

Land off Long Lane,
Chapel-en-le-Frith

Additional Ecological Information

HPK/2022/0484



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Client High Peak Retreats

Project Title Land off Long Lane, Chapel-en-le-Frith

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Background

Rachel Hacking Ecology Ltd was commissioned in 2023 by High Peak Retreats to provide ecology consultancy in connection with a proposed development at land off Long Lane, Chapel-en-le-Frith, hereafter referred to as the 'site'. The site is located at O.S. grid reference SK 05242 79803 (see Figure 1). The site is the subject of a planning application with High Peak Borough Council (HPBC) for a proposed glamping site, to include 10 glamping units, 5 units for facilities and covered parking for 10 cars (planning application reference HPK/2022/0484).

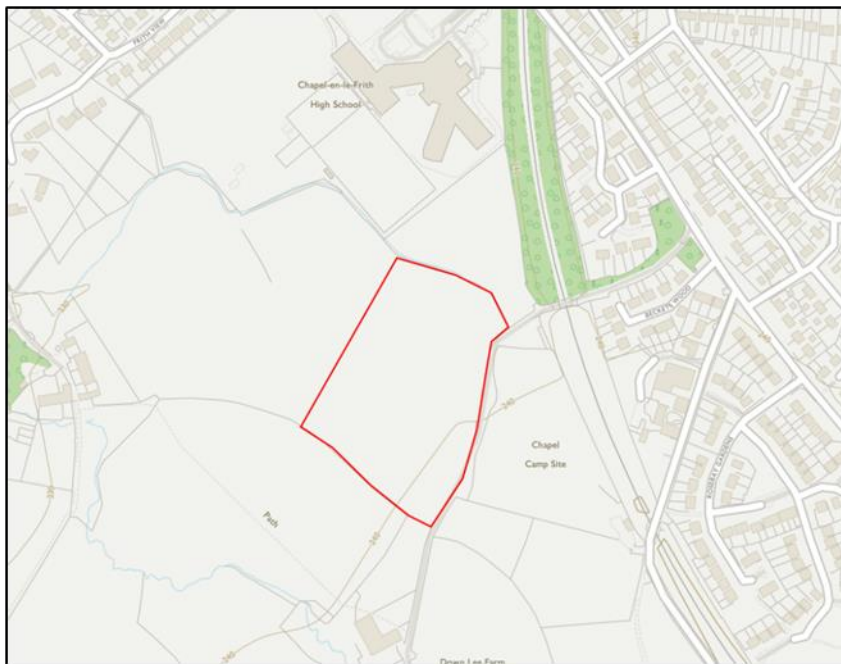


Figure 1 showing the site location

The purpose of this report is to respond to comments from Derbyshire Wildlife Trust (DWT), dated 3rd February 2023 (reference DWTHPK680). The comments stated that information was outstanding relating to two aspects of the potential ecological impacts associated with the proposed development, namely:

- 1) The use of a metric was required to quantify predicted changes in biodiversity units resulting from the proposed development.
- 2) A more thorough assessment and mitigation strategy was required to safeguard the nearby Down Lees and Barlow Farm Fields Local Wildlife Site (LWS).

Biodiversity Net Gain Assessment

A Biodiversity Net Gain (BNG) assessment was undertaken (see the accompanying DEFRA metric 4.0. calculator and summary of baseline and proposed habitats below). This predicts a net gain of 10.3% habitat units, 89.86 hedgerow units and 58.1% watercourse units. A detailed habitat management plan will be produced to ensure the proposed habitats are managed appropriately to achieve their target condition.

The baseline habitats achieve **9.31** habitat units, **0.21** hedgerow units and **0.63** watercourse units, and comprise the following:

- Modified Grassland in poor condition (the grassland fails the core criteria of having 6-8 vascular plants per m²)
- Tall Forbs in poor condition (the tall, ruderal vegetation only passes one of the three core criteria – a lack of invasive, non-native species)
- Developed Land (bare ground)
- Rural Tree in moderate condition (all to be retained).
- Two Native Hedgerows in poor condition (species-poor and gappy) (these are to be retained and enhanced)
- A dry ditch and a wet ditch in poor condition (to be retained and enhanced).

The proposed habitats achieve 5.98 habitat units with the retained habitats achieving 4.28 habitat units, meaning that overall the development achieves **10.26** habitat units, **0.39** hedgerow units and **1.00** watercourse units (see 07022_02B - Proposed Site Plan). This comprises:

- Developed Land (tracks, parking and buildings)
- Modified Grassland (amenity grassland) in poor condition
- Vegetated Garden (a growing area)
- Other Neutral Grassland (wildflower grassland within the ecology zone) in moderate condition
- Rural Tree (6 medium trees to be planted) in moderate condition
- Broadleaved Woodland (to be created as tree belts providing woodland perception of the site and to separate areas of the site) in poor condition



- Enhancement of Native Hedgerows, plugging gaps with species-rich native planting
- Enhancement of the ditches, including native species-rich planting.

