

# Land at Salters Heath Farm, Riverhead

# **Ecology Report**

13<sup>th</sup> September 2018



Client	The Montreal Estate
Job name	Land at Salters Heath Farm, Riverhead
Report title	Ecology Report
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	Name	Position	Date
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## 1 Introduction

## 1.1 Site Description

The site is located at Salters Heath Farm, off Cold Arbor Road, to the south of Riverhead, in the County of Kent at approximate postcode TN13 2PR. The site, which comprises part of the overall property, is estimated to be around 0.56 hectares in size, is centred on Ordnance Survey (OS) grid reference TQ 508 548 and comprises agricultural buildings, hard standing/bare ground, ruderal vegetation, hedgerows and scattered trees.

The land surrounding the site is rural in character, being dominated by agricultural fields, along with woodland, hedgerows, roads and a relatively low density of residential properties.

The site location and surrounding area are illustrated in aerial images provided in Appendix 1 and photographs of the site are provided in Appendix 2.

## 1.2 Proposed Works

It is understood that the proposed works are the subject of a planning application to Sevenoaks District Council, the Local Planning Authority (LPA), for: "The conversion of traditional agricultural buildings to form business uses within class B1(a), the demolition of a redundant modern agricultural building/silos and replacement with a new-built B1(a) office, together with access improvements, parking and landscaping".

## 1.3 Aims of Study

GreenLink Ecology Ltd. was initially commissioned undertake a preliminary ecological appraisal (PEA), to include a desk study of existing ecological information and a survey to identify what habitats are present and look for any evidence of, or potential for, protected/notable species.

Subsequent to potential being identified for bats and reptiles, further detailed survey work for these legally protected species was also conducted.

The aim of this report is to present the results of the PEA and protected species survey work, highlight any areas of conservation concern and make recommendations for appropriate mitigation/enhancement measures to comply with legislation/planning policy.

## 2 Methodology

## 2.1 Desk Study

A desk study was undertaken in order to locate existing ecological data held by the Kent and Medway Biological Records Centre (KMBRC), relating to designated sites for nature conservation and legally protected/notable species records from within one kilometre of the site.

## 2.2 PEA Survey

An initial survey was undertaken by experienced consultant ecologist Marcus Fry MCIEEM<sup>1</sup> on 10<sup>th</sup> July 2017 following published guidelines<sup>2</sup>. The native plant species and habitat types present were identified and any evidence of, or potential for, protected/notable species and their habitats was recorded. On the day of the survey the weather conditions were sunshine with clear skies and the temperature at midday was around 26°C.

## 2.3 Bat Survey

Since the proposed works include the conversion of the existing buildings, which could directly impact upon bats, if present, these were assessed by Natural England licence holder Marcus Fry MCIEEM (no. 2016-10955-CLS), for any evidence of, or potential for bats, in accordance with the 2016 Bat Conservation Trust's (BCT) published guidance<sup>3</sup>.

Features and evidence considered during the survey included:

- Roof and wall construction;
- Features that have the potential to be actual bat roosts or provide access to roosting opportunities within the buildings;
- Any droppings and/or staining on external walls;
- Scattered or accumulated bat droppings (identified by their dry, powdery texture when compressed) within the roof voids or around entrances to potential roosts;
- Oily staining, scratch marks and/or urine staining around access points to potential roosting locations;
- Places where cobwebs have been swept away; and
- The actual presence of live or dead bats.

Dusk/pre-dawn emergence/re-entry survey visits were conducted by Natural England bat licence holders Marcus Fry (no. 2015-10955-CLS), Leon Brown (2015-13716-CLS) and Rachel Masters GradCIEEM<sup>4</sup> (no. 2015-05522-CLS), assisted by Katherine Bright one 12<sup>th</sup>-13<sup>th</sup> July and 3<sup>rd</sup> August 2017. The surveyors covered aspects of buildings where potentially suitable bat roost features had been identified and used Anabat SD1 bat detectors, to enable any bats emerging/re-entering to be recorded.

The dusk emergence survey visits began approximately half an hour before sunset and continued until approximately two hours after sunset. The pre-dawn survey visit commenced approximately two hours before dawn and continued until the sun had visibly risen. During the survey visits, observations were made regarding bat activity around the area, and any bat ultrasonic

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<sup>&</sup>lt;sup>1</sup> Member of the Chartered Institute of Ecology and Environmental Management (Full)

<sup>&</sup>lt;sup>2</sup> CIEEM (2012) Technical Guidance Series – Guidelines for Preliminary Ecological Appraisal.

<sup>&</sup>lt;sup>3</sup> Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines, Bat Conservation Trust (3<sup>rd</sup> Edition)

echolocation calls that made within range of the bat detectors were recorded and later analysed, to determine which species of bat made them.

## 2.4 Reptile Survey

Since the land in the eastern part of the site adjacent to the B2042 contains a mosaic of habitats (bare ground and ruderal vegetation) that are potentially suitable for use by reptiles, a detailed reptile survey was conducted for this area, to inform the need for mitigation measures.

In accordance with the published guidelines<sup>5</sup>, 60 artificial refugia composed of a mixture of materials (0.5m<sup>2</sup> sections of roofing felt and corrugated metal) were distributed on 17<sup>th</sup> July 2017 and allowed to become established for around two weeks prior to the survey visits commencing.

The refugia and overall site were subsequently checked by an experienced ecologist on seven separate occasions for the presence of reptiles, under optimal climatic conditions (avoiding inclement weather and periods of peak temperature) during July-August 2017.

<sup>&</sup>lt;sup>5</sup> Froglife Advice Sheet 10 – Reptile Survey (1999)

## 3 Results

## 3.1 Desk Study

#### 3.1.1 Designated Sites

According to the KMBRC Designated Areas (DA) map (Appendix 3), the site is located within the Kent Downs Area of Outstanding Natural Beauty (AONB). The only statutory/non-statutory designated site for nature conservation within one kilometre is Dryhill, which is a Site of Special Scientific Interest (SSSI) and Local Wildlife Site (LWS) located circa 500 metres to the north-west.

