration. This could

include linking habitats such as woodlands, ponds, grasslands or scrub, or linking to other wildlife corridors such as brooks and rivers.

Grassland

Grassland creation and restoration around Stansted Mountfitchet has been identified as a key opportunity in the LNRS, particularly the regions to the east and west. Opportunities for creation can be relevant in all environments, including the urban areas. Small margins or wildflower rich grassland in urban areas can be very effective at boosting biodiversity, and making this noticeable for residents. Similarly areas of wildflowers can easily be created by residents in their own gardens (see the resident's guide <https://sustainablestansted.org/wp-content/uploads/2025/09/residents-guide-stansted-mountfitchet-1.pdf>).

When creating new biodiverse areas of grassland it is important to ensure that appropriate grassland types are targeted. For example in an urban area which might receive more footfall it would not be sensible to aim for very high value and species rich grasslands due to the likely impacts that are to occur there. Similarly, it is important to work with the soil conditions that are present. Higher value species rich grasslands typically depend on deprived soils that are low in nutrients. This is because these environments discourage vigorous dominant grasses, allowing more wildflowers to flourish. Therefore, it is important to check the soil conditions through soil sampling before investing in expensive seed mixes for high value grassland creation. Where soils are richer in nutrients it is possible to strip these nutrients out through repeated cuts, or stripping of topsoil. If soil testing is not feasible, or if nutrients are higher, then it is still feasible to create ecologically valuable grasslands but these will not be the very high value species rich habitats, such as lowland calcareous grassland. Another popular technique for reducing the dominance of vigorous grasses and allowing space for wildflowers is the addition of a species called yellow-rattle *Rhinanthus minor*. This distinctive plant is hemi-parasitic on vigorous grasses and naturally reduces their dominance.

When creating grassland habitats, it is important to consider ongoing management. Typically this will require a late summer haycut where the summer growth is cut late (late July to September) to allow wildflowers to set seed. The arisings are then removed, which slowly enables a reduction in nutrient levels. Early spring cuts can also help to keep any vigorous grass growth under control.

It is also feasible to create bee lawns in areas of amenity grasslands. Here low flowering species that can withstand regular mowing (for example selfheal *Prunella vulgaris* or bird's-foot trefoil *Lotus corniculatus*) can be incorporated into a lawn to create a nectar resource (Meadowmania, 2025). The lawn would require a slightly higher cut than normal, but this type of feature can create significant benefits for biodiversity where otherwise there might be none.

Ponds

Ponds are wonderful features for biodiversity, providing permanent habitats for many species such as amphibians, giant diving beetles, whirligig beetles and water crickets, and a critical water resource for visiting species, for example swallows *Hirundo rustica* swooping low over the water to scoop up a drink. Furthermore, ponds are very quick ways to introduce biodiversity to an area, often being colonised early by many species. Creation of ponds can be considered throughout the parish, in rural areas and urban areas alike. Even small bathtub ponds in gardens can make a big difference.

Additionally, existing ponds, particularly those known or suspected to support great crested newt, should be protected. Great crested newts are protected under Schedule 5 of the Wildlife and Countryside Act 1981 and Schedule 2 of the Conservation of Habitats and Species (Amendment) Regulations 2017; (see Appendix 1). It is an offence to harm this species or to damage or destroy breeding sites and resting places. Development proposals affecting such ponds or adjacent land must therefore be informed by appropriate ecological survey and assessment, and opportunities should be sought to avoid impacts through protection and habitat enhancements. Where impacts cannot be avoided, mitigation and licensing may be required.

Given the large number of ponds in the study area of unknown condition there is considerable scope for a Stansted Pond Project. Aims could be identifying the condition of all ponds and looking for opportunities for restoration, new pond creation or recreation of 'ghost' ponds which have been lost from the landscape. A good example of this type of endeavour is the Norfolk Pond Project (<https://norfolkponds.org/>). Such a project could work with landowners to leverage funding for pond creation and restoration, for example through the great crested newt District Licencing Project.

Rivers, streams and ditches

Stansted Mountfitchet is fortunate to have two significant watercourses in the River Stort and Stansted Brook. Both would benefit from enhancement and restoration works, particularly the River Stort as a chalk stream habitat. Projects to help understand the key issues facing these watercourses, and then identify and enact appropriate interventions, would have very positive effects for biodiversity. There are similar projects which have set a precedent locally within Uttlesford and these include Cam Upper Reaches Action Teams (CURAT, <https://curat.org.uk/curat/>) which includes the Newport River Group (<https://newportsex-pc.gov.uk/newport-river-group/>). This group undertakes a variety of tasks from monitoring to larger scale riverine restoration.

Both watercourses act as wildlife corridors and improving the permeability of the wider riparian corridors for wildlife will strengthen their function as corridors. This could be achieved by working with landowners to naturalise the bank top habitats.

Species

The provision of high quality biodiverse habitats, as listed above, will be the best approach to improve species populations and diversity. However, a number of additional opportunities for species are available and these are set out below.