LWS Assessment and Mitigation Strategy

Baseline

Down Lees and Barlow Farm Fields Local Wildlife Site ('the LWS') is located 200m southwest of the site (see Figure 2). The LWS is designated for the assemblage of ground-nesting birds it supports, including Snipe *Gallinago gallinago*, Lapwing *Vanellus vanellus* and Curlew *Numenius arquata*.



Figure 2 showing the site location (red line) in relation to the LWS (white line). Public footpaths are shown as yellow dashed lines

DWT raised concerns about the risk of disturbance to ground-nesting birds at the LWS and to a lesser degree, Brown Hare *Lepus europaeus*.

Potential Impacts

The proposed development is for a *Proposed glamping site, to include 10 glamping units, 5 units for facilities and covered parking for 10 cars.*

Potential impacts during the construction phase include:

- Noise and vibration from vehicles and machinery

Potential impacts during the operation phase include:

- Noise and light from the camp site
- Increased recreational pressure (walkers/dog-walkers)

Noise

Considering the potential impacts of noise on the bird assemblage using the LWS first, construction activities will be low-level, as described in the Design and Access Statement. It is acknowledged that noise can have an adverse effect on avian behaviour and physiology. This can include stress responses, flight or flushing responses, avoidance of noisy areas, changes in reproductive success and changes in vocal communication¹.

Brown (1990)² reported that maximum response of seabirds (flight) was observed at exposure to aircraft noise greater than 85dB, and that a minimum response such as 'head-turning' was observed at nearly all levels of exposure. An intermediate state of alertness was evident at levels just below 85dB.

Birds (and other wildlife) can become habituated to noise. Evidence of noise habituation is detailed in a report from 2003³, in which estuarine birds were observed within 25m of an active construction site and within 50-75m of wheeled excavators and showed no changes to feeding behaviour. The sound power level of a wheeled excavator is approximately 108dB. At a distance of 50-75m the sound power level would have been 62-66dB(A), so it is reasonable to assume that noise levels below 66dB(A) is unlikely to cause a significant response in birds (e.g. taking flight).

¹ Ortega, C.P. *Ornithological Monographs* Vol. 74, No. 1 (July 2012), pp.6-22.

² Brown, A. (1990) Measuring the effect of aircraft noise on sea birds. *Environmental International*, Vol. 16, pp.587-592.

³ Institute of Estuarine and Coastal Studies: Ornithological Monitoring: Annual Report: 2003.



Standard control measures to control noise levels to 65-70dB will include:

- Use of well-maintained and silenced plant and equipment
- Switching off engines on idling vehicles
- Low speed running and idling for plant
- Use of electric or hydraulic powered equipment
- If piling is required, use of continuous flight auger (CFA) techniques
- Acoustic enclosures for equipment likely to exceed 70dB(A)
- Mandatory awareness training of for contractors with regards to BS5228 and the need to minimise construction noise

As sound levels attenuate with distance, sound pressure levels of 85dB are reduced to 45dB at a distance of 100m. The sound pressure levels of normal conversation are 50-65dB. It is therefore concluded that noise from either the construction or operation phases of the proposed development will not result in any significant effects to birds using the LWS. It should also be noted that a railway line is present adjacent to the southeast boundary of the LWS and passing trains can result in sound pressure levels of 85dB.

Lighting

Regarding potential disturbance to wildlife from light associated with the proposed development, the Design and Access Statement describes the minimal low-level lighting that would be used along paths during the operation phase. At 200m distance it is inconceivable that this would affect any wildlife within the LWS.

It is considered disproportionate to require noise/curfew policies and visual landscape screening along the boundary closest to the LWS.

Footpaths

On the issue of the potential for increased recreational pressure resulting from guests accessing the LWS, there is a public right of way running through the northwest section of the LWS (see



Figure 2). The website of Downlee Wildlife Site⁴ states *“The area can be viewed from a public footpath that runs adjacent to the Buxton to Manchester railway line, from Chapel-en-le-Frith South station towards Combs. The footpath contributes to a network of pleasant and interesting local walks that are close to centres of population and are enjoyed by people of all ages and physical ability”*.

This demonstrates that the network of footpaths in the local area is already used. It is acknowledged that inappropriate use of the footpath through the LWS, such as letting dogs off leads, could result in disturbance to ground-nesting birds and other wildlife such as Brown Hare. However, the owners of the LWS use signage to alert people to this. Information on the sensitivity of nesting birds and other wildlife will be made available to guests staying at the proposed development. DWT commented that *“No guarantee can be made that users will follow such guidance”*. This is true, no guarantee can be made that people will not use a public footpath or keep their dogs on a lead in the countryside. However, this is one of the mitigation strategies that is commonly applied to reduce such impacts to European protected sites and it is entirely appropriate in this case.

DWT state that it would *“also be helpful to investigate whether the route of any footpaths/tracks could be fenced to prevent dogs entering the fields within the LWS”*. If birds within the LWS are at risk of dogs entering the fields, then this risk is already present, and fencing should be included within the management of the LWS.

Conclusion

It is concluded that the proposed development is predicted to deliver a net gain in biodiversity units and is compliant with planning policy requirements. The potential impacts to the LWS have been assessed in detail and the mitigation strategy shown to be proportionate.

⁴ <https://downleewildlifesite.com>

