



Barncroft School, Havant, Hampshire

Extended Phase 1 Habitat Survey Report

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EXECUTIVE SUMMARY

- RPS Ecology was commissioned by Hampshire County Council to carry out a Phase 1 Habitat Survey at Barncroft Infants School, Havant, near Portsmouth.
- The aim of the survey was to update previous work completed in 2008.
- Buildings and hard standing that make up a large proportion of the site are considered to have negligible ecological value. The improved grassland is considered to have low ecological value. The tall ruderal and scattered scrub are considered to offer low botanical value but do provide habitat for small mammals, invertebrates and nesting birds.
- The survey found that none of the buildings or trees on site are suitable for roosting bats. Mature oak trees with low bat roost potential situated beyond the southern boundary will remain unaffected by the proposed works.
- Linear tree lines surrounding the site boundaries are potentially used for foraging and commuting bats. Therefore, it is recommended that artificial lighting should be designed to avoid any further light spill onto site boundaries than currently occurs.
- There is nesting bird habitat present on site in the form of young trees and scattered scrub therefore this should be cleared outside of the nesting bird season.
- It is considered that badgers are absent from the site, although there is evidence that fox may utilise the site.
- Given the low ecological value of the majority of the site, assuming the recommendations made in this report are followed, the development should have negligible ecological impact.

1 INTRODUCTION

Background to the Study

- 1.1 RPS Ecology was commissioned by Hampshire County Council in summer 2010 to carry out a Phase 1 Habitat Survey at Barncroft Infants School, in Havant, near Portsmouth, Hampshire.
- 1.2 A previous Phase 1 Habitat Survey was carried out at the site in 2008 (HED 2008). The 2008 survey included the entire Infants and Junior School site. This identified trees with the potential to support bat roosts in the boundary at the south of the site; potential bird nesting habitat on site; a pond supporting a diverse number of species and Ancient Woodland Indicator species at the south of the site.
- 1.3 School improvements and works within the former Junior School site have already received planning consent; therefore this updated survey refers only to ecological impacts within the land outside of this area covering the existing Infants School and land in the south west corner of the site.

Development Plans

- 1.4 It is proposed that the Infant School site is used for residential development in order to facilitate the merging of the existing Junior and Infant School.

Site Description

- 1.5 The site comprises school buildings and hard standing associated with the School. The southern half of the site is a playing field area, surrounded to the east, west and south by a mixture of scattered scrub and more mature trees.
- 1.6 The school is surrounded on all sides by mixed-aged residential housing, with associated gardens. The northern boundary is formed by an access path between Park Lane and Barncroft Way. Beyond the southern boundary is an area known as Hook's Row, a linear strip of land that supports rank grassland and mature pedunculate oak *Quercus robur* trees.

Aims and objectives

Field Survey

- 1.7 The purpose of the Phase 1 Habitat survey was to identify the habitats present within and around the site. The site walkover surveys also assessed the potential for the site and adjoining habitats to be used by species that receive legal protection (at a UK and/or European level) and species that are otherwise notable including Species of Principal Importance, UK BAP priority species, and Birds of Conservation Concern.
- 1.8 This report presents the Phase 1 Habitat survey information and provides an ecological baseline of the site. Consideration has been given to potential ecological impacts that could arise from the proposals on designated sites in the area.

2 METHODS

Field Survey

- 2.1 The survey was conducted in accordance with The Handbook for Phase 1 Habitat Survey (JNCC 2003), and included searches for signs of protected species.
- 2.2 A walkover of the site was undertaken on 6th August 2010, during which habitats within the site were classified, mapped and described, with respect to their structure and floristic composition.
- 2.3 The habitats within the site were assessed for their potential to support legally protected or otherwise notable flora and fauna. Where suitable habitat was identified on site, a search was conducted for signs indicating the presence of protected species such as droppings, burrows, tracks and evidence of feeding. Where species are not specifically mentioned, this indicates that no habitat of potential value for these species was identified during the survey.
- 2.4 Consideration was also given to habitats outside the site, in order to understand the ecological context of the site within the wider landscape. Adjacent habitats were also considered with respect to their own ecological value and their potential to enhance the ecological value of habitats within the site.
- 2.5 Searches were made for invasive non-native plant species focussing on those species currently listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), including those species included in the revised Schedule 9.
- 2.6 Botanical nomenclature follows Stace (1997).

3 RESULTS

Extended Phase 1 Habitat Survey

- 3.1 The results of the field survey are shown in Drawing JSL1786 3.1 Phase 1 Habitat Survey Map. The habitats present on the site are described below broadly in order of extent.

