

# PRELIMINARY ECOLOGICAL APPRAISAL AND BIODIVERSITY METRIC

## LAND AT HUDEGATE FARM, MIDDLETON-IN-TEESDALE, DL12 0QR



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Rachel Hepburn, ACIEEM rachel@durhamecology.com www.durhamecology.com

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Ecology surveys are carried out in good faith, to the relevant professional guidelines. Where variation from these guidelines is necessary, this is outlined in the report. Any comments regarding condition of buildings or trees are in relation to the use of the building/tree by bats and birds, and should not be considered as a building survey or arboricultural opinion on the condition of those features.

The client should be aware that the mitigation recommendations in ecology reports are often translated directly into planning conditions, and as such these should be studied closely and agreed with any contractors in advance of site works commencing.

It is the client's responsibility to commission, in writing, any additional survey effort/licence requirements detailed within this report with RH Ecological Services.

Mitigation recommendations should be clearly marked on the Architect's Plans or included in any Method Statements submitted with any planning or other consent.

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# Preliminary Ecological Appraisal and Biodiversity Metric - Land at Hudegate Farm, Middleton-in-Teesdale, DL12 0QR

### **Summary**

A Preliminary Ecological Appraisal was carried out to inform a planning application for the creation of 4 self-contained holiday pods on land to the south of Hudegate Farm, Middleton-in-Teesdale (NY 94078 25741). No planning application reference is currently available.

Land within the development area is of low ecological value, with habitats present being common and widespread in the local area. It is bounded by dry-stone walls and fencing.

- No existing buildings on site are affected by the proposals and these are not within the red line boundary and therefore were not included in the assessment.
- There are limited opportunities for nesting birds within the development site, however they
  may nest on nearby buildings.
- No other signs of protected species such as badger or red squirrel were noted within 50 metres of the development site.
- A small young oak tree planted by the owner is present within the development site and will be retained. Root Protection Measures should be put in place prior to construction.
- There are no watercourses within 100 metres and therefore otter and water vole are considered absent from the site.
- Bats may forage over the site.
- Hedgehog may be present on site.
- The site lies within the North Pennines AONB and there are 8 additional Designated
  [wildlife] Sites within 2km, the closest being ~440 metres from the site. The site falls within
  the SSSI Impact Risk Zones, although no impacts are expected, as long as the septic
  tank/sewage treatment system with associated reedbed for the discharge of waste
  conforms to the latest guidance and regulations.
- There are no Priority Habitats within the development site. Good quality semi-improved grassland Priority Habitat is located approximately 6 metres north, beyond the road.

Due to the small-scale of the development no ecological records have been sought at this stage.

A biodiversity metric (Defra Metric Version 3.0) was used. The Metric is a habitat-based approach to determining a proxy biodiversity value. It uses a calculation that takes into account the importance of these features for nature including size, ecological condition, location and proximity to nearby 'connecting' features. The Metric enables assessments to be made of the present and forecast future biodiversity value of a site. Calculations are explained in **appendix 3**.

Site enhancement measures are provided which aims at ensuring No Net Loss of Biodiversity to the site as a result of the proposed development. Habitat loss within the red line boundary will be compensated for by the creation of the following:

- Wildflower planting (minimum 0.1ha).
- Trees and shrubs landscaping features.
- Reedbed to support septic tank system.

The Biodiversity calculator shows this habitat creation will result in a Net Gain of Habitat.

Bat and bird boxes are recommended to be erected on site.

A pollution prevention plan should be put in place during the construction phase.

Any site clearance works should be undertaken outside the bird breeding season (March-August inclusive) unless the site is checked within 48 hours prior to works commencing. Any nests present should be allowed to remain undisturbed until the young have fledged.

Impacts are predicted to be minimal and small-scale. <u>Any potential impacts can be suitably dealt with via a Precautionary Working Method Statement (appendix 1)</u>. These should be conditioned as part of a planning application.

An updated assessment will be required should work not commence by December 2023.

### 1. Introduction and proposed works

The proposal is for the creation of 4 self-contained holiday pods on land to the south of Hudegate Farm, Middleton-in-Teesdale (NY 94078 25741). No planning application reference is currently available. The approximate development area is 0.6ha.

The site location is shown in figure 1 below, with plans shown in figure 2.



Figure 1. Site map - aerial view1.

<sup>&</sup>lt;sup>1</sup> Reproduced with permission from Google Earth (2021).



Figure 2. Proposed site plan.

### 2. Relevant legislation

The following principal protected species were considered in this report:

- Bats
- Birds
- Badger
- Flora
- Non-native species
- Red squirrel
- Trees

The applicable legislation and policies with regard to bats and birds are:

- Conservation of Habitats and Species Regulations (2017)
- Countryside and Rights of Way Act (2000)
- Directive79/409/EEC on the Conservation of Wild Birds 'The Birds Directive'
- Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora –
   'The Habitats Directive'
- National Planning Policy Framework (NPPF)
- Natura 2000
- Natural Environment and Rural Communities Act (2006)
- Protection of Badgers Act (1992)
- Wildlife and Countryside Act (1981)

Further details can be found in appendix 2.

### 3. Methodology

### 3.1 Desktop survey

The area was surveyed using Ordnance Survey Explorer maps (1:25,000 scale) and Google Earth Pro with habitat features of value to bats such as watercourses, woodland and hedgerows noted.

Natural England's 'Magic on the Map' website was accessed for details of the citations for the designated sites and EPS licensing. The JNCC website<sup>2</sup> and Natural England websites provided further information on site designations.

