

South West Bicester Environmental Statement Countryside Properties (Bicester) Ltd

Technical Appendix 6 Natural heritage

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Badger survey – has been supplied to Cherwell district council and may be provided on request if required

Species lists for breeding birds, butterflies, dragonflies and damselflies, from field surveys in 2005.

Breeding birds		
English name ¹	Scientific name	Conservation status
Red-legged Partridge	<i>Alectoris rufa</i>	
Common Pheasant	<i>Phasianus</i>	
Eurasian Sparrowhawk	<i>Accipiter nissus</i>	
Stock Pigeon	<i>Columba oenas</i>	
Common Wood Pigeon	<i>Columba palumbus</i>	
Eurasian Collared Dove	<i>Streptopelia decaocta</i>	
Little Owl	<i>Athene noctua</i>	
Tawny Owl	<i>Strix aluco</i>	
Green Woodpecker	<i>Picus viridis</i>	
Great Spotted Woodpecker	<i>Dendrocopus major</i>	2, 3
Sky Lark	<i>Alauda arvensis</i>	
Barn Swallow	<i>Hirundo rustica</i>	
Pied Wagtail	<i>Motacilla alba</i>	
Winter Wren	<i>Troglodytes troglodytes</i>	
Hedge Accentor	<i>Prunella modularis</i>	
European Robin	<i>Erithacus rubecula</i>	
Common blackbird	<i>Turdus merula</i>	
Song Thrush	<i>Turdus philomelos</i>	2, 3
Blackcap	<i>Sylvia atricapella</i>	
Common Whitethroat	<i>Sylvia communis</i>	
Common Chiffchaff	<i>Phylloscopus collybita</i>	
Willow Warbler	<i>Phylloscopus trochilus</i>	
Long-tailed Tit	<i>Aegithalos caudatus</i>	
Blue Tit	<i>Cyanistes caeruleus</i>	
Great Tit	<i>Parus major</i>	
Eurasian Jay	<i>Garrulus glandarius</i>	
Black-billed Magpie	<i>Pica pica</i>	
Eurasian Jackdaw	<i>Corvus monedula</i>	
Carrion Crow	<i>Corvus corone</i>	
Common Starling	<i>Sturnus vulgaris</i>	2
House Sparrow	<i>Passer domesticus</i>	2
Chaffinch	<i>Fringilla coelebs</i>	
European Greenfinch	<i>Carduelis chloris</i>	
European Goldfinch	<i>Carduelis carduelis</i>	
Common Linnet	<i>Carduelis cannabina</i>	2, 3
Common Bullfinch	<i>Pyrrhula pyrrhula</i>	2, 3
Yellowhammer	<i>Emberiza citrinella</i>	2
Reed Bunting	<i>Emberiza schoeniclus</i>	2, 3

Butterflies		
Small Skipper	<i>Thymelicus sylvestris</i>	
Large white	<i>Pieris brassicae</i>	
Green-veined White	<i>Pieris napi</i>	
Common Blue	<i>Polyommatus icarus</i>	
Red Admiral	<i>Vanessa atalanta</i>	
Small Tortoiseshell	<i>Aglais urticae</i>	
Peacock	<i>Inachis io</i>	
Marbled White	<i>Melanargia galathea</i>	
Gatekeeper	<i>Pyronia tithonus</i>	
Meadow Brown	<i>Maniola jurtina</i>	
Ringlet	<i>Aphantopus hyperantus</i>	
Dragonflies and damselflies		
Banded Demoiselle	<i>Calopteryx splendens</i>	

¹Nomenclature follows - Knox, A.G., Collinson, M., Helbig, A.J., Parkin, D.P. and Sangster, G. 2002. Taxonomic recommendations for British birds. *Ibis* **144** : 707-710. English names are as in BOU *Checklist of Birds of Britain and Ireland* (6th Edition, 1992)

² Red list species of conservation concern (BTO 2002)

³ UKBAP priority species (www.ukbap.org.uk/species.aspx)

