



The Grove, St Leonards, East Sussex.

Dormouse Survey

Report for Miller Bourne Architects.

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Executive Summary

The Ecology Consultancy was commissioned by Miller Bourne Architects to undertake a dormouse survey to assess the presence or likely absence of dormice at The Grove, St. Leonards, East Sussex. The objective of this survey was to determine any likely constraints to development and, if necessary, to provide an outline of any mitigation that may be required. The main findings are as follows:

- The site, a former school, lies within the urban area of St Leonards on Sea in East Sussex and comprised a mosaic of habitats including broadleaved woodland, intermittent pockets of scrub and tall ruderal vegetation, small patches of less intensively managed areas of semi-improved grassland, extensive intensively managed areas (former school playing field) semi-improved grassland and bare ground (location of demolished built structures).
- The site comprised of habitats which have been considered to be suitable to support hazel dormouse. The on-site habitats were assessed as having high value for dormice. and at a landscape scale the on-site woodland is considered important in providing habitat connectivity.
- Dormice were confirmed as being present at the site. In total, one dormouse nest was found during the first survey within the western half of the site. Their presence is therefore assumed within all suitable contiguous suitable habitats.
- The dormouse population on the site itself is likely to be of moderate value at the local level only. The site does form part of a much wider network of woodland habitat that is likely to be important for dormice at the district level or above.
- The development proposal involves the loss of the majority of scrub and scattered trees from around the site although the woodland in the south-western corner of the site will be retained.
- Dormice and their habitats are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended). A Natural England European Protected Species Mitigation (EPSM) licence, will be required to derogate from the legislation and facilitate the development proposals.

1. Introduction

BACKGROUND

- 1.1 A Preliminary Ecological Appraisal (PEA) has previously been carried out at the site by The Ecology Consultancy and issued to the client (Miller Bourne Architects) in 2014 (The Ecology Consultancy, 2014). The PEA identified woodland and scrub habitats on site as having high potential to support hazel dormouse *Muscardinus avellanarius*.
- 1.2 In 2014 and 2016 The Ecology Consultancy was commissioned by Miller Bourne Architects to undertake dormouse, bat, badger *Meles meles* and reptile surveys in all suitable habitats within the site boundaries.
- 1.3 An assessment of the suitability of habitats for reptiles have also been undertaken at the site, the results of which are presented in a separate report (The Ecology Consultancy 2016).

SCOPE OF THE REPORT

- 1.4 The aim of the survey was to allow an assessment of the value of the survey area for dormice. To achieve this the following objectives were set:
 - To confirm presence or likely absence of dormice within all parts of the survey area; and;
 - To gain an understanding of dormice distribution throughout the survey area and highlight any key areas of use.
- 1.5 This report has been prepared with reference to best practice as detailed in British Standard 42020:2013 Biodiversity - Code of Practice for Biodiversity and Development (BSI, 2013).

SITE CONTEXT AND STATUS

- 1.6 The proposed development site (a former secondary school) is approximately 9.29 hectares (ha) in size and centred on Ordnance Survey National Grid reference TQ 784104. The site lies on the western edge of Hastings, accessed via Darwell Close. The site comprised habitats including bare ground, intensively managed semi-improved grassland (former playing field), field margins of less intensively managed

semi-improved grassland, intermittent patches of scrub and tall ruderal vegetation and an area of broadleaved woodland (The Ecology Consultancy, 2014) .

- 1.7 The central part of the site is improved amenity grassland that has been left for a number of years reverting to rough unmanaged grassland. The periphery of this area connects to gardens and housing with encroaching scrub and shrubs on both the northeast and south-eastern boundaries. In the most eastern corner is a large area of scrub, which also contains Japanese Knotweed.
- 1.8 The south-western corner of the site comprises mainly of broadleaved semi-natural woodland which backs on to gardens and housing. This area connects in to the northern section of the site via a stretch of continuous scrub along a south facing embankment. On the northern boundary of the site is more semi-natural woodland with scattered trees and scrub.
- 1.9 Within the wider landscape are extensive areas of woodland, many of which are ancient, as well as the Coombe Haven Site of Special Scientific Interest which is notable for its rich diversity of habitats.

