Landscape Science Consultancy Ltd

OAKHAM, RUTLAND

EXTENDED PHASE 1 SURVEYS

FOR

RUTLAND COUNTY COUNCIL

JULY 2009

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0.0 Non Technical Summary

Background to Phase 1 Habitat Survey

Landscape Science Consultancy Ltd (LSC Ltd) was commissioned by Rutland County Council (RCC) to conduct Extended Phase 1 Habitat Surveys of compartments of land bordering the town of Oakham, Rutland. The purpose of the surveys was to provide RCC with evidence on habitats and protected species within the compartments, as part of the Local Development Framework. The habitat surveys were conducted by LSC Ltd ecologists between April and May 2009 and followed best practice methodology. The results of the surveys have been detailed within reports and habitat maps for each compartment of land.

Overview - Habitats

The dominant habitats within the compartments to the south and east of Oakham are arable fields, with grassland pasture fields dominating to the north and west. The majority of grassland fields have to varying degrees, been agriculturally 'improved' through the re-seeding of swards and use of fertilizers to maximise agricultural grass cover for rearing livestock. Therefore, the grasslands in general support a low diversity of plant species. The majority of grassland and arable fields are enclosed by 'species-poor' hedgerows dominated by hawthorn with a low mix of other woody species; 'species-rich' hedgerows are generally uncommon. The habitat structure of the hedgerows vary markedly dependant on frequency of management throughout all compartments. Mature oak and ash standard trees are found occasionally within many of the hedgerows. Several minor streams run from west to east with a shallow water channel, and are generally no more than 1m in width. Minor areas of marsh, scrub, scattered broadleaf trees are associated with these streams, as well as thin belts of broadleaf woodland. Field ponds are uncommon and small in extent, supporting a low diversity of aquatic plants. Other habitats within the compartments include minor areas of mature scattered broadleaf trees, scrub and thin plantation woodlands in field corners and edges, as well as a fragmented part of the Oakham to Melton to canal to the north. A number of young plantation woodlands, grasslands and balancing ponds have been created along the recently developed Oakham by-pass to the east.

There are no sites of nature conservation within any of the compartments which receive national or European protection. However Rutland Water, a site of European protection, is situated to the south east of Oakham and is within 2km of several of the compartments surrounding Oakham. Potential land-use change within these areas would be of material consideration.

The majority of one compartment to the south west of Oakham is owned and managed by the Woodland Trust, and consists predominantly of extensive areas of grassland which have been recently planted with broadleaf trees. Occasional isolated sites within the compartments are protected through the local planning system, such as grassland fields, ponds and marsh and are generally noted as being of Parish, or local value. The majority of habitats surveyed within the compartments are also considered to be of local value. The minor streams are considered to be of particular local value as they provide important wildlife corridors for the distribution of floral

and faunal species within the local landscape. Other wildlife corridors include the fragmented Oakham canal and a live railway line. The habitats surrounding the Oakham by-pass have been identified as a potential wildlife corridor. Recommendations for the protection and enhancement of these wildlife corridors have been outlined within the main report. Recommendations have also been made for the general protection and enhancement of hedgerows and trees within the wider landscape.

Overview - Protected Species

During the Phase 1 habitat surveys the compartments were surveyed for the presence or the potential presence of protected species. The presence or potential presence of protected species is of material consideration for any potential land-use change within the compartments and may potentially significantly increase the value of habitats present.

The minor streams, canal and associated areas of marsh, scrub, woodland and tall grasslands have been identified as having the potential to support reptile species, particularly grass snake. There is also the potential for reptile species to be present within areas of unmanaged grassland and scrub, as well as where field ponds are present. The occasional field ponds found within the compartment may have the potential to support great crested newts although most are over shaded with scrub and do not provide a substantial vegetation substrate for newts to lay eggs. Historical records exist for great crested newts and grass snakes within a small number of these compartments.

The streams within the surveyed compartments were generally found to be of low value for water voles, generally due to a lack of food plants due to over shading from trees and scrub.

Several of the trees found within woodland belts, hedgerows and within fields have the potential to support bat roosts due to the presence of cracks, splits, rot holes and ivy cover in tree boles and boughs. A number of buildings were also identified which may support roosting bats. Historic records exist for foraging bats in a small number of these compartments. The mosaics of habitats found within the majority of the surveyed compartments of Oakham provide potential foraging and commuting habitat for bats species. Such habitats would also provide suitable opportunities for a wide variety of foraging and nesting farmland birds. Recommendations have been given with regards to conducting further protected surveys where found to be present or potentially present.

1.0 Introduction

1.1 Background

Landscape Science Consultancy Ltd (LSC Ltd) was commissioned by Rutland County Council to conduct Extended Phase 1 Habitat Surveys for eight compartments of land bordering the town of Oakham, Rutland. The compartments reflect possible directions for growth that may be identified to meet the housing and other requirements of the Draft East Midlands Regional Plan.

The purpose of the survey is to provide Rutland County Council with evidence on habitats and protected species within the compartments of land surrounding Oakham.

1.2 Survey Objectives

The objectives of the surveys are:

- To provide evidence to support the Council's Local Development Framework and associated Sustainability Process in determining the future directions for growth, allocation of land for development and policies to protect and enhance local biodiversity.

- To provide sufficient information to assist in the determination of planning applications and to enable consistent and sustainable decisions to be made in respect of protecting biodiversity, with specific regard to the Council's obligations under Planning Policy 9 – Biological and Geological Conservation.

- To provide a baseline and monitoring framework for further surveying and/or monitoring of habitats and protected species within the Rutland area.

1.3 Survey Methodology

The survey methodology employed followed the Phase 1 Habitat Survey Guidelines JNCC (2003). This involved a walkover of each compartment of land to identify and target note all macro-habitats present and identify the presence of, or the potential presence for protected species. Any statutory or non-statutory sites of nature conservation within or adjacent to the compartments were assessed. Any sites suitable for protection, such as areas of ancient woodland and potential veteran trees were identified.

This method provided a comprehensive and robust assessment of the extent, nature and conditions of habitats and associated species within each compartment of land to inform potential implications for land use planning. The full methodology is given in Appendix 1 in order to facilitate repetition as required.

1.4 Survey Reports

Individual reports have been produced for each compartment of land surrounding Oakham, together with accompanying target notes and Phase 1 Habitat maps.

Records of protected species, statutory and non-statutory nature conservation sites and Local Biodiversity Action Plan (LBAP) priority habitats and species within 2km of each compartment of land have been identified and mapped. All records were sourced from the Leicester Environmental Records Centre (LERC).

Habitats suitable for specific LBAP species which have the potential to provide 'wildlife corridors' in the wider landscape have also been identified and mapped, as well as unrecorded habitats of semi-natural value such as ancient woodland and veteran trees.

Recommendations are given as to any further surveys which may be required to inform future planning permissions and any mitigation recommended to ensure that habitats and species are satisfactorily protected and areas enhanced.

2.0 Legislation and Policy

The potentially relevant legislation is summarised below:

2.1 Legislation

The Conservation (Natural Habitats &c.) Regulations 1994 (as amended), or the 'Habitat Regulations', transposes European Directives into English and Welsh legislation. Under these regulations, wild animals of a European Protected Species (EPS) and their breeding sites or resting places are protected under Regulation 39. Such wild animals of an EPS include great crested newts and all species of bats. It is an offence to deliberately capture, injure or kill any such animal or deliberately take or destroy their eggs. It is also an offence to damage or destroy a breeding place or resting place of such an animal.

Amendments to the 'Habitat Regulations' in 2009 have now raised the threshold for deliberately disturbing a wild animal of an EPS. Under Regulation 39, it is now an offence if a person:

Deliberately disturbs wild animals of any such species which is likely:

(a) To 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

(b) To affect significantly the local distribution or abundance of the species to which they belong.

The Wildlife and Countryside Act 1981 (as amended) adds further protection to wildlife in England and Wales under Part 1. It is unlawful to intentionally kill, injure or take any wild bird or take, damage or destroy the nest of any wild bird whilst the nest is in use or being built. If the bird is included on the Schedule 1 list, it is additionally an offence to intentionally disturb its nest during the breeding season.

Certain species of animal, such as the water vole, are offered 'full protection' under the Wildlife and Countryside Act 1981 (as amended) by being included in Schedule 5 in respect of certain offences under Section 9. Such offences include:

9(1) Intentional killing, injuring or taking of a Schedule 5 animal;

9(4a) Damage to, destruction of, obstruction of access to any structure or place used by a Schedule 5 animal for shelter or protection;

9(4b) Disturbance of a Schedule 5 animal occupying such a structure or place.

Widespread species of native reptiles occurring within England and Wales such as the adder or common lizard are protected against killing and injuring under the Wildlife and Countryside Act 1981 (as amended) only. Animals of an EPS are now only protected under offences 9(4a) and 9(4b) of Section 9, however the main legislative tool covering EPS's is under the 'Habitats Directive'.

Under the Hedgerow Regulations 1997 it is an offence to remove most hedgerows without permission from the Local Planning Authority. Permission for the removal of hedgerows may be refused if the Local Planning Authority determine any hedgerow to be 'Important' under criteria listed in Part II of Schedule 1 of the Regulations.

2.2 European Protected Sites

Under the 'Habitats Directive' and the EC Directive on the Conservation of Wild Birds (79/409/EEC) 'The Birds' Directive', all Member States were required to identify a network of protected sites which represent areas of habitats and species of high ecological value which are rare, endangered or vulnerable in the European Community. This network of protected sites is known as Natura 2000 and includes Special Protection Areas (SPA's) and Special Areas of Conservation (SAC's).

Originally implemented through the UK's requirements under the EC Directive on the Conservation of Wild Birds (79/409/EEC), SPA's were implemented to safeguard the habitats of species of regularly occurring migratory birds from significant impacts. Rutland Water SPA is the only Natura 2000 site in Rutland and is situated within 2km to the south-east of Oakham.

Article 6 of the 'Habitats Directive' sets out circumstances under which a development having a significant adverse impact on a SPA site would only become acceptable where an overriding national need for development can be demonstrated and where there is a lack of alternative acceptable options.

Additionally, mitigation of habitat loss and/or improved habitat management measures should be implemented to ensure that the overall coherence of SPA's are protected. This is carried out by undertaking an Appropriate Assessment, which is a detailed appraisal of the impacts on the integrity of a Natura 2000 site. The Appropriate Assessment requires that all impacts within 2km of the SPA boundary are considered.

2.3 Ramsar Sites

Ramsar sites are wetlands of international importance designated under the Ramsar Convention, which was ratified by the UK Government in Iran in 1971. As a matter of policy, all Ramsar sites are also protected under Natura 2000 (as set out in the 'Habitat Regulations') and the vast majority are also SPA's.

Rutland Water SPA is designated as a Ramsar site of international importance.

2.4 Planning Policy Statement 9

Planning Policy Statement 9 (PPS9) Biodiversity and Geological Conservation aims 'to conserve, enhance and restore the diversity of England's wildlife by sustaining and where possible improving the quality and extent of the natural habitat .... and the populations of naturally occurring species that they support.' (ODPM, 2005).

Under PPS9 local authorities are required to ensure that protected species and designated nature conservation sites are protected from the adverse affects of proposed developments through the use of control measures within the planning system.

Where impact would occur to biodiversity interest the local planning authority must be satisfied that there is no reasonable alternative and that adequate mitigation measures would be in place to result in less or no harm.

2.5 East Midlands Spatial Strategy

The East Midlands Regional Spatial Strategy 2009 (RSS) provides a broad development strategy for the East Midlands up to 2026. The RSS also represents the spatial element of the East Midlands Integrated Regional Strategy (IRS).

The RSS planning policies are now used as the primary tool for development within Rutland; therefore policies under the Leicestershire, Leicester and Rutland Structure Plan are no longer applicable.

Policies listed under the RSS relevant to nature conservation are:

Policy 26

Protecting and Enhancing the Region's Natural and Cultural Heritage

Sustainable development should ensure the protection, appropriate management and enhancement of the Region's natural and cultural heritage. As a result the following principles should be applied:

- The Region's internationally and nationally designated natural and historic assets should receive the highest level of protection;
- Neither direct nor indirect damage to EU designated Natura 2000 sites will be permitted;
- Damage to natural and historic assets or their settings should be avoided wherever and as far as possible, recognising that such assets are usually irreplaceable;
- Unavoidable damage must be minimised and clearly justified by a need for development in that location which outweighs the damage that would result;
- Unavoidable damage which cannot be mitigated should be compensated for, preferably in a relevant local context, and where possible in ways which also contribute to social and economic objectives;
- There should be a net increase in the quality and active management of natural and historic assets across the Region in ways that promote adaptation to climate change, and an increase in the quantity of environmental assets generally; and
- The Region's best and most versatile agricultural land should be protected from permanent loss or damage.

Policy 29

Priorities for Enhancing the Region's Biodiversity

Local Authorities, statutory environmental bodies and developers should work with the voluntary sector, landowners and local communities to implement the Regional Biodiversity Strategy, and to deliver a major step change increase in the level of biodiversity across the East Midlands.

Measures should include the:

- Achievement of the East Midlands regional contribution towards the UK Biodiversity Action Plan targets;

- Establishment of large scale habitat creation projects in the biodiversity conservation and enhancement areas;

- Establishment of a regional project to promote the re-creation of key wildlife habitats in each Natural Area in the East Midlands;

- Creating, protecting and enhancing networks of semi-natural green spaces in urban areas;

- Creating, protecting and enhancing features of the landscape which act as corridors and 'stepping stones', essential for the migration and dispersal of wildlife;

- Development and implementation of mechanisms to ensure that development results in no net loss of BAP habitats and species, particularly for restricted habitats with special environmental requirements, and that net gain is achieved; and

- Development and maintenance of appropriate data to monitor and report on regional targets Biodiversity Action Plans.

Policy 30

Regional Priorities for Managing and Increasing Woodland Cover

Local Authorities, statutory environmental bodies and developers should work with the voluntary sector, landowners and local communities to deliver a significant increase in woodland cover in the East Midlands in ways that respect local landscape character and support the implementation of the Regional Plan.

New cover should make use of species resistant to climate change and complement national and regional woodland strategies, including, for example, the Forestry Commission's Woodfuel Strategy for England. Any impact on local landscape character should be carefully considered.

New woodland should optimise social, environmental and economic value whilst recognising the biodiversity and character of existing woodland and the sensitivity of existing nature conservation or archaeological interest. New woodland should also avoid negative effects on water resources and contribute to flood alleviation and floodplain management.

Woodland unavoidably lost to development should be replaced with new woodland of equivalent value, preferably in the same landscape unit. Preference should be given to creating 'new native woodland' as defined in Forestry Commission Bulletin 112.

Opportunities should be taken to increase woodland cover as part of new development and by using other mechanisms, focusing on:

- Priority areas identified through Space4Trees including; the National Forest, Greenwood Community Forest, Sherwood Forest, Rockingham Forest, East Derbyshire, the Boston Woods Initiative and ancient woodland clusters in the Lincolnshire Limewoods and Leighfield Forest areas;

- The Northamptonshire Growth Areas, where woodland creation and linkage should feature as a significant component of new green infrastructure; and principal transport corridors and Strategic River Corridors delivering local Biodiversity Action Plan targets.

Ancient semi-natural woodlands, veteran trees and other woodlands of acknowledged national and regional importance should be strongly protected by Local Development Frameworks. There should be a general presumption against the conversion of any woodland to other land uses unless there are overriding public benefits.

Opportunities should be taken to secure sustainable management of all woodland, and to increase public access to high quality multi-functional woodland close to communities as part of the development of Green Infrastructure.

2.6 Rutland Local Plan

The Rutland Local Plan was adopted by Rutland County Council on 23rd July 2001 and provides land-use planning policies for the period 1991-2006. The Plan is currently in the process of being replaced by a portfolio of local development documents as part of the Local Development Framework (LDF).

The evidence given in this report will form part of the policies relating to nature conservation and the natural environment in the new LDF documents.

2.7 Natural Areas

Natural Areas are sub-divisions of England devised by Natural England, each with a characteristic association of wildlife and natural features. Each Natural Area has a unique identity resulting from the interaction of wildlife, landforms, geology, land use and human impact.

Natural Areas provide a wider context for nature conservation action and the framework for Natural England in setting objectives for nature conservation, as well as forming the context of national and local Biodiversity Action Plan targets.

Oakham lies within the Trent Valley and Rises Natural Area 33 and its accompanying profile (Clifton and Windrum, 1999), briefly describes and evaluates its wildlife and geological features, summarises the issues which affect the nature conservation resource and concludes with the long-term visionary objectives through which the nature conservation interest could be maintained and enriched.

Objectives set by Natural England for the Trent Valley and Rises Natural Area include:

- To maintain the extent and quality of the characteristic semi-natural habitats in the Natural Area, particularly the 'unimproved' grasslands, freshwater and woodland habitats.

- To increase the semi-natural and characteristic habitats in the Natural Area particularly the grasslands, freshwater, woodland, and farmland habitats.

- To maintain and enhance important species and populations which are characteristic of the Natural Area.

- To survey and monitor species and habitats

- To increase awareness of, and encourage appropriate use of the nature conservation resource to ensure that the biodiversity can be enjoyed by all, including future generations without damaging the Trent Valley and Rises environment.

2.8 Biodiversity Action Plans

The UK Biodiversity Action Plans (BAPs) were drafted for 'Priority' species and habitats in which specific conservation targets were set and are regularly reviewed. BAP features do not receive any legal protection but have biodiversity value within a national context. The UK BAPs also serve as a framework for local biodiversity conservation efforts.

"Biodiversity Challenge: An Action Plan for Leicester, Leicestershire and Rutland" was produced in 1998. The plan identifies local and national priority habitats and species, and sets targets for their conservation, outlines mechanisms for achieving these.

The species and habitats for which LBAP have been developed are detailed in Table 1.

Table 1: 'Priority' habitats and species listed under the Leicester, Leicestershire and Rutland LBAP.

Local Species Plans	**Local Habitat Plans**
Bats	Broadleaved woodland
Black hairstreak butterfly	Calcareous grassland
Black poplar	Eutrophic standing water
Dingy skipper	Fast-flowing streams
Grizzled skipper	Field margins
Dormouse	Floodplain wetland
Nightingale	Heath-grassland
Purple small-reed	Lowland wood-pasture and parkland
Redstart	Mature trees
Sand martin	Mesotrophic lakes
Violet helleborine	Neutral grassland

Local Species Plans	Local Habitat Plans
Water vole	Reed beds
White-clawed crayfish	Roadside verges
Wood vetch	Sphagnum ponds
	Springs and flushes
	Wet woodland

3.0 Methodology

3.1 Background Data

Background data with respect to protected species, statutory and non-statutory nature conservation sites and LBAP species within 2km of Oakham were obtained from the Leicestershire Environmental Records Centre (LERC). However, the data supplied does not identify the level of activity with regard to each record, for example, whether a bat roost was present. The records only highlight that a particular species has been recorded at a particular location.

The 'MAGIC' website was also accessed for locations of statutory nature conservation sites and ancient woodlands within 2km of Oakham.

3.2 Field Surveys

3.2.1 *Phase 1 Habitat Survey*

The survey methodology employed followed the Phase 1 Habitat Survey Guidelines JNCC (2003). This involved a walkover of each compartment of land surrounding Oakham to identify and target note all macro-habitats present and identify the presence of, or the potential presence for protected species. Information with regards to badgers has not been included within this version of the report, due to the sensitive nature of badger sett locations.

This method provided a comprehensive and robust assessment of the extent, nature and conditions of habitats and associated species within each compartment of land to inform potential implications for land use planning.

The surveys were conducted by LSC Ltd ecologists from April through May 2009.

Various landowners were contacted to grant permission for access to land to conduct the surveys. Where access to land could not be attained habitats were surveyed from adjacent accessed areas, public footpath and byways using binoculars. Land which could not be accessed has been clearly identified within the target notes and survey reports.

Species lists for the main habitat areas were compiled. Plant nomenclature follows Stace (1997). The UK priority Species/Red Data book/locally important species lists were used to establish national, regional and local status of any rarer plants; animals or

invertebrates recorded during the survey. Aerial photographs of the area were used to increase the accuracy of the survey.

The ecological survey of the compartments considered all relevant aspects of ecology in order to provide sufficient detail to:

- Identify and assess the overall habitat pattern of the compartment and associated linkages relevant to the proposals, highlighting the terrestrial habitats present.
- Assess the current ecological status and sensitivity, particularly in relation to any statutory designations.
- Identify presence or possible presence of protected species.
- Identify constraints to potential land-use change.
- Identify any notifiable weeds.

3.2.2 *Protected Species Survey*

During the walkover of each compartment of land, habitats were assessed for the presence of, and the potential presence for, protected species. For example, rapid assessments were made of the potential for trees and buildings to support bat roosts, water bodies to support great crested newts and specific habitats to support reptile species.

Notes were also made of actual evidence of protected species which are more evident in the field such as the presence of water vole nests and field signs along watercourses and brief notes of vulnerable bird species.

4.0 Generic Area Description

4.1 Oakham – Landscape and Habitats

The market town of Oakham and surrounding compartments of land are situated in the Vale of Catmose in a generally flat bottomed valley basin at approximately 110m AOD. Rutland Water SPA, one of the largest man-made reservoirs in the UK, lies within 2km to the eastern outskirts of the town in the Vale basin. A key characteristic of the Vale is that of an open valley basin created by the edges, shoulders, ridges and slopes of the surrounding hills and plateau (David Tyldesley and Associates, 2003). The ancient woodland ridges of the Burley Estate overlooks the Vale and Rutland Water just to the east of Oakham, with the land gradually rising to the ridges and dips of the Rutland Uplands from the southern and western outskirts of the town.

The compartments of land surrounding Oakham, and indeed much of the land prevailing to the north, are characterised by a mosaic of meadows, pasture and arable fields typical of a 'vale' landscape. The fields are generally regular in shape and large in size and are typical of intensive agricultural systems.

The grasslands surrounding Oakham are generally 'improved' or 'semi-improved' in nature and are managed as pasture and meadow for livestock. Evidence of ridge and furrow can be found throughout the majority of the pasture grasslands surrounding Oakham and is an indicative feature that these habitat where once cultivated.

Fields are often bounded by managed hedgerows which are generally species-poor and dominated by hawthorn with a low varied mix of other species such as occasional elm, rose, blackthorn and elder. Where arable farming dominates, hedgerow loss becomes more prevalent and those that remain are often low-cut with frequent gaps.

Hedgerow trees form notable features in the landscape where they have survived and are generally mature stag-headed ash with occasional sycamore. There is relatively little tree cover surrounding Oakham and is generally restricted to sporadic copses of ash and sycamore woodland, restricted areas of wood-pasture and parkland and thin ash/willow woodland corridors along a series of small streams which run west-east throughout the Vale and into Oakham. A small number of these woodlands support indictor species more typical of semi-natural woodlands, such as dog's mercury and bluebell.

A number of linear landscape features pass through Oakham, such as the disused and fragmented Oakham to Melton canal and the live Leicester – Oakham – Melton railway line. Such linear features, in combination with the network of hedgerows bordering the fields surrounding Oakham, provide important 'wildlife corridors' for the distribution of floral and faunal species through the wider landscape. Occasional small field ponds are scattered around the fields surrounding Oakham and have generally been encroached by surrounding scrub, and typically support a low diversity of aquatic plants.

4.2 Background Data, Habitats and Species

Rutland Water SPA is the only Natura 2000 site in Rutland and is situated within 2km to the south-east of Oakham.

Article 6 of the 'Habitats Directive' sets out circumstances under which a development having a significant adverse impact on a SPA site would only become acceptable where an overriding national need for development can be demonstrated and where there is a lack of alternative acceptable options.

Additionally, mitigation of habitat loss and/or improved habitat management measures should be implemented to ensure that the overall coherence of SPA's are protected. This is carried out by undertaking an Appropriate Assessment, which is a detailed appraisal of the impacts on the integrity of a Natura 2000 site.

The Appropriate Assessment requires that all impacts within 2km of the SPA boundary are considered.

The following compartments were indentified to be within 2km of Rutland Water:

Compartments 2a, 2b, 2c and 2d.
Compartments 3a, 3b and 3c.
Compartment 5b.
Compartment 8.
Compartments 9a and 9b.
All other survey compartments surrounding Oakham fall just outside the 2km radius from Rutland Water.

(See Figure 01 and Appendix 4 – 7)

4.3 Wildlife Corridors

Existing linear wildlife corridors within Oakham and around the urban fringe have been identified in order to provide specific measures for their protection and enhancement within the Local Development Framework. All wildlife corridors are illustrated in Appendix 5.

Watercourses

Streams/River Corridors

Two main stream/river corridors have been identified within Oakham and run from west to east, one at the northern urban edge of Oakham (W1, Appendix 5) and the other along the southern urban edge (W2). Ordnance Survey maps of the Oakham area do not state a specific name for these watercourses.

The source of both of the watercourses is to the west of Oakham, approximately 1.5km to 2km from the western urban fringe. Both watercourses eventually meet approximately 0.5km from the eastern urban edge of Oakham which then flow directly into Rutland Water SPA. The northern watercourse W1 is connected to a further watercourse (W3) which is itself connected to the Oakham to Melton canal to the north.

All watercourses pass through several of the compartments surrounding Oakham and have been identified as minor streams with a shallow water channel, and are generally no more than 1.5 – 2m in width with a slow often sluggish flow. All watercourses pass through a number of habitats identified in the current Phase 1 survey which include linear belts of plantation and semi-natural woodlands, grasslands and arable fields.

Outside of the surveyed compartments it is evident from aerial photographs that similar habitats are present along the wider stretch of each watercourse as well as urban habitats such as housing estates, gardens and industrial parks. Within the background data search, a number of areas of woodlands, scrub, marsh and trees have been identified as being of Parish level importance along the stretch of all watercourses (Appendix 4 – 7).

Although the watercourses identified are only minor streams, the mosaic of habitats along their length form distinct wildlife corridors which provide foraging, commuting, breeding and shelter for a variety of faunal species, as well as a corridor for the dispersal of floral species into the wider countryside. The current Phase 1 surveys have identified that these watercourses have the potential to support a variety of protected species such as water vole, reptiles (particularly grass snake), birds, and bats.

It is therefore recommended that specific measures for the protection and enhancement of the identified watercourses (W1 – 3) are considered with the Local Development Framework.

Canal Corridors

A small fragmented part of the Oakham to Melton canal corridor is present to the north of Oakham and has been noted as being of Parish level importance with the background data search. The vast majority of the original canal through Oakham has now been lost and therefore does not provide a wildlife corridor in this area.

The canal, although disused, is continuous just to the north of this fragmented section and travels north from Oakham through the Vale of Catmose. From the assessment of current aerial photographs of the canal, it appears that much of the canal corridor is bounded by trees, shrubs and woodland as it passes through an arable and grassland pasture landscape. This section of the canal has been noted as being of District importance within the background data search.

The canal has the potential to support the variety of floral and faunal species as previously described for the stream/river corridors. As canals are generally considered to be lotic habitats (without flowing water), there is also the potential for populations of great crested newts to be present, particularly in the fragmented section at the northern edge of Oakham.

The canal is connected to the network of minor streams running through Oakham by stream W3.

Generic Recommendations for the Protection of Watercourses

Consideration should be given to the protection of the identified watercourse 'wildlife corridors' through the prevention of sediment loading, point source pollution and diffuse pollution from domestic, business and agricultural sources.

The pollution of watercourses from chemicals, fertilisers and pesticides has the potential to have a significant adverse affect on the floral and faunal communities found within these wildlife corridors.

The most effective way Rutland County Council can protect watercourses is through the implementation of Planning Policy Statement 23: Planning and Pollution Control (Annex 1) and PPS 9 through the planning process.

Generic recommendations are given below:

- Environmental and ecological specialists should always be consulted for expert advice where developments may potentially affect watercourses.

- Consideration should be given to the wider implementation of Sustainable Drainage Urban Systems (SUDS) within any potential developments near watercourses through the planning process, in order prevent point source pollution from surface water drainage.

- The creation and retention of 'buffer zones', such as riparian grassland strips, should also be considered in order to prevent diffuse pollution from developments adjacent to watercourses.

- Trees, scrub, woodlands and grasslands adjacent to watercourses should be retained as part of any development proposals near to watercourses, particularly where such habitats are mature and/or semi-natural and impossible to replace within the short to medium term.

- Where development proposals may have the potential to adversely affect watercourse habitats and associated protected species, detailed and appropriate mitigation and compensation should be of material consideration when determining planning applications and conditions.

- Advice given under the Environment Agencies' Pollution Prevention Guidelines 4 – Works and Maintenance near Watercourses should be carefully implemented during the construction phase of any development.

Generic Recommendations for the Enhancement of Watercourses

Consideration should be given to the enhancement of watercourses through the planning process as part of any development proposals near to such habitats. As has been previously described, any adverse affects to watercourse habitats and associated protected species should be suitably mitigated and compensated for within the planning process.

Where developments may be planned within close proximity to a watercourse but will not directly affect it, consideration should still be given to the enhancement of the watercourse corridor within the planning conditions. This may be implemented as compensation for the loss of other habitats within the development boundary not associated with the watercourse corridor.

Proposals to enhance the watercourse corridor should be undertaken by environmental and ecological specialises, who should formulate habitat creation and management proposals through the appropriate consideration of the abundance and distribution of existing habitats and protected species present.

For example, it would not be prudent to recommend the dense planting of trees in an area of watercourse where populations of water voles are known to occur, as the

eventual shading from tree canopies would trigger reduction of bankside vegetation and potential food plants for this species.

Habitat creation along watercourses could, however, include the strengthening of existing woodlands, scrub and tree lines through the planting of native tree and shrub species of local provenance, or the creation of species-rich river meadows and bankside vegetation. Proposals for protected species, if they are found to be present, could include the provision of pools and lagoons for water voles or the creation of hibernacula for grass snakes.

A detailed management plan for the future conservation of the enhanced watercourse corridor is vital to ensure biodiversity is maintained and should be included as a planning condition for the development.

Railway Corridor

The live Leicester – Oakham – Melton railway corridor runs north to south through the centre of Oakham. Railway embankments are of particular value for supporting reptile species and acting as 'wildlife corridors' for the dispersal of these species within the wider countryside. Slow worms and common lizards are reptile species which are often found within railway embankments and sidings, due to the presence of ballast for basking.

The background data search provides no records in regard to reptile species within the railway corridor (Appendix 4-5).

The railway embankments also have the potential to provide a wildlife corridor for small mammal species which in turn provide hunting grounds for raptors and owls. Railway corridors also have the potential to provide a dispersal mechanism for floral species within the wider countryside.

From the assessment of current aerial photographs, much of the railway corridor through Oakham appears to support tree lines and hedgerows, albeit mostly outside of the managed corridor itself and in neighbouring residential and business properties. The majority of these tree lines are likely to have been planted as a natural screen as part of the associated developments around the railway corridor.

These linear tree lines provide nesting and foraging habitat for breeding birds, as well as foraging and commuting corridors for bats.

Generic Recommendations for the Protection and Enhancement of the Railway Corridor

As the railway corridor through Oakham is live, specific recommendations for the protection and enhancement of the corridor is limited as the primary concern of rail track management would be the safe and effective running of the train network.

However where developments abut railway corridors, the retention, strengthening and enhancement of tree and scrub lines along the railway corridor should be considered within the planning process.

Where there is the potential for tree planting along the edge of the railway corridor, possibly as a landscaping screen for the adjacent development, native tree and shrub species should be planted and should be of local provenance.

Road Corridor

The recently created Oakham by-pass skirts along the eastern urban fringe of Oakham and should be considered as a potential wildlife corridor. Semi-improved grassland embankments, young plantation woodland, young hedgerows and several ponds are present along the entire stretch of the by-pass. As the by-pass is only two or three years old, the majority of habitats created along the road corridor are immature. The by-pass does, however, have the potential to provide a valuable wildlife corridor for a variety faunal and floral species as these habitats develop.

Generic Recommendations for the Enhancement the Road Corridor

Consideration should be given to the management of the road corridor for nature conservation, where this does not conflict with road safety.

Generic recommendations are given below:

- Where possible, unmanaged grassland strips should be left along the road embankments, particularly near adjacent hedgerows, woodlands and field boundaries in order to provide habitat for small mammals (and therefore foraging raptor and owl species). The grassland strips should, however, be cut every two to three years in order to prevent scrub encroachment.

- Consideration should be given to enhancing the botanical value of the roadside grassland embankments, such as the planting of wildflower plugs or the sowing of species-rich wildflower mixes. Grasslands would need to be appropriately managed in order to enhance their botanical diversity.

- Consideration should be given to the future appropriate management of the small woodland plantations along the road corridor as they develop, specifically to enhance structural and species diversity.

- Roadside hedgerows, once developed, should be trimmed within the winter months, preferably during January and February, so not to adversely affect breeding and foraging birds. The hedgerows should ideally be trimmed every other year in order to provide an intact and full woody canopy. This will maximise foraging, nesting and shelter opportunities for a variety of faunal species.

- A continuous link of linear habitat, such as hedgerows woodland and tall grassland, should be provided along the length of the road corridor in order to maximise commuting and shelter opportunities for faunal species.

- Consideration should be given to the potential creation of new ponds along the road corridor if suitable land exists, in order to maximise habitats for amphibian, reptile and invertebrate species.

5.0 Compartment Results

The locations of all compartments are shown on Figure 01 and Phase 1 Habitat maps for all compartments are illustrated in Figures 02-09. The field target notes for all compartments are included in Appendix 2 and background data for all compartments is given in Appendix 4. A glossary of terminology used in the compartment reports is provided in Appendix 6.

COMPARTMENTS 2a, 2b, 2c and 2d.

Figure 02

5.1 Compartment 2a

5.1.1 *Compartment Description*

Compartment 2a covers an area of approximately 3.85ha on the south eastern urban fringe of Oakham. The compartment is dominated by a large regular sized arable field bounded by a species-poor hedgerow to the north. To the eastern edge of the field, along the embankment of the Oakham by-pass is an area of newly planted whips of deciduous broad leaved trees. Compartment 2a is bounded to the south by an off-site woodland belt and associated stream which is in the boundary of Compartment 2c.

5.1.2 *Background Data, Habitats and Species*

The results given in this report are as supplied at the time of survey May 2009.

European Protected Sites of Nature Conservation Interest

Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 2a.

Statutory Sites of Nature Conservation Interest

There are two statutory sites of nature conservation interest within 2km of Compartment 2a. These are the Rutland Water SSSI and Burley Wood SSSI.

No part of Compartment 2a falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are twenty non-statutory sites of nature conservation interest within a 2km radius of Compartment 2a. The closest of these is an area of scrub which is located in Compartment 2c and abuts the southern boundary of Compartment 2a. The scrub is noted as being of Parish level importance.

Species

Records exist for protected species within a 2km radius of Compartment 2a, although no records are listed for within the boundaries of the compartment.

5.1.3 *Survey Results*

Habitats

Arable Fields

The majority of Compartment 2a is one large arable field which was planted with a cereal crop at the time of survey. No distinct grassland field margins exist around the arable fields although strips of ruderal vegetation and scrub are present, particularly along the hedge and fence lines.

A separate arable field is present to the north eastern corner of the compartment and consists of a previous stubble crop now grazed by sheep (Photograph 01).

Photograph 01. Stubble crop at the north eastern boundary of Compartment 2a.

Species-Poor Hedgerows

Species-poor hedgerow O2a – 1 runs along the northern boundary of the compartment along the edge of the B640 road. The hedgerow is dominated by hawthorn with a low number of other woody species such as elm and elder. The hedgerow is defunct with several gaps and is intensively managed to a height of 1.5m and a width of 1m. An understorey of ruderal species is present including common nettle, cow parsley, dock and cleavers with grass species on the field side including Yorkshire fog, twitch and false-oat grass (Photograph 02).

Photograph 02. Species poor hedgerow O2a – 1.

Scrub and Scattered Trees

In the south western corner of Compartment 2a is a fragmented remnant of defunct hedge which is now a length of scrub with a line of three standard ash trees (O2a – 3). Associated with the ash trees are stands of scrub with elder, rose and bramble and ruderal species include common nettle, hogweed, twitch and the woodland species lords and ladies (Photograph 03).

Photograph 03. Scattered scrub and mature ash trees O2a – 3.

Plantation Broadleaf Woodland

To the eastern boundary of Compartment 2a an area of recently planted broadleaf woodland is present (O2a – 2). The trees are planted whips to a height of approximately 0.5m in plastic tubes on a grass embankment alongside the recently created Oakham by-pass (Photograph 04). Many tree and shrub species are present including hawthorn, holly, ash, blackthorn, sycamore, Norway maple, cherry, fir, willow and Scot's pine.

Semi-improved grassland is present beneath the planted trees and is tussocky in places and appears to have been recently sown. Species present include red fescue, perennial rye grass, Yorkshire fog, cock's foot, white clover, red clover, dandelion, teasel, speedwell, red dead-nettle, dock and rosebay willowherb. A new hawthorn hedge has been planted between the woodland and the adjacent field.

Photograph 04. Area of newly planted woodland O2a – 2.

Species

Birds

The hedgerows and patches of scrub found within Compartment 2a have the potential to provide suitable foraging and nesting habitat for a variety of farmland bird species.

Reptiles

There is the potential for reptiles, particularly grass snake, to be present within habitats in Compartment 2a as an area of woodland and an associated stream is present just off-site on the southern compartment boundary (in Compartment 2c).

Water Vole

Water voles may be present in the off-site stream on the southern compartment boundary.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 2a at the time of survey.

5.1.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment, it is recommended that the following protected species surveys may potentially need to be carried out.

As a belt of woodland and associated stream is present just off-site on the southern compartment boundary, consideration may need to be given to conducting water vole and reptile surveys within the stream corridor and potentially adjacent habitats.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

5.2 Compartment 2b

5.2.1 *Compartment Description*

Compartment 2b covers an area of approximately 8.54ha on the south eastern urban fringe of Oakham. The compartment supports two dominant habitat types – a large arable field to the south and scattered broadleaf trees to the north. The compartment is bounded to the south and east by both species-poor and species-rich hedgerows which support standard trees. Compartment 2c abuts the southern and eastern boundary of Compartment 2b.

An area of woodland and off-site stream is present to the north of Compartment 2b and is not within any of the survey compartments within the current Phase 1 survey. The woodland and stream could not be surveyed due to access restrictions.

5.2.2 *Background Data, Habitats and Species*

The results given in this report are as supplied at the time of survey May 2009.

European Protected Sites of Nature Conservation Interest

Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 2b.

Statutory Sites of Nature Conservation Interest

There are two statutory sites of nature conservation interest within 2km of Compartment 2b. These are the Rutland Water SSSI and Burley Wood SSSI.

No part of Compartment 2b falls within the boundary or abuts any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 2b. The closest of these is an area of scrub which is noted as being of Parish level interest and abuts the north eastern boundary of the compartment.

Species

Records exist for protected species within a 2km radius of the Compartment 2b, although no records are listed within the boundaries of the compartment.

5.2.3 *Survey Results*

Habitats

Arable Field

The majority of Compartment 2b is one large arable field which was planted with a crop at the time of survey. No distinct grassland field margins exist around the arable field although strips of ruderal vegetation and scrub are present particularly along the boundary hedges (Photograph 05).

Photograph 05. An arable field within compartment 2b.

Scattered Broadleaf Trees

An area of scattered broadleaf trees dominated by mature to fully mature sycamore with ash and lime forms a sinuous margin around the northern edge of the arable field (O2b - 1). Semi-improved grassland is present in the field layer with a dominance of ruderal species including false-oat grass, cock's foot, cow parsley, common nettle and cleavers. Pockets of the scattered broadleaf trees are also present throughout the arable field (Photograph 06).

Photograph 06. Scattered broadleaf trees O2b – 1.

The scattered broadleaf trees also extend to the north of Compartment 2b over a linear strip of several small holdings, the majority of which are now abandoned and support tall ruderal vegetation (O2b – 7). Access was not possible to this area, however, it could be viewed from a boundary fence. Mature Scot's and Corsican pine trees are found in this area in association with mature sycamore and lime. Occasional patches of dense and scattered hawthorn, elder and blackthorn scrub are present throughout the understorey of the scattered trees in this area (Photograph 07).

Photograph 07. Scattered broadleaf trees and scrub O2b – 7.

Species-Poor Hedgerows

Three sections of species-poor hedgerows are present within Compartment 2b. The hedgerow at O2b - 4 is dominated by hawthorn with a low number of other woody species such as elm, elder and occasional semi-mature sycamore trees. The hedgerow appears to be generally undermanaged at a height of 5m and width of 2m. Ruderal species dominate the understorey and include cleavers, common nettle and garlic mustard (Photograph 08). This hedgerow shares a boundary with the adjacent Compartment 2c.

Photograph 08. Species-poor hedgerow O2b – 4.

A further species-poor hedgerow borders a residential property on the western boundary of Compartment 2b (O2b – 5). The hedge is dominated by *Cotoneaster spp.* with ornamental *Leylandii spp.* The hedgerow is intensively managed to a height and width of approximately 1m (Photograph 09).

Photograph 09. Ornamental hedgerow at O2b – 5.

A short section of hawthorn dominated hedgerow is also present on the western boundary of Compartment 2b (O2b – 6), with several mature sycamore trees present. The hedgerow is intensively managed to a height and width of 1m with an understorey of ruderal species including cleavers, common nettle and garlic mustard.

Species-Rich Hedgerows

A generally intact species-rich hedgerow is present along the southern boundary of the compartment and supports an abundance of hawthorn with a number of other species such as occasional sycamore, ash, elm, elder and rose (O2b – 3) (Photograph 10). This hedgerow shares a boundary with the adjacent Compartment 2c. A mature ash and sycamore standard tree is present within the hedgeline. The hedgerow is managed to an average height of 1.8m and width of 1m. Ruderal species dominate the understorey and include cleavers, common nettle, white dead- and false-oat grass.

Photograph 10. Species-rich hedgerow O2b – 3.

Building

A residential property is present on the north western boundary of Compartment 2b (O2b – 2). The building is a modern, well-maintained, brick-built house with a render on the exterior and a multi-pitched roof. A number of structural features are present which may potentially support roosting bats such as roof/ridge tiles, soffits, barge boards and roof voids. No access was gained to internal or external parts of the building to survey it effectively.

Species

Bats

Several of the scattered mature broadleaf trees at O2b – 1 & 7 supported rot holes, cracks, splits and old woodpecker holes which may potentially be suitable for roosting bats.

The building O2b – 2 at the north western boundary of Compartment 2b may have suitable features with the potential to support roosting bats.

The scattered broadleaf trees, scrub and hedgerows found throughout Compartment 2b have the potential to provide suitable foraging and communing habitat for bat species.

Birds

The scattered broadleaf trees, scrub and hedgerows found throughout Compartment 2b would provide suitable habitat for nesting and foraging farmland bird species.

Reptiles

There is the potential for reptiles, particularly grass snake, to be present within habitats in Compartment 2b as an area of woodland and an associated stream is present off-site near the northern compartment boundary. The mosaic of habitats within Compartment 2b also provide potential habitat for reptile species.

Water Vole

Water voles may be present in the off-site stream near the northern compartment boundary.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 2b at the time of survey.

5.2.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 2b would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

Several of the scattered mature trees to the northern edge of Compartment 2b have the potential to support roosting bats. Therefore it is recommended that dedicated bat surveys should be undertaken on all trees with roosting potential.

The residential house O2b – 2 at the north eastern corner of Compartment 2b would need to be surveyed in respect of nesting birds and roosting bats.

As a belt of woodland and associated stream is present near to the northern compartment boundary, consideration may need to be given to conducting water vole and reptile surveys within the stream corridor and for reptiles, within adjacent habitats.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

All protected species surveys should be undertaken according to Best Practice at the time of commission.

5.3 Compartment 2c

5.3.1 *Compartment Description*

Compartment 2c covers an area of approximately 12.26ha on the southern rural edge of Oakham. The compartment is dominated by two large arable fields partly bounded by hedgerows. A linear belt of recent tree planting is present along the eastern boundary of Compartment 2c, along a grass embankment associated with the adjacent recently created Oakham by-pass. A pond is present in the north eastern corner of the compartment near to a small area of semi-natural broadleaf woodland with an associated stream. Compartment 2c bounds Compartment 2a and 2b to the north and Compartment 2d to the south.

5.3.2 *Background Data, Habitats and Species*

The results given in this report are as supplied at the time of survey May 2009.

European Protected Sites of Nature Conservation Interest

Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 2c.

Statutory Sites of Nature Conservation Interest

There are two statutory sites of nature conservation interest within 2km of Compartment 2c. These are the Rutland Water SSSI and Burley Wood SSSI.

No part of Compartment 2c falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 2c.

One non-statutory site of nature conservation interest falls within the compartment boundary. This is an area of scrub on the northern boundary of the compartment, where it abuts Compartment 2a. The scrub is noted to be of Parish level importance.

Species

Records exist for protected species within a 2km radius of Compartment 2c, although no records are listed for within the boundaries of the compartment.

5.3.3 *Survey Results*

Habitats

Arable Field

The majority of Compartment 2c comprises two large arable fields which were planted with a crop at the time of survey. No distinct grassland field margins exist around either arable field although strips of ruderal vegetation and scrub are present at field boundaries.

Running Water

A stream is present along the north eastern boundary of Compartment 2c (O2c – 1). The stream is bounded and shaded by a linear belt of semi-natural woodland (O2c – 2), and is detailed separately. The stream has relatively steep clay banks and is almost vertical in places with a height of between 1-3m. Clay berms with shingle and stones are present occasionally along the stream banks. The water channel is clear and flows at a medium rate, varying in depth from approximately 10cm to 30cm, over a substrate of clay with occasional stones and shingle (Photograph 11).

Photograph 11. Stream bed on the northern boundary of Compartment 2c (O2c – 1).

The stream is relatively free of organic and artificial debris with generally no aquatic or marginal vegetation present. Occasional rush and brooklime was, however, recorded at the stream margins towards the east, where the surrounding woodland canopy is more open.

The banks of the stream largely support ruderal species including common nettle, rosebay willowherb, ivy, bramble and dock (Photograph 12). Woodland species typical of the surrounding habitat were also present occasionally to locally frequently along the stream banks and included lesser celandine, ramsons, lords and ladies, dog's mercury, hart's tongue fern and garlic mustard. Tree species associated with the stream channel include young pedunculate oak and willow.

Photograph 12. Banks of the stream O2c – 1.

A further stream is present along the southern boundary of Compartment 2c, which also shares a boundary with Compartment 2d (O2c – 9). The banks of the stream are steep, between 60º and 80º, rising to a height of approximately 2m. The stream channel is clear and slow flowing with an average depth of 20cm and width of approximately 0.5m, over a substrate of clay with occasional stones and slits (Photograph 13).

Occasional organic debris is present within the stream channel with locally frequent emergent and marginal vegetation with species including rush, fool's watercress and brooklime. The banks support an abundance of ruderal vegetation which includes common nettle and ivy with occasional semi-mature willow trees.

A species-rich hedgerow abuts the southern edge of the stream banks (02c – 10).

Photograph 13. Stream O2c – 9.

Semi-Natural Broadleaf Woodland

An area of semi-natural woodland (O2c – 2) exists on the north eastern boundary of Compartment 2c, forming a canopy over the associated stream below (O2c – 1). The woodland is dominated by mature ash and sycamore with pedunculate oak and willow (Photograph 14). The understorey is sparse with infrequent semi-mature hawthorn, elder and blackthorn. Occasional to locally frequent woodland species are found in the field layer and include variegated yellow archangel, lesser celandine, red campion, ramsons and the ancient woodland indicator dog's mercury.

Photograph 14. Broadleaf woodland at O2c - 2

Where woodland species are less frequent and where the field layer appears to be more disturbed, ruderal species including ivy, common nettle and cleavers dominate. There is abundant deadwood with moss species and leaf litter throughout the woodland ground layer and a sparse cover of grasses such as meadow grass and cock's foot. Part of a fragmented defunct hedgerow composed primarily of ash and hawthorn is present towards the eastern edge of the woodland. The hedgerow appears to have been laid in the past and now forms part of the woodland edge habitat.

The woodland O2c – 2 is noted as an area of 'scrub' and of Parish level importance within the background data search. It is possible that the original scrub habitat has succeeded to woodland since it was first recorded. It is likely that this woodland is secondary or plantation of origin. The presence of woodland indicator species such as ransoms and dog's mercury is indicative of continuous woodland cover and, therefore, this habitat has been defined as 'semi-natural'.

Open Water

In the north eastern corner of Compartment 2c a balancing pond is present (O2c – 3), and is likely to have been created as part of the adjacent Oakham by-pass (Photograph 15). The water in the pond is clear with a depth of 50cm-75cm and covers an area of approximately 20m^2. The pond appears to have been planted with occasional to locally frequent submerged, emergent and marginal vegetation with

species including brooklime, reed-mace, common reed, rosebay willowherb, pondweed and lesser spearwort.

The pond is surrounded by high banks of semi-improved grassland which rise to approximately 4-5m at a uniform aspect of 30-35º (O2c – 4).

Photograph 15. Balancing pond at O2c – 3.

Semi-Improved Grassland with Scattered Broadleaf Trees

An area of semi-improved grassland (O2c – 4) surrounds the balancing pond O2c – 3 at the north eastern corner of Compartment 2c. The grassland rises to a high of approximately 4-5m at a uniform aspect of 30-35º and levels out to a flat plateau (Photograph 16).

To the east of the grassland, adjacent to the Oakham by-pass, a belt of recently planted, mostly broadleaf trees is present with species including hawthorn, holly, ash, blackthorn, sycamore, Norway maple, willow and Scot's pine.

The grassland is dominated by crested dog's-tail with cock's foot, Yorkshire fog, red fescue and tufted hair-grass. Herbaceous species present, which are typical of a roadside species mix, include ribwort plantain, eyebright, black knapweed, rosebay willowherb, red clover, white clover and rarely recorded colt's foot. The grassland is managed with evidence of mechanical cutting to a height of approximately 10cm and occasional thatch present, although taller grasses and herbaceous species occur nearer to the pond margins. It is likely that the grassland has been sown as part of the recent development of the adjacent Oakham by-pass.

Photograph 16. Semi-improved grassland O2c – 4.

Species-Rich Hedgerows

On the southern boundary of Compartment 2c, bordering Compartment 2d, a species-rich hedgerow is present with an abundance of hawthorn and a variety of other species including occasional ash, holly, elm, sycamore and elder (O2c – 10). The hedgerow shares a boundary with Compartment 2d to the south.

Occasional semi-mature ash and holly trees are present in the hedgeline. The hedgerow abuts a small stream to the north (O2 – 9). The managed canopy of the hedgerow varies in height from between 1.5 – 3m and 2 - 3m in width. A ruderal understorey of species is present which includes common nettle, cleavers and white dead-nettle with occasional woodland species such as lords and ladies.

A species-rich hedgerow is also present on the western boundary of Compartment 2c and is hawthorn dominated with occasional willow, rose, elder, sycamore and field maple (O2c – 11). The hedgerow is managed to a height and width of 2m with no standard trees present within the hedgeline (Photograph 17).