Due to the habitats on site and nature of the development no ecological records have been sought at this stage. This decision was made based on guidance produced by CIEEM in 2016 *Guidelines to Accessing and Using Biodiversity Data*. This is quoted from below:

"If a data search is not undertaken, a statement must be provided that clearly explains why it is not required. This statement should ideally be agreed with the LPA prior to preparing the survey report. It may be considered that the full search is not needed in the following situations:

- 1. Pre-commencement consultation and agreement with the LERC and/or local authority ecologist.
- 2. Unreasonable delay in provision of information / data (i.e. more than 10 15 working days).
- 3. Low impact or small-scale development (e.g. by size, extent, duration of works, magnitude or locality) more information provided below.
- 4. Single-species surveys, where a survey undertaken at the correct time of year and following an appropriate methodology confirms likely absence."

Natural England's 'Magic on the Map' website was accessed for details of the citations for the designated sites and EPS licensing. The JNCC website and Natural England websites provided further information on site designations.

<sup>&</sup>lt;sup>2</sup> http://jncc.defra.gov.uk

### 3.2 Daylight assessment

The daylight assessment, a 'Preliminary Ecological Appraisal' was carried out **6**<sup>th</sup> **December 2021**. This was conducted according to the Chartered Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal (CIEEM, 2012).

The weather was 3°C, mostly dry with occasional rain showers.

The surveyor assessed the site for signs of bats, birds and other protected species. Access was available to the whole site.

The surveyor assessed the site and adjacent habitats for signs of a range of species including flora, bats, other mammals and birds.

An area a minimum distance of 50 metres surrounding the site was checked for signs of any wildlife using the site, with the key indicators listed below:

- Tracks, prints, live or dead animals, droppings, fur/hair, feeding remains (all mammals).
- Setts or snuffle holes, clear tunnels under boundaries (badger).
- Suitable bat roosting features such as gaps in stonework in buildings/walls, deadwood or limb holes in trees.
- Signs and potential for protected species bats, badger, water vole etc.
- Nests or singing/displaying birds.
- · Rare flora species.
- Areas of vegetation were noted and any features such as trees or hedgerows.
- Any trees and scrub were assessed from ground level with binoculars to look for signs of nesting birds/potential roost features with regard to bats.

The surveyor used a headtorch, handheld torch, binoculars and inspection camera (endoscope) with photographic functionality.

### 3.3 Biodiversity Metric

The calculation has been completed in accordance with the DEFRA Biodiversity 3.0 and is based on the site visit undertaken by RH Ecological Services in December 2021.

The DEFRA Biodiversity 3.0 is designed to provide ecologists, developers, planners and other interested parties with a means of assessing changes in biodiversity value (losses or gains) brought about by development or changes in land management, including those through proposed development.

The Metric is a habitat-based approach to determining a proxy biodiversity value. It uses a calculation that takes into account the importance of these features for nature including size, ecological condition, location and proximity to nearby 'connecting' features. The Metric enables assessments to be made of the present and forecast future biodiversity value of a site.

The calculations of the Metric will be passed onto the Local Planning Authority, who will determine if appropriate compensation and/or site enhancement measures proposed are appropriate and if any additional financial offsetting contributions are required. Such contributions are used to fund biodiversity site management or measures away from the development site. Financial offsetting is often secured *via* a Section 106 agreement with the Local Planning Authority.

Any site management measures detailed within the planning consent may require attendance on site/additional survey work within the operational use of the site, often between 10-25 years post development by a suitably qualified ecologist to ensure such measures are being met and to tailor requirements, if needed.

The 'Small Sites Metric' may have been more appropriate over the full version (3.0) for the following reasons, however the footprint of the site was over 0.5ha.

A minimum of a 10% Net Gain of Habitats is looked to be achieved.

### 3.4 Surveyor

The daylight site visit and report were compiled by Rachel Hepburn, an experienced ecologist and an associate member of the CIEEM since 2013 with over 14 years' experience in ecological surveying. She holds Natural England Licences for bat surveys (2015-12969-CLS-CLS) and great crested newt surveys (2016-19907-CLS-CLS).

### 4. Site description

The development site (NY 94078 25741) comprises a grassland field to the south of Hudegate Farm, grazed by sheep with ducks and chickens also present. Dry-stone walls are present along the eastern, western and southern boundaries and a post-and-wire fence present along the northern field boundary.

Part of the redline boundary is an area of hardstanding, pebbled areas and encroaching scrub/flora where the holiday accommodation will access the site through Hudegate Farm at the northern end of the site.

- The area is rural with grassland fields surrounding the development site.
- The main area of the village of Middleton-in-Teesdale lies approximately 450 metres south east.
- Two large areas of woodland lie ~250 metres north east and 480 metres north east.
- The River Tees, lined with trees, flows ~130 metres south beyond the B6277 road.



Figure 3. Approximately 2km surrounding the site<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> Reproduced with permission from Google Earth (2021).

### 5. Desktop survey

### **5.1 Designated Sites**

Designated [wildlife] Sites were checked on 'MAGiC on the Map'<sup>4</sup>. The site lies within the North Pennines AONB and there are 8 additional Designated [wildlife] Sites within 2km, the closest being approximately 440 metres from the site.

