

# North Thames Estuary and Marshes – LTC4 area Terrestrial Invertebrate Survey

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Natural England Commissioned Report NECR473

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# Foreword

The DHL land parcel (also known as 'LTC4') was surveyed in 2022 to determine its quality for terrestrial invertebrates and collect evidence to assess the case for designation as a Site of Special Scientific Interest (SSSI). The report does not itself make a case for designation, rather it provides an objective record of survey findings to support Natural England's independent assessment of special interest. Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

# Executive summary

## The Proposal

This document provides the results of a terrestrial invertebrate survey. This was requested in relation to proposals by Natural England who are considering the enlargement of Mucking Flats & Marshes Site of Special Scientific Interest (SSSI), in order to recognise the national importance of a series of habitats and the species which they support.

This report describes and assesses the terrestrial invertebrate features of ecological value found on the survey area.

## Invertebrates recorded

The terrestrial invertebrate survey of the LTC4 area recorded the following protected and/or notable <sup>1</sup> invertebrate species:

- Brown-banded carder bee *Bombus humilis* NERC S41, Essex vulnerable
- Small heath *Coenonympha pamphilus* IUCN NT, S41, Essex red listed
- A click beetle *Agriotes sordidus* IUCN pre 1994 R, Essex red listed
- A spider *Agyneta mollis* Essex vulnerable
- A spider *Agyneta simplicatarsis* Essex regionally important
- A leafhopper *Anoscopus albifrons* Notable B
- A pseudoscorpion *Chthonius tetrachelatus* Essex red listed
- A solitary bee *Hylaeus cornutus* Notable A, Essex regionally important
- A centipede *Lamyctes emarginatus* IUCN NE, Essex threatened
- An ant *Lasius alienus* Essex vulnerable
- A ground beetle *Ophonus ardosiacus* IUCN LC, Essex red listed
- A leafhopper *Stroggylocephalus livens* Notable B
- A ground beetle *Syntomus truncatellus* IUCN LC, NS includes <sup>2</sup>
- A spider *Zodarion italicum* IUCN LC, NS includes, Essex regionally important
- A histeridae beetle *Saprinus aeneus* IUCN LC, NS includes

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<sup>1</sup> Nationally Scarce species occurring in 16-100 hectads in Great Britain (includes Notable A, Notable B and NS includes) or are locally importance within Essex

<sup>2</sup> NS includes are species occurring in 16-100 hectads in Great Britain

## Contents

Introduction .....	7
Site Description .....	7
Study Scope .....	8
Methods .....	9
Survey or Qualifications and Experience .....	9
Invertebrate Survey .....	9
Invertebrate Identification .....	12
Results .....	13
Study Limitations .....	13
Grazing Assessment .....	13
Invertebrates Recorded .....	13
Daytime Terrestrial Survey .....	13
Pitfall Trapping .....	15
References .....	34
Appendices .....	35
Appendix 1 .....	35
Appendix 2 .....	36
Appendix 3 .....	36

# Introduction

## Site Description

The LTC4 area is to the east of Tilbury, south of East Tilbury and west of Coalhouse Fortin south Essex and is centred on NGR TQ 68117 76412.

The LTC4 area is a horse grazed grassland with areas of scrub and a small area of broadleaved woodland in the north-west. The area surveyed is shown on Figure 1.



**Figure 1: Site Location © Baker Consultants 2023**

# Study Scope

Baker Consultants was commissioned by the client to undertake the following works in relation to the survey area:

- A terrestrial invertebrate survey using pitfall traps which were left on site for a week and then collected; and
- A terrestrial invertebrate survey walking over the site to sample the invertebrates.

This report takes into account standard guidance from a variety of sources including the Chartered Institute of Ecology and Environmental Management <sup>3 4 5</sup>, British Standards Institution <sup>6</sup>, and [gov.uk website](https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications)<sup>7</sup>.

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<sup>3</sup> CIEEM (2018). Guidelines for Ecological Impact Assessment In The UK And Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

<sup>4</sup> CIEEM (2015). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

<sup>5</sup> CIEEM (2017). Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management, Winchester.

<sup>6</sup> BSI (2013). BS42020:2013 Biodiversity – Code of Practice for Planning and Development

<sup>7</sup> <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications>



# Methods

## Survey or Qualifications and Experience

Senior Invertebrate Ecologist David Goddard BSc (Hons) MCIEEM has over 15 years' consultancy experience of undertaking invertebrate surveys and also holds Natural England survey licenses for great crested newt, white-clawed crayfish, barn owl and dormouse. David undertook the site surveys and has authored this report.

Wherever appropriate during surveys, Natural England's Standing Advice on Protected Species <sup>8</sup> was taken into account, along with a wide range of other best practice guidance on survey methods. These are referenced in the text below. However, the professional judgement of the surveyors was also applied in relation to the site conditions and target species/habitats being considered. This may have required changes to the published guidance.

## Invertebrate Survey

Invertebrates exist in all habitats, but certain habitat types are potentially of higher value and were therefore considered more closely in the survey. These include semi-natural vegetation, wetland, coastal areas, open mosaics and previously developed brownfield land.

Invertebrate surveys were undertaken by David Goddard on 20<sup>th</sup> and 21<sup>st</sup> June 2022.

The habitats within the site and surrounding land were appraised for their suitability to support protected and/or notable invertebrate species or assemblages.

On the 20<sup>th</sup> June a total of 24 pitfall traps were set out (eight rows of three pitfall traps each) – see Appendix 1 for a plan showing their locations.

Pitfall traps: sinking small containers into the ground so that the rim is flush with the ground, these were then filled with a small amount of liquid containing isopropanol. The containers are covered over leaving a small gap between the cover and the ground and left for one week before the contents are retrieved. This method was a good means of recording ground beetles (Carabidae) and rove beetles (Staphylinidae). The survey was conducted with eight rows with each row containing three pitfall traps, see Table 1 for their locations.

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<sup>8</sup> <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications>

**Table 1: Pitfall trap locations**

**Table 1: Pitfall trap locations**

<b>Pitfall trap no.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>OS Grid Ref</b>	<b>Cluster Letter</b>
1	51.46127116	0.42236552	TQ6837676371	A
2	51.46125328	0.42237036	TQ6837676369	A
3	51.46123411	0.42237507	TQ6837776367	A
4	51.46462466	0.42335503	TQ6843276746	B
5	51.46460768	0.42335665	TQ6843276744	B
6	51.46458961	0.42335498	TQ6843276742	B
7	51.46517251	0.41560807	TQ6789276789	C
8	51.46516572	0.41558178	TQ6789076789	C
9	51.46515833	0.41555550	TQ6788976788	C
10	51.46018417	0.41396042	TQ6779676231	D
11	51.46020268	0.41395518	TQ6779676233	D
12	51.46021991	0.41395159	TQ6779576235	D
13	51.45653151	0.41600211	TQ6795175829	E
14	51.45652498	0.41597662	TQ6795075829	E
15	51.45651781	0.41594889	TQ6794875828	E
16	51.45879719	0.42358616	TQ6847076099	F
17	51.45880067	0.42355730	TQ6846876099	F
18	51.45880405	0.42353030	TQ6846676099	F
19	51.45850718	0.42358247	TQ6847176067	G
20	51.45852061	0.42360335	TQ6847276068	G
21	51.45853138	0.42362495	TQ6847376069	G
22	51.45852890	0.42393215	TQ6849576070	H
23	51.45854106	0.42395841	TQ6849776071	H
24	51.45855155	0.42398278	TQ6849876072	H

On the 21st June a walkover survey of the site was conducted sampling the invertebrates using several different techniques as per Eyre, 1996<sup>9</sup>; Hill et al., 2006<sup>10</sup> & Sutherland,

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<sup>9</sup> Eyre, M.D. (1996) Environmental monitoring, surveillance and conservation using invertebrates. EMS publications, Newcastle upon Tyne.