TARGET NOTE NUMER	TARGET NOTE
1	Hedge, largely stockproof, dominated by hawthorn. Species recorded include hawthorn, white bryony, elder, dog rose, crab apple and blackthorn. Field layer includes false oat-grass, sterile brome and common nettle.
2	Improved pasture, grazed by sheep. Species recorded include Yorkshire fog, soft brome, black grass, cock's-foot, smooth meadow-grass, perennial rye-grass, hogweed, field bindweed, common nettle and salad burnet.
3	Stockproof hedge, mainly mix of elder and hawthorn. Species recorded include crab apple, hawthorn, elder, bramble, blackthorn and black bryony. Field layer species include sterile brome, cleavers, black grass, common poppy, white campion, prickly sow-thistle, cock's-foot, broad-leaved dock, hogweed, false oat-grass, ivy, white bryony.
4	Stone wall with scattered hawthorn and elder. Field layer species include false oat-grass, common couch, cleavers, ivy, bittersweet, common nettle, broad-leaved dock, hogweed and white bryony.
5	Hedge with a dry ditch. Hedgerow species recorded include bramble, hawthorn, elder, privet, horse chestnut, dog rose, ivy, blackthorn, bittersweet and white bryony. Field layer species include false oat-grass, common couch, common nettle, cow parsley, sterile brome, cleavers, hogweed, great willowherb, fool's parsley, hedge woundwort, white campion, nipplewort and rough chervil.
6	Gappy hedge with hawthorn, pedunculate oak, elder, elm. Field layer species recorded include false oat-grass, wild oat, common nettle, black grass, cleavers, spear thistle, cock's-foot, common poppy, hogweed.
7	Hedgerow dominated by elm. Elder and bramble also recorded. Field layer species include false oat-grass, common nettle, prickly sow-thistle, sterile brome, white dead-nettle and hogweed
8	Hedgerow species recorded include elm, hawthorn, elder, bramble, privet, crab apple, blackthorn, dog rose and black bryony. Field layer species include spear thistle, false oat-grass, common nettle, hogweed, sterile brome, cleavers
9	Foxy Leys Copse species recorded include elm, ash, hawthorn, mature oaks, occasional holly & beech and field maple. Canopy comprises mostly elm and ash. Field layer species recorded include dog's mercury, cow parsley, common nettle, ivy, wild privet, wood avens, lords and ladies, wood false-brome, wood sedge, wood brome, cleavers and ground ivy.
10	Hedgerow species recorded include elder, hawthorn, ash, Turkey

	oak, buckthorn, blackthorn, field maple, ivy, spindle and wayfaring tree. Field layer species include cleavers, nipplewort, sterile brome, scarlet pimpernel, false oat-grass, cow parsley, black grass, white bryony, hogweed, wild oat and prickly sow-thistle
11	Boundary fence, native species planted alongside A41 including field maple, hawthorn, occasional blackthorn and black bryony. Field layer species include black grass, soft brome, false oat-grass, common poppy, Yorkshire fog, prickly sow-thistle, cow parsley, wild oat, scentless mayweed, redshank, spear thistle, treacle mustard, small toadflax, dwarf spurge, fool's parsley, field bindweed, common fumitory, shepherd's purse and swine cress.
12	Hedge dominated by hawthorn and ash with occasional blackthorn. Field layer species include false oat-grass, wild oat, scentless mayweed, redshank, black grass, hogweed, field bindweed, creeping thistle
13	Improved pasture grazed by sheep. Species recorded include smooth meadow-grass, perennial rye grass, Yorkshire fog, meadow barley, timothy, cocks foot, field bindweed, white clover, red clover, hogweed, ladies bedstraw, soft brome.
14	Species recorded from hedgerow include crab apple, bramble, elm, ash, blackthorn, field maple, dog rose and field maple. Field layer species recorded include wild oat, common nettle, false oat-grass, hogweed, black grass, great willowherb, soft brome, cow parsley, bristly ox-tongue, Yorkshire fog, smooth meadow-grass, hedge woundwort, hedge bindweed, compass plant and field penny-cress
15	Hedgerow bordering ditch. Species recorded include hawthorn, elder, bramble, bittersweet, crab apple, dog rose, field rose, black bryony, blackthorn and dog wood.
16	Species recorded from hedgerow include elm, hawthorn, elder, bramble, dog rose, black bryony and ash.
17	Hedgerow bordering ditch. Species recorded include blackthorn, elm, bramble, field rose and privet.
18	Species recorded from ditch include false oat-grass, hogweed, herb robert, sterile brome, meadowsweet, water figwort, hedge bindweed, hedge woundwort, ivy, burdock, cock's-foot, bittersweet, reed canary-grass, fool's water-cress, common couch and great willowherb.
19	Hedgerow bordering ditch. Species recorded include elder, elm, blackthorn, dog rose, white bryony, bramble, hawthorn, black bryony, field rose, crab apple and field maple.
20	Species recorded from hedgerow include hawthorn, elm, bramble, ash, dog rose, oak, black bryony.
21	Hedgerow bordering dry ditch. Species recorded from hedgerow