Designated Site	Proximity
North Pennines Area of Outstanding Natural Beauty (AONB)	The site lies within the AONB
Middle Side and Stonygill Meadows Site of Special Scientific Interest (SSSI)	~440 metres north west
North Pennines Dales Meadows Special Area of Conservation (SAC)	~440 metres north west
Middle Crossthwaite SSSI	~625 metres south west
North Pennine Moors Special Protection Area (SPA)	~625 metres south
Upper Teesdale SSSI	~625 metres south
Teesdale Allotments SSSI	~1.13km north west
Middleton Quarry SSSI	~1.2km south east
Park End Wood SSSI	~1.5km west

<sup>4</sup> magic.defra.gov.uk

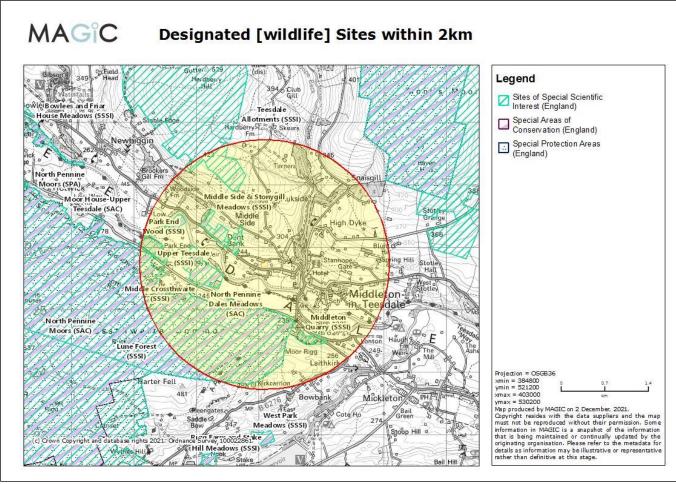


Figure 4. Statutory Designated [wildlife] Sites within 2km.

The **North Pennines AONB** is also a UNESCO Global Geopark. It is a stunning landscape of open heather moors and peatlands, dales and hay meadows, upland rivers, woods, areas with imprints of a mining and industrial past, birds, animals and plants.

### The North Pennines:

- has 40% of the UK's upland hay meadows.
- contains 30% of England's upland heathland and 27% of its blanket bog.
- is home to 80% of England's black grouse.
- is a place to see short-eared owl, ring ouzel, snipe and redshank.
- has important habitats 36% of the AONB is designated as SSSIs.
- has red squirrels, otters and rare arctic alpine plants.
- is the upland England's hotspot for breeding wading birds.
- enjoys peace, tranquillity and fabulous night skies.
- boasts England's biggest waterfall High Force in Upper Teesdale.

**Middle Side and Stonygill Meadows SSSI** are a series of south-facing, species-rich northern hay meadows, managed by traditional methods. This habitat is now largely restricted to parts of the Yorkshire and Durham Dales, and is increasingly threatened by agricultural intensification, particularly an increased use of inorganic fertilisers and a change in management to silage production. The majority of the area is composed of a diverse range of plant species typical of northern hay meadows.

The **North Pennines Dales Meadows SAC** are Northern Atlantic wet heaths with *Erica tetralix* communities that occur throughout the UK but are highly localised in parts of southern and central England. Wet heaths become increasingly extensive in the cool and wet north and west. However, the area covered by wet heath is significantly smaller than that covered by Annex I habitat - Blanket bogs or dry heath.

**Middle Crossthwaite** SSSI in Upper Teesdale comprises a complex mosaic of species-rich northern hay meadows, upland wood pasture, and areas with base-rich flushes. These habitats have a restricted distribution, the former occurring largely in parts of the Yorkshire and Durham Dales. Agricultural improvement through drainage and use of inorganic fertilisers threaten these communities. The meadows are some of the most species-rich within Upper Teesdale and support a wide range of grasses. Other habitats present include woodpasture and wetter areas.

The **North Pennine Moors SPA** includes parts of the Pennine moorland massif between the Tyne Gap (Hexham) and the Ribble-Aire corridor (Skipton). It encompasses extensive tracts of semi-natural moorland habitats including upland heath and blanket bog.

**Upper Teesdale SSSI** is an extensive upland area within the North Pennines which contains a number of nationally rare habitat types as well as a rich variety of representative habitats and associated plant and animal communities. The site includes enclosed hay meadows and pastures in the dale bottom as well as large tracts of moorland and mountain and ranges from 265 metres AOD at Wynch Bridge to 790 metres AOD on Mickle Fell.

Upper Teesdale is one of the most important botanical sites in Britain supporting a flora exceptionally rich in nationally rare species and including a relic arctic-alpine element. There is a diverse avifauna with internationally important breeding populations of wading birds, and a number of rare invertebrate species are present. The site also includes a series of locations of national geological importance.

The rare plants found here are often referred to as the 'Teesdale Assemblage' with several species found nowhere else in England, often quite Alpine in nature.

There are a number of exposures of whin sill, gritstones and limestones which form cliffs and screes in places.

Other habitats within the site include dry grasslands, sedge-dominated flush systems, a range of open moorland vegetation types occur reflecting ecological, geological and management differences, calcicolous, neutral and acidic grasslands

Over 50 species of birds breed in Upper Teesdale with typical communities of moorland, upland grassland, woodland and streamside being represented. Of greatest importance are the populations of wading birds and birds of prey. Particularly high densities of golden plover, dunlin, redshank, snipe, lapwing and curlew are recorded. The site is important for merlin, peregrine and short-eared owl and there is a strong population of black grouse. Other more local species occurring here include, ring ouzel, raven, twite and stonechat. Some 10 nationally rare and endangered or vulnerable invertebrate species are known from Upper Teesdale as well as over 60 nationally scarce species, including the northern dart and slender striped rustic moths. The mollusc (*Vertigo genesii*), an arctic species, was discovered there in 1970 and is otherwise unknown from Britain.

Much of this site was formerly known as, and part of, Upper Teesdale and Appleby Fells SSSI.