Photograph 17. Species-rich hedgerow along the western edge of Compartment 2c (O2c – 11).

A further species-rich hedgerow with mature trees is present on the northern boundary of Compartment 2c which also abuts the southern boundary of Compartment 2b, and has therefore been described in the previous compartment report.

Species-Poor Hedgerows

A species-poor hedgerow runs north to south through the centre of Compartment 2c and is dominated by hawthorn with a low number of other woody species including locally dominant blackthorn and elder (O2c – 8). The hedgerow is managed to a height and width of 1.5m and an understorey which is grass dominated is present, with species including false-oat grass, cock's foot and Yorkshire fog (Photograph 18).

A mature ash tree is present to the north of the hedgerow which has a hollow bole (Photograph 19).

Photograph 18. Species poor hedgerow O2c – 8.

Photograph 19. Ash tree at the northern end of hedgerow O2c – 8.

A recently planted hawthorn and blackthorn hedgerow is present to the north eastern corner of the compartment (O2c -5) and borders the area of semi-improved grassland near the new Oakham by-pass.

A further species-poor hedgerow with trees is present on the north western boundary of Compartment 2c, sharing a boundary with Compartment 2b. This hedgerow has been previously described.

Plantation Broadleaf Woodland

A linear strip of recently planted broadleaf woodland is present on the eastern boundary of Compartment 2c, boarding the Oakham by-pass (O2c - 13). Many tree and shrub species are present including hawthorn, holly, ash, blackthorn, sycamore, Norway maple, cherry, fir, willow and Scot's pine. A ground flora of semi-improved grassland is present beneath the plantation trees. The grassland is tussocky in places and appears to have been sown recently. Species include red fescue, perennial rye grass, Yorkshire fog, cock's foot, white clover, red clover, dandelion, teasel, speedwell, red dead-nettle, dock and rosebay willowherb.

Species

Bats

A hollow ash tree at the northern end of the hedgerow O2c – 8 could potentially provide roosting habitat for bats. In addition, the hedgerows, trees and woodland found within Compartment 2c have the potential to provide commuting and foraging habitat for these species.

Birds

The hedgerows and woodlands within Compartment 2c have the potential to provide suitable habitat for nesting and foraging farmland bird species.

Great Crested Newts

The balancing pond O2c – 3 at the north eastern corner of the compartment, as well as the surrounding grassland (O2c – 4), have the potential to support populations of great crested newts.

Reptiles

The balancing pond O2c – 3 at the north eastern corner of the compartment, as well as the surrounding grassland (O2c – 4), have the potential to support populations of reptiles, particularly grass snake. The stream at the northern edge of the compartment (O2c – 1) also has the potential provide a commuting and foraging corridor for this species.

Water Vole

The stream O2c – 1 at the northern boundary has the potential to support water vole and possible water vole burrows were recorded, however no other immediate evidence of water vole field signs were found at the time of survey.

The stream O2c – 9 at the southern boundary of the compartment offers low water vole potential due to heavy shading and the lack of suitable food plants.

This species may also utilise these streams for commuting.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 2c at the time of survey.

5.3.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 2c would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice, with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment, it is recommended that the following protected species surveys may potentially need to be carried out.

Compartment 2c was noted as having potential for a number of protected species.

The ash tree at the northern end of hedgerow O2c – 8 should be surveyed and assessed for its potential to support roosting bats.

The pond O2c - 3 and surrounding grassland O2c – 4 have the potential to support great crested newts and reptile populations. Therefore, it is recommended that these habitats are surveyed for the presence/absence of amphibians and reptiles. Consideration may also need to be given to surveying adjacent habitats for these species, particularly near the woodland and associated stream along the northern boundary of the compartment.

The stream at O2c – 1 has the potential to support water vole and potential burrows were identified. It is, therefore, recommended that a dedicated water vole survey should be undertaken along stream O2c -1 as well as the stream O2c – 9 on the southern boundary.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

5.4 Compartment 2d

Figure 02

5.4.1 *Compartment Description*

Compartment 2d covers an area of approximately 12.06ha on the southern rural edge of Oakham. The compartment is dominated by seven arable fields of varying sizes and is bounded by species-poor hedgerows often with mature trees. The compartment is spilt into two sections which are bisected by Uppingham Road, with one field situated to the south east of the road and six fields to the north west. The northern boundary of the larger section of Compartment 2d is demarcated by a hedgerow that abuts an area of offsite broadleaf woodland. A live railway line runs parallel to the western boundary of the compartment.

5.4.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 2d.

Statutory Sites of Nature Conservation Interest

There is one statutory site of nature conservation interest within 2km of Compartment 2d. This is the Rutland Water SSSI.

No part of Compartment 2d falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 2d.

No non-statutory sites of nature conservation interest fall within the compartment boundary. However, on the northern boundary of Compartment 2d scattered mature trees are present and are noted as being of Parish level importance.

Species

Records exist for protected species within a 2km radius of Compartment 2d, although no records are listed for within the boundaries of the compartment.

5.4.3 *Survey Results*

Habitats

Arable Fields

Compartment 2d is comprised of seven arable fields of varying shapes and sizes which were planted with crop at the time of survey. No distinct grassland field margins exist around any of the arable fields although strips of ruderal vegetation and scrub are present associated with the boundary hedgerows.

Species-Poor Hedgerows

The arable fields within Compartment 2d are generally bounded by species-poor hedgerows i.e. O2d – 1, 2, 8, 9, 10, 12, 14, 17 and 18. The hedgerows are dominated by hawthorn with a low number of other woody species present including ash, elder and sycamore and are generally managed to a height and width of 2m (Photograph 20).

The hedgerow understoreys generally support ruderal species such as common nettle, white dead nettle and cleavers with occasional species more typical of woodland habitats such as lords and ladies, lesser celandine and red campion.

Occasional mature sycamore and ash hedgerow trees occur in the several of the hedgerows within the compartment i.e. O2d – 1, 10, 14, 18.

Photograph 20. Species-poor hedgerow O2d – 1 on the eastern boundary of Compartment 2d.

A short section of unmanaged and overgrown hawthorn hedgerow to a height of 4-5m is present to the south of Compartment 2d, with an abundance of common nettle and cleavers in the field layer (O2d – 14). A mature ash tree is present to the south of the hedgerow and supports several cracks splits, tears and rot holes in its bole (Photograph 21).

Photograph 21. Overgrown hedgerow O2d – 14 with a mature ash tree in the foreground.

Species-Rich Hedgerows

A recently planted species-rich hedgerow is present at the south eastern corner of Compartment 2d, on the boundary of a small area of semi-improved grassland (O2d – 7). The hedgerow has been planted with a mix of typical hedgerow species including hazel, holly, field maple, blackthorn, hawthorn and dog rose. Occasional young ash standard trees have also been planted in the hedgerow.

A further species-rich hedgerow with an associated stream is present just to the north of this area and forms the boundary between Compartment 2d and 2c and has, therefore, been described in the previous compartment report.

Open Water

A shallow balancing pond with an average water depth of 30cm is present at the south eastern corner of Compartment 2d adjacent to the Oakham by-pass (O2d - 5). The pond is in a horseshoe shape covering an area of approximately 40m^2. Semi-improved grassland surrounds the pond (O2d – 6). It is evident that the pond and grassland have been created as part of the adjacent Oakham by-pass development.

The banks of the pond rise to 6 - 8m at an average aspect of 40 - 55º, with the pond margins supporting frequent bare muddy ground with occasional hard rush, great willowherb, creeping bent, creeping buttercup and pleurocarpus moss species (Photograph 22).

A mix of emergent aquatic species is present near the margins of the pond and include reed-mace, marsh marigold, brooklime, hard rush and common reed.

Locally frequent floating aquatic species are also present throughout the pond and include pondweed, water starwort and green algae.

Photograph 22. Balancing pond O2d – 5 surrounded by semi-improved grassland O2d – 6.

Semi-Improved Grassland

An area of semi-improved grassland (O2d 6) surrounds the pond O2d – 5 and appears to have been recently sown (Photograph 22). The grassland rises at a gentle incline from the pond to a height of approximately 3-4m. The height of the sward (>1m) indicates that the grassland is unlikely to be regularly managed. Species present, which are typical of a roadside grassland seed mix, include false-oat grass, red fescue and bent grass with frequent black knapweed and occasional common ragwort, colt's foot, ribwort plantain and yarrow.

Scattered Scrub

A thin line of scattered semi-mature hawthorn and elder scrub is present on bare stony ground (O2d – 11) following the line of the railway corridor at the western boundary of the compartment (Photograph 23).

Photograph 23. Railway corridor with scattered scrub (O2d – 11).

Plantation Broadleaf Woodland

A small woodland copse covering an area of approximately 80m^2 of maturing sycamore is present to the north of Compartment 2d (O2d – 13). A field layer of semi-improved grassland is present below the copse with an abundance of ruderal species including false-oat grass, cow parsley and cleavers (Photograph 24).

Photograph 24. Plantation woodland O2d – 13.

Semi-Natural Broadleaf Woodland

A thin linear belt of secondary semi-natural broadleaf woodland (O2d – 15) is present to the north of Compartment 2d, although is just outside of the compartment

boundary. A small stream is associated with the woodland (O2d – 16). A variety of mature and semi-mature trees are present within the woodland belt which form a relatively open canopy (Photograph 25). Tree species present include ash, crack willow and sycamore with an occasional shrub layer of scattered hawthorn, holly and elder.

The field layer of the woodland is dominated by ivy with occasional woodland species including lords and ladies and lesser celandine. Ruderal species such as common nettle and cow parsley are locally abundant.

The woodland belt is considered to be of Parish level importance within the background data results.

A 2 - 4m wide false-oat grass dominated grassland verge is present along the southern edge of the woodland within the compartment boundary.

Photograph 25. Semi-natural belt of broadleaf woodland just outside of the northern boundary of Compartment 2d.

A stream runs through the woodland, however, the majority of its length could not be assessed effectively due to lack of access and the presence of dense vegetation cover. The stream appeared to be no more than 1m wide with a shallow and slow flowing water channel, with often deep clay banks to 1.5 – 2.5m in height. It was not possible to assess whether aquatic vegetation was present.

Species

Water Voles

There is the potential for water voles to be present within the off-site stream near the northern compartment boundary.

Great Crested Newts

The balancing pond O2d – 5 and associated grassland O2d - 6 at the south eastern corner of Compartment 2d have the potential to support great crested newt populations.

Reptiles

The railway corridor on the western boundary of the compartment may act as a potential wildlife corridor for reptile species. There is also the potential for reptiles to be present within the balancing pond and associated grassland to the south east, particularly grass snakes. There is also the potential for reptiles to be foraging and commuting along the off-site stream and adjacent habitats near the northern compartment boundary.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 2d at the time of survey.

5.4.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 2d would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice, with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment, it is recommended that the following protected species surveys may potentially need to be carried out.

Compartment 2d has the potential to support a number of protected species.

The balancing pond at O2d – 5 has the potential to support great crested newt populations. Therefore it is recommended a dedicated survey should be undertaken of the pond and the surrounding semi-improved grassland terrestrial habitat.

Reptiles may also utilise the semi-improved grassland surrounding the pond O2d - 5, as well as the stream and associated woodland on the northern boundary. Dedicated reptile surveys should therefore be undertaken in these areas. The railway corridor on the western boundary of the compartment may act as a potential wildlife corridor for reptile species. Consideration may, therefore, need to be given to conducting reptile surveys along field margins.

There is the potential for water voles to be present within the off-site stream near the northern compartment boundary. A water vole survey should be conducted along the stream corridor. It has been previously discussed that a water vole survey should be undertaken on the stream between Compartment 2d and 2c to the south east (O2c – 9).

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

COMPARTMENTS 3a, 3b and 3c.

Figure 03

5.5 Compartment 3a

5.5.1 *Compartment Description*

Compartment 3a covers an area of approximately 7.8ha on the southern urban fringe of Oakham. The compartment is dominated by one large regular sized arable field bounded by species-poor hedgerows. The compartment is also bounded by Compartment 3b to the south. A live railway line runs along the eastern boundary of the compartment.

5.5.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

The Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 3a.

Statutory Sites of Nature Conservation Interest

There is one statutory site of nature conservation interest within 2km of Compartment 3a. This is the Rutland Water SSSI.

No part of Compartment 3a falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 3a.

No non-statutory sites of nature conservation interest fall within or abut the compartment boundary.

Species

Records exist for protected species within a 2km radius of Compartment 3a, although no records are listed for within the boundaries of the compartment.

5.5.3 *Survey Results*

Habitats

Arable Fields

The majority of Compartment 3a is one large arable field which was planted with a crop at the time of survey. No distinct field margins were present around the arable

field although strips of ruderal vegetation and grasses are present along hedgerow boundaries.

Species-Poor Hedgerows

Species-poor hedgerows bound the arable field within Compartment 3a and are generally dominated by hawthorn with a low number of other woody species including occasional blackthorn, elder and dog rose (i.e. O3a – 1, 3, 4, and 5). The majority of hedgerows are generally intact with few gaps and are managed to an average height of 2-4m and width of 3-4m.

Ruderal species dominate the hedgerow understoreys and include common nettle, cow parsley and cleavers along with occasional woodland species such as lesser celandine and lords and ladies (Photograph 26). Bramble and ivy are found occasionally within the hedgerow canopies.

Hawthorn hedgerows O3a – 4 & 5 have both been recently laid and replanted with more hawthorn saplings (Photograph 27).

The hedgerows O3a 3 & 4 form the boundary between Compartment 3a and Compartment 3b to the south.

Photograph 26. A typical species-poor hedgerow surrounding the arable field in Compartment 3a (O3a – 1).

Photograph 27. One of the laid hedgerows in Compartment 3a (O3a – 4).

Running Water

A small stream with a channel width of 0.5 – 1m is present to the north of Compartment 3a (O3a – 2) and is associated with hedgerow O3a – 1. The stream flows from west to east with a slow flow although at the time of survey there was little water present. The clay banks of the stream rise to a height of approximately 2m at an average aspect of 45º. No marginal or aquatic vegetation is present within the stream channel and the bank side vegetation was largely ruderal with species such as common nettle, cleavers and cow parsley.

Species

Birds

The hedgerows throughout Compartment 3a have the potential to support nesting and foraging farmland birds.

Reptiles

The railway on the eastern boundary of the compartment has the potential to provide a suitable wildlife corridor for reptile species.

Water Vole

The stream on the northern boundary of the compartment is considered unsuitable for water voles due to lack of suitable food plants and water channel.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 3a at the time of survey.

5.5.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice, with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

The railway line on the eastern boundary of the compartment has the potential to provide a wildlife corridor for reptiles. Consideration may, therefore, need to be given to conducting reptile surveys along adjacent field margins.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

5.6 Compartment 3b

5.6.1 *Compartment Description*

Compartment 3b covers an area of approximately 19.7ha on the southern urban fringe of Oakham. The compartment is dominated by four arable fields and is generally bounded by species-poor hedgerows. Compartment 3b is bounded by Compartment 3a to the north and Compartment 3c to the south west. A live railway track runs along the eastern boundary of the Compartment.

5.6.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 3b.

Statutory Sites of Nature Conservation Interest

There is one statutory site of nature conservation interest within 2km of Compartment 3b. This is the Rutland Water SSSI.

No part of Compartment 3b falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 3b.

No non-statutory sites of nature conservation interest fall within or abut the compartment boundary.

Species

Records exist for protected species within a 2km radius of Compartment 3b, although no records are listed for within the boundaries of the compartment.

5.6.3 *Survey Results*

Habitats

Arable Fields

The majority of Compartment 3b is comprised of four arable fields which were planted with a winter cereal crop at the time of survey. No distinct field margins were present around the arable fields although strips of ruderal vegetation and grasses are present along hedgerow boundaries.

Species-Poor Hedgerows

The majority of hedgerows within Compartment 3b are hawthorn dominated, species-poor and intensively managed to a height and width of 1m, often with extensive and frequent gaps i.e. (O3b – 5, 7 & 11). Occasional standard trees including young field maple, elm and ash are present in hedgerows O3b – 5 & 9 (Photograph 28). Ruderal species dominate the understorey of the hedgerows with species including false-oat grass, cock's foot, hogweed and garlic mustard. Bramble and ivy are found occasionally within the hedgerow canopies.

Species-poor hedgerows also bound the northern edge of Compartment 3b, sharing a boundary with Compartment 3a. These hedgerows have been described in the previous compartment report.

Photograph 28. Species-poor hedgerow with young trees O3b – 5.

Species-Rich Hedgerow

Species-rich hedgerows are present on the western and southern boundaries of Compartment 3b and support an abundance of hawthorn with a variety of other woody species including frequent blackthorn, dog rose, elder, ash and elm (O3b – 3 & 4). Both hedgerows are managed to a height of 1.5m and width of 2 - 2.5m (Photograph 29).

Hedgerow O3b – 3 forms a boundary between Compartment 3b and Compartment 3c to the south west.

Ruderal species dominate the hedgerow understorey and include common nettle, cleavers and garlic mustard with occasional woodland species such as lords and ladies and red campion. Bramble and ivy are found occasionally within the hedgerow canopies.

A wet ditch is associated with both of the hedgerows and have a narrow channel (>30cm) and shallow water depth (>15cm) with a sluggish to stagnant flow. The clay banks rise to 1.5m in height at an aspect of 70-80º. The banks and water channel are overgrown with common nettle, bramble and great willowherb.

Photograph 29. Species-rich hedgerow 3b-4.

Species

Reptiles

The railway on the eastern boundary of Compartment 3b has potential to provide a wildlife corridor for reptile species.

Water Voles

The ditches associated with hedgerows within Compartment 3b are considered unsuitable for water voles due to lack of suitable food plants and water channel.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 3b at the time of survey.

5.6.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows, where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 3b would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice, with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment, it is recommended that the following protected species surveys may potentially need to be carried out.

The railway line on the eastern boundary of the site has the potential to provide a wildlife corridor for reptiles. Consideration may, therefore, need to be given to conducting reptile surveys along adjacent field margins.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

5.7 Compartment 3c

5.7.1 *Compartment Description*

Compartment 3c covers an area of approximately 9.0ha on the southern urban fringe of Oakham. The compartment is dominated by one large regular sized arable field and bounded by species-rich hedgerows. The compartment is bounded by Compartment 3b to the north east and is also geographically separated from Compartments 4a and 4b to the west by a minor road.

5.7.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

The Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 3c.

Statutory Sites of Nature Conservation Interest

There is one statutory site of nature conservation interest within 2km of Compartment 3c. This is the Rutland Water SSSI.

No part of Compartment 3c falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 3c.

No non-statutory sites of nature conservation interest fall within or abut the compartment boundary.

Species

Records exist for protected species within a 2km radius of Compartment 3c, although no records are listed for within the boundaries of the compartment.

5.7.3 *Survey Results*

Habitats

Arable Fields

Compartment 3c comprises a large arable field which was planted with a winter cereal crop at the time of survey. No distinct field margins were present around the arable fields although strips of ruderal vegetation and grasses are present along hedgerow boundaries.

Species-Rich Hedgerows

All within Compartment 3c are species-rich and support an abundance of hawthorn with a variety of other species such as occasional to frequent elm, blackthorn, elder, rose, pedunculate oak, field maple, ash and hazel (O3c – 2 to 5). The hedgerows are managed to a height and width of 1.5 - 2.5m and are generally intact with few or no gaps (Photograph 30).

Ground flora associated with the hedgerows includes ruderal vegetation such as cleavers, bramble, common nettle and cow parsley with woodland species such as red campion, bluebell and lords and ladies. No standard trees are present within the hedgerows in Compartment 3c.

A species-rich hedgerow is present along the boundary between Compartment 3c and Compartment 3b to the north west and has been described in the previous compartment report.

Photograph 30. Species-rich hedgerow O3c-4.

Species

Nesting Birds

The hedgerows within Compartment 3c have the potential to support nesting and foraging farmland birds.

Other Protected Species

No evidence of, or the potential for, other protected species was noted in Compartment 3c at the time of survey.

5.7.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 3c would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Nesting Birds

Consideration would always need to be given to the protection of breeding birds which may be potentially present within hedgerows found throughout the compartment.

COMPARTMENTS 4a; 4b and 4c

Figure 04

5.8 Compartment 4a

5.8.1 *Compartment Description*

Compartment 4a covers an area of approximately 14.4ha on the western urban fringe of Oakham and consists predominantly of two large semi-improved grassland pasture fields bounded by species-poor hedgerows. Compartment 4a is geographically separated from Compartment 4b to the south by Braunston Road.

5.8.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There are no European protected sites of nature conservation interest within 2km of Compartment 4a.

Statutory Sites of Nature Conservation Interest

There are no statutory sites of nature conservation interest within 2km of Compartment 4a.

No part of Compartment 4a falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 4a.

No non-statutory sites of nature conservation interest fall within or abut the compartment boundary.

Species

Records exist for protected species within a 2km radius of Compartment 4a, although no records are listed for within the boundaries of the compartment.

5.8.3 *Survey Results*

Habitats

Semi-Improved Grassland

Compartment 4a is dominated by two large semi-improved grasslands fields managed as pasture and supports botanical communities more typical of swards

which have undergone less agricultural intensification than improved grasslands. The field to the south of the compartment (O4a – 6) is managed to a sward height of approximately 15-20cm and an abundance of grass species such as false-oat grass, Yorkshire fog and cock's foot with occasional perennial rye-grass are present. Occasional to frequent herbaceous species also occur within the sward including creeping buttercup, dandelion, spear thistle, dock, daisy and common nettle (Photograph 31). Three mature pedunculate oaks are present towards the centre of the field and four mature hawthorn are also present at the northern end close to a boundary stream (O4a – 7).

Photograph 31. Semi-improved grassland O4a – 6.

The northern most semi-improved grassland field O4a – 1 could not be directly surveyed due to access restrictions. The field was surveyed from the margins and appeared to support an abundance of grass species such as Yorkshire fog, cock's foot, false-oat grass and tufted-hair grass as well as rush species. However, a full species list could not be obtained. Ridge and furrow was present throughout the grassland field (Photograph 32).

Photograph 32. Ridge and furrow semi-improved grassland pasture (O4a-1).

Improved Grassland

A smaller area of improved grassland is present to the south eastern corner of Compartment 4a with a species-poor sward typically dominated by perennial rye grass and planted young pedunculate oak, ash and beech trees (O4a – 5). Occasional daffodils have been planted beneath the trees as well as low growing ornamental roses. Other herbaceous species present in the grassland include occasional daisy, creeping buttercup, dock, speedwell, dandelion and common mouse-ear.

Species-Poor Hedgerows

Species-poor hedgerows bound the northern most grassland field O4a – 1 (i.e. O4a – 2, 3 & 4). As access could not be gained to the grassland all boundary hedgerows were surveyed from a distance with binoculars. The majority of hedgerows appeared to be hawthorn dominated with a low number of other woody species such as occasional elder and semi-mature ash (Photograph 33). The hedgerows appeared to be generally undermanaged to a height of 4-6m often with frequent and wide gaps.

Photograph 33. Species-poor hedgerow O4a – 2.

Species-Rich Hedgerows

Species-rich hedgerow O4a - 9 is present along the western and southern boundary of the southern most grassland field O4a – 6 and is occasionally managed to a height and width of 1.5 – 2m (Photograph 34). The hedgerow supports an abundance of hawthorn and rose as well as various other woody species such as occasional elder, blackthorn, elm and hazel. The hedgerow understorey supports a dominance of ruderal species such as common nettle, cleavers, cow parsley and dock as well as occasional woodland species including lords and ladies and garlic mustard.

Several mature ash trees were recorded throughout the hedgeline and occasional dead willow stumps were also present to the south.

Photograph 34. Species-rich hedgerow O4a-9.

Running Water

A shallow stream, with an average depth of 20cm, is present through the centre of Compartment 4a (O4a – 7) and is bounded by a thin linear belt of semi-natural broadleaf woodland (O4a – 8). The stream channel is narrow in width (>0.5m) with clear slow flowing water running from west to east (Photograph 35). The channel substrate is composed of clays and rock with banks to 1m in height. No aquatic vegetation is present within the stream channel and the stream banks support ruderal species including common nettle, dock, cock's foot and rosebay willowherb as well as woodland species such as lesser celandine and lords and ladies.

Photograph 35. Stream O4a – 7.

Semi-Natural Broadleaf Woodland

A thin linear belt of semi-natural woodland forms a canopy along the length of the stream O4a – 7 through the centre of Compartment 4a (Photograph 36). The woodland appears to be secondary in origin with two lines of over mature hawthorns, once probably hedgerows, which have now grown to over 12m in height. Semi-mature willows are present throughout the woodland and appear to have

naturally regenerated. The field layer of the woodland supports an abundance of ruderal species including ivy, bramble, cleavers, common nettle and dock.

Photograph 36. Linear semi-natural woodland O4a – 8 running along stream O4a – 7.

Species

Water Vole

The stream at O4a – 7 has low potential for supporting water voles due to the heavy shading of the water course and lack of suitable food plants. The stream may be used by this species as a commuting corridor.

Reptiles

There is the potential for reptiles, particularly grass snakes, to be present within the stream O4a – 7 and adjacent habitats, which may be utilised for foraging and commuting.

Nesting Birds

The hedgerows and woodland within Compartment 4a all have the potential to support nesting and foraging farmland birds.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 4a at the time of survey.

5.8.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out

and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows, where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 4a would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

The stream at O4a – 7 has been identified as having low water vole potential. It is therefore recommended that a dedicated water vole survey be carried out.

Reptiles surveys should also be conducted on the stream O4a – 7 and adjacent habitats as these species may utilise such habitats for foraging and commuting.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

5.9 Compartment 4b

5.9.1 *Compartment Description*

Compartment 4b covers an area of approximately 20ha on the western urban fringe of Oakham. The compartment is dominated by an extensive field of semi-improved grassland owned by the Woodland Trust, with a smaller field to the north with unknown ownership. The fields are bounded by species-poor hedgerows which often support mature trees. Substantial woodland planting has recently taken place in the Woodland Trust grassland. Compartment 4b is bounded by Compartment 4c to the south which forms part of the Harris Grove and Ball's Meadow Woodland Trust site.

5.9.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There are no European protected sites of nature conservation interest within 2km of Compartment 4b.

Statutory Sites of Nature Conservation Interest

There are no statutory sites of Nature Conservation interest within 2km of Compartment 4b.

No part of Compartment 4b falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 4b.

One non-statutory site of nature conservation interest falls within the compartment boundary. This is a pond that is of Parish level interest (O4b – 2). The compartment also abuts an area of grassland that is of Parish level interest. This is to the southwest of Compartment 4b. This area of grassland also contains a pond of Parish level interest.

Species

Records exist for protected species within the compartment boundary. Great crested newts were recorded within the pond O4b - 2 in April 2004.

In addition, records exist for other protected species within a 2km radius of the site.

5.9.3 *Survey Results*

Habitats

Semi-Improved Grassland

An extensive area of wet semi-improved grassland dominates Compartment 4b and is owned and managed by the Woodland Trust (O4b – 01). The grassland is dominated by Yorkshire fog with frequent to locally abundant tufted hair-grass. cock's foot, false-oat grass and red fescue. The grassland is generally species-poor with creeping buttercup and meadow buttercup abundant throughout with frequent common sorrel. Occasional disturbed areas of the grassland support an abundance of common nettle, spear thistle and broadleaf dock.

Ridge and furrow is prominent to the north of the compartment where soft rush, creeping buttercup and tufted hair-grass are frequent to locally abundant in the furrows with Yorkshire fog almost solely dominant on ridges.

The grassland rises to an incline on its north western boundary, bordering Compartment 4c, another part of the Woodland Trust site. Wild carrot was frequent in this area and is indicative of grasslands which have escaped intensive agricultural improvement. Woodland compartments have been planted within last few months throughout the grassland, particularly near to the western boundary. A variety of species have been planted including pedunculate oak, ash, willow, hazel and alder (Photograph 37).

Photograph 37. Semi-improved wet grassland with recently planted trees (O4b – 1).

A further area of semi-improved grassland on ridge and furrow much smaller in extent is present to the north of Compartment 4b (O4b – 4). The grassland could not be directly surveyed due to access restrictions, but appeared to support a similar botanical community to the extensive grassland to the south, although without the species more typical of damp ground such as tufted-hair grass and soft rush.

Species-Poor Hedgerows

Species-poor hedgerows are present along the majority of grassland boundaries within Compartment 4b, and are occasionally managed with wide spreading canopies (i.e. O4b – 3, 5, 6, 7, 9, 10 & 12).

The hedgerows are hawthorn dominated with a low number of woody species present including locally abundant elm and blackthorn. Occasional standard trees are present within several of the hedgerows and include semi-mature to mature ash, oak and willow (Photograph 38). Ruderal species dominate the hedgerow understoreys and include bramble, ivy, common nettle, cleavers, white dead-nettle, false-oat grass and Yorkshire fog with occasional woodland species including lesser celandine and lords and ladies.

Four of the hedgerows have ditches associated with them (O4b - 3, 5, 11 and 12), and are on average 60cm wide and 1m high with a slow to sluggish flow and a shallow water depth (>20cm). Ruderal vegetation dominates the ditch banks.

Hedgerow O4b – 9 forms the boundary between Compartment 4b and Compartment 4c to the south.

Photograph 38. Species-poor hedgerow O4b-9 with mature ash trees.

Open Water

A small circular pond covering an area of approximately 20-30m^2 (O4b – 2) is present on the south western boundary of grassland field O4b – 1 (Photograph 39). The fairly uniform pond banks rise to 1.5 m in height at an aspect of 35-40º. The pond banks support occasional tufted hair-grass and soft rush along with frequent and extensive areas of bare ground. No aquatic vegetation was present within the pond.

Photograph 39. Pond (O4b-2)

Species

Bats

Two mature ash trees are present in the hedgerow at O4b – 3. One of the ash trees supports frequent deadwood, cracks and splits. These features have the potential to support roosting bats.

The grasslands, trees and hedgerows found throughout Compartment 4b have the potential to provide suitable foraging and communing habitat for bat species.

Great Crested Newts

It is considered that the pond at O4b - 2 on the western compartment boundary has low potential for great crested newt due to a lack of aquatic vegetation. Suitable terrestrial habitats for foraging do, however, surround the pond.

The pond is noted within the background data search as being of Parish level importance, with a population of great crested newts present of unknown size.

Reptiles

There is the potential for reptiles to be utilising the mosaic of habitats on-site, particularly grass snake, near the pond O4b – 2.

Nesting Birds

The grasslands, hedgerows and trees within Compartment 4b have the potential to provide nesting and foraging habitat for a variety of farmland bird species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 4b at the time of survey.

5.9.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows, where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice, with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment, it is recommended that the following protected species surveys may potentially need to be carried out.

The pond O4b – 2 is noted within the background data search as being of Parish level importance and a population of great crested newts of unknown size was noted as being present with the pond during April 2000. Therefore, a dedicated survey should be undertaken to ascertain their presence/absence within the pond and surrounding terrestrial areas.

Reptile surveys should also be conducted within adjacent habitats to O4b – 2, such as within grasslands and along boundary hedgerows.

Two trees which may potentially support bat roosts have been identified along hedgerow O4b – 3. A dedicated bat survey should be conducted on all trees with bat potential in the compartment.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

5.10 Compartment 4c

5.10.1 *Compartment Description*

Compartment 4c covers an area of approximately 5.6ha on the south western urban fringe of Oakham. The land within the compartment is owned and managed by the Woodland Trust. The compartment consists of an area of recently planted broadleaf woodland surrounded by a wide strip of semi-improved grassland. The entire compartment is bounded by tall and generally under managed species-poor hedgerows with a species-rich hedgerow to the east. Compartment 4c is bounded by Compartment 4b to the north, which is also mostly owned by the Woodland Trust.

5.10.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There are no European protected sites of nature conservation interest within 2km of Compartment 4c.

Statutory Sites of Nature Conservation Interest

There are no statutory sites of nature conservation interest within 2km of Compartment 4c.

No part of Compartment 4c falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 4c.

No part of compartment 4c falls within the boundary of any statutory site of nature conservation interest.

The compartment does, however, abut an area of grassland that is of Parish level interest. This is to the west of Compartment 4c and is owned by the Woodland Trust (Gorse Field). This area of grassland also contains a pond of Parish level interest, which is approximately 7m from the boundary of Compartment 4c.

Species

No records exist for protected species within Compartment 4c although records do exist for protected species within a 2km radius of the compartment.

5.10.3 *Survey Results*

Habitats

Plantation Broadleaf Woodland

An extensive area of Compartment 4b has been recently planted with broadleaf trees by the Woodland Trust and is on a steep southern incline (O4c – 5, Photograph 40). A wide variety of species have been planted and include hawthorn, blackthorn, ash, pedunculate oak, hazel, willow, silver birch and alder. Occasional semi-mature hawthorn shrubs are present within the woodland.

Tall semi-improved grassland is present below the saplings with mainly ruderal species including false-oat grass, cock's foot, tufted hair-grass, hogweed, cow parsley and spear thistle.

Photograph 40. Recently planted broadleaved woodland O4c – 5.

Semi-Improved Grassland

An L-shaped area of short sward semi-improved grassland O4c – 2 surrounds the plantation woodland O4c – 5 within Compartment 4c. To the east of the woodland, the grassland rises at a steep incline (Photograph 41). The sward appears to be rabbit grazed and is generally species-poor. Yorkshire fog is dominant within the sward with occasional to frequent tufted hair-grass, sorrel, creeping buttercup, broadleaf dock and common nettle. Wild carrot is locally frequent near the peak of the incline with occasional field wood-rush. Ant hills are present in this area, although a distinct increase in floral richness was not noted in and around the ant hills, as is often found in species-rich grasslands.

To the north of the woodland, the grassland is level although with gentle hills and hummocks. Soft rush and tufted hair-grass is frequent within the hummocks, particularly near to the northern boundary of the grassland.

Photograph 41. Semi-improved grassland field O4c – 2.

Species-Poor Hedgerows

Species-poor hedgerows are present along the north, western and southern boundaries of Compartment 4c (O4c – 3, 4 & 10). The hedgerows are dominated by hawthorn with a low number of other woody species such as frequent blackthorn, elm and occasional elder.

There are occasional semi-mature to mature pedunculate oak, ash and elm trees present in the hedgelines. Hedgerows O4c 3 & 4 are generally unmanaged and overgrown with wide spreading crowns, often with dense patches of bramble within the hedgerow canopies (Photograph 42).

Ruderal species dominate the understorey and include common nettle, cow parsley and false-oat grass with occasional woodland species such as lords and ladies and lesser celandine.

Photograph 42. Tall species-poor hedgerow (O4c – 4).

A further species-poor hedgerow is also present along the northern boundary of Compartment 4c and abuts the southern boundary of Compartment 4b.

Species-Rich Hedgerows

A species-rich hedgerow is present along the eastern boundary of Compartment 4c and is managed to a height of 2.5m and width of 3m (O4c – 1, Photograph 43). The hedgerow is dominated by hawthorn with a number of other woody species such as occasional to frequent elder, elm, dog rose and blackthorn. Occasional semi-mature ash and pedunculate oak trees are present within the hedgeline.

A grassland verge is present to the east of the hedgerow and supports a variety of species including Yorkshire fog, false oat grass and red fescue with frequent black knapweed, meadowsweet and lesser celandine.

Photograph 43. Species-rich hedgerow O4c - 1.

A wet ditch is present on the northern side of the hedgerow with banks rising to 0.5m at an aspect of 70-80º. The channel of the ditch is narrow (>1m) with a sluggish flow and supports a shallow water depth. The banks and channel of the ditch are overgrown with bramble, common nettle and great willowherb.

Tall Ruderal/Herb and Fern

A small area of tall ruderal vegetation is present within the north western corner of Compartment 4c (O4c – 8, Photograph 44). Creeping thistle dominates this habitat with frequent broadleaf dock, tufted hair-grass, common nettle, creeping buttercup and spear thistle. The vegetation appears to have developed over bare ground.

A sinuous belt of dense mature hawthorn scrub up to 8m in width is present around the vegetation (O4c - 7). Occasional semi-mature ash trees are present in the scrub line. Common nettle, cleavers and lords and ladies are present in the understorey with frequent to abundant areas of bare ground.

Photograph 44. Tall ruderal/herb and fern O4c – 8 surrounded by dense scrub O4c – 7.

Dense Scrub

A small area of dense scrub with mature hawthorn, blackthorn, bramble and gorse is present to the south of the compartment (O4c – 6) within the recently planted broadleaf woodland. A further area of scrub is also present in the south east compartment corner and consists of a small copse dense mature hawthorn with occasional semi-mature elm trees (O4c - 11). Ivy and common nettle dominates the field layer.

Marsh

A small wet depression covering an area of approximately 15-20m^2 is present to the north of the compartment within the semi-improved grassland (O4c – 9). An area of marsh has developed within the depression and supports an abundance of soft rush and occasional great willowherb, Yorkshire fog and broadleaf dock (Photograph 45). The depression is wet underfoot and small shallow pools occur with an abundance of water starwort. Tufted hair-grass, creeping buttercup and creeping thistle are present on the surrounding banks which rise to a uniform height of 1m. Occasional semi-mature hawthorn shrubs are also present on the banks.

Photograph 45. Marsh O4c - 9.

Species

Nesting Birds

The dense scrub, hedgerows and standard trees within Compartment 4c have the potential to support nesting and foraging farmland birds.

Great Crested Newts

There is the potential for great crested newts to be foraging within the grasslands, hedgerows and marsh in Compartment 4c, particularly near the southern boundary as this species has been recorded in a pond in Compartment 4b (O4b - 2).

Reptiles

The grasslands, hedgerows and marsh in Compartment 4c also have the potential to support foraging reptiles species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 4c at the time of survey.

5.10.4 *Recommendations*

Hedgerows

Where appropriate, the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 4c would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following the British Standard (BS) 5837 guidelines. Tree where mature or fully mature are of most value and impossible to replace in the short to medium term.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodland should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice, with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

Great crested newts have been recorded in Compartment 4b directly to the north of Compartment 4c. In addition, a pond of Parish level importance is present in the grassland to the west of Compartment 4c.

Given the habitats present with Compartment 4c (marsh, grassland and hedgerows) it is recommended that a dedicated great crested newt survey be undertaken to ascertain presence/absence within the compartment. In this respect, reptile surveys should also be conducted within the compartment.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

COMPARTMENTS 5a; 5b and 5c.

Figure 05

5.11 Compartment 5a

5.11.1 *Compartment Description*

Compartment 5a covers an area of approximately 20ha on the western urban fringe of Oakham. The compartment is dominated by both improved and semi-improved grassland bounded by species-poor hedgerows, often with standard trees. Two small field ponds are present to the south of the compartment. Compartment 5a is bounded by Compartment 5c to the north and geographically separated by a road from Compartment 4a to the south.

5.11.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There are no European protected sites of nature conservation interest within 2km of Compartment 5a.

Statutory Sites of Nature Conservation Interest

There are no statutory sites of nature conservation interest within 2km of Compartment 5a.

No part of Compartment 5a falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 5a.

No part of compartment 5a falls within or abuts the boundary of any non-statutory site of nature conservation interest.

Species

No records exist for protected species within the boundary of Compartment 5a, although records do exist for protected species within a 2km radius of the compartment.

5.11.3 *Survey Results*

Improved Grassland

Improved grassland fields dominate the northern half of Compartment 5a and appear to be mechanically cut to an average sward height of 5-10cm, although the sward

may also be partially grazed (O5a – 5 & 7) (Photograph 46). The grasslands, typical of agriculturally improved swards, are species-poor and dominated by perennial rye grass with occasional red fescue, Yorkshire fog and false oat grass. Herbaceous species typical of improved grassland appear frequently throughout the sward such as white clover, meadow buttercup and creeping buttercup with occasional ruderal species including common nettle and hogweed.

Photograph 46. Improved grassland at the northern half of Compartment 5a (O5a – 5).

Semi-Improved Grassland

An extensive field of ridge and furrow semi-improved grassland dominates the southern half of Compartment 5a and appears to be occasionally sheep grazed to a sward height of 10-15cm (O5a – 8). The field is sloped to the south at an angle of approximately 20º and levels out towards the base (Photograph 47).

Photograph 47. Semi-improved grassland O5a – 8 from its ridge.

The sward is grass dominated towards the ridge and trough of the grassland slope with species such as false-oat grass, cock's foot, Yorkshire fog, meadow foxtail, crested dog's tail and bent grass present. Perennial rye grass, more typical on improved grasslands, attains dominance only occasionally within the sward. The

herbaceous component of the grassland is more abundant towards the central reaches with species including dandelion, red clover, creeping buttercup, spear thistle, dock and daisy present.

A field pond is present in the centre of the grassland (O5a - 10) where a wet flush runs from the southern pond banks and along the south facing grassland slope. Species present in the wet flush are typical damp habitats and include sweet grass, brooklime, rush, creeping buttercup and water crowfoot.

Unimproved Grassland

A small field of tussocky grassland pasture is present at the southern boundary of Compartment 5a (O5a – 11) and supports a variety of grasses including Yorkshire fog, false-oat grass, red fescue, crested dog's tail, bent grass and meadow foxtail as well as occasional perennial rye grass (Photograph 48). The grassland supports frequent to occasional herbaceous species more typical of unimproved grasslands such as common bird's-foot trefoil, greater stitchwort, meadow vetchling and cuckoo flower. More common species such as creeping buttercup, meadow buttercup, lesser celandine, field forget-me-not and black horehound are also present. The field is marshy towards the southern boundary with patches of rush and tufted hair-grass becoming more frequent.

The species assemblages within this grassland are somewhat typical of an unimproved pasture which has not be significantly agriculturally improved However the grassland is generally rank with a reduction of herbaceous species present, probably due periods of grazing management which has not been targeted towards nature conservation.

Photograph 48. Unimproved grassland O5a – 11.

Species-Poor Hedgerows

Species-poor hedgerows bound the majority of grassland fields in Compartment 5a and are all hawthorn dominated with a low number of other woody species present such as elder, blackthorn and rose. The majority of hedgerows within Compartment 5a are generally intact and regularly managed to an average height and width 1.5 -

3m (i.e. O5a – 1, 13, 21, 20 & 22) (Photograph 49), with occasional semi-mature to mature standard ash trees present. The hedgerow on the western boundary of the extensive field of semi-improved grassland is, however, defunct with frequent gaps present (O5a – 14).

Photograph 49. Regularly managed species-poor hedgerow 05a – 1.

Further to the south of the compartment, taller only occasionally managed species-poor hedgerows are present, and bound the small field of unimproved grassland (Photograph 50). The hedgerows reach an average height of between 3-4m, with occasional semi-mature to mature standard ash trees present (O5a – 16 & 18). The tall unmanaged defunct hedgerow on the northern boundary of the unimproved grassland supports frequent gaps with semi-mature ash and willow standard trees (O5a – 15).

Ruderal species generally dominate the hedgerow understoreys throughout Compartment 5a with species such as white dead-nettle, common nettle and cow parsley present.

Hedgerow O5a – 21 forms a boundary between Compartment 5a and Compartment 5c to the north.

Photograph 50. Occasionally managed species-poor hedgerow O5a – 18.

Open Water

A small field pond (O5a – 10) covering an area of approximately 30-40m^2 is present in the centre of the extensive semi-improved grassland (O5a – 8). A dense stand of compact rush and soft rush is present around the margins of the pond with locally abundant emergent brooklime and fool's watercress throughout the water's surface (Photograph 51). The pond appeared to be on average 30cm deep, however, only occasional patches of open water are present due to the abundance of emergent vegetation.

The banks of the pond rise to a shallow aspect approximately 1m in height to the surrounding semi-improved grassland where an abundance of tall grasses are presen,t including tufted-hair grass and Yorkshire fog. A wet flush runs from the pond south down the slope of the surrounding grassland.

Photograph 51. Field pond at O5a – 10.

A smaller shallow field pond (O5a – 12), covering an area of approximately 10-15m^2, is present within the field of unimproved grassland to the south of Compartment 5a. The pond resembles more of wet depression within the field and

supports an abundance of sweet grass and occasional soft rush with compact rush and tufted hair grass present on the margins.

Dense Scrub

A dense copse of tall mature hawthorn scrub is present on the eastern boundary of the unimproved grassland (O5a – 17) (Photograph 52). The scrub is approximately 5m in height and is located on a steep east facing bank with a high canopy. Common nettle dominates the field layer with extensive areas of bare ground.

Photograph 52. Mature hawthorn scrub (O5a – 17).

Scattered Broadleaf Trees

A linear belt of planted trees approximately 6-8m wide is present to the north-west of Compartment 5a, on the southern boundary of the improved grassland (O5a – 2). Species present include mature ash, lime, horse chestnut, balsam poplar and frequent semi-mature Leyland cypress.

Occasional hawthorn and blackthorn shrubs are present within the woodland strip. The ground layer is dominated by Yorkshire fog, lords and ladies and common nettle.

Species

Great Crested Newts

The field pond 05a – 10 and surrounding grasslands have the potential to support populations of great crested newt.

Reptiles

The field pond 05a – 10 and surrounding grasslands also have the potential to support populations of reptiles, particularly grass snake.

Birds

The hedgerows and grassland within Compartment 5a have the potential to provide suitable habitat for nesting and foraging farmland bird species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 5a at the time of survey.

5.11.4 *Recommendations*

Hedgerows

Where appropriate, the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows, where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice, with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

The pond at O5a – 10 has the potential to provide suitable habitat for great crested newts and reptiles, as does the surrounding grassland habitat. It is, therefore, recommended that dedicated surveys are undertaken with respect to these species.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

5.12 Compartment 5b

5.12.1 *Compartment Description*

Compartment 5b covers an area of approximately 3.65ha on the north western urban fringe of Oakham. It consists predominantly of an improved grassland field with a linear belt of broadleaved woodland and defunct species-rich hedgerow on the perimeter.

5.12.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There is one European protected compartment of nature conservation interest within 2km of Compartment 5b. This is Rutland Water SPA and Ramsar site.

Statutory Sites of Nature Conservation Interest

There is one statutory site of nature conservation interest within 2km of Compartment 5b. This is the Rutland Water SSSI.

No part of Compartment 5b falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 5b.

No part of Compartment 5b falls within the boundary of any non-statutory site of nature conservation interest.

However, the compartment does abut grassland which is noted as being of Parish level importance. The grassland lies at the north western tip of Compartment 5b.

Species

No records exist for protected species within the boundary of Compartment 5b, although records do exist for protected species within a 2km radius of the compartment.

5.12.3 *Survey Results*

Improved Grassland

Compartment 5b is dominated by an improved grassland field (O5b – 1). The field could only be surveyed from the boundary fence due to constraints with access permissions. The grassland appeared to be maintained by mechanical cutting to a short sward height of approximately 5cm, with the typical dominant grass species being perennial rye grass with occasional herbaceous species (Photograph 53).

Photograph 53. The improved grassland field dominating Compartment 5b (O5b – 1).

Semi-Natural Broadleaf Woodland

A strip of semi-natural broadleaf woodland forms the western boundary of Compartment 5b (O5b – 3) (Photograph 54). The woodland is dominated by mature ash with occasional sycamore, pedunculate oak and horse chestnut. The field layer of the woodland forms an extensive cover of woodland species including lords and ladies, garlic mustard, lesser celandine and the ancient woodland indicator species dog's mercury. The shrub layer is largely absent except for a line of mature hawthorn and elder along the western woodland edge which appears to be a defunct hedge line.

It is possible that the mature trees within this woodland where originally planted. However, the presence of the ancient woodland indicator dog's mercury in the field layer is indicative of continuous woodland cover and this habitat should therefore be classified as semi-natural.

Photograph 54. Semi-natural broadleaf woodland (O5b – 3).

Semi-Improved Grassland

At the southern margins of the improved grassland field two areas of tall semi-improved grassland are present (O5b – 4 & 5). The grassland supports a higher frequency of grass and herbaceous species than the surrounding improved grassland with species including false-oat grass, cock's foot, common nettle, cow parsley, broadleaf dock and young developing bramble and hawthorn scrub. Occasional maturing lime and beech trees are present in this area.

It is evident that the semi-improved grassland has developed due to only occasional cutting on the margins of the improved grassland field, and therefore a more ruderal and diverse sward has developed.

Species-Rich Hedgerow

A hawthorn dominated defunct hedgerow is present along the road corridor on the northern boundary of the Compartment 5b (O5b – 2) (Photograph 55). The hedgerow is managed to a height of approximately 2m and a width of 1m, with occasional wide gaps present. A variety of other woody species is present in the length of the hedgerow and include elder, ash, oak, apple, horse chestnut and cherry. Several mature standard ash and beech trees are present within the hedgeline. The hedgerow understorey supports an abundance of ruderal species such as cow parsley, ivy and cleavers with woodland species such as lords and ladies, lesser celandine and dog's mercury also present.

Photograph 55. Species-rich hedgerow O5b – 2.

Species

Birds

The hedgerows and woodland within Compartment 5b have the potential to provide suitable habitat for nesting and foraging farmland bird species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 5b at the time of survey.

5.12.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows, where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 5b would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Nesting Birds

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

5.13 Compartment 5c

5.13.1 *Compartment Description*

Compartment 5c covers an area of approximately 18.67ha on the north western rural fringe of Oakham. The compartment is dominated by several irregular sized fields of improved and semi-improved pasture grassland bounded by hedgerows, often with standard trees. A stream runs from west to east along the southern boundary of the compartment and is bounded by broadleaf woodland. Compartment 5c is geographically separated from Compartment 6 to the east by an 'A' road, and bounds the northern boundary of Compartment 5a to the south.

Full access to the northern half of Compartment 5c was restricted due to access permissions. An assessment of habitat in these areas was, however, made from field boundaries using binoculars wherever possible.

5.13.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There are no European protected sites of nature conservation interest within 2km of Compartment 5c.

Statutory Sites of Nature Conservation Interest

There are no statutory sites of nature conservation interest within 2km of Compartment 5c.

No part of Compartment 5c falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 5c.

No part of Compartment 5c falls within or abuts the boundary of any non-statutory site of nature conservation interest.

Species

Records exist for protected species within the compartment boundary.

Records also exist for protected species within a 2km radius of the compartment.

5.13.3 *Survey Results*

Semi-Improved Grassland With Scattered Broadleaf Trees

The northern half of Compartment 5c is dominated by an extensive semi-improved grassland pasture field with scattered pockets of mature broadleaf trees (O5c – 2) (Photograph 56). Full access could not be gained to this grassland due to access permissions and, therefore, a full species list could not be compiled. The grassland was, however, surveyed at close distance from the field boundaries.

The grassland is sheep grazed and appears tussocky in places, with grass species including false-oat grass, Yorkshire fog, cock's foot and perennial rye grass. Occasional ruderal species are present within the sward including common nettle and creeping thistle. Scattered mature trees in the field include ash, oak, lime and pine.

Photograph 56. Semi-improved grassland with scattered broadleaf trees O5c – 2.