	<p>include wych elm, black bryony, hawthorn, ash, bramble, white bryony, blackthorn, dogwood, elm and sycamore.</p> <p>Field layer species include hogweed, black grass, false oat-grass, common nettle, bittersweet, garlic mustard, sterile brome and hedge woundwort.</p>
22	<p>Species recorded from hedgerow include bramble, elder, blackthorn, ash, sycamore and field maple.</p> <p>Field layer species include false out grass, common nettle, common couch, hogweed, black grass, sterile brome, garlic mustard and redshank,</p>
23	<p>Woodland along the boundary of the site. Species recorded include field maple, sycamore, hawthorn, elder, crab apple, ash, holly and horse chestnut.</p>
24	<p>Thick tree lined 'hedge'. Species recorded include elm, mature sycamore, elder, hazel, ash, crack willow (mature), hawthorn, crab apple, hop and dogwood.</p> <p>Field layer species include common conch, common nettle, dog weed, cleaves, nipplewort, burdock, redshank, black grass, garlic mustard, annual meadow-grass, Japanese knotweed, , wood areas and hedge woundwort.</p>
25	<p>Hedgerow species recorded include hawthorn, bramble, white bryony, crab apple, ash, elm, blackthorn, dog rose, bittersweet and black bryony.</p> <p>Field layer species include sterile brome, false oat-grass, hogweed, black grass, common couch, hogweed, wild oat</p>
26	<p>Hedgerow bordering ditch. Species recorded include elm, bramble, elder, blackthorn, bittersweet, dog rose, hawthorn, field rose and crab apple.</p>
27	<p>Improved pasture grazed by sheep. Species recorded include cat's tail, Yorkshire fog, tufted hair-grass, perennial rye grass, meadow barley, cock's-foot, meadow buttercup, field bindweed, hogweed, white clover and common mouse-ear</p>
28	<p>Hedgerow bordering ditch. Species recorded include hawthorn, ash, dog rose, bittersweet, elder, sycamore, bramble, horse chestnut and elm.</p> <p>Field layer species include floating sweet-grass, fool's water cress, hedge woundwort and great willowherb.</p>
29	<p>Hedgerow species recorded include hawthorn, bramble, field rose, dog rose, elder, black bryony, black grass and field bindweed.</p>
30	<p>Very patchy hedgerow. Species recorded include elm, sycamore, bramble, ash, elder, crab apple, hawthorn and blackthorn.</p> <p>Field layer species include cleavers, sterile brome, common nettle, false oat-grass, hogweed and hemlock.</p>
31	<p>Hedgerow species recorded include elder, elm, bramble, blackthorn, wild hop and sycamore.</p>

