

Preliminary Ecological Appraisal

of

Land at Woodthorpes, Assington, Suffolk

Carried out for:

Ben Elvin Planning

1st

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Issue/revision	1
Remarks	
Prepared by	AK
Date	26/09/22
Checked	TRA
Authorised	TRA



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Executive Summary

Overview

Abrehart Ecology Ltd was commissioned by Ben Elvin Planning, on behalf of Mr Sam Volk, to carry out a Preliminary Ecological Appraisal (PEA) of the land within the grounds of Woodthorpes Farm, Nayland Road, Assington. The site is proposed for development – to include the creation of shepherd huts adjacent to an existing menage.

The site is approximately 0.56 hectares of mown and horse grazed paddocks between an existing menage and mature hedgerow. It was bounded by the menage, post and wire fencing, and further paddocks (similarly managed).

A preliminary ecological appraisal was carried out on the 13th of September 2022 by Alister Killingsworth of Abrehart Ecology Ltd.

Results

The habitats recorded on and adjacent to the site included:

- Grassland
- Trees
- Hardstanding
- Buildings

The habitats listed above, and features recorded within the site, provided potential habitat for hedgehogs.



1. Background to Commission

- 1.1 Abrehart Ecology Ltd was commissioned by Ben Elvin Planning, on behalf of Mr Sam Volk, to carry out a Preliminary Ecological Appraisal (PEA) of the land within the grounds of Woodthorpes Farm, off Nayland Road, Assington, Suffolk (central grid reference TL 94244 36944; Fig. 1; hereafter referred to as the Site).
- 1.2 The survey was required to inform a planning application at the Site; to include the construction of shepherd huts adjacent to an existing menage.

Aims of Study

- 1.3 This report provides an ecological appraisal of the Site following the completion of a desk study and site visit. The aim of this study was to:
 - Provide a description of existing habitat types;
 - To determine the existence and location of any ecologically valuable areas;
 - To identify the potential (or actual) presence of protected and/or notable species;
 - To provide the legislative and/or policy protection afforded to any habitats present or any species assessed as likely to be associated with the site; and
 - To recommend any further ecological surveys considered necessary to inform mitigation requirements for the planning application within the Site.

Site Description

- 1.4 The Site is located within the grounds of Woodthorpes Farm, which itself is east of High Road, in Assington, Suffolk. The proposed construction zone is approximately 0.56 hectares of heavily managed grassland paddocks, which appeared to be managed through a mixture of horse grazing and mowing. Paddocks were separated and demarcated by post and electric tape fencing, some of which was absent at the time of survey. Northern and southern boundaries were an extension of the paddock habitats, several of which contained horses. To the east was a post and wire fence, bridleway, and mature hedgerow, beyond which is a woodland block and further fields. Part of the western boundary was formed by the existing menage/show jumping area, which is bounded by a post and rail fence.
- 1.5 Habitats surrounding the Site included large areas of heavily managed arable land, agricultural verges, ditches and a pocket of woodland to the east of the site (see Figure 1).



MAGIC

Site Location



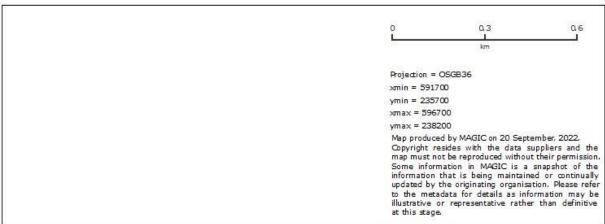


Figure 1. Site location



Relevant Legislation

- 1.6 Protected species, as referred to within this report, are taken to be those protected under European Legislation (Conservation of Habitats and Species Regulations 2010, as amended) and UK legislation (Wildlife and Countryside Act 1981; Protection of Badgers Act 1992); and those of principle importance in England as listed in Section 41 of the NERC Act (2006).
- 1.7 The National Planning Policy Framework (NPPF) 2021 places responsibility on Local Planning Authorities (LPAs) to aim to conserve and enhance biodiversity in and around developments. Section 40 of the NERC Act requires every public body to "have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". Biodiversity, as covered by the Section 40 duty, is not confined to habitats and species of principal importance but refers to all species and habitats. However, the expectation is that public bodies would refer to the Section 41 list (of species and habitats) through compliance with the Section 40 duty.
- 1.8 Appendix V details legislation which protects species and groups relevant to the Site (bats, reptiles, birds, and badgers).



2. Methods

Desk Study

- 2.1 Data obtained from the Suffolk Biodiversity Information Service (SBIS) were used to conduct a standard data search1 for any information regarding statutory and non-statutory sites and records of protected and priority species within a 2km radius of the Site. The data were received on the 26th of September 2022.
- 2.2 A 7km radius search for European Designated Sites, including Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsars was undertaken using MAGIC (http://www.natureonthemap.naturalengland.org.uk/).

Field Survey

A Preliminary Ecological Appraisal was carried out by Alister Killingsworth BSc (Hons) MSc ACIEEM (Natural England Great Crested Newt Class Survey Licence WML-CL08, Natural England Bat Class Survey Licence WML-CL17) on the 13th of September 2022 in accordance with standard best practice methodology for Phase 1 Habitat Surveys set out by the JNCC (JNCC 2010). Weather conditions during the survey were 70% cloud cover, a light breeze (Beaufort Scale 1-2), a temperature of 19°C, and good visibility. The Site was traversed slowly by the surveyor, mapping habitats, and making notes on dominant flora and fauna. The survey was extended to identify the presence of invasive species and included an assessment of the potential for the habitats in and around the Site to support protected species.