<sup>10</sup> Hill, D., Fasham, M., Tucker, G., Shewry, M. and Shaw, P. (2006) Handbook of biodiversity methods survey, evaluation and monitoring. Cambridge university press, Cambridge.

2006<sup>11</sup>. The invertebrate survey methods followed standard guidance for terrestrial species<sup>12 13</sup>. The following techniques were used during the walkover survey

**Sweep netting:** this involves netting invertebrates in low vegetation using a stout-handled net which was moved vigorously through the vegetation to dislodge resting invertebrates. This method can be considered to be quantitative, when carried out using a standardised amount of effort. This method was undertaken within the grassland areas of the survey area for 10 sweeps on each occasion.

**Aerial Netting:** netting and capturing for identification any flying invertebrate species. This technique was undertaken in suitable habitats throughout the survey area. Aerial netting was undertaken throughout the survey area where flying invertebrates were found.

**Beating tray:** beating trees and bushes with a stick using a sharp tap to dislodge the invertebrates which then fall onto the beating tray held beneath. This technique was effective in sampling arboreal invertebrate species. This technique was undertaken in suitable habitats within the site – around the more mature trees and bushes i.e. those over circa 3m in height.

**Grubbing:** looking for invertebrates in suitable habitats or microhabitats for example, under stones, logs, under bark, in crevices within walls and rocks, leaf litter, around the base of plants, dead and decaying fungi, dung and carrion. All suitable debris within the survey area was investigated for any invertebrates hiding underneath.

**Direct searching:** looking for invertebrates in the suitable habitats or microhabitats for species known or considered likely to occur within the site.

Weather conditions during the surveys are shown in Table 2.

**Table 2: Survey dates and weather condition**

Date	Start Time	End Time	Temperature °C	Cloud Cover (Oktas)	Wind Speed (Beaufort)	Wind Direction	Rain
20/06/2022	11:45	17:15	17 to 21	4/8	3	NE	Nil
21/06/2022	08:30	14:00	16 to 23	5/8	1 to 2	N	Nil

<sup>11</sup> Sutherland W J (ed.) 2006. Ecological Census Techniques 2nd edition. A Handbook. CUP

<sup>12</sup> Joint Nature Conservation Committee (2008). Common Standards Monitoring Guidance for Invertebrates, Version March 2008. JNCC, Peterborough.

<sup>13</sup> English Nature (2005). Organising Surveys to Determine Site Quality for Invertebrates: A Framework Guide for Ecologists. English Nature, Peterborough.

## **Invertebrate Identification**

The majority of the identification work was completed by David Goddard, however, as it is a specialist area, the spider ID was undertaken by Richard Gallon, following a recommendation from Natural England.

# Results

## Study Limitations

Whilst every effort was made in the field survey to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment. Also, natural and semi-natural habitats are subject to change, species may colonise the site after surveys have taken place and results included in this report may become less reliable over time.

The pitfall traps were set out in eight lines of three due to the presence of approximately twenty horses within the field and thus they were also set out primarily around the periphery of the field so as to try and avoid any interference from – and reduce the risk of harm to - the horses and maximise the potential to collect terrestrial invertebrates.

The long dry summer may have affected the terrestrial invertebrate species and numbers present on site during the survey as some of the vegetation was showing signs of having flowered early and set seed or was suffering from the lack of water. Thus, their ability to support the typical range and number of species may have been reduced.

## Grazing Assessment

The grazing pressure from the horses (circa 20 being present during the survey) within the study area was undertaken, this was somewhat compromised by the fact that there was undertaken during a long dry period which potentially had a greater effect than the grazing. That said, some areas especially towards the northern part of the study area showed signs of being heavily grazed, whilst in the south there was minimal signs of grazing.

## Invertebrates Recorded

The protected and/or notable species recorded on the site are summarised in the following sections.

### Daytime Terrestrial Survey

During the terrestrial invertebrate survey on the 21<sup>st</sup> June 33 invertebrate species were recorded. Of these, two are protected and/or notable, being the brown-banded carder bee *Bombus humilis* and the small heath (butterfly) *Coenonympha pamphilus* - see Appendix 2 for a plan showing their locations. The species recorded are summarised in Table 3 along with their status.

**Table 3: Terrestrial Survey - Species Recorded**

**Key:** **LC** - IUCN GB Red List Post 2001 Least Concern, **NT** - IUCN GB Red List Post 2001 Near Threatened, **S41** - Species listed on the NERC S41 list, **Essex vulnerable** - Essex red listed vulnerable species, **Essex listed** - Essex red listed species.

Scientific Name	Common Name	Status
<i>Aglais urticae</i>	Small tortoiseshell	LC
<i>Amblyteles armatorius</i>	An ichneumon wasp	Not applicable
<i>Andrena labialis</i>	Large meadow mining bee	Not applicable
<i>Apis mellifera</i>	Honeybee	Not applicable
<i>Bombus humilis</i>	Brown-banded carder bee	NERC S41, Essex vulnerable
<i>Bombus lapidarius</i>	Red-tailed bumblebee	Not applicable
<i>Bombus lucorum</i> agg.	White-tailed bumblebee	Not applicable
<i>Chloromyia formosa</i>	Broad centurion	LC
<i>Chrysotoxum bicinctum</i>	A hoverfly	Not applicable
<i>Chrysotoxum festivum</i>	A hoverfly	Not applicable
<i>Coccinella septempunctata</i>	7 spot ladybird	Not applicable
<i>Coenonympha pamphilus</i>	Small Heath	NT, S41, Essex listed
<i>Diplolepis rosae</i>	Robins pin cushion gall wasp	Not applicable
<i>Enallagma cyathigerum</i>	Common blue damselfly	LC
<i>Episyrphus balteatus</i>	Marmalade hoverfly	Not applicable
<i>Forficula auricularia</i>	Common earwig	LC
<i>Ischnura elegans</i>	Blue-tailed damselfly	LC
<i>Maniola jurtina</i>	Meadow brown	LC
<i>Melanargia galathea</i>	Marbled white	LC