Three smaller fields of semi-improved grassland are present further to the south and appear to be grazed at a low intensity and are, as a result, tussocky throughout (O5c – 22 & 26). The grassland swards are evidently less improved than perennial rye dominated grasslands supporting an abundance of grasses such as false-oat grass, Yorkshire fog, meadow foxtail, bent grass and cock's foot with occasional to frequent ruderal herbaceous species such as sorrel, common nettle and dock.

An abundance of tall ruderal herbs are present in semi-improved grassland O5c – 20 and is evidently only occasionally grazed.

Improved Grassland

Three improved grassland pasture fields are present to the south of Compartment 5c and are typically grass dominated with the agricultural grass species perennial rye (O5c 9, 14 & 19) (Photograph 57). The grasslands appear to be regularly grazed with an average sward height of 10cm.

Herbaceous typical species of agriculturally improved grasslands are also present and include white clover, daisy and meadow buttercup as well as ruderal species such as cow parsley, common nettle and cleavers.

Photograph 57. Improved grassland O5c – 14.

Species-Rich Hedgerows

A number of species-rich hedgerows are present within Compartment 5c. The hedgerows support an abundance of hawthorn as well as a high varying mix of other woody species such as blackthorn, elm, elder, rose, ash, holly, sycamore and oak (O5c – 1, 7 & 8). Frequent mature standard trees of pedunculate oak, ash, sycamore and lime are present in hedgerows 5c – 7 & 8 and occur at approximately 10m intervals (Photograph 58). One mature oak is present in hedgerow O5c – 1 on the north eastern boundary of the compartment.

The hedgerows are generally managed to a height of 3m and 2-3m width. The understoreys of the hedges support largely ruderal species including common nettle, cleavers, hogweed, ivy and cow parsley with occasional woodland species such as lesser celandine and lords and ladies.

Photograph 58. Species-rich hedgerow with trees O5c – 8.

Species-Poor Hedgerows

The majority of boundary hedgerows within Compartment 5c are species-poor and thus support a low number of woody species. The hedgerows are typically hawthorn dominated with a low varying mix of blackthorn, rose and elder. The hedgerows along the western and northern boundary of Compartment 5c are defunct and undermanaged reaching heights of approximately 6 - 8m (O5c – 3, 4, 23 & 24) (Photograph 59). Occasional ash, oak and willow standard trees are present in the hedgelines.

Hedgerow understoreys are dominated by ruderal species such as common nettle, cow parsley and cleavers as well as occasional woodland species such as red campion, lords and ladies and lesser celandine.

Photograph 59. Defunct species-poor hedgerow O5c – 3.

Managed species-poor hedgerows are more prominent to the south of Compartment 5c, maintained at average heights and widths of 2-3m (O5c – 10, 15, 16 & 18) (Photograph 60). Like the unmanaged hedgerows to the north a low number of woody species are present and hedgerow understoreys are dominated by ruderal

herbaceous species. Occasional mature ash and oak standard trees are present in the hedgelines.

A species-poor hedgerow forms the boundary between Compartment 5c and Compartment 5a to the south.

Photograph 60. Managed species-poor hedgerow (O5c – 18).

Plantation Broadleaf Woodland

Several small woodlands are present within Compartment 5c and generally appear to be plantation in origin.

A thin linear belt of plantation woodland is present to the south of the compartment (O5c – 11 & 13) and bounds a canalised stream (O5c – 12) (Photograph 61). Tree species present include mature London plane, sycamore, horse chestnut and beech with an understorey comprised mainly of planted saplings in plastic tubes such as oak, hawthorn and holly. Frequent natural regeneration of species is evident with species including elder, ash and elm saplings. The field layer of the woodland is dominated by cow parsley and occasional to frequent woodland species such as lords and ladies and lesser celandine.

Photograph 61. Plantation woodland and associated stream (O5c – 11).

A linear belt of broadleaf woodland (O5c – 6), probably plantation in origin, is present along the southern boundary of semi-improved grassland field O5c – 2, to the very north of Compartment 5c. The woodland could not be effectively surveyed due to access permissions; therefore a full species could not be compiled. The woodland appeared to be dominated by mature ash and sycamore with an occasional shrub layer of hawthorn and elder.

Running Water

A heavily canalised stream or river, possibly created for amenity value, is present along the southern boundary of Compartment 5c (O5c – 12) (Photograph 62). The stream is bounded by plantation woodland (O5c – 11 & 13).

The stream is approximately 5m wide, with a water channel approximately 20-30cm deep and slow flowing over a substrate of clay. The wooded banks of the stream slope at a shallow aspect to the waters' edge at approximately 15 to 20º. The water channel supports little in the way of aquatic or marginal vegetation apart from occasional patches of pond weed and iris.

Photograph 62. Canalised stream O5c – 12.

Bare Ground

A small area of bare ground is present to the south eastern boundary of Compartment 5c and is used for dressage by local riding stables (O5c – 17). Gravel dominates this habitat with occasional broad-leaved willowherb, meadow grass and moss present towards the boundaries.

Buildings And Tall Ruderal Vegetation

A stone built bungalow is present at along the central eastern boundary of Compartment 5c (O5c – 21). No access was gained to the building but it was viewed from a close distance. The bungalow has a slate roof which is in good condition with attic skylights. There are two sheds associated with the bungalow; a lean-to shed made of breeze blocks with a corrugated iron roof; and a concrete shed with a corrugated iron roof. The garden area appears undermanaged as the ground colonisation of tall ruderal herbs was evident with the original ornamental planting. Occasional young tree species are present including cherry, ash, elder and holly.

Species

Bats

The mature ash trees within the hedgerows at O5c – 10 & 18 could provide potential roosting habitat for bats.

In addition in hedgerow O5c – 24, a dead stump was noted in the hedgerow with some deadwood present, which could provide potential roosting habitat for bats.

The buildings at O5c – 21 could potentially provide roosting habitat for bats.

The woodlands, grassland hedgerows and trees present in Compartment 5b have the potential to provide suitable foraging and commuting habitat for bat species.

Birds

A number of bird boxes have been erected on mature trees across Compartment 5b with additional bird and owl boxes in the woodland O5c - 10.

Water Vole

The stretch of stream O5c – 12 at the southern boundary of the compartment is of low potential for water voles, as the banks are not suitable for nest burrowing and there are no suitable food plants present. The stream may also be used for commuting by this species.

Reptiles

There is the potential for reptiles to be present along the stretch of stream and surrounding woodland grassland at the southern compartment boundary, particularly grass snake.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 5c at the time of survey.

5.13.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 5c would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

A number of the mature trees within the hedge lines were identified as having potential features that may support roosting bats. In addition the buildings at O5c – 21 were identified as having potential to support roosting bats. It is, therefore, recommended that dedicated bat surveys are conducted in these areas.

The stream O5c – 12 along the southern boundary of the compartment has been identified as being of low potential for water voles, therefore, a dedicated survey is recommended.

A dedicated reptile survey should also be conducted on the stream and adjacent habitats at the southern compartment boundary to assess whether these species are present.

A number of nesting boxes for birds and owls were fixed to mature trees across the site and particularly within the woodland at O5c – 10. It is recommended that the trees and boxes are surveyed to establish utilisation by bird species, particularly barn owl.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

COMPARTMENT 6

Figure 06

5.14 Compartment 6

5.14.1 *Compartment Description*

Compartment 6 is the largest compartment surrounding Oakham and covers an area of approximately 44.4ha, between the north western fringe of Oakham and eastern edge of Barleythorpe.

The compartment is dominated by irregularly sized pasture fields bounded by managed species-poor hedgerows, often with mature standard trees and thin, linear broadleaved woodland belts. Only occasional hedgerows within Compartment 6 support enough woody species to be considered species-rich.

The majority of the pasture fields are improved in nature, with occasional fields supporting botanical communities more typical of semi-improved swards. The distinct patters of ridge and furrow are evident throughout the pasture fields. An extensive area of short-mown amenity grassland is present to the south of Compartment 6 and is currently used as a sports field. Other habitats within Compartment 6 include the occasional field pond to the north and a thin stream running west to east throughout the centre of the compartment.

Compartment 6 is geographically separated by several other near-by compartments by the Oakham by-pass and other A-roads.

5.14.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There are no European protected sites of nature conservation interest within 2km of Compartment 6.

Statutory Sites of Nature Conservation Interest

There are no statutory sites of nature conservation interest within 2km of Compartment 6.

No part of Compartment 6 falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 6.

No part of Compartment 6 falls within or abuts the boundary of any statutory site of nature conservation interest.

The compartment does, however, abut an area of grassland that is noted of being of Parish level interest. This is to the south of Compartment 6.

Species

Records exist for protected species within the compartment boundary.

Records exist for bats utilising the compartment. Pipistrelle and brown long-eared bats were recorded in 2006 and 2007. Additionally bats have been recorded utilising the grassland of Parish level importance that abuts Compartment 6. Brown long-eared bats were recorded as being active over the compartment grasslands throughout 1990.

Grass snake was recorded within the compartment in 2006 and 2007.

In addition, records exist for other protected species within a 2km radius of the site.

5.14.3 *Survey Results*

Habitats

Improved Grassland

The majority of pasture on the north western corner of Compartment 6 is improved grassland grazed by sheep and horses with a short sward height of up to 5-10cm (i.e. 06 – 1, 7, 14, 16, 54 & 70) (Photograph 63). Typical of improved grassland, grass species are dominant within the swards with a dominance of perennial rye grass and other occasionally occurring grasses including cock's foot, crested dog's tail, red fescue and Yorkshire fog.

Herbaceous species are generally occasional to frequent within the swards and are again typical of improved meadows with species including dandelion, daisy, white clover and meadow buttercup.

Locally frequent to abundant areas of spear thistle, creeping thistle and common nettle are also present within the swards, caused by nutrient enrichment by grazing livestock.

The distinctive pattern of ridge and furrow is evident throughout the majority of the improved pasture fields and indicates that this pasture was once tilled.

Photograph 63. A typical field of improved grassland pasture in Compartment 6 (O6 – 70).

Semi-Improved Grassland

Pasture fields within the central section of Compartment 6 and to the north eastern corner are dominated by semi-improved grassland (i.e. O6 – 35, 36, 40, 44 & 49) (Photograph 64). The majority of these grasslands support tall unmanaged swards and are likely to be former improved grassland fields where regular grazing has now ceased.

Photograph 64. A typical field of semi-improved grassland within Compartment 6 (O6 – 44).

False-oat grass is abundant within the all of the grassland fields and is a species typical of abandoned pasture fields. Other grass species include occasional to frequent cock's foot, Yorkshire fog, meadow foxtail, meadow grass, red fescue and perennial rye grass.

Herbaceous species within the sward are mostly ruderal and include frequent common nettle, hogweed, cow parsley, spear thistle, creeping thistle, red clover, broadleaf dock, cleavers and meadow buttercup. The distinctive patterns of ridge and furrow are evident in several of the semi-improved grassland fields to the north eastern corner of Compartment 6.

The majority of the semi-improved grassland surrounds the Hawksmead Park development on the eastern and central sections of Compartment 6. It was evident that many of these grasslands are targeted for future development as ground testing areas and earth scrapes were present throughout (i.e. O6 – 24, 28, 40 & 51).

Amenity Grassland

An extensive area of regularly managed, short-mown amenity grassland is present to the southern edge of Compartment 6 (O6 – 64, Photograph 65). The sward has been mechanically mown to an average height of 5cm with a typical amenity grassland mix of perennial rye grass, red fescue and abundant dandelion, greater plantain and white clover.

The field is used and maintained as a sports pitch.

Photograph 65. Extensive area of amenity grassland O6 – 64.

Species-Poor Hedgerows

The majority of pasture fields within Compartment 6 are bounded by species poor-hedgerows which are generally intact with few or only occasional small gaps (O6 – 3, 8, 10, 17, 31, 37 & 67) (Photograph 66). The hedgerows are managed by flailing to an average height of 2-4m in height and width. The hedgerows typically support a low number of woody species with a dominance of hawthorn with varying frequencies of blackthorn, elder and rose species.

Photograph 66. A typical species-poor hedgerow in Compartment 6.

Ruderal species dominate the hedgerow understoreys and include common nettle, cleavers, broad leaved dock, cow parsley and garlic mustard with occasional woodland species such as lords and ladies and lesser celandine. Woody climbers such as ivy and bramble occur frequently within the hedgerow canopies.

Occasional standard trees are present within many of the hedgerows within Compartment 6 (O6 – 3, 19, 43, 46, 62 & 65) (Photograph 67). Species are typically ash and oak and are often mature to fully mature in age supporting features typical of stag headed trees.

Photograph 67. A typical species-poor hedgerow with trees in Compartment 6 (O6 – 43).

Species-Rich Hedgerows

Occasional hedgerows within Compartment 6 support a variety of woody shrub species through the hedge line and should be considered species-rich. Hedgerow O6 – 4 & 11 runs along the north western edge of Compartment 6 adjacent to Main Road (Photograph 68). Hawthorn is abundant within the hedgerows with occasional to frequent elder, blackthorn, elm, lime, horse chestnut, wild privet, ash and midland hawthorn. Closely managed to a height and width of 2m, frequent mature standard

trees of horse chestnut, lime and ash are present with dense ivy growth throughout their crowns and boles.

Photograph 68. Species-rich hedgerow with trees O6 – 11.

A high, overgrown, hedgerow is present on the south eastern boundary of Compartment 6 and is 4m in height and 5 – 6m in width (O6 – 66). The hedgerow almost forms a double hedge set on a low raised bank with abundant hawthorn and occasional to frequent blackthorn, holly, elder, dog rose and ash.

Several mature and semi-mature ash and crack willow trees are present in the hedgerow, with frequent herbaceous species typical of woodland habitats including red campion, lesser celandine, lords and ladies and occasional dog's mercury, an ancient woodland indicator. It is possible that the hedgerow may be an old field boundary or was once part of former woodland.

A species-rich hedgerow is also present to the north east of Compartment 6 (O6 – 47) and supports an abundance of hawthorn with occasional ash, elm, blackthorn, elder and dog rose. Managed to a height and width of 2.5m, the hedgerow supports a line of frequent mature stag headed ash trees.

Plantation Broadleaf Woodland

Three linear woodland belts run west to east along field margins in Compartment 6 and appear to have been planted. Two mature hornbeam and ash plantation woodland belts are present to the north (O6 – 46 & 52) (Photograph 69), and are approximately 10m in width with occasional hawthorn in the shrub layer. Frequent ruderal herbaceous species are present within the field layer and include cow parsley, white dead nettle and cleavers with an abundance of bare ground.

Photograph 69. Linear hornbeam and ash plantation O6 – 52.

A linear belt of plantation woodland dominated by sycamore, field maple and Norway maple is present to the south of Compartment 6 (O6 – 33) and is approximately 10-15m in width. Occasional hawthorn is present within the shrub layer and cow parsley, common nettle and hogweed dominate the field layer.

A number of young plantation woodlands have been planted within the last four years to the north of Compartment 6, along the edge of semi-improved and improved pasture fields (i.e. O6 – 50, 53, 55 & 60). The woodlands are generally 20-30m in width and have been planted with a typical mix of species including ash, oak, hawthorn, whitebeam, wild privet, hazel, blackthorn, wild cherry, willow and alder. Ruderal vegetation dominates the field layer of the young woodlands and includes common nettle, hogweed, cow parsley, cock's foot and false-oat grass.

Open Water

Two field ponds are present to the north western edge of Compartment 6. O6 – 2 is present within an improved field and is heavily shaded by dense hawthorn, elder and goat willow scrub. At the time of survey the pond was little more than a wet depression at a depth of 1.5m covering an area of 30-40m^2. Shallow puddles were present in the pond area at the time of survey with no aquatic vegetation. Low clay banks rise to 1-1.5m above the pond and generally support bare earth with occasional to frequent common nettle and lords and ladies.

Pond O6 – 9 is present within a field corner just to the south and is also heavily shaded by surrounding hawthorn scrub, as well as several mature ash and horse chestnut trees (Photograph 70). The pond covers an area of approximately 30 m^2 and supports stagnant shallow water up to 30cm-40cm in depth. Green algae are abundant throughout the pond with occasional water crowfoot. Shallow and wide muddy banks circle the pond and the roots of the bankside trees and scrub are exposed into the water margins and form part of the pond bank. Common nettle is abundant throughout the surrounding terrestrial habitat with frequent patches of lords and ladies and bare ground.

Photograph 70. Pond O6 – 9.

A large rectangular balancing lagoon approximately 100 m^2 in area is present within the centre of Compartment 6 (O6 – 29). Possibly created as part of the adjacent Hawksmead Park development, the lagoon could not be directly accessed due to the presence of security fencing.

Duckweed appears to dominate the water's surface, with a thin belt of reed-mace around the lagoon margins. The lagoon banks are uniform, rising to a height of approximately 3-4m at an angle of 60 - 70º. Ruderal plant species appear to dominate the banks with frequent daffodil. Scattered semi-mature trees and shrubs skirt the top of the lagoon banks and the encircling terrestrial area up to 15-20m with species including alder, ash, willow, hawthorn and dogwood.

A further linear but much smaller balancing lagoon is present on the very north western edge of Compartment 6, along Main Road (O6 – 61). The lagoon is approximately 5m wide and supports stagnant water up to 60cm in depth with abundant reed-mace. The lagoon banks rise to 3m in height at an aspect of 60º. Ruderal grasses and herbs are present and include Yorkshire fog, false-oat grass, cock's foot, ribwort plantain, broadleaf dock, great willowherb and common nettle.

Running Water

A canalised stream runs west to east through the centre of Compartment (O6 – 25). The stream could not be fully surveyed due to the presence of security fencing along much of its length.

To the east, the stream channel is 2m wide with shallow water up to 30cm in depth and a sluggish, almost stagnant flow. Reed-mace is abundant throughout the water channel. The clay banks rise to 2.5m in height at an aspect of 45º. Common nettle and cleavers are dominant on the banks, with frequent lesser celandine and great willowherb. Young alder, ash, goat willow and hawthorn are also present along the bank edges.

The stream is culverted towards its western edge with the channel dropping approximately 1m in height as it travels further to the east. The channel is narrower

in this section (up to 60cm), with a slow flow and shallow water up to 30cm in depth (Photograph 71). Locally abundant great willowherb and reed-mace is present throughout the channel. The stream banks rise to a height of 3m at a steeper aspect of 50 - 60º. Nettle and cleavers dominate the banks with rarely recorded young alder and goat willow.

Photograph 71. Eastern section of the canalised stream O6 – 25.

Buildings and Bare Ground

Part of the Hawksmead Park development is present within the centre of Compartment 6 and comprises office and residential developments with areas of bare ground used to store building materials and equipment (O6 – 38).

Species

Bats

A number of mature hedgerow trees throughout Compartment 6 have the potential to support roosting bats, particularly where trees are stag-headed and have cracks, splits and rot holes (i.e. O6 – 43, 47 & 48).

A dilapidated stone built stable block is present on the north western boundary of Compartment 6 (O6 – 5), which may have potential for supporting roosting bats.

The networks of hedgerows, linear woodland plantations, open water and tall grassland have the potential to provide a variety of foraging and commuting habitats for bat species.

The background data search indicated that bats have been recorded utilising the site within the last few years.

Birds

The hedgerows, linear belts of woodland and tall grasslands found within Compartment 6 have the potential to provide suitable foraging and nesting habitat for a variety of farmland bird species.

A number of the mature trees along hedgerows have owl boxes which have the potential to support a number of raptor species as well as owls. There is the potential for barn owl to nest within these boxes.

Amphibians and Reptiles

Two ponds are present to the north of Compartment 6 (O6 – 2 & 9) as well as two balancing lagoons (O6 – 29 & 61). There is the potential for great crested newts to be present within these water bodies as well as reptile species, particularly grass snake. Herpetofaunal mitigation fencing is present along the northern boundaries of Compartment 6, presumably installed as part of the recently created Oakham by-pass. This is a good indication that reptile species and/or great crested newts are present on-site.

The long semi-improved grasslands within the centre of the compartment have the potential to provide foraging grounds for reptile species, as well as the stream running through the centre of the compartment.

The background data search indicated that grass snake was recorded within the compartment in 2006 and 2007.

Water Vole

The stream running through the centre of the site has low to medium potential for supporting water voles, as a variety of suitable food plants are present due and high clay banks provide a burrowing substrate. Two burrows were noted near the culvert at the eastern section of the stream, however, it was not possible to assess whether they were water vole due to the presence of security fencing along the stream banks.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 6 at the time of survey.

5.14.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows, where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 6 would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment, it is recommended that the following protected species surveys may potentially need to be carried out.

Historical bat records exist within Compartment 6. The current Phase 1 surveys have identified a number of mature hedgerow trees that have the potential to support roosting bats, particularly where trees are stag-headed and have cracks, splits and rot holes. In addition, the stone building identified at O6 – 5 has been identified as having bat roosting potential. It is recommended that a dedicated bat survey is conducted on all buildings and trees which have the potential to support roosting bats.

Two ponds are present to the north of Compartment 6 that have the potential for great crested newts to be present, together with reptile species, particularly grass snake, in the surrounding habitat. Herpetofaunal mitigation fencing is present along the northern boundaries of Compartment 6, presumably installed as part of the recently created Oakham by-pass. This is a good indication that reptile species and/or great crested newts are present on-site.

In addition, the long semi-improved grasslands within the centre of the compartment and the stream have the potential to provide foraging grounds for reptile species and these should also be surveyed to ascertain presence/absence. There are also recent historical records for grass snake in Compartment 6.

The stream running through the centre of the compartment has low to medium potential for supporting water voles, as a variety of suitable food plants are present.

In addition, two burrows, which could potentially be attributed to water vole, were noted near the culvert at the eastern section of the stream. Due to access constraints at the time of the current Phase 1 survey, it is recommended that a dedicated water vole survey be undertaken.

The above surveys should be undertaken according to Best Practice at the time of commission.

Nesting Birds

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

It is recommended that surveys of the owl/raptor boxes attached to mature trees are carried out in order to ascertain the presence of these species, particularly barn owl.

COMPARTMENT 7

Figure 07

5.15 Compartment 7

5.15.1 *Compartment Description*

Compartment 7 covers an area of approximately 50ha on the north western urban fringe of Oakham, above the recently created Oakham by-pass. To the east, the compartment is dominated by arable fields and to the west, improved grassland pasture fields prevail with occasional pockets of semi-improved grassland. The distinctive patterns of ridge and furrow are evident throughout the majority of the grassland pasture fields.

Pasture and arable fields are bounded by species-poor hedgerows, often with mature standard trees. The majority of the hedgerows are intact and regularly managed with few gaps, although several hedgerows to the east are no longer stock proof and defunct. Remnants of species-rich hedgerows are present along the northern boundary of the compartment.

A recently planted linear plantation broadleaf woodland runs north to south through the eastern section of Compartment 7 with a dense area of scrub on the eastern boundary adjacent to a railway line. A number of field ponds are scattered throughout Compartment 7.

Compartment 7 is geographically separated from Compartment 8 to the east by the railway line and from Compartment 6 to the south by the Oakham by-pass.

5.15.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There are no European protected sites of nature of nature conservation interest within 2km of Compartment 7.

Statutory Sites of Nature Conservation Interest

There is one statutory site of nature conservation interest within 2km of Compartment 7. This is Burley Wood SSSI, which lies approximately 1.9km to the southeast of Compartment 7.

No part of Compartment 7 falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 7.

No part of Compartment 7 falls within or abuts the boundary of any statutory site of nature conservation interest.

Species

No records exist for protected species within the boundary of Compartment 7, although records do exist for protected species within a 2km radius of the compartment.

5.15.3 *Survey Results*

Habitats

Arable Fields

The eastern section of Compartment 7 is divided into five arable fields which were planted with a winter cereal crop at the time of survey. The fields are generally even sized covering a wide expanse of ground. No distinct grassland field margins exist around any of the arable fields although strips of ruderal vegetation and scrub are present associated with the boundary hedgerows.

Improved Grassland

Improved grassland pasture dominates the western section of Compartment 7 and were grazed by sheep at the time of survey, with a short sward height of up to 5-10cm (i.e. O7 – 7, 12, 15, 18, 23 & 47) (Photograph 72). Typical of improved grassland, grass species are dominant within the swards with an abundance of perennial rye grass and other occasionally occurring grasses including cock's foot, crested dog's tail, red fescue and Yorkshire fog.

Herbaceous species are generally occasional to frequent within the swards and are again typical of improved meadows with species including dandelion, daisy, white clover and meadow buttercup.

Locally frequent to abundant areas of spear thistle, creeping thistle and common nettle are also present within the swards, probably caused by nutrient enrichment by grazing livestock.

Photograph 72. Typical improved pasture field within Compartment 7 (O7 – 12).

Species-Poor Hedgerows

The majority of pasture and arable fields are bounded by species-poor hedgerows which are in general regularly managed to average heights and widths of 2-3m and intact with few gaps (i.e. O7 – 6, 8, 11, 13, 16, 19, 29 & 38). Hedgerows with frequent gaps are more common to the east of Compartment 7 (i.e. 36, 37 & 41). The hedgerows are generally dominated by hawthorn with a low number of other woody species such as occasional blackthorn, elder, rose and elm species. Occasional mature to semi-mature standard trees are found within the majority of the hedgerows within Compartment 7. Ash trees are by far the most common standard tree with occasional elm, oak and field maple (Photograph 73).

Ruderal herbaceous species dominate the understorey of the hedgerows and include common nettle, cow parsley, cleavers, broad-leaved dock, hogweed and white dead nettle with occasional to frequent woodland species such as red campion, lesser celandine and lords and ladies.

Photograph 73. A typical species-poor hedgerow with occasional ash trees in Compartment 7 (O7 – 20).

Species-Rich Hedgerows

Species-rich hedgerows are not common within Compartment 7 and are restricted to the northern boundary. To the north east a high species-rich hedgerow to 6m is present and supports a variety of woody species including midland hawthorn, field maple, ash, elder, blackthorn, dogwood, elm and an abundance of common hawthorn (O6 – 43 & 46). Several mature standard field maple trees are present in the hedgerow and one mature ash tree. Ruderal herbaceous species dominate the hedgerow understorey.

A further section of species-rich hedgerow is present along the north western corner of Compartment 7 and forms a double hedgerow, supporting an abundance of blackthorn and hawthorn and occasional field maple, rose, dogwood, elder and hazel coppice stools (O7 – 17). Ruderal species are abundant in the hedgerow understorey with frequent woodland species including red campion and lords and ladies. The hedgerow is infrequently managed with occasional gaps to a height of 3m. A number of semi-mature and mature ash and oak trees are present in the hedgerow, some of which are stag headed.

Open Water

A number of small field ponds are scattered throughout Compartment 7 (O7- 10, 22, 25, 40 & 44). These ponds are generally small in extent (<20m^2) with a shallow water depth (>50cm) and generally with occasional to frequent aquatic vegetation such as rush, sweet grass, pondweed, duckweed and low willow scrub. Tall ruderal vegetation surrounds the majority of the ponds with occasional hawthorn and elder scrub and mature ash trees (i.e. O6 – 10 & 25) (Photograph 74).

Photograph 74. Field pond O7 – 26 surrounded by hawthorn scrub and mature ash trees.

A much larger pond is present along the southern boundary of Compartment 7 covering an area of approximately 50-60sqm (O7 – 1, Photograph 75). The pond is likely to have been created as a balancing pond for the recently created Oakham by-pass just to the south. A thin band of marginal vegetation is present around the pond margins and includes common reed, reed-mace and lesser spearwort.

The banks of the pond rise to an average and relatively uniform height of 2-2.5m at an aspect of 35-40º. The banks support managed semi-improved grassland with cock's foot, crested dog's tail and false-oat grass present, with tufted hair grass becoming dominant nearer to the pond margins. Occasional to frequent herbaceous species are present within the sward and include common knapweed, spear thistle, broad leaved dock, yarrow, ragwort, common mouse-ear and cow parsley.

Photograph 75. Balancing pond O7 -1.

Plantation Broadleaf Woodland

A young linear belt of plantation woodland runs north to south throughout the centre of Compartment 7 and is approximately 20-25m in width (O7 – 31). A typical mix of native trees and shrubs to 6m in height have been planted and includes species such as ash, beech, hazel, hawthorn, ash, oak and willow. Tall ruderal vegetation and grasses dominate below.

Dense Scrub

A dense belt of mature scrub is present adjacent to the railway line along the south eastern boundary of Compartment 7 (O7 – 35, Photograph 76). Mature hawthorn and elder scrub to an average height of 4-5m form a closed canopy, under a field layer comprising almost solely of bare and stony ground with locally dominant patches of common nettle. A line of semi-mature ash, often with coppiced stools skirts the western boundary of the scrub.

It is likely that this scrub has developed due to natural succession over former railway sidings.

Photograph 76. Mature hawthorn and elder scrub along the edge of the railway line.

Species

Bats

A number of the mature trees within hedgerows in Compartment 7 have the potential to support roosting bats due to the presence of cracks, splits, tears, rot holes and old woodpecker holes.

The hedgerows, trees and grasslands within the Compartment 7 have the potential to provide foraging and commuting habitat for bat species.

Birds

The hedgerows, trees and linear belts of woodland and scrub found within Compartment 7 have the potential to provide suitable foraging and nesting habitat for a variety of farmland bird species.

Reptiles and Amphibians

Several field ponds are scattered across Compartment 7 (O7 – 1, 10, 22, 25, 40, 44). There is the potential for great crested newts to be present within these ponds as well as reptile species, particularly grass snake. Herpetofaunal mitigation fencing is present along the southern boundaries of Compartment 7, presumably installed as part of the recently created Oakham-by-pass. This is a good indication that reptile species and/or great crested newts are present on-site.

The railway on the eastern boundary of the site has the potential to provide a 'wildlife corridor' for reptile species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 7 at the time of survey.

5.15.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

All species-rich hedgerows within Compartment 7 would need to be fully surveyed to assess whether they are likely to meet the criteria of an 'important' hedgerow under the Hedgerow Regulations 1997.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

A number of the mature trees within hedgerows in Compartment 7 have the potential to support roosting bats due to the presence of cracks, splits, tears, rot holes and old woodpecker holes. Dedicated bat surveys should be undertaken on trees which have the potential to support rooting bats within the compartment.

Several field ponds are scattered across Compartment 7. There is the potential for great crested newts to be present within these ponds as well as reptile species, particularly grass snake in the surrounding habitats. Herpetofaunal mitigation fencing is present along the southern boundaries of Compartment 7, presumably installed as part of the recently created Oakham-by-pass. This is a good indication that reptile species and/or great crested newts are present on-site. Therefore dedicated great crested newt and reptile surveys should be undertaken to ascertain presence/absence.

The railway on the eastern boundary of the compartment has the potential to provide a wildlife corridor for reptile species. Consideration should, therefore, be given to conducting reptile surveys in adjacent habitats.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

COMPARTMENT 8

Figure 08

5.16 Compartment 8

5.16.1 *Compartment Description*

Compartment 8 covers an area of approximately 23ha on the northern urban fringe of Oakham. The compartment is dominated by large regular sized arable fields bounded by managed species-poor hedgerows, with a distinct area of scattered trees and scrub to the south, forming part of an abandoned small holding.

The disused and fragmented Oakham to Melton canal runs through centre of the site and a railway line runs parallel to the western boundary. A thin linear belt of semi-natural ash woodland forms part of a small stream which runs west to east along the northern boundary of the compartment.

Compartment 8 is geographically separated from Compartment 7 to the west by the railway line and from Compartment 9a to the east by a minor road, garden centre and small industrial site.

5.16.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

The Rutland Water SPA and Ramsar site lies within a 2km radius of Compartment 8.

Statutory Sites of Nature Conservation Interest

There are two statutory sites of nature conservation interest within 2km of Compartment 8. These are Burley Wood and Rutland Water SSSI, which lie approximately 1.9km to the southeast of Compartment 8.

No part of Compartment 8 falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 8.

Two ash trees are noted as being present within Compartment 8 near the eastern boundary and have since been removed.

In addition, a stretch of the disused Oakham canal which is noted as being of Parish level importance lies within the boundary of Compartment 8.

Species

No records exist for protected species within the boundary of Compartment 8, although records do exist for protected species within a 2km radius of the compartment.

5.16.3 *Survey Results*

Habitats

Arable Fields

The majority of Compartment 8 is divided into four arable fields which were planted with a winter cereal crop at the time of survey. The fields are generally even sized covering a wide expanse of ground. No distinct grassland field margins exist around any of the arable fields although strips of ruderal vegetation and scrub are present associated with the boundary hedgerows.

Species-Poor Hedgerows

Species-poor hedgerows bound the majority of the arable fields within Compartment 8 and are generally dominated by hawthorn with a low number of woody species such as occasional blackthorn, elder and dog rose (i.e. O8 – 2, 3, 9 & 11). Hedgerow O8 – 9 runs along the old course of the fragmented Oakham to Melton canal which is dry in this section. The majority of hedgerows within Compartment 8 are generally intact with few gaps and are managed by flailing to an average height of 2-4m and width of 3-4m (Photograph 77).

Photograph 77. A typical species-poor hedgerow surrounding the arable fields in Compartment 8 (O8 – 3).

Ruderal species dominate the hedgerow understoreys and include common nettle, cleavers, cow parsley and garlic mustard with occasional woodland species such as lords and ladies and lesser celandine. Woody climbers such as ivy and bramble occur frequently within the hedgerow canopies.

The only hedgerow to support standard trees is O8 – 14 on the eastern compartment boundary, where two mature ash trees are present and are covered in a dense tangle of ivy.

Dense Scrub and Scattered Trees

A live railway line runs parallel to the western boundary of Compartment 8 and supports only thin lines of scattered semi-mature ash trees and dense hawthorn and blackthorn scrub (O8 – 4 & 5). Bare stony ground prevails throughout the ground layer of these linear habitats, mainly comprising of railway ballast, with occasional ruderal herbaceous species such common nettle, ivy and garlic mustard (Photograph 78).

Photograph 78. Scattered ash trees along the railway line on the western boundary of Compartment 8 (O8 – 5).

Four mature ash trees are present in the south eastern field of Compartment 8 and are likely to be a remnant of an old hedge line (O8 – 12). As the trees were situated within the middle of a cropped arable field they could only be viewed from a distance of approximately 30m with binoculars. The majority of the trees were, however, stag headed and supported rot holes, splits, tears and woodpecker holes which have the potential to be exploited by a variety of faunal species.

Open Water

A disused and fragmented stretch of the Oakham to Melton canal runs north to south through the centre of Compartment 8 (O8 – 8, Photograph 79). A linear strip of semi-natural broadleaf woodland is present along the canal corridor (O8 – 7). The canal has been identified as being of Parish importance in the background data search.

To the south, the canal holds water and has a channel width of approximately 8m. The water is stagnant and eutrophic throughout this stretch and little aquatic vegetation is present apart from occasional to locally frequent reed-mace and brooklime. Distinctive patches of green algae are present throughout the water channel.

Crack willow is abundant in the canal, particularly to north. Many mature and collapsed trees are present and the water channel is almost completely overgrown in parts with willow vegetative re-growth.

Photograph 79. A fragmented section of the disused Oakham to Melton canal (O8 – 8).

To the north of the wet section of canal, a wide hedgerow is present (O8 – 9), which follows the old course of the canal. The only vestige of the canal along this section is a small area of open water (O8 – 10) approximately 30m^2 in extent within the middle of the hedge line (Photograph 80). The water level was low at the time of survey (> 5cm) with occasional patches of damp ground and wet mud. Sweet grass is dominant throughout the open water with occasional great willowherb and locally abundant brooklime. Mature hawthorn shrubs of the surrounding hedgerow partly over shade the area of open water.

Photograph 80. Shallow area of open water within a hedge line, probably a remnant of the disused Oakham to Melton canal (O8 – 10).

Semi-Natural Broadleaf Woodland

A thin belt of semi-natural woodland approximately 8 – 10m wide (O8 – 7), is present along the banks of the disused Oakham to Melton canal. The woodland is likely to be secondary in origin and may be partly planted. Frequent semi-mature ash is present in the woodland canopy within occasional Scot's pine.

The shrub layer supports occasional hawthorn, holly and dog rose, with a field layer dominated by cow parsley and typical woodland species such as lords and ladies, lesser celandine and red campion. There was no immediate evidence of ancient woodland indicators. Deadwood is present throughout the northern end of the woodland, much of which has fallen into the canal.

A thin belt (>10m) of semi-natural broadleaf woodland is present along the banks of a shallow stream which meanders along the northern boundary of Compartment 8 (O8 – 1, Photograph 81). The channel of the stream varies from 0.5m-1.5m in width with a slow to medium flow over clay and shingle, with a water depth of up to 20cm. No evidence of aquatic vegetation was present in the stream at the time of survey. The banks of stream vary from 1m-2.5m in height and vary in aspect throughout.

The woodland on the banks of the stream is probably secondary in origin, with many stag headed mature ash trees present. Occasional hawthorn and hazel is present in the shrub layer. Ruderal species are abundant within the woodland field layer and on the banks of the stream and include common nettle, cleavers and cow parsley with occasional to frequent woodland species such as lords and ladies and red campion.

A hedgerow is present on the southern edge of the woodland edge (O8 - 2).

Photograph 81. The linear woodland belt on the northern boundary of Compartment 8 (O8 – 1).

Plantation Broadleaf Woodland

A recently planted (>2 years) broadleaf woodland is present on the banking of the new Oakham by-pass, to the south of the compartment (O8 – 6). A typical mix of species is present including hawthorn, hazel, field maple, pedunculate oak and ash.

Semi-improved grassland is present within the field layer and has probably been sown from bare ground. Species present include false-oat grass, cock's foot, Yorkshire fog, creeping buttercup, spear thistle, red fescue, broadleaf dock and common nettle.

Buildings

A number of disused stable blocks, outhouses and barns are present near the southern boundary of Compartment 8 and is part of the former Springfield Stables (O8 – 13). No access was gained into this site; therefore buildings were surveyed from a distance of at least 30-40m with binoculars. Most of the buildings are brick built with tiled pitched roofs. Several metal barns are also present. Several of the buildings appear to be derelict or in a state of disrepair.

Two houses are also present on site and appear to be occupied. Rank grassland and scattered scrub surround the buildings.

Scattered Mixed Trees with Semi-Natural Grassland

An area of scattered mixed trees with semi-natural grassland is present to the south of Springfield Stables (O8 -16). The site appears to be a former small holding possibly used as a tree nursery or for some other horticultural purpose.

Many scattered trees are present across the site such as mature beech, sycamore, lime, Scot's pine and yew (Photograph 82). A double line of mature, pollarded lime trees is present to the west of the site. Non-native trees are also present and include a mature Wellingtonia. Holly, hawthorn and goat willow scrub is present throughout the site and often forms locally abundant stands.

Photograph 82. Scattered mixed trees and scrub to the south of Compartment 8 (O8 – 16)

Ivy is dominant in the field layer under scattered trees and scrub with lords and ladies, red campion and lesser celandine. Ruderal species are also present including common nettle and cleavers.

Where trees are not present, dense areas of bramble dominate often with frequent great willowherb. Isolated and fragmented areas of unmanaged semi-improved grassland are present throughout the site with a variety of grass and herb species including false-oat grass, cock's foot, meadow grass, bent grass, colt's foot, cow parsley, red clover, white clover, common ragwort and ribwort plantain. The grassland appears to be grazed by rabbits.

Locally abundant patches of giant hogweed, a highly invasive and notifiable weed, are present within the site (Photograph 83).

Photograph 83. A patch of giant hogweed within O8 – 16

Amenity Grassland

A small area of short-mown grassland is present on the southern boundary on a road edge. Species present include perennial rye grass, red fescue, daisy, creeping buttercup, dandelion, red clover, white clover, broadleaf dock.

Species

Bats

A number of mature ash trees within Compartment 8 have the potential to support roosting bats as splits, cracks, rot holes and old woodpecker holes are present in tree boles and crowns. Potential bat roosting trees are in the semi-natural woodland belt on the northern boundary (O8 – 1), in the woodland along the disused canal (O8 – 7) and the four mature field trees (O8 – 12).

The variety of buildings within the former Springfield Stables are constructed from brick with pitched tiled roofs and are likely to support structural features which may provide roosting sites for bats. Similarly, the old stables, outhouses and barns within this area may also provide potential nesting habitat for barn owl. These buildings could not be directly accessed during the survey period.

The hedgerows, linear belts of woodland and canal habitats found within Compartment 8 have the potential to provide suitable foraging and commuting habitats for a variety of bat species.

Reptiles and Amphibians

The section of stagnant open water in the disused canal has the potential to support great crested newts (O8 – 8), although there is a lack of vegetation which newts can use as an egg laying substrate. The canal also has the potential to support grass snakes, particularly to the north, where re-growth from collapsed willows dominate. Foraging and hibernacula habitat for these species surrounds the canal in the form of the woodland belt on the canal banks and adjacent hedge lines.

The small area of open water O8 – 10 supported only a shallow volume of water at the time of survey (>5cm) and is considered to be of low value for great crested newts.

The area of scattered mixed trees on the southern boundary of Compartment 8 (O8 – 16) has the potential to support reptile species as a mosaic of habitats are present which include scattered trees, dense and scattered scrub interspersed with areas of unmanaged grassland. Waste materials such as brick piles and metal sheeting are scattered throughout the site which can be exploited by reptiles as artificial refugia for shelter.

The woodland and associated stream on the northern boundary of the compartment has the potential to support reptile species (O8 – 1).

The railway line running along the eastern boundary of the site has the potential to provide a wildlife corridor for reptile species.

Water Vole

The small stream meandering along the northern boundary of Compartment 8 (O8 – 1) and canal (O8 – 8) are considered to be of low potential for water vole as they are heavily shaded by surrounding woodland and provide few of the typical food plants required to sustain viable water vole populations.

No direct evidence of water vole field signs was found during the survey period.

The stream may, however, be used as a commuting corridor for this species.

Birds

The hedgerows, linear belts of woodland and canal habitats found within Compartment 8 have the potential to provide suitable foraging and nesting habitat for a variety of farmland bird species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 8 at the time of survey.

5.16.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

A number of mature ash trees within Compartment 8 have the potential to support roosting bats as splits, cracks, rot holes and old woodpecker holes are present in tree boles and crowns. Additional potential bat roosting trees were also identified in the semi-natural woodland belt on the northern boundary, in the woodland along the disused canal and the four mature field trees at O8 – 12. The former Springfield Stables has a variety of buildings which support structural features which may provide roosting sites for bats. It is, therefore, recommended that dedicated bat surveys are carried out on all potential bat roosting trees and at Springfield Stables.

There are a number of water bodies within Compartment 8 that have the potential to support great crested newts including the open water in the disused canal and the small area of open water at O8 – 10. It is recommended that these water bodies are

surveyed for the presence of great crested newts. Any terrestrial habitat adjacent to these areas should also be surveyed for the presence of great crested newts.

The canal also has the potential to support grass snakes where re-growth from collapsed willows dominates over the water course. Foraging and hibernacula habitat for reptiles surrounds the canal. The woodland and associated stream on the northern boundary of the compartment also has the potential to support reptile species. The area of scattered mixed trees on the southern boundary of Compartment 8 (O8 – 16) has the potential to support reptile species as a mosaic of habitats are present which include scattered trees, dense and scattered scrub interspersed with areas of unmanaged grassland. Waste materials such as brick piles and metal sheeting are scattered throughout the site which can be exploited by reptiles as artificial refugia for shelter. These areas should all be surveyed for reptile presence/absence.

The railway line running along the eastern boundary of the site has the potential to provide a wildlife corridor for reptile species. Consideration may need to be given to surveying adjacent field margins and hedgerows for reptile species.

Although the canal and stream within Compartment 8 have been considered to be a low potential for water vole due to a lack of suitable food plants present, it is recommend that a water vole survey is still conducted in these habitats.

The surveys should be undertaken according to Best Practice at the time of commission.

Nesting Birds

The old stables, outhouses and barns within Springfield Stables to the south of the compartment provides potential nesting habitat for barn owl (O8 – 13). The buildings should be surveyed for the presence of barn owl or other nesting birds.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

Giant Hogweed

Abundant patches of giant hogweed were noted in the area of scattered trees and grassland O8 – 16 to the south of Compartment 8. Under the Wildlife and Countryside Act 1981 it is an offence to plant or cause giant hogweed to grow in the wild. Giant hogweed is a highly invasive ‘alien’ plant species and it is recommended that this infestation is cleared.

COMPARTMENTS 9a and 9b

Figure 09

5.17 Compartment 9a

5.17.1 *Compartment Description*

Compartment 9a covers an area of approximately 16ha on the north eastern urban fringe of Oakham. It consists predominantly of an extensive arable fields bounded by species-poor hedgerows, occasionally with mature standard trees. A small stream runs along the northern boundary of the compartment bounded by mature scattered trees. Compartment 9a is geographically separated from Compartment 9b to the south and Compartment 8 to the west by 'A' roads.

5.17.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There is one European protected site of nature conservation interest within 2km of Compartment 9a. This is Rutland Water SPA and Ramsar site.

Statutory Sites of Nature Conservation Interest

There are two statutory sites of nature conservation interest within 2km of Compartment 9a. These are the Rutland Water SSSI and Burley Wood SSSI.

No part of Compartment 9a falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 9a.

However, no part of Compartment 9a falls within or abuts the boundary of any non-statutory site of nature conservation interest.

Species

No records exist for protected species within the boundary of Compartment 9a, although records do exist for protected species within a 2km radius of the compartment.

5.17.3 *Survey Results*

Habitats

Arable Field

The majority of Compartment 9a is an extensive arable field. A supermarket and associated areas of hard standing and landscaping have, in the past, been developed into much of the original extent of the field but are outside of the compartment boundary. No distinct grassland field margins exist around any of the arable fields although strips of ruderal vegetation and scrub are present associated with the boundary hedgerows.

Species-Poor Hedgerows

Species-poor hedgerows surround the arable field and are dominated by hawthorn with a low number of other woody species such as occasional elder and blackthorn. Ruderal species dominate the hedgerow understoreys and include common nettle, hogweed, cow parsley, cleavers, white dead nettle and broad leaved dock.

Hedgerows O9a - 3 and O9a – 4 are run along the western boundary of the arable field and have been intensively managed with frequent gaps and a poor canopy structure (Photograph 84). The hedgerows surrounding the supermarket development and along Burley Road are generally intact, taller and regularly managed to a height of up to 6m with full woody canopies (O9a - 5, 6 & 7). Frequent mature ash, poplar and sycamore trees are just offset from the hedge within the supermarket boundary (O9a – 6 & 7) (Photograph 85).

Photograph 84. Species-poor hedgerow 09a-3.

Photograph 85. Species-poor hedgerow 09a – 6 along the boundary of an adjacent supermarket.

Running Water

A small stream is present along the northern boundary of Compartment 9a flowing from west to east (O9a – 1, Photograph 86). Scattered broadleaf trees bound the stream banks (O9a – 2). The water channel varies from 1-3m in width along its length with a substrate of stone, shingle and clays. The average depth of the channel is 30cm with a medium flow rate. No floating or submerged aquatic vegetation was recorded, although marginal species including fool's watercress, brooklime, rosebay willowherb and rush were locally abundant.

The banks of the stream varied in height from 1-3m its length and were often not well defined in profile. Ruderal vegetation dominated the banks and included ivy, cleavers and common nettle with a canopy of trees and shrubs.

Photograph 86. Stream (09a - 1).

Scattered Broadleaved Trees

A linear belt of scattered broadleaf trees and scrub is present along the banks of the stream on the northern boundary of Compartment 9a (O9a – 2, Photograph 87).

Mature willow with occasional ash, sycamore as well as rarely recorded pedunculate oak is present along the stream banks. Where tree cover is not continuous tall ruderal vegetation persists and includes typical species such as rosebay willowherb, false-oat grass, cock's foot, cow parsley and common nettle. Standing and fallen deadwood is present throughout this habitat.

Photograph 87. Scattered broadleaved trees (09a-2)

Species

Bats

There is the potential for trees along the stream on the northern boundary of Compartment 9a to support roosting bats as cracks, splits and tears were present in occasional tree boles.

This habitat also has the potential to provide a linear foraging and commuting habitat for bat species.

Reptiles

There is potential for reptiles to be present along the stream along the northern boundary of Compartment 9a, particularly foraging grass snake due to the variety of habitat structures present.

Birds

The hedgerows and scattered trees on site have the potential to support foraging and nesting farmland birds.

Water Vole

The stream on the northern boundary of the compartment has low potential for supporting water vole due to a lack of suitable food plants and burrowing substrates. The stream may, however, be used as a commuting corridor for this species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 9a at the time of survey.

5.17.4 *Recommendations*

Hedgerows

Where appropriate, the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows, where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment it is recommended that the following protected species surveys may potentially need to be carried out.

A number of trees along the stream on the northern boundary had features that may support roosting bats. Therefore, a dedicated bat survey is recommended for these trees.

A reptile survey is recommended along the stream along the northern boundary due to the variety of habitats and presence of natural refugia. The stream should also be surveyed for the potential presence of water vole.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

5.18 Compartment 9b

5.18.1 *Compartment Description*

Compartment 9b covers an area of approximately 13ha and is mostly dominated by arable fields with semi-improved grassland and linear belts of dense scrub to the south. Hedgerows are only prominent to the north and south of the compartment with a linear broadleaf woodland belt off-site to the east and no field boundary present to the west.

Compartment 9b is geographically separated from Compartment 9a to the north by an 'A' Road.

5.18.2 *Background Data, Habitats and Species*

European Protected Sites of Nature Conservation Interest

There is one European protected site of nature of nature conservation interest within 2km of Compartment 9b. This is Rutland Water SPA and Ramsar site.

Statutory Sites of Nature Conservation Interest

There are two statutory sites of Nature Conservation interest within 2km of Compartment 9b. These are the Rutland Water SSSI and Burley Wood SSSI.

No part of Compartment 9b falls within or abuts the boundary of any statutory site of nature conservation interest.

Non-Statutory Sites of Nature Conservation Interest

There are a number of non-statutory sites of nature conservation interest within a 2km radius of Compartment 9b.

However, no part of Compartment 9b falls within the boundary of any non-statutory site of nature conservation interest.

The Compartment does, however, abut woodland that is noted as being of Parish level importance. The woodland lies midway down the eastern boundary of Compartment 9b.

Species

No records exist for protected species within the boundary of Compartment 9b although records do exist for protected species within a 2km radius of the compartment.

5.18.3 *Survey Results*

Habitats

Arable Field

The majority of Compartment 9b is dominated by an extensive arable field. The field was cropped with a winter cereal at the time of survey. No distinct grassland field margins exist around any of the arable fields although strips of ruderal vegetation and scrub are associated with the boundary hedgerows.

Semi-Improved Grassland

Two tall-sward, semi-improved grasslands which are separated by a stream, are present to the south of Compartment 9b (O9b – 3 & 7). Both grasslands appear to be unmanaged and support a variety of grass species including false-oat grass, Yorkshire fog, cock's foot, perennial rye grass and red fescue (Photograph 88). The grasslands may potentially be former improved pasture which since fallen into general abandonment.