DESCRIPTION OF THE DEVELOPMENT

- 1.10 The current development proposal is for 210 dwellings with associated access roads and parking for residents and visitors. There will be a variety of different sized dwellings ranging from one bedroom, two person flats to five bedroom detached properties. The woodland and a grassy embankment, located within the western section of the overall site is proposed to be retained in situ.

2. Legislation and Conservation Status

LEGISLATION

2.1 Dormice are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capture of any wild animal listed on Schedule 2 (e.g. dormice)
- Deliberate disturbance of wild animals listed on Schedule 2 (dormice) including, in particular, any disturbance which is likely:
 - to impair their ability:
 - to survive, breed, or reproduce, or to rear or nurture young;
 - to hibernate or migrate
 - to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place
- Having in one's possession or control or to transport any live or dead animal.

2.2 Dormice are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance of any wild animal while it is occupying a structure or place used for shelter or protection; and
- Intentional or reckless obstruction of access to any place of shelter or protection.

2.3 A European Protected Species Mitigation (EPSM) licence, issued by the relevant countryside agency (e.g. Natural England), will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse nests) or for operations likely to result in a level of disturbance which might impair their ability to survive, breed, rear young and hibernate. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place, and their efficacy to be monitored.

CONSERVATION STATUS

2.4 The hazel dormouse is listed upon Annex IV of the EC Habitat Directive as a European Protected Species (EPS) and is worthy of conservation across the European Community. The Conservation of Habitats and Species Regulations 2010 transposes

the EC Habitats Directive into national law, which affords dormice protection as described above.

2.5 The EC Habitats Directive (Article 1, sections (e) and (i)) offers a definition of conservation status for species:

'the sum of influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within a given geographical area'.

2.6 The definition implies that two factors are paramount when assessing a species' conservation status: (1) threat (a decline in abundance and/or distribution/range) and (2) rarity (limited abundance and/or distribution/range).

2.7 In England the hazel dormouse has shown decline in both numbers and distribution over the last 100 years, with recent data suggesting it has become extinct in about half of its former distributional range (Hurrell & Macintosh, 1984; Macdonald & Tattersall, 2003; Bright *et al*, 2006). It has been on Natural England's species recovery programme since 1992 (Macdonald & Tattersall, 2003) and is listed as a Species of Principal Importance for the Conservation of Biodiversity in England (hereby referred to as 'species of principal importance') as required under Section 41 of the Natural Environment and Rural Communities Act (NERC) Act 2006. The current adult population estimate for this species in England is 45,000 (Battersby, 2005).

2.8 Although distribution is patchy, the southern English counties are a stronghold for dormice populations. In East Sussex the species is widespread throughout and populations are strong and viable. As a consequence East Sussex has an obligation to safeguard these core populations.

3 Methodology

FIELD SURVEY

Overview

- 3.1 All on-site habitat with potential to support dormice was included in the surveys, this included broadleaved semi-natural woodland and dense scrub.
- 3.2 Habitats were described and a perceived 'value' placed on them. This was dependent on a number of factors, including diversity of food, shelter and nest resources and arboreal connectivity between suitable on and off-site habitat.