The DA map also identified the presence of Ancient Semi-Natural Woodland (ASNW), Plantation on Ancient Woodland Sites (PAWS) and "water features" in the surrounding area, which are likely to support notable habitats of conservation interest, although none of these sites are closer that circa 200 metres from the site boundaries.

#### 3.1.2 Protected/Notable Species Records

Many of the records provided in the KMBRC Protected Species Inventory (Appendix 4) are for relatively common/widespread species of plant, invertebrate, amphibian and mammal that are protected in ways not relevant to the proposed works (e.g. from trade/sale/exploitation) and/or they have specialist habitat requirements not supported by the site. However, there are records for protected species of bat and reptile, which could potentially be present within the site, as described in a subsequent section.

## 3.2 Habitat Description

In addition to the agricultural buildings, which are considered in a subsequent section, the site contains hard standing/bare ground, ruderal vegetation, hedgerows and scattered trees.

Hard standing/bare ground is the dominant habitat type and is found throughout the site. This represents a habitat type of inherently low ecological value.

The ruderal vegetation is most abundant in eastern part of the site and is also occasionally present around the agricultural buildings/hard standing areas. Species present include common nettle (Urtica dioica), thistles (Cirsium spp.), docks (Rumex spp.), plantains (Plantago spp.), common ragwort (Senecio jacobaea), yarrow (Achillea millefolium), scentless mayweed (Matricaria perforata), scarlet pimpernel (Anagallis arvensis) and sow thistle (Sonchus sp.). This represents a habitat type of low ecological value.

There are two short sections of hedgerow present, one that extends perpendicular from the A21 boundary, which is dominated by hawthorn (*Crataegus monogyna*), with occasional common ivy (*Hedera helix*) and hazel (*Corylus avellana*), along with one that is present in the western part of the site, adjacent to the Loading Clamp area, which contains blackthorn (*Prunus spinosa*), elm (*Ulmus sp.*) and common ivy. These species-poor hedgerows represent a habitat type of low ecological value. Although there is a more diverse hedgerow adjacent to the A21 boundary, this is entirely off-site.

There are very low numbers of scattered trees present, which consist of two mature oaks in the south-east of the site, with associated immature oak, sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*) trees. The mature trees represent the features of highest ecological value on the site.

None of the plants recorded during the survey are protected/notable species and the habitats present are not of conservation concern.

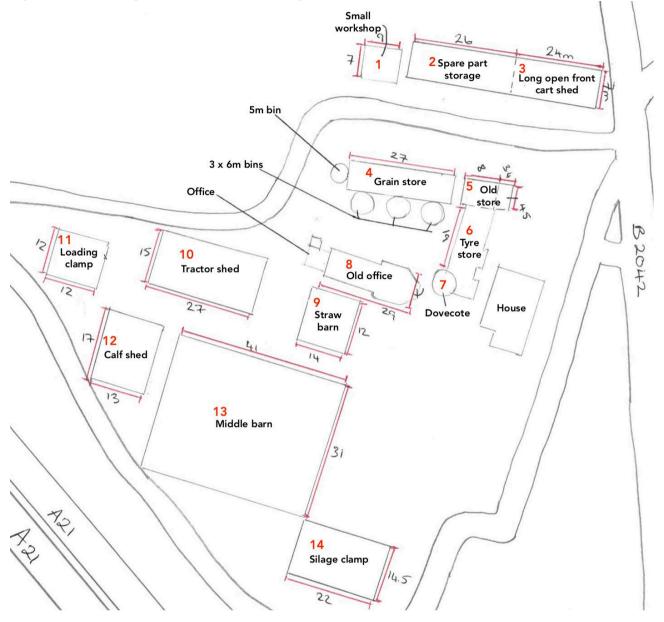
## 3.3 Protected/Notable Species

#### 3.3.1 Bats

The detailed results of the building/structures assessment are provided in Table 1, which should be cross referenced with Figure 1. In summary, the majority of the buildings/structures were found to have no/negligible potential for use by bats and those that did have potential for roosting bats were the subject of more detailed dusk/pre-dawn survey work.

Building number	Building reference	Evidence of bats	Potential for bats	Description
1	Small Workshop	No	No	Corrugated metal walls and pitched roof, no roof void
2	Spare Part Storage	No	No	Stone block walls and slate-tile pitched roof, timber frame, tiles directly on battens, no roof void
3	Long Open Front Cart Shed	Droppings	Moderate	Stone block walls (sides/rear) and slate-tile pitched roof, timber frame, tiles directly on battens, no roof void
4	Grain Store	No	No	Corrugated asbestos/metal walls and pitched roof, no roof void
5	Old Store	No	No	Stone block walls and slate-tile pitched roof, timber frame, tiles directly on battens, no roof void
6	Tyre Store	No	No	Block/brick walls (sides/rear), timber frame, pitched slate roof with tiles directly on battens
7	Dovecote	No	Low	Block/brick walls, no roof, mortice holes in walls
8	Old Office	No	Moderate	<ul> <li>Three buildings, from west (front) to east (rear):</li> <li>brick/block, timber weatherboard and corrugated asbestos walls and corrugated asbestos pitched roof, no roof void;</li> <li>brick/block walls and corrugated metal pitched roof, no roof void; and</li> <li>brick walls, slate-tiled pitched roof, no roof void</li> </ul>
9	Straw Barn	Droppings	No	Corrugated asbestos pitched roof, concrete frame, no roof void
10	Tractor Shed	Droppings	No	Corrugated asbestos pitched roof, concrete frame, no roof void
11	Loading Clamp	No	No	Concrete bays
12	Calf Shed	Droppings	No	Block/timber cladding walls, corrugated asbestos pitched roof, no roof void
13	Middle Barn	Droppings	No	Corrugated asbestos walls and roof, concrete frame, no roof void
14	Silage Clamp	No	No	Concrete bays, timber sleeper walls

Table 1: Details for the building/structures assessment



#### Figure 1: Illustrating the locations of buildings referred to in Table 1

During the first dusk emergence survey visit conducted on 12<sup>th</sup> July 2017, there were no bats recorded emerging from any of the buildings that were the focus of the survey, although low numbers of common pipistrelle (*Pipistrellus pipistrellus*) bats were recorded entering the site shortly after dusk, from the direction of the residential dwellings immediately adjacent to the site (Salters Heath Farmhouse). This building has tile-hung elevations, which represent typical roosting features for this species. These bats were recorded foraging around/inside the open-sided barn buildings for the duration of the survey, with a maximum of three individuals being recorded at any one time.