Herbaceous species within the grassland are typically ruderal and include common nettle, hogweed, cow parsley, broad-leaved dock, ground ivy and cleavers. A number of hazel and ash saplings as well as bramble scrub is encroaching into the fields and is indicative of an unmanaged pasture.

A small copse of dense semi-mature hawthorn scrub (O9b – 2) with ash saplings is present along the northern edge of the semi-improved grassland (O9b – 3) and is likely to have developed due to lack of grazing management.

Photograph 88. Semi-improved grassland to the south of Compartment 9b (O9b – 3).

Running Water

A short section of a stream flows from west to east through the middle of the semi-improved grasslands, near to the southern boundary of Compartment 9b (O9b - 6).

The stream is surrounded by a thin linear belt of dense scrub and scattered broadleaf trees.

The water channel is approximately 1-2m wide and up to 10cm deep with a medium flow over a slit and stone substrate (Photograph 89). The banks of the stream to the north are shallow sloping at an average aspect of 20º to a height of 0.5m, whilst the banks to the south are steeper at 60º in aspect and 2m in height. No submerged or floating aquatic plants are present in the water channel although marginal species such as sweet grass and rosebay willowherb are locally frequent.

Photograph 89. Stream O9b – 6 surrounded by dense scrub and scattered broadleaf trees.

Dense Scrub with Scattered Broadleaf Trees

Dense blackthorn scrub and semi-mature broadleaf trees including ash and sycamore (O9b – 4 & 5) are present along the stream near the southern boundary of Compartment 9b. The scrub is more prominent along the northern bank of the stream, with a dense belt approximately 15m in width. The southern banks are more open with tall ruderal vegetation dominating with common nettle, Yorkshire fog and cleavers with a variety of woodland species including red campion, lesser celandine and lords and ladies. Butterbur is locally dominant along the stream banks.

Species-Poor Hedgerow

An intact hawthorn hedgerow is present along the northern boundary of Compartment 9b and supports a low number of other woody species such as occasional blackthorn, rose and elder (O9b – 1). The hedgerow is managed to a height of 3m and width of 5m. Ruderal species dominate the hedgerow understorey and include common nettle, cow parsley and ground ivy.

The only other hedgerow present within Compartment 9b is on its southern boundary and is species-poor and hawthorn dominated. The hedgerow appears to be generally

unmanaged and is up to 6m in height with frequent gaps along its length (Photograph 90). A number of coppiced ash trees are present within the hedge line reaching to the height of the shrub layer.

Photograph 90. Hedgerow O9b – 8 on the southern boundary of Compartment 9b

Stone Wall

A defunct stone wall is present partly along the eastern boundary of Compartment 9b and is now overgrown with grasses, moss and ruderal herbaceous species including red campion, creeping buttercup, Yorkshire, common nettle, cleavers and false oat grass (O9b – 9).

Semi-natural broadleaf woodland is located off-site behind this wall consisting of mature horse chestnut, hawthorn, sycamore, lime, London plane and ash with an extensive ground flora of lords and ladies, garlic mustard, lesser celandine and dog's mercury. This woodland is noted as being of Parish level importance under the background data search.

Species

Birds

The dense scrub and scattered broadleaf trees as well as hedgerows within Compartment 9b have the potential to support nesting and foraging birds.

Reptiles

The semi-improved grasslands adjacent to the stream near the southern boundary of Compartment 9b have the potential to provide foraging grounds for reptile species, particularly grass snake.

The defunct stone wall (O9b – 9) on the eastern boundary of the compartment may have the potential to provide refugia for reptile species.

Water Vole

There is the potential for water vole to be present within the stream near the southern boundary of Compartment 9b (O9b – 6). A number of burrows were noted in the stream banks at the time of survey. However, no other field evidence pertaining to the presence of water vole was found.

The stream may potentially be used as a commuting corridor by this species.

Other Species

There was no evidence of, or the potential for, any other protected species in Compartment 9b at the time of survey.

5.18.4 *Recommendations*

Hedgerows

Where appropriate the hedges should be protected and managed to improve the structure, diversity and function of the hedge line. Dead wood should be cleared out and gaps should be infilled with native indigenous shrubs such as dogwood, blackthorn, guelder rose, buckthorn, spindle, field maple and wild privet.

Consideration should be given to the planting of new hedgerows where appropriate, so that links to the wider landscape are enhanced and maintained. Tree planting should be done using native indigenous species.

Trees

Consideration should be given to the protection of trees and their root structures within the compartment, following British Standard (BS) 5837 guidelines.

It is recommended that the planting of native trees and shrubs to enhance and strengthen existing tree lines, scrub and woodlands should also be considered.

Water

Consideration should also be given to the protection of watercourses in accordance with Environment Agency best practice with respect to controlling runoff, diffuse and point source pollution and contamination of the water course.

Protected Species Surveys

In order to ascertain the distribution and abundance of protected species within the compartment, it is recommended that the following protected species surveys may potentially need to be carried out.

The grasslands to the south of the compartment and the defunct stone wall have the potential to provide foraging and shelter opportunities for reptile species. It is

therefore recommended that a dedicated reptile survey is undertaken in these areas and adjacent habitats.

A number of burrows that could be attributed to water vole were identified on the banks of the stream on the southern boundary during the current Phase 1 survey. Although no other field signs were noted at that time, it is recommended that a dedicated water vole survey be should undertaken on the stream.

Consideration would always need to be given to the protection of breeding birds which may be potentially present within the mosaic of habitats found throughout the compartment.

The surveys should be undertaken according to Best Practice at the time of commission.

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Guidelines for the selection of Compartments of Importance for Nature Conservation in Leicester. Leicestershire and Rutland, Revised May 2001.

Leicestershire and Rutland Wildlife Trust (1998). Leicestershire Biodiversity Action Plan (BAP) www.lrwt.org.uk

East Midlands Regional Spatial Strategy 2009 - 2026
Policy 26 - Protecting and Enhancing the Region's Natural and Cultural Heritage
Policy 28 - Priorities for Enhancing the Region's Biodiversity
Policy 29 - A Regional Target for Increasing Woodland Cover

Leicestershire Environmental Resources Centre.

Webcompartments:

MAGIC www.magic.gov.uk

APPENDIX 1

PHASE 1 SURVEY FORMS

Phase 1 Habitat Survey – LSC Standard Recording Methodology

Rutland County Council 2009

WOODLAND – ALL TYPES

Broadleaved - *<10% Conifers*	Coniferous - *<10% Broadleaved*	Mixed - *10-90% broadleaved or conifer*
Scrub - *woody species <5m tall*	Carr - *willows or alder with a marshy understorey*	Open - *scattered trees with pasture below (trees <30%)*

Woodland layers: CANOPY, SHRUB/UNDERSTOREY, FIELD, GROUND

Recording attributes: Woodland layers present and % cover, species in each layer, approximate age of trees/shrubs, indicator plant species of ancient woodland, rare plant species, deadwood, leaf litter, bare ground, previous/current woodland management, rides and glades (see grasslands), potential for protected species.

GRASSLAND – ALL TYPES

Recording attributes: Species, average sward height, previous/current management, bare ground, dead thatch, grazing livestock, indicator species of unimproved grassland and/or impeded drainage (wet grassland), rare plant species, indictor species of soil types (acid/neutral/calcareous), agricultural improvement, ridge and furrow, ant hills, potential for protected species.

RUNNING WATER – STREAMS AND RIVERS

River/stream zones: WATER CHANNEL, MARGINS, BANKS

Recording attributes: Species in each zone (floating, submerged, emergent, marginal, bankside), flow rate and direction, substrate type, approximate height/width/depth/aspect of each zone, pollution/water quality, previous/current management, potential for protected species.

STANDING WATER – PONDS, LAKES, CANALS, DITCHES

Recording attributes: Species (floating, submerged, emergent, marginal, bankside), approximate area and depth of water, approximate height/width/aspect of banks, adjacent terrestrial habitat, presence of pollution/water quality, previous/current management, potential for protected species.

TALL HERB AND FERN – BRACKEN, RUDERAL, NON-RUDERAL

Recording attributes: Species, height of vegetation, evidence of nutrient enrichment and/or disturbance, potential for protected species.

SWAMP, MARGINAL AND INUNDATION

Recording attributes: Species, height of vegetation, depth of water, substrate, area of habitat type, seasonal variation in water level, evidence of nutrient enrichment, potential for protected species.

FEN – ALL TYPES

Recording attributes: Species, height of vegetation, depth of water, substrate., area of habitat type, evidence of nutrient enrichment, obvious water flow (soligenous), impeded drainage (topogenous), previous/current management, potential for protected species.

SHORT EPHEMERAL/PERENNIAL VEGETATION

Recording attributes: Species, substrate, area of bare ground, area of habitat type, evidence of disturbance, height of vegetation, potential for protected species.

TN (& compartment Nº):	**Component ID:**	**Photograph:**	**Access (Y/N?):**

Broad Habitat Classification(s):
Habitat Description / Protected Species Potential:

Species List:							

TN (& compartment Nº):	**Component ID:**	**Photograph:**	**Access (Y/N?):**

Broad Habitat Classification(s):
Habitat Description / Protected Species Potential:

Species List:							

SPECIES-RICH HEDGEROW RECORDING SHEET

Hedgerow N°(s) and Compartment N° :	**Photograph:**	**Access (Y/N?):**

Height (m) ☐ Width (m) ☐ Recently laid or coppiced? ☐

Hedgerow runs along bridleway, footpath, road used as a public path or a bridleway open to all traffic? ☐

Woody species present:

Alder, common (*Alnus glutinosa*)	☐	Gorse (*Ulex europaeus*)	☐	Privet, wild (*Ligustrum vulgare*)	☐
Apple, crab (*Malus sylvestris*)	☐	Gorse, western (*Ulex gallii*)	☐	Rose, dog- (*Rosa canina*)	☐
Ash (*Fraxinus excelsior*)	☐	Guelder rose (*Viburnum opulus*)	☐	Rose, field- (*Rosa arvensis*)	☐
Aspen (*Populus tremula*)	☐	Hawthorn, Common (*Crataegus monogyna*.)	☐	Rose (*Rosa* sp.)	☐
Beech (*Fagus sylvatica*)	☐	Hawthorn, Midland (*Crataegus laevigata*)	☐	Rowan (*Sorbus aucuparia*)	☐
Birch, downy (*Betula pubescens*)	☐	Hazel (*Corylus avellana*)	☐	Spindle (*Euonymus europaeus*)	☐
Birch, silver (*Betula pendula*)	☐	Holly (*Ilex aquifolium*)	☐	Sycamore (*Acer pseudoplatanus*)	☐
Blackthorn (*Prunus spinosa*)	☐	Hornbeam (*Carpinus betulus*)	☐	Wayfaring-tree (*Viburnum lantana*)	☐
Broom (*Cytisus scoparius*)	☐	Lime, large-leaved *(Tilia platyphyllos*)	☐	Willow, grey (*Salix cinerea*)	☐
Buckthorn (*Rhamnus cathartica*)	☐	Maple, field (*Acer campestre*)	☐	Willow, goat (*Salix caprea*)	☐
Cherry, wild (*Prunus avium*)	☐	Oak, pedunculate (*Quercus robur*)	☐	Willow (*Salix sp.*)	☐
Dogwood (*Cornus sanguinea*)	☐	Oak, sessile (*Quercus petraea*)	☐		☐
Elder (*Sambucus nigra*)	☐	Pear, (*Pyrus communis*)	☐		☐
Elm, English (*Ulmus procera*)	☐	Pine, Scots (*Pinus sylvestris*)	☐		☐
Elm, wych (*Ulmus glabra*)	☐	Plum, wild (*Prunus domestica*)	☐		☐
Elm, (*Ulmus sp.*)	☐	Poplar, black (*Populus nigra betulifolia*)	☐		☐

N° of woody species: ☐ Is the hedgerow recently planted (<30 years)? ☐

Other climbers present:

Bramble *(Rubus fruticosus agg.)*	☐	Honeysuckle *(Lonicera periclymenum)*	☐	Ivy *(Hedera helix)*	☐
Traveller's-joy *(Clematis vitalba)*	☐	White bryony *(Bryonia dioica)*	☐		

Standard trees (Species, frequency/number and average height):

On average, at least one standard tree per 50m in the hedgerow length? ☐

Ground flora (Dominants and ancient woodland indicator species):

More than three woodland species in hedgerow (from list of 57 plants)? ☐

Other associated features:

Bank/wall supporting hedgerow at least one half length?	☐
Less than 10% gaps in hedgerow length?	☐
A ditch along at least one half length of the hedgerow?	☐
A parallel hedge within 15m of the hedgerow?	☐
Number of connections with other hedgerows, ponds and woodlands?	☐

Other comments (i.e. condition, shape or management of hedgerow):

APPENDIX 2

CITATIONS

Rutland Water Ramsar Site
Rutland Water Special Protection Area
Rutland Water SSSI
Burley Woods SSSI

APPENDIX 3

PHASE 1 HABITAT SURVEY TARGET NOTES

COMPARTMENT 2A		
TN No. /Access	**Description**	**Species**
O2a – 1 FULL ACCESS	Defunct Species-Poor Hedgerow Gappy defunct hawthorn (Crataegus monogyna) dominated hedgerow with occasional elm (Ulmus spp.) around a post and wire fence. Intensively managed to a height of ~1.5m and a width of ~1m. Understorey of ruderal species including common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), dock (Rumex spp.), cleavers (Galium aparine) and dandelion (Taraxacum officinale agg.) with grass species on the field side including Yorkshire fog (Holcus lanatus), twitch (Elytrigia repens) and false oat grass (Arrhenatherum elatius).	Cow parsley (Anthriscus sylvestris), hawthorn (Crataegus monogyna), common nettle (Urtica dioica), cleavers (Galium aparine), dock (Rumex spp.), bramble (Rubus fruticosus agg.), twitch (Elymus repens), false oat grass (Arrhenatherum elatius), dandelion (Taraxacum officinale agg.), bindweed (Convolvulus spp.), Yorkshire fog (Holcus lanatus), groundsel (Senecio vulgaris).
O2a – 2 FULL ACCESS	Plantation Broadleaf Woodland Young broadleaf plantation with whips to ~0.5m in plastic tubes on embankment beside new road. Many species present including hawthorn (Crataegus monogyna), holly (Ilex aquifolium), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), Norway maple (Acer platanoides), cherry (Prunus spp.), fir (Abies spp.), willow (Salix spp.) and Scot's pine (Pinus sylvestris). Semi-improved grassland beneath is tussocky in places and appears to have been sown recently including red fescue (Festuca rubra), perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), white clover (Trifolium repens), red clover (Trifolium pratense), dandelion (Taraxacum officinale agg.), teasel (Dipsacus fullonum), speedwell (Veronica spp.), red dead-nettle (Lamium purpureum), dock (Rumex spp.) and rosebay willowherb (Epilobium angustifolium). A new hawthorn hedge has been planted between the broadleaf plantation and the adjacent field.	Red fescue (Festuca rubra), perennial rye grass (Lolium perenne), white clover (Trifolium repens), red clover (Trifolium pratense), dandelion (Taraxacum officinale agg.), teasel (Dipsacus fullonum), speedwell (Veronica spp.), red dead-nettle (Lamium purpureum), groundsel (Senecio vulgaris), Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), hawthorn (Crataegus monogyna), holly (Ilex aquifolium), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), Norway maple (Acer platanoides), fir (Apies spp.), cherry (Prunus spp.), willow (Salix spp.), Scot's pine (Pinus sylvestris), dock (Rumex spp.), rosebay willowherb (Epilobium angustifolium).
O2a – 3 FULL ACCESS	Scattered Scrub Line of three standard ash (Fraxinus excelsior) trees and elder (Sambucus nigra) with associated rose (Rosa spp.) and bramble (Rubus fruticosus agg.) scrub. Ruderal species include common nettle (Urtica dioica), hogweed (Heracleum sphondylium), twitch (Elymus repens) and Lords and Ladies (Arum maculatum). This isn't a planted hedgerow but forms a line along a wooden fence and pipeline.	Elder (Sambucus nigra), rose (Rosa spp.), bramble (Rubus fruticosus agg.), ash (Fraxinus excelsior), ivy (Hedera helix), common nettle (Urtica dioica), hogweed (Heracleum sphondylium), twitch (Elymus repens) and Lords and Ladies (Arum maculatum).

COMPARTMENT 2B		
TN No. /Access	**Description**	**Species**
O2b – 1 FULL ACCESS	Scattered Broadleaf Trees With Semi-Improved Grassland Mature to fully mature scattered sycamore (Acer pseudoplatanus) trees with ash (Fraxinus excelsior) and lime (Tilia spp.) present in a sinuous margin around the northern edge of an arable field. Semi-improved grassland is present in the field layer with a dominance of ruderal species including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica) and cleavers (Galium aparine). Several of the mature trees supported rot holes, cracks, splits and old woodpecker holes potentially suitable for roosting bats. Green woodpecker (Picris viridis) noted in trees. This area would provide good quality habitat for nesting and foraging bird species.	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), cleavers (Galium aparine), common chickweed (Stellaria media), hogweed (Heracleum sphondylium), Lords and Ladies (Arum maculatum), herb-Robert (Geranium pratense), lesser celandine (Ranunculus ficaria), broadleaf dock (Rumex obtusifolius), red fescue (Festuca rubra), creeping buttercup (Ranunculus repens).
O2b – 2 FULL ACCESS	Building Modern brick built residential property with a pitched roof. A number of structural features are present which may potentially support roosting bats such as roof/ridge tiles, soffits, barge boards and roof voids. No access was gained to survey the building effectively.	
O2b -3 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with occasional sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), elm (Ulmus spp.), elder (Sambucus nigra) and rose (Rosa spp.). A mature ash and sycamore standard tree is present. The hedgerow is managed to an average height of 1.8m and width of 1m. Ruderal species dominate the understorey and include cleavers (Galium aparine) and common nettle (Urtica dioica).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), rose (Rosa spp.), cleavers (Galium aparine), common nettle (Urtica dioica), white dead-nettle (Lamium album), false oat grass (Arrhenatherum elatius).

COMPARTMENT 2B		
TN No. /Access	**Description**	**Species**
O2b- 4 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with elm (Ulmus spp.), elder (Sambucus nigra) and occasional semi-mature sycamore (Acer pseudoplatanus) trees. The hedgerow appears to be generally undermanaged at a height of 5m and width of 2m. Ruderal species dominate the understorey and include cleavers (Galium aparine), common nettle (Urtica dioica) and garlic mustard (Alliaria petiolata).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), cleavers (Galium aparine), common nettle (Urtica dioica), garlic mustard (Alliaria petiolata), broadleaf dock (Rumex obtusifolius), cow parsley (Anthriscus sylvestris).
O2b – 5 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Ornamental hedgerow bordering a residential property dominated by Cotoneaster sp. with ornamental Leylandii sp. The hedgerow is intensively managed to a height and width of approximately 1m.	(Cotoneaster sp.), (Leylandii sp.).
O2b – 6 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Short section of hawthorn (Crataegus monogyna) dominated hedgerow with occasional elder (Sambucus nigra). Several mature sycamore (Acer pseudoplatanus) trees are present. The hedgerow is intensively managed to a height and width of 1m. Ruderal species dominate the understorey and include cleavers (Galium aparine), common nettle (Urtica dioica) and garlic mustard (Alliaria petiolata).	Hawthorn (Crataegus monogyna), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), garlic mustard (Alliaria petiolata), white dead-nettle (Lamium album).
O2b- 7 CLOSE DISTANCE	Scattered Broadleaf Trees And Scrub With Tall Ruderal Vegetation Linear strip of several former small holding plots which now appear to have been mostly abandoned. Mature scattered hawthorn (Crataegus monogyna) and elder (Sambucus nigra) scrub is present to east of the small holdings with mature to fully mature sycamore (Acer pseudoplatanus), lime (Tilia spp.), Scot's pine (Pinus sylvestris) and Corsican pine (Pinus nigra variety maritima). Tall ruderal vegetation dominates to the west of the small holdings with false oat grass	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), Corsican pine (Pinus nigra variety maritima), Scot's pine (Pinus sylvestris), lime (Tilia spp.), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), broadleaf dock (Rumex obtusifolius), Cock's foot (Dactylis glomerata), spear thistle (Cirsium vulgare), hogweed (Heracleum sphondylium), common nettle (Urtica dioica), garlic mustard (Alliaria petiolata) and great willowherb (Epilobium hirsutum).

COMPARTMENT 2B		
TN No. /Access	**Description**	**Species**
	(Arrhenatherum elatius), cleavers (Galium aparine), and cow parsley (Anthriscus sylvestris). Occasional areas of dense hawthorn and elder scrub are also present. This area would provide good quality habitat for nesting and foraging bird species.	

COMPARTMENT 2C		
TN No. /Access	**Description**	**Species**
O2c – 1 FULL ACCESS	Running Water A stream with relatively step banks 1-3m in height, vertical in places. Some areas of flat ground at the waters edge at the base of the banks with rocks and shingle present. Water is clear and flowing at a medium rate from west to east, shallow (~10cm depth) in some places, deeper to 30cm in others. Substrate is clay with some stones in places and the stream is relatively free of organic and artificial debris. No aquatic/marginal vegetation except where the canopy above opens out at the eastern end beside the road, here rush (Juncus spp.) and brooklime (Veronica beccabunga) were recorded. The banks were largely covered with ruderal species including common nettle (Urtica dioica), rosebay willowherb (Epilobium angustifolium), ivy (Hedera helix), bramble (Rubus fruticosus agg.) and dock (Rumex spp.). Woodland species from the adjacent woodland (O2c – 2) were also present including lesser celandine (Ranunculus ficaria), Lords and Ladies (Arum maculatum), dog's mercury (Mercurialis perennis), hart's tongue fern (Asplenium scolopendrium) , garlic mustard (Alliaria petiolata) and ramsons (Allium ursinum), particularly on the northern bank. Trees growing associated with the water include pedunculate oak (Quercus robur) and willow (Salix spp.). This stream has the potential to support water vole (Arvicola amphibius) and potential holes were recorded. Muntjac deer (Muntiacus reevesi) tracks were recorded in soft mud beside the water. Mallard (Anas platyrhynchos) and stickleback (Gasterosteus aculeatus) were also recorded in the stream at the time of survey.	Lesser celandine (Ranunculus ficaria), ivy (Hedera helix), bramble (Rubus fruticosus agg.), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), dog's mercury (Mercurialis perennis), bluebell (Hyacinthoides non-scripta), dock (Rumex spp.), hart's tongue fern (Asplenium scolopendrium), willow (Salix spp.), pedunculate oak (Quercus robur), yellow iris (Iris pseudocorus), speedwell (Veronica spp.), garlic mustard (Alliaria petiolata), dandelion (Taraxacum officinale agg.), cleavers (Galium aparine), rush (Juncus spp.), rosebay willowherb (Epilobium angustifolium), brooklime (Veronica beccabunga), ramsons (Allium ursinum).
O2c – 2 FULL ACCESS	Semi-Natural Broadleaf Woodland Area of secondary semi-natural woodland. Ash (Fraxinus excelsior) and sycamore (Acer pseudoplatanus) dominate with pedunculate oak (Quercus robur) and willow (Salix spp.) also present. The understorey is sparse with infrequent hawthorn (Crataegus monogyna), elder (Sambucus nigra) and blackthorn (Prunus spinosa). There are a number of woodland species found in the ground layer including variegated yellow archangel (Lamiastrum galeobdolon), lesser celandine (Ranunculus ficaria), red campion (Silene dioica), yarrow (*Achillea millefolium*), ramsons (Allium ursinum), garlic mustard	Elder (Sambucus nigra), willow (Salix spp.), blackthorn (Prunus spinosa), pedunculate oak (Quercus robur), ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), garlic mustard (Alliaria petiolata), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), yarrow (*Achillea millefolium*), lesser celandine (Ranunculus ficaria), red campion (Silene dioica), variegated yellow archangel (Lamiastrum galeobdolon), ramsons (Allium ursinum), dog's mercury (Mercurialis perennis), ivy (Hedera helix), cleavers (Galium aparine), hogweed (Heracleum sphondylium), Yorkshire fog (Holcus lanatus), Cock's foot

COMPARTMENT 2C		
TN No. /Access	**Description**	**Species**
	(Alliaria petiolata) and dog's mercury (Mercurialis perennis). Some areas are more disturbed and ruderal species including ivy (Hedera helix), common nettle (Urtica dioica) and cleavers (Galium aparine) are present. There is moss and leaf litter on the ground with grass such as meadow grass (Poa spp.) and Cock's foot (Dactylis glomerata) in places and abundant deadwood. Canopy trees are to approximately 25m in height and are semi-mature/mature. A defunct hedgerow composed primarily of ash (Fraxinus excelsior) and hawthorn (Crataegus monogyna) was evident from past laying at the eastern edge of the woodland.	(Dactylis glomerata), holly (Ilex aquifolium), snowdrop (Galanthus nivalis), ground elder (Aegopodium podagraria), ground ivy (Glechoma hederacea), meadow grass (Poa spp.).
O2c – 3 FULL ACCESS	<u>Open Water</u> A drainage pond with three artificial inlets, presumably from the road. Clear water to a depth of 50cm-75cm with some submerged vegetation, emergents and marginals, including brooklime (Veronica beccabunga), reed-mace (Typha latifolia), common reed (Phragmites australis), rosebay willowherb (Epilobium angustifolium) and lesser spearwort (Ranunculus flammula). The reed-mace and common reed stands are developed but not dominant and good areas of open water were present. Mallard (Anas platyrhynchos) and moorhen (Gallinula chloropus) were noted but there was no evidence of fish or amphibians. Lots of invertebrates were noted. This pond and the surrounding grassland (O2c – 4) have good reptile and great crested newt (Triturus cristatus) potential.	Brooklime (Veronica beccabunga), reed-mace (Typha latifolia), common reed (Phragmites australis), rosebay willowherb (Epilobium angustifolium), lesser spearwort (Ranunculus flammula), rush (Juncus spp.).
O2c – 4 FULL ACCESS	<u>Semi-Improved Grassland With Scattered Broadleaf Trees</u> Area of semi-improved grassland with the pond O2c – 3 in the centre and a plantation of mostly broadleaf whips to the east adjacent to the road. The grassland was dominated by crested dog's-tail (Cynosurus cristatus) with Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra) and tufted hair-grass (Deschampsia cespitosa) with herbaceous species including ribwort plantain (Plantago lanceolata), eyebright (Euphrasia spp.), black knapweed (Centaurea nigra), rosebay willowherb (Epilobium angustifolium), red clover (Trifolium pratense), white clover (Trifolium repens) and rarely recorded Colt's foot (Tussilago farfara). Broadleaf species included	Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), ribwort plantain (Plantago lanceolata), black knapweed (Centaurea nigra), rosebay willowherb (Epilobium angustifolium), yarrow (Achillea millefolium), tufted hair-grass (Deschampsia cespitosa), common ragwort (Senecio jacobaea), crested dog's-tail (Cynosurus cristatus), red clover (Trifolium pratense), white clover (Trifolium repens), dock (Rumex spp.), red fescue (Festuca rubra), vetch (Vicia spp.), creeping buttercup (Ranunculus repens), bent grass (Agrostis spp.), common nettle (Urtica dioica), eyebright (Euphrasia spp.), teasel (Dipsacus fullonum), Colt's foot (Tussilago farfara), hawthorn (Crataegus

COMPARTMENT 2C		
TN No. /Access	**Description**	**Species**
	hawthorn (Crataegus monogyna), holly (Ilex aquifolium), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), Norway maple (Acer platanoides), willow (Salix spp.) and Scot's pine (Pinus sylvestris). The grassland was managed with evidence of cutting to a height of ~10cm and some thatch was present, although it was less managed close to the waters edge where longer grass and rosebay willowherb (Epilobium angustifolium) stands were present. This grassland and the pond O2c – 3 have good potential to support reptiles and great crested newt (Triturus cristatus).	monogyna), holly (Ilex aquifolium), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), Norway maple (Acer platanoides), fir (Apies spp.), cherry (Prunus spp.), willow (Salix spp.), Scot's pine (Pinus sylvestris).
O2c – 5 FULL ACCESS	Intact Species-Poor Hedgerow Newly planted hedgerow with whips to ~60cm in plastic tubes, hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa) with others including larger ~2.5m high standards. Sward beneath as O2c – 4.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), holly (Ilex aquifolium), sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior).
O2c – 6 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with elm (Ulmus spp.), elder (Sambucus nigra) and occasional semi-mature sycamore (Acer pseudoplatanus) trees. The hedgerow appears to be generally undermanaged at a height of 5m and width of 2m. Ruderal species dominate the understorey and include cleavers (Galium aparine), common nettle (Urtica dioica) and garlic mustard (Alliaria petiolata).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), cleavers (Galium aparine), common nettle (Urtica dioica), garlic mustard (Alliaria petiolata), broadleaf dock (Rumex obtusifolius), cow parsley (Anthriscus sylvestris).
O2c – 7 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with occasional sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), elm (Ulmus spp.), elder (Sambucus nigra) and rose (Rosa spp.). A mature ash and sycamore standard tree is present. The hedgerow is managed to an average height of 1.8m and width of 1m. Ruderal species dominate the understorey and include cleavers (Galium aparine) and common nettle (Urtica dioica).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), rose (Rosa spp.), cleavers (Galium aparine), common nettle (Urtica dioica), white dead-nettle (Lamium album), false oat grass (Arrhenatherum elatius).

COMPARTMENT 2C		
TN No. /Access	**Description**	**Species**
02c – 8 FULL ACCESS	Intact Species-Poor Hedgerow Well maintained hawthorn (Crataegus monogyna) dominated hedgerow to ~1.5m height and ~1.5m width. Gaps in places, some to 5m wide. Other woody components include locally dominant blackthorn (Prunus spinosa) and elder (Sambucus nigra), with rare hazel (Corylus avellana) and ash (Fraxinus excelsior). Evidence of laying in the past. The ground layer was grass dominated with false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata) and Yorkshire fog (Holcus lanatus) with ruderal species including common nettle (Urtica dioica), cleavers (Galium aparine), dock (Rumex spp.) and rosebay willowherb (Epilobium angustifolium) with some burdock (Arctium lappa) and Lords and Ladies (Arum maculatum). Rose (Rosa spp.) and bramble (Rubus fruticosus agg.) were recorded within the hedgerow. An old ash tree at the northern end could provide roosting habitat for bats – there were no other standards in this hedgerow.	Elm (Ulmus spp.), hawthorn (Crataegus monogyna), rose (Rosa spp.), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine), Yorkshire fog (Holcus lanatus), bramble (Rubus fruticosus agg.), Lords and Ladies (Arum maculatum), hogweed (Hypericum sphondylium), sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album), perennial rye grass (Lolium perenne), willow (Salix spp.).
O2c – 9 FULL ACCESS	Running Water Stream with slowly flowing clear water to ~0.5m width and to a depth of ~20cm. The banks are to 4m width at the top and steep, between 60º and 80º. The substrate is clay with some stones and some organic debris but no artificial debris. Some emergent and marginal vegetation recorded including rush (Juncus spp.), fool's watercress (Apium nodiflorum) and brooklime (Veronica beccabunga). Banks are largely ruderal vegetation including common nettle (Urtica dioica), bramble (Rubus fruticosus agg.) and ivy (Hedera helix) and are heavily shaded by hedgerow (O2c – 10) in places with poor visibility at the western end. Some trees are associated with the stream including willow (Salix spp.). Low water vole (Arvicola amphibius) potential due to heavy shading and few marginals/aquatics.	Rosebay willowherb (Epilobium angustifolium), fool's watercress (Apium nodiflorum), rush (Juncus spp.), dock (Rumex spp.), creeping buttercup (Ranunculus repens), common nettle (Urtica dioica), brooklime (Veronica beccabunga), Cock's foot (Dactylis glomerata), red fescue (Festuca rubra), false oat grass (Arrhenatherum elatius), ground ivy (Glechoma hederacea), common ragwort (Senecio jacobaea), ivy (Hedera helix), Lords and Ladies (Arum maculatum), bracken (Pteridium aquilinum), horse chestnut (Aesculus hippocastanum), creeping thistle (Cirsium arvense) hogweed (Hypericum sphondylium), red campion (Silene dioica), rose (Rosa spp.), willow (Salix spp.).

COMPARTMENT 2C		
TN No. /Access	**Description**	**Species**
O2c - 10 FULL ACCESS	Intact Species-Rich Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with standard ash (Fraxinus excelsior) and holly (Ilex aquifolium) present growing on either side of the stream O2c – 9. The hedgerow is well maintained on the south side but is growing into and from the banks on the northern side. It is between ~1.5 – 3m height and between ~2 - 3m wide. Other woody components include ash (Fraxinus excelsior), elder (Sambucus nigra), elm (Ulmus spp.) and sycamore (Acer pseudoplatanus). The ground flora is largely ruderal with common nettle (Urtica dioica), cleavers (Galium aparine), white dead-nettle (Lamium album) and ivy (Hedera helix) as well as garlic mustard (Alliaria petiolata) and Lords and Ladies (Arum maculatum). There is a lot of rabbit (Oryctolagus cuniculus) activity. Visibility was poor due to overgrowth in places and it is possible that there could be a sett present.	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), rose (Rosa spp.), ivy (Hedera helix), common nettle (Urtica dioica), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), holly (Ilex aquifolium), elm (Ulmus spp.), Lords and Ladies (Arum maculatum), white dead-nettle (Lamium album), sycamore (Acer pseudoplatanus), dandelion (Taraxacum officinale agg.), cleavers (Galium aparine), garlic mustard (Alliaria petiolata).
O2c – 11 FULL ACCESS	Intact Species-Rich Hedgerow Aggressively managed hawthorn (Crataegus monogyna) dominated hedgerow with elder (Sambucus nigra) and occasional willow (Salix spp.), sycamore (Acer pseudoplatanus) and field maple (Acer campestre). No standards are present. The ground flora is dominated by ruderals including rosebay willowherb (Epilobium angustifolium), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), ground ivy (Glechoma hederacea) and bindweed (Convolvulus spp.). Bramble (Rubus fruticosus agg.), ivy (Hedera helix) and rose (Rosa spp.) were recorded growing within the hedgerow.	Hawthorn (Crataegus monogyna), ivy (Hedera helix), cow parsley (Anthriscus sylvestris), perennial rye grass (Lolium perenne), common nettle (Urtica dioica), dandelion (Taraxacum officinale agg.), cleavers (Galium aparine), false oat grass (Arrhenatherum elatius), bramble (Rubus fruticosus agg.), Yorkshire fog (Holcus lanatus), willow (Salix spp.), white dead-nettle (Lamium album), bindweed (Convolvulus spp.), rose (Rosa spp.), ground ivy (Glechoma hederacea), field maple (Acer campestre), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), rosebay willowherb (Epilobium angustifolium).
O2c – 12 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with occasional sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), elm (Ulmus spp.), elder (Sambucus nigra) and rose (Rosa spp.). A mature ash and sycamore standard tree is present. The hedgerow is managed to an average height of 1.8m and width of 1m. Ruderal species dominate the understorey and include cleavers (Galium aparine) and common nettle (Urtica dioica).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), rose (Rosa spp.), cleavers (Galium aparine), common nettle (Urtica dioica), white dead-nettle (Lamium album), false oat grass (Arrhenatherum elatius).

COMPARTMENT 2C		
TN No. /Access	**Description**	**Species**
O2C - 13 FULL ACCESS	Plantation Broadleaf Woodland Young broadleaf plantation with whips to ~0.5m in plastic tubes on embankment beside new road. Many species present including hawthorn (Crataegus monogyna), holly (Ilex aquifolium), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), Norway maple (Acer platanoides), cherry (Prunus spp.), fir (Abies spp.), willow (Salix spp.) and Scot's pine (Pinus sylvestris). Semi-improved grassland beneath is tussocky in places and appears to have been sown recently including red fescue (Festuca rubra), perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), white clover (Trifolium repens), red clover (Trifolium pratense), dandelion (Taraxacum officinale agg.), teasel (Dipsacus fullonum), speedwell (Veronica spp.), red dead-nettle (Lamium purpureum), dock (Rumex spp.) and rosebay willowherb (Epilobium angustifolium). A new hawthorn hedge has been planted between the broadleaf plantation and the adjacent field.	Red fescue (Festuca rubra), perennial rye grass (Lolium perenne), white clover (Trifolium repens), red clover (Trifolium pratense), dandelion (Taraxacum officinale agg.), teasel (Dipsacus fullonum), speedwell (Veronica spp.), red dead-nettle (Lamium purpureum), groundsel (Senecio vulgaris), Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), hawthorn (Crataegus monogyna), holly (Ilex aquifolium), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), Norway maple (Acer platanoides), fir (Apies spp.), cherry (Prunus spp.), willow (Salix spp.), Scot's pine (Pinus sylvestris), dock (Rumex spp.), rosebay willowherb (Epilobium angustifolium).

COMPARTMENT 2D		
TN No. /Access	**Description**	**Species**
O2d – 1 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated roadside hedgerow with occasional elder (Sambucus nigra), sycamore (Acer pseudoplatanus) and dog rose (Rosa canina), closely managed to a height of 1.5m and width of 1m. Occasional mature sycamore trees are present to the northern end. A 2m wide grassland verge is present on the roadside edge with false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine) and locally abundant patches of butterbur (Orthocarpus erianthus) and snowdrops (Galanthus spp.). Woodland species Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria) and red campion (Silene dioica) are present in the hedgerow understorey.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), dog rose (Rosa canina), cow parsley (Anthriscus sylvestris), elm (Ulmus spp.), Lords and Ladies (Arum maculatum), cleavers (Galium aparine), butterbur (Orthocarpus erianthus), lesser celandine (Ranunculus ficaria), snowdrops (Galanthus spp.), red campion (Silene dioica), ivy (Hedera helix), red fescue (Festuca rubra), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata).
O2d – 2 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated roadside hedgerow closely managed to a height and width of 1m. A 2-3m grassland verge is present on the roadside edge with false oat grass (Arrhenatherum elatius), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica) and cleavers (Galium aparine).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), cleavers (Galium aparine), ivy (Hedera helix), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), bramble (Rubus fruticosus agg.).
O2d – 3 FULL ACCESS	Intact Species-Rich Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with standard ash (Fraxinus excelsior) and holly (Ilex aquifolium) present growing on either side of the stream O2c – 9. The hedgerow is well maintained on the south side but is growing into and from the banks on the northern side. It is between ~1.5 – 3m height and between ~2 - 3m wide. Other woody components include ash (Fraxinus excelsior), elder (Sambucus nigra), elm (Ulmus spp.) and sycamore (Acer pseudoplatanus). The ground flora is largely ruderal with common nettle (Urtica dioica), cleavers (Galium aparine), white dead-nettle (Lamium album) and ivy (Hedera helix) as well as garlic mustard (Alliaria petiolata) and Lords and Ladies (Arum maculatum).	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), rose (Rosa spp.), ivy (Hedera helix), common nettle (Urtica dioica), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), holly (Ilex aquifolium), elm (Ulmus spp.), Lords and Ladies (Arum maculatum), white dead-nettle (Lamium album), sycamore (Acer pseudoplatanus), dandelion (Taraxacum officinale agg.), cleavers (Galium aparine), garlic mustard (Alliaria petiolata).

COMPARTMENT 2D		
TN No. /Access	**Description**	**Species**
	There is a lot of rabbit (Oryctolagus cuniculus) activity. Visibility was poor due to overgrowth in places and it is possible that there could be a sett present.	
O2d – 4 FULL ACCESS	Running Water Stream with slowly flowing clear water to ~0.5m width and to a depth of ~20cm. The banks are to 4m width at the top and steep, between 60º and 80º. The substrate is clay with some stones and some organic debris but no artificial debris. Some emergent and marginal vegetation recorded including rush (Juncus spp.), fool's watercress (Apium nodiflorum) and brooklime (Veronica beccabunga). Banks are largely ruderal vegetation including common nettle (Urtica dioica), bramble (Rubus fruticosus agg.) and ivy (Hedera helix) and are heavily shaded by hedgerow (O2c – 10) in places with poor visibility at the western end. Some trees are associated with the stream including willow (Salix spp.). Low water vole (Arvicola amphibius) potential due to heavy shading and few marginals/aquatics.	Rosebay willowherb (Epilobium angustifolium), fool's watercress (Apium nodiflorum), rush (Juncus spp.), dock (Rumex spp.), creeping buttercup (Ranunculus repens), common nettle (Urtica dioica), brooklime (Veronica beccabunga), Cock's foot (Dactylis glomerata), red fescue (Festuca rubra), false oat grass (Arrhenatherum elatius), ground ivy (Glechoma hederacea), common ragwort (Senecio jacobaea), ivy (Hedera helix), Lords and Ladies (Arum maculatum), bracken (Pteridium aquilinum), horse chestnut (Aesculus hippocastanum), creeping thistle (Cirsium arvense) hogweed (Hypericum sphondylium), red campion (Silene dioica), rose (Rosa spp.), willow (Salix spp.).
O2d – 5 FULL ACCESS	Open Water Shallow (>30cm) balancing pond in a horseshoe shape (area of 40m^2), likely to have been created as part of the adjacent bypass. A mix of emergent aquatic species is present near the margins of pond and include reed-mace (Typha latifolia), marsh marigold (Caltha palustris), brooklime (Veronica beccabunga), hard rush (Juncus inflexus) and common reed (Phragmites australis). Floating aquatic species are also present throughout the pond and include pondweed (Potamogeton spp.), water starwort (Callitriche spp.) and green algae. The banks of the pond rise to 6 - 8m at an average aspect of 40 - 55º, with the pond margins supporting frequent bare muddy ground with occasional hard rush, great willowherb (Epilobium hirsutum), creeping bent (Agrostis stolonifera), creeping buttercup (Ranunculus repens) and pleurocarpus moss species.	Reed-mace (Typha latifolia), brooklime (Veronica beccabunga), marsh marigold (Caltha palustris), hard rush (Juncus inflexus), common reed (Phragmites australis), pondweed (Potamogeton spp.), water starwort (Callitriche spp.), creeping bent (Agrostis stolonifera), creeping buttercup (Ranunculus repens).

COMPARTMENT 2D		
TN No. /Access	**Description**	**Species**
	Potential for great crested newts (Triturus cristatus) in the pond.	
O2d – 6 FULL ACCESS	Semi-Improved Grassland Terrestrial habitat surrounding the pond O2d – 5 likely to have been recently sown as part of the creation of the adjacent bypass. Tall grassland is present, unlikely to be regularly managed, including false oat grass (Arrhenatherum elatius), red fescue (Festuca rubra) and bent grass (Agrostis spp.) with frequent black knapweed (Centaurea nigra) and occasional common ragwort (Senecio jacobaea), colt's foot (Tussilago farfara), ribwort plantain (Plantago lanceolata) and yarrow (Achillea millefolium). A typical neutral grassland species mix used along road corridors.	Black knapweed (Centaurea nigra), false oat grass (Arrhenatherum elatius), common ragwort (Senecio jacobaea), false oat grass (Arrhenatherum elatius), broadleaf dock (Rumex obtusifolius), bent grass (Agrostis spp.), colt's foot (Tussilago farfara), cock's foot (Dactylis glomerata), rosebay willowherb (Epilobium angustifolium), crested dog's-tail (Cynosurus cristatus), red fescue (Festuca rubra), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), red clover (Trifolium pratense), vetch (Vicia spp.), ribwort plantain (Plantago lanceolata), tufted hair-grass (Deschampsia cespitosa), white clover (Trifolium repens), creeping buttercup (Ranunculus repens), teasel (Dipsacus fullonum), yarrow (Achillea millefolium), creeping thistle (Cirsium arvense), spear thistle (Cirsium vulgare), wild carrot (Daucus carota).
O2d – 7 FULL ACCESS	Intact Species-Rich Hedgerow Recently planted hedgerow (>3 years) with a mix of typical hedgerow species including hazel (Corylus avellana), holly (Ilex aquifolium), field maple (Acer campestre), blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna), dog rose (Rosa canina). Occasional young ash (Fraxinus excelsior) standard trees have been planted in the hedgerow.	Hazel (Corylus avellana), holly (Ilex aquifolium), field maple (Acer campestre), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), dog rose (Rosa canina), elder (Sambucus nigra).
O2d – 8 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow along a narrow ditch (O2d - 4). The hedgerow is closely managed to a height and width of 1m. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and cleavers (Galium aparine) with occasional woodland species such as lesser celandine (Ranunculus ficaria) and Lords and Ladies (Arum maculatum).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), cleavers (Galium aparine), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album), Lords and Ladies (Arum maculatum), red campion (Silene dioica).

COMPARTMENT 2D		
TN No. /Access	**Description**	**Species**
O2d – 9 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow along a railway corridor. The hedgerow is closely managed to a height and width of 1m. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and cleavers (Galium aparine) with occasional woodland species such as lesser celandine (Ranunculus ficaria) and Lords and Ladies (Arum maculatum). The railway may act as a potential wildlife corridor for reptile species.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), cleavers (Galium aparine), false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album), Lords and Ladies (Arum maculatum), red campion (Silene dioica).
O2d – 10 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Thin hedgerow with hawthorn (Crataegus monogyna) and elm (Ulmus spp.). Closely managed to a height of 1.5m and a width of 0.5m. Two mature sycamore (Acer pseudoplatanus) and ash (Fraxinus excelsior) trees are present at the western edge of the hedgerow. Ruderal species dominate the understorey and include cleavers (Galium aparine), common nettle (Urtica dioica) with occasional woodland species such as Lords and Ladies (Arum maculatum).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), elm (Ulmus spp.), sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), white dead-nettle (Lamium album), common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), Lords and Ladies (Arum maculatum), red campion (Silene dioica).
O2d – 11 FULL ACCESS	Scattered Scrub A thin line of scattered semi mature hawthorn (Crataegus monogyna) and elder (Sambucus nigra) scrub on bare stony ground present along a railway corridor. Railway may act as a potential wildlife corridor for reptile species.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra) and dog rose (Rosa canina).
02d – 12 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with occasional elm (Ulmus spp.). Closely managed to a height of 2m and 1.5m width. Ruderal species dominate the understorey and include cleavers (Galium aparine), common nettle (Urtica dioica)	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), elm (Ulmus spp.), dog rose (Rosa canina), cleavers (Galium aparine), common nettle (Urtica dioica), white dead-nettle (Lamium album), cow parsley (Anthriscus sylvestris), Lords and Ladies (Arum maculatum).

COMPARTMENT 2D		
TN No. /Access	**Description**	**Species**
	and white dead-nettle (Lamium album) with occasional woodland species such as Lords and Ladies (Arum maculatum).	
O2d – 13 FULL ACCESS	Plantation Broadleaf Woodland A small copse (>80m^2) of maturing sycamore (Acer pseudoplatanus) trees over semi-improved grassland with an abundance of ruderal species including false oat grass (Arrhenatherum elatius), cow parsley (Anthriscus sylvestris) and cleavers (Galium aparine).	Sycamore (Acer pseudoplatanus), false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine).
O2d – 14 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Short section of unmanaged hedgerow with overgrown mature hawthorn (Crataegus monogyna) to a height of 4-5m. A fully mature ash (Fraxinus excelsior) tree is present at the southern end. Ruderal species dominate the understorey and include cleavers (Galium aparine), common nettle (Urtica dioica) and white dead-nettle (Lamium album). A number of cracks, splits and holes were noted in the mature ash tree which may provide roosting potential for bat species.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), cleavers (Galium aparine), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album).
O2d – 15 FULL ACCESS	Semi-Natural Broadleaf Woodland Thin linear belt of secondary woodland along a narrow stream. A variety of mature and semi-mature trees are present forming a relatively open canopy and include ash (Fraxinus excelsior), crack willow (Salix fragilis) and sycamore (Acer pseudoplatanus) with a shrub layer of scattered hawthorn (Crataegus monogyna), holly (Ilex aquifolium), and elder (Sambucus nigra). The understorey of the woodland is dominated by ivy (Hedera helix) with occasional woodland species including Lords and Ladies (Arum maculatum) and lesser celandine (Ranunculus ficaria). Ruderal species such as common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris) are locally abundant.	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), crack willow (Salix fragilis), holly (Ilex aquifolium), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), ivy (Hedera helix), Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria), red campion (Silene dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), white dead-nettle (Lamium album), common nettle (Urtica dioica).

COMPARTMENT 2D		
TN No. /Access	**Description**	**Species**
	A 2 - 4m false oat grass (Arrhenatherum elatius) dominated grassland verge is present on the southern edge of the woodland.	
O2d – 16 CLOSE DISTANT	Running Water Narrow stream to 1m in width with high clay banks rising to 2 - 2.5m at a steep incline of 75 - 80º. Slow- sluggish flow. The stream is bounded by broadleaf woodland (O2d – 15). The stream could not be effectively surveyed due to surrounding vegetation. However, the banks appeared to be dominated by bare ground with occasional ivy (Hedera helix) and common nettle (Urtica dioica) with locally abundant patches of bramble (Rubus fruticosus agg.) scrub.	Ivy (Hedera helix), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), cleavers (Galium aparine).
O2d – 17 FULL ACCESS	Intact Species-Poor Hedgerow Managed privet (Ligustrum spp.) hedgerow on the edge of a residential property, closely managed to a height of 1.5m high and width of 1m.	
O2d – 18 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with occasional mature sycamore (Acer pseudoplatanus) trees. Ruderal species dominate the understorey and include cleavers (Galium aparine), common nettle (Urtica dioica) and white dead-nettle (Lamium album).	Hawthorn (Crataegus monogyna), sycamore (Acer pseudoplatanus), elm (Ulmus spp.), elder (Sambucus nigra), cleavers (Galium aparine), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album), ivy (Hedera helix), false oat grass (Arrhenatherum elatius).

COMPARTMENT 3A		
TN No. /Access	**Description**	**Species**
O3a – 1 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow, last cut to ~3m but growth to ~4m at the time of survey, ~4m wide. 3x ash (Fraxinus excelsior) to the eastern end have bat potential. Ground flora includes common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris) and cleavers (Galium aparine) along with lesser celandine (Ranunculus ficaria) and Lords and Ladies (Arum maculatum), bramble (Rubus fruticosus agg.), ivy (Hedera helix) and rose (Rosa spp.) were growing within the hedgerow.	Hawthorn (Crataegus monogyna), ivy (Hedera helix), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), lesser celandine (Ranunculus ficaria), willow (Salix spp.), rose (Rosa spp.), ash (Fraxinus excelsior), Lords and Ladies (Arum maculatum).
O3a – 2 FULL ACCESS	Running Water Visibility impaired due to thick hedge on compartment side although it is more open to the east. Little water present at time of survey, slow flowing with organic and artificial debris present. Water to a depth of ~20cm with a width of ~0.5 – 1m, flowing west to east. Banks to a height of ~2m above the water with an angle of ~45º. No marginals or aquatics were recorded, the bankside vegetation was largely ruderal such as common nettle (Urtica dioica), cleavers (Galium aparine) and cow parsley (Anthriscus sylvestris) (see hedgerow O3a – 1)	Common nettle (Urtica dioica), cleavers (Galium aparine), lesser celandine (Ranunculus ficaria), cow parsley (Anthriscus sylvestris).
O3a – 3 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Gappy hawthorn (Crataegus monogyna) dominated hedgerow with some standard ash (Fraxinus excelsior) and sycamore (Acer pseudoplatanus), managed to ~2m height and ~1.5 width. Grass dominated ground flora with some ruderals including red fescue (Festuca rubra), lesser celandine (Ranunculus ficaria), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), Yorkshire fog (Holcus lanatus) and speedwell (Veronica spp.). Some deadwood present. Rose (Rosa spp.) and bramble (Rubus fruticosus agg.) present within the hedgerow.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), red fescue (Festuca rubra), lesser celandine (Ranunculus ficaria), cleavers (Galium aparine), elder (Sambucus nigra), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens), rose (Rosa spp.), speedwell (Veronica spp.), red dead-nettle (Lamium purpureum), elm (Ulmus spp.), sycamore (Acer pseudoplatanus).