Plants and fungi

Diversity of plant and fungi species will be delivered through the provision of habitats through Stansted Mountfitchet. Some targeted tree planting could be considered where feasible with landowner agreement. This could include black poplar *Populus nigra*, a native species which has declined and is the UK's most endangered native timber tree. Black poplar was once common in river valleys and planting could be considered along the Stort Valley. Similarly willow planting with pollard management could be considered along the watercourse in the parish. Old pollard willows are valued because of an important invertebrate community associated with the dead and living wood that has developed over a long period of time. This includes species such as the musk beetle *Aromia moschata*, a large longhorn beetle over 3cm in length.

Invertebrates

Creation of habitats for invertebrates requires many habitat niches to suit different species, or different stages in lifecycles. The residents pack provides details on the creation of bug hotels for gardens, but these could also be considered for public spaces too. The provision of deadwood can also be an excellent resource for invertebrates. Where tree works are taking place leaving some of the arisings to create logpiles can provide for invertebrates and reduce the effort required for removal of materials after the work has finished.

Amphibians and reptiles

Citizen science projects to understand the distribution of amphibian and reptile populations in Stansted Mountfitchet would help to inform potential locations for habitat enhancements for these species. Methodologies, such as torchlight surveys for amphibians (Froglife, 2025a) and artificial refuges for reptiles (Froglife, 2025b), are easily accessible for a range of surveyor ages and experience levels. Care should be taken when undertaking torchlight surveys to ensure that there is no disturbance of great crested newt (a species which is protected from disturbance).

Habitat creation projects could be explored for both groups. Pond creation and restoration projects (as described above) will help with amphibian populations. Amphibians spend a proportion of their time out of water and will regularly move between waterbodies. Therefore, creation of pond clusters can be beneficial. Amphibians will also occupy the same terrestrial habitat as reptiles for large parts of the year. This includes rough grasslands and refugia such as logpiles. The creation of these habitats around ponds will benefit both species groups. Both will hibernate over winter and the provision of suitable

hibernation sites in areas with known populations will be beneficial, these can be easy and rewarding to create (Wildlife Trust, 2025).

Birds

Bird boxes could be considered throughout the urban parts of Stansted Mountfitchet and recommendations are set out in the resident's biodiversity pack. Suitable target species are house sparrow, swift, tawny owl and starlings. Within rural areas it may be possible to work with landowners and farmers to develop a barn owl box scheme.

Bats

Bat boxes could be considered in both urban and rural areas of Stansted Mountfitchet and recommendations are set out in the resident's biodiversity pack. Developing a more connected landscape through the creation of strong linear features, such as hedgerows and lines of trees, will also serve to enhance bat populations. Ideally these features should join habitats that are good for foraging and roosting enabling bats to access all the resources they require for their lifecycles.

Other mammals

A citizen science project to understand the distribution of hedgehogs in the parish would help to inform appropriate locations for interventions for this species. Positive interventions could include community engagement to increase connectivity between back gardens with hedgehog highways (small hedgehog sized gaps in fences between gardens). Warwickshire Wildlife Trust (2025) have developed a ten point plan to help the species in such areas.

Creation of artificial otter holts along the watercourses will benefit this species. These structures are relatively easy to create and could be installed in more secluded locations alongside both the Stansted Brook and the River Stort. Areas of woodland and scrub can be good locations as these naturally offer more cover from disturbance. Artificial setts can be simple logpile structures (Oxford Preservation Trust, 2025), or more complex built structures (for example Wildlife Kate, 2025).

Green corridors and connectivity

Wildlife corridors are critical for the maintenance of ecological processes including allowing for the movement of animals and the continuation of viable populations of species within and between significant habitat parcels. As such, it is of high importance to identify, maintain and enhance existing wildlife corridors. This will not only ensure a sustainable ecological network through the landscape, but also prevent existing sites designated for their habitats of ecological importance and their wildlife populations from becoming isolated.

Green corridors can be understood at a local level and at a landscape level. At a landscape level, the land to the east of Stansted Mountfitchet bordering M11 has been noted as an important strategic

location for maintaining landscape connectivity of woodland within Uttlesford (Land Use Consultants, 2023). On a local level, individual features such as hedgerows, lines of trees and road verges are important for allowing connectivity between habitats, even when the landscape is not otherwise strategically valuable for biodiversity. This is particularly relevant to the north-west of Stansted Mountfitchet, where there are a small number of woodland parcels, including Houghtey Wood LoWS, surrounding by cropland with a lower density of hedgerow and lines of trees. The watercourses also provide excellent corridors and these should be enhanced wherever feasible.

The key corridors proposed at Stansted Mountfitchet, Essex are set out below:

- The M11 north-south corridor
- The River Stort
- Stansted Brook

Lighting

Nocturnal wildlife, and notably bats, can be significantly affected by artificial lighting. Some locations are particularly sensitive to obtrusive light and lighting schemes in these areas should be discouraged, or very carefully planned. The green corridors should be treated particularly sensitively and lighting strategies close to these should be developed with ecologists.