During the 13<sup>th</sup> July 2017 pre-dawn re-entry survey visit, there was limited bat activity associated with the site and no bats were recorded re-entering any of the buildings on-site, although low numbers of common were intermittently recorded foraging around/inside the long open front cart shed and along the hedgerow adjacent to the A21 boundary.

The results of the second dusk emergence survey visit conducted on 3<sup>rd</sup> August 2017 were very similar to the first visit, with no bats recorded emerging from any of the on-site buildings and low

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numbers of common pipistrelle recorded entering the site shortly after dusk, from the direction of Salters Heath Farmhouse. A maximum of two common pipistrelle bats were subsequently recorded foraging around/inside the open-sided barn buildings for the duration of the survey.

Date	Weather	Sunset/rise	Bats emerging/ re-entering (numbers)	Bat activity (calls)
12/07/17	Clear skies, 22°C	21:13	None	Common pipistrelle (266)
13/07/17	Overcast, 14°C	04:58	None	Common pipistrelle (40)
03/08/17	Scattered cloud, 24°C	20:44	None	Common pipistrelle (40)

Table 2: Details of the bat activity survey

#### 3.3.2 Breeding Birds

Evidence of actively breeding house sparrow (*Passer domesticus*), swallow (*Hirundo rustica*) and feral pigeon (*Columba livia domestica*) was recorded during the survey, predominantly in association with buildings 3, 5, 6 and 8 (rear).

Although no evidence of breeding birds was recorded at the time of survey, the short sections of hedgerow and low number of scattered trees also represent potentially suitable habitats for use by birds during the breeding season.

#### 3.3.3 Reptiles

In summary, there were no reptiles of any species recorded during the survey visits and it is considered that reptiles are therefore absent from the site. The full details of the reptile survey are provided in Table 3.

Date	Climatic conditions	Reptiles present
31/07/17	Clear skies, 20°C	Negative
03/08/17	Overcast, 20°C	Negative
05/08/17	Overcast, 16°C	Negative
14/08/17	Clear skies, 21°C	Negative
16/08/17	Clear skies, 20°C	Negative
19/08/17	Scattered cloud, 21°C	Negative
31/08/17	Scattered cloud, 19°C	Negative

Table 3: Details of the reptile survey

## 4 Assessment

## 4.1 Constraints

#### 4.1.1 Desk Study

The KMBRC provided comprehensive records for legally protected/notable species, along with information relating to statutory designated sites from within the local area. Therefore, it is considered that there were no significant constraints to the desk study information.

#### 4.1.2 PEA Survey

It was possible to access all parts of the site and the survey was undertaken by an experienced consultant ecologist using standard survey techniques. It is therefore considered that there were no significant constraints to the PEA.

#### 4.1.3 Bat Survey

The bat survey work was conducted by appropriately experienced and licensed ecologists, during the appropriate season, under optimal climactic conditions and in accordance with the published guidelines. It is therefore considered that there were no significant constraints to the survey.

#### 4.1.4 Reptile Survey

The reptile survey work was undertaken in accordance with the published guidelines, during an appropriate time of the year and by experienced consultant ecologist. It is therefore considered that there were no significant constraints to the reptile survey.

### 4.2 Potential Impacts

#### 4.2.1 Designated Sites

As illustrated in the DA map provided in Appendix 3, the closest statutory/non-statutory designated site is located circa 500 metres to the north-west and there are no notable habitats types present within less than 200 metres from the site boundaries.

Therefore, since the proposals are restricted to the existing site footprint and the land use will remain agricultural, there should be no significant impact to any statutory/non-statutory designated site or notable habitats of conservation interest that are present in the wider area.

#### 4.2.2 Habitats

The site is dominated by hard standing/bare ground and ruderal vegetation, which represent habitats of low ecological value.

Although there are also small sections of species-poor hedgerow and scattered trees present, it is understood that they will be unaffected by the proposals.

Therefore, potential impacts to habitats are not considered to be significant in relation to the proposed works.

#### 4.2.1 Protected/Notable Species

#### 4.2.1.1 Bats

The survey has determined that bats do not use the buildings within the site for roosting purposes and although scattered bat droppings were recorded on the floors of certain buildings (Table 1), this reflects that low numbers of the most common/widespread species of bat have been recorded foraging around/inside these buildings.

Since these buildings and suitable bat foraging habitats (sections of hedgerow and scattered trees) will all be retained, there is low level bollard lighting proposed and the land use associated with the site will remain agricultural, it is therefore considered that the proposed works would not have a significant negative impact on the local bat population.

The proposals could actually have a positive impact for bats through the provision of various "bolton/built-in" roost features within the converted/new buildings.

#### 4.2.1.2 Breeding Birds

Evidence for breeding birds was recorded during the survey, throughout many of the agricultural buildings, in a variety of locations.

Therefore, breeding birds could be directly impacted on by the conversion of these buildings, if undertaken during the breeding season (March-July/August, as a guide), which would be an offence against domestic law. To avoid the seasonal risk of impacts to breeding birds, precautionary mitigation measures are recommended in a subsequent section.

The proposed works could actually have a positive impact for birds through the provision of "bolton/built-in" nesting features within the converted/new buildings.

#### 4.2.1.3 Reptiles

Since the results of the survey indicate that reptiles are most likely to be absent from the site and therefore, would not be impacted on by the proposed works, mitigation measures are not considered necessary for reptiles.

However, if at any time during the proposed works, it becomes apparent that reptiles are present and at risk of impacts, works will need to temporarily cease whilst an experienced ecologist is contacted and consulted about how to proceed without the risk of an offence being committed.