Scientific Name	Common Name	Status
<i>Oedemera nobilis</i>	Thick thighed beetle	LC
<i>Phalangium opilio</i>	A harvestman	Not applicable
<i>Philaenus spumarius</i>	A froghopper	Not applicable
<i>Pieris brassicae</i>	Large white	LC
<i>Pieris rapae</i>	Small white	LC
<i>Polyommatus icarus</i>	Common blue	LC
<i>Pseudochorthippus parallelus</i>	Meadow grasshopper	Not applicable
<i>Rhagonycha fulva</i>	Common red soldier beetle	LC
<i>Roeseliana roeselii</i>	Roesel's bush cricket	Not applicable
<i>Thymelicus lineola</i>	Essex skipper	LC
<i>Thymelicus sylvestris</i>	Small skipper	LC
<i>Trochulus striolatus</i>	Strawberry snail	LC
<i>Vanessa atalanta</i>	Red admiral	LC
<i>Vanessa cardui</i>	Painted lady	LC

## Pitfall Trapping

The pitfall traps were retrieved on the 27<sup>th</sup> June. The invertebrate species recorded within each pitfall trap are given within the Tables 4 to 11 along with their status.

**Table 4: Cluster A - Pitfall traps 1 – 3**

**Key: 1994 R** - IUCN GB Red List Pre 1994 Rare, **ERI** - Essex regionally Important, **Essex listed** - Essex red listed species, **LC** - IUCN GB Red List Post 2001 Least Concern, **NS** includes - Nationally Scarce - species occurring in 16-100 hectads in Great Britain

Scientific Name	Common Name	Number	Status
<i>Acari sp.</i>	Mites	2	Not applicable
<i>Agriotes sordidus</i>	A click beetle	1	1994 R, Essex listed
<i>Agriotes sputator</i>	A click beetle	2	Not applicable
<i>Agrypnus murinus</i>	A click beetle	3	Not applicable

Scientific Name	Common Name	Number	Status
<i>Agyneta affinis</i>	A spider	2	Not applicable
<i>Alopecosa pulverulenta</i>	A spider	1	LC
<i>Armadillidium vulgare</i>	Common pill woodlouse	5	Not applicable
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	2	Not applicable
<i>Coleoptera sp.</i>	Beetle larvae	2	Not applicable
<i>Collembola sp.</i>	Springtails	22	Not applicable
<i>Diptera sp.</i>	A fly	6	Not applicable
<i>Euophrys frontalis</i>	A spider	1	LC
<i>Formica cunicularia</i>	An ant	1	Not applicable
<i>Gnaphosidae sp.</i>	A spider	2	Not applicable
<i>Kalama tricornis</i>	A lacebug	1	Not applicable
<i>Lasius niger</i>	An ant	71	Not applicable
<i>Lasius umbratus</i>	An ant	1	Not applicable
<i>Linyphiidae sp.</i>	A spider	1	Not applicable
<i>Lycosidae sp.</i>	A spider	5	Not applicable
<i>Microlestes minutulus</i>	A ground beetle	3	LC
<i>Myrmica ruginodis</i>	An ant	4	Not applicable
<i>Ocyopus olens</i>	Devil's coach horse beetle	2	Not applicable
<i>Pardosa pullata</i>	A spider	4	LC
<i>Philoscia muscorum</i>	Common striped woodlouse	14	Not applicable
<i>Phrurolithus festivus</i>	A spider	2	LC
<i>Silpha sp.</i>	Beetle larvae	11	Not applicable
<i>Silpha tristis</i>	A carrion beetle	1	Not applicable
<i>Staphylinidae sp.</i>	A rove beetle	1	Not applicable
<i>Thomisidae sp.</i>	A spider	1	Not applicable
<i>Trachyzelotes pedestris</i>	A spider	2	LC
<i>Trochosa sp.</i>	A spider	1	Not applicable
<i>Zodarion italicum</i>	A spider	1	LC, NS includes, ERI



**Table 5: Cluster B - Pitfall traps 4 – 6**

**Key: Essex listed** - Essex red listed species, **Essex threatened** - Essex threatened species, **LC** - IUCN GB Red List Post 2001 Least Concern, **NE** - IUCN GB Red List Post 2001 Not Evaluated, **NS includes** - Nationally Scarce- species occurring in 16-100 hectads in Great Britain.

Scientific Name	Common Name	Number	Status
<i>Acari sp.</i>	Mites	2	Not applicable
<i>Agyneta affinis</i>	A spider	2	Not applicable
<i>Alopecosa pulverulenta</i>	A spider	1	LC
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	4	Not applicable
<i>Bathyphantes parvulus</i>	A spider	2	LC
<i>Chthonius tetrachelatus</i>	A pseudoscorpion	1	Essex listed
<i>Collembola sp.</i>	Springtails	17	Not applicable
<i>Diptera sp.</i>	A fly	7	Not applicable
<i>Drassyllus pusillus</i>	A spider	1	LC
<i>Erigone atra</i>	A spider	1	LC
<i>Hahnia nava</i>	A spider	1	LC
<i>Hymenoptera sp.</i>	Hymenoptera	1	Not applicable
<i>Kalama tricornis</i>	A lacebug	2	Not applicable
<i>Lamyctes emarginatus</i>	A centipede	2	NE, Essex threatened
<i>Lasius niger</i>	An ant	94	Not applicable
<i>Lithobius sp.</i>	A centipede	1	Not applicable
<i>Lycosidae sp.</i>	A spider	21	Not applicable
<i>Microlestes maurus</i>	A ground beetle	1	LC
<i>Myrmica ruginodis</i>	An ant	1	Not applicable
<i>Ocyopus olens</i>	Devil's coach horse beetle	1	Not applicable
<i>Pardosa prativaga</i>	A spider	2	LC
<i>Pardosa pullata</i>	A spider	3	LC
<i>Philoscia muscorum</i>	Common stripped woodlouse	8	Not applicable

Scientific Name	Common Name	Number	Status
<i>Phrurolithus festivus</i>	A spider	2	LC
<i>Poecilus versicolor</i>	A ground beetle	1	LC
<i>Quedius simplicifrons</i>	A rove beetle	1	Not applicable
<i>Saprinus aeneus</i>	A histeridae beetle	2	LC, NS includes
<i>Silpha sp.</i>	Beetle larvae	7	Not applicable
<i>Silpha tristis</i>	A carrion beetle	7	Not applicable
<i>Staphylinidae sp.</i>	A rove beetle	4	Not applicable
<i>Stenodemini sp.</i>	A grass bug	2	Not applicable
<i>Syntomus truncatellus</i>	A ground beetle	1	LC, NS includes
<i>Trachyzelotes pedestris</i>	A spider	2	LC
<i>Trochosa ruricola</i>	A spider	1	LC
<i>Trochosa sp.</i>	A spider	2	Not applicable

**Table 6: Cluster C - Pitfall traps 7 – 9**

**Key:** 1994 R - IUCN GB Red List Pre 1994 Rare, **ERI** - Essex Regionally Important, **Essex listed** - Essex red listed species, **Essex threatened** - Essex threatened species, **LC** - IUCN GB Red List Post 2001 Least Concern, **NE** - IUCN GB Red List Post 2001 Not Evaluated, **NS Includes** - Nationally Scarce - species occurring in 16-100 hectads in Great Britain.

