



ECOSYSTEMS SERVICES STATEMENT

Client: Mr. Steve Homewood

Site: Hawksfold House, Fernhurst

22.09.2023

Version 001





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Report	This report remains valid for 12 to 18 months from date of issue. The report, conclusions and recommendations are valid for current development plans only. Should this change, the report should be reviewed and, if necessary, further survey work and desk study review undertaken.		
Survey Data	Survey data are valid for 12 to 18 months from the date the survey was undertaken.		

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The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

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1. Introduction

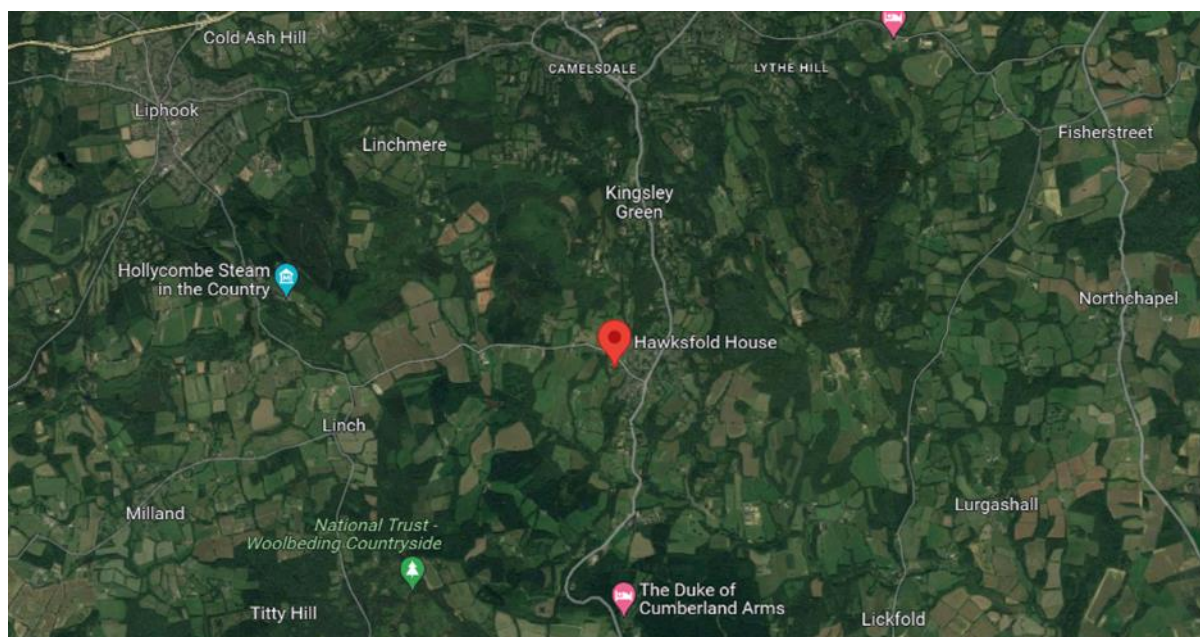
1.1 Site Details

Table 1 provides details of the site, intended as a summary of key features, derived from www.magic.gov.uk, and aLyne Ecology's Hawksfold House, Fernhurst, Preliminary Ecological Appraisal Report, Version 002, 14.08.2023.