Guidance has been developed by the Bat Conservation Trust and the Institute for Lighting Professionals (ILP, 2023). Sustainable Stansted should work to encourage any new lighting projects to adhere to these guidelines. Whilst focused on bats the principles set out in this guidance would benefit a range of other nocturnal wildlife.

Development control

Development control does not fall directly within the remit of this project. However, Sustainable Stansted should actively encourage the creation of habitat and species features listed above in any new development schemes. This would include appropriate habitats, species measures and contributions to green corridors.

Similarly Sustainable Stansted should actively discourage development in inappropriate locations, for example any of the important places listed at the end of Section 3. It is the responsibility of developers, landowners and local planning authorities to ensure compliance with wildlife legislation, and it is an offence under the law (see Appendix 1) to destroy, damage, or disturb protected habitats and intentionally harm or kill protected species, including the breeding sites and resting places of some protected species. Early consideration of these legal obligations can help guide site design, reduce ecological impacts and ensure that development proposals avoid or mitigate harm to protected species

and habitats. Proposed development projects should clearly demonstrate that they have followed the mitigation hierarchy which is 1) avoid impacts, 2) mitigate impacts and 3) compensate for losses. Furthermore any development should be enhancing biodiversity, for example through the Biodiversity Net Gain regulations.

General recommendations

Sustainable Stansted should encourage general biodiversity measures across the parish, this could include factors such as ensuring all composts are peat free and avoiding use of pesticides (except in exceptional circumstances such as the presence of invasive species). Reduction in the use of fertilisers will also help to reduce runoff into sensitive local receptors, for example the River Stort. Such measures will ensure that opportunities for restoring biodiversity are delivered locally, and also that they recognise broader ecological concerns.

Urban enhancement areas

Two urban areas were identified as having established potential for biodiversity enhancements, these were;

- The Recreation Ground
- Land off Dairy Lane

The habitats for each location were reviewed, and a suite of specific recommendations have been developed. These areas are shown on Figures 14 and 15.