Teesdale Allotments SSSI forms part of an extensive area of enclosed upland grazing in two blocks among a larger area of rough grazing on the north side of the Tees Valley near Middleton-in-Teesdale and are of national importance for their breeding bird assemblage. The bird community includes lapwing, snipe, redshank, curlew, golden plover and black grouse, all species which with the exception of curlew are declining nationally due to changes in land use, particularly agricultural intensification. In terms of breeding wader densities the populations in Teesdale District of Durham are the most significant in the uplands of England and the Teesdale Allotments with the Upper Teesdale SSSI and parts of the tributary valleys of the Lune and Balder are the most important areas for these birds. Outside the North Pennine dales, important concentrations are restricted to a few sites in the lowlands specifically managed for their bird populations.

**Middleton Quarry SSSI** is an abandoned mineral working on the Whin Sill of Upper Teesdale which has been naturally recolonised by a wide range of vegetation types. Open water, soligenous mire and fen vegetation on the quarry floor are especially notable as such habitats are uncommon in County Durham. Willow scrub, acid, neutral and base-rich grasslands, tall herb and fern communities add to the biological diversity of the site, which also supports a range of plants usually found on limestone soils but found here growing on igneous dolorite rock.

**Park End Wood SSSI** is situated upon a low hill of Whin Sill rock in Upper Teesdale. The hill slopes are clothed by birch woodland giving way to acid grassland on the more intensively grazed hill top. At the base of the hill alder woodland and species-rich fen occur on poorly drained soils.

The breeding bird community includes redstart and pied flycatcher.

The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI). Potential impacts are discussed in the table below:

Category	Risk	Potential impact according to DEFRA's 'Magic on the Map' <sup>5</sup>
Infrastructure	N/A	Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
Wind and solar energy	N/A	Wind turbines.
Minerals, oil and gas	N/A	Planning applications for quarries.
Residential	N/A	Residential development of 100 units or more.
Rural residential	N/A	Any residential development of 50 or more houses outside existing settlements/urban areas.
Air pollution	N/A	Any development that could cause air pollution (including industrial/commercial processes, livestock and poultry units, slurry lagoons and digestate stores, manure stores).
Combustion	N/A	All general combustion processes.
Waste	N/A	Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management.
Composting	N/A	Any composting proposal.
Discharges	See below	Any discharge of water or liquid waste of more than 20m³/day to ground ( <i>i.e.</i> to seep away) or to surface water, such as a beck or stream.
Water supply	N/A	Large infrastructure such as warehousing / industry where net additional gross internal floorspace is >1,000m² or any development needing its own water supply.

**Discharges** – the client is proposing a septic tank/sewage treatment system with associated reedbed. The client should ensure this conforms to the latest guidance and regulations.

<sup>&</sup>lt;sup>5</sup> Natural England (2018) 'Magic on the Map'

### **5.2** Priority Habitats

'MAGiC on the Map' was checked for Priority Habitats (Habitats of Principal Importance). These are habitats listed under Section 41 of the Natural Environment and Rural Communities Act 2006.

Priority Habitats are listed in the table below. No impacts on these habitats is expected.

Priority Habitat	Proximity
Good quality semi-improved grassland	~6 metres north (beyond road)
Ancient and semi-natural woodland	~220 metres south west (beyond River Tees)
Upland hay meadow	~245 metres north west
Woodpasture and parkland BAP	~260 metres east
Deciduous woodland	~550 metres north east
Lowland fens	~640 metres south
Lowland meadow	~700 metres south west
Grass moorland	~875 metres south west
Open Mosaic Habitat on Previously Developed Land <sup>6</sup>	~1.3km south west
Lowland heathland	~1.6km west
Upland heathland	~1.8km west
Blanket bog	~1.8km south west

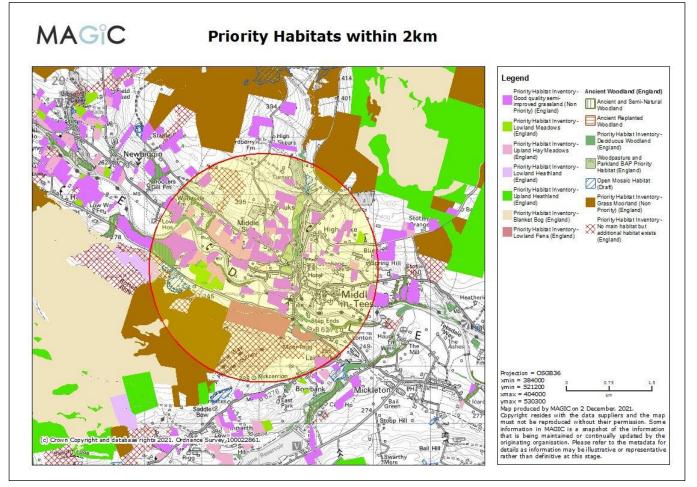


Figure 5. Priority Habitats.

<sup>&</sup>lt;sup>6</sup> Draft mapping.

### 5.3 Species records

Due to the habitats on site and nature of the development no ecological records have been sought at this stage. This is due to the small-scale and low impact of the development.

'MAGiC on the Map' was checked for Endangered Protected Species Licence records, which brought back no results. A search for Natural England great crested newt (GCN) licence returns also brought back no results.