## 4.3 Legislation and Policy

#### 4.3.1 Bats

All species of bat and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000), and by the Conservation of Habitats and Species Regulations 2010, which consolidates all the various amendments made to the Conservation (Natural Habitats, &c.) (Amendments) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law.

The legislation makes it illegal under the Wildlife and Countryside Act 1981 (as amended) to:

- Intentionally or recklessly kill, injure or take a wild bat;
- Be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat;

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- Intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; and
- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection.

All species of bat are also European Protected Species (EPS). As such under the Conservation of Habitats and Species Regulations 2010 it is an offence to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species. Disturbance of animals includes in particular any disturbance which is likely to:
  - $\circ$  impair their ability -
    - to survive, to breed or reproduce, or to rear or nurture their young; or
    - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
  - to affect significantly the local distribution or abundance of the species to which they belong;
- Deliberately take or destroy the eggs of such an animal; or
- Deliberately damage or destroy a breeding site or resting place of such an animal.

#### 4.3.2 Breeding Birds

Breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally or recklessly kill, injure or take any wild bird or take, damage or destroy its nest whilst it is in use or being built, or to take or destroy its eggs.

#### 4.3.3 Reptiles

All species of reptile native to the UK are afforded legal protection under the Wildlife and Countryside Act 1981 (as amended) in respect of deliberate, intentional or reckless killing and injuring.

#### 4.3.4 National Planning Policy Framework

The Government published the National Planning Policy Framework (NPPF) in 2012, which replaced previous policy documents, including Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation.

The NPPF states that when determining planning applications, LPAs should aim to conserve and enhance biodiversity by encouraging opportunities to be taken for the incorporation of biodiversity in and around developments.

## 5 Recommendations

## 5.1 Mitigation Measures

#### 5.1.1 Designated Sites

Since there is no perceived risk of impacts to designated sites for nature conservation (or notable habitats of conservation interest) in the local area, mitigation measures are not considered necessary for designated sites.

#### 5.1.2 Habitats

Mitigation measures are not required for the hard standing/bare ground and ruderal vegetation, since potential impacts to these low ecological value habitats are not considered to be significant.

In relation to the small sections of species-poor hedgerow and scattered trees, it is understood that they will be unaffected by the proposals and therefore, will not need to be subject to mitigation measures.

#### 5.1.3 Protected/Notable Species

#### 5.1.3.1 Bats

Since it is considered that the proposed works would not have a significant negative impact on individual bats, bat habitats, or the local bat population, mitigation measures for bats should not be required.

However, if at any time during the proposed works, it becomes apparent that bats are present and at risk of impacts, works will need to cease whilst an experienced ecologist is contacted and consulted about how to proceed without the risk of an offence being committed.

#### 5.1.3.2 Breeding Birds

Since evidence for breeding birds was recorded in a variety of locations, throughout many of the agricultural buildings, the conversion/demolition of these buildings could directly impact on breeding birds, if undertaken during the breeding season (March-July/August, as a guide).

Therefore, to avoid the seasonal risk of impacts to breeding birds, the buildings should be converted/made unsuitable for use by breeding birds outside the breeding season, i.e. prior to March or after August.

If it is necessary to conduct such work during the breeding season, this should be carried out under the supervision of an experienced ecologist, who will check for the presence/absence of any birds' nests. If any active nests are found then works with the potential to impact on the nest must temporarily cease and an appropriate buffer zone should be established until the young have fledged and the nest is no longer in use.

#### 5.1.3.3 Reptiles

Since it is considered that there is no perceived risk of potential impacts to reptiles as a result of the proposed works, mitigation measures for reptiles should not be required.

However, if at any time during the proposed works, it becomes apparent that reptiles are present and at risk of impacts, works will need to cease whilst an experienced ecologist is contacted and consulted about how to proceed without the risk of an offence being committed.

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## 5.2 Enhancement Measures

Habitat enhancement measures are not considered appropriate or necessary for the site, since it will be an actively used agricultural facility located within an extensive rural landscape.

The following measures are considered to be appropriate to compensate for the loss of bird nesting opportunities associated with the existing buildings and to enhance the site for the local bat population:

- 1 no. Timber barn owl box, located within the gable end of a suitably-sized building;
- 4 no. House sparrow terraces, located above 3-4 metres on walls inside/outside of the converted buildings;
- 8 no. Swallow nesting features, located on ridge beams inside of the converted buildings; and
- 2 no. Schwegler bat boxes, mounted to walls on the outside/inside of the converted buildings.

The exact make/model and location of these boxes will need to be determined in consultation with an ecologist, once planning permission has been granted.

## 6 Conclusions

To inform a planning application, GreenLink Ecology Ltd. was commissioned to undertake a PEA and detailed survey work for legally protected species, which has been conducted without significant constraint.

The desk study has identified that the closest statutory/non-statutory designated site is located circa 500 metres from the proposed development site and that there are no notable habitats of conservation interest closer that 200 metres. Since there is no perceived risk of impacts to designated sites/notable habitats as a result of the proposed works, mitigation measures are not considered necessary.

The desk study data also included records for protected species of bat and reptile, which could potentially be present within the site and these species have been considered in this report.

The survey has determined that the plants within the site are not protected/notable species and they do not constitute habitats of conservation concern. Mitigation for habitats is not considered necessary.

Due to potential for bats and reptiles being identified, further survey work was conducted to determine the need for mitigation measures. The results of the detailed survey work indicate that bats and reptiles are not a constraint to the proposed works and mitigation measures are not required for these species.

Since breeding birds are considered to be a seasonal constraint to the proposed works, mitigation measures will be required for breeding birds to avoid the risk of impacts.

In accordance with the principles of the NPPF, recommendations have also been made for ecological enhancement measures to benefit local wildlife.

Overall, there are no known overriding ecological constraints that would prevent the proposed works going ahead, subject to the recommendations made in this report being correctly implemented.

## 7 Disclaimer

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Nothing in this report constitutes legal opinion. If legal opinion is required the advice of a qualified legal professional should be secured.