Figure 14: Boundary of the Recreation Ground

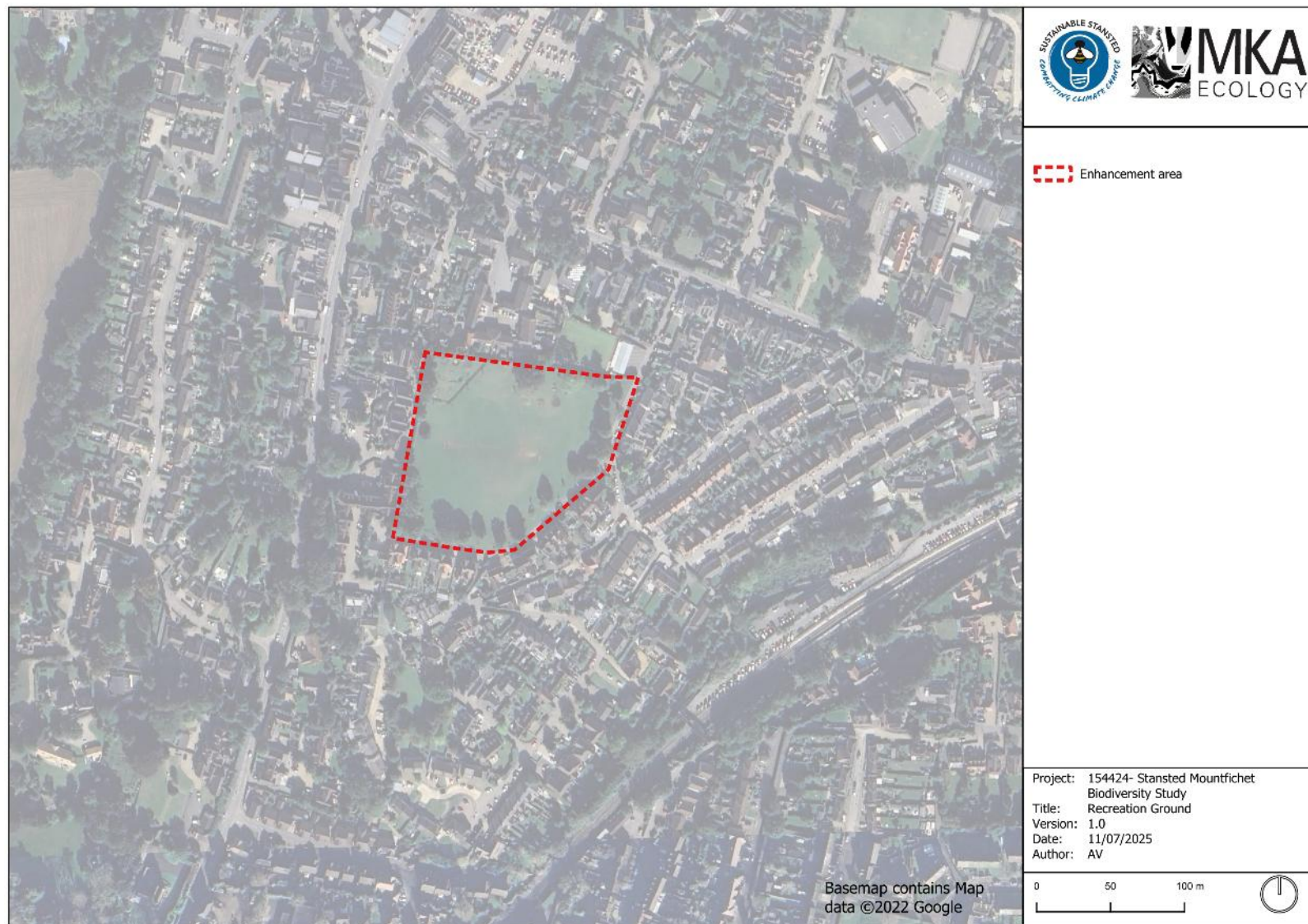


Figure 15: Boundary of Land off Dairy Lane



Recreation Ground

Site description

A typical recreation ground dominated by amenity grassland of low ecological value. The boundary features contain more biodiversity value and these comprise hedgerows and lines of trees, both with a mixture of native and non-native species. These features provide shelter and corridors for wildlife, as well as food resources.

Land use

Any projects in this location will need to recognise the significant recreational use and value that the area provides to the residents of Stansted.

Biodiversity and landscape context

The Recreation Ground is situated centrally within Stansted Mountfitchet and the surrounding area is urban and heavily developed. There is no strong connectivity through wildlife corridors to the surrounding landscape. However, the leafy gardens are likely to provide some permeability for biodiversity through the area.

Potential enhancement options

The overall purpose of the enhancements should be to maximise opportunities for biodiversity whilst recognising the primary land use as a recreation ground. This is not necessarily a constraint and instead it is an opportunity for public engagement with biodiversity. Therefore, signage and interpretation of interventions would be beneficial in this location. The proposals will need to maintain open space for games and recreation and therefore enhancements are likely to be focussed on the edges. Given the urban setting there are no special requirements to create certain habitats to fit in with the directly surrounding landscape, instead there is flexibility to create what delivers the most for biodiversity in a smaller area.

Wildflower grasslands

Soil sampling should be undertaken if you are targeting a high value species rich type of grassland.

Option 1: Where no soil sampling is undertaken, or where nutrient levels are higher a relatively diverse grassland type should be targeted. A staged approach would be appropriate;

- a) Begin sensitive mowing regime (described below)
- b) Scarification (opening up the sward to expose areas of bare soil)
- c) Seeding of yellow-rattle and some wildflowers
- d) Monitor for success of yellow-rattle and reseed where necessary, target new areas with scarification and sow more diverse wildflower mix.

Option 2: Where soil sampling is undertaken and nutrients are low, or where nutrient levels are higher and nutrient stripping is proposed a high diversity grassland type should be targeted. However due to the land use signage will be important to prevent excessive trampling or dog impacts. A staged approach would be appropriate (this assumes nutrient stripping has taken place);

- a) Begin sensitive mowing regime (described below) or if appropriate and budgets allow, strip existing sward and part of topsoil
- b) Scarification (opening up the sward to expose areas of bare soil)
- c) Seeding of yellow rattle and diverse wildflower mix.

If larger areas of grassland are being targeted it may be more cost effective to undertake these actions in strips with a view to the desirable grassland spreading into the adjacent areas.

Once established the grasslands should be managed sensitively. They should not be cut through the summer growing period from April to July. There should be a hay cut late July to September and all arisings should be removed. The arisings should be left for more than two days for seeds to drop. There could be further cuts between September and April if possible but this will depend on ground conditions. If the grassland is over 15cm high for these further cuts then arisings should also be removed.

When sourcing seeds it is important that these are from a reputable supplier and that the seeds are locally sourced.

Paths could be created through the grassland to allow for access, with some larger cut areas for picnics or recreation.

An appropriate area for wildflowers at the Recreation Ground includes the edges, although it is unlikely that high value wildflowers grasslands can be created in areas which are heavily shaded by trees. Also, the more steeply sloping, south facing ground, to the north could be appropriate as this is less likely to be used for sports recreation.

Woodland

A small woodland could be considered at the Recreation Ground, particularly using the Miyawaki method which provides a technique for quickly establishing woodlands (Local Government Association, 2025 and Creating Tomorrows Forests, 2025). This could be of any shape to suit requirements. Trees should always be sourced from sustainable stock.

Scrub and hedgerows

The hedgerows on the perimeter should be managed to maximise opportunities for biodiversity, and in parts be allowed to develop into a scrubby edge. Scrub and hedgerows should have scalloped edges

and glades to create microclimates for invertebrates such as butterflies. Similarly having a graded edge from hedgerows/scrub to long grass creates more niches for invertebrates rather than a sharp cut off from hedgerows/scrub to amenity grass.

New islands of native scrub planting could be considered to provide nesting opportunities for birds, and habitats for invertebrates.

