60 SINAH LANE, HAYLING ISLAND

Ecological Appraisal and Biodiversity Report

On behalf of:

Mr N. Slydell

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1.0 INTRODUCTION AND METHODS

1.1 Background

A planning application has been submitted to Havant Borough Council for the construction of a two-storey dwelling with garage and driveway on land at 60 Sinah Lane, Hayling Island. The building will be situated adjacent to the original house on the site, within an area of mown garden lawn. Construction of another dwelling on the site, for which planning permission has already been granted, is presently underway.

Havant Borough Council requires a Biodiversity Checklist to be completed for certain types of planning application, including those that are situated near to protected sites or semi-natural habitats. The checklist provides guidance on follow-up ecological survey work that might be required, for example in order to assess potential impacts and mitigation measures.

This report has been commissioned by the owner of the land in response to a request by the Council to provide a Biodiversity Survey and Report to accompany the application. A copy of the completed Biodiversity Checklist is also attached.

1.2 Location of the Application Site and Adjacent Protected Sites

The application site is located in the south-western part of Hayling Island at Ordnance Survey grid reference SZ703997. The existing garden (**Figure 1**) extends almost to the boundary of Langstone Harbour Site of Special Scientific Interest (SSSI), which is included in the Chichester and Langstone Harbours Special Protection Area (SPA) and Ramsar site. These are national and international designations which afford legal protection to the important bird populations and intertidal habitat of these two estuaries. The boundaries of the protected sites follow Mean High Water, which is approximately 125m to the edge of the application area.

1.3 Data Sources and Methods

A walkover survey of the application site was carried out by the author on 19 February 2009. The habitats and vegetation were checked visually to assess their ecological value, particularly in terms of plant species present and their potential to support legally protected species of fauna, such as bats, Badger *Meles meles*, nesting birds and reptiles. Information on adjacent habitats (see Section 2.1) is mainly based on the author's own knowledge of the area. Use was also made of Google Earth™ aerial imagery, reproduced here under licence.

Although the survey was carried out during the late winter period, the timing of the survey was suitable to search for signs of Badger, which are particularly active in February, and to assess the potential for other protected species, such as bats. The vegetation present within the garden was also relatively straightforward to assess at this time, including vascular plant species and mosses in the lawn, which were able to be identified. Although it is likely that some later-developing plant species could have been missed by the survey, this does not affect the conclusions or recommendations made in this report. No further ecological survey should be required for this site with respect to the present planning application.



Figure 1: Aerial photo showing the location of the application site and habitat of the surrounding areas.

2.0 SITE DESCRIPTION AND EVALUATION

2.1 Site Setting and Ecological Context

The application site is situated within a large suburban garden measuring approximately 145m by 40m. A number of similar sized gardens occur to the east. To the west and south there are further residential areas with small to medium-sized gardens. The aerial photograph (**Figure 1**) indicates that most of the gardens in the area are managed as lawn, but there are frequent shrubs and small trees and some clipped hedges dividing some of the larger ones.

In the western part of the garden there is a broken line of semi-mature to mature Pedunculate Oak trees, which continues as a denser strip of oaks and other trees southwards along the west side of Sinah Lane. It is possible that that these mark a former hedgerow or field boundary, but within the garden there is no surviving hedgebank or any other associated semi-natural vegetation.

The northern boundary of the garden is marked by a low wall, with a narrow shingle beach beyond at the edge of Langstone Harbour. At low tide a large expanse of intertidal mud is uncovered here, which helps support some of the nationally and internationally important populations of birds visiting the estuary, especially in winter. Key species occurring in this particular part of the harbour include Brent Goose *Branta bernicla*, Shelduck *Tadorna tadorna*, Grey Plover *Pluvialis squatarola* and Knot *Calidris canutus*.

Beyond the adjacent housing to the west of the site there is a riding school with areas of disturbed land and improved or semi-improved short grassland. Beyond here is a holiday camp. An area of saltmarsh is situated on the north side of these areas, inside the sea wall, but is not included within the boundary of the protected sites.

Other parts of the Sinah peninsula to the south and west include a golf course and extensive areas of coastal acid grassland. There are also small areas of sand dune, heathland and woodland habitats and an area of Gorse *Ulex europaeus* scrub. There is a large lake and other smaller water bodies, but no watercourses in vicinity of the site. Most of the area is of high nature conservation interest for its flora and fauna and is largely afforded protection at a Local Authority level by designation as Sites of Importance for Nature Conservation (SINC).