Nest Tube Survey

- 3.3 Following best practice guidelines (Bright *et al.*, 2006) the dormouse surveys will be undertaken between April – November 2016 in habitats identified as having suitability for dormice (see Appendix 1 for a location of the nest tubes).
- 3.4 Surveys are being undertaken by Rosanna Marston BSc MSc ACIEEM, an ecologist with four years hazel dormouse survey experience (Natural England Licence CLS001942) and Charlie Dwight BSc, CEcol, with six years dormouse survey experience (Licence Number: 2016-19769-CLS-CLS). Rosie and Charlie both have experience which includes habitat suitability survey, monitoring sites for the National Dormouse Monitoring Programme, handling dormice and collecting of biometric data.
- 3.5 A total of 50 dormouse nest tubes were deployed March 2016 spaced at approximately 15-20m intervals. Nest tubes comprise a 25cm long black plastic tube with a plywood tray insert and may be used by dormice for shelter and breeding. They are suspended from horizontal limbs of vegetation using thin wire. The tubes are inspected for the presence of dormice and signs indicative of their presence; in particular their characteristic woven nest.
- 3.6 An index of probability is used (see Table 1 below) to provide a score indicative of the thoroughness of the survey using 50 tubes as standard. Assumed absence of dormice should not be based on a search effort score of less than 20 (the minimum score for a robust survey effort), which for example, would be obtained by using 50 tubes from June to November exclusive ($2+2+5+7+2+2 = 20$). May, August and September are the months when nest tubes are most frequently occupied, scoring four, five and seven respectively.

Table 1: Index of probability of finding dormice present in nest tubes

Month	Index of probability
April	1
May	4
June	2
July	2
August	5
September	7
October	2
November	2

(Taken from Bright *et al.*, 2006)

- 3.7 The first check was undertaken on 25 May 2016, generating a search effort providing a table score of five for the months of April and May. A further two surveys were carried out on the 29 July 2016 generating a score of four for the months of June and July and the final check was carried on the 29 September 2016, generating a score of twelve for August and September be carried out in July and September allowing the tubes to be collected towards the end of the year.
- 3.8 The checks involved inspecting each tube for the presence of dormice or recently constructed dormouse nests. If a tube was found to contain a nest, the tube was removed from the vegetation and placed inside a large clear plastic bag. The tube was then opened to determine whether the nest was currently occupied by a dormouse and, if so, to collect biometric data including sex, weight, age and breeding condition wherever apparent. The tube was then replaced in its original position within surrounding vegetation.

DETERMINING BIODIVERSITY VALUE

- 3.9 The Chartered Institute of Ecology and Environmental Management (CIEEM) (2006) state that there are various characteristics that can be used to identify important species. These include:
- The rarity of the species at various geographical scales;
 - The threat status and vulnerability of the species at various geographical scales;
 - The population size and/or geographical extent of the species;
 - How characteristic or typical a species is;

- The location of the species in relation to its known geographical distribution and range at various geographical scales.

3.10 The characteristics listed above help define a species' conservation status (as defined above in Section 2.4/2.5) which can then be used to help determine its biodiversity value. CIEEM (2006) provides further information on how the relative value and importance of a species can be determined and states that the value of a species should be measured against published selection criteria where available. There are some publications that attempt to calculate an estimate the size of a dormouse population and its relative importance, such as:

- Natural England's (formerly English Nature) Dormouse Conservation Handbook (Bright *et al.*, 2006); and
- Natural England's (formerly English Nature) Hedgerow Management, Dormice and Biodiversity (Bright & MacPherson, 2002).

3.11 It is also useful to distinguish between the biodiversity value of a receptor and its legal status as the scale at which any legal protection is governed should not always determine the geographical scale of biodiversity value i.e. the presence of a EPS, such a dormouse within a patch of scrub, does not automatically qualify that scrub as being of biodiversity value at the international scale.

3.12 In reasonable accordance with CIEEM (2006), any population present is assessed as valuable, or potentially valuable, based on the following geographic frame of reference:

- International e.g. a population warranting designation as a Special Area of Conservation (SAC) and/or of significant conservation status for Europe;
- National (i.e. UK) e.g. a population warranting designation as a Site of Special Scientific Interest (SSSI) and/or of significant conservation status for England;
- Regional e.g. a population valuable at a regional level and/or of significant conservation status for south-east England;
- County e.g. a population warranting designation as a County Wildlife Site and/or of significant conservation status for East Sussex;
- District e.g. a population of significant conservation status for the local (i.e. Hastings) district;

- Local e.g. a population of significant conservation status within a local context (i.e. the town/parish of Hastings);
- Within the immediate survey area only i.e. a population of significance for the immediate survey site only.

