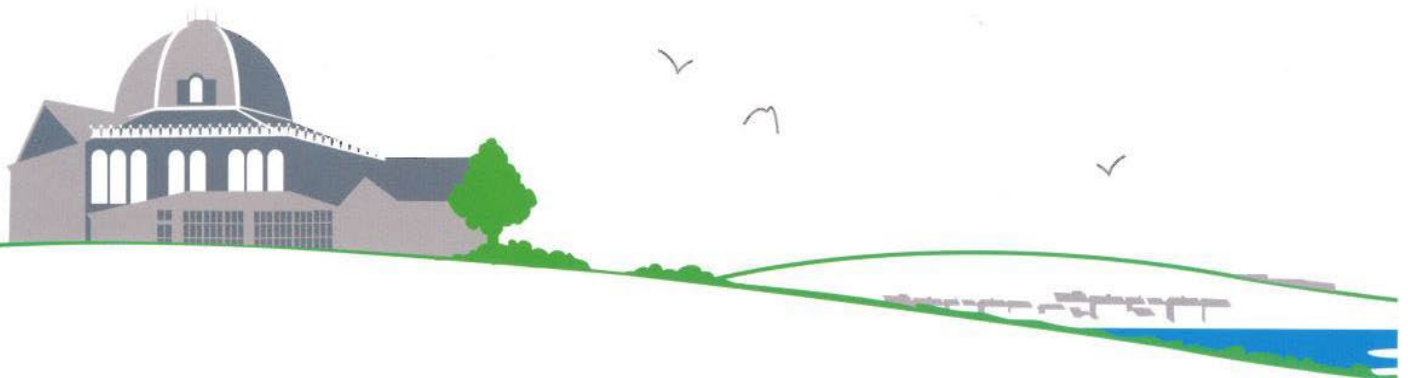




JONATHON V DAVIES
CHARTERED SURVEYORS

QUEENS ROAD, BUXTON

PRELIMINARY ECOLOGICAL APPRAISAL AND
BIODIVERSITY NET GAIN FEASIBILITY STUDY



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This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

Signed: _____



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1. INTRODUCTION

- 1.1 Penny Anderson Associates (PAA) was commissioned by Jonathon V Davies Chartered Surveyors to undertake a Preliminary Ecological Assessment (PEA) and to conduct a Biodiversity Net Gain (BNG) feasibility study for land east of 68 Queens Road, Buxton (hereafter referred to as the 'site'). The red line boundary is shown in Figure 1.
- 1.2 The methods and results for the surveys are provided within this report. Any recommendations for further ecological survey work and mitigation needed to ensure compliance with wildlife legislation and relevant planning policy are then made as appropriate.

Site Location

- 1.3 The site is located within Buxton, with immediate residential surroundings extending to the west and south, a golf course to the north and agricultural land to the east.

Legislative Context

- 1.4 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (amended).
- 1.5 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA), 1981 (as amended) and Countryside and Rights of Way (CROW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).
- 1.6 At the national level, Biodiversity 2020 (Defra 2011) forms England's national biodiversity strategy. Building on the Natural Environment White Paper¹ published in 2011, this provides a means of delivering the UK's commitments to maintaining and protecting biodiversity. Under Biodiversity 2020, the Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England as listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006 (amended).
- 1.7 More recently, the Environment Act 2021 further supports this commitment to, and strengthens the legislation in respect of, maintaining and also enhancing biodiversity in England, and Part 6 Nature and Biodiversity includes the following key areas:
- Strengthened biodiversity duty for public authorities in England;
 - Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity;
 - Local Nature Recovery Strategies to support a Nature Recovery Network;
 - Duty upon Local Authorities to consult on street tree felling;

¹ <https://www.gov.uk/government/publications/the-natural-choice-securing-the-value-of-nature>

- Strengthen woodland protection enforcement measures; and
 - Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature.
- 1.8 Finally, the National Planning Policy Framework (NPPF 2023) provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks.
- 1.9 The NPPF identifies the following principals that should be applied by local planning authorities when determining planning applications:
- a. if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b. development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;
 - c. development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
 - d. development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.
- 1.10 The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:
- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
 - recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services; and
 - minimising impacts on biodiversity and providing net gains for biodiversity including establishing coherent ecological networks that are more resilient to current and future pressures.
- 1.11 To protect and enhance biodiversity and geodiversity, plans should:
- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Biodiversity Net Gain

- 1.12 In England, biodiversity net gain is required under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This statutory framework is referred to as 'biodiversity net gain' in Planning Practice Guidance to distinguish it from other or more general biodiversity gains.
- 1.13 Under the statutory framework for BNG, subject to some exceptions, every grant of planning permission for applications submitted after 12th February 2024 (or 2nd April for small developments²) the introduction of the statutory framework, is deemed to have been granted subject to the condition that the biodiversity gain objective is met ('the biodiversity gain condition'). This objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the on-site habitat. This increase can be achieved through on-site biodiversity gains, registered off-site biodiversity gains or statutory biodiversity credits.

Protected Species

- 1.14 Summaries of the protected species legislation relevant to this site can be found in Appendix 1.

Invasive Species

- 1.15 Certain non-native species that have been introduced into the UK are regarded as being a threat to native biodiversity. Legislative measures have, therefore, been put in place to prevent the spread of these invasive species in the wild.
- 1.16 Under section 14 of the WCA, 1981 (as amended), it is illegal to introduce plants listed under Part II of Schedule 9 of the WCA into the wild or sell these species. Offences include causing the spread of viable plant material or neglecting to contain or appropriately manage non-native species.
- 1.17 Commonly introduced Schedule 9 species include non-native cotoneaster species, specifically, small-leaved cotoneaster³ (*Cotoneaster microphylla*) and wall cotoneaster (*C. horizontalis*), Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Reynoutria japonica*).