32	Hedgerow bordering ditch. Species recorded include blackthorn, bittersweet, elm, hawthorn, ash, way-faring tree, black bryony, elder, dogwood, field rose, field maple and crab apple.
33	Hedgerow species recorded include sycamore, buckthorn, white bryony, elder, ash, ivy, field maple, way-faring tree, laurel, spindle, hawthorn, privet, field rose, bittersweet and crab apple. Field layer species include cleavers, common nettle, false oat-grass, black bryony, rough chervil, lords and ladies, black grass, garlic mustard, hedge woundwort, hogweed, hemlock and common couch.
34	Hedgerow bordering ditch Species recorded include sycamore (abundant), ash, field maple, way-faring tree, wild privet, black bryony, buckthorn, dog rose and wych elm. Field layer species include perforate St John's-wort, ivy, hedge woundwort, ground ivy, sterile brome, lords and ladies, common poppy, fool's parsley, cocks-foot, false oat-grass and common couch.
35	Hedgerow species recorded include elm, sycamore, hawthorn (occasional), bramble, privet (occasional) and blackthorn. Field layer species recorded include hogweed, false oat-grass, common poppy, common nettle, cleavers, sterile brome and lords and ladies
36	Hedgerow species recorded include elm, ash, sycamore, ivy, bramble and elder. Field layer species include common comfrey, false oat-grass, ground ivy, lords and ladies, cleavers, barren brome, common poppy, common nettle and hogweed.
37	Hedgerow bordering Middleton Stoney Road. Species recorded include ash, elder, elm, hawthorn, bramble, white bryony, blackthorn, dog rose, privet, field rose, buckthorn, black bryony and sycamore. Field layer species recorded include sterile brome, common nettle, cleavers, false oat-grass, prickly sow-thistle, compass plant, common poppy, hemlock, wild oat and toadflax.
38	Small area of woodland. Species recorded include horse chestnut wild privet, hawthorn, elm, sycamore and ash. Field layer species recorded include ivy, cow parsley, herb robert, common nettle and lords and ladies.
39	Hedgerow species recorded include elm, elder, bramble, hawthorn, field maple and wild privet.
40	Hedgerow species recorded include hawthorn, bramble, elm elder and white bryony. Field layer species recorded include ivy, common nettle and lords and ladies.
41	Small copse with abundant horse chestnut and sycamore. Hawthorn recorded around edges of copse along with occasional ash saplings.

	Field layer species recorded include ivy, cow parsley, herb robert and lords and ladies. Ivy and herb robert are dominant.
42	Hedgerow species recorded include elm, elder, blackthorn, field maple, white bryony, way-faring tree, ash and bramble. Field layer species recorded include rough chervil, cleavers, white dead nettle, common poppy, compass plant, soft brome, nipplewort, lords and ladies, wild oat, greater knapweed, black grass, false oat grass and hogweed.
43	Hedgerow species recorded include blackthorn, elm, hawthorn, dog rose, oak, and bramble.
44	Hedgerow bordering ditch. Species recorded include elder, hawthorn, bramble, field maple, field rose, white bryony, blackthorn, wild privet, black bryony, clematis, dogwood and elm. Field layer species recorded include cleavers, hogweed, false oat-grass, common poppy, sterile brome, scentless mayweed, lords and ladies, white dead nettle, compass plant and soft brome. Species recorded along ditch include great willowherb, fool's watercress, water forget-me-not and lesser water parsnip.
45	Area of scrubby woodland along stream. Species recorded include ash, hawthorn, elm, ash and elder. Field layer species include ivy, bittersweet, bramble, herb robert, garlic mustard, lords or ladies with black horehound and field penny-cress on edge of wood. There is an open area in the middle of the woodland dominated by bramble and common nettle with cleavers, ground ivy, ivy, great willow herb, meadowsweet and hedge woundwort.
46	Hedgerow species recorded include hawthorn, blackthorn, elder, bramble, white bryony and elm. Field layer species recorded include common poppy, false oat-grass, hogweed, rough chervil, cut leaved crane's-bill, common nettle, mugwort, creeping thistle, cock's-foot, hedge garlic, common mallow and white campion.
47	Hedgerow species recorded include hawthorn, elder, dog rose, bittersweet, ash, hedge bindweed and honeysuckle.
48	Wet pasture (improved) grazed by cattle and rush pasture. Species recorded include locally dominant hard rush, Yorkshire fog, tufted hair grass, cock's-foot, creeping thistle, creeping buttercup, meadow barley, common couch, great willowherb, silverweed, floating sweet-grass, meadow vetchling, creeping cinquefoil spear thistle, white clover and red clover.
49	Hedgerow species recorded hawthorn, elm, ash, dog rose, bramble, blackthorn, bittersweet elder, field maple, crab apple and wild privet.
50	Branched bur-reed, brooklime, floating sweet-grass, hard rush, tufted hair grass, great willowherb, lesser water parsnip, water figwort, water forget-me-not, bittersweet, fool's water-cress and