LIMITATIONS

3.13 It should be noted that, whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.

4 Results

FIELD SURVEY

Description and Assessment of Habitat Areas

Western area of site

- 4.1 Large areas of scrub and woodland were present in the western half of the site, where the majority of the area is covered by semi-natural woodland connected to the rest of the site by continuous and scattered scrub. (Photograph 1).
- 4.2 The south-western section of the site consisted an area of woodland approximately 1.1ha (Photograph 2). This canopy was predominantly ash *Fraxinus excelsior*, pedunculate oak *Quercus robur* and sycamore *Acer pseudoplatanus* with a good age structure amongst the tree species. The understorey was generally well-developed although patchy in places (Photograph 3), consisting primarily of hawthorn *Crataegus monogyna*, hazel *Corylus avellana* and holly *Ilex aquifolium*. Ivy *Hedera helix* was abundant in the field layer, with frequent lesser celandine *Ranunculus ficaria*, bramble *Rubus fruticosus* agg., lords-and-ladies *Arum maculatum* and honeysuckle *Lonicera periclymenum*. Species recorded as occasional too rare in the ground flora included bluebell *Hyacinthoides non-scripta*, moschatel *Adoxa moschatellina*, hart's-tongue *Phyllitis scolopendrium*, butcher's-broom *Ruscus aculeatus*, pendulous sedge *Carex pendula*, primrose *Primula vulgaris* and ramsons *Allium ursinum*.
- 4.3 The north western section contains wooded areas, scattered trees and scrub. These areas are all connected.
- 4.4 This habitat type was considered to have high value to dormice. The species present, namely oak, hazel, honeysuckle, bramble, blackthorn and hawthorn, are key food sources for dormice and provide excellent shelter and structure for nest-building.

Eastern area of site

- 4.5 The eastern side of the site is dominated by less intensively managed semi-improved grassland. The northern area of the site comprises bare ground and rubble from demolished built structures.
- 4.6 The south-eastern part has encroaching scrub which backs onto private gardens. The periphery is dominated by fences with scattered trees.

- 4.7 Towards the north-eastern corner is a small area of encroaching scrub, which includes Japanese Knotweed.
- 4.8 The northern corner is scattered scrub with tall ruderal grasses which backs onto significant semi-natural woodland.
- 4.9 There are also considerable areas of scattered trees around the site with the majority of the periphery comprising of mature trees.
- 4.10 Considered in isolation, this habitat type on the western side of the site was considered likely to be of moderate value to dormice, there is reasonable structure and a species-rich field layer that could provide shelter and nest-building opportunities. Key food source plants such as hazel, oak and honeysuckle *Lonicera periclymenum* were also abundant. When considered at a landscape scale the woodland is considered important in providing habitat connectivity for dormice.

Nest Tube Survey

- 4.11 On the first survey one dormouse nest was recorded on site within areas of broadleaved semi-natural woodland (photograph 4 and 5). No evidence of dormice was found on the two subsequent visits.

Table 2: Summary of nest tube survey findings

Date	Location	Tube No.	Findings
25/5/2016	Woodland (western edge of site)	21	Dormouse nest, unoccupied.
29/07/2016	All	All	No evidence of dormice found.
29/09/2016	All	All	No evidence of dormice found.

- 4.12 The survey map demonstrates that the dormouse nests found during the survey within the western boundary has connectivity to the whole woodland area located in the western half of the site (tubes 1-7 and 16-50).