Records from the Natural England 'Great Crested Newt Pond Surveys 2017 – 2019' are shown below:

Year of survey	2019	2019	2019	
Grid reference	NY9405424925	NY9363824949	NY9237625330	
GCN occurrence	Absent	Absent	Inconclusive	
Proximity	~730 metres south	~840 metre south west	~1.66km south west	

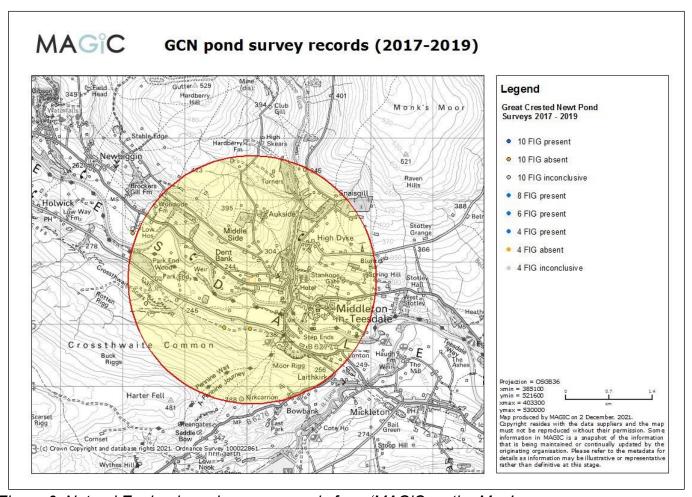


Figure 6. Natural England pond survey records from 'MAGiC on the Map'.

### 6. Local Planning Portal

Hudegate Farm/the development site has no previous planning history.

The local planning portal was checked for nearby (within 250 metres) and/or recent (in the last 5 years) planning applications that have reference to ecology. References to individual trees away from the development site have been omitted.

There was nothing to note in the Public Domain.

### 7. Site walkover

### 7.1 Annotated map



Figure 7. Target Note map<sup>7</sup>.

Target Note	Description
1	Hudegate Farm house.
2	Site entrance.
3	Proposed parking.
4	Area of standing water from field drain/spring.
5	Existing septic tank?
6	Outflow pipe.
7	Young oak tree planting by owner.

<sup>&</sup>lt;sup>7</sup> Reproduced with permissions from Google Earth (2021).

### 7.2 Description

The development site (NY 94078 25741) comprises a grassland field, currently grazed by sheep with ducks and chickens also present.

Access to the site is through the existing farm to the north of the field (**TN2**, **figure 16**). The area proposed for parking (**TN3**, **figure 17**) is currently a mixture of hardstanding and a pebbled area, some small shrubs and encroaching scrub are present including *Buddleia* (*Buddleia davidii*), dogrose (*Rosa canina* agg.) and rosebay willowherb (*Chamaenerion angustifolium*).

Dry-stone walls delineate the field to the east, west and south. Post-and-wire fencing is present along the northern field boundary.

Grasses dominate the field (**figures 8 and 9**), other flora species present within the field are of no particular note and are show in in the table below, along with their overall abundance (using DAFOR<sup>8</sup>):

Species	Scientific name	DAFOR
Broadleaved dock	Rumex obtusifolius	0
Broadleaved plantain	Plantago major	0
Common nettle	Urtica dioica	F
Cow parsley	Anthriscus sylvestris	R
Creeping buttercup	Ranunculus repens	F
Creeping thistle	Cirsium arvense	0
Daisy	Bellis perennis	R
Dandelion	Taraxacum officinale agg.	0
Moss		0
Sorrel	Rumex sp.	0
Spear thistle	Cirsium vulgare	R

Standing water, possibly from a land drain or spring is pooling near the north east corner of the field (**TN4**, **figure 10**).

The owner has planted a single oak (Quercus sp.) in the lower part of the field (TN7, figure 13).

The existing septic tank (**figure 5**) with outflow pipe (**figure 6**) is present part of the way down the field (**TN4 and TN5**).

A line of small trees lie beyond the southern dry-stone wall (**figure 15**), outside the development boundary. Species present include dogrose, holly (*llex aquifolium*) and sycamore (*Acer pseudoplatanus*).

No signs of badger were noted within 50 metres. Hedgehog and rabbit are assumed present on/adjacent to the site. No birds were noted or heard singing during the site visit.

No existing buildings on site are affected by the proposals and are not within the red line boundary and therefore were not included in the assessment.

<sup>&</sup>lt;sup>8</sup> The DAFOR score – D (dominant), A (abundant), F (frequent), O (occasional), R (rare).

### 7.3 Photos



Figure 8. Field proposed for holiday pods looking south east.



Figure 9. Grassland field looking north.



Figure 10. Area of water (TN4).



Figure 11. Area of current septic tank (**TN5**).



Figure 12. Outflow pipe (TN6).



Figure 13. Young oak tree (TN7).



Figure 14. Southern end of the field.



Figure 15. Trees to the south of the field (outside development boundary).



Figure 16. Access route from the north.



Figure 17. Area proposed for carparking (**TN3**).

### 8. Impact assessment and proposed mitigation

### 8.1 **Summary**

- The development site consists of habitat of low ecological value, with no signs of protected species noted.
- No Potential Roosting Features for bats are present <u>within</u> the development area.
- No existing buildings on site are affected by the proposals and are not within the red line boundary and therefore were not included in the assessment.
- There are limited opportunities for nesting birds within the development site, however they may nest on nearby buildings. No signs of owl were noted.
- Nearby tree root systems may be present underground within the development site. Root Protection Measures should be put in place.
- Bat and bird boxes are recommended to be erected on site.
- There are no Designated [wildlife] Sites or Priority Habitats that would be impacted by the development as long as the discharge of waste conforms to current guidelines.
- Habitat loss within the red line boundary will be compensated for by the creation of the following - wildflower planting (minimum 0.1ha), trees and shrubs (landscaping features) and a reedbed (to support septic tank system). The Biodiversity calculator shows this habitat creation will result in over a 10% Net Gain of Habitats.