	meadow vetchling.
51	Hedgerow species recorded include bramble hawthorn, bittersweet, elder, field maple and elm.
52	Uneven field of semi-improved grassland, some calcareous with limestone exposures. Species recorded include ladies bedstraw, mouse ear hawkweed, salad burnet, smooth meadow-grass, yarrow, ribwort plantain, greater plantain, creeping cinquefoil, silverweed, Yorkshire fog, meadow buttercup, creeping buttercup, white clover, smaller cat's-tail, perennial rye grass, spear thistle, black medick and tufted hair grass.
53	The banks of the stream are heavily poached by cattle. Species recorded include lesser water-parsnip, brooklime, water forget-me-not, water figwort and hard rush.
54	Species recorded along the stream include hard rush, tufted hair-grass, brooklime, lesser water-parsnip, branched bur-red, water forget-me-not, water mint, perforate St John's-wort, floating sweet-grass
55	Roadside hedge. Species recorded include hawthorn, ash, elm, bramble, privet, dog rose, elder, blackthorn, crab apple, buckthorn and horse chestnut.
56	Hedgerow species recorded include sycamore, hawthorn, elm, alder, and bramble.
57	Vegetation recorded along the ditch includes false – oat grass, common nettle, hogweed, hedge woundwort, common couch, black bryony, white bryony, cock's-foot, white dead nettle, white campion, greater knapweed, and field scabious.
58	Hedgerow species recorded include hawthorn, elder, bramble, blackthorn, crab apple and white bryony.
59	Hedgerow species recorded include hawthorn, spindle, hazel, blackthorn, bramble, dog rose, ash, elder, dogwood, sycamore, black bryony, crab apple, wild hop, buckthorn and pedunculate oak.
60	Badger feeding signs and old latrine
61	Young hawthorn/field maple hedge alongside fence with occasional blackthorn
62	Hedgerow with trees. Species recorded include dogwood, elm, hazel, field maple, ash, blackthorn, willow, spindle, hawthorn and crab apple.
63	Semi-improved rough grassland. Species recorded include false oat-grass, wild carrot, wild angelica, meadowsweet, bush vetch, meadow vetchling, ladies bedstraw, field scabious, black knapweed, tufted hair-grass, agrimony, red fescue, black grass, sweet vernal grass, hard rush, Yorkshire fog, oxeye daisy, common fleabane, upright hedge parsley, cowslip, marsh thistle, meadow buttercup, compressed rush, common bent, self heal glaucous sedge, creeping cinquefoil, pepper saxifrage and ribwort plantain.

WHITELANDS FARM, BICESTER
WHITE-CLAWED CRAYFISH SURVEY

Final Document
July 2006

WHITELANDS FARM, BICESTER, OXFORDSHIRE
WHITE-CLAWED CRAYFISH SURVEY

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment (ECOSA) was contracted by Terence O'Rourke to carry out a crayfish survey of land at Whitelands Farm to the south of Bicester, Oxfordshire. The land is currently mainly used for arable crop growth although there are some permanent grassland fields at the centre of the site and to the north is an area of grassland with wet ditches and rush pasture. A single, shallow stoney bottomed stream flows through the northeast corner of the site. The crayfish survey was required in order to assess the presence or absence of the species from the site in order to inform a mitigation strategy.

1.2 Methods

Survey methods were based on visual and physical searching methods and no trapping was employed. The water course was fairly shallow and only limited vegetation was present and it was considered that the visual searching methods allowed a comprehensive assessment of the water course to be made. Survey consisted of the close investigation during daylight hours of the water course, this included turning stones, boulders etc in the stream bed, parting vegetation and investigating any holes within the banks. In addition 3 nighttime torch surveys were carried out on 18th September 2005, 12th May 2006 and 1st June 2006. These consisted of a slow and methodical search of the stream bed using a 1 million candle power torch. Crayfish are active at night and this can be an effective means of recording their presence.

2.0 RESULTS AND DISCUSSION

2.1 Introduction

This section provides an account of the findings of the survey.