5 Conclusions and Recommendations

CONCLUSIONS

- 5.1 The site comprised of two distinct areas, the western half with the majority of semi-natural woodland and the neglected playing fields/open grassland to the east. The scrub and woodland habitats within the western half of the site were perceived to have high value for dormice. The scattered trees and scrub to the north of the site were considered to have moderate value for dormice. The periphery on the eastern side consisted of isolated trees and gardens was considered to be of no value. At a landscape scale, the woodland and scrub is considered important in providing habitat connectivity for dormice.
- 5.2 The dormouse survey has confirmed the presence of dormice on the site within the western half of the site. In total, one occupied dormouse nest was recorded during the first survey. A further two surveys carried out in July and September found no evidence for dormice, however their presence can be assumed within all suitable connecting woodland and scrub habitats on the site, even if not recorded as present, during the nest tube survey (Bright *et al.*, 2006).
- 5.3 The nest tube survey methodology is not designed to enable a population estimate, but to determine presence or likely absence. As such the data collected to date is considered sufficient to support a European Protected Species Mitigation (EPSM) licence.
- 5.4 The habitats with the potential to support dormice on site is considerable, the majority of the western half of the site has suitable woodland, scrub and scattered scrub all considered suitable habitat for dormice. This is connected to the rest of the site via the peripheral vegetation, a mix of trees and scrub, which runs around the majority of the site. The central part of the site has little to no value.
- 5.5 If considered in isolation (e.g. not taking into account the value of the site as part of a wider network of habitat), and given the average population density of dormice across the country of two adults per ha (Bright *et al.*, 2006), the site is likely to be of value at no more than the local level, particularly as East Sussex is a stronghold for the species. However, the site does form part of a much wider network of woodland which is considered of importance for dormice at district-level or above.

Potential Legal Constraints

- 5.6 As outlined in Section 2 of this report the dormouse is afforded strict legal protection, making it an offence to deliberately capture, injure, kill or disturb them. In the absence of any mitigation, the proposed works have the potential to breach the legislation.
- 5.7 The legal protection of dormice extends not just to the individual animal but also the habitat in which they are considered present. Areas of woodland and scrub within the western site parcel will be directly impacted by the proposed development and could result in an offence under Schedule 2 of The Conservation of Habitats and Species Regulations 2010 (as amended) through '*damage or destruction of a breeding site or resting place*'.
- 5.8 Other potential impacts of the proposed development include adversely affecting the abundance and distribution of dormice within the site and restricting the dispersal movements of dormice through the wider landscape as a result of habitat fragmentation. This has the potential to increase the vulnerability of isolated populations to stochastic events and local extinctions and may limit genetic interchange between populations.

RECOMMENDATIONS

- 5.9 To enable the proposed development to proceed within the legislative framework, it will therefore be necessary to obtain a European Protected Species Mitigation (EPSM) licence from Natural England, to undertake the proposed works and ensure that the scheme is compliant with the current legislation. The licence will also require that any adverse impacts on local dormouse populations are off-set through appropriate mitigation and compensation. An EPSM licence can only be made once full planning consent has been granted, and Natural England require a minimum of 30 working days to determine the application.
- 5.10 It will be necessary to safeguard both individuals and the long-term viability of the local population and to compensate for the habitats to be lost and/or fragmented. An outline strategy is provided below; however, this should not be implemented until an EPSM license has been granted.

HABITAT CLEARANCE

- 5.11 Once an EPSM has been obtained, sympathetic habitat clearance will be carried out to persuade dormice to leave the on-site woodland and scrub habitats which are scheduled for removal and move into adjacent suitable habitats. Due to the relatively small amount of dormouse habitat to be removed it is not thought that the clearance

will displace large numbers of animals and that the carrying capacity of the large areas of high quality woodland surrounding the site is such that displaced animals will be accommodated without the need for specific habitat enhancement measures.

- 5.12 Habitat clearance can be approached in two ways – winter clearance or summer clearance. Winter clearance is suitable for areas up to 1 – 1.5ha (e.g. the size of typical dormouse home range in woodland). For smaller areas, summer clearance is an accepted approach. These are detailed below.