Scientific Name	Common Name	Number	Status
<i>Acari sp.</i>	Mites	6	Not applicable
<i>Agriotes sordidus</i>	A click beetle	1	1994 R, Essex listed
<i>Agrypnus murinus</i>	A click beetle	1	Not applicable
<i>Agyneta simplicatarsis</i>	A spider	3	ERI
<i>Alopecosa pulverulenta</i>	A spider	5	LC
<i>Armadillidium vulgare</i>	Common pill woodlouse	11	Not applicable
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	2	Not applicable
<i>Collembola sp.</i>	Springtails	25	Not applicable

Scientific Name	Common Name	Number	Status
<i>Diptera sp.</i>	A fly	5	Not applicable
<i>Euophrys frontalis</i>	A spider	2	LC
<i>Kalama tricornis</i>	A lacebug	4	Not applicable
<i>Lamyctes emarginatus</i>	A centipede	1	NE, Essex threatened
<i>Lasius niger</i>	An ant	58	Not applicable
<i>Lepidoptera sp.</i>	A moth caterpillar	1	Not applicable
<i>Lycosidae sp.</i>	A spider	2	Not applicable
<i>Micaria micans</i>	A spider	1	Not applicable
<i>Ocypus olens</i>	Devil's coach horse beetle	2	Not applicable
<i>Ophonus ardosiacus</i>	A ground beetle	2	LC, Essex listed
<i>Pardosa palustris</i>	A spider	4	LC
<i>Pardosa pullata</i>	A spider	2	LC
<i>Philoscia muscorum</i>	Common striped woodlouse	1	Not applicable
<i>Phrurolithus festivus</i>	A spider	3	LC
<i>Poecilus cupreus</i>	A ground beetle	1	LC
<i>Salticidae sp.</i>	A spider	1	Not applicable
<i>Staphylinidae sp.</i>	A rove beetle	2	Not applicable
<i>Trachyzelotes pedestris</i>	A spider	1	LC
<i>Zelotes apricorum</i>	A spider	2	LC
<i>Zodarion italicum</i>	A spider	4	LC, NS includes, ERI

**Table 7: Cluster D - Pitfall traps 10 – 12**

**Key:** ERI - Essex Regionally Important, LC - IUCN GB Red List Post 2001 Least Concern, **Notable A** - Nationally Scarce A - species occurring in 16-30 hectads in Great Britain.

Scientific Name	Common Name	Number	Status
<i>Alopecosa pulverulenta</i>	A spider	4	LC
<i>Armadillidium nasatum</i>	A woodlouse	1	Not applicable
<i>Armadillidium vulgare</i>	Common pill woodlouse	3	Not applicable

Scientific Name	Common Name	Number	Status
<i>Collembola sp.</i>	Springtails	6	Not applicable
<i>Diplostyla concolor</i>	A spider	1	LC
<i>Erigone atra</i>	A spider	1	LC
<i>Formica cunicularia</i>	An ant	1	Not applicable
<i>Hylaeus cornutus</i>	A solitary bee	1	Notable A, ERI
<i>Hymenoptera sp.</i>	Hymenoptera	2	Not applicable
<i>Lasius niger</i>	An ant	61	Not applicable
<i>Linyphiidae sp.</i>	A spider	1	Not applicable
<i>Lycosidae sp.</i>	A spider	3	Not applicable
<i>Ocyopus olens</i>	Devil's coach horse beetle	4	Not applicable
<i>Palliduphantes ericaeus</i>	A spider	1	LC
<i>Pardosa pullata</i>	A spider	4	LC
<i>Phrurolithus festivus</i>	A spider	4	LC
<i>Poecilus cupreus</i>	A ground beetle	1	LC
<i>Staphylinidae sp.</i>	A rove beetle	15	Not applicable
<i>Thomisidae sp.</i>	A spider	1	Not applicable
<i>Trochosa ruricola</i>	A spider	1	LC
<i>Zelotes latreillei</i>	A spider	1	LC

**Table 8: Cluster E - Pitfall traps 13 – 15**

**Key:** **ERI** - Essex Regionally Important, **Essex threatened** - Essex threatened species, **Essex vulnerable** - Essex red listed vulnerable species, **LC** - IUCN GB Red List Post 2001 Least Concern, **NE** - IUCN GB Red List Post 2001 Not Evaluated. **Notable B** - Nationally Scarce B - species occurring in 31-100 hectads in Great Britain. **NS Includes** - Nationally Scarce - species occurring in 16-100 hectads in Great Britain.

Scientific Name	Common Name	Number	Status
<i>Acarid sp.</i>	Mites	6	Not applicable
<i>Agriotes sordidus</i>	A click beetle	1	1994 R, Essex listed
<i>Agrypnus murinus</i>	A click beetle	1	Not applicable
<i>Agyneta simplicatarsis</i>	A spider	3	ERI
<i>Alopecosa pulverulenta</i>	A spider	5	LC
<i>Armadillidium vulgare</i>	Common pill woodlouse	11	Not applicable

Scientific Name	Common Name	Number	Status
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	2	Not applicable
<i>Collembola sp.</i>	Springtails	25	Not applicable
<i>Diptera sp.</i>	A fly	5	Not applicable
<i>Euophrys frontalis</i>	A spider	2	LC
<i>Kalama tricornis</i>	A lacebug	4	Not applicable
<i>Lamyctes emarginatus</i>	A centipede	1	NE, Essex threatened
<i>Lasius niger</i>	An ant	58	Not applicable
<i>Lepidoptera sp.</i>	A moth caterpillar	1	Not applicable
<i>Lycosidae sp.</i>	A spider	2	Not applicable
<i>Micaria micans</i>	A spider	1	Not applicable
<i>Ocypus olens</i>	Devil's coach horse beetle	2	Not applicable
<i>Ophonus ardosiacus</i>	A ground beetle	2	LC, Essex listed
<i>Pardosa palustris</i>	A spider	4	LC
<i>Pardosa pullata</i>	A spider	2	LC
<i>Philoscia muscorum</i>	Common striped woodlouse	1	Not applicable
<i>Phrurolithus festivus</i>	A spider	3	LC
<i>Poecilus cupreus</i>	A ground beetle	1	LC
<i>Salticidae sp.</i>	A spider	1	Not applicable
<i>Staphylinidae sp.</i>	A rove beetle	2	Not applicable
<i>Trachyzelotes pedestris</i>	A spider	1	LC
<i>Zelotes apricorum</i>	A spider	2	LC
<i>Zodarion italicum</i>	A spider	4	LC, NS includes, ERI

**Table 9: Cluster F - Pitfall traps 16 – 18**

**Key: 1994 R** – IUCN GB Red List Pre 1994 Rare, **Essex listed** – Essex red listed species, **LC** – IUCN GB Red List Post 2001 Least Concern, **NS includes** – Nationally Scarce – species occurring in 16-100 hectads in Great Britain.