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# 8 Appendices

Appendix 1: Aerial images illustrating the approximate site location and surrounding area

Photograph 1: The site and immediate surrounding area





Photograph 2: The site and wider surrounding area

## Appendix 2: Photographs of the site

## Photograph 1: View from the site entrance, looking west



Photograph 2: Workshop (building 1)



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## Photograph 3: Diesel store (building 2)



Photograph 4: Open fronted barn (building 3)



# Photograph 5: Old drier (building 4)



Photograph 6: Old store (building 5)



Photograph 7: Tyre store and oast remains (buildings 6 and 7)



Photograph 8: Office block/front (building 8)



# Photograph 9: Office block/middle (building 8)



Photograph 10: Office block/rear (building 8)





Photograph 11: Straw barn (building 9)

Photograph 12: Tractor shed (building 10)



## Photograph 13: Loading clamp (11)



Photograph 14: Calf shed (building 12)



## Photograph 15: Middle barn (building 13)



Photograph 16: Silage clamp (14)





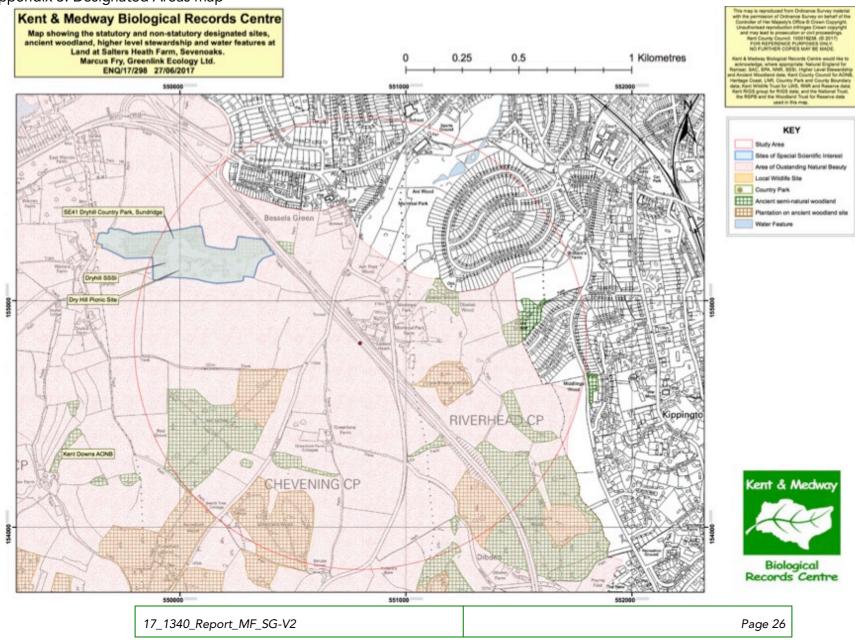
Photograph 17: Eastern part of the site, taken from the southern boundary looking north

Photograph 18: Eastern part of the site, taken from the northern boundary looking south



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Appendix 3: Designated Areas map



**Appendix 4: Protected Species Inventory** 

Protected Species Inventory

Brogdale Farm Office, Brogdale Road, Faversham ME13 8XZ Kent & Medway Tel: (01795) 532385 Fax: (01795) 532386 E-Mail: info@kmbrc.org.uk Web: www.kmbrc.org.uk

## Area requested - Land at Salters Heath Farm, Cold Arbor Road, Sevenoaks

Enquiry on behalf of Marcus Fry, GreenLink Ecology Ltd

Broad-leaved Helleborine

Broad-leaved Helleborine

Broad-leaved Helleborine

Broad-leaved Helleborine

Broad-leaved Helleborine

Broad-leaved Helleborine

**Bird's-nest Orchid** 

Common Twayblade

27/06/2017 ENQ/17/298

Scientific Name

Hericium erinaceus

Sphagnum recurvum

Sphagnum capillifolium

Sphagnum cuspidatum

Sphagnum fimbriatum

Sphagnum palustre Sphagnum papillosum

Leucobryum glaucum

Lycopodium clavatum

Epipactis helleborine

Neottia nidus-avis

Neottia ovata

Cephalanthera damasonium

Cephalanthera

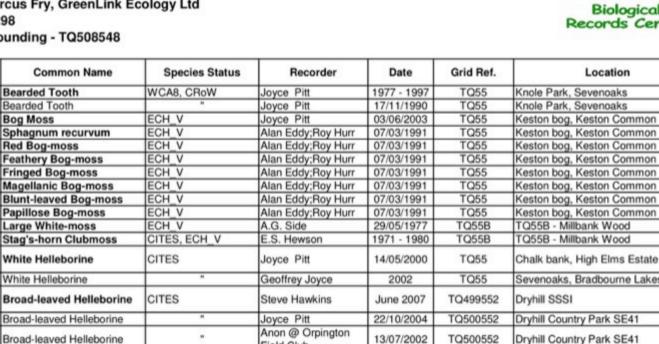
damasonium

Sphagnum magellanicum

Hericium erinaceus

Sphagnum

1km radius search surrounding - TQ508548



Alan Eddy;Roy Hurr	07/03/1991	TQ55	Keston bog, Keston Common
Alan Eddy;Roy Hurr	07/03/1991	TQ55	Keston bog, Keston Common
A.G. Side	29/05/1977	TQ55B	TQ55B - Millbank Wood
E.S. Hewson	1971 - 1980	TQ55B	TQ55B - Millbank Wood
Joyce Pitt	14/05/2000	TQ55	Chalk bank, High Elms Estate
Geoffrey Joyce	2002	TQ55	Sevenoaks, Bradbourne Lakes NR
Steve Hawkins	June 2007	TQ499552	Dryhill SSSI
Laura Ditt	00/10/0001	TOFOOFFO	De trill Occupier De L OF M

TQ500552

TQ500552

TQ500552

TQ5054

TQ5055

TQ55

TQ55

TQ45

Dryhill Country Park SE41

Dryhill Country Park SE41

Dryhill Country Park SE41

Chalk bank, High Elms Estate

Chalk bank, High Elms Estate

Hill Water Bottom Wood

Dryhill Picnic Park

Bessels Green

10/03/2012

13/04/1985

25/07/1992

23/07/1992

26/07/2016

14/05/2000

03/05/2000

May 1958

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Field Club

Joyce Pitt

Joyce Pitt

Joyce Pitt

D. Steere

Joyce Pitt

Joyce Pitt

Francis Rose

Pitt

...