Scattered trees

There are already significant numbers of scattered trees around the boundaries of the Recreation Ground and these provide good habitat. However, it is recommended that over time when trees are replaced then this is done with a suitable mix of native species.

Bird and bat boxes

A suite of bird and bat boxes could be mounted in the trees around the perimeter of the Recreation Ground. This could include generalist boxes for birds, as well as boxes for target species such as house sparrow, starling and tawny owl.

Invertebrate features

Insect houses could be installed within the hedgerows of the Recreation Ground. This could include 'bug hotels' created from recycled materials such as wooden pallets and bricks. Deadwood features are also valuable in providing terrestrial habitat and opportunities for a large number of invertebrate features. This could include log piles, or 'log pyramids' which can be created by part-burying logs vertically into the ground. Similarly bug hotels and log piles can easily be created by residents in their own gardens (see the resident's guide <https://sustainablestansted.org/wp-content/uploads/2025/09/residents-guide-stansted-mountfitchet-1.pdf>). Wood to create deadwood features should be sourced sustainably.

Wildlife ponds

The installation of one or more ponds at the Recreation Ground could enhance the habitat diversity at this area. Ponds of varying depths and gently sloping margins could be established to support a range of aquatic and marginal plant species, providing habitat for amphibians, invertebrates and foraging opportunities for bats and birds.

A number of these features could be combined to create a discrete biodiversity area within the Recreation Ground.

Land off Dairy Lane

Site description

This area will be adopted by Stansted Parish Council. It currently comprises rough open grassland. The area was formerly part of a dairy farm, being intensively grazed and possibly systematically cut for fodder. In 2022 or 2023 a large proportion of this area was cleared and reseeded with a basic grassland mix. There has been some native scrub and woodland planting around the edge of the field, particularly to the north and west.

Land use

Whilst not specifically under any land use the area is likely to be used for recreation. However, due to the sloping topography it is unlikely to ever be used for sports recreation.

Biodiversity and landscape context

Situated on the urban fringe of Stansted Mountfitchet this site has excellent connectivity to the surrounding landscape for biodiversity. It is situated close to the Stansted Brook, and also the parkland habitats of Stansted Park. Similarly the new wetlands associated with the Dairy Lane development are close by, as is the biodiverse complex of scrub, wetlands and woodlands around Durrell's Wood and Turner's Spring.

Potential enhancement options

Whilst a very long-term vision, the creation of open parkland with open growth veteran and mature trees oversailing species diverse grassland would be an appropriate approach for Land off Dairy Lane. This takes precedent from the neighbouring Stansted Park and is an extremely high value habitat type and also provides an excellent opportunity for public engagement in nature. The planting of larger trees with a view for long-term maintenance offers opportunities for civic celebrations through tree planting. Although the vision is long-term the creation of wildflower grassland across the site will provide immediate biodiversity benefits and opportunities for resident's engagement with biodiversity.

Wildflower grasslands/Parkland

Species rich grassland with scattered trees should be the target. Several trees should be planted through the area. These should have sufficient space to grow into mature veteran trees whilst also allowing higher value grassland between that is not heavily shaded. The trees will require protection from damage and deer browsing. Trees should be sourced locally from reputable suppliers. Suitable species include oak *Quercus robur* or potentially beech *Fagus sylvatica*, although a detailed study of the Stansted Park trees may provide some further suitable species.

Soil sampling should be undertaken if you are targeting a high value species rich type of grassland.

Option 1: Where no soil sampling is undertaken, or where nutrient levels are higher a relatively diverse grassland type should be targeted. A staged approach would be appropriate;

- a) Begin sensitive mowing regime (described below)
- b) Scarification (opening up the sward to expose areas of bare soil)
- c) Seeding of yellow-rattle and some wildflowers
- d) Monitor for success of yellow-rattle and reseed where necessary, target new areas with scarification and sow more diverse wildflower mix.

Option 2: Where soil sampling is undertaken and nutrients are low, or where nutrient levels are higher and nutrient stripping is proposed a high diversity grassland type should be targeted. A staged approach would be appropriate (this assumes nutrient stripping has taken place);

- a) Begin sensitive mowing regime (described below) or if appropriate and budgets allow, strip existing sward and part of topsoil
- b) Scarification (opening up the sward to expose areas of bare soil)
- c) Seeding of yellow-rattle and diverse wildflower mix.

If larger areas of grassland are being targeted it may be more cost effective to undertake these actions in strips with a view to the desirable grassland spreading into the adjacent areas over time.

Once established the grasslands should be managed sensitively. They should not be cut through the summer growing period from April to July. There should be a hay cut late July to September and all arisings should be removed. The arisings should be left for more than two days for seeds to drop. There could be further cuts between September and April if possible but this will depend on ground conditions. If the grassland is over 15cm high for these further cuts then arisings should also be removed.

When sourcing seeds it is important that these are from a reputable supplier and that the seeds are locally sources.

Paths could be created through the grassland to allow for access, with some larger cut areas for picnics or recreation.