Scientific Name	Common Name	Number	Status
<i>Acari sp.</i>	Mites	4	Not applicable
<i>Agriotes lineatus</i>	A click beetle	1	Not applicable

Scientific Name	Common Name	Number	Status
<i>Agriotes sordidus</i>	A click beetle	1	1994 R, Essex listed
<i>Alopecosa pulverulenta</i>	A spider	1	LC
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	2	Not applicable
<i>Coleoptera sp.</i>	Beetle larvae	3	Not applicable
<i>Collembola sp.</i>	Springtails	1	Not applicable
<i>Diptera sp.</i>	A fly	7	Not applicable
<i>Erigone atra</i>	A spider	1	LC
<i>Harpalus rufipes</i>	A ground beetle	1	LC
<i>Hymenoptera sp.</i>	Hymenoptera	3	Not applicable
<i>Lasius niger</i>	An ant	9	Not applicable
<i>Lycosidae sp.</i>	A spider	2	Not applicable
<i>Myrmica ruginodis</i>	An ant	4	Not applicable
<i>Ocypus olens</i>	Devil's coach horse beetle	9	Not applicable
<i>Ontholestes murinus</i>	A rove beetle	25	Not applicable
<i>Pachygnatha degeeri</i>	A spider	1	LC
<i>Pachygnatha sp.</i>	A spider	1	Not applicable
<i>Pardosa palustris</i>	A spider	7	LC
<i>Pardosa pullata</i>	A spider	4	LC
<i>Poecilus cupreus</i>	A ground beetle	13	LC
<i>Pterostichus melanarius</i>	A ground beetle	2	LC
<i>Saprinus aeneus</i>	A historidae beetle	1	LC, NS includes
<i>Trochosa sp.</i>	A spider	4	Not applicable
<i>Trochosa terricola</i>	A spider	1	LC
<i>Tytthaspis sedecimpunctata</i>	16-spot ladybird	3	Not applicable

**Table 10: Cluster G - Pitfall traps 19 – 21**

**Key: Essex vulnerable** - Essex red listed vulnerable species, **LC** - IUCN GB Red List Post 2001 Least Concern, **Notable B** - Nationally Scarce B - species occurring In 31-100 hectads in Great Britain. **NS includes** – Nationally Scarce – species occurring in 16-100 hectads in Great Britain.

Scientific Name	Common Name	Number	Status
<i>Acari sp.</i>	Mites	26	Not applicable
<i>Agrypnus murinus</i>	A click beetle	1	Not applicable
<i>Agyneta mollis</i>	A spider	1	Essex vulnerable
<i>Alopecosa pulverulenta</i>	A spider	2	LC
<i>Amara aenea</i>	A ground beetle	2	LC
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	1	Not applicable
<i>Bathyphantes gracilis</i>	A spider	1	LC
<i>Coleoptera sp.</i>	Beetle larvae	2	Not applicable
<i>Collembola sp.</i>	Springtails	5	Not applicable
<i>Diptera sp.</i>	Flies	9	Not applicable
<i>Erigone atra</i>	A spider	2	LC
<i>Erigone dentipalpis</i>	A spider	3	LC
<i>Hymenoptera sp.</i>	Hymenoptera	3	Not applicable
<i>Kalama tricornis</i>	A lacebug	4	Not applicable
<i>Lasius niger</i>	An ant	52	Not applicable
<i>Myrmica ruginodis</i>	An ant	1	Not applicable
<i>Myrmica scabrinodis</i>	An ant	10	Not applicable
<i>Ocypus olens</i>	Devil's coach horse beetle	1	Not applicable
<i>Oedothorax fuscus</i>	A spider	2	LC
<i>Opiliones sp.</i>	A harvestman	1	Not applicable
<i>Pachygnatha degeeri</i>	A spider	1	LC
<i>Pachygnatha sp.</i>	A spider	1	Not applicable
<i>Paederus littoralis</i>	A rove beetle	1	Not applicable
<i>Pardosa palustris</i>	A spider	4	LC
<i>Podops inuncta</i>	A shieldbug	1	LC
<i>Poecilus cupreus</i>	A ground beetle	1	LC

Scientific Name	Common Name	Number	Status
<i>Saprinus aeneus</i>	A histeridae beetle	1	LC, NS includes
<i>Staphylinidae sp.</i>	A rove beetle	1	Not applicable
<i>Stroggylocephalus livens</i>	A leafhopper	1	Notable B
<i>Thomisidae sp.</i>	A spider	1	Not applicable
<i>Trochosa sp.</i>	A spider	3	Not applicable
<i>Tytthaspis sedecimpunctata</i>	16-spot ladybird	2	Not applicable

**Table 11: Cluster H - Pitfall traps 22 – 24**

**Key:** ERI - Essex Regionally Important, LC - IUCN GB Red List Post 2001 Least Concern.

Scientific Name	Common Name	Number	Status
<i>Acari sp.</i>	Mites	16	Not applicable
<i>Agriotes obscurus</i>	A click beetle	1	Not applicable
<i>Agyneta simplicatarsis</i>	A spider	1	ERI
<i>Alopecosa pulverulenta</i>	A spider	4	LC
<i>Amara aenea</i>	A ground beetle	1	LC
<i>Armadillidium vulgare</i>	Common pill woodlouse	1	Not applicable
<i>Erigone atra</i>	A spider	3	LC
<i>Euophrys frontalis</i>	A spider	1	LC
<i>Hahnina nava</i>	A spider	1	LC
<i>Ichneumonidae sp.</i>	An ichneumon wasp	1	Not applicable
<i>Kalama tricornis</i>	A lacebug	3	Not applicable
<i>Lasius niger</i>	An ant	108	Not applicable
<i>Lasius sabularum</i>	An ant	1	Not applicable
<i>Lycosidae sp.</i>	A spider	4	Not applicable
<i>Oedothorax fuscus</i>	A spider	1	LC
<i>Pardosa palustris</i>	A spider	5	LC
<i>Pardosa prativaga</i>	A spider	2	LC
<i>Pardosa pullata</i>	A spider	3	LC
<i>Pardosa sp.</i>	A spider	2	Not applicable
<i>Phrurolithus festivus</i>	A spider	12	LC
<i>Platybunus triangularis</i>	A harvestman	1	Not applicable



Scientific Name	Common Name	Number	Status
<i>Poecilus cupreus</i>	A ground beetle	1	LC
<i>Staphylinidae sp.</i>	A rove beetle	5	Not applicable
<i>Syntomus foveatus</i>	A ground beetle	3	LC
<i>Tenuiphantes tenuis</i>	A spider	1	LC
<i>Trachyzelotes pedestris</i>	A spider	2	LC
<i>Trochosa ruricola</i>	A spider	2	LC
<i>Trochosa sp.</i>	A spider	8	Not applicable

Table 12 lists all the invertebrate species from pitfall traps by combining the species recorded from the pitfall traps 1 to 24 along with their status.