COMPARTMENT 3A		
TN No. /Access	**Description**	**Species**
O3a – 4 FULL ACCESS	Intact Species-Poor Hedgerow Recently planted, laid hawthorn (Crataegus monogyna) hedgerow with ruderal species such as common nettle (Urtica dioica), cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine) and hogweed (Heracleum sphondylium) beneath. Hedge to height of ~0.75m and ~0.5m wide. 1x young ash (Fraxinus excelsior) standard at ~5m height. The hedgerow is older, to ~1.2m height towards the west.	Hawthorn (Crataegus monogyna), cock's foot (Dactylis glomerata), red fescue (Festuca rubra), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), hogweed (Heracleum sphondylium), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), ash (Fraxinus excelsior), white dead-nettle (Lamium album), red dead-nettle (Lamium purpureum), garlic mustard (Alliaria petiolata), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius).
O3a – 5 FULL ACCESS	Intact Species-Poor Hedgerow Recently planted, laid hawthorn (Crataegus monogyna) hedgerow with ruderal species such as common nettle (Urtica dioica), cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine) and hogweed (Heracleum sphondylium) beneath. Hedge to height of ~1.2m and ~0.5-1m wide. No standards present.	Hawthorn (Crataegus monogyna), cock's foot (Dactylis glomerata), red fescue (Festuca rubra), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), hogweed (Heracleum sphondylium), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), ash (Fraxinus excelsior), white dead-nettle (Lamium album), red dead-nettle (Lamium purpureum), garlic mustard (Alliaria petiolata), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), field maple (Acer campestre).

COMPARTMENT 3B		
TN No. /Access	**Description**	**Species**
O3b – 1 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow closely managed to a height and width of 1m. Ruderal species dominate the understorey and include false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), hogweed (Heracleum sphondylium) and garlic mustard (Alliaria petiolata).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), field maple (Acer campestre), false oat grass (Arrhenatherum elatius), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), garlic mustard (Alliaria petiolata), common nettle (Urtica dioica), cock's foot (Dactylis glomerata), white dead-nettle (Lamium album), foxglove (Digitalis purpurea).
O3b – 2 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with locally abundant field maple (Acer campestre) and elm (Ulmus spp.). Closely managed to a height of 1.5m and width of 1m. Ruderal species dominate the understorey and include broadleaf dock (Rumex obtusifolius) and common nettle (Urtica dioica).	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), field maple (Acer campestre), elder (Sambucus nigra), elm (Ulmus spp.), ivy (Hedera helix), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), broadleaf dock (Rumex obtusifolius).
O3b – 3 FULL ACCESS	Intact Species-Rich Hedgerow An abundance of hawthorn (Crataegus monogyna) is present in the hedgerow, however with frequent blackthorn (Prunus spinosa), dog rose (Rosa canina), and occasional elder (Sambucus nigra), ash (Fraxinus excelsior) and elm (Ulmus spp.). The hedgerow is managed to a height and width of 1.5m. Ruderal species dominate the understorey and include common nettle (Urtica dioica), cleavers (Galium aparine) and garlic mustard (Alliaria petiolata).	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), dog rose (Rosa canina), elder (Sambucus nigra), ash (Fraxinus excelsior), elm (Ulmus spp.), common nettle (Urtica dioica), ivy (Hedera helix), cleavers (Galium aparine), garlic mustard (Alliaria petiolata), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), broadleaf dock (Rumex obtusifolius), cow parsley (Anthriscus sylvestris), bramble (Rubus fruticosus agg.).
O3b – 4 FULL ACCESS	Intact Species-Rich Hedgerow An abundance of hawthorn (Crataegus monogyna) is present in the hedgerow, however with frequent blackthorn (Prunus spinosa), dog rose (Rosa canina), and occasional elder (Sambucus nigra), ash (Fraxinus excelsior) and elm (Ulmus spp.). The hedgerow is managed to a height of 1.5m and width of 2.5m. A wet ditch is present on the northern side of the hedgerow with a narrow channel	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), dog rose (Rosa canina), elm (Ulmus spp.), elder (Sambucus nigra), blackthorn (Prunus spinosa), ivy (Hedera helix), common nettle (Urtica dioica), bramble (Rubus fruticosus agg.), broadleaf dock (Rumex obtusifolius), great willowherb (Epilobium hirsutum).

COMPARTMENT 3B		
TN No. /Access	**Description**	**Species**
	(>30cm wide), shallow water depth (>15cm) and sluggish to stagnant flow. The clay banks rise to 1.5m in height at an aspect of approximately 60º. The banks and water channel are overgrown with common nettle (Urtica dioica), bramble (Rubus fruticosus agg.) and great willowherb (Epilobium hirsutum).	
O3b – 5 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow which has recently been laid and re-planted with more hawthorn. Three young ash (Fraxinus excelsior) trees are present. Frequent gaps are present throughout hedgerow. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and white dead-nettle (Lamium album).	Hawthorn (Crataegus monogyna), dog rose (Rosa canina), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), common nettle (Urtica dioica), spear thistle (Cirsium vulgaris), cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album), ivy (Hedera helix), bramble (Rubus fruticosus agg.).
O3b – 6 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) and elm (Ulmus spp.) dominated hedgerow. The hedgerow is closely managed to a height of 1.5m and width of 1.5 – 3m. A wet ditch is present on the southern side of the hedgerow with a narrow channel (>30cm wide), shallow water depth (>15cm) and a sluggish to stagnant flow. The clay banks rise to 1.5m in height at an aspect of 70-80º. The banks and water channel are overgrown with common nettle (Urtica dioica), bramble (Rubus fruticosus agg.) and great willowherb (Epilobium hirsutum). Ruderal species dominate the understorey and include common nettle (Urtica dioica), cleavers (Galium aparine) and bramble (Rubus fruticosus agg.). Woodland species are more prominent to east where the hedgerow becomes wider and includes red campion (Silene dioica), Lords and Ladies (Arum maculatum) and lesser celandine (Ranunculus ficaria).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), dog rose (Rosa canina), common nettle (Urtica dioica), cleavers (Galium aparine), bramble (Rubus fruticosus agg.), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), great willowherb (Epilobium hirsutum), lesser celandine (Ranunculus ficaria), Lords and Ladies (Arum maculatum), red campion (Silene dioica).

COMPARTMENT 3B		
TN No. /Access	**Description**	**Species**
O3b – 7 FULL ACCESS	Defunct Species-Poor Hedgerow An unmanaged section of hedgerow along a railway corridor with wide gaps. Locally abundant patches of ash (Fraxinus excelsior), elm (Ulmus spp.) and blackthorn (Prunus spinosa) are present with elder (Sambucus nigra) and dog rose (Rosa canina). The railway has potential to provide a wildlife corridor for reptile species.	Ash (Fraxinus excelsior), elm (Ulmus spp.), elder (Sambucus nigra), dog rose (Rosa canina), blackthorn (Prunus spinosa), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine).
O3b – 8 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Gappy hawthorn (Crataegus monogyna) dominated hedgerow with some standard ash (Fraxinus excelsior) and sycamore (Acer pseudoplatanus), managed to ~2m height and ~1.5 width. Grass dominated ground flora with some ruderals including red fescue (Festuca rubra), lesser celandine (Ranunculus ficaria), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), Yorkshire fog (Holcus lanatus) and speedwell (Veronica spp.). Some deadwood present. Rose (Rosa spp.) and bramble (Rubus fruticosus agg.) present within the hedgerow.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), elm (Ulmus spp.), dog rose (Rosa canina), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), ivy (Hedera helix), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), white dead-nettle (Lamium album), broadleaf dock (Rumex obtusifolius), cleavers (Galium aparine), bramble (Rubus fruticosus agg.), hogweed (Heracleum sphondylium).
O3b – 9 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) and elm (Ulmus spp.) dominated hedgerow with occasional blackthorn (Prunus spinosa), closely managed to 1m in height and width. The hedgerow has been re-planted with hawthorn. Frequent semi-mature ash (Fraxinus excelsior) trees are also present. Ruderal species dominate the understorey and include broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica) and cleavers (Galium aparine).	Elm (Ulmus spp.), hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), bramble (Rubus fruticosus agg.).
O3b – 10 FULL ACCESS	Defunct Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with extensive gaps. The hedgerow has recently been laid and replanted with more hawthorns.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), cleavers (Galium aparine), garlic mustard (Alliaria petiolata), field speedwell (Veronica persica), red dead-nettle (Lamium purpureum), bramble

COMPARTMENT 3B		
TN No. /Access	**Description**	**Species**
		(Rubus fruticosus agg.).
O3b – 11 FULL ACCESS	Defunct Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with extensive gaps. The hedgerow has recently been laid and replanted with more hawthorns.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), cleavers (Galium aparine), hogweed (Hypericum sphondylium), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), garlic mustard (Alliaria petiolata), bramble (Rubus fruticosus agg.).

COMPARTMENT 3C		
TN No. /Access	**Description**	**Species**
O3c – 1 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow, no standard trees, maintained to ~1.5m height and ~2m width. Understorey largely consists of ruderal species including cow parsley (Anthriscus sylvestris), cleavers (Galium aparine) and rosebay willowherb (Epilobium angustifolium) with some lesser celandine (Ranunculus ficaria). Bramble (Rubus fruticosus agg.) and rose (Rosa spp.) were recorded within the hedgerow.	Hawthorn (Crataegus monogyna), common nettle (Urtica dioica), ivy (Hedera helix), hogweed (Heracleum sphondylium), lesser celandine (Ranunculus ficaria), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), rosebay willowherb (Epilobium angustifolium), rose (Rosa spp.), elm (Ulmus spp.).
O3c – 2 FULL ACCESS	Intact Species-Rich Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with elm (Ulmus spp.), elder (Sambucus nigra), pedunculate oak (Quercus robur), field maple (Acer campestre) and hazel (Corylus avellana) with rose (Rosa spp.) and bramble (Rubus fruticosus agg.) also recorded within the hedgerow. Ground flora includes ruderal vegetation such as cleavers (Galium aparine), common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris) as well as red campion (Silene dioica) and bluebell (Hyacinthoides non-scripta). 2x standard ash (Fraxinus excelsior) trees were recorded. A wet ditch runs along the off-compartment side of this hedgerow. It is maintained to a height of ~2m and a width of ~2-3m. This could potentially be an 'important hedgerow'.	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), rose (Rosa spp.), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), cleavers (Galium aparine), elder (Sambucus nigra), cow parsley (Anthriscus sylvestris), dock (Rumex spp.), pedunculate oak (Quercus robur), red campion (Silene dioica), field maple (Acer campestre), broad-leaved willowherb (Epilobium montanum), hogweed (Heracleum sphondylium), hazel (Corylus avellana), dock (Rumex spp.), ash (Fraxinus excelsior), bluebell (Hyacinthoides non-scripta), Cock's foot (Dactylis glomerata).
O3c – 3 FULL ACCESS	Intact Species-Rich Hedgerow This is a hawthorn (Crataegus monogyna) dominated hedgerow maintained to 1.5 – 2m height and between 2 – 3m in width by cutting. One small standard ash (Fraxinus excelsior) was recorded. Components also include blackthorn (Prunus spinosa), field maple (Acer campestre), ash and elm (Ulmus spp.). The ground flora is largely ruderal with false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), cleavers (Galium aparine), dock (Rumex spp.) and cow parsley (Anthriscus sylvestris) as well as rare Lords and Ladies (Arum maculatum).	Blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine), dock (Rumex spp.), field maple (Acer campestre), elder (Sambucus nigra), cow parsley (Anthriscus sylvestris), rose (Rosa spp.), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), ash (Fraxinus excelsior), ivy (Hedera helix), elm (Ulmus spp.), Lords and Ladies (Arum maculatum).

COMPARTMENT 3C		
TN No. /Access	**Description**	**Species**
O3c – 4 FULL ACCESS	Intact Species-Rich Hedgerow This is a wide, sprawling hedge, especially towards the northern end where it is up to 5m across, closer to 2-3m at the southern end. It is ~1.5m high throughout its length and has several small standard ash (Fraxinus excelsior), cherry (Prunus spp.) and sycamore (Acer pseudoplatanus) trees. There is a dry ditch which runs along the road side of this hedgerow. Understorey species include rosebay willowherb (Epilobium angustifolium), common nettle (Urtica dioica), cleavers (Galium aparine), Cock's foot (Dactylis glomerata) and hogweed (Heracleum sphondylium) as well as Lords and Ladies (Arum maculatum) and rare horsetail (Equisetum spp.). This could potentially be an 'important hedgerow'.	Dock (Rumex spp.), ivy (Hedera helix), Lords and Ladies (Arum maculatum), bramble (Rubus fruticosus agg.), rosebay willowherb (Epilobium angustifolium), hawthorn (Crataegus monogyna), rose (Rosa spp.), elm (Ulmus spp.), common nettle (Urtica dioica), hogweed (Heracleum sphondylium), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine), ash (Fraxinus excelsior), Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), sycamore (Acer pseudoplatanus), tufted hair-grass (Deschampsia cespitosa), red campion (Silene dioica), cherry (Prunus spp.), hogweed (Heracleum sphondylium), horsetail (Equisetum spp.), blackthorn (Prunus spinosa), spear thistle (Cirsium vulgare), white dead-nettle (Lamium album).
O3c – 5 FULL ACCESS	Intact Species-Rich Hedgerow An abundance of hawthorn (Crataegus monogyna) is present in the hedgerow, however with frequent blackthorn (Prunus spinosa), dog rose (Rosa canina), and occasional elder (Sambucus nigra), ash (Fraxinus excelsior) and elm (Ulmus spp.). The hedgerow is managed to a height and width of 1.5m. Ruderal species dominate the understorey and include common nettle (Urtica dioica), cleavers (Galium aparine) and garlic mustard (Alliaria petiolata).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), blackthorn (Prunus spinosa), elm (Ulmus spp.), rose (Rosa spp.), bramble (Rubus fruticosus agg.), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), dock (Rumex spp.), field maple (Acer campestre).

COMPARTMENT 4A		
TN No. /Access	**Description**	**Species**
O4a – 1 NO ACCESS, VIEWED CLOSE	Semi-Improved Grassland **No access, viewed over the gate only** Ridge and furrow semi-improved grassland field, cattle grazed (appears to be low intensity, only 8-10 in the field at the time of survey). One small area of bramble (Rubus fruticosus agg.) and hawthorn (Crataegus monogyna) scrub to the northern end. Grass species which could be identified given constraints include Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius) and tufted hair-grass (Deschampsia cespitosa). Rush (Juncus spp.) and common nettle (Urtica dioica) were also identified.	Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), tufted hair-grass (Deschampsia cespitosa), rush (Juncus spp.), common nettle (Urtica dioica).
O4a – 2 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with some elder (Sambucus nigra) and rare willow (Salix spp.) to 6m in height and ~5m wide, with standard ash (Fraxinus excelsior) to 10m co-dominant with the hawthorn trees. Some dead standing ash trees. Damp wet ditch running along the road side of the hedge for approximately 50% of its length at the southern end. Ivy (Hedera helix) and ruderal species such as common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris) and lots bramble (Rubus fruticosus agg.) scrub on the field (O4a – 1) side.	Hawthorn (Crataegus monogyna), ivy (Hedera helix), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), garlic mustard (Alliaria petiolata), ash (Fraxinus excelsior), bramble (Rubus fruticosus agg.), dock (Rumex spp.), cleavers (Galium aparine), creeping buttercup (Ranunculus repens), perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), elder (Sambucus nigra), red campion (Silene dioica), elm (Ulmus spp.), willow (Salix spp.).
O4a – 3 NO ACCESS, VIEWED CLOSE	Defunct Species-Poor Hedgerow **No access, viewed from a distance only.** Hawthorn (Crataegus monogyna) dominated hedgerow, leggy to the north and denser to the south to 4m height. Some elder (Sambucus nigra) also seen.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra).
O4a – 4 PARTIAL ACCESS	Defunct Species-Poor Hedgerow **Access limited to one half of the hedgerow.** Gappy, defunct hawthorn (Crataegus monogyna) dominated hedge, unmanaged to 6m	Hawthorn (Crataegus monogyna), ivy (Hedera helix), bramble (Rubus fruticosus agg.), cleavers (Galium aparine), honeysuckle (Lonicera spp.), rose (Rosa spp.), common nettle (Urtica dioica).

COMPARTMENT 4A		
TN No. /Access	**Description**	**Species**
	height with lots of bramble (Rubus fruticosus agg.) and ivy (Hedera helix) present. Largely grass (O4a – 1) present beneath.	
O4a – 5 FULL ACCESS	Improved Grassland With Scattered Broadleaf Trees Improved grassland, perennial rye grass (Lolium perenne) dominated with young pedunculate oak (Quercus robur), ash (Fraxinus excelsior) and beech (Fagus sylvatica) trees (~8/10m) planted. Some daffodil (Narcissus spp.) planted beneath as well as small ornamental rose (Rosa spp.). Other herbaceous species present in the grassland include daisy (Bellis perennis), creeping buttercup (Ranunculus repens), dock (Rumex spp.), speedwell (Veronica spp.), dandelion (Taraxacum officinale agg.) and common mouse-ear (Cerastium fontanum).	Perennial rye grass (Lolium perenne), silver birch (Betula pendula), beech (Fagus sylvatica), rose (Rosa spp.), daffodil (Narcissus spp.), speedwell (Veronica spp.), dandelion (Taraxacum officinale agg.), Yorkshire fog (Holcus lanatus), dock (Rumex spp.), creeping buttercup (Ranunculus repens), common mouse-ear (Cerastium fontanum), cow parsley (Anthriscus sylvestris), ash (Fraxinus excelsior), pedunculate oak (Quercus robur), red fescue (Festuca rubra).
O4a – 6 FULL ACCESS	Semi-Improved Grassland Sheep grazed semi-improved grassland with some herbaceous species and some moss. Grasses include false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), perennial rye grass (Lolium perenne) and cock's foot (Dactylis glomerata) whilst herbaceous species include creeping buttercup (Ranunculus repens), dandelion (Taraxacum officinale agg.), spear thistle (Cirsium vulgare), dock (Rumex spp.), daisy (Bellis perennis) and common nettle (Urtica dioica). Three large pedunculate oak (Quercus robur) present towards the centre of the field and 4 mature hawthorn (Crataegus monogyna) at the northern end, close to the stream (O4a – 7) along with a small patch of blackthorn (Prunus spinosa) scrub.	False oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), perennial rye grass (Lolium perenne), common nettle (Urtica dioica), dock (Rumex spp.), daisy (Bellis perennis), dandelion (Taraxacum officinale agg.), spear thistle (Cirsium vulgare), white clover (Trifolium repens), Cock's foot (Dactylis glomerata), pedunculate oak (Quercus robur), hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), bramble (Rubus fruticosus agg.).
O4a - 7	Running Water Small stream, <0.5m across in most places with clear water flowing west to east to a depth of ~20cm. The base is flattened and rocky in places with banks to 2m height and shallow angles in most places. Stone and sediment base with no aquatics/marginals. Little organic/artificial debris present. Ruderal and grass species including common nettle (Urtica dioica), dock (Rumex spp.), cock's foot (Dactylis glomerata) and rosebay willowherb (Epilobium angustifolium) on the banks as well as lesser celandine	Common nettle (Urtica dioica), dock (Rumex spp.), cock's foot (Dactylis glomerata), lesser celandine (Ranunculus ficaria), rosebay willowherb (Epilobium angustifolium), Lords and Ladies (Arum maculatum), shining cranesbill (Geranium lucidum) and cardamine (Cardamine spp.).

COMPARTMENT 4A		
TN No. /Access	**Description**	**Species**
	(Ranunculus ficaria) and shining cranesbill (Geranium lucidum). This stream has low water vole (Arvicola amphibius) potential.	
O4a – 8 FULL ACCESS	Semi-Natural Broadleaf Woodland With Scattered Scrub. Trees and scrub surrounding the stream O4a – 7, some are self-set and naturally generated although there is a line of hawthorn (Crataegus monogyna) on either side which appear to been laid in the past but have now grown to mature trees, 10-12m in height. Willow (Salix spp.) were recorded closer to the water and ruderal species including ivy (Hedera helix), bramble (Rubus fruticosus agg.), cleavers (Galium aparine), common nettle (Urtica dioica) and dock (Rumex spp.) were recorded in the ground flora.	Hawthorn (Crataegus monogyna), ivy (Hedera helix), bramble (Rubus fruticosus agg.), rose (Rosa spp.), willow (Salix spp.), common nettle (Urtica dioica), cleavers (Galium aparine), dock (Rumex spp.), elder (Sambucus nigra), Cock's foot (Dactylis glomerata).
O4a – 9 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with abundant rose (Rosa spp.) as a woody component, occasional elder (Sambucus nigra), elm (Ulmus spp.) and hazel (Corylus avellana). Hedgerow is dominated by dense bramble (Rubus fruticosus agg.) scrub in places, ivy (Hedera helix) also recorded growing through the hedgerow. Understorey is largely ruderal with common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris) and dock (Rumex spp.) as well as Lords and Ladies (Arum maculatum) and garlic mustard (Alliaria petiolata). Mature ash (Fraxinus excelsior) recorded throughout and willow (Salix spp.) to towards the south including dead stumps. There is a moist ditch on the off-compartment side and the hedge shows signs of being laid in the past. The southern portion of the hedge, where it runs beside the road, is well maintained but the remainder shows no evidence of recent cutting.	Hawthorn (Crataegus monogyna), rose (Rosa spp.), ash (Fraxinus excelsior), elder (Sambucus nigra), hazel (Corylus avellana), false oat grass (Arrhenatherum elatius), dock (Rumex spp.), common nettle (Urtica dioica), ivy (Hedera helix), bramble (Rubus fruticosus agg.), cleavers (Galium aparine), rosebay willowherb (Epilobium angustifolium), cow parsley (Anthriscus sylvestris), Lords and Ladies (Arum maculatum), garlic mustard (Alliaria petiolata), willow (Salix spp.), hogweed (Hypericum sphondylium), elm (Ulmus spp.).

COMPARTMENT 4B		
TN No. /Access	**Description**	**Species**
O4b – 1 FULL ACCESS	Semi-Improved Grassland and Plantation Broadleaf Woodland Part of a Woodland Trust compartment. An extensive area of semi-improved wet grassland with ridge and furrow to the north. The grassland rises to an incline to its north-western boundary, bordering Compartment O4c, another part of the Woodland Trust compartment. An even sward was present within the grassland at a height of 10-20cm. The grassland is dominated by Yorkshire fog (Holcus lanatus) with frequent to locally abundant tufted hair-grass (Deschampsia cespitosa). Cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius) and red fescue (Festuca rubra) are also present. The grassland is generally species-poor with creeping buttercup (Ranunculus repens) and meadow buttercup (Ranunculus acris) abundant throughout with frequent sorrel (Rumex acetosa). Disturbed areas of the grassland support abundant common nettle (Urtica dioica), spear thistle (Cirsium vulgare) and broadleaf dock (Rumex obtusifolius). Soft rush (Juncus effusus), creeping buttercup (Ranunculus repens) and tufted hair-grass (Deschampsia cespitosa) are frequent to locally abundant in furrows with Yorkshire fog (Holcus lanatus) almost solely dominant on ridges. Wild carrot (Daucus carota) is locally abundant on the north-west incline of the compartment, where it is probably drier. Woodland compartments have been planted within last few months throughout the grassland, particularly near to the western boundary. A variety of species have been planted and include pedunculate oak (Quercus robur), ash (Fraxinus excelsior), willow (Salix spp.), hazel (Corylus avellana) and alder (Alnus glutinosa). A number of meadow pipits (Anthus pratensis) were noted throughout the grassland.	Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra), creeping buttercup (Ranunculus repens), spear thistle (Cirsium vulgare), greater plantain (Plantago major), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), tufted hair-grass (Deschampsia cespitosa), sorrel (Rumex acetosa), white clover (Trifolium repens), soft rush (Juncus effusus), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), wild carrot (Daucus carota), hazel (Corylus avellana), pedunculate oak (Quercus robur), ash (Fraxinus excelsior), willow (Salix spp.), elm (Ulmus spp.), alder (Alnus glutinosa).

COMPARTMENT 4B		
TN No. /Access	**Description**	**Species**
O4b – 2 FULL ACCESS	Open Water Part of a Woodland Trust compartment. Small circular pond ($20m^2$) on the western boundary of O4b - 1. Appears to be recently created, with no aquatic vegetation present. The fairly uniform banks rise to 1.5 m in height at an aspect of 35-40º. The banks support tufted hair-grass (Deschampsia cespitosa), soft rush (Juncus effusus) and (Glyceria spp.) with abundant bare ground. Low potential for great crested newt (Triturus cristatus) although suitable terrestrial habitats surround.	Tufted hair-grass (Deschampsia cespitosa), soft rush (Juncus effusus), hawthorn (Crataegus monogyna), spear thistle (Cirsium vulgare), sweet grass (Glyceria spp.).
O4b – 3 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Part of a Woodland Trust compartment. Undermanaged thin hedgerow along a wet ditch to a height of 2m and 1m in width. Hawthorn (Crataegus monogyna) is generally dominant with locally abundant elm (Ulmus spp.). Two mature ash (Fraxinus excelsior) trees are present in the hedgerow, one of which supports frequent deadwood, cracks and splits. Potential for roosting bats. A wet ditch is present to the south of the hedgerow with a narrow channel (>30cm) and shallow water (>20cm) with a slow-sluggish flow. The clay banks rise to 1m at an aspect of 60º. The banks and water channel have recently been dredged; therefore no aquatic vegetation is present.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), elm (Ulmus spp.), pedunculate oak (Quercus robur), dog rose (Rosa canina), bramble (Rubus fruticosus agg.), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius), great willowherb (Epilobium hirsutum).
O4b – 4 CLOSE DISTANT	Semi-Improved Grassland No access was gained to the field; however it appeared to be short grazed semi-improved and generally species-poor. Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens) and white clover (Trifolium repens) are dominant at the field margins.	White clover (Trifolium repens), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens).

COMPARTMENT 4B		
TN No. /Access	**Description**	**Species**
	Ridge and furrow is only slightly evident within the field.	
O4b – 5 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with frequent elm (Ulmus spp.), closely managed to a height of 2.5m and width of 3m. Semi-mature ash (Fraxinus excelsior) and pedunculate oak (Quercus robur) trees are also present. A wet ditch is present to the northern side of the hedgerow with a narrow channel (>40cm), shallow water depth (>45cm) and sluggish flow. The clay banks rise to 0.5m at an average aspect of 80º. The channel is overgrown with common nettle (Urtica dioica), bramble (Rubus fruticosus agg.) and great willowherb (Epilobium hirsutum). Woodland species such as Lords and Ladies (Arum maculatum) and lesser celandine (Ranunculus ficaria) are found frequently in the hedgerow understorey.	Hawthorn (Crataegus monogyna), pedunculate oak (Quercus robur), ash (Fraxinus excelsior), elm (Ulmus spp.), ivy (Hedera helix), cleavers (Galium aparine), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), Lords and Ladies (Arum maculatum), garlic mustard (Alliaria petiolata), great willowherb (Epilobium hirsutum), lesser celandine (Ranunculus ficaria).
O4b – 6 FAR DISTANT	Intact Species-Poor Hedgerow With Trees Hedgerow assessed from distance of at least 30-40m with binoculars, no direct access was possible. Tall (>5m) hawthorn (Crataegus monogyna) hedgerow with one mature ash (Fraxinus excelsior) tree. From a distance, the hedgerow appears to be species poor and generally undermanaged.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), elder (Sambucus nigra).
O4b – 7 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Part of a Woodland Trust site. An overgrown and unmanaged hedgerow with tall mature hawthorn (Crataegus monogyna) to a height of 6m. Two mature ash (Fraxinus excelsior) trees are present. Ruderal species are present in the understorey and include cleavers (Galium aparine), white dead-nettle (Lamium album) and false oat grass (Arrhenatherum elatius).	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), common chickweed (Stellaria media).

COMPARTMENT 4B		
TN No. /Access	**Description**	**Species**
O4b – 8 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Part of a Woodland Trust site. A generally unmanaged hedgerow to a height of 1.5-3m and width of 3m with full, bushy crowns. Hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa) are dominant in the hedgerow with occasional semi-mature ash (Fraxinus excelsior) trees. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and Yorkshire fog (Holcus lanatus).	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), dog rose (Rosa canina), elder (Sambucus nigra), bramble (Rubus fruticosus agg.), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine).
O4b – 9 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Part of a Woodland Trust site. A generally unmanaged hedgerow to a height of 1.5-2.5m and width of 3-3.5m with full, bushy crowns. Hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa) are dominant in the hedgerow with frequent elm (Ulmus spp.). Occasional mature ash (Fraxinus excelsior) and pedunculate oak (Quercus robur) trees are present. A collapsed crack willow (Salix fragilis) tree is present to the south of the hedgerow. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and Yorkshire fog (Holcus lanatus).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), blackthorn (Prunus spinosa), crack willow (Salix fragilis), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus).
O4b – 10 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Part of a Woodland Trust site. Hawthorn (Crataegus monogyna) dominated hedgerow with locally abundant elm (Ulmus spp.). Semi-mature elm (Ulmus spp.) trees are present to the west of the hedgerow. Managed to a height of 2m and width of 2.5m.	Bramble (Rubus fruticosus agg.), ivy (Hedera helix), false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), common nettle (Urtica dioica).

COMPARTMENT 4B		
TN No. /Access	**Description**	**Species**
	Ruderal species dominate the understorey and include bramble (Rubus fruticosus agg.), ivy (Hedera helix) and common nettle (Urtica dioica).	
O4b – 11 FULL ACCESS	Defunct Species-Poor Hedgerow Overgrown hedgerow along a school field to 8m in height with hawthorn (Crataegus monogyna), ash (Fraxinus excelsior) and elm (Ulmus spp.). A wet ditch is present to the east of the hedgerow and has been recently dredged. Clay banks rise to 1m in height at an aspect of 70º. Channel is approximately 60cm wide with a slow to sluggish flow and a shallow water depth (>20cm). The ditch banks support Yorkshire fog (Holcus lanatus), tufted hair-grass (Deschampsia cespitosa), broadleaf dock (Rumex obtusifolius) and bramble (Rubus fruticosus agg.) with frequent patches of bare ground.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), elm (Ulmus spp.), dog rose (Rosa canina), Yorkshire fog (Holcus lanatus), tufted hair-grass (Deschampsia cespitosa), common nettle (Urtica dioica), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius), bramble (Rubus fruticosus agg.), ivy (Hedera helix).
O4b – 12 FULL ACCESS	Intact Species-Poor Hedgerow With Trees An intensively managed hawthorn (Crataegus monogyna) hedgerow alongside residential properties. A mature and topped ash (Fraxinus excelsior) tree is present to the south. A wet ditch is present to the east of hedgerow and has been recently dredged. Clay banks rise to 1m in height at an aspect of approximately 70º. The channel is approximately 60cm wide with a slow to sluggish flow and a shallow water depth (>20cm). Ditch banks support Yorkshire fog (Holcus lanatus), tufted hair-grass (Deschampsia cespitosa), broadleaf dock (Rumex obtusifolius) and bramble (Rubus fruticosus agg.) with frequent patches of bare ground.	Hawthorn (Crataegus monogyna), dog rose (Rosa canina), Yorkshire fog (Holcus lanatus), tufted hair-grass (Deschampsia cespitosa), common nettle (Urtica dioica), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius), bramble (Rubus fruticosus agg.), ivy (Hedera helix).

COMPARTMENT 4C		
TN No. /Access	**Description**	**Species**
O4c – 1 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Part of a Woodland Trust compartment. Managed roadside hedgerow to a height of 2.5m and width of 3m. Hawthorn (Crataegus monogyna) dominates the hedgerow with elder (Sambucus nigra), elm (Ulmus spp.) and dog rose (Rosa canina). Occasional semi-mature ash (Fraxinus excelsior) and pedunculate oak (Quercus robur) trees are present. A 2m grassland verge is present to the south of the hedgerow and supports a variety of species including Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius) and red fescue (Festuca rubra) with frequent black knapweed (Centaurea nigra), meadowsweet (Filipendula ulmaria) and lesser celandine (Ranunculus ficaria). A wet ditch is preset on the northern side of the hedgerow with banks rising to 0.5m at an aspect of 70-80º. The channel of the ditch is narrow (>30cm) with a sluggish flow and has a shallow water depth (>15cm). The banks and channel of the ditch are overgrown bramble (Rubus fruticosus agg.), common nettle (Urtica dioica) and great willowherb (Epilobium hirsutum).	Hawthorn (Crataegus monogyna), dog rose (Rosa canina), elder (Sambucus nigra), pedunculate oak (Quercus robur), elm (Ulmus spp.), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), hogweed (Heracleum sphondylium), meadowsweet (Filipendula ulmaria), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), lesser celandine (Ranunculus ficaria), black knapweed (Centaurea nigra), ivy (Hedera helix), bramble (Rubus fruticosus agg.).
O4c – 2 FULL ACCESS	Semi-Improved Grassland Part of a Woodland Trust compartment. L-shaped area of short sward semi-improved grassland surrounding a young plantation woodland (O4c – 5). To the east, the grassland rises at a steep incline. The sward appears to be rabbit grazed and is generally species-poor. Yorkshire fog (Holcus lanatus) is dominant with occasional to frequent tufted hair-grass (Deschampsia cespitosa), sorrel (Rumex acetosa), creeping buttercup (Ranunculus repens), broadleaf dock (Rumex obtusifolius) and common nettle (Urtica dioica). Wild carrot (Daucus carota) is locally frequent near	Yorkshire fog (Holcus lanatus), tufted hair-grass (Deschampsia cespitosa), sorrel (Rumex acetosa), creeping buttercup (Ranunculus repens), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), wild carrot (Daucus carota), white clover (Trifolium repens), field wood-rush (Luzula campestris).

COMPARTMENT 4C		
TN No. /Access	**Description**	**Species**
	the peak of the incline with occasional field wood-rush (Luzula campestris). Ant hills are present in this area. To the north the grassland is level although with gentle hills and hummocks. Soft rush (Juncus effusus) and tufted hair-grass (Deschampsia cespitosa) becomes more frequent within the hummocks and particularly near to the eastern boundary of the grassland.	
O4c - 3	Defunct Species-Poor Hedgerow With Trees Part of a Woodland Trust compartment. Unmanaged and overgrown hedgerow to a height of 4 - 5m with hawthorn (Crataegus monogyna) and occasional elder (Sambucus nigra). Occasional mature ash (Fraxinus excelsior) and elm (Ulmus spp.) trees are also present. Ruderal species dominate the understorey and include common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris) and false oat grass (Arrhenatherum elatius).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), ash (Fraxinus excelsior), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), Lords and Ladies (Arum maculatum).
O4c - 4	Defunct Species-Poor Hedgerow With Trees Part of a Woodland Trust compartment. Unmanaged and overgrown hedgerow with hawthorn (Crataegus monogyna) and dog rose (Rosa canina) and an abundance of dense bramble (Rubus fruticosus agg.) throughout. The hedgerow supports full, bushy crowns forming a high hedgerow to 5m in height and 5-6m in width. Lords and Ladies (Arum maculatum), ivy (Hedera helix), lesser celandine (Ranunculus ficaria) and common nettle (Urtica dioica) are abundant in the understorey.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), dog rose (Rosa canina), common nettle (Urtica dioica), ivy (Hedera helix), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), bramble (Rubus fruticosus agg.), lesser celandine (Ranunculus ficaria).

COMPARTMENT 4C		
TN No. /Access	**Description**	**Species**
O4c - 5	Plantation Broadleaf Woodland Part of a Woodland Trust site. Recently planted broadleaf woodland (last 2-3 years) on a steep incline. A wide variety of species have been planted and include hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), pedunculate oak (Quercus robur), hazel (Corylus avellana), willow (Salix spp.), silver birch (Betula pendula) and alder (Alnus glutinosa). Tall semi-improved grassland is present below the saplings with mainly ruderal species including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), tufted hair-grass (Deschampsia cespitosa), hogweed (Hypericum sphondylium), cow parsley (Anthriscus sylvestris) and spear thistle (Cirsium vulgare).	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), pedunculate oak (Quercus robur), hazel (Corylus avellana), silver birch (Betula pendula), hazel (Corylus avellana), alder (Alnus glutinosa), willow (Salix spp.), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), tufted hair-grass (Deschampsia cespitosa), lesser celandine (Ranunculus ficaria), hogweed (Hypericum sphondylium), cow parsley (Anthriscus sylvestris), spear thistle (Cirsium vulgare), sorrel (Rumex acetosa), creeping buttercup (Ranunculus repens), common nettle (Urtica dioica).
O4c - 6	Dense Scrub Part of a Woodland Trust site. Small area (<40m$^{2)}$) of dense scrub with mature hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), bramble (Rubus fruticosus agg.) and gorse (Ulex europaeus).	
O4c - 7	Dense Scrub Part of a Woodland Trust site. Sinuous belt of dense mature hawthorn (Crataegus monogyna) scrub up to 8m in width around an area of tall ruderal vegetation (O4c – 8). Occasional semi-mature ash (Fraxinus excelsior) trees are present in the scrub. Common nettle (Urtica dioica), cleavers (Galium aparine) and Lords and Ladies (Arum maculatum) are present in the understorey with frequent to abundant bare ground.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), ash (Fraxinus excelsior), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), broadleaf dock (Rumex obtusifolius).

COMPARTMENT 4C		
TN No. /Access	**Description**	**Species**
O4c - 8	Tall Ruderal Herb And Fern Part of a Woodland Trust site. Small area of tall ruderal vegetation (>40m^2) surrounded by dense scrub (O4c – 7). Creeping thistle (Cirsium arvense) dominates with frequent broadleaf dock (Rumex obtusifolius), tufted hair-grass (Deschampsia cespitosa), common nettle (Urtica dioica), creeping buttercup (Ranunculus repens) and spear thistle (Cirsium vulgare). The vegetation has developed over bare ground.	Creeping thistle (Cirsium arvense), broadleaf dock (Rumex obtusifolius), tufted hair-grass (Deschampsia cespitosa), common nettle (Urtica dioica), creeping buttercup (Ranunculus repens), spear thistle (Cirsium vulgare), great willowherb (Epilobium hirsutum), white dead-nettle (Lamium album), common chickweed (Stellaria media), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata).
O4c - 9	Marsh Part of a Woodland Trust site. Wet depression covering an area of 15-20m^2 with extensive soft rush (Juncus effusus) and occasional great willowherb (Epilobium hirsutum), Yorkshire fog (Holcus lanatus) and broadleaf dock (Rumex obtusifolius). The depression is wet underfoot and small shallow pools occur with an abundance of water starwort (Callitriche sp.) Tufted hair-grass (Deschampsia cespitosa), creeping buttercup (Ranunculus repens), Yorkshire fog (Holcus lanatus) and creeping thistle (Cirsium arvense) are present on the surrounding banks, which rise to a height of 1.5m.	Soft rush (Juncus effusus), great willowherb (Epilobium hirsutum), Yorkshire fog (Holcus lanatus), broadleaf dock (Rumex obtusifolius), (Callitriche sp), tufted hair-grass (Deschampsia cespitosa), creeping buttercup (Ranunculus repens), Yorkshire fog (Holcus lanatus), creeping thistle (Cirsium arvense).
O4c - 10	Intact Species-Poor Hedgerow With Trees Part of a Woodland Trust site. Hawthorn (Crataegus monogyna) dominated hedgerow with frequent blackthorn (Prunus spinosa) and elm (Ulmus spp.). Occasional mature pedunculate oak (Quercus robur) and ash (Fraxinus excelsior) trees are present. The hedgerow is generally unmanaged to a height of 1.5-2m and 3-3.5m width. A wet ditch is present on the west of the hedgerow with clay banks rising to 0.5m at an	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), blackthorn (Prunus spinosa), crack willow (Salix fragilis), pedunculate oak (Quercus robur), ash (Fraxinus excelsior), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), ivy (Hedera helix), soft rush (Juncus effusus), broadleaf dock (Rumex obtusifolius), creeping buttercup (Ranunculus repens), Yorkshire fog (Holcus lanatus).

COMPARTMENT 4C		
TN No. /Access	**Description**	**Species**
	aspect of approximately 80º. The ditch has a narrow channel (>30cm) with a shallow sluggish flow due to an abundance of soft rush (Juncus effusus), Yorkshire fog (Holcus lanatus), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica) and creeping buttercup (Ranunculus repens).	
O4c - 11	Dense Scrub Part of a Woodland Trust site. Dense copse of hawthorn (Crataegus monogyna) scrub to 5-6m in height with occasional semi-mature elm (Ulmus spp.) trees. Ivy (Hedera helix) and common nettle (Urtica dioica) dominates the field layer.	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), common nettle (Urtica dioica), ivy (Hedera helix), Lords and Ladies (Arum maculatum), red campion (Silene dioica), broadleaf dock (Rumex obtusifolius).

COMPARTMENT 5A		
TN No. /Access	**Description**	**Species**
O5a – 1 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with occasional blackthorn (Prunus spinosa). Frequent semi-mature horse chestnut (Aesculus hippocastanum) trees are present. The hedgerow is managed to a height of 1.5m and width of 2.5m. Ruderal species dominate the understorey and include white dead-nettle (Lamium album), common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris).	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), elder (Sambucus nigra), horse chestnut (Aesculus hippocastanum), white dead-nettle (Lamium album), common nettle (Urtica dioica), ivy (Hedera helix), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), garlic mustard (Alliaria petiolata), cleavers (Galium aparine), field speedwell (Veronica persica).
O5a – 2 FULL ACCESS	Plantation Broadleaf Woodland Linear belt of trees approximately 6-8m wide with mature ash (Fraxinus excelsior), lime (Tilia spp.), horse chestnut (Aesculus hippocastanum), balsam poplar (Populus balsamifera) and frequent semi-mature Leyland cypress (X Cuprocyparis leylandii). Occasional hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa) shrubs are present. The ground layer is dominated by Yorkshire fog (Holcus lanatus), Lords and Ladies (Arum maculatum) and common nettle (Urtica dioica).	Ash (Fraxinus excelsior), lime (Tilia spp.), horse chestnut (Aesculus hippocastanum), balsam poplar (Populus balsamifera), Leyland cypress (X Cuprocyparis leylandii), blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna), Yorkshire fog (Holcus lanatus), Lords and Ladies (Arum maculatum), cleavers (Galium aparine), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris).
O5a – 3 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with a mature ash (Fraxinus excelsior) tree. The hedgerow is managed to a height of 2m and width of 2.5m. Ruderal species dominate the understorey and include white dead-nettle (Lamium album), common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), blackthorn (Prunus spinosa), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), hogweed (Heracleum sphondylium), white dead-nettle (Lamium album), field speedwell (Veronica persica).
O5a – 4 FULL ACCESS	Intact Species-Poor Hedgerow Recently laid hedgerow with hawthorn (Crataegus monogyna) and occasional beech (Fagus sylvatica) along the edge of a residential property.	Hawthorn (Crataegus monogyna), beech (Fagus sylvatica).

COMPARTMENT 5A		
TN No. /Access	**Description**	**Species**
O5a – 5 FULL ACCESS	Improved Grassland Recently mowed semi-improved grassland which was not grazed at the time of survey but appeared to be associated with stables. Grass dominated sward with perennial rye grass (Lolium perenne) dominating; other species include Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius) and red fescue (Festuca rubra) which sometimes attained local abundance within the sward. Creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris) and white clover (Trifolium repens) were frequent throughout the sward with occasional ruderals and herbaceous species including dock (Rumex spp.), hogweed (Hypericum sphondylium) and ribwort plantain (Plantago lanceolata). The sward was ~10-15cm tall but longer close to the fences which divided into 5 sections with post and rail fences where ruderals were also in greater frequency including dock (Rumex spp.) and common nettle (Urtica dioica).	Perennial rye grass (Lolium perenne), Cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), cow parsley (Anthriscus sylvestris), white clover (Trifolium repens), meadow buttercup (Ranunculus acris), red clover (Trifolium pratense), ribwort plantain (Plantago lanceolata), dandelion (Taraxacum officinale agg.), vetch (Vicia spp.), red fescue (Festuca rubra), creeping buttercup (Ranunculus repens), dock (Rumex spp.), common nettle (Urtica dioica), hogweed (Hypericum sphondylium).
O5a – 6 FULL ACCESS	Tall Ruderal Herb And Fern Dense common nettle (Urtica dioica) dominant with some hogweed (Hypericum sphondylium) and dock (Rumex spp.) present and mature elder (Sambucus nigra) and hawthorn (Crataegus monogyna) in the centre. This area is fenced off from the surrounding improved grassland (O5a – 6). There is a lot of rabbit activity with holes and droppings in this area.	Elder (Sambucus nigra), hawthorn (Crataegus monogyna), common nettle (Urtica dioica), hogweed (Hypericum sphondylium), dock (Rumex spp.), speedwell (Veronica spp.), Lords and Ladies (Arum maculatum), cleavers (Galium aparine).
O5a – 7 CLOSE DISTANCE	Improved Grassland No Access to this area, viewed from the adjacent field. Appears to be an improved grassland with a sward height of up to 10cm with no grazing at the time of survey. Some patches of barer earth could be seen; here meadow grass (Poa spp.) was noted. Throughout the remainder of the sward, perennial rye grass (Lolium perenne) appeared to dominate with Yorkshire fog (Holcus lanatus) and Cock's foot (Dactylis glomerata) also noted. Herbaceous and ruderal species appeared to be occasional and included dandelion (Taraxacum officinale agg.), creeping buttercup (Ranunculus repens), daisy (Bellis perennis) and common chickweed (Stellaria media).	Perennial rye grass (Lolium perenne), daisy (Bellis perennis), dandelion (Taraxacum officinale agg.), meadow grass (Poa spp.), dock (Rumex spp.), creeping buttercup (Ranunculus repens), white clover (Trifolium repens), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), meadow buttercup (Ranunculus acris), common chickweed (Stellaria media), broadleaf plantain (Plantago major), lesser celandine (Ranunculus ficaria), speedwell (Veronica spp.), common sorrel (Rumex acetosa).

COMPARTMENT 5A		
TN No. /Access	**Description**	**Species**
O5a – 8 FULL ACCESS	Semi-Improved Grassland Large ridge and furrow field on a hill with a slope of ~20° towards the top and levelling out towards the base. Appears to be sheep grazed at times although not at the time of survey. The ridge and furrow pattern follows the gradient of the hill throughout the majority of the field but runs perpendicular to it at the base. The sward is grass-dominated throughout with perennial rye grass (Lolium perenne) forming the dominant component. Other grass species include red fescue (Festuca rubra), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), meadow foxtail (Alopecurus pratensis), crested dog's-tail (Cynosurus cristatus) and bent grass (Agrostis spp.) with some of these attaining local abundance in places. The sward is approx. 90% grass towards the top and bottom of the hill. However, the herbaceous component is more pronounced in the middle reaches where the grass cover is sparser and contributes ~60% of the sward. Herbaceous species recorded throughout the sward include dandelion (Taraxacum officinale agg.), white clover (Trifolium repens), creeping buttercup (Ranunculus repens), red clover (Trifolium pratense), spear thistle (Cirsium vulgare), tufted hair-grass (Deschampsia cespitosa) and daisy (Bellis perennis). Field woodrush (Luzula campestris) was also recorded in places. Directly downhill from the pond (O5a – 10) there is a wet flush where sweet grass (Glyceria spp.), brooklime (Veronica beccabunga), rush (Juncus spp.), creeping buttercup (Ranunculus repens) and water crowfoot (Ranunculus spp.) were recorded.	Perennial rye grass (Lolium perenne), meadow grass (Poa spp.), Yorkshire fog (Holcus lanatus), bent grass (Agrostis spp.), white clover (Trifolium repens), dandelion (Taraxacum officinale agg.), common nettle (Urtica dioica), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), dock (Rumex spp.), creeping buttercup (Ranunculus repens), daisy (Bellis perennis), crested dog's-tail (Cynosurus cristatus), bugle (Ajuga reptans), red clover (Trifolium pratense), wild carrot (Daucus carota), false oat grass (Arrhenatherum elatius), meadow foxtail (Alopecurus pratensis), field woodrush (Luzula campestris), sweet grass (Glyceria spp.), brooklime (Veronica beccabunga), rush (Juncus spp.), water crowfoot (Ranunculus spp.)
O5a – 9 FULL ACCESS	Semi-Improved Grassland With Scattered Scrub Area of longer grass around the pond (O5a – 10) with crested dog's-tail (Cynosurus cristatus), tufted hair-grass (Deschampsia cespitosa) and some creeping thistle (Cirsium arvense) as well as a hawthorn (Crataegus monogyna) shrub and saplings.	Crested dog's-tail (Cynosurus cristatus), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), creeping thistle (Cirsium arvense), red fescue (Festuca rubra), daisy (Bellis perennis), hawthorn (Crataegus monogyna).
O5a – 10 FULL ACCESS	Open Water And Marsh Field pond with little open water but appears to be fed from above by a spring. Stands of compact rush (Juncus conglomeratus), soft rush (Juncus effusus) were growing as marginals with brooklime (Veronica beccabunga) and fool’s watercress (Apium	Broad-leaved willowherb (Epilobium montanum), rosebay willowherb (Epilobium angustifolium), brooklime (Veronica beccabunga), fool’s watercress (Apium nodiflorum), soft rush (Juncus effusus), compact rush (Juncus conglomeratus), dock (Rumex spp.), sweet grass (Glyceria spp.), duckweed (Lemna spp.), bulrush (Typha latifolia), rush (Juncus

COMPARTMENT 5A		
TN No. /Access	**Description**	**Species**
	nodiflorum) growing as emergents. The water is clear with some artificial and organic debris present as well as some duckweed (Lemna spp.). There is a heavy cover of mosses on the damp ground around the edges. From this pond, a wet flush proceeds down the hill in the improved grassland (O5a – 9). This pond could provide habitat for great crested newt (Triturus cristatus).	spp.).
O5a – 11 FULL ACCESS	Un-Improved Grassland This is a tussocky, rank un-improved, grassland which was sheep grazed at low intensity at the time of survey. The sward contains several grass species including Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), red fescue (Festuca rubra), bent grass (Agrostis spp.) and meadow foxtail (Alopecurus pratensis), as well as occasional perennial rye grass (Lolium perenne). Herbaceous species include creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris), common bird's-foot trefoil (Lotus corniculatus), lesser celandine (Ranunculus ficaria), field forget-me-not (Myosotis arvensis), greater stitchwort (Stellaria holostea), cardamine species (Cardamine spp.), black horehound (Ballota nigra) and meadow vetchling (Lathyrus pratensis). The field is marshy towards the southern end with patches of rush (Juncus spp.) and tufted hair-grass (Deschampsia cespitosa) more frequent.	Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), red fescue (Festuca rubra), white clover (Trifolium repens), common sorrel (Rumex acetosa), creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris), crested dog's-tail (Cynosurus cristatus), tufted hair-grass (Deschampsia cespitosa), bent grass (Agrostis spp.), Cock's foot (Dactylis glomerata), meadow foxtail (Alopecurus pratensis), perennial rye grass (Lolium perenne), common bird's-foot trefoil (Lotus corniculatus), meadow vetchling (Lathyrus pratensis), lesser celandine (Ranunculus ficaria), common nettle (Urtica dioica), common mouse-ear (Cerastium fontanum), field forget-me-not (Myosotis arvensis), dock (Rumex spp.), greater stitchwort (Stellaria holostea), cardamine spp. (Cardamine spp.), black horehound (Ballota nigra), tufted hair-grass (Deschampsia cespitosa).
O5a – 12 FULL ACCESS	Open Water Pond filled with sweet grass (Glyceria spp.) and some soft rush (Juncus effusus) and compact rush (Juncus conglomeratus) as marginals. Water was clear but the depth could not be determined due to the cover of sweet grass (Glyceria spp.). Tufted hair-grass (Deschampsia cespitosa) growing close to the waters edge, associated with the grassland surrounding (O5a – 11). This pond could provide habitat for great crested newt (Triturus cristatus).	Tufted hair-grass (Deschampsia cespitosa), sweet grass (Glyceria spp.), soft rush (Juncus effusus), compact rush (Juncus conglomeratus).