Winter clearance

- 5.13 Winter clearance should be undertaken as a two-stage process. During stage one, all trees and shrubs should be cut down to approximately 300mm between November and March inclusive (dependent on weather conditions) to avoid the period when dormice are found in above ground nests and also to avoid the breeding bird season. Clearance should be undertaken under an Ecological Watching Brief using hand tools and combined with a fingertip search for nests to be carried out by an experienced and licensed dormouse ecologist. Tree and shrub stumps should be retained at this time as they provide suitable hibernation habitat.
- 5.14 Stage two should be undertaken between May and October (dependent on weather conditions) when dormice are active. The tree and shrub stumps should be removed under an Ecological Watching Brief. By this time it is expected that any dormice emerging from hibernation in these areas will have moved into adjacent areas of woodland.

Summer clearance

- 5.15 This should be undertaken during May or late September to October when dormice are active (dependent on weather conditions) and able to move away from that area immediately. Vegetation should be removed in a successive and directional manner, pushing the dormice towards the surrounding retained woody habitats. Clearance should be undertaken under an Ecological Watching Brief using hand-tools and combined with a fingertip search for nests to be carried out by an experienced and licensed dormouse ecologist.
- 5.16 Timing the works in this way avoids disturbing female dormice with dependent young; however, there is a risk that breeding birds will be present in areas of scrub and woodland at this time. All birds are protected under the Wildlife and Countryside Act 1981 (as amended) and thus, if any active bird nests are found, clearance of the surrounding vegetation should be postponed. The nest area should be protected by

setting up an appropriately sized exclusion zone/cordon. Works may then proceed up to, but not within, this exclusion zone. It may be possible for works to resume once it has been confirmed by an ecologist that the young have fledged (left the nest); however, if, by this time, it is suspected that dormice may be breeding, it would need to be rescheduled for September/October.

Habitat Replacement and Enhancement

Planting and enhancement of value to dormice

- 5.17 Any trees and shrubs that must be uprooted or removed should be compensated for through post-works planting. The replanted species should aim to enhance the habitat for dormice and do not necessarily need to be the same as those that were removed during clearance operations. Planting should comprise a high diversity of native species such as hazel, pedunculate oak, honeysuckle, ash, blackthorn and hawthorn (see Appendix 3 for a list of tree and shrub species of recognised value to dormice).
- 5.18 As a minimum, any loss of dormouse habitat area must be compensated for within the site (or other nearby land within the clients/landowners control) on a like-for-like basis. Where possible, suitable habitat on site should be increased in terms of both its quantity (extent) and quality such that the development results in a net gain for biodiversity. This is in line with the objectives of the NERC Act 2006 which places a duty on competent authorities such as the Local Planning Authority to have regard to the conservation of biodiversity in exercising their functions.
- 5.19 Dormice feed on a wide variety of food sources including flowers (nectar and pollen), fruits (berries and nuts) and some insects (aphids and caterpillars). They will also eat buds and young leaves. A high degree of diversity among tree and shrub species is desirable in order to ensure food availability throughout the year. Certain tree species are particularly valuable as providers of food at different times of year.
- 5.20 Dormice are generally reluctant to cross open spaces, perhaps due to the increased risk of predation (Bright *et al.*, 2006), and therefore new planting should ensure aerial connectivity (e.g. above ground at the shrub or tree canopy layer) is maintained across the site. It is recommended that an area across the northern boundary of the western site parcel is planted up to connect habitats within the railway corridor and old trackway. Consideration should also be given to the installation of a dormouse bridge, or by the planting of large standards either side of the new site entrance, to bridge the approximately 8m wide gap which will be created.

5.21 It is important that this habitat provides sufficiently dense foliage that dormice can move through it without needing to descend to ground level. Sprawling hedgerows often meet these criteria and benefit from full exposure to sunshine, maximising potential dormouse food and often supporting substantial populations (Bright *et al.*, 2006).