Over time if grazing could be introduced this would be highly beneficial for the grassland quality, and the dung would also benefit invertebrates and their predators.

Scrub and hedgerows

The new planting around the perimeter should be managed to maximise opportunities for biodiversity. For example the scrub and hedgerows should have scalloped edges and glades to create microclimates

for invertebrates such as butterflies. Similarly having a graded edge from woodland to scrub to long grass creates more niches for invertebrates rather than a sharp cut off from scrub/woodland to grass.

Bird boxes

There are no suitable features to mount boxes on at Land off Dairy Lane. However, given the location with open grassland it may be appropriate to consider a pole mounted box for barn owl. This would need to be positioned as far away from disturbance as possible, and it would need to be facing open space and foraging areas of grassland.

6. RECOMMENDATIONS

This section provides a summary list of all the recommendations made within the report for reference.

All projects should have regard for the new Essex Local Nature Recovery Strategy and where feasible they should help to deliver the aims of the strategy.

Recommendations relating to the protections and enhancement of habitats

Woodland

- 1) Retain, protect and enhance all of the existing woodlands in the parish, particularly the ancient woodlands.
- 2) Consider projects to control deer browsing in the woodlands.
- 3) Encourage the creation of new woodland, particularly that which links existing woodland and other habitats. Where possible woodland should be allowed to develop through natural succession.
- 4) Increase tree canopy cover in the urban parts of Stansted Mountfitchet and consider the creation of mini woodlands with the Miyawaki method.
- 5) Undertake a citizen science project to map the veteran trees in the parish and raise awareness with residents and stakeholders.

Scrub

- 6) Retain, protect and enhance existing scrub and consider new areas, particularly in the urban sections of the study area.

Hedgerow

- 7) Opportunities for hedgerow creation should be sought across the parish, as should opportunities to improve the condition of existing hedgerows. Ideally these would be in locations which strengthen ecological connectivity.

Grassland

- 8) Creation of species rich grasslands should be considered across the study area, including in urban areas. These grasslands should be suited to the conditions with careful planning to ensure appropriate use of funding. This includes bee-lawns for more formal locations.

Ponds

- 9) Creation of ponds should be considered throughout the parish, in rural areas and urban areas alike.
- 10) Undertake a citizen science project with the aim of identifying the condition of all ponds and looking for opportunities for restoration, new pond creation or recreation of 'ghost' ponds. Encourage landowners to seek funding for creation and restoration of ponds

Waterways

- 11) Undertake projects to help understand the key issues facing the River Stort and Stansted Brook, and then identify and enact appropriate interventions, seeking funding for major schemes where feasible.
- 12) Undertake planting projects for black poplar or developing pollard willows along watercourses.

Recommendations relating to specific species

Invertebrates

- 13) Create invertebrate features wherever feasible, particularly in urban areas where fewer niches are available for these species.

Reptiles and amphibians

- 14) Citizen science projects to enable greater understanding of reptile and amphibian populations and distributions across the parish and to help inform appropriate enhancement activities.
- 15) Creation of suitable terrestrial habitats for reptile and amphibian populations, including the creation of hibernation sites in suitable locations.

Birds

- 16) Develop a bird box scheme for the urban parts of the parish and consider a barn owl box project for the rural landscape.

Bats

- 17) Develop a bat box scheme for urban and rural areas. Strengthen linear features and connectivity for bats throughout the landscape.

Hedgehogs

- 18) Citizen science project to map distribution of hedgehogs in the parish and to inform an enhancement project for the species.

Otters

- 19) Work with landowners and managers in the riparian corridors of the River Stort and the Stansted Brook to create artificial otter holts.

General recommendations

- 20) Retain and enhance the green corridors through Stansted Mountfitchet.
- 21) Encourage the use of wildlife friendly lighting.
- 22) For new development projects in the parish encourage the uptake of the habitat and species measures set out in this document to ensure that they result in a net positive result for biodiversity. Discourage development projects that would have a negative impact on the important biodiversity features identified in this study.
- 23) Implement the proposed enhancement schemes for the Recreation Ground and Land off Dairy Lane
- 24) Encourage wildlife-friendly land management practices across the parish, where feasible, including the use of peat-free products, the reduction or avoidance of pesticides, herbicides and artificial fertilisers, and the promotion of measures to protect water quality and support biodiversity.

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Woodland fungi

8. APPENDICES

Appendix 1: Relevant wildlife legislation and planning policy

Please note that the following is not an exhaustive list, and is solely intended to cover the most relevant legislation pertaining to species commonly encountered.

Subject	Legislation (England)	Relevant prohibited actions
<i>Amphibians</i>	-	-
Great Crested Newt <i>Triturus cristatus</i> Natterjack Toad <i>Epidalea calamita</i>	Schedule 2 of Conservation of Habitats and Species Regulations 2017 (as amended); and Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	Intentionally or deliberately capture or kill, or intentionally injure; Deliberately disturb or intentionally or recklessly disturb them in a place used for shelter or protection; Damage or destroy a breeding site or resting place; Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection; and Possess an individual, or any part of it, unless acquired lawfully.
<i>Reptiles</i>	-	-
Common Lizard <i>Zootoca vivipara</i> Adder <i>Vipera berus</i> Slow-worm <i>Anguis fragilis</i> Grass Snake <i>Natrix natrix</i>	Part of Sub-section 9(1) of Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	Intentionally kill or injure individuals of these species (Section 9(1)).