Table 1. Site Details

Site Name	Hawksfold House, Fernhurst
Site Address	1 Hawksfold House, Hawksfold Lane, Fernhurst, Haslemere, GU27 3JW
OS Grid Reference	SU 8921 2856
Approximate Total Area of Site	3000 m ² (0.3 ha)
Landowner and Local Authority	Mr. Steve Homewood, Chichester District Council
Geology and Soils	Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
Hydrology	Impeded drainage
Nature Conservation Designations	Network Enhancement Zone 2
Other Designations	None on site
The Woodland Trust Ancient and Notable Tree Inventory	None on site
Biodiversity Opportunity Area	None on site
National Habitat Network	Semi-natural ancient woodland site
Primary Habitats	Semi-natural ancient woodland, buildings, lawns, ornamental shrubs, and trees
Protected Species	Reptiles, nesting birds, foraging/commuting bats, and European hedgehogs (<i>Erinaceus europaeus</i>)
Current Land Use	Garden space and former sweet chestnut plantation
Surrounding Habitats and Land Use	The site is situated within a parcel of semi-natural ancient woodland located on the edge of an urban area, with pastureland and woodland parcels to the south and west and residential buildings and associated gardens to the north and east
Urban Context / Locality	The site is located off Hawksfold Lane West on the western edge of Fernhurst. The A286 is located 400 m to the east of the site
Connectivity to Wider Landscape	There is a parcel of semi-natural ancient woodland located on site, which connects directly to Perry Copse to the north of the site, which are likely to support key foraging habitat for bats

An aerial plan showing the location of the site is provided below.



Site Location (© Google Earth Pro, accessed 12th September 2023).

1.2 What are Ecosystem Services?

Ecosystem Services are the benefits that people and society get from the natural environment. An ecosystems approach helps us to identify the benefits we get from nature, value them, and build them into planning, decision making, and management. Examples of Ecosystems Services, where the landscape supports people include food, raw materials, clean air, and wellbeing. The Ecosystems Services approach is imbedded into the South Downs Local Plan through Core Policy SD2, which requires applicants to consider landscape and environment in terms of its functions and the wider benefits it provides. Core Policy SD2 of the South Downs Local Plan is provided in Section 1.3 below.

1.3 Core Policy SD2: Ecosystems Services

Development proposals will be permitted where they have an overall positive impact on the ability of the natural environment to contribute goods and services. This will be achieved through the use of high-quality design, and by delivering all opportunities to:

- a) Sustainably manage land and water environments.
- b) Protect and provide more, better, and joined up natural habitats.
- c) Conserve water resources and improve water quality.
- d) Manage and mitigate the risk of flooding.
- e) Improve the National Park's resilience to, and mitigation of, climate change.
- f) Increase the ability to store carbon through new planting or other means.
- g) Conserve and enhance soils, use soils sustainably, and protect the best and most versatile agricultural land.
- h) Support the sustainable production and use of food, forestry, and raw materials.
- i) Reduce levels of pollution.
- j) Improve opportunities for peoples' health and wellbeing.
- k) Provide opportunities for access to the natural and cultural resources, which contribute to the special qualities.

Development proposals must be supported by a statement that sets out how the development proposal impacts, both positively and negatively, on ecosystem services.

1.4 Proposed Development

The development proposals, as shown in the Proposed Site Plan (*reference: Hawksfold, Proposed Site Plan, 26th May 2023, File Name: 394-21-01, One-World Design Architects*), are as follows:

- Construction of a single storey dwelling, which has been classified as developed land, sealed surface.
- Construction of a biodiverse green roof.
- Construction of footpaths and car parking spaces, which have been classified as developed land, sealed surface.
- Creation of a pond (non-priority).
- Planting of four trees.
- Planting of a native species-poor hedgerow comprising hornbeam (*Carpinus betulus*).
- Installation of a log pile hibernacula for invertebrates and reptiles.
- Installation of a Schwegler 2F bat box.
- Installation of a 2GR Schwegler nest box.
- Installation of a swift brick.
- Installation of a bee brick.
- Installation of a Royal hedgehog house.

The development will result in the loss or partial loss of the following habitats:

- Bramble scrub.
- Developed land, sealed surface.
- Other neutral grassland.

1.5 Ecological Background

1.5.1 Preliminary Ecological Appraisal

aLyne Ecology Ltd was commissioned by Mr. Steve Homewood to undertake a Preliminary Ecological Appraisal (PEA) of the habitats on site.

An online data search was carried out for the site and land within 1 km of the site boundary, comprising information on protected species, species of conservation concern, and statutory designated sites.