2.2 Habitats and Vegetation of the Application Site

Photographs of the application site and garden are attached to this report. The proposed new house will sit on a plot of land measuring approximately 27m x 20m on the eastern side of the present house, which is presently mown as a lawn. It is bounded on the south side next to the road by a planted hedge of Beech *Fagus sylvatica* roughly 1.5m high sitting on a low, narrow bank which supports species poor vegetation dominated by Ivy *Hedera helix*. There is semi-mature Beech tree half way along and a small Field Maple *Acer campestre* at the south-eastern corner of the plot. Inside the hedge is a maintained garden border with a planted Holly *Ilex aquifolium* bush and ornamental conifers of various sizes. This border continues around the eastern side of the plot, where there are a few small and semi-mature trees, including some Pedunculate Oaks, and evergreen shrubs. A mature, ivy-covered oak is situated at the north-east corner of the plot, with a Yew *Taxus baccata* growing up through its lower

branches. The northern boundary of the plot is marked by a brick wall, about 2.5m tall and the continuation of the garden border with planted shrubs.

To the north of the wall is a further area of lawn lying outside the footprint of the development, which is bounded on the east side by a narrow, trimmed strip of bramble and a wooden fence. Some conifer trees, including a mature Monterey Pine *Pinus radiata* stand at the northern edge of this lawn and two mature, open-crowned oaks stand outside the north-west corner, within the line of oaks mentioned above. To the west of the existing house and these trees there is a driveway and further maintained shrub beds and planted trees. Further details of the trees in the garden have been provided in the separate tree survey that has been carried out.

The remainder of the garden to the north supports improved or resown grassland and some smaller Pedunculate Oak trees. The ongoing development is situated in this area.

The lawn within the plot actually affected by the development consists of herb-poor and moderately 'improved' grassland which is partly shaded by the surrounding buildings and trees and is therefore slightly damp in places. At the time of the survey there was a high cover of mosses, but these would be less evident in summer. Plant species recorded during the survey and their frequency over the area are as follows:

Mosses:	
Brachythecium albicans	rare
Brachythecium rutabulum	frequent
Calliergonella cuspidata	frequent
Kindbergia praelonga	occasional
Rhytidiadelphus squarrosus	abundant

Vascular plants including grasses:	
Blinks *Montia fontana*	occasional
Common Bent *Agrostis capillaris*	dominant
Common Mouse-ear *Cerastium fontanum*	occasional
Creeping Buttercup *Ranunculus repens*	locally frequent
Grey Field-speedwell *Veronica polita*	rare
Hawkbit *Leontodon* sp.	rare
Perennial Rye-grass *Lolium perenne*	abundant
Red Fescue *Festuca rubra*	locally frequent
Selfheal *Prunella vulgaris*	frequent
White Clover *Trifolium repens*	abundant
Yarrow *Achillea millefolium*	rare
Yorkshire-fog *Holcus lanatus*	occasional

It is likely that other species of common grasses occur, but no attempt was made to identify all species present. Red Fescue also occurs in a tussocky strip of grassland behind the wall together with some bramble and some additional species, including Ribwort Plantain *Plantago lanceolata* and Lords-and-Ladies *Arum maculatum*.

It is possible that the property was originally built on semi-natural coastal grassland, which may have formerly been species rich, but the present-day lawn must be considered relatively species-poor. All the mosses present are common or abundant species of grasslands and other habitats. *Rhytidiadelphus squarrosus* is particularly associated with unimproved lawns, whilst *Brachythecium albicans* is usually indicative of acid soils. Blinks is also a species of acid grasslands which is fairly local in Hampshire, but easily overlooked due to its small size and early spring flowering period (only small shoots were present in the lawn). Grey Field-speedwell is a fairly local early-flowering annual which was found on a part of the lawn to the north of the existing house, where the grassland appears more enriched and disturbed, with small patches of bare soil present at the time of the survey. The species is typical of such habitats and is often found in gardens.

The brick wall and the mature Pedunculate Oak trees were checked for lichens, but were poor in species. No noteworthy species were found.

2.3 Fauna of the Application Site

The only sign of larger mammals recorded during the visit was of Red Fox *Vulpes vulpes*, droppings of which were present on the lawn to the north of the application site. There was no evidence of Badger on or next to the site, either of foraging activity or trails.

The mature, ivy covered Pedunculate Oak tree in the north-east corner of the application plot has high potential for bats, i.e. as a temporary or short-term roost site, that could occasionally be used during the summer months or early autumn. The other mature trees on the site generally have low potential for bats. The two larger oaks near to the plot have no ivy cover, only small areas of peeling bark and very few natural cavities. However, in general the site and the surrounding gardens represent good foraging habitat for bats in view of the wider presence of mature oaks and other native trees. It is likely in a suburban area such as this that the commonest species of bats will be species preferring to breed in roofs of houses, such as the two commonest Pipistrelle *Pipistrellus* species, Brown Long-eared Bat *Plecotus auritus* and possibly Serotine *Eptesicus serotinus*.