COMPARTMENT 5A		
TN No. /Access	**Description**	**Species**
O5a – 13 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with frequent rose (Rosa spp.) and blackthorn (Prunus spinosa). The hedgerow is intensively managed to a height of 1m and width of 3m. Occasional small gaps are present. Bramble (Rubus fruticosus agg.) dominates hedgerow canopy throughout. A dry ditch overgrown with bramble is present to the south of the hedgerow and is 1m in depth and 1.5m in width.	Hawthorn (Crataegus monogyna), rose (Rosa spp.), blackthorn (Prunus spinosa), bramble (Rubus fruticosus agg.).
O5a – 14 FULL ACCESS	Defunct Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with locally abundant dog rose (Rosa canina), intensively managed to a height 1.5m and width of 2.5m. Extensive gaps are present throughout the hedgerow. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris).	Hawthorn (Crataegus monogyna), dog rose (Rosa canina), elder (Sambucus nigra), common nettle (Urtica dioica), Cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), bramble (Rubus fruticosus agg.).
O5a – 16 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow which is generally unmanaged to a height of 3m and width of 3 – 4m. A single semi-mature ash (Fraxinus excelsior) tree is present in the hedgerow. Common nettle (Urtica dioica) dominates the understorey.	Hawthorn (Crataegus monogyna), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata).
O5a – 17 FULL ACCESS	Dense Scrub Dense copse of high mature hawthorn (Crataegus monogyna) scrub to 5m in height on a steep east facing bank. Common nettle (Urtica dioica) dominated the field layer with extensive areas of bare ground.	Hawthorn (Crataegus monogyna), common nettle (Urtica dioica).

COMPARTMENT 5A		
TN No. /Access	**Description**	**Species**
O5a – 18 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow, occasionally managed to a height of 3m and 4m in width. A mature ash (Fraxinus excelsior) tree is present to the east and is covered in dense ivy (Hedera helix).	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), ivy (Hedera helix), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), bramble (Rubus fruticosus agg.).
O5a – 19 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Intensively managed hawthorn (Crataegus monogyna) hedgerow on the edge of a residential property to a height and width of 2m. Several semi-mature silver birch (Betula pendula) have been planted in the hedgerow.	Hawthorn (Crataegus monogyna), silver birch (Betula pendula).
O5a -20 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa) hedgerow running partly along the edge of residential properties. The hedgerow has been intensively managed along the residential properties to a height and width of 1m with occasional small gaps. Two mature ash (Fraxinus excelsior) trees are also present. Further to the north, the hedgerow runs along a small copse of mixed woodland and is generally unmanaged to a height of 4 - 5m. Further to the north again the hedgerow is managed to a height of 1m and width of 4-5m over a dry ditch. Ruderal species dominate the hedgerow understorey and include bramble (Rubus fruticosus agg.), common nettle (Urtica dioica) and cleavers (Galium aparine), with occasional woodland species such as Lords and Ladies (Arum maculatum) and lesser celandine (Ranunculus ficaria).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), blackthorn (Prunus spinosa), dog rose (Rosa canina), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria), cleavers (Galium aparine), ivy (Hedera helix), red campion (Silene dioica).

COMPARTMENT 5A		
TN No. /Access	**Description**	**Species**
O5a – 21 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with abundant mature elder (Sambucus nigra), managed to a height of 2m and width of 3m. A mature ash (Fraxinus excelsior) is present in the hedgerow. Ruderal species dominate the understorey and include cleavers (Galium aparine) and common nettle (Urtica dioica) as well as woodland species Lords and Ladies (Arum maculatum) and lesser celandine (Ranunculus ficaria).	Hawthorn (Crataegus monogyna), dock (Rumex spp.), red dead-nettle (Lamium purpureum), Lords and Ladies (Arum maculatum), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), bramble (Rubus fruticosus agg.), cow parsley (Anthriscus sylvestris), elder (Sambucus nigra), white dead-nettle (Lamium album), cleavers (Galium aparine), ivy (Hedera helix), lesser celandine (Ranunculus ficaria), ash (Fraxinus excelsior).
O5a – 22 FAR DISTANCE	Intact Species-Poor Hedgerow Hedgerow viewed from adjacent field, no direct access to survey. Appears to be a hawthorn (Crataegus monogyna) dominated hedgerow, managed to 2m high and 2-3m in width.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra).

COMPARTMENT 5B		
TN No. /Access	**Description**	**Species**
O5b – 1 NO ACCESS, CLOSE DISTANCE	Improved Grassland NO ACCESS Short sward to 5cm, maintained by cutting, perennial rye grass (Lolium perenne) dominated with some herbaceous species.	Perennial rye grass (Lolium perenne), speedwell (Veronica spp.), dandelion (Taraxacum officinale agg.), Yorkshire fog (Holcus lanatus), daisy (Bellis perennis).
O5b – 2 FULL ACCESS	Defunct Species-Rich Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow to 2m height, 1m width. Mature standard ash (Fraxinus excelsior) within the hedgerow and an associated area of lesser celandine (Ranunculus ficaria), cow parsley (Anthriscus sylvestris), dog's mercury (Mercurialis perennis), ground ivy (Glechoma hederacea), garlic mustard (Alliaria petiolata) and Lords and Ladies (Arum maculatum) under mature beech (Fagus sylvatica) trees. The ground flora of the hedgerow is largely ruderal with ivy (Hedera helix), cow parsley and cleavers (Galium aparine) with Lords and Ladies and lesser celandine also present.	Hawthorn (Crataegus monogyna), ivy (Hedera helix), ash (Fraxinus excelsior), elder (Sambucus nigra), lesser celandine (Ranunculus ficaria), cow parsley (Anthriscus sylvestris), dog's mercury (Mercurialis perennis), ground ivy (Glechoma hederacea), garlic mustard (Alliaria petiolata), Lords and Ladies (Arum maculatum), ground elder (Aegopodium podagraria), common nettle (Urtica dioica), cleavers (Galium aparine), field maple (Acer campestre), elm (Ulmus spp.).
O5b – 3 FULL ACCESS	Semi-Natural Broadleaf Woodland Strip of mature trees, ash (Fraxinus excelsior) dominated with some sycamore (Acer pseudoplatanus), pedunculate oak (Quercus robur) and horse chestnut (Aesculus hippocastanum). Ground flora is an extensive cover of woodland species including dog's mercury (Mercurialis perennis), Lords and Ladies (Arum maculatum), garlic mustard (Alliaria petiolata), lesser celandine (Ranunculus ficaria) and cow parsley (Anthriscus sylvestris). The shrub/understorey is largely absent except for hawthorn (Crataegus monogyna) and elder (Sambucus nigra) along the western edge – this appears to be an old hedge line. Little leaf litter or deadwood present. Well worn tracks exist through the woodland with bike jumps indicating recreational use by locals.	Ash (Fraxinus excelsior), elder (Sambucus nigra), cow parsley (Anthriscus sylvestris), dog's mercury (Mercurialis perennis), Lords and Ladies (Arum maculatum), dock (Rumex spp.), common nettle (Urtica dioica), cleavers (Galium aparine), ivy (Hedera helix), horse chestnut (Aesculus hippocastanum), garlic mustard (Alliaria petiolata), ash (Fraxinus excelsior), cherry (Prunus spp.), hawthorn (Crataegus monogyna), lesser celandine (Ranunculus ficaria), pedunculate oak (Quercus robur), hogweed (Heracleum sphondylium), apple (Malus spp.), daisy (Bellis perennis), sycamore (Acer pseudoplatanus), beech (Fagus sylvatica), garlic mustard (Alliaria petiolata), hogweed (Heracleum sphondylium).
O5b – 4 NO ACCESS,	Semi-Improved Grassland	Ash (Fraxinus excelsior), elder (Sambucus nigra), dock (Rumex spp.), tufted hair-grass (Deschampsia cespitosa), lime (Tilia spp.).

COMPARTMENT 5B		
TN No. /Access	**Description**	**Species**
FAR DISTANCE	**NO ACCESS** Area of grassland with some developing scrub, ash (Fraxinus excelsior) whips and elder (Sambucus nigra) with ruderal species including dock (Rumex spp.), tufted hair-grass (Deschampsia cespitosa) and some mature lime (Tilia spp.) trees.	
O5b – 5 NO ACCESS, CLOSE DISTANCE	Semi-Improved Grassland With Scattered Scrub And Scattered Broadleaf Trees Area of grassland with dense bramble (Rubus fruticosus agg.) scrub, mature lime (Tilia spp.) and one semi-mature beech (Fagus sylvatica). Ruderal species and grass beneath including cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), dock (Rumex spp.) and common nettle (Urtica dioica).	Bramble (Rubus fruticosus agg.), lime (Tilia spp.), beech (Fagus sylvatica), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), dock (Rumex spp.).

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
O5C – 1 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with a damp ditch on the road side. One standard pedunculate oak (Quercus robur) at the northern end. Managed by cutting to 3m high and 3m wide. Ruderals including common nettle (Urtica dioica), cleavers (Galium aparine) and cow parsley (Anthriscus sylvestris) with some lesser celandine (Ranunculus ficaria) and creeping buttercup (Ranunculus repens).	Hawthorn (Crataegus monogyna), ivy (Hedera helix), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), creeping buttercup (Ranunculus repens), lesser celandine (Ranunculus ficaria), cleavers (Galium aparine), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), Lords and Ladies (Arum maculatum), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), garlic mustard (Alliaria petiolata), rosebay willowherb (Epilobium angustifolium), red campion (Silene dioica), elm (Ulmus spp.), rose (Rosa spp.), sycamore (Acer pseudoplatanus), holly (Ilex aquifolium).
O5C – 2 CLOSE DISTANCE	Semi-Improved Grassland With Scattered Broadleaf Trees Sheep grazed semi-improved grassland field with grass species including perennial rye grass (Lolium perenne), false oat grass (Arrhenatherum elatius) and cock's foot (Dactylis glomerata). Some ruderals in the grassland including common nettle (Urtica dioica) and creeping thistle (Cirsium arvense). Some mature trees in the field including ash (Fraxinus excelsior), lime (Tilia spp.) and pine (Pinus spp.). Grassland appears tussocky in places.	Common nettle (Urtica dioica), lesser celandine (Ranunculus ficaria), false oat grass (Arrhenatherum elatius), perennial rye grass (Lolium perenne), lime (Tilia spp.), ash (Fraxinus excelsior), pine (Pinus spp.), tufted hair-grass (Deschampsia cespitosa), white clover (Trifolium repens), creeping thistle (Cirsium arvense).
O5C – 3 CLOSE DISTANCE	Defunct Species-Poor Hedgerow With Trees Leggy hawthorn (Crataegus monogyna) dominated hedgerow to ~8m height with mature standard ash (Fraxinus excelsior) present along the length and pedunculate oak (Quercus robur) and horse chestnut (Aesculus hippocastanum) close to the roundabout. Grass present beneath, not stock proof, sheep use the field (O5c – 2) and the adjacent field to the north as one.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), pedunculate oak (Quercus robur), horse chestnut (Aesculus hippocastanum).
O5C – 4 FAR DISTANCE	Defunct Species-Poor Hedgerow With Trees Visible across the field, this field appears to be similar in character to the adjacent hedge ()5c – 3). Leggy, hawthorn (Crataegus monogyna) dominated hedge with mature	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior).

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
	potentially ash (Fraxinus excelsior) standards.	
O5C – 5 FAR DISTANCE	Semi-Natural Broadleaf Woodland Several hawthorn (Crataegus monogyna) trees with pedunculate oak (Quercus robur) present.	Hawthorn (Crataegus monogyna), pedunculate oak (Quercus robur).
O5C – 6 CLOSE DISTANCE	Semi-Natural Broadleaf Woodland Hawthorn (Crataegus monogyna), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), ash (Fraxinus excelsior) along the boundary with semi-natural broadleaf woodland to the south. Only accessed at the top end close to the road.	Hawthorn (Crataegus monogyna), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), ash (Fraxinus excelsior), Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria), ivy (Hedera helix), holly (Ilex aquifolium).
O5C – 7 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) and elm (Ulmus spp.) co-dominant, to ~3m height, 2m wide and well managed by trimming. Ground layer is largely ruderals including cow parsley (Anthriscus sylvestris), cleavers (Galium aparine) and common nettle (Urtica dioica) with dense ivy (Hedera helix) in places. Pedunculate oak (Quercus robur), ash (Fraxinus excelsior), lime (Tilia spp.) and sycamore (Acer pseudoplatanus) present as mature standards every 10m towards the east especially.	Pedunculate oak (Quercus robur), hawthorn (Crataegus monogyna), elm (Ulmus spp.), ground elder (Aegopodium podagraria), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), common nettle (Urtica dioica), ivy (Hedera helix), Lords and Ladies (Arum maculatum), holly (Ilex aquifolium), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), ground ivy (Glechoma hederacea), lesser celandine (Ranunculus ficaria), bramble (Rubus fruticosus agg.), garlic mustard (Alliaria petiolata), dock (Rumex spp.), Midland hawthorn (Crataegus laevigata), horse chestnut (Aesculus hippocastanum), ash (Fraxinus excelsior), rose (Rosa spp.), lime (Tilia spp.), hogweed (Hypericum sphondylium).
O5C – 8 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow managed by cutting to 2.5m height, ~3m wide with no evidence of recent management. The understorey is largely ruderal with species including cleavers (Galium aparine), common nettle (Urtica dioica) and hogweed (Hypericum sphondylium). Evidence that the hedge has been laid in the past. Pedunculate oak (Quercus robur), ash (Fraxinus excelsior), sycamore (Acer pseudoplatanus) and lime (Tilia spp.) are all present as native standards, roughly every	Pedunculate oak (Quercus robur), hawthorn (Crataegus monogyna), elm (Ulmus spp.), cleavers (Galium aparine), common nettle (Urtica dioica), hogweed (Hypericum sphondylium), cow parsley (Anthriscus sylvestris), dock (Rumex spp.), ground ivy (Glechoma hederacea), rose (Rosa spp.), ivy (Hedera helix), lesser celandine (Ranunculus ficaria), sycamore (Acer pseudoplatanus), Yorkshire fog (Holcus lanatus), garlic mustard (Alliaria petiolata), Lords and Ladies (Arum maculatum), blackthorn (Prunus spinosa), ash (Fraxinus excelsior),

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
	10m. This hedgerow could be important.	white dead-nettle (Lamium album), bramble (Rubus fruticosus agg.), lime (Tilia spp.), semi-mature, daffodil (Narcissus spp.)
O5C – 9 FULL ACCESS	Semi-Improved Grassland With Improved Grassland Areas Old ridge and furrow field, used for grazing but no stock in the field at the time of survey. Some areas are perennial rye grass (Lolium perenne) and red clover (Trifolium pratense) dominated, other areas have more herbaceous species including sorrel (Rumex acetosa), meadow buttercup (Ranunculus acris) and lesser celandine (Ranunculus ficaria). Other grass species present include Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), bent grass (Agrostis spp.) and meadow foxtail (Alopecurus pratensis). Very few ruderals present.	Perennial rye grass (Lolium perenne), white clover (Trifolium repens), daisy (Bellis perennis), cow parsley (Anthriscus sylvestris), ground ivy (Glechoma hederacea), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), dandelion (Taraxacum officinale agg.), white clover (Trifolium repens), broad leaved plantain (Plantago major), red fescue (Festuca rubra), bent grass (Agrostis spp.), sorrel (Rumex acetosa), meadow buttercup (Ranunculus acris), lesser celandine (Ranunculus ficaria),meadow foxtail (Alopecurus pratensis), meadow grass (Poa spp.), common nettle (Urtica dioica).
O5C – 10 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with abundant blackthorn (Prunus spinosa), 2.5m wide and 2-4m high. Maintained by cutting. The understorey is largely bare ground with dense ivy (Hedera helix) and some ruderals including common nettle (Urtica dioica), cleavers (Galium aparine) and cow parsley (Anthriscus sylvestris). One mature ash (Fraxinus excelsior) standard to the south. There mature ash could provide potential roosting habitat for bats.	Blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna), Lords and Ladies (Arum maculatum), common nettle (Urtica dioica), cleavers (Galium aparine), ivy (Hedera helix), bramble (Rubus fruticosus agg.), cow parsley (Anthriscus sylvestris), rose (Rosa spp.), elder (Sambucus nigra), ash (Fraxinus excelsior).
O5C – 11 FULL ACCESS	Semi-Natural Broadleaf Woodland Semi-mature/mature horse chestnut (Aesculus hippocastanum), sycamore (Acer pseudoplatanus) and beech (Fagus sylvatica) trees approximately 25m in height. There is no understorey to the west but some elder (Sambucus nigra) and rose (Rosa spp.) saplings to the east. Ground layer is dominated by lesser celandine (Ranunculus ficaria) in places but more ruderal close to the edge of the field ()5c – 9). Mammal trails are present close to the waters edge. Some leaf litter present. Bird boxes have been put up. Whips have been planted to form an under canopy including pedunculate oak (Quercus	Horse chestnut (Aesculus hippocastanum), sycamore (Acer pseudoplatanus), lesser celandine (Ranunculus ficaria), cow parsley (Anthriscus sylvestris), dock (Rumex spp.), common nettle (Urtica dioica), hogweed (Hypericum sphondylium), cock's foot (Dactylis glomerata), meadow grass (Poa spp.), Lords and Ladies (Arum maculatum), cleavers (Galium aparine), garlic mustard (Alliaria petiolata), bluebell (Hyacinthoides non-scripta), pedunculate oak (Quercus robur), elder (Sambucus nigra), hawthorn (Crataegus monogyna), beech (Fagus sylvatica), burdock (Arctium lappa),

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
	robur), elder, hawthorn (Crataegus monogyna), holly (Ilex aquifolium) and ash (Fraxinus excelsior).	bramble (Rubus fruticosus agg.), holly (Ilex aquifolium), ash (Fraxinus excelsior), garlic mustard (Alliaria petiolata).
O5C – 12 FULL ACCESS	Running water 5m wide old river/canal which appears to be slowly flowing. Water is shallow and clear, (20cm-50cm). Sediment and leaf litter substrate, banks slope shallowly at ~15/20º. Sediment closer to the waters edge, no aquatics/marginals except for some pondweed (Potamogeton spp.) but lots of vegetation present in sections of the river offsite. One small patch of Iris (Iris spp.) present. Two mature willow (Salix spp.) present, associated with the water. A moorhen was seen. It is not likely that this particular stretch of water would provide suitable habitat for water voles as the banks are not suitable for holes and there is no aquatic vegetation present. Areas of broadleaf woodland (O5c – 11 and O5c – 13) present to either side.	Pondweed (Potamogeton spp.), iris (Iris spp.), willow (Salix spp.).
O5C – 13 FULL ACCESS	Semi-Natural Broadleaf Woodland Mature London plane (Platanus x hispanica), sycamore (Acer pseudoplatanus), horse chestnut (Aesculus hippocastanum) and beech (Fagus sylvatica) present with an understorey planted with whips in plastic tubes, some natural with species including elder (Sambucus nigra), ash (Fraxinus excelsior) and elm (Ulmus spp.). The ground layer is cow parsley (Anthriscus sylvestris) dominated with some ruderals as well as Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria) and bluebell (Hyacinthoides non-scripta). Leaf litter present in places. Bird and owl boxes have been put up in the woodland. A leyland cypress (x Cupressia leylandii) hedge to a height of 4m present along the eastern boundary.	Sycamore (Acer pseudoplatanus), horse chestnut (Aesculus hippocastanum), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), bluebell (Hyacinthoides non-scripta), elder (Sambucus nigra), ash (Fraxinus excelsior), lesser celandine (Ranunculus ficaria), elm (Ulmus spp.), cleavers (Galium aparine), holly (Ilex aquifolium), Leyland cypress (x Cupressus leylandii), beech (Fagus sylvatica), white dead-nettle (Lamium album), creeping thistle (Cirsium arvense), foxglove (Digitalis purpurea), bird cherry (Prunus padus), willow (Salix spp.).
O5C – 14 CLOSE DISTANCE	Semi-Improved Grassland This is a horse grazed semi-improved grassland field which appears perennial rye grass (Lolium perenne) dominated with a sward height of ~10cm. Some herbaceous and	Perennial rye grass (Lolium perenne), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), cow parsley (Anthriscus sylvestris), dandelion (Taraxacum officinale agg.), dock (Rumex spp.), spear thistle (Cirsium vulgare), cleavers (Galium aparine), white clover

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
	ruderal species present including spear thistle (Cirsium vulgare), dock (Rumex spp.), cleavers (Galium aparine), white clover (Trifolium repens) and cow parsley (Anthriscus sylvestris).	(Trifolium repens).
O5C – 15 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Thick, hawthorn (Crataegus monogyna) dominated hedgerow with some elder (Sambucus nigra) and a mature ash (Fraxinus excelsior) standard. Managed by cutting to a height of ~2m and a width of ~3m. This hedgerow stops ~10m short of the southern end. The ground layer is largely ruderal with species including common nettle (Urtica dioica), cleavers (Galium aparine) and bramble (Rubus fruticosus agg.).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), Yorkshire fog (Holcus lanatus), common nettle (Urtica dioica), cleavers (Galium aparine), bramble (Rubus fruticosus agg.).
O5C – 16 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with abundant mature elder (Sambucus nigra), managed to a height of 2m and width of 3m. A mature ash (Fraxinus excelsior) is present in the hedgerow. Ruderal species dominate the understorey and include cleavers (Galium aparine) and common nettle (Urtica dioica) as well as woodland species Lords and Ladies (Arum maculatum) and lesser celandine (Ranunculus ficaria).	Hawthorn (Crataegus monogyna), dock (Rumex spp.), red dead-nettle (Lamium purpureum), Lords and Ladies (Arum maculatum), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), bramble (Rubus fruticosus agg.), cow parsley (Anthriscus sylvestris), elder (Sambucus nigra), white dead-nettle (Lamium album), cleavers (Galium aparine), ivy (Hedera helix), lesser celandine (Ranunculus ficaria), ash (Fraxinus excelsior).
O5C – 17 FULL ACCESS	Bare Ground Area used for dressage by the local riding stables, gravel on the ground with some broad-leaved willowherb (Epilobium montanum), meadow grass (Poa spp.) and moss present at the edges.	Broad-leaved willowherb (Epilobium montanum), meadow grass (Poa spp.)
O5C – 18 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with a height of ~2.5m and a width of ~3m. One mature ash (Fraxinus excelsior), ivy (Hedera helix) clad. The ground layer is largely bare ground and ruderal with species including common nettle (Urtica	Hawthorn (Crataegus monogyna), pedunculate oak (Quercus robur), Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria), ground ivy (Glechoma hederacea), common nettle (Urtica dioica), cleavers (Galium aparine), ivy (Hedera helix).

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
	dioica) and cleavers (Galium aparine) as well as lesser celandine (Ranunculus ficaria) and Lords and Ladies (Arum maculatum). The mature ash tree could provide potential roosting habitat for bats.	
O5C – 19 FULL ACCESS	Semi-Improved Grassland Semi-improved grassland field with variable topography, perennial rye grass (Lolium perenne) dominated with ruderals such as cow parsley (Anthriscus sylvestris) and dock (Rumex spp.) rare throughout the sward. Grass species also present include Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius) and cock's foot (Dactylis glomerata) whilst herbaceous species include creeping buttercup (Ranunculus repens), speedwell (Veronica spp.) and daisy (Bellis perennis). Not grazed at the time of survey but it appears to be grazed at times. Sward height to ~15cm.	Perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), white clover (Trifolium repens), lesser celandine (Ranunculus ficaria), cow parsley (Anthriscus sylvestris), common mouse-ear (Cerastium fontanum), Dove's foot cranesbill (Geranium molle), false oat grass (Arrhenatherum elatius), red fescue (Festuca rubra), cock's foot (Dactylis glomerata), daisy (Bellis perennis), speedwell (Veronica spp.), creeping buttercup (Ranunculus repens), dock (Rumex spp.).
O5C – 20 FULL ACCESS	Semi-Improved Grassland With Tall Ruderal Herb And Fern. Tussocky, rank semi-improved grassland with lots of tall ruderal vegetation where common nettle (Urtica dioica) and dock (Rumex spp.) dominate. The field is grazed at a low intensity by sheep at the time of survey. There is an area where ash (Fraxinus excelsior) saplings grow over rubble close to the house (U5c – 21) and sycamore (Acer pseudoplatanus). Lots of debris present close to the buildings which provide good habitat for reptiles.	Common nettle (Urtica dioica), cleavers (Galium aparine), ramsons (Allium ursinum), garlic mustard (Alliaria petiolata), creeping buttercup (Ranunculus repens), Yorkshire fog (Holcus lanatus), perennial rye grass (Lolium perenne), false oat grass (Arrhenatherum elatius), red dead-nettle (Lamium purpureum), dock (Rumex spp.),creeping thistle (Cirsium arvense), spear thistle (Cirsium vulgare), red fescue (Festuca rubra), cock's foot (Dactylis glomerata), Meadow foxtail (Alopecurus pratense), bent grass (Agrostis spp.), sorrel (Rumex acetosa), ash (Fraxinus excelsior), sycamore (Acer pseudoplatanus), rosebay willowherb (Epilobium angustifolium).
O5C – 21 CLOSE DISTANCE	Buildings And Tall Ruderal Herb And Fern A stone built bungalow with a slate roof in good condition with attic skylights. There is also a lean-to shed made of breeze blocks with a corrugated iron roof and a concrete shed with a corrugated iron roof. Garden and abandoned ground with tall ruderal herb and fern and ornamental planting. Some trees present including cherry (Prunus spp.), ash (Fraxinus excelsior), elder (Sambucus nigra) and holly (Ilex aquifolium).	Cherry (Prunus spp.), ash (Fraxinus excelsior), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), holly (Ilex aquifolium).

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
	The buildings could potentially provide roosting habitat for bats.	
O5C – 22 FULL ACCESS	Semi-Improved Grassland Tussocky semi-improved grassland with dense thatch in places, sheep grazed at the time of survey to a low intensity. Grass species include false oat grass (Arrhenatherum elatius), red fescue (Festuca rubra) and meadow foxtail (Alopecurus pratensis) with herbaceous species including sorrel (Rumex acetosa) and lesser celandine (Ranunculus ficaria). Sward is dense in places and is generally grass dominated with some ruderals including patches of common nettle (Urtica dioica).	Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius) cock's foot (Dactylis glomerata), red fescue (Festuca rubra),meadow foxtail (Alopecurus pratensis), sorrel (Rumex acetosa), creeping thistle (Cirsium arvense), dock (Rumex spp.), bent grass (Agrostis spp.), lesser celandine (Ranunculus ficaria), creeping buttercup (Ranunculus repens), common nettle (Urtica dioica).
O5C – 23 FULL ACCESS	Defunct Species-Poor Hedgerow Defunct gappy hedgerow which are individual trees and shrubs rather than forming a cohesive hedgerow, to 6m height. The hedge is denser to the north where blackthorn (Prunus spinosa) dominates. The ground layer is largely ruderal with species including cleavers (Galium aparine), common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris). There is a ditch which was dry at the time of survey to the west of the hedgerow.	Hawthorn (Crataegus monogyna), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), lesser celandine (Ranunculus ficaria), ground ivy (Glechoma hederacea), cleavers (Galium aparine), sycamore (Acer pseudoplatanus), elder (Sambucus nigra), ash (Fraxinus excelsior), dock (Rumex spp.), bramble (Rubus fruticosus agg.), blackthorn (Prunus spinosa), ivy (Hedera helix).
O5C – 24 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated gappy hedgerow which appears unmanaged, to ~6m in height and 3m wide. The ground layer is largely ruderal with species including cow parsley (Anthriscus sylvestris), ivy (Hedera helix) and cleavers (Galium aparine). There is a ditch which was wet at the time of survey to the north. This hedgerow has been laid in the past. Large mature ash (Fraxinus excelsior) and willow (Salix spp.) are present as standards. A dead stump was noted in the hedgerow with some deadwood present, this could provide habitat for reptiles. The mature trees could provide potential roosting habitat for bats.	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), Lords and Ladies (Arum maculatum), cleavers (Galium aparine), rose (Rosa spp.), bramble (Rubus fruticosus agg.), cow parsley (Anthriscus sylvestris), ivy (Hedera helix), blackthorn (Prunus spinosa), willow (Salix spp.).

COMPARTMENT 5C		
TN No. /Access	**Description**	**Species**
O5C – 25 CLOSE DISTANCE	Defunct Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated gappy hedgerow to a height of ~5m and a width of 3m. Standard mature ash (Fraxinus excelsior), some ivy (Hedera helix) covered with one dead stump present. The ground layer appears to be ruderal vegetation.	Ash (Fraxinus excelsior), ivy (Hedera helix), hawthorn (Crataegus monogyna), rose (Rosa spp.).
O5C – 26 FAR DISTANCE	Semi-Improved Grassland Looks to be a tussocky grassland, sheep grazed at the time of survey. The sward looks to include false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), bent grass (Agrostis spp.) and red fescue (Festuca rubra) with some ruderals including common nettle (Urtica dioica) and dock (Rumex spp.).	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), bent grass (Agrostis spp.), red fescue (Festuca rubra), common nettle (Urtica dioica), dock (Rumex spp.).
O5C – 27 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Leyland cypress (x Cupressus leylandii) hedgerow, well maintained to 2m high and 0.5m wide with ash (Fraxinus excelsior) and cherry (Prunus spp.) standards planted along with daffodils (Narcissus spp.) planted below. Trees to a height of ~12m, most closer to ~8m. Some garlic mustard (Alliaria petiolata) and cleavers (Galium aparine) beneath the hedgerow.	Leyland cypress (x Cupressus leylandii), ash (Fraxinus excelsior), cherry (Prunus spp.), daffodil (Narcissus spp.), cleavers (Galium aparine), common nettle (Urtica dioica), garlic mustard (Alliaria petiolata).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 1 FULL ACCESS	Improved Grassland Short sward grassland (>15cm) with perennial rye grass (Lolium perenne), cock's foot (Dactylis glomerata), dandelion (Taraxacum officinale agg.), daisy (Bellis perennis) and meadow buttercup (Ranunculus acris). Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and common nettle (Urtica dioica) is present, probably caused by nutrient enrichment by grazing cattle.	Common nettle (Urtica dioica), meadow buttercup (Ranunculus acris), creeping thistle (Cirsium arvense), spear thistle (Cirsium vulgare), red clover (Trifolium pratense), white clover (Trifolium repens), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra), perennial rye grass (Lolium perenne), creeping buttercup (Ranunculus repens), dandelion (Taraxacum officinale agg.).
O6 – 2 FULL ACCESS	Open Water With Dense Scrub Shallow depression at a depth of 1.5m covering an area of 30-40m^2. Shallow puddles were present in the depression at the time of survey with no aquatic vegetation. The low banks are dominated by dense scrub with hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra) and goat willow (Salix caprea). Locally abundant common nettle (Urtica dioica) and Lords and Ladies (Arum maculatum) are present in field layer with frequent bare ground. Rabbit (Oryctolagus cuniculus) burrows are present on top of banks. Possible potential for great crested newt (Triturus cristatus) and reptiles.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra), goat willow (Salix caprea), common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), Lords and Ladies (Arum maculatum), cleavers (Galium aparine).
O6 – 3 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with two mature stag headed ash (Fraxinus excelsior) trees. Possible potential for roosting bats. The hedgerow is managed to a height and width of 1.5m. A dry ditch is present to the southern edge of the hedgerow and is 1m in depth and 1.5m in width. The steep clay banks and ditch channel are dominated by broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), bramble (Rubus fruticosus agg.).	Hawthorn (Crataegus monogyna), dog rose (Rosa canina), elder (Sambucus nigra), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), ivy (Hedera helix), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), cleavers (Galium aparine), perennial rye grass (Lolium perenne), common chickweed (Stellaria media), broadleaf dock (Rumex obtusifolius).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 4 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Short section of hedgerow with hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior) and midland hawthorn (Crataegus laevigata). Managed to a height and width of 2m. Ivy (Hedera helix), common nettle (Urtica dioica) and cleavers (Galium aparine) is present in the understorey. Two mature horse chestnut (Aesculus hippocastanum) trees are present in the hedgerow with low bat roosting potential.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), elder (Sambucus nigra), horse chestnut (Aesculus hippocastanum), midland hawthorn (Crataegus laevigata), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine).
O6 – 5 PARTIAL ACCESS	Building Stone built stables in a dilapidated condition. A pitched slate tiled roof is present, however, much of it has fallen in. Low potential for roosting bats. No access was gained to survey the interior of building.	
O6 – 6 FULL ACCESS	Semi-Improved Grassland Small area of grassland adjacent to stables O6 – 5, likely to be an abandoned paddock. False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata) and perennial rye grass (Lolium perenne) are present with locally abundant patches of common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and broadleaf dock (Rumex obtusifolius). Piles of rubble are present within grassland, likely to be from adjacent dilapidated stables.	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), cow parsley (Anthriscus sylvestris), hogweed (Heracleum sphondylium), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), white dead-nettle (Lamium album).
O6 – 7 FULL ACCESS	Improved Grassland Short sward grassland (>15cm) with perennial rye grass (Lolium perenne), white clover (Trifolium repens), Cock's foot (Dactylis glomerata), dandelion (Taraxacum	Perennial rye grass (Lolium perenne), meadow buttercup (Ranunculus acris), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), white clover (Trifolium repens), red clover (Trifolium pratense), dandelion (Taraxacum

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	officinale agg.), daisy (Bellis perennis) and meadow buttercup (Ranunculus acris) on ridge and furrow. Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and common nettle (Urtica dioica) are present, probably caused by nutrient enrichment by grazing cattle.	officinale agg.), broadleaf dock (Rumex obtusifolius), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), bramble (Rubus fruticosus agg.).
O6 – 8 FULL ACCESS	<u>Species Poor Hedgerow</u> Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 2.5m and width of 2m. A dry ditch is present on the western edge of the hedgerow and is 1m in depth and width and overgrown with bramble (Rubus fruticosus agg.), common nettle (Urtica dioica) and broadleaf dock (Rumex obtusifolius).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), Yorkshire fog (Holcus lanatus), bramble (Rubus fruticosus agg.), cock's foot (Dactylis glomerata), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius).
O6 – 9 FULL ACCESS	<u>Open Water</u> Stagnant pond with shallow water (>30cm) and muddy margins across an area of approximately 30m^2. Green algae are abundant throughout pond with occasional water crowfoot (Ranunculus fluitans). Shallow and wide banks are present along the margins of the pond with mature ash (Fraxinus excelsior), horse chestnut (Aesculus hippocastanum) and hawthorn (Crataegus monogyna). The roots of the bankside trees and scrub are exposed into the water margins and form part of the pond bank. Common nettle (Urtica dioica) is abundant throughout the surrounding terrestrial habitat with frequent patches of bare ground. Occasional Lords and Ladies (Arum maculatum) are also present. There is the potential for roosting bats in the ash trees due to cracks, splits and rot holes. An owl box is present in the largest ash tree.	Water crowfoot (Ranunculus fluitans), ash (Fraxinus excelsior), horse chestnut (Aesculus hippocastanum), hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), broadleaf dock (Rumex obtusifolius), cleavers (Galium aparine), common chickweed (Stellaria media), Cock's foot (Dactylis glomerata).
O6 – 10 FULL ACCESS	<u>Intact Species-Poor Hedgerow</u> Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 1.5m	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius), false oat grass (Arrhenatherum elatius), cock's

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	and width of 2m. A dry ditch is present to north of the hedgerow and is 1m in depth and 2m in width. The ditch is overgrown with common nettle (Urtica dioica) cleavers (Galium aparine) and broadleaf dock (Rumex obtusifolius).	foot (Dactylis glomerata), Lords and Ladies (Arum maculatum), spear thistle (Cirsium vulgare), lesser celandine (Ranunculus ficaria).
O6 – 11 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Managed hedgerow to 1.5m in height and 2m in width, probably once linked to hedgerow 06 – 4. A variety of native and non-native woody species is present and includes hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), lime (Tilia spp.), wild privet (Ligustrum vulgare), sycamore (Acer pseudoplatanus) and blackthorn (Prunus spinosa). Several mature ash, lime and horse chestnut (Aesculus hippocastanum) trees are present along the hedgerow and are covered in ivy (Hedera helix). Potential for roosting bats in hedgerow trees. A mix of ruderal and woodland plants is present in the understorey and includes Lords and Ladies (Arum maculatum), common nettle (Urtica dioica), cleavers (Galium aparine), red campion (Silene dioica) and ivy.	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), elder (Sambucus nigra), lime (Tilia spp.), wild privet (Ligustrum vulgare), sycamore (Acer pseudoplatanus), blackthorn (Prunus spinosa), holly (Ilex aquifolium), horse chestnut (Aesculus hippocastanum), common nettle (Urtica dioica), ivy (Hedera helix), bramble (Rubus fruticosus agg.), Lords and Ladies (Arum maculatum), red campion (Silene dioica), cleavers (Galium aparine), lesser celandine (Ranunculus ficaria).
O6 – 12 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height and width of 1.5m. A mix of ruderal and woodland plants is present in the understorey and includes Lords and Ladies (Arum maculatum), common nettle (Urtica dioica), cleavers (Galium aparine) and cleavers (Galium aparine).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), Lords and Ladies (Arum maculatum).
O6 – 13 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height and width of 1.5m. A dry ditch is present to eastern edge of the hedgerow and is 1m in depth and 2m in width. The banks and channel of the ditch are overgrown with common	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	nettle (Urtica dioica).	
O6 – 14 FULL ACCESS	Improved Grassland Short sward grassland (>15cm) with perennial rye grass (Lolium perenne), cock's foot (Dactylis glomerata), dandelion (Taraxacum officinale agg.), daisy (Bellis perennis) and meadow buttercup (Ranunculus acris) on ridge and furrow. Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and common nettle (Urtica dioica) are present, probably caused by nutrient enrichment by grazing cattle.	Common chickweed (Stellaria media), spear thistle (Cirsium vulgare), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), dandelion (Taraxacum officinale agg.), common nettle (Urtica dioica), white clover (Trifolium repens), red clover (Trifolium pratense), creeping thistle (Cirsium arvense), red fescue (Festuca rubra), daisy (Bellis perennis), meadow buttercup (Ranunculus acris), creeping buttercup (Ranunculus repens).
O6 – 15 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow occasionally managed to a height of 2.5-3m and a width of 2m. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and false oat grass (Arrhenatherum elatius). A 6m belt of mixed young trees have been planted along the western edge of the hedgerow and include ash (Fraxinus excelsior), Scot's pine (Pinus sylvestris), field maple (Acer campestre), hazel (Corylus avellana) and larch (Larix spp.).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), Scot's pine (Pinus sylvestris), larch (Larix spp.), hazel (Corylus avellana), willow (Salix spp.), field maple (Acer campestre), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata) cleavers (Galium aparine).
O6 – 16 FULL ACCESS	Improved Grassland Short sward grassland grazed by horses (>2-3cm) with perennial rye grass (Lolium perenne), meadow buttercup (Ranunculus acris), daisy (Bellis perennis) and white clover (Trifolium repens). Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and common nettle (Urtica dioica) are present, probably caused by nutrient enrichment by grazing horses.	Perennial rye grass (Lolium perenne), spear thistle (Cirsium vulgare), daisy (Bellis perennis), creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris), red clover (Trifolium pratense), white clover (Trifolium repens), broadleaf dock (Rumex obtusifolius), greater plantain (Plantago major), spear thistle (Cirsium vulgare).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 17 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height and width of 2m. Ruderal species dominate the understorey and include common nettle (Urtica dioica) and cleavers (Galium aparine).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), ivy (Hedera helix), bramble (Rubus fruticosus agg.).
O6 -18 FULL ACCESS	Improved Grassland Short sward grassland grazed by horses (>2-3cm) with perennial rye grass (Lolium perenne), meadow buttercup (Ranunculus acris) and daisy (Bellis perennis), white clover (Trifolium repens). Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and common nettle (Urtica dioica) are present, probably caused by nutrient enrichment by grazing horses.	Perennial rye grass (Lolium perenne), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), red fescue (Festuca rubra), spear thistle (Cirsium vulgare), red clover (Trifolium pratense), white clover (Trifolium repens), bramble (Rubus fruticosus agg.), common chickweed (Stellaria media), common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), creeping thistle (Cirsium arvense), spear thistle (Cirsium vulgare).
O6 – 19 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with frequent gaps managed to a height of 1.5m and width of 2m. Several mature pedunculate oak (Quercus robur) trees are present within the hedgerow and are covered in ivy (Hedera helix). Owl boxes were noted in the oak trees. Potential for roosting bats within cracks, splits and rot holes in the oak trees.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), pedunculate oak (Quercus robur), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), ivy (Hedera helix).
O6 – 20 PARTIAL ACCESS	Buildings Two modern barn buildings constructed from sheet metal and breeze blocks. No internal inspection was carried out. Negligible bat roosting potential.	

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 21 FULL ACCESS	Bare Ground Stone/gravel track way recently re-laid.	
O6 – 22 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 1.5m and width of 2m. Two mature pedunculate oak (Quercus robur) trees are present to the east of the hedgerow with ivy (Hedera helix). Ruderal species dominate the understorey and include common nettle (Urtica dioica), white dead-nettle (Lamium album), creeping thistle (Cirsium arvense), dandelion (Taraxacum officinale agg.) and cleavers (Galium aparine) with planted snowdrops (Galanthus spp.) and daffodil (Narcissus spp.).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), pedunculate oak (Quercus robur), common nettle (Urtica dioica), ivy (Hedera helix), Lords and Ladies (Arum maculatum), white dead-nettle (Lamium album), creeping thistle (Cirsium arvense), dandelion (Taraxacum officinale agg.), garlic mustard (Alliaria petiolata), cleavers (Galium aparine), bramble (Rubus fruticosus agg.), snowdrops (Galanthus spp.), daffodil (Narcissus spp.).
O6 – 23 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow occasionally managed to a height of 1.5m and width of 2m, which is overgrown in parts with bramble (Rubus fruticosus agg.) and cleavers (Galium aparine). Two mature pedunculate oak (Quercus robur) are present on the western edge of the hedgerow with have the potential to support roosting bats. A line of semi-mature wild cherry (Prunus avium) are present along the northern edge of the hedgerow.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), pedunculate oak (Quercus robur), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), ivy (Hedera helix), white dead-nettle (Lamium album), creeping thistle (Cirsium arvense), dandelion (Taraxacum officinale agg.), cleavers (Galium aparine).
O6 – 24 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius) and cock's foot (Dactylis glomerata) and occasional perennial rye grass (Lolium perenne). Ruderal herbs occur frequently throughout the sward and include common nettle (Urtica dioica), creeping buttercup	Common nettle (Urtica dioica), bramble (Rubus fruticosus agg.), sorrel (Rumex acetosa), broadleaf dock (Rumex obtusifolius), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), common chickweed (Stellaria media), creeping buttercup (Ranunculus repens),

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	(Ranunculus repens), spear thistle (Cirsium vulgare) and creeping thistle (Cirsium arvense). Parts of the grassland have been scraped to leave bare ground. High spoil mounds occur to the east of the grassland and are dominated by ruderal herbs.	meadow buttercup (Ranunculus acris).
O6 – 25 PARTIAL ACCESS	<u>Running Water</u> **Stream could not be surveyed fully due to the presence of security fencing** Canalised stream. The channel is 2m wide to the east with shallow water (>30cm) with a sluggish flow although almost stagnant in parts. Bulrush (Typha latifolia) is abundant throughout the channel. The clay banks rise to 2.5m in height at an aspect of 45º. Common nettle (Urtica dioica) and cleavers (Galium aparine) are dominant on the banks, with frequent lesser celandine (Ranunculus ficaria) and great willowherb (Epilobium hirsutum). Young alder (Alnus glutinosa), ash (Fraxinus excelsior), goat willow (Salix caprea) and hawthorn (Crataegus monogyna) are also present along the bank edges. The stream is culverted towards the eastern edge with the channel dropping approximately 1m in height as it travels to the west. The channel is narrower (>60cm) with a slow flow and shallow water depth (>30cm). Locally abundant great willowherb and bulrush is present. The banks rise to a height of 3m at a steeper aspect of 50 - 60º. Nettle and cleavers dominate the banks with young alder and goat willow. Burrows are present in parts of the bank, possibly water vole (Arvicola terrestris). However, the banks could not be surveyed effectively due to the presence of security fencing.	Bulrush (Typha latifolia), common nettle (Urtica dioica), cleavers (Galium aparine), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), great willowherb (Epilobium hirsutum), lesser celandine (Ranunculus ficaria), Lords and Ladies (Arum maculatum), alder (Alnus glutinosa), bramble (Rubus fruticosus agg.), ash (Fraxinus excelsior), willow (Salix spp.), goat willow (Salix caprea).
O6 – 26 FULL ACCESS	<u>Introduced Shrubs</u> Linear belt of introduced shrubs and trees with some native species, approximately 5-8m wide. Species present include Spiraea spp., Laurus spp., Cornus spp., Prunus spp.,	Spiraea spp., Laurus spp., Cornus spp., Prunus spp., Acer spp., Pinus spp., ash (Fraxinus excelsior), sycamore (Acer pseudoplatanus).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	Acer spp., Pinus spp., ash (Fraxinus excelsior) and sycamore (Acer pseudoplatanus).	
O6 – 27 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius) and cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne) and meadow foxtail (Alopecurus pratensis). Ruderal herbs are frequent throughout the sward and include common nettle (Urtica dioica) cow parsley (Anthriscus sylvestris), broadleaf dock (Rumex obtusifolius) and hogweed (Hypericum sphondylium).	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), meadow foxtail (Alopecurus pratensis), meadow grass (Poa spp.), red fescue (Festuca rubra), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), cleavers (Galium aparine), hogweed (Hypericum sphondylium), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica) cow parsley (Anthriscus sylvestris), broadleaf dock (Rumex obtusifolius), Hogweed (Hypericum sphondylium.
O6 – 28 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius) and cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne). Ruderal herbs are frequent throughout the sward and include common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), broadleaf dock (Rumex obtusifolius) and hogweed (Hypericum sphondylium). Much of the grassland has been disturbed and frequent areas of bare ground are present due to development works in adjacent areas.	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) creeping buttercup (Ranunculus repens), cleavers (Galium aparine), hogweed (Hypericum sphondylium), white dead-nettle (Lamium album).
O6 – 29 NO ACCESS - FAR DISTANCE	Standing Water With Scattered Broadleaf Trees **Habitat could not be directly accessed do presence of security fencing** Rectangular pond, possibly a balancing lagoon approximately 100m^2. Duckweed (Lemna spp.) appears to be dominant on water surface with a thin belt of bulrush	Duckweed (Lemna spp.), alder (Alnus glutinosa), ash (Fraxinus excelsior), willow (Salix spp.), hawthorn (Crataegus monogyna), dogwood (Cornus sanguinea).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	(Typha latifolia) around the pond margins. The pond banks are uniform, rising to a height of approximately 3-4m at an angle of 60 - 70º. Ruderal plant species appear to dominate the banks with frequent daffodil (Narcissus spp.). Scattered semi-mature trees skirt the top of the banks and surrounding terrestrial area with alder (Alnus glutinosa), ash (Fraxinus excelsior), willow (Salix spp.), hawthorn (Crataegus monogyna) and dogwood (Cornus sanguinea). May have potential for great crested newt (Triturus cristatus), water vole (Arvicola terrestris) and reptile species.	
O6 – 30 FULL ACCESS	Plantation Broadleaf Woodland Small copse of mature sycamore (Acer pseudoplatanus), wild cherry (Prunus avium) and hawthorn (Crataegus monogyna) fragmented by recently constructed access road. The woodland is adjacent to area of new office and residential development. Common nettle (Urtica dioica) dominates the field layer with occasional lesser celandine (Ranunculus ficaria) and Lords and Ladies (Arum maculatum).	Sycamore (Acer pseudoplatanus), wild cherry (Prunus avium), hawthorn (Crataegus monogyna), cleavers (Galium aparine), common nettle (Urtica dioica), lesser celandine (Ranunculus ficaria), broadleaf dock (Rumex obtusifolius), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris).
O6 – 31 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 2m and width of 2.5m. Ruderal herbs dominate the understorey and include common nettle (Urtica dioica) and white dead-nettle (Lamium album).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), ivy (Hedera helix), white dead-nettle (Lamium album), common nettle (Urtica dioica), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius).
O6 – 32 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with locally abundant blackthorn (Prunus spinosa). Managed to a height of 1.5m and width of 2m. Two semi-mature ash (Fraxinus excelsior) trees are present within hedgerow to the north. Ruderal herbs dominate the understorey and include common nettle (Urtica dioica),	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cock's foot (Dactylis glomerata), ivy (Hedera helix), white dead-nettle (Lamium album).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	cow parsley (Anthriscus sylvestris) and white dead-nettle (Lamium album).	
O6 – 33 FULL ACCESS	Plantation Broadleaf Woodland Linear belt of plantation woodland with a variety of semi-mature maple *Acer sp* including sycamore (Acer pseudoplatanus), field maple (Acer campestre) and Norway maple (Acer platanoides). Occasional hawthorn (Crataegus monogyna) is present in the shrub layer. Common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris) and hogweed (Hypericum sphondylium) dominate the field layer.	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), field maple (Acer campestre), sycamore (Acer pseudoplatanus), Norway maple (Acer platanoides), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), perennial rye grass (Lolium perenne), hogweed (Hypericum sphondylium), cleavers (Galium aparine).
O6 – 34 NO ACCESS – CLOSE DISTANT	Plantation Broadleaf Woodland **Woodland could not be accessed due to security fencing** Linear belt of plantation woodland on a low bank 10-15m wide, probably planted as a landscaping screen to adjacent factory units. A number of tree species are present and include ash (Fraxinus excelsior), sycamore (Acer pseudoplatanus), wild cherry (Prunus avium), silver birch (Betula pendula) and Lombardy poplar (Populus nigra variety 'Italica'). Occasional hawthorn (Crataegus monogyna) and elder (Sambucus nigra) scrub are present in the shrub layer. The field layer is dominated by common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris) with frequent areas of bare ground.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), elder (Sambucus nigra), poplar (Populus spp.), dog rose (Rosa canina), Lombardy poplar (Populus nigra variety 'Italica'), sycamore (Acer pseudoplatanus), wild cherry (Prunus avium), silver birch (Betula pendula), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris).
O6 – 35 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius) and cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne) and meadow foxtail (Alopecurus pratensis).	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), meadow foxtail (Alopecurus pratensis), meadow grass (Poa spp.), red fescue (Festuca rubra), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), cleavers (Galium aparine), hogweed (Hypericum sphondylium), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	Ruderal herbs are frequent throughout the sward and include common nettle (Urtica dioica) cow parsley (Anthriscus sylvestris), broadleaf dock (Rumex obtusifolius) and hogweed (Hypericum sphondylium).	
O6 – 36 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius) and Cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne). The grassland appears to have been recently mechanically cut as dead thatch is present throughout. Grasses dominate the sward with only occasional ruderal herb species such as common nettle (Urtica dioica) and spear thistle (Cirsium vulgare).	False oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), dandelion (Taraxacum officinale agg.), creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris).
O6 – 37 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 2m and width of 2.5m. Ruderal herbs dominate the understorey and include common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine) and broadleaf dock (Rumex obtusifolius).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius), cock's foot (Dactylis glomerata), ivy (Hedera helix).
O6 – 38 NO ACCESS – FAR DISTANCE	Buildings New area of residential and commercial development, comprising of mostly offices and apartments. Areas of bare ground and tall ruderal vegetation are present. Could not access the site.	
O6 – 39 FULL ACCESS	Intact Species-Poor Hedgerow High Leyland cypress (X Cuprocyparis leylandii) hedgerow managed to 13m in height and 3 – 4m in width.	