**Table 12: Combined Pitfall Trap Species List**

**Key:** **1994 R** - IUCN GB Red List Pre 1994 Rare, **ERI** - Essex Regionally Important, **Essex listed** - Essex red listed species, **Essex threatened** - Essex threatened species, **Essex vulnerable** - Essex red listed vulnerable species, **LC** - IUCN GB Red List Post 2001 Least Concern, **NE** - IUCN GB Red List Post 2001 Not Evaluated, **Notable A** - Nationally Scarce A - species occurring In 16-30 hectads in Great Britain, **Notable B** - Nationally Scarce B - species occurring In 31-100 hectads in Great Britain, **NS includes** - Nationally Scarce - species occurring In 16-10- hectads in Great Britain.

Scientific Name	Common Name	Number	Status
<i>Acari</i>	Mites	60	Not applicable
<i>Agriotes lineatus</i>	A click beetle	1	Not applicable
<i>Agriotes obscurus</i>	A click beetle	1	Not applicable
<i>Agriotes sordidus</i>	A click beetle	3	1994 R, Essex listed
<i>Agriotes sputator</i>	A click beetle	2	Not applicable
<i>Agrypnus murinus</i>	A click beetle	7	Not applicable
<i>Agyneta affinis</i>	A spider	4	Not applicable
<i>Agyneta mollis</i>	A spider	1	Essex vulnerable
<i>Agyneta simplicatarsis</i>	A spider	4	ERI
<i>Alopecosa pulverulenta</i>	A spider	24	LC
<i>Amara aenea</i>	A ground beetle	3	LC
<i>Anoscopus albifrons</i>	A leafhopper	1	Notable B
<i>Armadillidium nasatum</i>	A woodlouse	1	Not applicable

Scientific Name	Common Name	Number	Status
<i>Armadillidium vulgare</i>	Common pill woodlouse	23	Not applicable
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	11	Not applicable
<i>Bathyphantes gracilis</i>	A spider	1	LC
<i>Bathyphantes parvulus</i>	A spider	2	LC
<i>Chthonius tetrachelatus</i>	A pseudoscorpion	1	Essex listed
<i>Coleoptera sp.</i>	Beetle larvae	8	Not applicable
<i>Collembola sp.</i>	Springtails	84	Not applicable
<i>Diplostyla concolor</i>	A spider	1	LC
<i>Diptera</i>	A fly	36	Not applicable
<i>Drassyllus pusillus</i>	A spider	1	LC
<i>Erigone atra</i>	A spider	8	LC
<i>Erigone dentipalpis</i>	A spider	3	LC
<i>Euophrys frontalis</i>	A spider	4	LC
<i>Formica cunicularia</i>	An ant	2	Not applicable
<i>Gnaphosidae</i>	A spider	3	Not applicable
<i>Hahnia nava</i>	A spider	2	LC
<i>Harpalus rufipes</i>	A ground beetle	1	LC
<i>Hylaeus cornutus</i>	A solitary bee	1	Notable A, ERI
<i>Hymenoptera sp.</i>	Hymenoptera	9	Not applicable
<i>Ichneumonidae sp.</i>	An ichnumen wasp	1	Not applicable
<i>Kalama tricornis</i>	A lacebug	16	Not applicable
<i>Lamyctes emarginatus</i>	A centipede	4	NE, Essex threatened
<i>Lasius alienus</i>	An ant	2	Essex vulnerable
<i>Lasius niger</i>	An ant	613	Not applicable
<i>Lasius sabularum</i>	An ant	1	Not applicable
<i>Lasius umbratus</i>	An ant	1	Not applicable
<i>Lepidoptera sp.</i>	A moth caterpillar	1	Not applicable
<i>Linyphiidae</i>	A spider	2	Not applicable
<i>Lithobius sp.</i>	A centipede	1	Not applicable

Scientific Name	Common Name	Number	Status
<i>Lycosidae</i>	A spider	41	Not applicable
<i>Micaria micans</i>	A spider	1	Not applicable
<i>Microlestes maurus</i>	A ground beetle	1	LC
<i>Microlestes minutulus</i>	A ground beetle	3	LC
<i>Myrmica ruginodis</i>	An ant	10	Not applicable
<i>Myrmica scabrinodis</i>	An ant	11	Not applicable
<i>Ocypus olens</i>	Devil's coach horse beetle	26	Not applicable
<i>Oedothorax fuscus</i>	A spider	4	LC
<i>Ontholestes murinus</i>	A rove beetle	25	Not applicable
<i>Ophonus ardosiacus</i>	A ground beetle	2	LC, Essex listed
<i>Opiliones</i>	A harvestman	2	Not applicable
<i>Pachygnatha degeeri</i>	A spider	4	LC
<i>Pachygnatha sp.</i>	A spider	2	Not applicable
<i>Paederus littoralis</i>	A rove beetle	1	Not applicable
<i>Palliduphantes ericaeus</i>	A spider	1	LC
<i>Pardosa palustris</i>	A spider	21	LC
<i>Pardosa prativaga</i>	A spider	4	LC
<i>Pardosa pullata</i>	A spider	26	LC
<i>Pardosa sp.</i>	A spider	2	Not applicable
<i>Phalangium opilio</i>	A harvestman	1	Not applicable
<i>Philoscia muscorum</i>	Common stripped woodlouse	24	Not applicable
<i>Phrurolithus festivus</i>	A spider	26	LC
<i>Platybunus triangularis</i>	A harvestman	1	Not applicable
<i>Podops inuncta</i>	A shieldbug	1	LC
<i>Poecilus cupreus</i>	A ground beetle	19	LC
<i>Poecilus versicolor</i>	A ground beetle	1	LC

Scientific Name	Common Name	Number	Status
<i>Pterostichus madidus</i>	A beetle	1	LC
<i>Pterostichus melanarius</i>	A ground beetle	2	LC
<i>Quedius simplicifrons</i>	A rove beetle	1	Not applicable
<i>Salticidae</i>	A spider	1	Not applicable
<i>Saprinus aeneus</i>	A historidae beetle	4	LC, NS includes
<i>Silpha sp.</i>	Beetle larvae	18	Not applicable
<i>Silpha tristis</i>	A carrion beetle	8	Not applicable
<i>Staphylinidae sp.</i>	A rove beetle	27	Not applicable
<i>Stenodemini sp.</i>	A grass bug	2	Not applicable
<i>Stroggylocephalus livens</i>	A leafhopper	1	Notable B
<i>Syntomus foveatus</i>	A ground beetle	3	LC
<i>Syntomus truncatellus</i>	A ground beetle	1	LC, NS includes
<i>Tenuiphantes tenuis</i>	A spider	1	LC
<i>Thomisidae</i>	A spider	3	Not applicable
<i>Trachyzelotes pedestris</i>	A spider	8	LC
<i>Trochosa ruricola</i>	A spider	4	LC
<i>Trochosa sp.</i>	A spider	19	Not applicable
<i>Trochosa terricola</i>	A spider	2	LC
<i>Tytthaspis sedecimpunctata</i>	16-spot ladybird	5	Not applicable
<i>Xysticus cristatus</i>	A spider	1	LC
<i>Zelotes apricorum</i>	A spider	2	LC
<i>Zelotes latreillei</i>	A spider	1	LC
<i>Zodarion italicum</i>	A spider	6	LC, NS includes, ERI

Table 13 lists all the invertebrate species recorded from the survey area along with their status.

