

Preliminary Ecological Appraisal

Survey site:

1 West View, Brown Knoll Road, Thurstonland, HD4 6XG

Client:

David Gaunt

Survey date:

04/08/2025

Project:

This report is prepared to inform a planning application with Kirkless Council. The proposal is described as:

The creation of a detached building with an associated area of hardstanding.

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024](#).

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Site Location and Context

The survey site is consisting of two plots centred on National Grid References SE 17169 10973 and SE 17327 11244 and has an area of approximately 0.18ha consisting of two areas of modified grassland. The site is situated within a rural context approximately 2.3km Thongsbridge town centre. As a result, the site is surrounded by areas of grassland, with a combination of drystone walls and hedgerow boundaries, small areas of woodland are also present within the surrounding landscape. These habitats persisting into the wider landscape with larger areas of woodland present. Such features likely enhance the area for a variety of species. A site location plan is provided in appendix 2.

Survey Details

The site survey was undertaken by David Hill-Chambers MSc, BSc (Hons), Graduate Ecologist, Accredited agent of Natural England Bat Licence Number 2024-12491-CL18-BAT

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain(mm)
04/08/2025	18	88	100	15	None

Executive Summary

The site comprises two parcels of species-poor modified grassland in poor condition, with one dry-stone wall along the boundary of plot 2. The proposed development will result in the loss of one parcel to accommodate a detached building and hardstanding, while the second parcel will be retained and enhanced. The habitats on site are of low ecological value, and the loss is considered to have a negligible impact due to the availability of higher-quality habitats within the surrounding rural landscape.

No evidence of protected species was recorded on-site, though the area offers moderate suitability for foraging and commuting bats due to its connectivity with nearby woodland and linear features. Habitats were assessed as suboptimal for reptiles and amphibians, and no signs of badgers, dormice, riparian species or nesting birds were identified. Precautionary working methods are recommended during clearance to minimise risks to wildlife. Enhancements including integrated bat and bird boxes, fruiting trees, brash piles, and hedgehog gaps are advised. The development must also demonstrate a minimum 10% biodiversity net gain in line with the Environment Act (2021).

Survey limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

There were no specific limitations to the survey.

<p>Ecological Survey Factor</p> <p>Conclusion, Impact or Recommendations</p>	<p>Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.</p>
<p>Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3 and photos in appendix 4).</p> <p>Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).</p>	
<p><i>Summary of Survey Findings</i></p> <p><i>(UKHab codes used)</i></p>	<p>The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km.</p> <p>On-site habitat descriptions</p> <p>g4 100 – Modified grassland, grazed</p> <p>The two areas of grassland have been classified as modified grassland currently using for grazing. Plot 1 contains the area in which the development will take place whilst plot 2 is designated for habitat enhancement. Species composition between the two parcels is the same and consisted of the below species:</p> <ul style="list-style-type: none"> • Perennial Ryegrass <i>Lolium perenne</i> (D) • White Clover <i>Trifolium repens</i> (F) • Common Dandelion <i>Taraxacum officinale</i> (O) • Compact Rush <i>Juncus conglomeratus</i> (R) • Foxglove <i>Digitalis purpurea</i> (R) • Red Clover <i>Trifolium pratense</i> (R) • Meadow Grass spp <i>Poa spp.</i> (A) • Creeping Buttercup <i>Ranunculus repens</i> (O) • Common Nettle <i>Urtica dioica</i> (O) • Bramble <i>Rubus fruticosus agg.</i> (R) • Creeping Thistle <i>Cirsium arvense</i> (R)

	<p>Within both habitat parcels, less than 6 vascular plant species were present per square metre with the majority of the species present along the dry-stone wall. The sward height was uniformly short throughout given the grazing pressure the grassland experience. No areas of bare ground or scrub were present, in addition to no invasive species or areas of adverse anthropogenic damage. Both parcels are therefore considered to be in poor condition.</p> <p>u1e – Built linear features</p> <p>Present along the boundary of plot 2 is a stone wall. The wall is built using flat, roughly coursed sedimentary stone, likely sandstone or slate, laid without mortar in a traditional dry-stone style. The stones are stacked in horizontal layers with a generally tight fit, relying on weight and friction for stability.</p> <p>Local notable habitats</p> <p>Patches of ancient deciduous woodland are present in close proximity to the site, with the nearest located approximately 0.4km to the east. Additional large parcels are situated in all directions within the wider landscape. A large area of lowland meadow lies ~0.6km to the east, and a single parcel of lowland dry acid grassland is located ~1.9km to the northwest. These habitats are all listed as priority habitats under Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006. Their presence within the local landscape increases the ecological value of the surrounding area and may support a variety of protected and notable species.</p>
<i>Foreseen Impacts</i>	<p>On-site habitats</p> <p>The proposed development will result in the loss of modified grassland plot 1. This could result in a net loss in biodiversity at the site.</p> <p>Notable habitats</p> <p>No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats.</p>
<i>Recommendations</i>	<p>On-site habitats</p> <p>Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).</p>