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 40 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus) and Cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne). Ribwort plantain (Plantago lanceolata) and creeping buttercup (Ranunculus repens) are frequent through sward with occasional spear thistle (Cirsium vulgare), common nettle (Urtica dioica) and broadleaf dock (Rumex obtusifolius). The grassland is heavily disturbed in parts with frequent areas of bare ground and stored building materials for adjacent developments (O6 – 38). Evidence of ridge and furrow still in field.	False oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus) and cock's foot (Dactylis glomerata), occasional perennial rye grass (Lolium perenne), ribwort plantain (Plantago lanceolata) and creeping buttercup (Ranunculus repens) spear thistle (Cirsium vulgare), common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius).
O6 – 41 FULL ACCESS	Bare Ground Probably once pasture, field now mostly bare ground with stored building materials for adjacent developments (O6 – 38).	
O6 – 42 FULL ACCESS	Scattered Mixed Trees A number of mature scattered trees present along a track way adjacent to a development area (O6 – 38). Trees include ash (Fraxinus excelsior), ornamental conifers and weeping willow (Salix x sepulcralis). One ash tree has low bat roosting potential.	Ash (Fraxinus excelsior), ornamental conifers, weeping willow (Salix x sepulcralis).
O6 – 43 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 1.5m and width of 2m. Several mature ash (Fraxinus excelsior) trees are present in hedgerow with low to medium bat potential. Owl box in one tree.	Common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), cock's foot (Dactylis glomerata), ivy (Hedera helix), Lords and Ladies (Arum maculatum), bramble (Rubus fruticosus agg.).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	Ruderal herbs dominate the understorey of the hedgerow and include common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), and cleavers (Galium aparine).	
O6 – 44 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus) and cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne) and meadow foxtail (Alopecurus pratensis). The sward is grass dominated with occasional herbs present, which include broadleaf dock (Rumex obtusifolius) and common nettle (Urtica dioica).	False oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), meadow foxtail (Alopecurus pratensis), broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), red fescue (Festuca rubra), sorrel (Rumex acetosa), meadow buttercup (Ranunculus acris).
O6 – 45 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height and width of 2m. A mature stag headed ash tree is present to the south with low to medium bat roosting potential. Cleavers (Galium aparine) and common nettle (Urtica dioica) dominate the hedgerow understorey.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), dog rose (Rosa canina), ash (Fraxinus excelsior), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine), white dead-nettle (Lamium album), Lords and Ladies (Arum maculatum).
O6 – 46 FULL ACCESS	Plantation Broadleaf Woodland Single line of mature hornbeam (Carpinus betulus) trees with occasional hawthorn (Crataegus monogyna) shrubs. Red campion (Silene dioica) is abundant in the field layer with Cock's foot (Dactylis glomerata), common chickweed (Stellaria media) and cleavers (Galium aparine).	Hornbeam (Carpinus betulus), hawthorn (Crataegus monogyna), elder (Sambucus nigra), red campion (Silene dioica), cock's foot (Dactylis glomerata), common chickweed (Stellaria media), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica).
O6 – 47 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Hawthorn (Crataegus monogyna) hedgerow with locally abundant elm (Ulmus spp.),	Broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), cleavers (Galium aparine), false oat grass (Arrhenatherum elatius), bramble (Rubus fruticosus agg.), Lords and Ladies (Arum maculatum).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	blackthorn (Prunus spinosa) and occasional ash (Fraxinus excelsior), elder (Sambucus nigra) and dog rose (Rosa canina). Ruderal herbs dominate the understorey and include common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius) and cleavers (Galium aparine). Several mature stag headed ash trees are present in the hedgerow with low to medium bat potential. Owl boxes are also present in several trees.	
O6 – 48 FULL ACCESS	<u>Intact Species-Poor Hedgerow With Trees</u> Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 1.5m and width of 2m. Ruderal herbs dominate the understorey and include common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius) and cleavers (Galium aparine). Several mature stag headed ash (Fraxinus excelsior) trees are present in the hedgerow with low-medium bat potential. Owl boxes are also present in several trees.	Broadleaf dock (Rumex obtusifolius), common nettle (Urtica dioica), cleavers (Galium aparine), false oat grass (Arrhenatherum elatius), bramble (Rubus fruticosus agg.), Lords and Ladies (Arum maculatum).
O6 – 49 FULL ACCESS	<u>Semi-Improved Grassland</u> Unmanaged grassland on ridge and furrow, likely to be an abandoned improved pasture field with abundant false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus) and cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne), crested dog's-tail (Cynosurus cristatus) and meadow foxtail (Alopecurus pratensis). Occasional herb species are present including daisy (Bellis perennis), cleavers (Galium aparine), dandelion (Taraxacum officinale agg.), creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris) and common nettle (Urtica dioica).	Red fescue (Festuca rubra), false oat grass (Arrhenatherum elatius), meadow buttercup (Ranunculus acris), perennial rye grass (Lolium perenne), bent grass (Agrostis spp.), meadow foxtail (Alopecurus pratensis), cock's foot (Dactylis glomerata), creeping thistle (Cirsium arvense), dock (Rumex spp.), cleavers (Galium aparine), crested dog's-tail (Cynosurus cristatus), dandelion (Taraxacum officinale agg.), selfheal (Prunella vulgaris), red campion (Silene dioica), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens), ribwort plantain (Plantago lanceolata), common nettle (Urtica dioica) hawthorn (Crataegus monogyna).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 50 FULL ACCESS	Plantation Broadleaf Woodland Linear belt of plantation woodland on a field edge (O6 – 51) approximately 20-25m wide and recently planted within the last 2 – 3 years. A mix of woody species is present and include ash (Fraxinus excelsior), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna) and wild privet (Ligustrum vulgare). Ruderal vegetation dominates the field layer with abundant common nettle (Urtica dioica), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius) and creeping thistle (Cirsium arvense).	Ash (Fraxinus excelsior), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare) , blackthorn (Prunus spinosa), whitebeam (Sorbus spp.), common nettle (Urtica dioica), Cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), creeping thistle (Cirsium arvense), cleavers (Galium aparine), great willowherb (Epilobium hirsutum), cow parsley (Anthriscus sylvestris).
O6 – 51 FULL ACCESS	Semi-Improved Grassland Unmanaged grassland with ridge and furrow to the north likely to be an abandoned improved pasture field. Abundant false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus) and cock's foot (Dactylis glomerata) with occasional perennial rye grass (Lolium perenne), crested dog's-tail (Cynosurus cristatus) and meadow foxtail (Alopecurus pratensis) are present. The sward is generally herb poor with locally abundant patches of common nettle (Urtica dioica) and broadleaf dock (Rumex obtusifolius). Creeping buttercup (Ranunculus repens) and meadow buttercup (Ranunculus acris) are frequent throughout. The southern half of grassland has been heavily disturbed and almost reduced to bare ground with occasional patches of ruderal herbs such as spear thistle (Cirsium vulgare), broadleaf dock and common nettle. Large spoil mounds are present in the centre of the grassland.	False oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), crested dog's-tail (Cynosurus cristatus), meadow foxtail (Alopecurus pratensis), common nettle (Urtica dioica), red fescue (Festuca rubra), daisy (Bellis perennis), creeping thistle (Cirsium arvense), spear thistle (Cirsium vulgare), groundsel (Senecio vulgaris), broadleaf dock (Rumex obtusifolius).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 52 FULL ACCESS	Plantation Broadleaf Woodland Thin linear belt of mature hornbeam (Carpinus betulus) and ash (Fraxinus excelsior) woodland approximately 6m in width. Occasional hawthorn (Crataegus monogyna) and elder (Sambucus nigra) is present in the shrub layer. Bare ground is frequent throughout the field layer with occasional cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album), cleavers (Galium aparine) and Lords and Ladies (Arum maculatum). Several trees present with low potential for supporting roosting bats. Owl boxes also present.	Hornbeam (Carpinus betulus), hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), elder (Sambucus nigra), common chickweed (Stellaria media), cow parsley (Anthriscus sylvestris), white dead-nettle (Lamium album), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), red campion (Silene dioica).
O6 – 53 FULL ACCESS	Plantation Broadleaf Woodland L-shaped area of plantation woodland at field edge (O6 – 54), 6m in width to the south and 25m in width to the east. Trees have been planted in the last 2 – 3 years with a mix of species present including ash (Fraxinus excelsior), elm (Ulmus spp.), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare) , holly (Ilex aquifolium), hazel (Corylus avellana) and Blackthorn (Prunus spinosa). Ruderal vegetation dominated field layer including common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata) and broadleaf dock (Rumex obtusifolius).	Ash (Fraxinus excelsior), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare), blackthorn (Prunus spinosa), holly (Ilex aquifolium), hazel (Corylus avellana), elm (Ulmus spp.), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), broadleaf dock (Rumex obtusifolius), cleavers (Galium aparine), white dead-nettle (Lamium album), common chickweed (Stellaria media), hogweed (Heracleum sphondylium).
O6 – 54 FULL ACCESS	Improved Grassland Short sward grassland (>2-3cm) on ridge and furrow with perennial rye grass (Lolium perenne), crested dog's-tail (Cynosurus cristatus), Yorkshire fog (Holcus lanatus),	Perennial rye grass (Lolium perenne), creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris), sorrel (Rumex acetosa), spear thistle (Cirsium vulgare), white clover (Trifolium repens), red clover (Trifolium pratense), Yorkshire fog (Holcus lanatus), crested dog's-tail (Cynosurus cristatus), daisy (Bellis perennis), dandelion

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	meadow buttercup (Ranunculus acris) and daisy (Bellis perennis), white clover (Trifolium repens). Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and common nettle (Urtica dioica) present probably caused by nutrient enrichment.	(Taraxacum officinale agg.), common nettle (Urtica dioica), creeping thistle (Cirsium arvense).
O6 – 55 FULL ACCESS	Plantation Broadleaf Woodland Belt of plantation woodland on field edge (O6 – 54) approx. 15m wide. Trees have been planted in the last 2 – 3 years with a mix of species present including ash (Fraxinus excelsior), elm (Ulmus spp.), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare , holly (Ilex aquifolium), hazel (Corylus avellana) and Blackthorn (Prunus spinosa). Ruderal vegetation dominated field layer including common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata) and broadleaf dock (Rumex obtusifolius).	Ash (Fraxinus excelsior), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare), blackthorn (Prunus spinosa), holly (Ilex aquifolium), hazel (Corylus avellana), elm (Ulmus spp.), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), broadleaf dock (Rumex obtusifolius), cleavers (Galium aparine), white dead-nettle (Lamium album), common chickweed (Stellaria media), hogweed (Heracleum sphondylium).
O6 – 56 FULL ACCESS	Improved Grassland Short sward grassland (>2-3cm) on ridge and furrow with perennial rye grass (Lolium perenne), crested dog's-tail (Cynosurus cristatus), Yorkshire fog (Holcus lanatus), meadow buttercup (Ranunculus acris) and daisy (Bellis perennis), white clover (Trifolium repens). Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and common nettle (Urtica dioica) present probably caused by nutrient enrichment.	Perennial rye grass (Lolium perenne), creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris), sorrel (Rumex acetosa), spear thistle (Cirsium vulgare), white clover (Trifolium repens), red clover (Trifolium pratense), Yorkshire fog (Holcus lanatus), crested dog's-tail (Cynosurus cristatus), daisy (Bellis perennis), dandelion (Taraxacum officinale agg.), common nettle (Urtica dioica), creeping thistle (Cirsium arvense).

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
O6 – 57 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow occasionally managed to a height of 2.5m and width of 4m. Ruderal herbs dominate the understorey and include common nettle (Urtica dioica), cleavers (Galium aparine) and broadleaf dock (Rumex obtusifolius). One mature ash (Fraxinus excelsior) is present in the centre of the hedgerow with low potential for supporting roosting bats.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), ash (Fraxinus excelsior), common nettle (Urtica dioica), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), broadleaf dock (Rumex obtusifolius), white dead-nettle (Lamium album).
O6 – 58 FULL ACCESS	Plantation Broadleaf Woodland Small area of plantation woodland recently planted within last 2 – 3 years with a mix of species present including ash (Fraxinus excelsior), elm (Ulmus spp.), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare) , holly (Ilex aquifolium), hazel (Corylus avellana) and blackthorn (Prunus spinosa). Ruderal vegetation dominated field layer including common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata) and broadleaf dock (Rumex obtusifolius).	Ash (Fraxinus excelsior), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare), blackthorn (Prunus spinosa), holly (Ilex aquifolium), hazel (Corylus avellana), elm (Ulmus spp.), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), broadleaf dock (Rumex obtusifolius), cleavers (Galium aparine), white dead-nettle (Lamium album), common chickweed (Stellaria media), hogweed (Heracleum sphondylium).
O6 – 59 FULL ACCESS	Intact Species-Rich Hedgerow Recently planted hedgerow with a variety of woody species including hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), field maple (Acer campestre), holly (Ilex aquifolium), hazel (Corylus avellana). A 3m wide road verge is present to north of hedgerow on a low bank with a typical mix of species including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), spear thistle (Cirsium vulgare), dandelion (Taraxacum officinale agg.), creeping thistle (Cirsium arvense), broadleaf dock (Rumex obtusifolius), hogweed	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), field maple (Acer campestre), holly (Ilex aquifolium), hazel (Corylus avellana), wild cherry (Prunus avium), pedunculate oak (Quercus robur), red clover (Trifolium pratense), white clover (Trifolium repens), spear thistle (Cirsium vulgare), dandelion (Taraxacum officinale agg.), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), creeping thistle (Cirsium arvense), broadleaf dock (Rumex obtusifolius), creeping buttercup (Ranunculus repens), meadow buttercup (Ranunculus acris), white dead-nettle (Lamium album),

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	(Heracleum sphondylium), white dead-nettle (Lamium album) and common nettle (Urtica dioica).	hogweed (Heracleum sphondylium), great willowherb (Epilobium hirsutum), red fescue (Festuca rubra), common nettle (Urtica dioica), ribwort plantain (Plantago lanceolata).
O6 – 60 FULL ACCESS	Plantation Broadleaf Woodland Small area of plantation woodland recently planted within last 2 – 3 years with a mix of species present including ash (Fraxinus excelsior), elm (Ulmus spp.), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare) , holly (Ilex aquifolium), hazel (Corylus avellana) and blackthorn (Prunus spinosa). Ruderal vegetation dominated field layer including common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata) and broadleaf dock (Rumex obtusifolius).	Ash (Fraxinus excelsior), pedunculate oak (Quercus robur), wild cherry (Prunus avium), alder (Alnus glutinosa), hawthorn (Crataegus monogyna), wild privet (Ligustrum vulgare), blackthorn (Prunus spinosa), holly (Ilex aquifolium), hazel (Corylus avellana), elm (Ulmus spp.), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), broadleaf dock (Rumex obtusifolius), cleavers (Galium aparine), white dead-nettle (Lamium album), common chickweed (Stellaria media), hogweed (Heracleum sphondylium).
O6 – 61 FULL ACCESS	Open Water Ditch approx. 5m wide used as a balancing pond. Stagnant water in ditch up to 60cm in depth with abundant bulrush (Typha latifolia). Banks rise to 3m in height at an aspect of 60º. Ruderal grasses and herbs present including Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), ribwort plantain (Plantago lanceolata), broadleaf dock (Rumex obtusifolius), great willowherb (Epilobium hirsutum) and common nettle (Urtica dioica). May have potential for great crested newt (Triturus cristatus).	Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), ribwort plantain (Plantago lanceolata), broadleaf dock (Rumex obtusifolius), white dead-nettle (Lamium album), dandelion (Taraxacum officinale agg.), meadow grass (Poa spp.), creeping bent (Agrostis stolonifera), cow parsley (Anthriscus sylvestris), daisy (Bellis perennis), greater plantain (Plantago major), creeping buttercup (Ranunculus repens), great willowherb (Epilobium hirsutum), common nettle (Urtica dioica).
O6 – 62 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Intensively managed hedgerow to 1.5m in height and 3 – 4m in width with hawthorn (Crataegus monogyna) and locally abundant horse chestnut (Aesculus hippocastanum) and elm (Ulmus spp.).	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), rose (Rosa spp.), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), horse chestnut (Aesculus hippocastanum), ash (Fraxinus excelsior), cleavers (Galium aparine), daisy (Bellis perennis), dandelion (Taraxacum officinale agg.), cow parsley (Anthriscus sylvestris), yarrow (Achillea millefolium), cock's foot (Dactylis glomerata), Lords and Ladies

COMPARTMENT 6		
TN No. /Access	**Description**	**Species**
	Several mature ash (Fraxinus excelsior) and horse chestnut trees are present within the hedgerow. A 3m grassland road verge bounds the western edge of the hedgerow with species including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), black knapweed (Centaurea nigra), ribwort plantain (Plantago lanceolata) and yarrow (Achillea millefolium).	(Arum maculatum), white dead-nettle (Lamium album), ivy (Hedera helix), black knapweed (Centaurea nigra), hap, lesser celandine (Ranunculus ficaria), broadleaf dock (Rumex obtusifolius).
O6 – 63 FULL ACCESS	Scattered Broadleaf Trees Line of mature sycamore (Acer pseudoplatanus) trees over amenity grassland. Negligible bat roosting potential.	
O6 – 64 FULL ACCESS	Amenity Grassland Extensive area of short mown (>5cm) amenity grassland with perennial rye grass (Lolium perenne), red fescue (Festuca rubra) and abundant dandelion (Taraxacum officinale agg.), greater plantain (Plantago major) and white clover (Trifolium repens).	Perennial rye grass (Lolium perenne), red fescue (Festuca rubra) and abundant dandelion (Taraxacum officinale agg.), greater plantain (Plantago major), white clover (Trifolium repens).
O6 – 65 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with frequent gaps and two mature sycamore (Acer pseudoplatanus) trees. Managed to a height and width of 1m.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), common nettle (Urtica dioica), white dead-nettle (Lamium album), cow parsley (Anthriscus sylvestris).
O6 – 66 FULL ACCESS	Defunct Species-Rich Hedgerow With Trees High overgrown hedgerow 4m in height and 5 – 6m in width. Almost a double hedge set on a low bank with abundant hawthorn (Crataegus monogyna) and occasional to frequent blackthorn (Prunus spinosa), holly (Ilex aquifolium), elder (Sambucus nigra), dog rose (Rosa canina) and ash (Fraxinus excelsior). Several mature and semi-mature ash and crack willow (Salix fragilis) trees are present in hedgerow. Frequent woody species are present in understorey with red campion (Silene dioica), lesser celandine (Ranunculus ficaria), Lords and Ladies (Arum maculatum) and occasional dog's mercury (Mercurialis perennis), an ancient	Hawthorn (Crataegus monogyna), dog rose (Rosa canina), blackthorn (Prunus spinosa), holly (Ilex aquifolium), elder (Sambucus nigra), yew (Taxus baccata), sycamore (Acer pseudoplatanus), crack willow (Salix fragilis), ash (Fraxinus excelsior), ivy (Hedera helix), white dead-nettle (Lamium album), common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), red campion (Silene dioica), hogweed (Heracleum sphondylium), spear thistle (Cirsium vulgare), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria).

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TN No. /Access	**Description**	**Species**
	woodland indicator. It is possible that the hedgerow may be an old field boundary.	
O6 – 67 FULL ACCESS	Intact Species-Poor Hedgerow Intensively managed hawthorn (Crataegus monogyna) hedgerow to a height of 2m and width of 4m. Frequent elder (Sambucus nigra) also present. Ruderal herbs dominate the hedgerow understorey and include common nettle (Urtica dioica), cleavers (Galium aparine) and hogweed (Heracleum sphondylium).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), hogweed (Heracleum sphondylium), creeping buttercup (Ranunculus repens), Yorkshire fog (Holcus lanatus), white dead-nettle (Lamium album), bramble (Rubus fruticosus agg.).
O6 – 68 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with occasional elm (Ulmus spp.) and blackthorn (Prunus spinosa) managed to a height of 2m and width of 1.5m. Runs along the length of woodland belt O6 – 33.	Hawthorn (Crataegus monogyna), elm (Ulmus spp.), blackthorn (Prunus spinosa), elder (Sambucus nigra), dog rose (Rosa canina), common nettle (Urtica dioica), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), common chickweed (Stellaria media).
O6 – 69 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Short length of crab apple (Malus sylvestris) dominated hedgerow managed to a height of 1m and width of 1.5m. One mature crab apple tree present.	Crab apple (Malus sylvestris), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), white dead-nettle (Lamium album), broadleaf dock (Rumex obtusifolius).
O6 – 70 FULL ACCESS	Improved Grassland Short sward grassland (>15cm) with perennial rye grass (Lolium perenne), cock's foot (Dactylis glomerata), dandelion (Taraxacum officinale agg.), daisy (Bellis perennis) and meadow buttercup (Ranunculus acris) on ridge and furrow. Locally frequent to abundant areas of spear thistle (Cirsium vulgare), creeping thistle	Common chickweed (Stellaria media), spear thistle (Cirsium vulgare), cock's foot (Dactylis glomerata), perennial rye grass (Lolium perenne), dandelion (Taraxacum officinale agg.), common nettle (Urtica dioica), white clover (Trifolium repens), red clover (Trifolium pratense), creeping thistle (Cirsium arvense), red fescue (Festuca rubra), daisy (Bellis perennis), meadow buttercup (Ranunculus acris), creeping buttercup (Ranunculus repens).

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TN No. /Access	**Description**	**Species**
	(Cirsium arvense) and common nettle (Urtica dioica) present probably caused by nutrient enrichment by grazing cattle.	
O6 – 71 FULL ACCESS	Defunct Species-Poor Hedgerow Unmanaged and overgrown hawthorn (Crataegus monogyna) dominated hedgerow to 5m in height. Tall ruderal dominated the hedgerow understorey including cow parsley (Anthriscus sylvestris), broadleaf dock (Rumex obtusifolius), hogweed (Heracleum sphondylium), common nettle (Urtica dioica).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), cow parsley (Anthriscus sylvestris), broadleaf dock (Rumex obtusifolius), hogweed (Heracleum sphondylium), common nettle (Urtica dioica).

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TN No. /Access	**Description**	**Species**
O7 – 1 FULL ACCESS	Open Water Pond with clear water up to ~0.5m deep in the centre although shallower areas close to the edges. Reed-mace (Typha latifolia) and some common reed (Phragmites australis) stands with brooklime (Veronica beccabunga) and lesser spearwort (Ranunculus flammula) as marginals. Some blanket weed present. Appears to be a drainage pond with several inlets from the road. No fish or amphibians were recorded but this habitat has potential to provide habitat for great crested newt (Triturus cristatus) and reptiles.	Reed-mace (Typha latifolia), brooklime (Veronica beccabunga), lesser spearwort (Ranunculus flammula), creeping buttercup (Ranunculus repens), common reed (Phragmites australis), pondweed (Potamogeton spp.), rosebay willowherb (Epilobium angustifolium), sweet grass (Glyceria spp.), rush (Juncus spp.).
O7 – 2 FULL ACCESS	Rank Grassland Rank grassland, managed by cutting at the top but appears unmanaged close to the pond which it surrounds (O7 – 1). Grass dominated with some ruderals and herbaceous species, tufted hair-grass (Deschampsia cespitosa) recorded close to the water and some moss in the ground layer. Cock's foot (Dactylis glomerata) dominates in some places where the grassland is tussocky and there is some thatch present.	Dock (Rumex spp.), black knapweed (Centaurea nigra), Cock's foot (Dactylis glomerata), creeping thistle (Cirsium arvense), white clover (Trifolium repens), vetch (Vicia spp.), yarrow (Achillea millefolium), common mouse-ear (Cerastium fontanum), spear thistle (Cirsium vulgare), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), rosebay willowherb (Epilobium angustifolium), red fescue (Festuca rubra), false oat grass (Arrhenatherum elatius), common ragwort (Senecio jacobaea), ribwort plantain (Plantago lanceolata), crested dog's-tail (Cynosurus cristatus).
O7 – 3 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Newly planted hawthorn (Crataegus monogyna) dominated hedgerow, whips in plastic tubes to a maximum height of 1m. Some field maple (Acer campestre), blackthorn (Prunus spinosa), holly (Ilex aquifolium) and horse chestnut (Aesculus hippocastanum) present with some ash (Fraxinus excelsior) standards to 4m. Grassland (O7 – 2) beneath with some ruderals.	Hawthorn (Crataegus monogyna), field maple (Acer campestre), blackthorn (Prunus spinosa), holly (Ilex aquifolium), horse chestnut (Aesculus hippocastanum), ash (Fraxinus excelsior).
O7 – 4 FULL ACCESS	Semi-Improved Grassland Grass dominated old ridge and furrow field. No evidence of grazing at the time of survey. Grass species include red fescue (Festuca rubra), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata) and false oat grass (Arrhenatherum elatius) and the sward is	Yorkshire fog (Holcus lanatus), ribwort plantain (Plantago lanceolata), Cock's foot (Dactylis glomerata), dock (Rumex spp.), cleavers (Galium aparine), Doves-foot cranesbill (Geranium molle), common nettle (Urtica dioica), creeping thistle (Cirsium arvense), dandelion (Taraxacum officinale agg.), false oat grass (Arrhenatherum elatius), bent grass

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	variable with different species attaining local dominance throughout the grassland. A number of herbaceous species were recorded including creeping buttercup (Ranunculus repens), common chickweed (Stellaria media) and dandelion (Taraxacum officinale agg.).	(Agrostis spp.), red fescue (Festuca rubra),creeping buttercup (Ranunculus repens), common chickweed (Stellaria media), bugle (Ajuga reptans).
O7 – 5 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow to 5/6m in height and up to 3m across. Managed to control horizontal growth only by cutting on the north side, no evidence of management on the south side. Ruderal species recorded beneath including common nettle (Urtica dioica) and cleavers (Galium aparine); ivy (Hedera helix) and bramble (Rubus fruticosus agg.) were recorded throughout the hedgerow.	Hawthorn (Crataegus monogyna), bramble (Rubus fruticosus agg.), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), hogweed (Heracleum sphondylium), rose (Rosa spp.), Lords and Ladies (Arum maculatum), blackthorn (Prunus spinosa), bugle (Ajuga reptans), burdock (Arctium lappa), elder (Sambucus nigra).
O7 – 6 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with ivy (Hedera helix) covered mature ash (Fraxinus excelsior) and largely ruderal vegetation beneath. The hedge is maintained by cutting on the west side but not on the east side to a height of 2m with a width of ~2m. There is a dry ditch running along the eastern side which was largely dry at the time of survey although some damper areas with standing water were present.	Elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), rose (Rosa spp.), bramble (Rubus fruticosus agg.), ivy (Hedera helix), Lords and Ladies (Arum maculatum), blackthorn (Prunus spinosa), red campion (Silene dioica), creeping thistle (Cirsium arvense), rosebay willowherb (Epilobium angustifolium).
O7 – 7 FULL ACCESS	Improved Grassland Ridge and furrow grassland with some spatial variation with common nettle (Urtica dioica) stands in the furrows, for example. The grassland is grass dominated with a sward height of ~5cm and was sheep grazed at the time of survey with some areas of bare ground. The sward is well mixed with a variety of grass species throughout although perennial rye grass (Lolium perenne) is the dominant species. Patches of ruderal vegetation also recorded close to the southern fence.	Perennial rye grass (Lolium perenne), common nettle (Urtica dioica), white clover (Trifolium repens), Yorkshire fog (Holcus lanatus), creeping thistle (Cirsium arvense), bent grass (Agrostis spp.), red fescue (Festuca rubra), crested dog's-tail (Cynosurus cristatus), creeping buttercup (Ranunculus repens), broadleaf plantain (Plantago major), Cock's foot (Dactylis glomerata), blackthorn (Prunus spinosa).
O7 – 8 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with mature ash (Fraxinus excelsior), trimmed to approx. 2m height and 2m width. Largely bare ground with ruderal	Hawthorn (Crataegus monogyna), dock (Rumex spp.), ash (Fraxinus excelsior), ivy (Hedera helix), Lords and Ladies (Arum maculatum), common nettle (Urtica dioica), cleavers (Galium aparine), bugle (Ajuga reptans), rosebay willowherb (Epilobium angustifolium), elm (Ulmus

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	vegetation including common nettle (Urtica dioica) and cleavers (Galium aparine) as well as Lords and Ladies (Arum maculatum) beneath. There is a ditch running along the southern side which was dry at the time of survey.	spp.), elder (Sambucus nigra).
O7 – 9 FULL ACCESS	Scattered Broadleaf Trees With Bare Ground. Area used for shelter beneath trees by sheep around the pond (O7 – 10). Largely bare ground with hawthorn (Crataegus monogyna), mature ash (Fraxinus excelsior) and very rarely recorded Lords and Ladies (Arum maculatum) and common chickweed (Stellaria media).	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), Lords and Ladies (Arum maculatum), common chickweed (Stellaria media).
O7 – 10 FULL ACCESS	Open Water Pond with water of medium turbidity, probably to a depth of ~0.5m, with leaf litter at the bottom and mud banks. No aquatics/marginals were recoded. Deadwood had been stacked to form a ramp into the water (presumably to allow access for livestock) at one end. There was no evidence of fish or amphibians but the pond could provide habitat for great crested newt (Triturus cristatus).	
O7 – 11 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with some elder (Sambucus nigra) and blackthorn (Prunus spinosa), with rose (Rosa spp.) and bramble (Rubus fruticosus agg.) throughout. Hedge is maintained to 3m height and ~2m width with ruderal and grass beneath. A ditch, which was dry at the time of survey, is running along the west side.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), bramble (Rubus fruticosus agg.), rose (Rosa spp.), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), Yorkshire fog (Holcus lanatus), creeping thistle (Cirsium arvense), blackthorn (Prunus spinosa), white dead-nettle (Lamium album).
O7 – 12 FULL ACCESS	Improved Grassland Ridge and furrow grassland, grass dominated with a sward height of ~5cm and was sheep grazed at the time of survey with some areas of bare ground. The sward is well mixed with a variety of grass species throughout although perennial rye grass (Lolium perenne) is the dominant.	Perennial rye grass (Lolium perenne), crested dog's-tail (Cynosurus cristatus), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra), white clover (Trifolium repens), cow parsley (Anthriscus sylvestris), spear thistle (Cirsium vulgare), creeping buttercup (Ranunculus repens), daisy (Bellis perennis).

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
O7 – 13 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with few ash (Fraxinus excelsior) standards and bare ground and ruderal vegetation such as common nettle (Urtica dioica) and cleavers (Galium aparine) as well as Lords and Ladies (Arum maculatum) beneath. Ash is also present as a woody component in places. The hedge is maintained to a height of ~3m and a width of ~2/3m. There is a dry ditch running along the southern side.	Hawthorn (Crataegus monogyna), bramble (Rubus fruticosus agg.), rose (Rosa spp.), common nettle (Urtica dioica), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), dock (Rumex spp.), elder (Sambucus nigra), blackthorn (Prunus spinosa), ivy (Hedera helix), spear thistle (Cirsium vulgare).
O7 – 14 FULL ACCESS	Plantation Broadleaf Woodland With Semi-Improved Grassland. This is a recent plantation of broadleaf woodland with saplings to ~6m planted ~2m apart. Species appear to have been selected as native broadleaf including hazel (Corylus avellana), beech (Fagus sylvatica), hawthorn (Crataegus monogyna), willow (Salix spp.), pedunculate oak (Quercus robur) and ash (Fraxinus excelsior). Although there are some conifers such as Scot's pine (Pinus sylvestris) these constitute <10% of the planting as well as some non-native species. Below the trees is semi-improved grassland including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra) and bent grass (Agrostis spp.) with ruderals and herbaceous species including dock (Rumex spp.), common bird's-foot trefoil (Lotus corniculatus), dandelion (Taraxacum officinale agg.), rosebay willowherb (Epilobium angustifolium) and common ragwort (Senecio jacobaea).	Hazel (Corylus avellana), beech (Fagus sylvatica), hawthorn (Crataegus monogyna), willow (Salix spp.), common ragwort (Senecio jacobaea), dock (Rumex spp.), dandelion (Taraxacum officinale agg.), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra), bent grass (Agrostis spp.), spear thistle (Cirsium vulgare), ash (Fraxinus excelsior), cherry (Prunus spp.), rose (Rosa spp.), rosebay willowherb (Epilobium angustifolium), common bird's-foot trefoil (Lotus corniculatus), broad-leaved willowherb (Epilobium montanum), Scot's pine (Pinus sylvestris), rowan (Sorbus aucuparia), pedunculate oak (Quercus robur), bird cherry (Prunus padus), blackthorn (Prunus spinosa), creeping buttercup (Ranunculus repens), hogweed (Heracleum sphondylium).
O7 – 15 FULL ACCESS	Improved Grassland Sheep grazed improved grassland with a sward height of ~5cm. The sward is grass dominated with herbaceous species such as creeping buttercup (Ranunculus repens) gaining local abundance in places but generally a well mixed sward. Perennial rye grass (Lolium perenne) was the dominant grass species recorded with Yorkshire fog (Holcus lanatus), crested dog's-tail (Cynosurus cristatus) and Cock's foot (Dactylis glomerata) also recorded. Herbaceous species included white clover (Trifolium repens), meadow buttercup (Ranunculus acris) and creeping buttercup as well as some ruderals such as spear thistle (Cirsium vulgare).	Perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens), daisy (Bellis perennis), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), white clover (Trifolium repens), crested dog's-tail (Cynosurus cristatus), dandelion (Taraxacum officinale agg.), red fescue (Festuca rubra), meadow buttercup (Ranunculus acris), cock's foot (Dactylis glomerata), bent grass (Agrostis spp.), common nettle (Urtica dioica).

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
O7 – 16 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with occasional blackthorn (Prunus spinosa). Bare ground, grass and ruderals beneath including common nettle (Urtica dioica), dock (Rumex spp.) and spear thistle (Cirsium vulgare). Maintained by cutting to a height of 2.5m and a width of ~1.5m. There are the remains of a dry ditch on the west side although little more than a depression. One standard mature ash (Fraxinus excelsior) was recorded at the northern end which has low bat potential.	Hawthorn (Crataegus monogyna), common nettle (Urtica dioica), dock (Rumex spp.), perennial rye grass (Lolium perenne), spear thistle (Cirsium vulgare), dandelion (Taraxacum officinale agg.), blackthorn (Prunus spinosa), ash (Fraxinus excelsior).
O7 – 17 FULL ACCESS	Defunct Species-Rich Hedgerow With Trees Double hedgerow with a damp ditch in between. Blackthorn (Prunus spinosa) is dominant towards the west with hawthorn (Crataegus monogyna) dominating towards the east other components include dogwood (Cornus spp.), rose (Rosa spp.), elder (Sambucus nigra), hazel (Corylus avellana) and field maple (Acer campestre). Largely bare ground and ruderals including dock (Rumex spp.) and common nettle (Urtica dioica) as well as garlic mustard (Alliaria petiolata), Lords and Ladies (Arum maculatum) and red campion (Silene dioica) beneath. Broken rejuvenating ash (Fraxinus excelsior) is among the standards, which also includes pedunculate oak (Quercus robur). Evidence of laying in the past and good hazel coppices in places. Some deadwood present and lots of rabbit activity recorded. The standard trees could provide roosting habitat for bats. This could be an important hedgerow.	Blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna), garlic mustard (Alliaria petiolata), dock (Rumex spp.), ivy (Hedera helix), dogwood (Cornus spp.), common nettle (Urtica dioica), bramble (Rubus fruticosus agg.), rose (Rosa spp.), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), ash (Fraxinus excelsior), elder (Sambucus nigra), hazel (Corylus avellana), pedunculate oak (Quercus robur), hogweed (Heracleum sphondylium), field maple (Acer campestre), red campion (Silene dioica).
O7 – 18 FULL ACCESS	Improved Grassland Sheep grazed improved grassland with a sward height of ~5cm. The sward is grass dominated with herbaceous species such as creeping buttercup (Ranunculus repens) gaining local abundance in places but generally a well mixed sward. Perennial rye grass (Lolium perenne) was the dominant grass species recorded with Yorkshire fog (Holcus lanatus), crested dog's-tail (Cynosurus cristatus) and Cock's foot (Dactylis glomerata) also recorded. Herbaceous species included white clover (Trifolium repens), meadow buttercup (Ranunculus acris) and creeping buttercup as well as some ruderals such as spear thistle	Perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens), daisy (Bellis perennis), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), white clover (Trifolium repens), crested dog's-tail (Cynosurus cristatus), dandelion (Taraxacum officinale agg.), red fescue (Festuca rubra), meadow buttercup (Ranunculus acris), Cock's foot (Dactylis glomerata), bent grass (Agrostis spp.), common nettle (Urtica dioica).

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	(Cirsium vulgare).	
O7 – 19 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with some blackthorn (Prunus spinosa) and elder (Sambucus nigra). Double hedge with a dry ditch in the centre, bare ground and ruderal vegetation including common nettle (Urtica dioica), white dead-nettle (Lamium album) and cleavers (Galium aparine) beneath. Hedge to 6m tall and ~4m wide with no evidence of recent management. Two standard elm (Ulmus spp.) and four mature standard ash (Fraxinus excelsior) were recorded to the east. The standard trees could provide roosting habitat for bats.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra), rose (Rosa spp.), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), elm (Ulmus spp.), white dead-nettle (Lamium album), cleavers (Galium aparine).
O7 – 20 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow to 2m height and 1 – 1.5m wide. Well maintained by cutting with standard ash (Fraxinus excelsior). Bare ground, ruderals and grass including common nettle (Urtica dioica), spear thistle (Cirsium vulgare) and perennial rye grass (Lolium perenne) beneath.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), blackthorn (Prunus spinosa), common nettle (Urtica dioica), rose (Rosa spp.), perennial rye grass (Lolium perenne), spear thistle (Cirsium vulgare), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), bugle (Ajuga reptans).
O7 – 21 FULL ACCESS	Scattered Scrub And Tall Ruderal Herb And Fern. Hawthorn (Crataegus monogyna) and elder (Sambucus nigra) with bramble (Rubus fruticosus agg.) and common nettle (Urtica dioica) scrub, fenced off from the surrounding field.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), bittercress (Cardamine spp.), rosebay willowherb (Epilobium angustifolium), rose (Rosa spp.), dock (Rumex spp.), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), spear thistle (Cirsium vulgare), Cock's foot (Dactylis glomerata).
O7 – 22 FULL ACCESS	Open Water Small pond, dried up around the edges at the time of survey but still water close to the centre. Mud on the shallowly sloping banks. Some pondweed (Potamogeton spp.) and algae were present with willow (Salix spp.) in the water. A moorhen (Gallinula chloropus) was recorded.	Willow (Salix spp.), pondweed (Potamogeton spp.)

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	This pond could provide habitat for great crested newt (Triturus cristatus) and reptiles.	
O7 – 23 FULL ACCESS	Improved Grassland Sheep grazed improved grassland with a sward height of ~5cm. The sward is grass dominated with herbaceous species such as creeping buttercup (Ranunculus repens) gaining local abundance in places but generally a well mixed sward. Perennial rye grass (Lolium perenne) was the dominant grass species recorded with Yorkshire fog (Holcus lanatus), crested dog's-tail (Cynosurus cristatus) and Cock's foot (Dactylis glomerata) also recorded. Herbaceous species included white clover (Trifolium repens), meadow buttercup (Ranunculus acris) and creeping buttercup (Ranunculus repens), as well as some ruderals such as spear thistle (Cirsium vulgare).	Perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens), daisy (Bellis perennis), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), white clover (Trifolium repens), crested dog's-tail (Cynosurus cristatus), dandelion (Taraxacum officinale agg.), red fescue (Festuca rubra), meadow buttercup (Ranunculus acris), Cock's foot (Dactylis glomerata), bent grass (Agrostis spp.), common nettle (Urtica dioica).
O7 – 24 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Gappy hedge with hawthorn (Crataegus monogyna) growing unmanaged as specimens to the west but forming more of a cohesive hedgerow to the east where it is wide and double-planted in places. There are some gaps in the hedgerow filled with bramble (Rubus fruticosus agg.) scrub as well as ruderals including common nettle (Urtica dioica), hogweed (Heracleum sphondylium) and cleavers (Galium aparine). Ash (Fraxinus excelsior) standards.	Hawthorn (Crataegus monogyna), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), false oat grass (Arrhenatherum elatius), white dead-nettle (Lamium album), hogweed (Heracleum sphondylium), ash (Fraxinus excelsior), common chickweed (Stellaria media), elder (Sambucus nigra), cleavers (Galium aparine), rose (Rosa spp.), blackthorn (Prunus spinosa), spear thistle (Cirsium vulgare).
O7 – 25 FULL ACCESS	Scattered Scrub With Tall Ruderal Herb And Fern Area of hawthorn (Crataegus monogyna) with some elder (Sambucus nigra) and 2 mature ash (Fraxinus excelsior). Ruderals beneath including common nettle (Urtica dioica), dock (Rumex spp.) and hogweed (Heracleum sphondylium) with some grass in places including Cock's foot (Dactylis glomerata) and false oat grass (Arrhenatherum elatius). Growing around the pond (O7 – 26).	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), common nettle (Urtica dioica), Cock's foot (Dactylis glomerata), hogweed (Heracleum sphondylium), dock (Rumex spp.), cow parsley (Anthriscus sylvestris), vetch (Vicia spp.), blackthorn (Prunus spinosa), rosebay willowherb (Epilobium angustifolium), bramble (Rubus fruticosus agg.), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), spear thistle (Cirsium vulgare), honeysuckle (Lonicera spp.), dandelion (Taraxacum officinale agg.) and cow parsley (Anthriscus sylvestris).

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
O7 – 26 FULL ACCESS	Open Water Muddy water with lots of aquatic vegetation, pondweed (Potamogeton spp.) and sweet grass (Glyceria spp.) as well as some rush (Juncus spp.). Could not access the waters edge due to barbed wire fence. This pond could provide habitat for great crested newt (Triturus cristatus).	Rush (Juncus spp.), pondweed (Potamogeton spp.)), sweet grass (Glyceria spp.) and honeysuckle (Lonicera spp.).
O7 – 27 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated unmanaged hedgerow which merges with the woodland to the east (offsite). The hedgerow components, which also include elder (Sambucus nigra), blackthorn (Prunus spinosa) and elm (Ulmus spp.) appear unmanaged and form shrubs/trees to ~12m height. Standard ash (Fraxinus excelsior) are present and the understorey is largely ruderal including common nettle (Urtica dioica), cleavers (Galium aparine) and dock (Rumex spp.).	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra), common nettle (Urtica dioica), cleavers (Galium aparine), elm (Ulmus spp.), ivy (Hedera helix), bramble (Rubus fruticosus agg.), willow (Salix spp.), dock (Rumex spp.), false oat grass (Arrhenatherum elatius).
O7 – 28 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with rare blackthorn (Prunus spinosa) and ash (Fraxinus excelsior) standards, maintained to 2m height and 1.5m wide. There is a ditch which was dry at the time of survey on the southern side of the hedge, although it was damp towards the western end. The ground layer contained ruderals such as common nettle (Urtica dioica), cleavers (Galium aparine) and Cock's foot (Dactylis glomerata) as well as Lords and Ladies (Arum maculatum) and garlic mustard (Alliaria petiolata).	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), bramble (Rubus fruticosus agg.), rosebay willowherb (Epilobium angustifolium), Lords and Ladies (Arum maculatum), white dead-nettle (Lamium album), dock (Rumex spp.), hogweed (Heracleum sphondylium), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), common nettle (Urtica dioica), rose (Rosa spp.), blackthorn (Prunus spinosa), honeysuckle (Lonicera spp.), garlic mustard (Alliaria petiolata), cleavers (Galium aparine).
O7 – 29 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with rare blackthorn (Prunus spinosa) and with ash (Fraxinus excelsior) standards, maintained to 2m height and 1.5m wide. There is a ditch which was dry at the time of survey on the eastern side of the hedge. The ground layer contained ruderals such as common nettle (Urtica dioica), cleavers	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), bramble (Rubus fruticosus agg.), rosebay willowherb (Epilobium angustifolium), Lords and Ladies (Arum maculatum), white dead-nettle (Lamium album), dock (Rumex spp.), hogweed (Heracleum sphondylium), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), common nettle (Urtica dioica), rose (Rosa spp.), blackthorn (Prunus

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	(Galium aparine) and Cock's foot (Dactylis glomerata) as well as Lords and Ladies (Arum maculatum) and garlic mustard (Alliaria petiolata). The ash trees have the potential to provide roosting habitat for bats.	spinosa), honeysuckle (Lonicera spp.), garlic mustard (Alliaria petiolata), cleavers (Galium aparine).
O7 – 30 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with ivy (Hedera helix) clad ash (Fraxinus excelsior) standard. The understorey is largely ruderal including cleavers (Galium aparine), cow parsley (Anthriscus sylvestris) and common nettle (Urtica dioica). There is a ditch running along the western side of the hedgerow which was dry at the time of survey. The ash tree has the potential to provide roosting habitat for bats.	Common nettle (Urtica dioica), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), red dead-nettle (Lamium purpureum), common dog violet (Viola riviniana), Lords and Ladies (Arum maculatum), bramble (Rubus fruticosus agg.), dock (Rumex spp.), elder (Sambucus nigra), garlic mustard (Alliaria petiolata), perennial rye grass (Lolium perenne), cock's foot (Dactylis glomerata), hogweed (Heracleum sphondylium).
O7 – 31 FULL ACCESS	Plantation Broadleaf Woodland This is a recent plantation of broadleaf woodland with saplings to ~6m planted ~2m apart. Species appear to have been selected as native broadleaf including hazel (Corylus avellana), beech (Fagus sylvatica), hawthorn (Crataegus monogyna), willow (Salix spp.), pedunculate oak (Quercus robur) and ash (Fraxinus excelsior). Although there are some conifers such as Scot's pine (Pinus sylvestris) these constitute <10% of the planting as well as some non-native species. Below the trees is semi-improved grassland including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra) and bent grass (Agrostis spp.) with ruderals and herbaceous species including dock (Rumex spp.), common bird's-foot trefoil (Lotus corniculatus), dandelion (Taraxacum officinale agg.), rosebay willowherb (Epilobium angustifolium) and common ragwort (Senecio jacobaea).	Hazel (Corylus avellana), beech (Fagus sylvatica), hawthorn (Crataegus monogyna), willow (Salix spp.), common ragwort (Senecio jacobaea), dock (Rumex spp.), dandelion (Taraxacum officinale agg.), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra), bent grass (Agrostis spp.), spear thistle (Cirsium vulgare), ash (Fraxinus excelsior), cherry (Prunus spp.), rose (Rosa spp.), rosebay willowherb (Epilobium angustifolium), common bird's-foot trefoil (Lotus corniculatus), broad-leaved willowherb (Epilobium montanum), Scot's pine (Pinus sylvestris), rowan (Sorbus aucuparia), pedunculate oak (Quercus robur), bird cherry (Prunus padus), blackthorn (Prunus spinosa), creeping buttercup (Ranunculus repens), hogweed (Heracleum sphondylium).
O7 – 32 FULL ACCESS	Defunct Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow which is managed for horizontal growth only on the north and west sides, to a height of ~6m and a width of ~3-4m in	Hawthorn (Crataegus monogyna), bramble (Rubus fruticosus agg.), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine), common dog violet (Viola riviniana), garlic mustard (Alliaria petiolata), elder (Sambucus nigra), rose (Rosa spp.), hogweed

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	places. There is a ditch running along the northern side which was dry at the time of survey. The ground layer was largely ruderal including bramble (Rubus fruticosus agg.), cleavers (Galium aparine) and common nettle (Urtica dioica) as well as common dog-violet (Viola riviniana) and garlic mustard (Alliaria petiolata).	(Heracleum sphondylium).
O7 – 33 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with blackthorn (Prunus spinosa) and elder (Sambucus nigra), maintained by trimming to a height of ~2m and a width of ~3m. There is a ditch running along the northern side which was dry at the time of survey and there is some scrub developing within this. The ground layer beneath the hedge and within the ditch is largely ruderal including common nettle (Urtica dioica), cleavers (Galium aparine) and rosebay willowherb (Epilobium angustifolium). Bramble (Rubus fruticosus agg.) and rose (Rosa spp.) were growing throughout the hedgerow.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra), bramble (Rubus fruticosus agg.), rose (Rosa spp.), common nettle (Urtica dioica), cleavers (Galium aparine), rosebay willowherb (Epilobium angustifolium), garlic mustard (Alliaria petiolata), ivy (Hedera helix).
O7 – 34 FULL ACCESS	Plantation Broadleaf Woodland Over Semi-Improved Grassland. This is a recent plantation of broadleaf woodland with saplings to ~6m planted ~2m apart. Species appear to have been selected as native broadleaf including hazel (Corylus avellana), beech (Fagus sylvatica), hawthorn (Crataegus monogyna), willow (Salix spp.), pedunculate oak (Quercus robur) and ash (Fraxinus excelsior). Although there are some conifers such as Scot's pine (Pinus sylvestris) these constitute <10% of the planting as well as some non-native species. Below the trees is semi-improved grassland including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra) and bent grass (Agrostis spp.) with ruderals and herbaceous species including dock (Rumex spp.), common bird's-foot trefoil (Lotus corniculatus), dandelion (Taraxacum officinale agg.), rosebay willowherb (Epilobium angustifolium) and common ragwort (Senecio jacobaea).	Hazel (Corylus avellana), beech (Fagus sylvatica), hawthorn (Crataegus monogyna), willow (Salix spp.), common ragwort (Senecio jacobaea), dock (Rumex spp.), dandelion (Taraxacum officinale agg.), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), red fescue (Festuca rubra), bent grass (Agrostis spp.), spear thistle (Cirsium vulgare), ash (Fraxinus excelsior), cherry (Prunus spp.), rose (Rosa spp.), rosebay willowherb (Epilobium angustifolium), common bird's-foot trefoil (Lotus corniculatus), broad-leaved willowherb (Epilobium montanum), Scot's pine (Pinus sylvestris), rowan (Sorbus aucuparia), pedunculate oak (Quercus robur), bird cherry (Prunus padus), blackthorn (Prunus spinosa), creeping buttercup (Ranunculus repens), hogweed (Heracleum sphondylium).
O7 – 35 FULL ACCESS	Dense Scrub With Scattered Broadleaf Trees And Tall Ruderal Herb And Fern. This is a triangular shaped area of scrub growing adjacent to the railway to the east. There is a line of mature ash (Fraxinus excelsior) running along the centre of this area, parallel to	Ash (Fraxinus excelsior), common bird's-foot trefoil (Lotus corniculatus), common nettle (Urtica dioica), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), rosebay willowherb (Epilobium angustifolium), broad-leaved willowherb (Epilobium

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	the railway line. Along the western boundary is a ditch which was dry at the time of survey and a hedge which is most developed towards the north consisting of hawthorn (Crataegus monogyna) and elder (Sambucus nigra). In between the ash line and the hedge is largely ruderal vegetation including common nettle (Urtica dioica), cleavers (Galium aparine), rosebay willowherb (Epilobium angustifolium), broad-leaved willowherb (Epilobium montanum), creeping buttercup (Ranunculus repens) and bramble (Rubus fruticosus agg.) as well as red campion (Silene dioica), Lords and Ladies (Arum maculatum) and lesser celandine (Ranunculus ficaria) and grasses including red fescue (Festuca rubra), Cock's foot (Dactylis glomerata) and false oat grass (Arrhenatherum elatius). To the east of the ash line is dense scrub formed of mature hawthorn and elder with a largely bare ground layer. In some areas the elder forms an understorey. The substrate in this area is very stony, indicating that it has been used as a storage area for the railway in the past. In many places there is bare ground with some moss growing and in others, common nettle dominates. There is much deadwood on the ground in many places, especially below the dense scrub.	montanum), burdock (Arctium lappa), bugle (Ajuga reptans), dock (Rumex spp.), white dead-nettle (Lamium album), hawthorn (Crataegus monogyna), rose (Rosa spp.), bramble (Rubus fruticosus agg.), lesser celandine (Ranunculus ficaria), red campion (Silene dioica), elder (Sambucus nigra), creeping buttercup (Ranunculus repens), common ragwort (Senecio jacobaea), Cock's foot (Dactylis glomerata), red fescue (Festuca rubra), white dead-nettle (Lamium album), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), cherry species (Prunus spp.), snowdrop (Galanthus nivalis)
O7 – 36 FULL ACCESS	Defunct Species-Poor Hedgerow Newly planted hawthorn (Crataegus monogyna) hedgerow with some blackthorn (Prunus spinosa) and field maple (Acer campestre) also present. Currently whips to ~0.5m in plastic tubes.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), field maple (Acer campestre).
O7 – 37 FULL ACCESS	Defunct Species-Poor Hedgerow Well maintained hawthorn (Crataegus monogyna) dominated hedgerow with some elder (Sambucus nigra) to ~2m height and ~1.5m wide. There is a ditch running to the south and west sides which was dry at the time of survey. The ground layer is largely bare ground and ruderals including common nettle (Urtica dioica), cleavers (Galium aparine) and rosebay willowherb (Epilobium angustifolium). There are two small standard ash (Fraxinus excelsior). In places there is dense bramble (Rubus fruticosus agg.) scrub in the ditch.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), rosebay willowherb (Epilobium angustifolium), common nettle (Urtica dioica), cleavers (Galium aparine), garlic mustard (Alliaria petiolata), honeysuckle (Lonicera spp.), dock (Rumex spp.), hogweed (Heracleum sphondylium), spear thistle (Cirsium vulgare), white dead-nettle (Lamium album), ivy (Hedera helix), ash (Fraxinus excelsior).