Subject	Legislation (England)	Relevant prohibited actions
Sand Lizard <i>Lacerta agilis</i> Smooth Snake <i>Coronella austriaca</i>	Full protection under Section 9 of Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	Deliberately or intentionally kill, capture (take) or intentionally injure; Deliberately disturb; Deliberately take or destroy eggs; Damage or destroy a breeding site or resting place or intentionally damage a place used for shelter; or Intentionally obstruct access to a place used for shelter.
<i>Birds</i>	-	-
All wild birds	Wildlife and Countryside Act 1981 (as amended)	Intentionally kill, injure, or take any wild bird or their eggs or nests.
'Schedule 1' Birds	Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)	Disturb any wild bird listed on Schedule 1 whilst it is building a nest or is in, on, or near a nest containing eggs or young; or Disturb the dependent young of any wild bird listed on Schedule 1.
<i>Mammals</i>	-	-

Subject	Legislation (England)	Relevant prohibited actions
Bats (all UK species)	Schedule 2 of Conservation of Habitats and Species Regulations 2017 (as amended); and Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	Deliberately capture, injure or kill a bat; Deliberately disturb a bat (disturbance is defined as an action which is likely to: (i) Impair their ability to survive, to breed or reproduce, or to rear or nurture their young; (ii) Impair their ability to hibernate or migrate; or (iii) Affect significantly the local distribution or abundance of the species); Damage or destroy a bat roost; Intentionally or recklessly disturb a bat at a roost; or Intentionally or recklessly obstruct access to a roost. In this interpretation, a bat roost is "<i>any structure or place which any wild [bat]...uses for shelter or protection</i>". Legal opinion is that the roost is protected whether or not the bats are present at the time.

Subject	Legislation (England)	Relevant prohibited actions
Badger <i>Meles meles</i>	Protection of Badgers Act 1992	Under Section 3 of the Act: Damage a sett or any part of it; Destroy a sett; Obstruct access to, or any entrance of, a sett; or Disturb a Badger when it is occupying a sett. A sett is defined legally as any structure or place which displays signs indicating current use by a Badger (Natural England 2007).
Hazel Dormouse <i>Corylus avellana</i>	Schedule 2 of Conservation of Habitats and Species Regulations 2017 (as amended); and Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	Intentionally or deliberately capture or kill, or intentionally injure; Deliberately disturb or intentionally or recklessly disturb them in a place used for shelter or protection; Damage or destroy a breeding site or resting place; Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection; and Possess an individual, or any part of it, unless acquired lawfully.

Subject	Legislation (England)	Relevant prohibited actions
Otter <i>Lutra lutra</i>	Schedule 2 of Conservation of Habitats and Species Regulations 2017 (as amended); and Section 9(4)(b) and (c) of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	Deliberately capture, injure or kill an Otter; Deliberately disturb an Otter in such a way as to be likely to significantly affect the local distribution or abundance of otters or the ability of any significant group of otters to survive, breed, rear or nurture their young; Intentionally or recklessly disturb any Otter whilst it is occupying a holt; Damage or destroy or intentionally or recklessly obstruct access to an Otter holt.
Water Vole <i>Arvicola amphibius</i>	Section 9 of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	Intentionally kill, injure or take Water Voles; Possess or control live or dead Water Voles or derivatives; Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection; or Intentionally or recklessly disturb Water Voles whilst occupying a structure or place used for that purpose.
Crustaceans	-	-
White-clawed Crayfish <i>Austropotamobius pallipes</i>	Section 9(1) of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	Intentionally kill, injure or take White-clawed Crayfish by any method.

Conservation of Habitats and Species Regulations 2017 (as amended)

Full legislation text available at:

<http://www.legislation.gov.uk/ukxi/2010/490/regulation/61/made>

The Wildlife and Countryside Act 1981 (as amended)

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/1981/69/contents>.

Countryside and Rights of Way Act 2000

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/2000/37/contents>

Protection of Badgers Act 1992

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/1992/51/contents>

Section 41 of Natural Environments and Rural Communities (NERC) Act 2006

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/2006/16/section/41>

Many of the species above, along with a host of others not afforded additional protection, are listed on Section 41 of the NERC Act 2006.

Section 41 (S41) of the Natural Environment and Rural Communities (NERC Act 2006) requires the Secretary of State to publish a list of Habitats and Species of Principal Importance for the conservation of biodiversity in England. The list (including 56 habitats and 943 species) has been drawn up in consultation with Natural England and draws upon the UK Biodiversity Action Plan (BAP) List of Priority Species and Habitats.