### No further survey work is recommended.

Potential impacts can be suitably dealt with *via* a Precautionary Working Method Statement (**appendix 1**) and a longer-term site management plan without the need for further survey work. These should be conditioned as part of a planning application.

Factors supporting the recommendations are discussed in the sections below:

### 8.2 Limitations

The site visit was undertaken outside the optimal period for botanical assessment.

It should be noted that the Defra Metric 3.0 should only be done to 2 decimal places and for some the habitats, the footprint is below 0.01ha in footprint, however the 'Small Sites Metric' (which uses metres<sup>2</sup>) cannot be used for sites over 0.5ha.

### 8.3 Bats, birds and trees

There are no Potential Roosting Features (PRFs) for bats within the development site. Bats may forage across the site. Nearby buildings are not impacted by the development proposals.

There are limited opportunities for nesting birds within the development site, however they may nest on nearby buildings.

Trees present to the south of the development boundary and the young oak tree on site have no PRFs for bats. Their root systems may be present underground within the development site, their root systems are likely to be out of the way of the development proposals, which are mostly at the northern end of the field.

### **Potential impacts**

- Disturbance to breeding birds.
- Destruction of active nests, causing death or injury to fledging birds during the construction phase.
- Disturbance to foraging bats.
- Increased lighting levels may affect foraging and commuting routes for nocturnal animals.
- Loss of habitat connectivity/disruption of flight lines.
- Increased lighting levels may affect foraging and commuting routes for nocturnal animals.

### **Actions and mitigation**

- All contractors working on site should be made aware of the law surrounding bats. If bats
  are discovered all work in the area will immediately cease, and a licensed ecologist should
  be called to the site. Any bats must be left in situ if this is safe until the project ecologist
  arrives.
- Additional lighting should be avoided near trees/hedgerows. Any external lighting should be low level, PIR, directional and follow the ILP/BCT 2018 guidance<sup>9</sup>.
- Non-Bitumen (Breathable) Roofing Membranes<sup>10</sup> should not be used as these are known to cause death to bats by entanglement. Currently the only 'bat safe' roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction.
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.
- Bat and bird boxes are recommended to be erected on site.
- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive). Contractors should stop work and report any birds noted nesting close to the site and seek advice from the project ecologist before continuing works.
- Root Protection Areas (RPAs) should be marked up around nearby trees. Refer to 'British Standard 5837:2012 Trees in relation to design, demolition and construction'. The Root Protection Plan should also include measures to protect any exposed roots during the construction phase.

<sup>&</sup>lt;sup>9</sup> ILP (2018). Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series. BCT

<sup>10</sup> www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes

### 8.5 Designated Sites and Priority Habitats

The site lies within the North Pennines AONB and there are 8 additional Designated [wildlife] Sites within 2km, the closest being ~440 metres from the site.

The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI), although no impacts are expected, as long as the septic tank/sewage treatment system with associated reedbed for the discharge of waste conforms to the latest guidance and regulations. Any Designated Sites are considered sufficiently distant from the proposed development site that any impacts are unlikely to occur.

There are no Priority Habitats within the development site. Good quality semi-improved grassland Priority Habitat is located approximately 6 metres north, beyond the road.

The additional of 4 holiday pods is unlikely to significantly increase footfall/increased recreational use on nearby Priority Habitats.

No further assessment or mitigation measures are proposed.

### 8.6 Other species and habitats

Potential impacts can be suitably dealt with *via* a Precautionary Working Method Statement (**appendix 1**) without the need for further survey work. These should be conditioned as part of a planning application.

No other protected species such as badger or red squirrel were noted within 50 metres of the development site.

There are no watercourses, bar a small ephemeral area (see **figure 10** above) within 250 metres and therefore otter and water vole are considered absent from the site.

Hedgehog may be present on site.

### **Potential impacts**

- Disturbance and/or injury to wildlife during the construction phase.
- Activities such as mixing cement, refuelling or storage of materials/equipment may cause significant damage to those features such as compaction or contamination.
- Disturbance/harm/loss of habitat to small mammals.
- Increased site traffic/site use causing pollution run-off.
- Indirect impacts temporary habitat loss/disturbance.

### **Actions and mitigation**

- The Precautionary Working Method Statement (**appendix 1**) is deemed sufficient to deal with any passing species.
- A pollution protection plan should be put in place during the construction phase.
- Any storage of materials on site is likely to create suitable refugia for several species and therefore should only be moved by hand. Any mounds of materials, substrate or spoil may be used by badgers for exploratory digging. Mounds should be carefully protected.
- Any pits or holes dug during construction phase must be covered up overnight or fitted with exit ramps (scaffolding planks) for mammals to be placed at an angle of 30° from base to top.
- All materials, fuel and equipment, if left on site, to be stored securely in a position away from the tree canopies.
- A toolbox talk should be given to site contractors on the law surrounding protected species prior to works commencing.
- No fires should be lit on site.
- Habitat enhancement measures discussed in section 8.7 will act as compensation of loss of habitats.

### 8.7 Biodiversity Metric summary

A biodiversity metric (Defra Metric Version 3.0) was used. The Metric is a habitat-based approach to determine a proxy biodiversity value. It uses a calculation that takes into account the importance of these features for nature including size, ecological condition, location and proximity to nearby 'connecting' features. The Metric enables assessments to be made of the present and forecast future biodiversity value of a site. Calculations are explained in **appendix 3**.