Improved Grassland

- 3.2 A large area of the site supports an improved grassland playing field that is regularly mown to produce a very short sward (Plate 1). The grassland has not changed since the previous Phase 1 survey, and still supports species typical of amenity grassland, with abundant perennial ryegrass *Lolium perenne*, creeping bent *Agrostis stolonifera* and rough meadow-grass *Poa trivialis*, frequent cock's-foot *Dactylis glomerata* and meadow fescue *Festuca pratensis*. Forb species included locally dominant creeping buttercup *Ranunculus repens*, locally abundant daisy *Bellis perennis*, black medick *Medicago lupulina* and yarrow *Achillea millefolium* and frequent greater plantain *Plantago major*, common sorrel *Rumex acetosella*, red clover *Trifolium pratense* and white clover *Trifolium repens*.
- 3.3 Very thin margins had been left to grow slightly taller around the edge of the grassland, and there was a higher proportion of herbaceous species towards the planted trees and scrub boundaries. Species recorded here include locally abundant ground-ivy *Glechoma hederacea* in shaded areas, common nettle *Urtica dioica* and cleavers *Gallium aparine*.



Plate 1 – Improved grassland playing field

Scattered Scrub

- 3.4 Scattered scrub surrounds the southern, eastern and western boundaries of the playing field; this includes recently planted tree saplings between the Infants and Junior School. The habitat includes a mix of native and non-native species, with a ground flora dominated by ground-ivy (Plate 2).

- 3.5 The scrub species includes locally dominant dogwood *Cornus sanguineus*, abundant hawthorn *Crataegus monogyna* and field maple *Acer campestre*, frequent blackthorn *Prunus spinosa*, elder *Sambucus nigra* and sycamore *Acer pseudoplatanus*, and occasional willow sp. *Salix sp.*, cherry *Prunus avium var.*, poplar *Populus sp* and ash *Fraxinus excelsior*.
- 3.6 Ground flora species recorded beneath the scrub includes abundant ivy *Hedera helix*, locally abundant ground ivy, common nettle and cleavers, frequent yarrow, bramble *Rubus fruticosus*, wood avens *Chenopodium album* and common ragwort *Senecio jacobaea*, and occasional male-fern *Dryopteris filix-mas*.
- 3.7 On the southern boundary of the Infants School is a recently planted hedgerow of field maple. Garden escapee shrub species were recorded along the northern site boundary.



Plate 2 – Scattered scrub and tall ruderal habitats along the southern site boundary

Standard Trees

- 3.8 Standard trees are present along the southern boundary of the school including mature pedunculate oak and semi-mature ash and poplar.

Tall Ruderal

- 3.9 An area of ruderal vegetation is present at the south-western corner of the site. This is dominated by common nettle and bramble (Plate 2).

Buildings and Hard Standing

- 3.10 A large part of the site comprises school buildings and areas of tarmac and paved hard standing. The school buildings are all brick built, single-storey modern school buildings with flat roofs, and some external sheet cladding (Plate 3).



Plate 3 – School buildings on site

4 EVALUATION

Habitats

- 4.1 The large proportion of the site comprises hard standing, buildings and improved (amenity) grassland, with small areas of scattered scrub and planted trees. The buildings and hard standing are considered to have no botanical value.
- 4.2 The amenity grassland supports a moderate number of plant species but these are widespread grasses and forbs that will occur commonly in the local area. The amenity grassland is frequently mown, with a uniform short sward and little botanical and structural diversity and is considered to be of low ecological value.
- 4.3 The scattered scrub and tall ruderal are relatively species-poor and are considered to be of low botanical value, however they provide potential habitat for small mammals, invertebrates and nesting birds.

Species

Bats - Roosting

- 4.4 All species of bats occurring in the UK receive full protection under The Conservation of Habitats and Species Regulations 2010, and the Wildlife and Countryside Act 1981 (as amended). A number of bat species are UK BAP priority species. These include the widespread species, soprano pipistrelle *Pipistrellus pygmaeus*, brown-long eared bat *Plecotus auritus* and noctule *Nyctalus noctula*.
- 4.5 The school buildings are not typical of structures that have high potential value for roosting bats. The buildings are all modern and flat-roofed and they lack features such as roof voids and cavities. No obvious features such as openings, crevices, voids or overhangs were noted, therefore the buildings are considered to offer negligible value for roosting bats.
- 4.6 The large mature oaks along Hooks Row at the south of the site contained features such as small holes that may offer bat roost potential. These should all be retained within the masterplan of the site and should not be impacted by the proposed works on site.

Bats - Foraging

- 4.7 The tree lines across the site, especially at the south of the site, are linear features that may be used by bats in the local area as foraging / commuting routes.

Badger

- 4.8 Under the Protection of Badgers Act 1992, badgers *Meles meles* are protected from killing, injuring or disturbance, while occupying a sett, and their setts are protected from obstruction, damage or destruction.
- 4.9 No setts or obvious signs of badger, such as snuffle holes, prints or latrines, were noted during the site walkover. Gaps underneath the wire fencing on the western boundary have been attributed to fox rather than badger due to the presence of fox hairs and tracks. It is considered likely that badgers are absent from the site.