2.2 White-clawed Survey

No white-clawed crayfish were recorded during the course of the survey. The only species found to be present was the introduced signal crayfish. A peak of 6 signal crayfish were recorded during torch surveys carried out on 1st June 2006. Generally, white-clawed crayfish will only persist for a short period of time after signal crayfish colonise a water course since the signal crayfish may pass on 'crayfish plague' and the larger and faster growing out compete the native white-claws for food and shelter.

2.3 Recommendations

There are records of the native white-clawed crayfish to the east of the A41 in the area of Langford Park Farm. It is recommended that the current survey is repeated in 2006/07 and is extended to include this area. Should white-clawed crayfish be found to be present then a signal crayfish control programme should be instigated so that white-clawed crayfish are able to persist.

WHITELANDS FARM, BICESTER, OXFORDSHIRE
GREAT CRESTED NEWT TERRESTRIAL SURVEY

Final Report
June 2006

INVERTEBRATE, BIRD, MAMMAL, REPTILE, AMPHIBIAN, AND BOTANICAL SURVEYS •
MANAGEMENT PLANS • HABITAT APPRAISAL • MARINE • NVC • EIA •

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**WHITELANDS FARM, BICESTER, OXFORDSHIRE
GREAT CRESTED NEWT TERRESTRIAL SURVEY**

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment (ECOSA) was contracted by Terence O'Rourke to carry out a great crested newt (GCN) survey of land at Whitelands Farm to the south of Bicester, Oxfordshire. The land is currently mainly used for arable crop growth although there are some permanent grassland fields at the centre of the site and to the north is an area of grassland with wet ditches and rush pasture.

The site is proposed for residential housing and as a result of the significant populations of GCN in the Bicester area it was considered necessary to carry out a survey to determine their status on site. However, the single pond located in the south west of the site did not contain water during the spring 2006 survey season and access could not be obtained to the ponds surrounding the site. As a result of this the survey was based on an assessment of the suitability of the terrestrial habitat for the species.

2.0 METHODS

2.1 Habitat Assessment

The site was walked on 11th July 2005 by Simon Colenutt of ECOSA. During this walkover survey habitat was evaluated and scored for its potential to support GCN. The criteria used were as follows;

Low Cereal fields, regularly mown improved grassland, gappy hedges with no associated ditches or other features.

Medium Cereal fields with cracks in ground suitable as GCN retreats, grazed grassland with some tussocky sward structure, hedges with a good structure but perhaps gappy at the base or with a crop planted up to the base.

High Grassland with tussocky structure or other unmown or lightly grazed swards, thick hedges with well developed basal vegetation, otherwise medium value hedges with a feature such as an associated wet ditch.

2.2 Drift Fence and Pitfall Trap Survey

A total of 645 metres of standard Animex great crested newt drift fencing was erected across key areas of the site. This fencing was dug into the ground by approximately 15cm and stood approximately 75cm above ground. Upright supporting posts were installed at approximately 1.5m intervals. A total of 215 pitfall traps were located at intervals of 2-3 metres along both sides of the fencing. These pitfall traps were white circular plastic buckets with a diameter of approximately 20cm. These pitfall traps intercept the movement of amphibians as they walk along the line of the fencing having encountered it. Map 1 shows the distribution of the drift fencing erected on site. This drift fencing was erected in areas of the site evaluated as having high to medium potential for terrestrial GCN and was erected across potential dispersal corridors such as ditches, hedgerows and strips of grassland along field margins. It was not possible to erect long expanses of fencing across fields since the site is a working farm however woodland areas had longer lengths of fencing installed.

In total traps were opened on 78 nights between 1st October 2005 and 9th November 2005 and 15th March 2006 and 29th May 2006. On all nights that traps were opened the weather was mild with temperatures above 7^o centigrade and where possible damp nights were favoured. These traps were opened in the evening and inspected early the following morning. Any animals found were removed from the immediate vicinity of the fencing so as to ensure that they were not retrapped.

3.0 RESULTS

3.1 Habitat Assessment

Figure 1 shows the results of the survey and all target notes (TN) are discussed below.