The conservatory of the existing building will be demolished as part of the development. This is of brick, wood and glass construction, without any suitable cavities or entrances that could be used by bats.

The garden supports a range of coniferous and other evergreen species which garden birds are likely to favour for nesting due to the better cover they provide earlier in the nesting season. This has possible implications if any are proposed for removal (see below), but in general the bird interest of the site is not likely to be especially rich.

The site is well maintained and free of any rough grassland or other dense ground vegetation. It is therefore unlikely to be suitable for most reptiles, including Slow-worm *Anguis fragilis*, which can be locally common in gardens. The main potential reptile habitat is the low strip of bramble along the eastern boundary fence of the site, to the north of the application area. In general the high density of tree cover over the site precludes use by reptiles, which prefer open, sunny habitats.

2.4 Ecological Evaluation

From an ecological and biodiversity perspective the main features of interest in the garden are the mature Pedunculate Oak trees, especially the ivy-covered tree in the north-east corner of the application site. This has high value for bats and is likely to support nesting birds and a diversity of insect and other invertebrate species. Other oak trees on the site are of lower general value. Hayling Island is not well wooded, so groups of mature native trees are of high local ecological value. The denser trees along Sinah Lane provide a habitat corridor and link to other fragments of native woodland to the south.

The lawn within the application site is not especially species rich, even though it does support a few noteworthy species that are also found in unimproved acid grasslands. Large areas of similar grassland occur around the lake and golf course area to the south of Sinah Lane and the value of such as small area of grassland is relatively low in the local context.

3.0 IMPACTS AND MITIGATION RECOMMENDATIONS

3.1 Biodiversity Impacts and Mitigation

The zone of influence of the proposed development will mainly be within the garden of the existing property. During construction it is possible that there will be some minor disturbance effects outside this zone, e.g. from noise which could potentially disturb wildlife in adjacent gardens. The most likely impact will be to birds which happen to nest close to the construction site. Most garden species, however, are tolerant of quite high levels of noise and other disturbance, so any effects are likely to be negligible.

The mature ivy-covered oak tree and other large trees on the site will not be affected by the development. The Field Maple tree in the south-east corner of the site and part of the Beech hedge and will be removed to create space for a new driveway and access into the site. This will have a very small impact on the overall habitat diversity of the site but is not likely to impact on any particular species. If necessary, a new tree could be planted somewhere on the site as mitigation. The brick wall of low ecological interest will be demolished.

The loss of a small area of lawn is of low ecological significance. It does not warrant mitigation, but it is suggested that at least part of the main area of lawn at the northern end of the site be kept mown but not treated with herbicides or fertilisers. This will allow acid grassland plants to naturally colonise from other parts of the garden and surrounding areas. Over a period of time a species rich turf could develop in this area.

3.2 Impacts on Protected Sites

There will be no direct or indirect ecological impacts on the adjacent SSSI/SP/Ramsar site of Langstone Harbour during construction or use of the dwelling.

3.3 Impacts on Protected Species and Legal Implications

All bats and their roost places are fully protected under the Wildlife & Countryside Act, whilst rarer species also have legal protection at a European level. The conservatory of the existing house was assessed as unsuitable for bats and its demolition will therefore have no impacts on bats. However, if any work is carried out in the main roofspace of the building a precautionary check should be carried out by a qualified bat surveyor.

Removal or cutting back of dense vegetation could harm nesting wild birds, the eggs of which are protected under the Wildlife & Countryside Act 1981. Any removal or management of dense vegetation should therefore be carried out with care, particularly in the case of any large evergreen shrubs, should any be proposed for removal. The bird nesting season in suburban areas such as this can extend for a long period or even be year round for certain species.

It is considered that there is very minimal risk that the development can potentially harm legally protected reptiles or any other protected species of fauna, so no precautions have been recommended for other species.

PHOTOGRAPHS



1. Proposed site of new building showing mown lawn and fringe of shrubs and trees.
2. Adjacent improved lawn in front of existing house.
3. Brick wall marking northern boundary of site, and part of adjacent lawn.
4. Further view of adjacent lawn and eastern boundary of garden with fence and low bramble.
5. Mature ivy-covered Pedunculate Oak tree in corner of site (with Yew in front).
6. Mature Pedunculate Oak tree within garden, with poor ivy cover and peeling bark on one branch.

ANNEX 1: HAVANT BOROUGH COUNCIL BIODIVERSITY CHECKLIST