Lighting

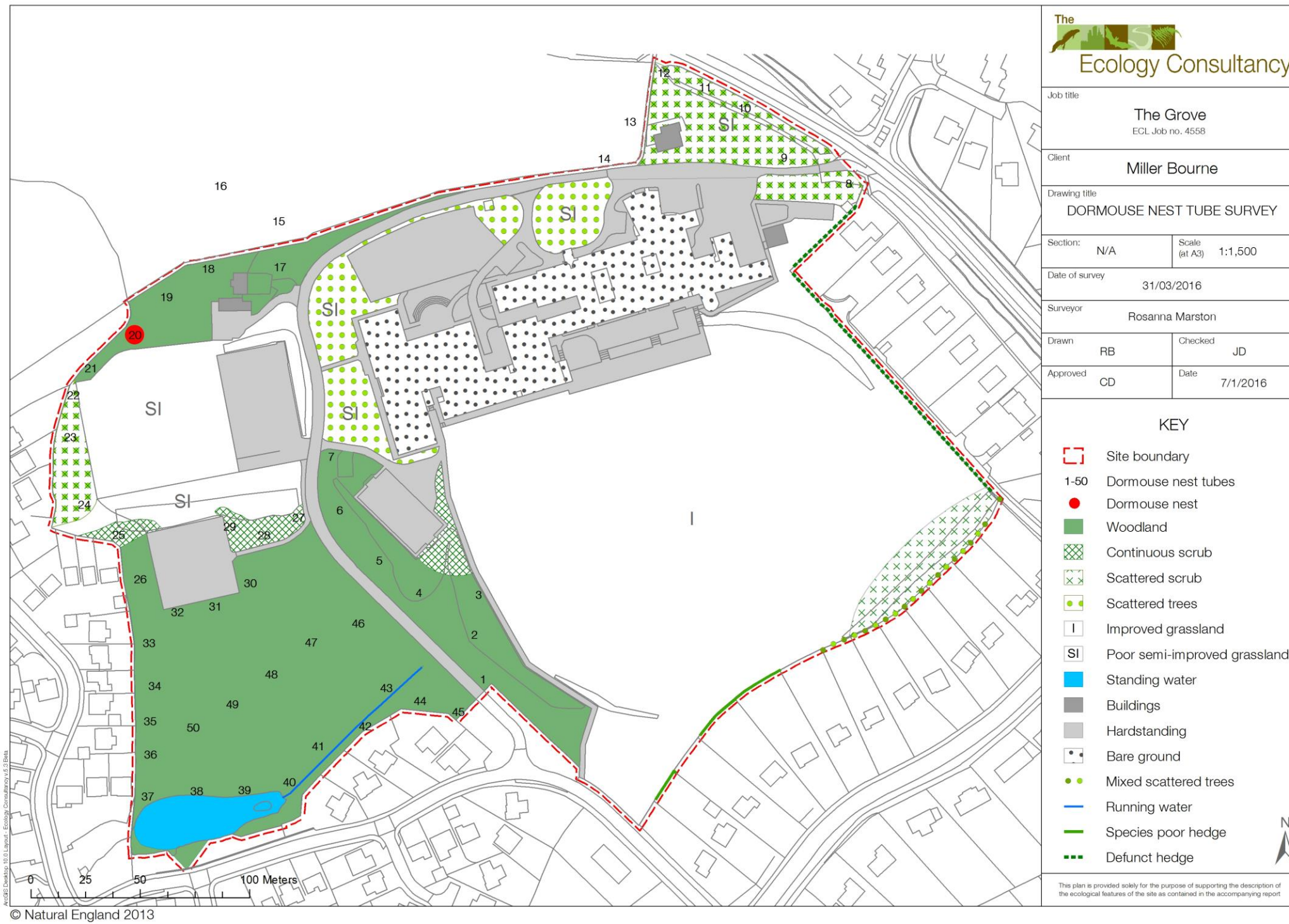
5.22 Dormice are nocturnal and sensitive to artificial lighting. Excessive lighting could cause dormice to move away from otherwise suitable foraging grounds, dispersal corridors or nesting sites. It is important, therefore, that any lighting scheme is designed in co-ordination with an ecologist to minimise any adverse impacts. Most importantly, the retained woody habitats around the site boundaries should not be illuminated. Similarly, any areas of planting or newly created habitats should not be directly lit.