A large proportion of the site is under cereal or rape and with few features of any suitability for GCN, as a result these were graded as being of low value (uncoloured on figure 1). However, fields at TN13 had extensive cracks on the soil surface and these provide suitable retreats for GCN. Four improved grassland swards were present towards the centre of the site (TN9), these have a slightly tussocky in nature with cracks in the soil surface providing suitable retreats for GCN, these swards had been recently cut and were being sheep grazed.

There are five key areas on the site that would provide good GCN terrestrial habitats. These consist of four false oat-grass dominated grasslands at TN14, 15 and 17 and tussocky grazed grassland and rush pasture at TN7 and TN11. The grassland at TN17 is of particular note because of its tall tussocky structure and the associated tall hedges. In addition, to the east of this field is a well vegetated pond that may provide suitable breeding habitat although this was not investigated closely and may be stocked with fish. At TN15 a new balancing pond has been excavated, probably within the last few months, this is currently devoid of vegetation and provides limited breeding opportunities; however a single immature GCN was found beneath a stone at the western end of the area on 11th July 2005. This would indicate that this balancing pond may be used as a breeding site in the future and that there are animals already present within the area so that any suitable pond (TN16) may be used for breeding. However, subsequent investigation of the area of the pond failed to produce any further records of GCN although smooth newt was present.

At TN 5 and 6 are small stands of woodland, at TN6 this is sycamore dominated secondary woodland whereas at TN5 this is oak, ash and hazel dominated and of more historic origin. All woodland areas on site have much deadwood, a dense understorey structure and cracks in the ground providing excellent foraging and hibernating opportunities for GCN.

The hedgerows on site are largely of medium value although generally species poor. These provide a network of potential dispersal corridors across the site. To the southwest of the site is an area of semi-improved to improved grassland with woodland and scrub, this provides ideal terrestrial habitat for GCN.

3.2 Drift Fencing

Figure 1 indicates the location of the drift fencing installed on site.

No GCN were recorded during the survey. A total of 16 common toad were captured in Area 2, these were all taken from the drift fence adjacent to the pond in the garden centre at TN16 indicating that the species probably breeds here. A total of 21 smooth newt were trapped, these were present in Area 2 adjacent to the pond in the garden centre at TN16 and in Area 3 in the eastern most pitfall trap near to the pond at Wendlebury Farm, this would suggest that the species breeds at both of these ponds. Finally a single common lizard was capture in Area 3.

Additional notable captures within the pitfall trap included a total of 15 harvest mouse captured in pitfall traps in the eastern areas of Area 1 and within Area 3.

4.0 DISCUSSION

In conclusion large parts of the site provides unsuitable habitat for GCN, however, there are a number of key areas on and adjacent to the site that are suitable for the species. The hedgerows on site generally provide good corridor habitat potentially allowing animals to disperse across the site and the woodland and areas of tussocky grassland would provide suitable foraging habitat. However, the absence of records of GCN from the site during the survey would indicate that the site is not being utilised by the species. This is probably because of the intensively farmed nature of much of the site areas of suitable habitat being distant from potential breeding ponds surrounding the site. GCN from breeding ponds in the vicinity are likely to be utilising more accessible areas of tussocky grassland, scrub and woodland away from the Whitelands Farm site, for example, the area of grassland and scrub along the south-west boundary of the site

Other Species

In addition the following notable breeding birds were recorded during the course of the GCN surveys during the spring 2006:

<i>Grey Partridge</i>	One pair on March 31 st 2006 on west of main access track to Whitelands Farm.
<i>Lapwing</i>	At least two pairs were seen displaying and mobbing potential predators over a field of oilseed rape to the southeast of Whitelands Farm. After a wood pigeon shoot on April 14th just one bird was seen on the 18th and two on the 20th.
<i>Sky Lark</i>	At least 15 singing males, 13 on Area 1 and 2 on Area 2.
<i>Yellow Wagtail</i>	One pair in the rape field to the southeast of Whitelands Farm.
<i>Tree Sparrow</i>	One pair in the rape field to the southeast of Whitelands Farm.
<i>Yellowhammer</i>	At least 7 singing males all within Area 1.

No reptile survey work has been carried out by ECOSA on the site, however, the presence of common lizard was confirmed from Area 2 and it is considered that other species may be present.