² A small development means residential development where the number of dwellings is between 1 and 9 on a site of an area 1 hectare or less, or if the number of dwellings is unknown, the site area is less than 0.5 hectares or commercial development where floor space created is less than 1,000 square metres or total site area is less than 1 hectare

³ Plant species names follow Stace 2019

2. METHODS

Desk Study

- 2.1 A request for details of protected and notable species and locally designated sites within 1km of the centre of the site was made to Derbyshire Biological Records Centre (DBRC), with data returned on 10th July 2024. Additionally, the Multi-Agency Geographic Information for the Countryside (MAGIC⁴) website was consulted for details of statutory designated sites and Priority Habitats within a 1km search area from the centre of the site. The desk study was compiled by Assistant Ecologist Rebekah Pipes⁵.
- 2.2 It is important to note that the desk study results provide only an indication of the species present in and around the site, and do not confirm current presence or absence of any species. Protected species are often under-recorded in county wildlife databases.

Preliminary Ecological Appraisal

- 2.3 A PEA was undertaken in the field by Ecologist Beth Howes on 11th July 2024. This comprised a UKHab survey and a scoping assessment for protected and notable species.
- 2.4 The PEA was undertaken in accordance with the best practice methodology as detailed by the Chartered Institute of Ecology and Environmental Management (CIEEM 2017), UK Habitat Classification System Version 2.01 (UKHab Ltd 2023) and the British Standard BS42020:2013.
- 2.5 The UKHab survey element entailed mapping and describing the habitats present within the site boundary and collating a plant species list for each of the habitats. Each plant species was assigned an abundance code using the 'DAFOR' scale (where: D = Dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare), which provides an indication of the relative abundance of each plant species present within a particular habitat. Common names and scientific names according to Stace (2019) are provided in the species list (Appendix 2). Common names only are referred to in the text.
- 2.6 The survey was 'extended' (Institute of Environmental Assessment 1995) to include notes on fauna and habitats which could potentially support protected or notable species. The presence of, or potential for, protected or notable species was noted on the field map as a Target Note (TN) during the survey.

Habitat Condition Assessment

- 2.7 Habitat condition assessments (HCA) were undertaken on each separate parcel of habitat, linear feature (line of trees) and individual tree identified during the habitat survey. The condition assessment used the 'Statutory Biodiversity Metric Condition Assessment - Technical Annex 1: Condition Assessment Sheets and Methodology'.

⁴ <https://magic.defra.gov.uk/MagicMap.aspx> (last accessed [28th February 2022])

⁵ Qualifying member of Chartered Institute of Ecology and Environmental Management (CIEEM)

Biodiversity Net Gain

Baseline (Pre-Development Calculations)

- 2.8 With the outputs of the PEA, baseline BNG scores were calculated for the site.
- 2.9 The Statutory Metric was applied, using the metric and associated guidance notes available via the Defra web pages⁶. The inputs to the Statutory Metric for the baseline assessment were:
- Habitat type;
 - Area of each habitat type (ha); and
 - Habitat condition.
- 2.10 The Metric requires a 'condition' assessment for each habitat and feature, based on the guidelines and targets provided in the methodology for the specific habitat type. Condition categories available within the Metric (which vary slightly depending on the habitat classification) range from Poor to Good, or Not Applicable where appropriate.
- 2.11 The Metric also includes a 'distinctiveness' score for each habitat. This is completed automatically by the Statutory Metric when the habitat type is selected and is based on parameters such as species-richness, diversity, rarity and the degree to which habitats support species rarely found in other habitats. There are five distinctiveness categories, ranging from Very Low to Very High.
- 2.12 Linear features, such as hedgerows and streams, are assessed separately within the methodology, including any streams or rivers within 10m of the application site boundary. The existing length of the feature is entered (in linear km) in the on-site hedge baseline spreadsheet, and on-site watercourse baseline spreadsheet, and the feature condition is selected based on the guidelines presented in the methodology. However, for this site, no streams were present within the baseline habitats.

Protected Species Assessment

- 2.13 The survey was 'extended' to include the presence, or potential presence, of protected and priority species, noting any areas of suitable habitat and the location and type of any field signs recorded. Recommendations for any further ecological survey work and mitigation needed to ensure compliance with wildlife legislation and relevant planning policy are also made.
- 2.14 The habitat within the site was assessed for its habitat quality for bat foraging and commuting. Trees within the site were also assessed for their bat roost potential during a daytime bat walkover (DBW), which formed part of the PEA. If a tree was identified as possessing one or more potential roost features (PRF) during the DBW then these trees were flagged as requiring further survey. Trees without PRF were assigned a PRF category of 'None'.
- 2.15 Trees of sufficient age/size were inspected from ground level and the types and locations of any features that appeared to provide sufficient shelter for bats were recorded, for example woodpecker holes, knot holes, crevices in deadwood or beneath loose bark and other natural fissures and cavities. Any potential indication of bat presence that could be seen was also recorded. These assessments were based on the broad criteria outlined in the tables below (after Collins 2023), combined with the professional judgement and experience of the surveyor in recognising suitable habitat features and field signs of bats.

⁶ https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides?fbclid=IwAR3t_S8djN97HZsb8H9ISdfVqDiUZJcSR7pp4Kz5zHRFK5KWoljPBImRcw