The field survey was conducted in July 2023 to map and classify the habitats on site using the UK Habitat Classification (UKHab; The UK Habitat Classification Working Group, May 2018). As part of the PEA, the site was assessed for its potential to support protected or notable species.

The findings of the online data search showed Perry Copse Outcrops Site of Special Scientific Interest (SSSI) is located 135 m from the site. There is a parcel of semi-natural ancient woodland on site and 20 further parcels of semi-natural ancient woodland, and three parcels of replanted ancient woodland located within 1 km of the site. There are four types of Priority Habitats located within 1 km of the site namely deciduous woodland, rivers/streams, traditional orchards, and ponds. There are four granted European Protected Species Licences (EPSLs) for roosting bats within 2 km including licences for common pipistrelles (*Pipistrellus pipistrellus*), soprano pipistrelles (*Pipistrellus pygmaeus*), serotines (*Eptesicus serotinus*), whiskered (*Myotis mystacinus*), and brown long-eared bats (*Plecotus auritus*). A great crested newt (*Triturus cristatus*) licence return with great crested newts being present was submitted approximately 275 m to the north of the site.

The habitats identified during the field surveys are as follows:

- Other neutral grassland – g3c.
- Bramble scrub – h3d.
- Buildings – u1b5.
- Other developed land – u1b6.
- Other lowland mixed deciduous woodland – w1f7.
- Hedgerow (Priority Habitat) – h2a.

Hollyberry cotoneaster (*Cotoneaster bullatus*) and rhododendron (*Rhododendron ponticum*) were recorded on site, which are listed under Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended) as invasive plant species.

The site was assessed as having suitability to support invertebrates of conservation concern, reptiles, nesting birds (including birds of conservation concern), foraging/commuting/roosting bats, and hedgehogs.

Avoidance and mitigation measures relating to ancient woodlands, Priority Habitats, trees, invasive plants, reptiles, nesting birds, bats, and hedgehogs were recommended.

No further surveys were recommended.

1.5.2 Biodiversity Net Gain Assessment

aLyne Ecology Ltd was commissioned by Mr. Steve Homewood to undertake a Biodiversity Net Gain Design Stage Assessment, based on the Biodiversity Metric 4.0 (Defra, 2023), of the proposals. The baseline biodiversity units were calculated from the PEA carried out by aLyne Ecology in July 2023. The habitat condition assessments (habitat and hedgerow) were completed by aLyne Ecology Ltd in July 2023.

Under current proposals, a biodiversity net gain of + 0.12 units (+ 36.99 %) for broad habitats and + 0.67 units (+ 100 %) for hedgerows on site can be achieved; however, the current proposals do not comply with the trading rules, i.e., habitats proposed should be like-for-like or better. Trading down should be avoided, where possible. Ideally, new, or restored habitats should aim to achieve a higher distinctiveness and habitat type, and the same condition or better. Baseline habitats on site, including other neutral grassland and bramble scrub habitats are proposed to be replaced by either habitats of lower distinctiveness or a habitat which is not like-for-like (e.g., developed land; sealed surface). This is calculated as trading down by the Biodiversity Metric.

1.6 Brief and Objectives

The brief and objectives of this Statement are as follows:

- Produce an Ecosystems Services Statement, which sets out how the development proposals impact, both positively and negatively, on Ecosystems Services.
- Produce an Ecosystems Services Statement that is proportionate to the impact of the development.

2. Ecosystems Services Statement

The following sections detail how Ecosystems Services will be incorporated into the development proposals. The following documents relating to the site have been utilised for this Statement:

- One-World Design Architects (2023) *Hawksfold, Proposed Site Plan, 26th May 2023, File Name: 394-21-01*, One-World Design Architects.