Site enhancement measures are provided within a separate management plan which aim at ensuring No Net Loss of Biodiversity to the site as a result of the proposed development:

Habitat loss within the red line boundary will be compensated for by the creation of the following:

- Wildflower planting (minimum 0.1ha).
- Trees and shrubs landscaping features.
- Reedbed to support septic tank system.

The Biodiversity calculator shows this habitat creation will result in a Net Gain of Habitat. A minimum of a 10% Net Gain of Habitats is looked to be achieved.

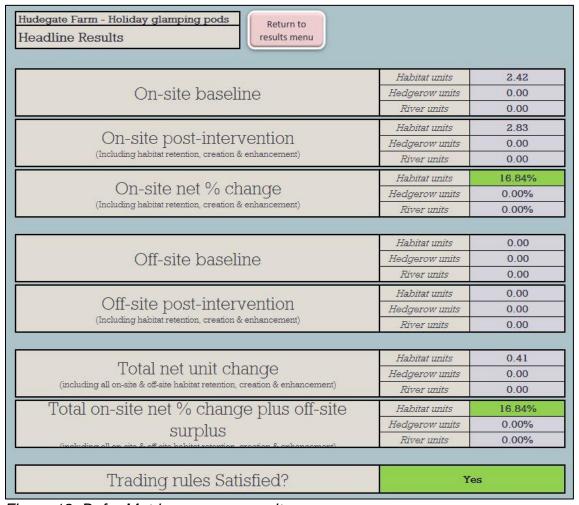


Figure 18. Defra Metric summary results.

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### **APPENDIX 1.** Precautionary Working Method Statement

# METHOD STATEMENT FOR CONTRACTORS LAND AT HUDEGATE FARM, MIDDLETON-IN-TEESDALE, DL12 0QR

The following precautions are necessary to prevent a legal offence being committed. Bats, badger, red squirrel, great crested newts and breeding birds are protected by law. Deliberate or reckless disturbance of these animals is a legal offence, punishable by fines and/or imprisonment. They are intended to reduce the impact of this development to protected species. These recommendations must be followed by all of those working on the site.

Should any protected species be found, work should immediately stop, and the project ecologist contacted.

**Birds** - all species of breeding birds, their nests (whilst being built and when in use), eggs and chicks are also protected by law.

- All contractors working on site should be made aware of the law surrounding bats. If bats
  are discovered all work in the area will immediately cease, and a licensed ecologist should
  be called to the site. Any bats must be left in situ if this is safe until the project ecologist
  arrives.
- If bats or signs of bats are found, then work must stop, and the project ecologist contacted for advice.
- Additional lighting should be avoided around the nearby trees/hedgerows. Any external lighting should be low level, PIR, directional and follow the ILP/BCT 2018 guidance<sup>11</sup>.
- Non-Bitumen (Breathable) Roofing Membranes<sup>12</sup> should not be used as these are known to cause death to bats by entanglement. Currently the only 'bat safe' roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction.
- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive). Contractors should stop work and report any birds noted nesting close to the site and seek advice from the project ecologist before continuing works.
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.
- Bat and bird boxes are recommended to be erected on site.
- Root Protection Areas (RPAs) should be marked up around nearby trees. Refer to 'British Standard 5837:2012 Trees in relation to design, demolition and construction'. The Root Protection Plan should also include measures to protect any exposed roots during the construction phase.
- No storage of materials or parking of machinery should occur within the RPAs.
- All materials, fuel and equipment, if left on site, to be stored securely in a position away from the site boundaries.

<sup>11</sup> ILP (2018). Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series. BCT

<sup>12</sup> www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes

- A pollution prevention plan should be put in place during the construction phase. Guidance can be found in the Pollution Prevention Guidelines 6 (see **references**).
- A toolbox talk should be given to site contractors on the law surrounding protected species prior to works commencing.
- Contractors should check any areas of ground thoroughly before starting work and before they leave.
- Any rocks, bricks, rubble, timber or rubbish to be moved by hand carefully checking for wildlife, in particular amphibians.
- Any storage of materials on site is likely to create suitable refugia for several species and therefore should only be moved by hand. Any mounds of materials, substrate or spoil may be used by badgers for exploratory digging. Mounds should be carefully protected.
- Any pits or holes dug during construction phase must be covered up overnight or fitted with exit ramps (scaffolding planks) for mammals to be placed at an angle of 30° from base to top.
- No fires should be lit on site.
- Wildflower planting is recommended to use the Northumberland Meadow seed mix<sup>13</sup> or one recommended by the North Pennines AONB. Any areas of planting/seeding should be at least 2 metres wide.

<sup>13</sup> https://britishwildflowermeadowseeds.co.uk/products/northumberland-meadow-seed-mix

Names	
Date	

### **Signed by Contractors**

**Signed by Owners** 

Name	Job Title	Date	Signature

### APPENDIX 2. Relevant wildlife legislation

Under Section 25 (1) of the Wildlife & Countryside Act (1981) local authorities have a duty to take such steps as they consider expedient to bring to the attention of the public the provisions of Part I of the Wildlife & Countryside Act, which includes measures to conserve protected species.

The Natural Environment and Rural Communities Act (2006) places a Statutory Biodiversity Duty on public authorities to take such measures as they consider expedient for the purposes of conserving biodiversity, including restoring or enhancing a population or habitat.

Paragraph 109 of the National Planning Policy Framework (NPPF) requires that the planning system minimizes impacts on biodiversity and provides net gains where possible.

