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Cherry Lodge Golf Club

Reptile Survey Report



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Executive Summary

Johns Associates Ltd was commissioned to undertake a reptile presence/absence survey within suitable areas of grassland and scrub associated with Cherry Lodge Golf Club in Biggin Hill, Kent. Standard survey methods (e.g. those advocated by Froglife) were followed. The surveys were completed in June and July 2009, during a time when reptiles are fully active. Two adult grass snakes were detected adjacent to a component of the golf course associated with a remodelling/enhancement proposal. The results indicate the presence of a small population of this grass snake and the relatively limited value of the majority of the survey area/Golf Course for reptiles.

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1. Introduction

1.1 Background

Cherry Lodge Golf Club (the Site) is located approximately two miles to the east of Biggin Hill and approximately nine miles to the south of the London Borough of Bromley. The Site is located at approximate Ordnance Survey grid reference TQ 434 587 (see Figure 1.1) and comprises an area of land that is currently used as a golf driving range, a 18-hole golf course and includes a clubhouse, members' car park, managed amenity grassland, scattered trees and blocks of plantation woodland.

An extended Phase 1 Habitat Survey was undertaken at Cherry Lodge Golf Club in April 2009 to inform the planning application for the proposed re-modelling works of the golf course and driving range. This survey confirmed the potential for parts of the Site to support common reptiles. All reptiles are legally protected through their inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). However, the extent of this legal protection varies according to the species concerned. All legally protected species are material planning considerations under Planning Policy Statement 9 (PPS9) "Biodiversity and Geological Conservation".

It is therefore necessary to undertake a survey for reptiles to confirm their presence or likely absence. If present, appropriate mitigation can then be developed to minimise harm to these animals and the risk of an offence under the nature conservation legislation.

1.2 Scheme Description

Our understanding of the proposed scheme is that it will involve the phased redevelopment of the majority of the existing driving range and the majority of the golf course through the importation of recycled soil, land-forming, installation of new drainage, planting and subsequent management as an enhanced driving range and golf course. It is likely that this will involve the removal of broadleaved and coniferous trees and shrubs, grassland habitat (up to the canopy line of boundary trees and woodland) and other features.

The remodelled driving range and golf course will be landscaped and planted to create an enhanced playing experience and to compliment the local landscape and biodiversity requirements. The proposals include significant enhancement provision for biodiversity, including new hedgerows, calcareous grassland, pond and orchard habitat.

1.3 Purpose of this report

This report provides the results of a reptile survey undertaken at the Site as summarised in Johns Associates (2009) Cherry Lodge Golf Club Ecological Impact Assessment. A detailed reptile mitigation strategy will be presented separately, if required.

1.4 About this report

The remainder of this report sets out:

- Methodology (Section 2);
- Results of the desk study and field survey (Section 3); and
- Conclusions and recommendations (Section 4).

2. Methodology

2.1 Desk study

A request was submitted to Greenspace Information for Greater London (GiGL) to obtain records of legally protected and notable species for an area within a 2km radius of the Site (including reptiles). In addition, the National Biodiversity Network (NBN) website¹ was searched for reptile records held for the 10km grid square TQ 45, which includes the Site.

2.2 Field Survey

Suitably experienced ecologists from Johns Associates undertook the reptile survey during June and July 2009 (see Figure 3.1: Survey Area). The surveys took into account standard guidance provided by the Joint Nature Conservancy Council² and Froglife's Advice Sheet 10³.

2.2.1 Site set up

The Site was first visited to set up the reptile refugia on 16th June 2009. The survey area was walked carefully and quietly to provide an opportunity to observe basking reptiles (if present) and to determine optimal locations for setting repeat survey transects and positions for artificial refugia (see below). A further seven survey visits were then scheduled.

2.2.2 Transect survey

A fixed survey transect was walked on each survey visit to observe the potential presence of basking reptiles. The transect was designed to include areas where existing refugia and bare ground were present, as well as the artificial refugia deployed on 16th June 2009 as part of the survey (see below). The transect covered areas of open grassland bordering scrub habitat.

The surveyor walked carefully and quietly along the transect during each survey visit to minimise disturbance to any reptiles that were present. Binoculars were used to view the areas associated with the transect before they were reached to ensure any reptiles present were not disturbed before they were observed. Characteristic 'rustling', created by fleeing reptiles, was listened for. Other signs such as sloughed skins and reptile skeletons were also searched for along the transect.