The S41 list should be used to guide decision-makers such as local and regional authorities to have regard to the conservation of biodiversity in the exercise of their normal functions – as required under Section 40 of the NERC Act 2006. The duty applies to all local authorities and extends beyond just conserving what is already there, to carrying out, supporting and requiring actions that may also restore or enhance biodiversity.

Schedule 9 of Wildlife and Countryside Act 1981 (as amended)

In addition to affording protection to some species, The Wildlife and Countryside Act 1981 (as amended) also names species which are considered invasive and require control. Section 14 of the Act prohibits the introduction into the wild of any animal of a kind which is not ordinarily resident in, and is not a regular visitor to, Great Britain in a wild state, or any species of animal or plant listed in Schedule 9 to the Act. In the main, Schedule 9 lists non-native species that are already established in the wild, but which continue to pose a conservation threat to native biodiversity and habitats, such that further releases should be regulated.

Wild Mammals (Protection) Act 1996

Full legislation text is available at: <http://www.legislation.gov.uk/ukpga/1996/3/contents>

Under this legislation it is an offence to cause unnecessary suffering to wild mammals, including by crushing and asphyxiation. It largely deals with issues of animal welfare, and covers all non-domestic mammals including commonly encountered mammals on development sites such as rabbits, foxes and field voles.

Birds of Conservation Concern (BoCC)

This is a quantitative assessment of the status of populations of bird species which regularly occur in the UK, undertaken by the UK's leading bird conservation organisations. It assesses a total of 246 species against a set of objective criteria to place each on one of three lists – Green, Amber and Red – indicating an increasing level of conservation concern. There are currently 52 species on the Red list, 126 on the Amber list and 68 on the Green list. The classifications described have no statutory implications, and are used merely as a tool for assessing scarcity and conservation value of a given species.

Local Planning Policy

Uttlesford District Council have an adopted Local Plan which covers relevant policies relating to biodiversity and habitat conservation and development, including:

- Policy 40: Biodiversity and Nature Recovery
 - *Biodiversity and nature recovery are integral to sustainable development and to health and wellbeing. The protection of the natural environment is a core objective of the Local Plan and an essential component of the measures to mitigate climate change.*
 - *The Council supports the objectives of the Essex Local Nature Partnership, including their commitment to ensure that 25% of all land in Essex will enhance biodiversity and the natural environment by creating natural green infrastructure and to adopt the Accessible Natural Green Space Standards (ANGSt) target for everyone to have access to high quality natural space close to home and work.*
 - *The Council supports the creation, restoration, retention, protection and extension of all areas designated internationally, nationally and locally as well as all Habitats and Species of Principal Importance within the District.*
 - *To support declining local species populations new homes should include integrated habitats including those for bats, birds (including swifts) and pollinators, in line with the standards set out in the Uttlesford Design Code as well as permeable boundaries to*

facilitate wildlife movement. Where new tree planting is required, native species should be used referring to the Essex Tree Palette.

- *The management of natural areas and newly created sites to be an integral part of the development will require an endowment or some other means to support maintenance and longer-term future. This may include the creation of Biodiversity Net Gain units. The stewardship arrangement and the potential need for off-site BNG units should be discussed with the local planning authority at the earliest date since it may affect the design and nature of proposals for the natural environment and Biodiversity Net Gain requirements on the site.*
- *The creation of BNG units is particularly encouraged where they:*
 - *are in locations of strategic importance according to the Statutory BNG metric*
 - *are included in Nature Recovery Strategies, or*
 - *have the potential to positively impact important habitats within the District including, but not limited to, Ancient Woodland, Ancient Trees, rivers and their supporting habitats, chalk meadows, watercourses, chalk streams and hedgerows, or to support protected species.*
- *The Environment Act (2021) has introduced a mandatory approach to supporting biodiversity through development Biodiversity Net Gain, setting a statutory 10% minimum increase in natural habitats and ecology for all development which impacts on biodiversity. Biodiversity Net Gain is calculated using the most recent Defra Biodiversity Metric. It can be viewed as a mechanism within the planning system to help work towards better environmental protection and sustainable development as well as an opportunity to invest in the Environment, beyond the previous 'no net loss' approach. However there remains strong pressure for development in the District with its range of vulnerable natural and semi natural habitats, and chalk steams. Unplanned development consents fragment ecological pathways and without a specific measure to encourage connectivity and ecological corridors, development can impact on the quality and viability of habitats and species.*
- *Environmental degradation through modern farming methods, runoff from fields and roads into rivers and from roads into (protected) grass verges, loss of hedgerows, species extinctions and new greenfield development have lowered the value of biodiversity in the District and give considerable scope for improvement beyond 20% BNG. At the time of writing, despite being the largest District in Essex with the lowest population density, Uttlesford has the third lowest biodiversity (species per km²) of any Essex District. Its biodiversity is significantly lower than similar UK Districts in terms of size and population density. To address this, the Council seeks to exceed the statutory minimum increase by setting a requirement for development proposals to achieve at least 20% Biodiversity Net Gain.*



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