	<p>Notable habitats</p> <p>None required.</p> <p>Biodiversity net gain</p> <p>The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.</p>
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	<p>On-site designations</p> <p>The site is not subject to any designation.</p> <p>Statutory designated sites (within 2km)</p> <p>There are no known statutory sites within 2km of the site.</p> <p>Non-statutory designated sites</p> <p>The presence of non-statutory designated sites within 2km of the site cannot be established without data from West Yorkshire Ecology Records Centre Name.</p>
<i>Foreseen Impacts</i>	<p>On-site designations</p> <p>No impacts foreseen.</p> <p>Statutory and non-statutory designated sites</p> <p>No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known).</p>

<i>Recommendations</i>	<p>On-site designations None required.</p> <p>Statutory and non-statutory designated sites None required.</p>										
Invasive / Non-native species											
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.										
<i>Foreseen Impacts</i>	N/A										
<i>Recommendations</i>	No further surveys but remain vigilant										
Invertebrates											
<i>Summary of Survey Findings</i>	The habitats present on-site, including grassland and drystone wall, likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.										
<i>Foreseen Impacts</i>	An area of modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.										
<i>Recommendations</i>	No further surveys.										
Bats											
<i>Summary of Survey Findings</i>	<p>EPSL data</p> <p>A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are 2 EPSLs within a 2km radius of site as detailed below:</p> <table border="1" data-bbox="504 1252 2094 1364"> <thead> <tr> <th>EPSL reference</th> <th>Bat species affected</th> <th>Distance from site</th> <th>Impacts allowed by licence</th> </tr> </thead> <tbody> <tr> <td>2017-30682-EPS-MIT</td> <td>Common Pipistrelle</td> <td>1.45km northeast</td> <td>Destruction of a resting place</td> </tr> </tbody> </table>			EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2017-30682-EPS-MIT	Common Pipistrelle	1.45km northeast	Destruction of a resting place
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2017-30682-EPS-MIT	Common Pipistrelle	1.45km northeast	Destruction of a resting place								

	EPSM2012-5385	Brown Long eared and Common Pipistrelle	1.55km northeast	Destruction of a breeding site Destruction of a resting place
<i>Foreseen Impacts</i>	<p>Foraging and commuting habitat</p> <p>Habitats recorded on site and within the immediate surroundings are assessed to provide foraging and commuting opportunities for bats in the form of species-poor modified grassland on site and the arable land, scattered scrub, hedgerows and woodland within the surrounding landscape. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Most notably, the hedgerows on site are mature and extend beyond the site adding to the continuity of vegetated linear features present in the wider landscape. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites. The number of areas of ancient woodland in the area also increase the likelihood of local bat populations foraging on site. Therefore, the site is assessment to provide moderate suitability for foraging and commuting bats.</p> <p>Roosting habitat</p> <p>No buildings are present on site. The Hawthorn tree located in grassland plot 2 is young and contains no ecological feature which could support roosting bats.</p>			
<i>Recommendations</i>	<p>Foraging and commuting habitat</p> <p>No further surveys are required.</p>			

	<p>Artificial lighting</p> <p>None required.</p> <p>Suggested biodiversity enhancements</p> <p>The installation of two bat boxes at the site will provide additional roosting habitat for bats.</p> <p>The bat boxes will be incorporated into the fabric of the new building. They will be suitable for pipistrelles (which have been identified locally through EPSL data). Suitable bat boxes include Habibat Bat Box, Ibstock Enclosed Bat Box or similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.</p>
Birds	
<i>Summary of Survey Findings</i>	<p>Trees and vegetation</p> <p>No bird nests were identified within the areas of modified grasslands. None are considered suitable for ground nesting birds given the short sward height. They do, however, offer nest-building resources for birds.</p> <p>Barn owls</p> <p>The site does not appear to provide any suitable nesting sites for barn owls.</p> <p>Overwintering birds</p> <p>Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.</p>
<i>Foreseen Impacts</i>	<p>Trees and Vegetations</p> <p>No impacts are anticipated on nesting birds as a result of the proposed development.</p>

	<p>Barn owls None foreseen.</p> <p>Overwintering birds None foreseen.</p>
<i>Recommendations</i>	<p>Trees and Vegetation None required.</p> <p>Barn owls None required.</p> <p>Overwintering birds None required.</p> <p>Suggested biodiversity enhancements The installation of a minimum of two bird boxes on retained or newly created buildings will provide additional nesting habitat for birds e.g.</p> <ul style="list-style-type: none"> • Schwegler No 17 Swift Nest Box (buildings) • Schwegler 1SP Sparrow Terrace (buildings) • Schwegler 1B Nest Boxes (trees) • Schwegler 2H Robin Boxes (trees) • Woodstone Nest Box (buildings or trees) <p>Or a similar alternative brand.</p>

	Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction.
Reptiles	
<i>Summary of Survey Findings</i>	<p>EPSL data</p> <p>A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site.</p> <p>Habitat suitability</p> <p>The areas of modified grassland on site offer sub-optimal opportunities for reptiles given the lack of a varied sward height or areas of scrub which would offer refuge for these species. The dry stone wall however offer opportunities for basking, commuting and sheltering reptiles given the numerous gaps between the stonework. The site is situated within a rural location where reptiles are likely active especially within the surrounding woodlands with no barriers limiting their dispersal on site.</p> <p>Wider landscape</p> <p>The adjacent sections ancient woodland are of elevated ecological value within the wider landscape and may represent important resources for local reptile populations. These adjacent habitats provide optimal foraging, commuting, and refuge opportunities for reptiles and are well connected to further suitable habitat in the wider landscape. The presence of reptiles utilising these adjacent habitats cannot be discounted.</p>
<i>Foreseen Impacts</i>	Areas of modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.
<i>Recommendations</i>	<p>A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:</p> <ul style="list-style-type: none"> • Vegetation will be maintained at a short sward (5cm) to discourage reptiles. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.

	<ul style="list-style-type: none"> • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist. <p>Suggested biodiversity enhancements</p> <p>The site could be enhanced for reptiles' post-development with the inclusion of log piles (created from felled materials) and planting of areas of native shrubs, to provide sheltering opportunities.</p>
Amphibians	
<i>Summary of Survey Findings</i>	<p>EPSL and survey data</p> <p>A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site.</p> <p>Aquatic habitat suitability (including ponds within 500m)</p> <p>Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001).</p> <p>No ponds on site or within 500m</p> <p>No ponds are present on site or within 500m of the site.</p>

	<p>Terrestrial habitat suitability</p> <p>Areas of grassland are unlikely to provide foraging and sheltering opportunities for amphibians. No hibernation opportunities were identified on-site.</p>
<i>Foreseen Impacts</i>	Given the lack of suitably connected breeding ponds within 500m of the site, the presence of GCN on-site is considered unlikely and therefore impacts to amphibians as a result of the proposed development are deemed to be acceptably low.
<i>Recommendations</i>	None required.
Badger	
<i>Summary of Survey Findings</i>	No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting trees/scrub. The surrounding habitats however, most notably the ancient woodland offer opportunities for foraging and sett excavation, with no barrier between them and the site, therefore badgers may use the site for foraging and commuting areas.
<i>Foreseen Impacts</i>	No works will be undertaken within 30m of a badger sett. Areas of modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.
<i>Recommendations</i>	<p>Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures:</p> <ul style="list-style-type: none"> • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. <p>In the unlikely event that a badger sett is identified, works must cease and advice must be sought from a suitably qualified ecologist.</p>

	<p>Suggested biodiversity enhancements</p> <p>Planting fruit bearing trees and species-rich grassland to increase foraging opportunities for badgers.</p>
Riparian animals	
<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	<p>EPSL data</p> <p>A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site.</p> <p>Habitat suitability</p> <p>The site lies outside of the know current range for hazel dormice and there are no suitable habitats within the development area. As such it is considered likely that hazel dormice are absent from site.</p>
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	Areas of modified grassland provides limited foraging and commuting opportunities for hedgehogs, with ancient woodland habitat nearby foraging greater ecological value in the surround landscape for foraging and sheltering reptiles.
<i>Foreseen Impacts</i>	No impacts are anticipated on hedgehogs as a result of the proposed development.
<i>Recommendations</i>	None required.

Suggested biodiversity enhancements

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs:

- Planting fruit bearing trees and species-rich grassland to increase foraging opportunities.
- Creation of brash piles or installation of hedgehog houses in shady areas.
- Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.

Appendix 1: Survey/Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan

JE = DA Gaunt Proposed Cattle Building at 1 West View, Brown's Knoll Road, Thurstonland,
HD4 6XG
Location Plan 1 : 3000 @ A4 June 2025



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Appendix 4: Habitat Photos



Image 1: Modified grassland (Plot 1)



Image 2: Modified grassland (Plot 2)



Image 3: Drystone Wall within Plot 2



Image 4: Developed land, sealed surface within Plot 1

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Version control			
Status	Issue	Name	Date
Draft	0.1	David Hill-Chambers BSc, MSc (Hons), Graduate Ecologist	06/08/2025
Final	1.0	David Hill-Chambers BSc, MSc (Hons), Graduate Ecologist	06/08/2025