2.1 Sustainably Manage Land and Water Environments

The site comprises mainly short mown other neutral grassland, with bramble scrub and other lowland mixed deciduous woodland, which is a parcel of ancient woodland. The other neutral grassland onsite functions as a residential garden, which is mown regularly and not managed to increase floristic diversity. The Proposed Site Plan shows the proposed dwelling and wildlife pond will be largely confined to the grassland, avoiding the boundary of the existing ancient woodland parcel, which will be retained and enhanced. The proposed wildlife pond will be designed to be suitable for amphibians such as great crested newts and common toads (*Bufo bufo*) and will be planted with native aquatic plants that will be beneficial for aquatic invertebrates and pollinators. The Proposed Site Plan also shows the inclusion of a biodiverse green roof, which will increase the floristic diversity on site and provide a nectar source for pollinating insects. Therefore, the development has been designed to cause minimal ecological and landscape impacts and provide ecological enhancements.

The development will utilise a connection to the existing foul water sewer network; therefore, reducing the need for extending into and significantly increase the demand on the foul water sewer network. The proposed wildlife pond will be filled with rainwater and will naturally fluctuate in water levels, thereby reducing the demand for mains water. The proposed biodiverse green roof will be designed with a drainage system that will be connected by downpipes to water butts that will collect rainwater, which will be utilised for watering newly planted areas and thereby reducing the demand for mains water.

2.2 Protect and Provide More, Better, and Joined Up Natural Habitats

Habitat creation, as detailed in Section 1.4 has been incorporated into the development design, which will help to achieve habitat connectivity and protect existing habitats. As shown in aLyne Ecology's Biodiversity Net Gain Design Stage Assessment for the site, the proposals will result in a measurable biodiversity net gain of + 0.12 units (+ 36.99 %) for habitats and a measurable biodiversity net gain + 0.67 units (+ 100 %) for hedgerows, and therefore, complies with the South Downs National Park Biodiversity Net Gain Interim Guidance, which states at least a 20% net gain in biodiversity is required; however, the trading rules have not been satisfied.

The proposed biodiverse green roof will be planted and managed to increase the floristic diversity on site, which will provide a nectar source for pollinating insects year-round and create a stepping-stone habitat connecting to habitats in the wider landscape for invertebrates, birds, bats and other wildlife.

The proposals include the protection and enhancement of the existing parcel of ancient woodland through the following:

- An area of the semi-natural ancient woodland, which had been felled will be replanted with native species already growing on site, such as beech (*Fagus sylvestris*), English oak (*Quercus robur*), hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), sweet chestnut (*Castanea sativa*), and yew (*Taxus baccata*), in order to enhance connectivity for foraging/commuting bats and other wildlife.

- A buffer zone will be created between the development and the ancient woodland on site, comprising areas of grassland, managed to increase its floristic diversity. The buffer zones will provide protection to the woodland and the wildlife it could support.
- Materials will not be stored in or near the buffer.
- There will be no access into the buffer.

2.3 Conserve Water Resources and Improve Water Quality

Below are a set of measures, which would ensure that the proposals have a positive impact on the conservation of water resources and the maintaining of good water quality:

- Water butts connected to all rainwater downpipes of the building will be utilised for watering newly planted areas.
- The proposed wildlife pond will be filled with rainwater.

2.4 Manage and Mitigate the Risk of Flooding

The existing hydrology of the site is impeded drainage (www.magic.gov.uk); however, according to the Environment Agency website (<https://flood-map-for-planning.service.gov.uk/location>) the site is situated in Flood Zone 1, meaning there is a low probability of flooding from rivers and the sea; therefore, a Flood Risk Assessment (FRA) is not required as part of the planning application.

2.5 Improve the National Park's Resilience to, and Mitigation of, Climate Change

Please refer to Section 1.4 for recommendations relating to new native planting. The proposed dwelling will comprise timber, which will be locally sourced, and a biodiverse green roof, which will increase the floristic diversity onsite. The biodiverse green roof will also harness solar energy to cool the building during periods of high temperatures and provide an extra layer of insulation to reduce wasted heat energy in colder temperatures, which will help minimise contribution to climate change.

2.6 Increase the Ability to Store Carbon through New Planting or Other Means

Please refer to Section 1.4 for recommendations relating to new native planting.