Nesting Birds

- 4.10 Nesting birds are protected by the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to intentionally kill, injure or take the birds or their eggs, or to intentionally destroy or disturb a nest, when it is in use or being built.
- 4.11 Areas of cover in the scattered scrub and young tree planting, and the more mature trees on site provide suitable nesting opportunities for a range of common bird species.
- 4.12 The combination of scrub, grassland and tall ruderal habitats around the edges of the site will provide a foraging resource for nesting birds in the wider area.

Reptiles

- 4.13 The four widespread reptile species (grass snake *Natrix natrix*, adder *Vipera berus*, viviparous lizard *Lacerta vivipara* and slow-worm *Anguis fragilis*) are protected from killing and injury under the Wildlife and Countryside Act 1981 (as amended). These are also Priority Species in the UK Biodiversity Action Plan.
- 4.14 The majority of the short improved grassland on site is regularly mown up to the edge of the dense scrub at the boundaries of the site, and is therefore unsuitable for reptile species. Garden habitats off site and rank grassland in Hooks Row south of the site are likely to be more important for reptiles in the context of the local area.

Great Crested Newt and Other Amphibians

- 4.15 The great crested newt *Triturus cristatus* receives full protection under The Conservation of Habitats and Species Regulations 2010, and the Wildlife & Countryside Act 1981, (as amended). Great crested newt is also a UK BAP priority species.
- 4.16 No ponds are present within the Infants School, however there is a small pond present in the Junior School site, approximately 100m from the red line boundary. The pond does not contain any aquatic vegetation, and appears to dry out regularly. A previous netting survey of the pond in 2008 recorded smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* of both sexes. Neither of these species has specific statutory protection, but they are priority species in the Hampshire Biodiversity Action Plan.
- 4.17 In addition the pond is not surrounded by extensive areas of good quality great crested newt habitat, and is isolated from other areas of such habitat by residential housing and associated gardens. There is no suitable great crested newt habitat within the Infants School site, therefore it is concluded that the site is very unlikely to support great crested newt.

5 CONCLUSIONS

- 5.1 The buildings and hard standing that make up a large proportion of the site are considered to have negligible ecological value.
- 5.2 The improved (amenity) grassland is considered to have low ecological value. The tall ruderal and scattered scrub on the boundaries of the school are considered to offer low botanical value but do provide potential habitat for small mammals, invertebrates and nesting birds.
- 5.3 The survey has found all buildings and trees on site had negligible potential to support roosting bats. Mature oak trees with low bat roost potential exterior to the southern boundary will remain unaffected by the proposed works. Linear tree lines surrounding the site boundaries are potentially used for foraging and commuting bats.
- 5.4 There is considered to be no suitable habitat for reptiles or great crested newts on site.
- 5.5 It is considered that badgers are absent from the site, although there is evidence that fox may utilise the site.

6 RECOMMENDATIONS

Habitats

- 6.1 There are opportunities for enhancement of the habitats on site to encourage wildlife. The field margins around the improved grassland adjacent to the scattered scrub could be managed as wildflower meadow to promote a greater diversity of grassland species. This would enhance the botanical value of the grassland habitat and provide greater cover for fauna; reptiles, amphibians and invertebrates, while also enhancing linkages between off-site habitats. These measures should also increase the potential value of the site for foraging bats and birds.

Bats

- 6.2 Tree lines are linear features that may be used by bats in the local area as foraging / commuting routes, especially on the southern boundary. Protection of the boundary features and maintenance of dark corridors (without any artificial light spill) will avoid impacting on the potential for bats to forage at the school.
- 6.3 Although it is considered that the buildings on site offer very low potential for roosting, bats are mobile species and will move between roosting locations during the active season. Transitory roosts used by pipistrelle species can be used on an infrequent basis and therefore the absence of bats during demolition cannot be guaranteed.
- 6.4 The contactors involved in the building works should therefore be made aware that bats can be found at any time during building work and in the unlikely event that a bat is found they have a legal duty to stop all works and consult with the project ecologist or Natural England to determine what actions need to be taken.
- 6.5 In order to enhance the site for roosting bats, at least two bat boxes should be fitted in appropriate locations within the new development.

Nesting Birds

- 6.6 If any habitat identified as suitable for nesting birds is to be removed it should be undertaken outside of the bird nesting season (normally considered to be March-August inclusive). If this is not possible, works completed within the bird nesting season will need to take into account the potential presence of active nests. Where birds are found to be nesting on or in a building or within scrub on site, any works that result in damage to or loss of the nest would be unlawful.
- 6.7 Any active nests established in the working area during site operations will need to be protected until after the young have fully fledged and no longer return to the nest site. Any active nest should be cordoned off to a distance of 5-10m. No works will be allowed within the cordoned area until it has been confirmed that the nest is no longer active.
- 6.8 In order to enhance the site for nesting birds, it is recommended that a few different types of nest boxes are installed in appropriate locations across the site.

7 REFERENCES

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FIGURE 3.1

Phase 1 Habitat Survey September 2010 – Barncroft Infants and Junior School, Havant



Legend

- Buildings
- Survey Boundary
- Hardstanding
- Scattered Scrub
- I Improved Grassland
- Trees

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