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Appendix 1: Survey Map

Map 1: Survey Results map



Appendix 2: Photographs

Photograph 1

An area of dense bramble scrub with trees showing the connectivity between areas of the site.



Photograph 2

Lowland mixed-deciduous woodland in the south-west of the site.



Photograph 3

Woodland edge in south-western corner of site showing understory cover and scrub.



Photograph 4
Showing tube number of the dormouse nest found and nest in situ.



Photograph 5
Typical dormouse nest found within tube number 21.



Appendix 3: Trees and Shrubs of Value to Dormice

Trees and Shrubs of Value to Dormice (taken from Bright *et al.*, 2006)

Species	Value
Hazel	Where present, this is the principal source of food (nuts) for fattening up prior to hibernation. Hazel also supports many insects, including caterpillars, which are potential dormouse food. Hazel forms a continuous understorey of sprawling poles, easy for arboreal activity and is a very valuable (but not essential) species for the dormouse.
Oak	An important source of insect food (including caterpillars). Dormice also eat oak flowers, but acorns are of little value.
Honeysuckle	The plant's finely shredded bark is the preferred nesting material used by dormice. Honeysuckle flowers also provide food at a time when few other things are available, with berries later. The climbing strands also offer convenient routes into the trees and provide dense shelter in which to nest.
Bramble	Its flowers and fruits are very important dormouse foods and tend to be available for a long period (especially where the site has slopes which vary the amounts of sunlight on the shrubs) and the thorns provide good protection for nests. Bramble often flowers late, when many other species are over and dormice also eat the berries and seeds in autumn. Dormice seem to thrive where blackberries are abundant, even in the absence of hazel. Bramble is best if scattered among hazels and trees.
Sycamore	A valuable source of insect food and pollen. A useful tree: dormice can survive in habitats with many sycamores. However, sycamores cast a dense shade which reduces the understorey. Thus sycamores should be kept few and scattered, perhaps coppiced to prevent seeding and to reduce the extent of shading.
Ash	Ripening seeds ('keys') are eaten whilst they are still on the tree, but ash supports few food insects. The canopy does not cast a dense shade, but generally ash woodlands are not good habitat.
Wayfaring tree	Fruits in late summer when little else may be available. Dormice eat the seeds and probably also the flowers.
Yew	The fruits are a favoured food and dormice will make special excursions to reach them, but the seeds are not eaten.
Hornbeam	Seeds are small and hard, but dormice eat them. The advantage is that they are too small to be attractive to squirrels, so they may form an alternative food where squirrels have taken most of the hazel nuts. Fruiting is erratic.
Broom	Flowers are eaten in early summer.
Sallow	Unripe seeds are eaten from the flowers in early summer. Sallow also supports many insects.
Birch	The catkins are over too early in the year to be much use to dormice, but they can eat the seeds. These are too small to attract squirrels and may provide support where squirrels compete for hazel nuts.
Sweet chestnut	Chestnuts are an excellent food source and dormice may also eat the flowers.
Blackthorn	Fruits (kernels) are eaten but the flowers come too early in the year. Dense blackthorn thickets tend to be avoided where alternative shrubs are available.
Hawthorn	Flowers are an important food in the spring. The fruits are eaten occasionally.
Conifers	Little is known about the use made of these trees by dormice, but they often support many aphids and caterpillars – potential dormouse food. The trees may also provide shelter from the wind and rain in exposed sites.
Other species such as cherry, crab apple, holly, ivy	Little is known about the value of these trees to dormice, but it is likely that they will eat the pollen (stamens) and perhaps fruits. Ivy is a useful source of food insects and its evergreen tangles among tree branches are often used for summer nesting sites.



Ecology Consultancy

The Ecology Consultancy is part of the Temple Group.

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