**Table 13: Terrestrial Survey – All Species Recorded**

**Key:** **1994 R** - IUCN GB Red List Pre 1994 Rare, **ERI** - Essex Regionally Important, **Essex listed** - Essex red listed species, **Essex threatened** - Essex threatened species, **Essex vulnerable** - Essex vulnerable species, **LC** - IUCN GB Red List Post 2001 Least Concern, **NE** - IUCN GB Red List Post 2001 Not Evaluated, **Notable A** - Nationally Scarce A - species occurring in 16-30 hectads in Great Britain, **Notable B** - Nationally Scarce B - species occurring in 31-100 hectads in Great Britain, **NS includes** - Nationally Scarce - species occurring in 16-100 hectads in Great Britain, **NT** - IUCN GB Red List Post 2001 Near Threatened, **S41** - Species listed on the NERC S41 list

Scientific Name	Common Name	Status
<i>Acari</i>	Mites	Not applicable
<i>Aglais urticae</i>	Small tortoiseshell	LC
<i>Agriotes lineatus</i>	A click beetle	Not applicable
<i>Agriotes obscurus</i>	A click beetle	Not applicable
<i>Agriotes sordidus</i>	A click beetle	1994 R, Essex listed
<i>Agriotes sputator</i>	A click beetle	Not applicable
<i>Agrypnus murinus</i>	A click beetle	Not applicable
<i>Agyneta affinis</i>	A spider	Not applicable
<i>Agyneta mollis</i>	A spider	Essex vulnerable
<i>Agyneta simplicatarsis</i>	A spider	ERI
<i>Alopecosa pulverulenta</i>	A spider	LC
<i>Amara aenea</i>	A ground beetle	LC
<i>Amblyteles armatorius</i>	An ichneumon wasp	Not applicable
<i>Andrena labialis</i>	Large meadow mining bee	Not applicable
<i>Anoscopus albifrons</i>	A leafhopper	Notable B
<i>Apis mellifera</i>	Honeybee	Not applicable
<i>Armadillidium nasatum</i>	A woodlouse	Not applicable
<i>Armadillidium vulgare</i>	Common pill woodlouse	Not applicable
<i>Auchenorrhyncha sp.</i>	Plant hopper larvae	Not applicable
<i>Bathyphantes gracilis</i>	A spider	LC
<i>Bathyphantes parvulus</i>	A spider	LC
<i>Bombus humilis</i>	Brown-banded carder bee	NERC S41, Essex vulnerable

Scientific Name	Common Name	Status
<i>Bombus lapidarius</i>	Red-tailed bumblebee	Not applicable
<i>Bombus lucorum</i> agg.	White-tailed bumblebee	Not applicable
<i>Chloromyia formosa</i>	Broad centurion	LC
<i>Chrysotoxum bicinctum</i>	A hoverfly	Not applicable
<i>Chrysotoxum festivum</i>	A hoverfly	Not applicable
<i>Chthonius tetrachelatus</i>	A pseudoscorpion	Essex listed
<i>Coccinella septempunctata</i>	7 spot ladybird	Not applicable
<i>Coenonympha pamphilus</i>	Small Heath	NT, S41, Essex listed
<i>Coleoptera sp.</i>	Beetle larvae	Not applicable
<i>Collembola sp.</i>	Springtails	Not applicable
<i>Diplolepis rosae</i>	Robins pin cushion gall wasp	Not applicable
<i>Diplostyla concolor</i>	A spider	LC
<i>Diptera sp.</i>	A fly	Not applicable
<i>Drassyllus pusillus</i>	A spider	LC
<i>Enallagma cyathigerum</i>	Common blue damselfly	LC
<i>Episyrphus balteatus</i>	Marmalade hoverfly	Not applicable
<i>Erigone atra</i>	A spider	LC
<i>Erigone dentipalpis</i>	A spider	LC
<i>Euophrys frontalis</i>	A spider	LC
<i>Forficula auricularia</i>	Common earwig	LC
<i>Formica cunicularia</i>	An ant	Not applicable
<i>Gnaphosidae sp.</i>	A spider	Not applicable
<i>Hahnia nava</i>	A spider	LC
<i>Harpalus rufipes</i>	A ground beetle	LC
<i>Hylaeus cornutus</i>	A solitary bee	Notable A, ERI
<i>Hymenoptera sp.</i>	Hymenoptera	Not applicable
<i>Ichneumonidae sp.</i>	An ichnumen wasp	Not applicable
<i>Ischnura elegans</i>	Blue-tailed damselfly	LC
<i>Kalama tricornis</i>	A lacebug	Not applicable

Scientific Name	Common Name	Status
<i>Lamyctes emarginatus</i>	A centipede	NE, Essex threatened
<i>Lasius alienus</i>	An ant	Essex vulnerable
<i>Lasius niger</i>	An ant	Not applicable
<i>Lasius sabularum</i>	An ant	Not applicable
<i>Lasius umbratus</i>	An ant	Not applicable
<i>Lepidoptera sp.</i>	A moth catterpillar	Not applicable
<i>Linyphiidae sp.</i>	A spider	Not applicable
<i>Lithobius sp.</i>	A centipede	Not applicable
<i>Lycosidae sp.</i>	A spider	Not applicable
<i>Maniola jurtina</i>	Meadow brown	LC
<i>Melanargia galathea</i>	Marbled white	LC
<i>Micaria micans</i>	A spider	Not applicable
<i>Microlestes maurus</i>	A ground beetle	LC
<i>Microlestes minutulus</i>	A ground beetle	LC
<i>Myrmica ruginodis</i>	An ant	Not applicable
<i>Myrmica scabrinodis</i>	An ant	Not applicable
<i>Ocypus olens</i>	Devil's coach horse beetle	Not applicable
<i>Oedemera nobilis</i>	Thick thighed beetle	LC
<i>Oedothorax fuscus</i>	A spider	LC
<i>Ontholestes murinus</i>	A rove beetle	Not applicable
<i>Ophonus ardosiacus</i>	A ground beetle	LC, Essex listed
<i>Opiliones sp.</i>	A harvestman	Not applicable
<i>Pachygnatha degeeri</i>	A spider	LC
<i>Pachygnatha sp.</i>	A spider	Not applicable
<i>Paederus littoralis</i>	A rove beetle	Not applicable
<i>Palliduphantes ericaeus</i>	A spider	LC
<i>Pardosa palustris</i>	A spider	LC
<i>Pardosa prativaga</i>	A spider	LC
<i>Pardosa pullata</i>	A spider	LC
<i>Pardosa sp.</i>	A spider	Not applicable
<i>Phalangium opilio</i>	A harvestman	Not applicable
<i>Philaenus spumarius</i>	A froghopper	Not applicable
<i>Philoscia muscorum</i>	Common stripped woodlouse	Not applicable
<i>Phrurolithus festivus</i>	A spider	LC
<i>Pieris brassicae</i>	Large white	LC