CITES

CITES

Trudie Side; Joyce

Biological **Records** Centre The Montreal Estate

Scientific Name	Common Name	Species Status	Recorder	Date	Grid Ref.	Location
Neottia ovata	Common Twayblade		Joyce Pitt	2000	TQ45	Cudham, Cudham Frith SNCI
Neottia ovata	Common Twayblade		Joyce Pitt	23/07/1992	TQ5054	Dryhill Picnic Park
Neottia ovata	Common Twayblade		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Spiranthes spiralis	Autumn Lady's-tresses	CITES	Barbara Collins	1998	TQ55	Kemsing, The Butts
Herminium monorchis	Musk Orchid	CITES	Unknown	1824	TQ55	
Platanthera chlorantha	Greater Butterfly-orchid	CITES	Joyce Pitt	14/05/2000	TQ55	Chalk bank, High Elms Estate
Platanthera chlorantha	Greater Butterfly-orchid		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Dactylorhiza fuchsii	Common Spotted-orchid	CITES	Joyce Pitt	2000	TQ45	Cudham, Cudham Frith SNCI
Dactylorhiza fuchsii	Common Spotted-orchid		Steve Hawkins	June 2007	TQ499552	Dryhill SSSI
Dactylorhiza fuchsii	Common Spotted-orchid	-	Anon @ Orpington Field Club	13/07/2002	TQ500552	Dryhill Country Park SE41
Dactylorhiza fuchsii	Common Spotted-orchid		Joyce Pitt	25/07/1992	TQ500552	Dryhill Country Park SE41
Dactylorhiza fuchsii	Common Spotted-orchid	-	Trudie Side;Joyce Pitt	13/04/1985	TQ500552	Dryhill Country Park SE41
Dactylorhiza fuchsii	Common Spotted-orchid		Joyce Pitt	23/07/1992	TQ5054	Dryhill Picnic Park
Dactylorhiza fuchsii	Common Spotted-orchid		D. Steere	26/07/2016	TQ5055	Bessels Green
Dactylorhiza fuchsii	Common Spotted-orchid		S Perry	2002	TQ55	Sevenoaks, Bradbourne Lakes NR
Dactylorhiza fuchsii	Common Spotted-orchid		Ishpi Blatchley;Joyce Pitt	06/07/1987	TQ55	Biggin Hill area
Dactylorhiza fuchsii	Common Spotted-orchid		Joyce Pitt	14/05/2000	TQ55	Chalk bank, High Elms Estate
Dactylorhiza fuchsii	Common Spotted-orchid		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Dactylorhiza fuchsii	Common Spotted-orchid		R.L.P. White;E.S. Hewson	1971 - 1980	TQ55B	TQ55B - Millbank Wood
Orchis anthropophora	Man Orchid	CITES	Joyce Pitt	2000	TQ45	Cudham, Cudham Frith SNCI
Orchis anthropophora	Man Orchid	-	Unknown	1959	TQ45	Westerham Downs above Pilgrim House
Orchis anthropophora	Man Orchid		Ken White	1962	TQ45	Westerham, Westerham Hill
Orchis anthropophora	Man Orchid		Joyce Pitt	1996	TQ55	Kemsing, Kemsing Downs SNCI
Orchis anthropophora	Man Orchid		Joyce Pitt	14/05/2000	TQ55	Chalk bank, High Elms Estate
Orchis anthropophora	Man Orchid		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Orchis mascula	Early-purple Orchid	CITES	Jan Hendey;Joyce Pitt	09/05/2013	TQ55	Barham Down Reserve
Orchis mascula	Early-purple Orchid		Joyce Pitt	17/05/2013	TQ55	Barham Down Reserve
Neotinea ustulata	Burnt Orchid	CITES	Unknown	1899	TQ55	Knockholt-Wrotham
Anacamptis morio	Green-winged Orchid	CITES	Geoffrey Joyce	2002	TQ55	Sevenoaks, Bradbourne Lakes NR
Anacamptis pyramidalis	Pyramidal Orchid	CITES	Orpington Field Club	1997	TQ45	Cudham, Strawberry Bank
		10/10/01/2020 No. 10/10	Trudie Side; Joyce		and the second	
Anacamptis pyramidalis	Pyramidal Orchid		Pitt	13/04/1985	TQ500552	Dryhill Country Park SE41

