



Land at Bar Farm, Longstanton

Regulation 18 Ecology Report

Background

- 1.1 Applied Ecology Ltd was commissioned by Bidwells, on behalf of landowner Peterhouse College, Cambridge, to complete an ecological appraisal of a 12.40 ha area of land, part of 'Bar Farm', situated to the south-west of Longstanton, Cambridgeshire ("the Site"), in order to inform a Regulation 18 Local Plan submission.
- 1.2 The Site has an approximate central grid reference of TL 3950 6633 and its location is shown in **Appendix A**.
- 1.3 A walkover survey of the Site was completed by an experienced ecologist and botanical surveyor¹ from Applied Ecology Ltd in January 2020.
- 1.4 The survey aimed to visually inspect all of the semi-natural habitat types present within the Site in order to comment on their botanical value in line with the possible need to provide biodiversity net gain as part of development planning in the future, and assess their potential to support protected faunal species. Incidental sightings of field evidence of fauna within or close to the Site was noted as part of the survey.
- 1.5 This report has also been informed by a Cambridgeshire & Peterborough Environmental Records Centre (CPERC) records search of a 2 km radius of land around the centre of the Site.

Protected Wildlife Sites

- 1.6 The Site carries no formal wildlife site designation and does not occur particularly close to any designated wildlife site. The closest statutory designated site is called the **Overhall Grove Site of Special Scientific Interest (SSSI)** and is located approximately 5.8 km to the south-west of the Site. An impact risk buffer zone associated with this SSSI overlaps the entire Site. However, Natural England (NE) do not consider new residential development within the risk zone to constitute a risk to this SSSI.
- 1.7 There are no non-statutory wildlife sites (e.g. County Wildlife Sites) or ancient woodlands within 2 km of the Site.

¹ Botanical Society of Britain and Ireland (BSBI) Field Identification Skills Certificate (FISC) Level 5



Habitats and Plants

- 1.8 The Site was comprised almost entirely of a single arable field, with a crop of young winter wheat evident at the time of survey. There were narrow (up to 1 m wide) species-poor rank grassland margins around the field edges and small corners of disturbed short-sward grassland in the south-western and south-eastern parts of the Site.



- 1.9 Nettle-dominated tall ruderal and scattered trees and shrubs were present on the edge of the Site between the arable field and Hattons Road to the north-west. Most of these trees were semi-mature but there were also two mature ash trees.



- 1.10 Young mixed plantation woodland was present off-Site, to the west and south of the field, and a small stream (Longstanton Brook) was located just beyond the eastern Site boundary, on the opposite side of a public footpath.



Habitat Value & Biodiversity Net Gain

- 1.11 The capacity for future development within the Site to achieve a biodiversity net gain has been provisionally assessed using Natural England/DEFRA's Biodiversity Metric 2.0 calculator (beta version). We calculate that the Site has a **baseline biodiversity value of 24.80 habitat units**.
- 1.12 The potential to achieve no net loss of biodiversity or a biodiversity net gain has been assessed using provisional figures based on a development area of 6.51 ha and 5.89 ha of public open space, as shown in the Preliminary Concept Plan for the development.
- 1.13 Three possible scenarios have been assessed using the calculator to help inform development planning:
- The development area is assumed to comprise a **70:30 split of built development to amenity green space**, with the remaining public open space categorised as amenity grassland (a low distinctiveness habitat) in moderate condition. This results in a net biodiversity gain of 0.14 habitat units, i.e. a 0.6% gain in biodiversity.



- Scenario 2 provides an estimate of the minimum land area of new semi-natural habitat² required to be created as part of the public open space to achieve a 10% net gain.
 - To achieve a **10% net gain, 1.2 ha of grassland would need to be created – 10%** of the total Site area, and 20% of the public open space area.
- Scenario 3 provides an estimate of how much off-Site³ land would need to be enhanced, assuming the on-Site habitat creation in Scenario 2 is not feasible, to achieve a 10% net biodiversity gain based on enhancing improved grassland⁴.
 - To achieve a 10% net biodiversity gain, 0.6 ha of off-site improved grassland would need to be enhanced.

1.14 These scenarios are based on a preliminary assessment of on-Site habitats using the current version of the DEFRA Metric calculator, they aim to inform how net gain could be achieved and would need to be recalculated as part of development planning going forward.

Fauna

1.15 There are no ponds or standing waterbodies on Site or within 250 m, so the presence of great crested newts is unlikely.

1.16 The Site was not considered to be of value to reptiles given the lack of significant areas of rank grassland or other suitable habitats.

1.17 Although most of the Site consisted of an arable field of low value to foraging and commuting bats the habitats present along the field boundaries are likely to be used by a range of bat species. A mature ash tree on the north-western site boundary had several features that could be used by roosting bats.

1.18 The Longstanton Brook, directly to the east of the Site, provided habitat that was suitable for water vole *Arvicola amphibius* and otter *Lutra lutra*, and the CPERC search returned records for water vole from the brook close to the Site and upstream records of otter.

1.19 The field and its boundary habitats are likely to be used by an assemblage of farmland birds for nesting.

1.20 In overall terms, the Site is likely to have modest protected faunal interest that would need detailed assessment to support a future planning application. However, the presence of protected species should be straightforward to mitigate by adopting standard ecological mitigation approaches as part of development planning.

1.21 The following protected faunal species surveys are likely to be required to enable an assessment of development impacts in the future:

- Breeding birds survey (spring-summer)
- Bat activity survey (spring-summer-autumn)

² Creation of neutral grassland of moderate condition, i.e. moderately species-rich wildflower grassland, is used, as this represents the best and less costly option for habitat gain (as measured by the DEFRA metric).

³ Located within the same Local Planning Authority administrative area.

⁴ In practice the off-Site land need not be improved grassland but should, ideally, be a low distinctiveness habitat such as arable land. As it currently stands enhancing existing improved grassland provides the best and least costly option for habitat gain (as measured by the DEFRA metric) compared to creating a new habitat type as it is considered more feasible (less risky) to enhance an existing habitat than create a new habitat type.



- Water vole and otter survey (spring-summer-autumn)

Conclusions

- 1.22 The Site is comprised of habitats that are widespread, commonplace and of low biodiversity value that do not represent a development planning constraint and would mean that it should not be problematic to achieve a net gain in biodiversity as part of development planning.
- 1.23 The Site is considered likely to have limited protected faunal interest that should be straightforward to appropriately manage by adopting standard ecological mitigation and compensation approaches as part of detailed development planning going forward.
- 1.24 The Site is not protected by any statutory or non-statutory wildlife site designation and does not occur particularly close to any designated wildlife site. Significant adverse impacts (either direct or indirect) as a result of development construction and/or operation on nearby wildlife sites are not predicted to occur.



Appendix A

Site Location



Land at Bar Farm, Longstanton

Site location

 Site boundary

Appendix A

Map Scale @ A4: 1:12,000

Surveyed by: n/a

Survey date: n/a

Drawn by: RD

Checked by: DP

Status: Final