### **Bats**

In Britain all bat species and their roosts are legally protected, principally under the Conservation of Habitats and Species Regulations (2010), with additional protection under the Wildlife and Countryside Act (1981) (as amended), including under Schedule 12 of the Countryside and Rights of Way Act, 2000, which created a new offence of reckless disturbance.

The combined effect of these is that a person is guilty of an offence if they:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats In particular where this may:
  - i. Impair their ability to survive, to breed or reproduce, or rear or nurture their young.
  - ii. Affect significantly the local distribution or abundance of the species.
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
- Intentionally or recklessly obstruct access to a bat roost.

### **Badger**

The Protection of Badgers Act 1992 protects badgers and their setts, and makes it illegal to:

- Wilfully capture, injure or kill a wild badger (or attempt to do so).
- Be in possession of a live or dead badger.
- Intentionally or recklessly damage or destroy a badger sett or obstruct access to it.
- Disturb a badger when it is occupying a sett.
- · Cruelly ill-treat a badger.
- Dig for a badger.
- Cause a dog to enter a badger sett.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. It is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed.

### **Birds**

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building
  or is in, on or near a nest with eggs or young; or disturb the dependent young of such a
  bird. Barn Owls are named in Schedule 1 of this Act.

The UK is bound by the terms of the EC Birds and Habitats Directives and the Ramsar Convention. These are implemented in the UK through the Conservation of Habitats and Species Regulations, 2017 which provide for the protection of areas of European importance for wildlife (European Sites) in the form of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive.

### **Designated Sites and Habitats**

A central component of the Habitats Directive is the creation of an overall network of European sites Natura 2000. The aim is to maintain, protect and enhance a coherent network of sites, reflecting the trans-boundary nature of many species, particularly migratory species. Although Ramsar sites are not European sites as a matter of law, the Government has chosen as a matter of policy to protect and manage them by applying the same procedures to them. Consequently, Ramsar sites are treated as European sites in practice.

Sites of Special Scientific Interest (SSSIs) are nationally important sites protected under laws including The Wildlife and Countryside Act 1981, Countryside and Rights of Way Act 2000. LPAs must consult Natural England on planning applications that might affect SSSIs. Operations that could damage special interests require consent by Natural England.

Section 41 of The Natural Environment and Rural Communities (NERC) Act (2006) requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. This includes planning decisions.

### **APPENDIX 3.** Biodiversity Metric calculator

The survey area comprises of the following habitats:

- Semi-improved neutral grassland.
- Hardstanding/small areas of pebbled hardcore.
- Fence line.
- Dry-stone walls.
- Single young tree.

The total site area is ~0.6ha (see red line boundary in **figure 1** in the main report).

The site is within the North Pennines AONB (see **section 5.1**) and therefore the 'strategic significance' is set as 'location ecologically desirable but not in local strategy'.

The Defra Metric 3.0 uses the 'UK Habitat Classification', therefore a conversion table for habitat types is explained below, along with the areas:

It should be noted that the Defra Metric 3.0 should only be done to 2 decimal places and for some the habitats, such as the holiday pods, the footprint is below 0.01ha in footprint, however the 'Small Sites Metric' (which uses metres<sup>2</sup>) cannot be used for sites over 0.5ha.

Habitat	UK Habitat Classification	Area (ha)
Semi-improved neutral grassland (poor quality)	Grassland – Other neutral grassland	0.55
Driveway and access area – a mixture of pebbled areas and hardstanding.	Urban - Developed land; sealed surface	0.02
Area has been split to approximately correct.	Urban - Artificial unvegetated, unsealed surface	0.03
	Total area	0.6

The proposed habitats on site are as follows:

Description	UK Habitat Classification	Area (ha)	Notes
Holiday pods	Urban - Developed land; sealed surface	0.01	Each pod has a footprint of ~23.8 metres <sup>2</sup> (7 x 3.4 metres), 1 (out of the 4 proposed) will be larger for disabled access/use.
Semi-improved neutral grassland	Other neutral grassland	0.41	Quality set to same as baseline as it will be mostly retained.
Wildflower planting	Other neutral grassland	0.1	Minimum area added to the Metric to achieve 10% Net Gain. Client is likely to add more.  Quality set to 'good'.
Hardstanding	Urban - Developed land; sealed surface	0.06	Parking, site access and storage area for bins.
Reedbed	Reedbeds	0.01	To support septic waste system. This may be enlarged to the south east corner of the field, outside the red line boundary.
Trees and shrubs – scattered	Mixed shrub	0.01	Landscaping proposal – therefore quality set to 'poor'.
	Total area	0.6	

The results are summarised in the table below. A full copy of the Metric spreadsheet will be provided to the client/Local Planning Authority.

Hudegate Farm - Holiday glamping pods Headline Results  Return to results menu		
	Habitat units	2.42
On-site baseline	Hedgerow units	0.00
	River units	0.00
Oitt itti	Habitat units	2.83
On-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation & enhancement)	River units	0.00
0	Habitat units	16.84%
On-site net % change	Hedgerow units	0.00%
(Including habitat retention, creation & enhancement)	River units	0.00%
	Habitat units	0.00
Off-site baseline	Hedgerow units	0.00
	River units	0.00
0	Habitat units	0.00
Off-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation & enhancement)	River units	0.00
W 11 1 1 1 1	Habitat units	0.41
Total net unit change	Hedgerow units	0.00
(including all on-site & off-site habitat retention, creation & enhancement)	River units	0.00
Total on-site net % change plus off-site	Habitat units	16.84%
3 1	Hedgerow units	0.00%
surplus	River units	0.00%
Trading rules Satisfied?	Ye	es