Scientific Name	Common Name	Status
<i>Pieris rapae</i>	Small white	LC
<i>Platybunus triangularis</i>	A harvestman	Not applicable
<i>Podops inuncta</i>	A shieldbug	LC
<i>Poecilus cupreus</i>	A ground beetle	LC
<i>Poecilus versicolor</i>	A ground beetle	LC
<i>Polyommatus icarus</i>	Common blue	LC
<i>Pseudochorthippus parallelus</i>	Meadow grasshopper	Not applicable
<i>Pterostichus madidus</i>	A beetle	LC
<i>Pterostichus melanarius</i>	A ground beetle	LC
<i>Quedius simplicifrons</i>	A rove beetle	Not applicable
<i>Rhagonycha fulva</i>	Common red soldier beetle	LC
<i>Roeseliana roeselii</i>	Roesel's bush cricket	Not applicable
<i>Salticidae</i>	A spider	Not applicable
<i>Saprinus aeneus</i>	A historidae beetle	LC, NS includes
<i>Silpha sp.</i>	Beetle larvae	Not applicable
<i>Silpha tristis</i>	A carrion beetle	Not applicable
<i>Staphylinidae sp.</i>	A rove beetle	Not applicable
<i>Stenodemini sp.</i>	A grass bug	Not applicable
<i>Stroggylocephalus livens</i>	A leafhopper	Notable B
<i>Syntomus foveatus</i>	A ground beetle	LC
<i>Syntomus truncatellus</i>	A ground beetle	LC, NS includes
<i>Tenuiphantes tenuis</i>	A spider	LC
<i>Thomisidae sp.</i>	A spider	Not applicable
<i>Thymelicus lineola</i>	Essex skipper	LC
<i>Thymelicus sylvestris</i>	Small skipper	LC
<i>Trachyzelotes pedestris</i>	A spider	LC
<i>Trochosa ruricola</i>	A spider	LC
<i>Trochosa sp.</i>	A spider	Not applicable
<i>Trochosa terricola</i>	A spider	LC
<i>Trochulus striolatus</i>	Strawberry snail	LC
<i>Tytthaspis sedecimpunctata</i>	16-spot ladybird	Not applicable



Scientific Name	Common Name	Status
<i>Vanessa atalanta</i>	Red admiral	LC
<i>Vanessa cardui</i>	Painted lady	LC
<i>Xysticus cristatus</i>	A spider	LC
<i>Zelotes apricorum</i>	A spider	LC
<i>Zelotes latreillei</i>	A spider	LC
<i>Zodarion italicum</i>	A spider	LC, NS includes, ERI

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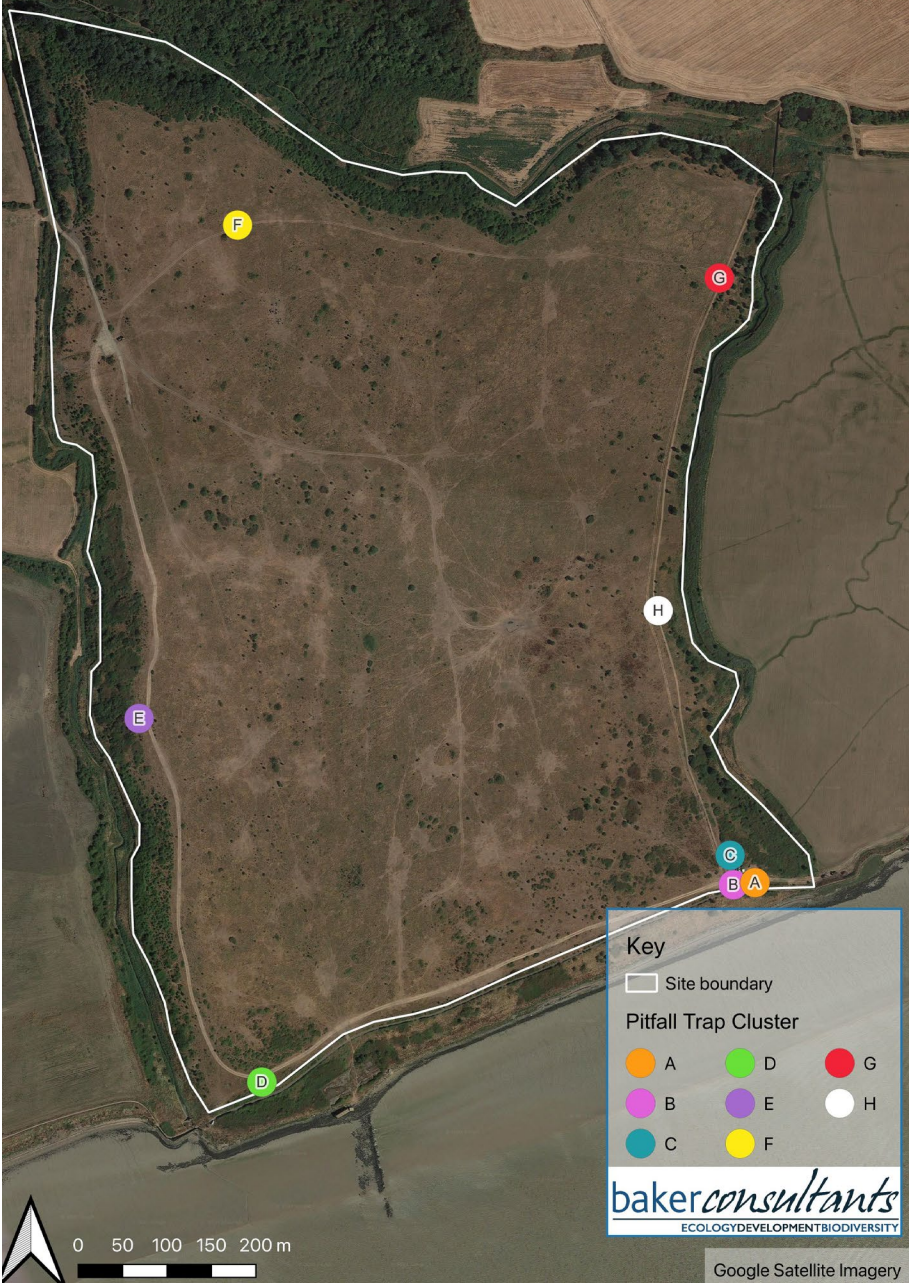
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# Appendices

## Appendix 1

Figure 2: Pitfall Trap Locations Plan © Baker Consultants 2023



## Appendix 2

Figure 3: Notable Species Plan © Baker Consultants 2023



## Appendix 3

The **Invertebrates Species Recorded** file is available for download alongside this report on the Access to Evidence Catalogue.