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
O7 – 38 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated unmanaged hedgerow to ~7m height and ~3m wide. There is a ditch running along the western side of the hedgerow, which was dry at the time of survey. Ash (Fraxinus excelsior) standards with the ground layer largely bare ground and ruderals including common nettle (Urtica dioica), cleavers (Galium aparine) and dock (Rumex spp.) as well as garlic mustard (Alliaria petiolata), bugle (Ajuga reptans) and red campion (Silene dioica).	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), rose (Rosa spp.), bramble (Rubus fruticosus agg.), garlic mustard (Alliaria petiolata), bugle (Ajuga reptans), common nettle (Urtica dioica), cleavers (Galium aparine), creeping buttercup (Ranunculus repens), broad-leaved willowherb (Epilobium montanum), dock (Rumex spp.), ivy (Hedera helix), spear thistle (Cirsium vulgare), speedwell (Veronica spp.), nipplewort (Lapsana communis), burdock (Arctium lappa), red campion (Silene dioica).
O7 – 39 FULL ACCESS	Dense Scrub With Tall Ruderal Herb And Fern This is an area of tall ruderal herb and fern including rosebay willowherb (Epilobium angustifolium), common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris) growing around the pond (O7 – 40). There are hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa) shrubs present also.	Blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna), rosebay willowherb (Epilobium angustifolium), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), hogweed (Heracleum sphondylium), false oat grass (Arrhenatherum elatius), twitch (Elymus repens), rose (Rosa spp.), dock (Rumex spp.), honeysuckle (Lonicera spp.), garlic mustard (Alliaria petiolata), bramble (Rubus fruticosus agg.), spear thistle (Cirsium vulgare).
O7 – 40 FULL ACCESS	Open Water Field pond surrounded by the dense scrub (O7 – 39) with dense growth of sweet grass (Glyceria spp.) and some rush (Juncus spp.) around the edges. The water appears clear but visibility was limited by the growth of sweet grass. There are lots of algae on the water and some duckweed (Lemna spp.). The substrate could not be determined. This pond could provide habitat for great crested newt (Triturus cristatus).	Sweet grass (Glyceria spp.), rush (Juncus spp.), duckweed (Lemna spp.), honeysuckle (Lonicera spp.).
O7 – 41 FULL ACCESS	Defunct Species-Poor Hedgerow Heavily managed hawthorn (Crataegus monogyna) dominated hedgerow with some elder (Sambucus nigra) and blackthorn (Prunus spinosa) to ~1.5m height and ~1m width. The ground layer is largely ruderal including hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris) and dock (Rumex spp.). There are two mature standard ash (Fraxinus excelsior). The hedgerow has been laid in the past; there is currently some	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), dock (Rumex spp.), false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), elder (Sambucus nigra), garlic mustard (Alliaria petiolata), dandelion (Taraxacum officinale agg.), cleavers (Galium aparine), bramble (Rubus fruticosus agg.), white dead-nettle (Lamium album), rose (Rosa spp.), broad-leaved willowherb (Epilobium

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	deadwood present and gaps in places. The mature ash have the potential to provide roosting habitat for bats.	montanum), blackthorn (Prunus spinosa), dogwood (Cornus spp.).
O7 – 42 FULL ACCESS	Intact Species-Rich Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with elder (Sambucus nigra), blackthorn (Prunus spinosa) and elm (Ulmus spp.) and ash (Fraxinus excelsior), to a height of ~2.5m and a width of ~3m. There is a ditch running along the southern side which was dry at the time of survey. The ground layer is largely bare ground with ruderals including dock (Rumex spp.), common nettle (Urtica dioica) and cleavers (Galium aparine) as well as red campion (Silene dioica) and Lords and Ladies (Arum maculatum). There were no standard trees. This hedgerow could be important.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), blackthorn (Prunus spinosa), red campion (Silene dioica), dock (Rumex spp.), common nettle (Urtica dioica), cleavers (Galium aparine), rose (Rosa spp.), bramble (Rubus fruticosus agg.), ash (Fraxinus excelsior), dogwood (Cornus spp.), elm (Ulmus spp.), Lords and Ladies (Arum maculatum), hogweed (Heracleum sphondylium).
O7 – 43 FULL ACCESS	Intact Species-Rich Hedgerow With Trees Tall hawthorn (Crataegus monogyna) dominated hedgerow with abundant blackthorn (Prunus spinosa), managed to control horizontal growth only to a height of 8m. Other woody components of the hedgerow include elder (Sambucus nigra) and elm (Ulmus spp.). The ground layer is largely ruderal including common nettle (Urtica dioica), bramble (Rubus fruticosus agg.) and cow parsley (Anthriscus sylvestris) with some bare ground in places. Several dead standing trees were present in one section. There is a ditch running along the south of the hedgerow which was dry at the time of survey. There was one semi-mature ash (Fraxinus excelsior). This hedgerow could be 'important'.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), common nettle (Urtica dioica), white dead-nettle (Lamium album), hogweed (Heracleum sphondylium), bramble (Rubus fruticosus agg.), cow parsley (Anthriscus sylvestris), dock (Rumex spp.), spear thistle (Cirsium vulgare), garlic mustard (Alliaria petiolata), burdock (Arctium lappa), rosebay willowherb (Epilobium angustifolium), dogwood (Cornus spp.), elm (Ulmus spp.), ash (Fraxinus excelsior), elder (Sambucus nigra), bugle (Ajuga reptans).
O7 – 44 FULL ACCESS	Open Water Field pond with willow (Salix spp.) growing throughout. There is blanket weed on top and no other aquatics/marginals.	Willow (Salix spp.), honeysuckle (Lonicera spp.)

COMPARTMENT 7		
TN No. /Access	**Description**	**Species**
	This pond could provide habitat for great crested newt (Triturus cristatus).	
O7 – 45 FULL ACCESS	Tall Ruderal Herb And Fern Tall ruderal herb and fern growing around the pond (O7 – 44). Species include rosebay willowherb (Epilobium angustifolium), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris) and common nettle (Urtica dioica) with willow (Salix spp.) associated with the pond. This could provide habitat for great crested newt (Triturus cristatus) and reptiles.	Rosebay willowherb (Epilobium angustifolium), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), Cock's foot (Dactylis glomerata), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), bramble (Rubus fruticosus agg.), twitch (Elymus repens), garlic mustard (Alliaria petiolata), willow (Salix spp.), spear thistle (Cirsium vulgare).

O7 – 46 FULL ACCESS	<u>Intact Species-Rich Hedgerow With Trees</u> Hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa) dominated hedgerow to a height of ~6m and a width of ~3-4m. It appears to have been managed by trimming to control horizontal growth only. There is a ditch running along the southern side which was dry at the time of survey. There were several mature field maple (Acer campestre) which were associated with the woodland to the west but also present as a woody component of the hedgerow. The ground layer is largely bare ground and ruderal including rosebay willowherb (Epilobium angustifolium), cock's foot (Dactylis glomerata), cleavers (Galium aparine) and common nettle (Urtica dioica) as well as garlic mustard (Alliaria petiolata). This could be an 'important' hedgerow.	Hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), common nettle (Urtica dioica), Midland hawthorn (Crataegus laevigata), white dead-nettle (Lamium album), Yorkshire fog (Holcus lanatus), rosebay willowherb (Epilobium angustifolium), bramble (Rubus fruticosus agg.), hogweed (Heracleum sphondylium), garlic mustard (Alliaria petiolata), cleavers (Galium aparine), cock's foot (Dactylis glomerata), rose (Rosa spp.), dogwood (Cornus spp.), ash (Fraxinus excelsior), elder (Sambucus nigra), field maple (Acer campestre), cow parsley (Anthriscus sylvestris), dock (Rumex spp.).
O7 – 47 FULL ACCESS	<u>Improved Grassland</u> Sheep grazed improved grassland with a sward height of ~5cm. The sward is grass dominated with herbaceous species such as creeping buttercup (Ranunculus repens) gaining local abundance in places but generally a well mixed sward. Perennial rye grass (Lolium perenne) was the dominant grass species recorded with Yorkshire fog (Holcus lanatus), crested dog's-tail (Cynosurus cristatus) and Cock's foot (Dactylis glomerata) also recorded. Herbaceous species included white clover (Trifolium repens), meadow buttercup (Ranunculus acris) and creeping buttercup as well as some ruderals such as spear thistle (Cirsium vulgare).	Perennial rye grass (Lolium perenne), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens), daisy (Bellis perennis), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense), white clover (Trifolium repens), crested dog's-tail (Cynosurus cristatus), dandelion (Taraxacum officinale agg.), red fescue (Festuca rubra), meadow buttercup (Ranunculus acris), Cock's foot (Dactylis glomerata), bent grass (Agrostis spp.), common nettle (Urtica dioica).

COMPARTMENT 8		
TN No. /Access	**Description**	**Species**
O8 – 1 FULL ACCESS	Semi-Natural Broadleaf Woodland With Running Water A thin belt (>10m) of semi-natural broadleaf woodland along the banks of a shallow stream. Channel of stream varies from 0.5m-1.5m in width with a slow to medium flow. Water depth is shallow (>20cm over clay and shingle). No evidence of aquatic vegetation. Banks of stream vary from 1- 2.5m in height and are also very variable in aspect. The woodland on the banks of stream is probably secondary in origin with many stage headed mature ash (Fraxinus excelsior) trees. Occasional hawthorn (Crataegus monogyna) and hazel (Corylus avellana) is present in the shrub layer. Ruderal species are abundant within the woodland layer and include common nettle (Urtica dioica), cleavers (Galium aparine) and cow parsley (Anthriscus sylvestris) with occasional to frequent woodland species such as Lords and Ladies (Arum maculatum) and red campion (Silene dioica). A hedgerow present on the southern edge of stream bank (O8-2). There is potential for roosting bats within some of the mature ash trees. Low water vole (Arvicola terrestris) potential in the stream due to heavy shading and lack of food plants.	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), hazel (Corylus avellana), ivy (Hedera helix), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), garlic mustard (Alliaria petiolata), red campion (Silene dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine).
O8 – 2 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with occasional blackthorn (Prunus spinosa) and dog rose (Rosa canina) and rarely recorded hazel (Corylus avellana). The hedgerow is present on the southern peak of the stream (O8 – 2) and essentially forms part of the associated woodland. The hedgerow managed on field edge to a height of 1.5 – 2m.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), blackthorn (Prunus spinosa), dog rose (Rosa canina), hazel (Corylus avellana).

COMPARTMENT 8		
TN No. /Access	**Description**	**Species**
O8 – 3 FULL ACCESS	Defunct Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow with frequent wide gaps and is generally unmanaged to a height of 2m and width of 4m. Common nettle (Urtica dioica) dominates the understorey with occasional Lords and Ladies (Arum maculatum). Rabbit (Oryctolagus cuniculus) burrows are present throughout.	Hawthorn (Crataegus monogyna), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), blackthorn (Prunus spinosa), common nettle (Urtica dioica) broadleaf dock (Rumex obtusifolius), Lords and Ladies (Arum maculatum).
O8 – 4 FULL ACCESS	Dense Scrub Thin line of dense hawthorn (Crataegus monogyna) scrub along a railway banking. Occasional elder (Sambucus nigra) and blackthorn (Prunus spinosa) are present with semi-mature ash (Fraxinus excelsior) trees. Ivy (Hedera helix) and common nettle (Urtica dioica) dominates the understorey with frequent garlic mustard (Alliaria petiolata). Many rabbit (Oryctolagus cuniculus) holes are present throughout the railway banking. The railway may act as wildlife corridor for reptile species.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), elder (Sambucus nigra), blackthorn (Prunus spinosa), ivy (Hedera helix), cleavers (Galium aparine), common nettle (Urtica dioica), garlic mustard (Alliaria petiolata).
O8 – 5 FULL ACCESS	Scattered Broadleaf Trees Thin line of semi-mature ash (Fraxinus excelsior) trees with young hawthorn (Crataegus monogyna) along a railway banking. Occasional common nettle (Urtica dioica) is present in the field layer with abundant bare rocky ground. Many rabbit (Oryctolagus cuniculus) holes are present throughout the railway banking. The railway may act as wildlife corridor for reptile species.	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), common nettle (Urtica dioica) ivy (Hedera helix), broadleaf dock (Rumex obtusifolius) cleavers (Galium aparine).
O8 – 6 FULL ACCESS	Plantation Broadleaf Woodland Recently planted (>2 years) broadleaf woodland on the banking of a new road. A typical mix of species is present including hawthorn (Crataegus monogyna), hazel	Hawthorn (Crataegus monogyna), hazel (Corylus avellana), field maple (Acer campestre), dog rose (Rosa canina), ash (Fraxinus excelsior), pedunculate oak (Quercus robur), blackthorn (Prunus spinosa), sycamore (Acer pseudoplatanus), wild cherry (Prunus avium), false oat

COMPARTMENT 8		
TN No. /Access	**Description**	**Species**
	(Corylus avellana), field maple (Acer campestre), pedunculate oak (Quercus robur) and ash (Fraxinus excelsior). Semi-improved grassland is present below, probably sown from bare ground. Species present include false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), creeping buttercup (Ranunculus repens), spear thistle (Cirsium vulgare), red fescue (Festuca rubra), broadleaf dock (Rumex obtusifolius) and common nettle (Urtica dioica).	grass (Arrhenatherum elatius), creeping buttercup (Ranunculus repens), common ragwort (Senecio jacobaea), common nettle (Urtica dioica), broadleaf dock (Rumex obtusifolius), greater plantain (Plantago major), field forget-me-not (Myosotis arvensis), red fescue (Festuca rubra), Cock's foot (Dactylis glomerata), spear thistle (Cirsium vulgare), Yorkshire fog (Holcus lanatus).
O8 – 7 FULL ACCESS	<u>Semi-Natural Broadleaf Woodland</u> Thin belt of semi-natural woodland 8 – 10m wide along the banks of a disused canal, probably secondary woodland and may be partly planted. Many semi-mature ash (Fraxinus excelsior) are present within occasional Scot's pine (Pinus sylvestris). Shrub layer supports occasional hawthorn (Crataegus monogyna), holly (Ilex aquifolium) and dog rose (Rosa canina). The field layer is dominated by cow parsley (Anthriscus sylvestris) with typical woodland species such as Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria) and red campion (Silene dioica). No immediate evidence of ancient woodland indicators. Much deadwood is present throughout, particularly in the adjacent canal. Potential for bat roosts in older trees.	Ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), dog rose (Rosa canina), Scot's pine (Pinus sylvestris), holly (Ilex aquifolium), crack willow (Salix fragilis), cow parsley (Anthriscus sylvestris), Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria), garlic mustard (Alliaria petiolata), red campion (Silene dioica), cleavers (Galium aparine), broadleaf dock (Rumex obtusifolius), hogweed (Heracleum sphondylium), white dead-nettle (Lamium album), butterbur (Petacompartments hybridus).
O8 – 8 FULL ACCESS	<u>Open Water</u> Disused stretch of canal up to 8m wide. The water is stagnant and eutrophic, and little aquatic vegetation is present apart from occasional to locally frequent reed-mace (Typha latifolia) and brooklime (Veronica beccabunga). Green algae are present throughout the water channel. Crack willow (Salix fragilis) is abundant in the canal, particularly to north. Many mature and collapsed trees are present and the water channel is almost completely	Reed-mace (Typha latifolia), brooklime (Veronica beccabunga), crack willow (Salix fragilis).

COMPARTMENT 8		
TN No. /Access	**Description**	**Species**
	overgrown in parts with willow re-growth. Potential for great crested newt (Triturus cristatus) and reptile species in the canal, particularly grass snake (Natrix natrix).	
O8 – 9 FULL ACCESS	<u>Intact Species-Poor Hedgerow</u> Hawthorn (Crataegus monogyna) dominated hedgerow along the course of the old canal which is now dry (directly to the north of O8 – 8). To the south, the hedgerow is managed to a height of 2m and width of 4-5m. False oat grass (Arrhenatherum elatius), garlic mustard (Alliaria petiolata), cow parsley (Anthriscus sylvestris) and Lords and Ladies (Arum maculatum) are present in the understorey. To the north, the hedgerow is unmanaged to 4m in height and width with spreading, bushy crowns. An extensive belt of bramble (Rubus fruticosus agg.) scrub is present on the eastern edge of the hedgerow and is 6-7m in width. Particularly good area for breeding birds.	Hawthorn (Crataegus monogyna), elder (Sambucus nigra), dog rose (Rosa canina), blackthorn (Prunus spinosa), false oat grass (Arrhenatherum elatius), garlic mustard (Alliaria petiolata), cow parsley (Anthriscus sylvestris), hogweed (Heracleum sphondylium), Lords and Ladies (Arum maculatum), bramble (Rubus fruticosus agg.), great willowherb (Epilobium hirsutum).
O8 – 10 FULL ACCESS	<u>Open Water</u> Small pond approximately 30m^2 in hedgerow 08 – 9, probably a remnant of the old canal. The water level was low at the time of survey (> 5cm), almost reduced to damp ground in places with wet mud. Sweet grass (Glyceria spp.) dominates throughout with occasional great willowherb (Epilobium hirsutum) and locally abundant brooklime (Veronica beccabunga). Shallow clay banks surround the pond, over shaded by the surrounding hawthorn (Crataegus monogyna). Low great crested newt (Triturus cristatus) potential.	Sweet grass (Glyceria spp.), brooklime (Veronica beccabunga), great willowherb (Epilobium hirsutum), hawthorn (Crataegus monogyna).
O8 – 11 FULL ACCESS	<u>Intact Species-Poor Hedgerow</u> Tall hawthorn (Crataegus monogyna) dominated hedgerow with locally abundant	Hawthorn (Crataegus monogyna), dog rose (Rosa canina), elder (Sambucus nigra), blackthorn (Prunus spinosa), ash (Fraxinus excelsior), false oat grass (Arrhenatherum elatius), common nettle

COMPARTMENT 8		
TN No. /Access	**Description**	**Species**
	blackthorn (Prunus spinosa). Managed to a height of 3-4.5m and width of 3 -4 m. Ruderal ground flora present in the understorey including false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica) and hogweed (Heracleum sphondylium).	(Urtica dioica), hogweed (Heracleum sphondylium), Lords and Ladies (Arum maculatum), white dead-nettle (Lamium album), red fescue (Festuca rubra), cleavers (Galium aparine).
O8 – 12 FAR DISTANCE	Scattered Broadleaf Trees **Seen from far distance with binoculars.** Four mature ash (Fraxinus excelsior) trees present in the centre of a field. All are stag headed with rot holes, slits, tears and old woodpecker holes. Potential for roosting bats and breeding birds.	
O8 – 13 FAR DISTANCE	Buildings **Seen from far distance with binoculars.** A number of disused stable blocks and barns part of the former Springfield Stables. Most are brick built with tiled pitched roofs. Several metal barns also present. Most of the buildings appear to be derelict or in a state of disrepair. Two houses are also present on compartment and appear to be occupied. Rank grassland and scattered scrub surround the buildings. The compartment appears to be generally neglected. Potential for roosting bats and breeding birds within buildings. Old stables may provide nesting habitat for barn owl (Tyto alba).	
O8 – 14 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated hedgerow with ash (Fraxinus excelsior), elder (Sambucus nigra) and elm (Ulmus spp.). Two mature ash trees are present in the hedgerow and are covered in ivy (Hedera helix). Potential for roosting bats.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), elder (Sambucus nigra), elm (Ulmus spp.), blackthorn (Prunus spinosa), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), false oat grass (Arrhenatherum elatius), common nettle (Urtica dioica), garlic mustard (Alliaria petiolata), lesser

COMPARTMENT 8		
TN No. /Access	**Description**	**Species**
	The hedgerow is managed to a height of 3-4m and width of 1.5-2m. Ruderal ground flora dominates the understorey with cleavers (Galium aparine) and common nettle (Urtica dioica).	celandine (Ranunculus ficaria), ivy (Hedera helix).
O8 – 15 FULL ACCESS	Intact Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedgerow managed to a height of 2m and width of 3.5m. Ruderal ground flora is present in the understorey with cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), cleavers (Galium aparine) and the woodland species Lords and Ladies (Arum maculatum).	Elder (Sambucus nigra), hawthorn (Crataegus monogyna), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), Lords and Ladies (Arum maculatum), cleavers (Galium aparine).
O8 – 16 FULL ACCESS	Scattered Mixed Trees With Semi-Natural Grassland And Dense Scrub An area of scattered mixed trees adjacent to Springfield Stables (O8 -13). The compartment appears to be a former small holding possibly used as a tree nursery or for some other horticultural purpose. Many scattered trees are present across the compartment, such as mature beech (Fagus sylvatica), sycamore (Acer pseudoplatanus), lime (Tilia spp.), Scot's pine (Pinus sylvestris), and yew (Taxus baccata). Non-native trees are also present and include a mature Wellingtonia (Sequoiadendron giganteum). Holly (Ilex aquifolium), hawthorn (Crataegus monogyna) and goat willow (Salix caprea) scrub is present throughout the compartment and often forms locally abundant stands. A double line of mature pollarded lime (Tilia spp.) trees are present to the west of the compartment. Ivy (Hedera helix) is dominant in the field layer under trees with Lords and Ladies (Arum maculatum), red campion (Silene dioica) and lesser celandine (Ranunculus ficaria). Ruderal species are also present including common nettle (Urtica dioica) and cleavers (Galium aparine).	Lime (Tilia spp.), beech (Fagus sylvatica), holly (Ilex aquifolium), elder (Sambucus nigra), hawthorn (Crataegus monogyna), holly (Ilex aquifolium), elder (Sambucus nigra), ash (Fraxinus excelsior), butterfly bush (Buddleia davidii), horse chestnut (Aesculus hippocastanum), yew (Taxus baccata), Wellingtonia (Sequoiadendron giganteum), sycamore (Acer pseudoplatanus), Scot's pine (Pinus sylvestris), goat willow (Salix caprea), ivy (Hedera helix), red campion (Silene dioica), bramble (Rubus fruticosus agg.), Lords and Ladies (Arum maculatum), lesser celandine (Ranunculus ficaria), false oat grass (Arrhenatherum elatius), Cock's foot (Dactylis glomerata), common nettle (Urtica dioica), cleavers (Galium aparine), bent grass (Agrostis spp.), meadow grass (Poa spp.), red fescue (Festuca rubra), Colt's foot (Tussilago farfara), cow parsley (Anthriscus sylvestris), hogweed (Heracleum sphondylium), red clover (Trifolium pratense), white clover (Trifolium repens), common ragwort (Senecio jacobaea), ribwort plantain (Plantago lanceolata), speedwell (Veronica spp.), selfheal (Prunella vulgaris), creeping cinquefoil (Potentilla repens), ladies bedstraw (Galium verum), snowdrops (Galanthus sp.), daffodil (Narcissus sp.).

COMPARTMENT 8		
TN No. /Access	**Description**	**Species**
	Where trees are not present dense areas of bramble (Rubus fruticosus agg.) dominate often with frequent great willowherb (Epilobium hirsutum). Isolated and fragmented areas of semi-improved grassland are present throughout the compartment with a variety of grass and herb species including false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), meadow grass (Poa spp.), bent grass (Agrostis spp.), Colt's foot (Tussilago farfara), cow parsley (Anthriscus sylvestris), red clover (Trifolium pratense), white clover (Trifolium repens), common ragwort (Senecio jacobaea), ribwort plantain (Plantago lanceolata). The grassland appears to be grazed by rabbits (Oryctolagus cuniculus). Locally abundant patches of giant hogweed (Heracleum mantegazzianum), a highly invasive and notifiable weed, are present within the compartment. Rabbit (Oryctolagus cuniculus) holes were also present. A fox (Vulpes vulpes) and muntjac deer (Muntiacus reevesi) were spotted at time of survey in areas of scrub. Due to the variety of habitats present, the compartment has the potential to support reptiles.	
O8 – 17 FULL ACCESS	<u>Amenity Grassland</u> Short-mown grassland on a road edge with perennial rye grass (Lolium perenne), red fescue (Festuca rubra), daisy (Bellis perennis), creeping buttercup (Ranunculus repens), dandelion (Taraxacum officinale agg.), red clover (Trifolium pratense), white clover (Trifolium repens), broadleaf dock (Rumex obtusifolius).	Perennial rye grass (Lolium perenne), red fescue (Festuca rubra), daisy (Bellis perennis), creeping buttercup (Ranunculus repens), dandelion (Taraxacum officinale agg.), red clover (Trifolium pratense), white clover (Trifolium repens), broadleaf dock (Rumex obtusifolius).

COMPARTMENT 9A		
TN No. /Access	**Description**	**Species**
O9a – 1 FULL ACCESS	Running Water Stream with clear water running west – east at a medium flow rate. Substrate is sediment, stony in places with some organic debris, water to 30cm. The stream is between 1-3m across with the top of the banks ~5m apart and ~1-3m above the level of the water. Banks are often not well defined or steep. No aquatics recorded, some marginals including fool's watercress (Apium nodiflorum), brooklime (Veronica beccabunga), rosebay willowherb (Epilobium angustifolium) and rush (Juncus spp.). Some willow (Salix spp.) were recorded close to the waters edge with ruderal vegetation recorded on the banks including ivy (Hedera helix), cleavers (Galium aparine) and common nettle (Urtica dioica) with trees and shrubs higher up (see O9a – 2).	Rosebay willowherb (Epilobium angustifolium), brooklime (Veronica beccabunga), fool's watercress (Apium nodiflorum), rush (Juncus spp.), ivy (Hedera helix), cleavers (Galium aparine), common nettle (Urtica dioica), sycamore (Acer pseudoplatanus), alder (Alnus glutinosa) and willow (Salix spp.).
O9a – 2 FULL ACCESS	Scattered Broadleaf Trees And Scattered Scrub Over Tall Ruderal Herb And Fern. A linear belt of broadleaf trees and scrub which runs along either side of the length of the stream (O9a – 1). Large willow (Salix spp.) trees with some ash (Fraxinus excelsior) and sycamore (Acer pseudoplatanus) as well as rare pedunculate oak (Quercus robur). The ground layer is largely ruderal and grass with dock (Rumex spp.), common nettle (Urtica dioica), and cow parsley (Anthriscus sylvestris) as well as Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata) and false oat grass (Arrhenatherum elatius). The cover of trees and scrub is not continuous and areas of ruderal and grass dominate in places. Large piles of deadwood are present in places providing good reptile habitat. Some trees could provide potential habitat for bats.	Willow (Salix spp.), teasel (Dipsacus fullonum), common nettle (Urtica dioica), dock (Rumex spp.), mugwort (Artemisia vulgaris), nipplewort (Lapsana communis), cleavers (Galium aparine), ash (Fraxinus excelsior), garlic mustard (Alliaria petiolata), ivy (Hedera helix), Lords and Ladies (Arum maculatum), red campion (Silene dioica), lesser celandine (Ranunculus ficaria), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), hawthorn (Crataegus monogyna), alder (Alnus glutinosa), sycamore (Acer pseudoplatanus), rose (Rosa spp.), elder (Sambucus nigra), bramble (Rubus fruticosus agg.), field bindweed (Convolvulus arvensis), false oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), rosebay willowherb (Epilobium angustifolium), pedunculate oak (Quercus robur).
O9a – 3 FULL ACCESS	Defunct Species-Poor Hedgerow Gappy hawthorn (Crataegus monogyna) dominated hedgerow, appears old, to 2m height and 1.5m width. There is a grass track running along the off-site side with a newly	Hawthorn (Crataegus monogyna), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), elm (Ulmus spp.).

COMPARTMENT 9A		
TN No. /Access	**Description**	**Species**
	planted hawthorn hedge running parallel to this hedgerow on the other side. Ruderal species beneath including cleavers (Galium aparine), cock's foot (Dactylis glomerata) and common nettle (Urtica dioica). In places, large pieces of deadwood have been laid out to fill a gap in the hedge, this would provide good habitat for reptiles.	
O9a – 4 FULL ACCESS	Defunct Species-Poor Hedgerow Hawthorn (Crataegus monogyna) dominated hedge with some small gaps, to ~3m height and ~2m width. More elder (Sambucus nigra) and elm (Ulmus spp.) present towards the southern end where a shallow ditch which was dry at the time of survey was also recorded. Ruderal species beneath including cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), Cock's foot (Dactylis glomerata) and common nettle (Urtica dioica). In places, large pieces of deadwood have been laid out to fill a gap in the hedge, this would provide good habitat for reptiles.	Hawthorn (Crataegus monogyna), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), cleavers (Galium aparine), Cock's foot (Dactylis glomerata), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), elm (Ulmus spp.), rose (Rosa spp.), elder (Sambucus nigra), ivy (Hedera helix).
O9a – 5 FULL ACCESS	Intact Species-Poor Hedgerow Dense, well maintained, hawthorn (Crataegus monogyna) dominated hedgerow with no standard trees, height between 3-4m and ~3m wide. Shallow ditch which was dry at the time of survey runs along the site side but switches to the off-site side half way along. The ground layer was dominated by ivy (Hedera helix), ruderal vegetation and grass. Species include common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), cleavers (Galium aparine), bramble (Rubus fruticosus agg.) and cock's foot (Dactylis glomerata) were also recorded beneath. Abundant Lords and Ladies (Arum maculatum) were present.	Hawthorn (Crataegus monogyna), ivy (Hedera helix), common nettle (Urtica dioica), cleavers (Galium aparine), elder (Sambucus nigra), ash (Fraxinus excelsior), elm (Ulmus spp.), bramble (Rubus fruticosus agg.), cow parsley (Anthriscus sylvestris), cock's foot (Dactylis glomerata), Lords and Ladies (Arum maculatum), blackthorn (Prunus spinosa), ground ivy (Glechoma hederacea).

COMPARTMENT 9A		
TN No. /Access	**Description**	**Species**
O9a – 6 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Tall hawthorn (Crataegus monogyna) dominated hedgerow to 6m height and ~2-3m wide with occasional elm (Ulmus spp.) and blackthorn (Prunus spinosa). Ruderal vegetation and grass including Cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine), common nettle (Urtica dioica) and dock (Rumex spp.) recorded beneath. Bramble (Rubus fruticosus agg.) and rose (Rosa spp.) were recorded growing through the hedgerow. Large poplar (Populus spp.) and sycamore (Acer pseudoplatanus) trees are present offset from the hedgerow on the offsite side. The hedge is growing around a wire fence and is maintained on the field side by trimming.	Hawthorn (Crataegus monogyna), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), false oat grass (Arrhenatherum elatius), cleavers (Galium aparine), bramble (Rubus fruticosus agg.), Lords and Ladies (Arum maculatum), ground ivy (Glechoma hederacea), dock (Rumex spp.), white dead-nettle (Lamium album), poplar (Populus spp.), ivy (Hedera helix), rose (Rosa spp.), sycamore (Acer pseudoplatanus), elm (Ulmus spp.), blackthorn (Prunus spinosa).
O9a – 7 FULL ACCESS	Intact Species-Poor Hedgerow With Trees Tall 5-6m tall, poorly managed hawthorn (Crataegus monogyna) dominated hedgerow. The understorey was shady with ivy (Hedera helix) dominating and ruderals including common nettle (Urtica dioica) and cleavers (Galium aparine) present. Ash (Fraxinus excelsior) trees were present offset from the hedgerow on the offsite side.	Hawthorn (Crataegus monogyna), cleavers (Galium aparine), common nettle (Urtica dioica), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), cow parsley (Anthriscus sylvestris), hogweed (Heracleum sphondylium), rose (Rosa spp.), ash (Fraxinus excelsior).

COMPARTMENT 9B		
TN No. /Access	**Description**	**Species**
O9b – 1 FULL ACCESS	Intact Species-Poor Hedgerow Well maintained hawthorn (Crataegus monogyna) dominated hedgerow, ~3m high and up to 5m wide (some double-planting present). No standards, dense ivy (Hedera helix) beneath with ruderal species including common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris) and cleavers (Galium aparine), Lords and Ladies (Arum maculatum) and ground ivy (Glechoma hederacea). Mature hedgerow has been laid in the past. Rose (Rosa spp.) and bramble (Rubus fruticosus agg.) were recorded growing through the hedgerow.	Hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), common nettle (Urtica dioica), cleavers (Galium aparine), Lords and Ladies (Arum maculatum), cow parsley (Anthriscus sylvestris), Yorkshire fog (Holcus lanatus), cock's foot (Dactylis glomerata), ivy (Hedera helix), elder (Sambucus nigra), bindweed (Convolvulus spp.), blackthorn (Prunus spinosa), rose (Rosa spp.), field maple (Acer campestre), bramble (Rubus fruticosus agg.), ground ivy (Glechoma hederacea), false oat grass (Arrhenatherum elatius), dandelion (Taraxacum officinale agg.).
O9b – 2 FULL ACCESS	Dense Scrub Stand of ash (Fraxinus excelsior) whips, up to ~7m in height with occasional willow (Salix spp.) and hawthorn (Crataegus monogyna). Bare ground and grass including false oat grass (Arrhenatherum elatius) and Yorkshire fog (Holcus lanatus) beneath.	Ash (Fraxinus excelsior), willow (Salix spp.), hawthorn (Crataegus monogyna), rose (Rosa spp.), bramble (Rubus fruticosus agg.), false oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus).
O9b – 3 FULL ACCESS	Semi-Improved Grassland Tussocky, false oat grass (Arrhenatherum elatius) dominated semi-improved grassland, which appears unmanaged, with some thatch between the tussocks in places. As well as grass dominated areas there are patches where tall ruderal species, especially rosebay willowherb (Epilobium angustifolium) but also common nettle (Urtica dioica), dock (Rumex spp.) and cow parsley (Anthriscus sylvestris), dominate with bare ground in places. Some bramble (Rubus fruticosus agg.) scrub and ash (Fraxinus excelsior) whips were also recorded. An umbellifer which may have been pignut (Conopodium majus) was also noted; however it is not possible to confirm the identity of this species at this time of year.	False oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), cleavers (Galium aparine), common nettle (Urtica dioica), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), ground ivy (Glechoma hederacea), dock (Rumex spp.), rosebay willowherb (Epilobium angustifolium), garlic mustard (Alliaria petiolata), perennial rye grass (Lolium perenne), cock's foot (Dactylis glomerata), bent grass (Agrostis spp.), dock (Rumex spp.), lesser celandine (Ranunculus ficaria), speedwell (Veronica spp.), geranium (Geranium spp.), red fescue (Festuca rubra), pignut (Conopodium majus), ash (Fraxinus excelsior), hazel (Corylus avellana), perennial rye grass (Lolium perenne).
O9b – 4 FULL ACCESS	Butterbur (Petasites Hybridus) Stand Almost a monoculture of butterbur (Petasites hybridus) with some ivy (Hedera helix), common nettle (Urtica dioica) and hogweed (Heracleum sphondylium) beneath growing	Butterbur (Petasites hybridus), ivy (Hedera helix), common nettle (Urtica dioica), hogweed (Heracleum sphondylium).

COMPARTMENT 9B		
TN No. /Access	**Description**	**Species**
	close to the stream (O9b – 6).	
O9b – 5 FULL ACCESS	Dense Scrub With Scattered Broadleaf Trees Dense scrub, blackthorn (Prunus spinosa) dominated, and broadleaf trees growing around the stream (O9b – 6). Other species include ash (Fraxinus excelsior), hawthorn (Crataegus monogyna) and sycamore (Acer pseudoplatanus). The northern side is dense scrub whilst the southern side is more open with tall ruderal vegetation. Ruderal species include common nettle (Urtica dioica), ivy (Hedera helix) and cleavers (Galium aparine) although red campion (Silene dioica), lesser celandine (Ranunculus ficaria), Lords and Ladies (Arum maculatum) and hedge woundwort (Stachys sylvatica) were also present. Deadwood is present in places.	Blackthorn (Prunus spinosa), common nettle (Urtica dioica), ivy (Hedera helix), red campion (Silene dioica), cleavers (Galium aparine), Yorkshire fog (Holcus lanatus), lesser celandine (Ranunculus ficaria), am, elder (Sambucus nigra), ash (Fraxinus excelsior), white dead-nettle (Lamium album), hawthorn (Crataegus monogyna), hedge woundwort (Stachys sylvatica), dock (Rumex spp.), cardamine (Cardamine spp.), burdock (Arctium lappa), shining cranesbill (Geranium lucidum), sycamore (Acer pseudoplatanus), butterbur (Petasites hybridus).
O9b – 6 FULL ACCESS	Running Water Open stream with clear water flowing northwest to southeast at a medium rate, 1-2m wide and to 10cm deep with a stony bottom. Little organic or artificial debris was present. Banks to the north are shallow sloping, ~20º to 0.5m above the water whilst banks to the south are steeper, ~60 º to 2m above the water. No aquatics were recorded; some marginals including sweet grass (Glyceria spp.) and rosebay willowherb (Epilobium angustifolium) were recorded. This stream has water vole (Arvicola amphibius) potential with some holes present.	Creeping buttercup (Ranunculus repens), dock (Rumex spp.), cardamine (Cardamine spp.), sweet grass (Glyceria spp.), rosebay willowherb (Epilobium angustifolium), bramble (Rubus fruticosus agg.).
O9b – 7 FULL ACCESS	Semi-Improved Grassland A semi-improved grassland on a slope declining towards the stream (O9b – 6) which appears to be managed (no evidence of cutting or grazing at the time of survey). The character of this grassland is less ruderal and slightly more improved than the adjacent semi-improved grassland (O9c – 3). The grassland is tussocky and false oat grass (Arrhenatherum elatius) dominated with a number of other grass species and frequent herbaceous species throughout the sward and Colt's foot (Tussilago farfara) patches in places.	False oat grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus), cleavers (Galium aparine), common nettle (Urtica dioica), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), ground ivy (Glechoma hederacea), dock (Rumex spp.), garlic mustard (Alliaria petiolata), perennial rye grass (Lolium perenne), cock's foot (Dactylis glomerata), bent grass (Agrostis spp.), dock (Rumex spp.), lesser celandine (Ranunculus ficaria), speedwell (Veronica spp.), geranium (Geranium spp.), red fescue (Festuca rubra), pignut (Conopodium majus), ash (Fraxinus excelsior), hazel (Corylus avellana), perennial rye

COMPARTMENT 9B		
TN No. /Access	**Description**	**Species**
		grass (Lolium perenne), red clover (Trifolium pratense), white clover (Trifolium repens), Colt's foot (Tussilago farfara).
O9b – 8 FULL ACCESS	Defunct Species-Poor Hedgerow With Trees Hawthorn (Crataegus monogyna) dominated leggy, gappy hedgerow which appears unmanaged to ~6m height and 2-3m wide. Standard ash (Fraxinus excelsior) trees are barely taller than the woody component of the hedge. Ruderal understorey dominated by common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris).	Common nettle (Urtica dioica), hawthorn (Crataegus monogyna), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), bramble (Rubus fruticosus agg.), Yorkshire fog (Holcus lanatus), false oat grass (Arrhenatherum elatius), Lords and Ladies (Arum maculatum), pedunculate oak (Quercus robur), elder (Sambucus nigra), garlic mustard (Alliaria petiolata), ash (Fraxinus excelsior).
O9b – 9 FULL ACCESS	Wall Overgrown defunct stone wall, now overgrown with grasses, moss and ruderal species including red campion (Silene dioica), creeping buttercup (Ranunculus repens), Yorkshire fog (Holcus lanatus), common nettle (Urtica dioica), cleavers (Galium aparine) and false oat grass (Arrhenatherum elatius). A semi-natural broadleaf woodland is located behind this wall on the offsite side consisting of mature horse chestnut (Aesculus hippocastanum), hawthorn (Crataegus monogyna), sycamore (Acer pseudoplatanus), lime (Tilia spp.), London plane (Platanus x hispanica) and ash (Fraxinus excelsior) with an extensive ground flora of Lords and Ladies (Arum maculatum), garlic mustard (Alliaria petiolata), lesser celandine (Ranunculus ficaria) and dog's mercury (Mercurialis perennis). This wall provides good quality habitat for reptiles.	Red campion (Silene dioica), creeping buttercup (Ranunculus repens), Yorkshire fog (Holcus lanatus), common nettle (Urtica dioica), cleavers (Galium aparine), false oat grass (Arrhenatherum elatius), bramble (Rubus fruticosus agg.).

APPENDIX 4

BACKGROUND DATA MAPS

APPENDIX 5

WILDLIFE CORRIDORS

APPENDIX 6

GLOSSARY OF TERMS

The glossary of terms has been taken from the JNCC Phase 1 Habitat Survey Classification. All habitats have been categorized in line with the recommendations contained within the guidelines.

Woodland

Woodland is defined as vegetation dominated by trees more than 5m high when mature, forming a distinct, although sometimes open canopy. Dominant species have been noted with the understorey and ground layer species also identified. Distinct blocks of woodland, whether broadleaved or coniferous, have been mapped separately wherever possible.

The definitions of the main categories are:-

- Broadleaved woodland: 10% or less conifer in the canopy;
- Coniferous woodland: 10% or less broadleaved in the canopy;
- Mixed woodland: 10-90% of either broadleaved or conifer in the canopy.

If the cover of trees is less than 30%, the area is shown as scattered trees.

Semi-Natural Woodland

Semi-natural woodland comprises all stands which do not obviously originate from planting. The distribution of species will generally reflect natural variations in the site and its soil. Both ancient and more recent stands are included. Woodland with both semi-natural and planted trees are classified as semi-natural if the planted trees account for less than 30% of the canopy composition, but as plantation if more than 30% is planted.

The following would, amongst others, be included in the semi-natural woodland category:-

- woods with planted standards in semi-natural coppice;
- mature plantations (more than about 120 years old) of native species growing on sites where those species are native and where there are semi-natural woodland ground flora and shrub communities;
- self-sown secondary stands of exotic species
- alder carr and willow carr where the willows are more than 5m tall
- well-established sweet-chestnut coppice (that is, over 25 years old);
- woods which have been completely underplanted, but where the planted trees do not yet contribute to the canopy;

Plantation Woodland

All obviously planted woodland of any age are included in this category, with the exception of those types mentioned previously.

Scrub

Scrub is seral or climax vegetation dominated by locally native shrubs, usually less than 5m tall, occasionally with a few scattered trees. The following species are, amongst others, be included in this category:-

- Gorse, common broom and common juniper scrub;
- Stands of bramble and dog rose scrub
- Stands of mature hawthorn, blackthorn or grey willow, even if more than 5 m tall;
- All willow carr less than 5 m tall; all grey willow carr;

The following would not be included in this category:-

- Hedges
- Stands of young trees or stump regrowth less than 5 m high, where these represent more than 50% of the immature canopy cover;
- stands of introduced shrub species

Species-Poor Hedgerows

Hedges with a low diversity of native woody species and ground flora.

Species-Rich Hedges

Hedges with a high diversity of native woody species and ground flora.

Intact Hedge

Intact hedges are entire and more-or-less stock proof.

Defunct Hedge

Hedges in which there are gaps and which are no longer stock-proof.

Unimproved Grassland

Unimproved grasslands are likely to be rank and neglected, mown or grazed. They may have been treated with low levels of farmyard manure, but should not have had sufficient applications of fertiliser or herbicide, or have been so intensively grazed or drained, as to alter the sward composition significantly. Species diversity is often high, with species characteristic of the area and the soils and with a very low percentage of agricultural species. Unimproved grasslands may often be of high conservation value.

Semi-Improved Grassland

Semi-improved grassland is made up of grasslands which have been modified by artificial fertilisers, slurry, intensive grazing, herbicides or drainage, and

consequently have a range of species which is less diverse and natural than unimproved grasslands. Such grasslands are still of some conservation value. Semi-improved grassland may originate from partial improvement of acid, neutral or calcareous grassland. Species diversity will generally be lower than in unimproved grassland in the same area.

Semi-improved grassland are also common where former improved grasslands have become neglected, abandoned or only occasionally grazed and thus a more varied floral community often develops.

Improved Grassland

Improved grasslands are those meadows and pastures which have been so affected by heavy grazing, drainage, or the application of herbicides, inorganic fertilisers, slurry or high doses or manure that they have lost many of the species which one could expect to find in an unimproved sward. They have only a very limited range of grasses and a few common forbs, mainly those demanding of nutrients and resistant to grazing. Rye grass, crested dog's tail, white clover, broad leaved dock, Dandelion, daisy, meadow buttercup and bulbous buttercup are typical of improved grassland, while stands of dock species, common nettle and thistles species indicate local enrichment of the soil by grazing animals.

The following signs usually indicate substantial improvement:-

- Bright green, lush and even sward, dominated by grasses (though poaching causes unevenness);
- Low diversity of herb species;
- More than 50% rye grass, white clover and other agricultural species.

Marsh/Marshy Grassland

This includes grasslands with a high proportion of rush species, sedge species or meadowsweet, and wet meadows and pastures supporting communities of species such as marsh marigold or valerian species, where broadleaved herbs rather than grasses predominate.

Amenity Grassland

This comprises intensively managed and regularly mown grasslands, typical of lawns, playing fields, golf course fairways and many urban 'savannah' parks.

Tall Ruderal Vegetation

This category comprises stands of tall perennial or biennial herbaceous species, usually more than 25cm high, of species such as rosebay willowherb, common nettle and Japanese knotweed. Tall ruderal vegetation is indicative of areas of disturbed ground and/or nutrient enrichment.

Standing Water

Standing water includes lakes, reservoirs, pools, flooded gravel pits, ponds, water-filled ditches, canals and brackish lagoons.

Running Water

Running water comprises rivers and streams.

Arable

This includes arable cropland, horticultural land (for example nurseries, vegetable plots, flower beds), freshly-ploughed land and recently reseeded grassland, such as rye grass and rye-clover leys, often managed for silage.

Ephemeral/Short Perennial Vegetation

Short, patchy plant associations typical of derelict urban sites, quarries and railway ballast. The land is usually freely draining, and usually has shallow stony soil. The vegetation typically lacks a clear dominant species, but consists of a mixture of low growing plants, often less than 25 cm high.