2.2.3 Artificial refugia

Artificial refugia, comprising 0.5m x 0.5m squares of roofing felt, were laid out at suitable locations within the site on the 16th June 2009. Where possible, the refugia

¹ www.nbn.org.uk

² JNCC. 1998. Herpetofauna workers manual. JNCC. Peterborough.

³ Froglife. 1999. Reptile Survey, an introduction to planning, conducting and interpreting surveys for snake and lizard conservation.

were placed on slopes with a southerly aspect, as these would warm up quickly and therefore attract reptiles. The refugia were placed adjacent to overhanging vegetation or undergrowth (e.g. adjacent to the base of bramble stands), where reptiles were more likely to be located.

Froglife (1999) suggests placing between five and ten refugia per hectare (ha). Due to the relative abundance of potentially suitable habitat within the survey area, a decision was therefore taken to deploy a larger number of refugia, as this would maximise the likelihood of encountering reptiles. A total of 345 refugia were placed around the site in suitable areas of habitat. The relative distribution of the refugia is illustrated in Figure 3.1.

The refugia were only searched on warm days when their surface would be warm to the touch. The refugia were searched on seven different occasions during June and July 2009 (refer to Section 3.2.2 for more details), when the ambient air temperature was at or above 15 degrees Celsius.

3. Results

3.1 Desk Study

A review of the National Biodiversity Network website (www.nbn.org.uk) revealed a number of reptile records from the 10km grid square containing the Site:

- Records for slow worm in three 1km grid squares located to the south, east and southwest of the Site;
- Records for grass snake in two 1km grid squares located to the southeast and southwest of the Site;
- Records for adder in three 1km grid squares located to the south of the Site;
- Records for common lizard in three 1km grid squares, two records are located to the south of the Site and one record is located to the southwest of the Site.

Greenspace Information for Greater London (GiGL) holds records of legally protected species from within the 2km search area surrounding the Site at Cherry Lodge Golf Club. The reptile records are given in Table 3.1.

Table 3.1: Records of Reptiles (from GiGL) Within 2km of the Site boundary.

COMMON NAME	LATIN NAME	Distance (metres)	LEGAL STATUS
<i>Reptiles</i>			
Grass Snake	<i>Natrix natrix</i>	1903m, 1982m.	WCA Sch 5 (Killing, Injury and Sale)
Common Lizard	<i>Lacerta vivipara</i>	1850m, 1903m, 1982m.	WCA Sch 5 (Killing, Injury and Sale)
Slow Worm	<i>Anguis fragilis</i>	1850m, 1884m, 1903m, 1982m.	WCA Sch 5 (Killing, Injury and Sale)

3.2 Field Survey

3.2.1 Survey area character

The survey area was characterised in terms of potential reptile habitat as follows:

- Less intensively managed poor semi-improved grassland (used for foraging and resting);
- Scattered scrub (offering areas of shelter);
- Potential refugia including rabbit holes, small mammal burrows, cracked ground and scattered rubble etc (which may also offer overwintering sites); and
- Areas of bare ground or short vegetation used for basking.

These habitats are illustrated in Table 3.1. The wider context of the Site can be seen in Figure 3.1.

Table 3.1. Examples of Reptile Habitat Present at Cherry Lodge Golf Club.

**Habitat
Type**

Poor, semi-
improved
grassland



Bare ground



Scattered
scrub



3.2.2 Transect survey

Transect surveys were carried out on the following dates, where the following weather conditions were recorded:

- 16th June 2009, from 15.00 hrs, dry conditions, 2/8 cloud cover, > 15 degrees Celsius (Site set up);
- 17th June 2009, from 09.00 hrs, dry conditions, 3/8 cloud cover, 21.5 degrees Celsius;
- 7th July 2009, from 15.00 hrs, dry conditions with occasional scattered showers, 7/8 cloud cover, 18 degrees Celsius;
- 8th July 2009, from 07.00 hrs, dry conditions, 1/8 cloud cover, 16 degrees Celsius;
- 14th July 2009, from 15.00 hrs, dry conditions, 3/8 cloud cover, 17 degrees Celsius;
- 15th July 2009, from 09.00 hrs, dry conditions with occasional scattered showers, 16.5 degrees Celsius;
- 22nd July 2009, from 15.00 hrs, dry conditions, 3/8 cloud cover, 18 degrees Celsius; and
- 23rd July 2009, from 09.00hrs, dry conditions, 4/8 cloud cover, 20 degrees Celsius.

One grass snake was observed basking on bare ground adjacent to the artificial refugia placed along the transect during the survey visits. The location of the transect route is shown in Figure 3.1.