Scientific Name	Common Name	Species Status	Recorder	Date	Grid Ref.	Location
Anacamptis pyramidalis	Pyramidal Orchid		Anon @ Orpington Field Club	13/07/2002	TQ500552	Dryhill Country Park SE41
Anacamptis pyramidalis	Pyramidal Orchid		Joyce Pitt	23/07/1992	TQ5054	Dryhill Picnic Park
Anacamptis pyramidalis	Pyramidal Orchid		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Anacamptis pyramidalis	Pyramidal Orchid		Joyce Pitt	Unknown	TQ55	Paddocks off Stonehouse Rd, Orpington
Anacamptis pyramidalis	Pyramidal Orchid		Ishpi Blatchley;Joyce Pitt	06/07/1987	TQ55	Biggin Hill area
Himantoglossum hircinum	Lizard Orchid	WCA8	Knight	1933	TQ55	Sevenoaks, near Sevenoaks
Ophrys apifera	Bee Orchid	CITES	Joyce Pitt	2000	TQ45	Cudham, Cudham Frith SNCI
Ophrys apifera	Bee Orchid		Joyce Pitt	25/07/1992	TQ500552	Dryhill Country Park SE41
Ophrys apifera	Bee Orchid		Anon @ Orpington Field Club	13/07/2002	TQ500552	Dryhill Country Park SE41
Ophrys apifera	Bee Orchid		Joyce Pitt	23/07/1992	TQ5054	Dryhill Picnic Park
Ophrys apifera	Bee Orchid		Joyce Pitt	14/05/2000	TQ55	Chalk bank, High Elms Estate
Ophrys apifera	Bee Orchid		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Ophrys apifera	Bee Orchid		Joyce Pitt	Unknown	TQ55	Paddocks off Stonehouse Rd, Orpington
Ophrys insectifera	Fly Orchid	CITES	Joyce Pitt;R. Clarke	1971 - 1980	TQ45X	Sundridge
Ophrys insectifera	Fly Orchid		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Ophrys insectifera	Fly Orchid		Joyce Pitt	14/05/2000	TQ55	Chalk bank, High Elms Estate
Galanthus nivalis	Snowdrop	ECH V. CITES	Geoffrey Kitchener	22/04/2012	TQ5155	Sevenoaks north west
Hyacinthoides non-scripta	Bluebell	WCA8	Francis Rose	May 1958	TQ45	Hill Water Bottom Wood
Hyacinthoides non-scripta	Bluebell		Francis Rose	13/05/1958	TQ45	Gudge Wood, E. of Crockham Hill
Hyacinthoides non-scripta	Bluebell		Francis Rose	13/05/1958	TQ45	Spring Wood, west of Crockham Hill
Hyacinthoides non-scripta	Bluebell		Eric Philp	1991 - 1998	TQ45X	Sundridge
Hyacinthoides non-scripta	Bluebell		Joyce Pitt;R. Clarke	1971 - 1980	TQ45X	Sundridge
Hyacinthoides non-scripta	Bluebell		Geof. Kitchener	19/04/2016	TQ4954	Sundridge Dryhill south - Manor Farm
Hyacinthoides non-scripta	Bluebell		Rodney Burton	27/06/2016	TQ4954	Sundridge Dryhill south - Manor Farm
Hyacinthoides non-scripta	Bluebell		Geof. Kitchener	19/04/2016	TQ4955	Sundridge Dryhill
Hyacinthoides non-scripta	Bluebell		Joyce Pitt	29/03/2004	TQ500552	Dryhill Country Park SE41
Hyacinthoides non-scripta	Bluebell		Trudie Side;Joyce Pitt	13/04/1985	TQ500552	Dryhill Country Park SE41
Hyacinthoides non-scripta	Bluebell		Joyce Pitt	10/03/2012	TQ500552	Dryhill Country Park SE41
Hyacinthoides non-scripta	Bluebell		Geof. Kitchener	03/05/2014	TQ5053	Sevenoaks Whitley Forest north west
Hyacinthoides non-scripta	Bluebell		Geoffrey Kitchener	26/03/2012	TQ5153	Sevenoaks Dibden
Hyacinthoides non-scripta	Bluebell		Geoffrey Kitchener	21/04/2011	TQ5155	Sevenoaks north west

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Scientific Name	Common Name	Species Status	Recorder	Date	Grid Ref.	Location
Hyacinthoides non-scripta	Bluebell		Joyce Pitt	17/05/2013	TQ55	Barham Down Reserve
Hyacinthoides non-scripta	Bluebell		Jan Hendey;Joyce Pitt	09/05/2013	TQ55	Barham Down Reserve
Hyacinthoides non-scripta	Bluebell		Jo Weightman	09/03/2004	TQ55	Lessness Abbey and Woods
Hyacinthoides non-scripta	Bluebell		Joyce Pitt	07/07/2002	TQ55	Groombridge House Estate
Hyacinthoides non-scripta	Bluebell		Francis Rose	15/05/1958	TQ55	Wood E of Bayley's Hill
Hyacinthoides non-scripta	Bluebell		Francis Rose	15/05/1958	TQ55	Twitton Copse, Otford
Hyacinthoides non-scripta	Bluebell		Eric Philp	1991 - 2000	TQ55B	Millbank Wood
Hyacinthoides non-scripta	Bluebell		R.L.P. White;E.S. Hewson	1971 - 1980	TQ55B	TQ55B - Millbank Wood
Hyacinthoides non-scripta	Bluebell		Joyce Pitt;R. Clarke;E.S. Hewson	1971 - 1980	TQ55C	TQ55C - Montreal Park
Hyacinthoides non-scripta	Bluebell		Eric Philp	1991 - 1999	TQ55C	Bessels Green
Ruscus aculeatus	Butcher's-broom	ECH_V	Geof. Kitchener	19/04/2016	TQ4954	Sundridge Dryhill south - Manor Farm
Ruscus aculeatus	Butcher's-broom		Rodney Burton	27/06/2016	TQ4954	Sundridge Dryhill south - Manor Farm
Mentha pulegium	Pennyroyal	WCA8, CRoW	Geoffrey Joyce	2002	TQ55	Sevenoaks, Bradbourne Lakes NR
Gentianella anglica	Early Gentian	ECH_II, ECH_IV, Bern I, WCA8	Francis Rose	1946	TQ55	Kemsing, Kemsing Downs
Gentianella anglica	Early Gentian		Unknown	1946	TQ55	Kemsing Downs
Gentianella anglica	Early Gentian		Pat Eade	1998	TQ55	Kemsing, Greenhill
Helix (Helix) pomatia	Roman Snail	ECH_V, WCA5(p)	Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Lissotriton vulgaris	Smooth Newt	Bern_III, WCA5(p)	S A Williams	01/11/1974	TQ45X	Chipstead
Lissotriton vulgaris	Smooth Newt		Alex Williams	01/11/1974	TQ45X	Sundridge
Lissotriton vulgaris	Smooth Newt		BRC	1974	TQ4955	Chipstead
Lissotriton vulgaris	Smooth Newt		Rick Hodges	20/04/2005	TQ5123455184	[Private Residence]
Lissotriton vulgaris	Smooth Newt		Rick Hodges	08/03/2016	TQ5129955292	[Private Residence]
Triturus cristatus	Great Crested Newt	ECH_II, Bern_II, WCA5, CRoW	Eric Philp	20/06/1985	TQ45X	Sundridge
Triturus cristatus	Great Crested Newt		Rick Hodges	20/04/2005	TQ5123455184	[Private Residence]
Triturus cristatus	Great Crested Newt		Rick Hodges	08/03/2016	TQ5129955292	[Private Residence]
Bufo bufo	Common Toad	WCA5(p)	Alex Williams	01/11/1974	TQ45X	Sundridge
Bufo bufo	Common Toad		James Barlow	27/06/2010	TQ513553	[Private Residence]
Bulo bulo	Common Toad		Unknown	2011	TQ516547	[Private Residence]
Buto buto	Common Toad		KRAG	2011	TQ516547	[Private Residence]