2.7 Conserve and Enhance Soils

The ancient woodland soils on site will be avoided, retained, and enhanced. Peat-free composts and/or existing soils on site will be used for newly planted areas.

2.8 Support the Sustainable Production and Use of Food, Forestry, and Raw Materials

The building will be constructed out of locally sourced timber and recycled materials.

2.9 Reduce Levels of Pollution

External night lighting will be kept to a minimum and will be designed in accordance with Bat Conservation Trust's Bats and Artificial Lighting in the UK Guidance Note 08/23 (Bat Conservation Trust

and Institution of Lighting Professionals, 2023) and the South Downs National Park Dark Skies Technical Advice Note (South Downs National Park Authority, 2021), which includes the following:

- Avoid prolonged use of outside lighting during the period dusk to dawn, particularly during the bat active season (April to September, inclusive).
- Any security lighting should be on a motion sensor and short duration timer (1 minute).
- Lighting that is required for security or safety reasons, should use a lamp of no greater than 2000 lumens (150 Watts) and should comprise sensor activated lamps.
- LED luminaires with a warm white spectrum (<2700 Kelvin) are the preferred option and should be used where possible. Luminaires should feature peak wavelengths higher than 550 nm to minimise disturbance to bats. All luminaires should lack UV elements, metal halide and fluorescent sources should not be used.
- Lighting should be directed to where it is needed with minimal light spillage. This can be achieved by limiting the height of the lighting columns and by using as steep a downward angle as possible and/or a specialist bollard that directs the light below the horizontal plane (<90°).
- Any internal luminaires should be recessed where installed in proximity to windows to reduce glare and light spill.
- Any waymarking inground markers with a low output and with cowls should be used to delineate path edges.
- Artificial lighting should not directly illuminate any potential bat roosting features or habitats of value to foraging bats, i.e., the adjacent ancient woodland and proposed pond.

2.10 Improve Opportunities for People’s Health and Wellbeing

The proposals include a biodiverse green roof and a wildlife pond, which are designed to increase the biodiversity on site, which will provide an opportunity for access to nature. The proposals will also create suitable habitat for protected species, which will allow close access to potentially rare and declining native species. The energy efficient design of the building and the inclusion of the biodiverse green roof provides an opportunity for sustainable living and reducing the reliance on carbon-demanding energy sources.

2.11 Provide Opportunities for Access to the Natural and Cultural Resources, which Contribute to the Special Qualities

The development proposals are for the construction of a new dwelling. Therefore, this policy is not relevant to the development.

3. Conclusions

Measures detailed in Sections 2.1 to 2.11 demonstrate that the proposals meet all relevant criteria set out in Core Policy SD2 of the South Downs Local Plan.

4. References

aLyne Ecology Ltd. (2023) *Hawksfold House, Fernhurst, Preliminary Ecological Appraisal Report*, Version 002, 14.08.2023.

aLyne Ecology Ltd. (2023) *Hawksfold House, Fernhurst, Biodiversity Net Gain Design Stage Report*, Version 001, 14.08.2023.

Bat Conservation Trust. (2023). *Bats and Artificial Lighting at Night, Guidance Note 08/23*. Institution of Lighting Professionals.

Chichester District Council (2023) *The Chichester Local Plan 2021-2039: Proposed Submission*.

Oakley. D. (2018) *South Downs National Park Dark Skies Technical Advice Note, April 2018*. South Downs National Park Authority.

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South Downs National Park Authority (2019). *Ecosystem Services Technical Advice Note (non-householder)*. South Downs National Park Authority.

South Downs National Park Authority (2021). *South Downs National Park – Dark Skies Technical Advice Note, Version 2*, May 2021. South Downs National Park Authority.

Websites:

www.southdowns.gov.uk – Ecosystems Services Map

www.magic.gov.uk

www.woodlandtrust.org.uk

www.wildseed.co.uk

www.arkwildlife.co.uk

www.rspb.co.uk

www.flood-warning-information.service.gov.uk

<https://flood-map-for-planning.service.gov.uk/location>