Figure 3.1. Approximate location of transect route and artificial refugia within the Site.

3.2.3 Refugia survey

The refugia were inspected on the dates given in Section 3.2.2. The general location of the artificial reptile refugia is shown in Figure 3.1. In total, two adult grass snakes were recorded during the survey on separate dates (8th and 15th July 2009).

3.2.4 Limitations

Some refugia were subjected to disturbance during the reptile survey, however only a very small number of the total deployed refugia were affected.

Froglife (Advice Sheet 9) advises that reptiles are generally active from March to October, but that the most profitable months for surveying are April, May and September. The presence/absence surveys were mainly carried out in July. To compensate for this, a substantially greater number of reptile refugia were used on the site than is typically recommended by Froglife. Other aspects of the survey (i.e. timing and weather) were in accordance with the guidelines.

The approximate location of the two grass snakes recorded during the survey is illustrated in Figure 3.2.



Figure 3.2 Location of the two grass snakes recorded

The survey identified two adult grass snakes. One grass snake was recorded from underneath an artificial refugia situated adjacent to scrub on one survey visit. The other grass snake was recorded basking on bare ground adjacent to an artificial refugia. Whilst this confirms the presence of reptiles at the Site, the data strongly suggests that a 'Low Population' of grass snakes are present, based on the guidance provided by Froglife in its Advice Sheet 10 (see www.froglife.org.uk). Using the Froglife Survey Assessment Guidelines it is also considered that the Survey Area at the Cherry Lodge Golf Club is not a 'Key Reptile Site'.

The findings of the survey demonstrate the suitability of some of the habitats within the Site for reptiles. This is likely to be due to a mosaic of grassland, scattered scrub, bare ground and refugia present, the south facing aspect of parts of the survey area and sloping surfaces.

It is considered that the small number of grass snakes recorded within the survey area is likely to reflect the relatively constant disturbance caused as a result of the intensively managed grassland associated with the golf course. Suitable habitat within the Site is also relatively isolated from other suitable habitat (e.g. by Berry's Green Road to the east) with short, managed grassland dominating the golf course.

4. Conclusions and Recommendations

Conclusions

The reptile survey confirmed the presence of a low population of grass snakes within the areas surveyed. It is likely that this population is utilising a range of habitats present within these areas.

Without the implementation of appropriate mitigation measures, there is the potential for an offence to be committed under the terms of the Wildlife and Countryside Act 1981 (as amended) during the proposed golf course remodelling/enhancement as activities relating to vegetation removal/groundwork and the land re-forming works may result in the killing or injury of individual grass snakes. However, grass snakes have been recorded in low numbers and outside of the proposed development area. To minimise the risk of a legal offence a suitable mitigation strategy will need to be employed. This is set out in summary below.

Recommendations

- A reptile exclusion fence will be installed enclosing the boundaries of the habitat confirmed to support grass snake area. The fencing will be installed during the period April to October in order to avoid harm to hibernating grass snake. The fencing will subsequently be retained throughout the construction period in order to limit the risk of grass snake entering the working area.
- A series of artificial refugia will be deployed inside the reptile fence. These will be checked on consecutive days and any grass snakes found will be removed to the receptor area (located along the eastern boundary of the golf course). The translocation will be undertaken during the period April to October and will continue for a period of at least 15 days, although the trapping period will be extended if necessary until 5 clear days with no captures have been achieved.
- A programme of habitat degradation will be undertaken within the reptile fencing concurrently with trapping and translocation. Longer grassland will be mown in linear strips over consecutive days to 15cm (if not short already) to encourage grass snakes to shelter beneath the refuges.
- Once the trapping and translocation has been completed, all grassland within the reptile fence will be subject to a second cut to 5cm. The grass will then be immediately mown as short as possible and maintained in this condition until the top soil is stripped. All potential refugia located on the margins of the course will be destructively searched by hand. Construction work will then commence within the site.
- Stacked top soil will be placed away from the southeastern margin of the Site. All imported materials will be stored away from the southeastern margin of the site. Landforming activities will be managed so that all materials are deposited and compacted in a manner that potential refugia are not created, minimising the risk of injury/killing of grass snake. The extensive bare character of the working area is unsuitable for this species and as such grass snake is not expected to be encountered.

- The proposed enhancements to the golf course include a substantial number of biodiversity measures, including those associated with reptiles. For further information refer to the Ecological Impact Assessment for the planning application.
- It is considered reasonable to predict that after the implementation of the mitigation measures described in this report, the risk of a legal offence occurring is low.