Scientific Name	Common Name	Species Status	Recorder	Date	Grid Ref.	Location
Rana temporaria	Common Frog	ECH_V, Bern_III, WCA5(p)	Michael Huxley	20/06/1985	TQ45X	Sundridge
Rana temporaria	Common Frog		Rick Hodges	08/03/2016	TQ5129955292	[Private Residence]
Rana temporaria	Common Frog		KRAG	2011	TQ516547	[Private Residence]
Rana temporaria	Common Frog		Tom Langton	1981 - 1990	TQ55C	Bessels Green
Zootoca vivipara	Common Lizard	Bern_III, WCA5(p)	Trudie Side;Joyce Pitt	13/04/1985	TQ500552	Dryhill Country Park SE41
Zootoca vivipara	Common Lizard		Joyce Pitt	03/05/2000	TQ55	Chalk bank, High Elms Estate
Anguis fragilis	Slow-worm	Bern_III, WCA5(p)	Andy Sheffield	15/09/2016	TQ516552	[Private Residence]
Anguis fragilis	Slow-worm		Vic Measday	13/06/2003	TQ55B	Millbank Wood
Natrix natrix	Grass Snake	Bern_III, WCA5(p)	Rick Hodges	11/07/2004	TQ5123455184	[Private Residence]
Erinaceus europaeus	West European Hedgehog	Bern_III	Unknown (Maidstone Museum)	22/04/1980	TQ45X	TQ45X - Sundridge
Erinaceus europaeus	West European Hedgehog		V A Green	22/04/1980	TQ4955	Sundridge
Erinaceus europaeus	West European Hedgehog		R Taylor	30/07/1964	TQ4955	Sundridge
Myotis daubentonii	Daubenton's Bat	ECH_IV, Bonn_II, Bern_II, WCA5	Unknown (Maidstone Museum)	22/01/1984	TQ45X	TQ45X - Sundridge
Myotis daubentonii	Daubenton's Bat		Unknown (Maidstone Museum)	20/01/1985	TQ45X	TQ45X - Sundridge
Myotis daubentonii	Daubenton's Bat		Unknown (Maidstone Museum)	03/10/1982	TQ45X	TQ45X - Sundridge
Myotis daubentonii	Daubenton's Bat		Eric Philp	05/02/1995	TQ45X	Sundridge
Myotis daubentonii	Daubenton's Bat		Unknown (Maidstone Museum)	18/01/1986	TQ45X	TQ45X - Sundridge
Myotis daubentonii	Daubenton's Bat		P. Heathcote	13/02/2000	TQ45X	Sundridge
Myotis mystacinus	Whiskered Bat <sup>#</sup>	ECH_IV, Bonn_II, Bern_II, WCA5	P. Heathcote	24/01/1998	TQ45X	Sundridge
Myotis mystacinus	Whiskered Bat		D. Harrison	1974	TQ55	TQ55 - Sevenoaks Wildfowl Reserve
Myotis nattereri	Natterer's Bat <sup>#</sup>	ECH_IV, Bonn_II, Bern_II, WCA5	Eric Philp	05/02/1995	TQ45X	Sundridge
Myotis nattereri	Natterer's Bat		Unknown (Maidstone Museum)	22/01/1983	TQ45X	TQ45X - Sundridge

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Scientific Name	Common Name	Species Status	Recorder	Date	Grid Ref.	Location
Myotis nattereri	Natterer's Bat		Unknown (Maidstone Museum)	20/01/1985	TQ45X	TQ45X - Sundridge
Myotis nattereri	Natterer's Bat		Unknown (Maidstone Museum)	22/01/1984	TQ45X	TQ45X - Sundridge
Myotis nattereri	Natterer's Bat		P. Heathcote	22/01/2000	TQ45X	Sundridge
Myotis nattereri	Natterer's Bat		Eric Philp	11/02/1996	TQ45X	Sundridge
Plecotus auritus	Brown Long-eared Bat <sup>#</sup>	ECH_IV, Bonn_II, Bern_II, WCA5	Eric Philp	11/02/1996	TQ45X	Sundridge
Plecotus auritus	Brown Long-eared Bat		P. Heathcote	24/01/1998	TQ45X	Sundridge
Plecotus auritus	Brown Long-eared Bat	-	Unknown (Maidstone Museum)	20/01/1985	TQ45X	TQ45X - Sundridge
Plecotus auritus	Brown Long-eared Bat		Unknown (Maidstone Museum)	18/01/1986	TQ45X	TQ45X - Sundridge
Meles meles	Eurasian Badger <sup>†</sup>	Bern_III, Badger Act	Eric Philp	07/04/2000	TQ45X	Sundridge
Meles meles	Eurasian Badger	"	John Puckett	24/07/2011	TQ507553	Bessells Green
Mustela nivalis	Weasel	Bern_III	P Bick	29/03/1967	TQ5155	Riverhead
Mustela nivalis	Weasel		Glynis Fenn	25/08/2013	TQ55	2
Dama dama	Fallow Deer	Bern_III	Alan Ford	30/11/2012	TQ509541	sevenoaks
Dama dama	Fallow Deer		Eric Philp	07/04/2000	TQ55B	Millbank Wood
Dama dama	Fallow Deer		P. Heathcote	03/02/2001	TQ55B	Millbank Wood
Muntiacus reevesi	Chinese Muntjac	Bern_III	Heather Bryan	03/08/2014	TQ45	
Arvicola amphibius	European Water Vole	WCA5, CRoW	Joyce Pitt	12/09/2003	TQ55	Manor Park Country Park, West Malling
Muscardinus avellanarius	Hazel Dormouse	ECH_IV, Bern_III, WCA5, CRoW	Balfour Beatty Mott MacDonald	30/09/2013	TQ5127954336	