Survey Limitations

2.4 There were no limitations to the survey.

¹ The standard data search identifies designated sites including:- Ramsar; Special Areas of Conservation; Special Protection Areas; Sites of Special Scientific Interest; National Nature Reserves; Local Nature Reserves; County Wildlife Sites; Regionally Important Geological Sites; Ancient Woodland; and protected and priority species identified by the:- Wildlife & Countryside Act 1981 Schedules 1, 5 & 8; Conservation of Habitats & Species Regulations 2010 Schedules 2 & 5; Protection of Badgers Act 1992; Bonn Convention Appendix 1 & 2; Bern Convention Annex 1 & 2; Birds Directive Annex 1; Habitats Directive Annex 2, 4 & 5; NERC Act 2006 Section 41; UKBAP (both local and national); IUCN Red List species; Red & Amber Bird List; Nationally Scarce | Rare; Locally Scarce | Rare; and Veteran trees.



3. Results

3.1 The following section details the results of the desk study and field survey. Consideration has been given to species likely to be found in the habitats recorded on site and potential impacts to designated sites within the local area.

Data Search (for maps see Appendix II)

3.2 The following section details the results of the desk study and field survey. Consideration has been given to species likely to be found in the habitats recorded on site and potential impacts to designated sites within the local area. Several protected species have been 'scoped out' of the report, as the Site was not considered suitable to support them. Species scoped out were dormice, water voles, and otters.

Data Search

- 3.3 There were three statutory designated sites within 2 km of the Site, these are detailed below. The Site itself falls within the Impact Risk Zone for the SSSI and is near to the Dedham Vale Area of Outstanding Natural Beauty.
 - Arger Fen Local Nature Reserve (LNR) A mosaic of ancient coppice, naturally
 regenerating woodland, and wet meadows. It is one of the only ancient woodlands in
 Suffolk to contain wild cherry. The habitats support hazel dormice and barbastelle bats.
 - Arger Fen SSSI The habitat variety, including those described above and short acidic grassland and fens, support an interesting flora, birds, invertebrates, and several active badger setts.
 - Tiger Hill LNR A mixture of heathland, fen, and woodland supporting hazel dormice, badgers, and bats. A 'dormouse corridor' has been created to connect habitats to Arger Fen.
- 3.4 There are eight County Wildlife Sites within 2km of the Site. These are:
 - Assington Churchyard Assington churchyard supports a wide range of flowering plants, with more than 100 species having been recorded here. The north eastern end of the churchyard is managed by taking an annual hay cut and is the most diverse part of the site. The rest of the churchyard is maintained by regular mowing. Species present include a good population of nationally scarce lesser calamint, as well as a range of other meadow species such as lady's bedstraw, yellow star-of-Bethlehem, burnet saxifrage, barren strawberry and narrow-leaved vetch. The diverse structure provided by varying lengths of grassland, scrub and mature trees in the churchyard provide habitat opportunities for a wide range of species of invertebrates, small mammals and birds such as song thrush which is included in the red list of Birds of Conservation Concern. It also provides suitable habitat for reptiles such as slow-worm and grass snake. The many large ant hills provide further structural diversity.
 - Assington Meadow This linear narrow wet meadow is located to the west of Assington
 village, adjacent to Oatech Grove. The site is in the valley of a small watercourse with a
 stony base which flows southwards from Assington Church, giving rise to 'flush' areas in
 the unimproved meadow which supports a diverse wet grassland plant community, with



ragged robin, bristle club-rush and southern marsh-orchid amongst the more uncommon and indicative wetland species recorded. The stream supports a population of water vole.

- Assington Thicks An extensive ancient woodland (Priority habitat) situated to the west
 of the village of Assington and north of Arger Fen Site of Special Scientific Interest (SSSI).
 Although part of the woodland was cleared in the past, Assington Thicks remains one of
 the largest woods in west Suffolk and therefore an important feature in the landscape. A
 woodbank which is considered to be medieval in origin surrounds the wood.
- Breach Grove/Kingsland Lane One of several ancient woods in this part of Suffolk
 which is listed in the Inventory of Ancient Woodland (English Nature). It has been
 considerably disturbed in recent years by the construction of a number of buildings and
 a cinder track which runs the length of the wood. It is composed mainly of medium-aged
 oaks, planted approximately one hundred years ago. In addition, it contains hazel, holly,
 elder, cherry and bramble.
- Leadenhall Wood Listed in the Suffolk Inventory of Ancient Woodland (English Nature). It is an important landscape feature situated on higher ground to the west of the A134, just north of the village of Leavenheath. During a brief survey carried out in 1993, it was found that Leadenhall Wood consists mainly of ash and small-leaved lime coppice.
- RNR 195 Lesser Calamint. This site is also a Roadside Nature Reserve.
- Rowley Grove Listed in Natural England's Inventory of Ancient Woodland. The entire woodland is enclosed by a prominent ditch and bank which is a characteristic feature of ancient woodlands (a Priority habitat). A large proportion of this site consists of small-leaved lime standards (an uncommon tree species both regionally and nationally) with some hazel coppice and oak standards scattered throughout. The remainder consists of ash, field maple and small-leaved lime coppice. In addition, there is a small area in the centre of the wood which is dominated by elm.
- Tiger Hill Long Meadow A stretch of brook valley grassland and has formed part of
 Tiger Hill Local Nature Reserve (LNR) since 1991. The meadow also abuts parcels of
 Arger Fen SSSI. It contains an intact sequence of grasslands along the valley, an
 uncommon feature in East Anglia. There are four distinct Priority habitat grassland
 communities within the meadow. Neutral dry grassland with pockets of acid grassland
 can be found in the south.
- 3.5 There are no European Conservation Site (Ramsar, SAC, or SPA) within 7km of the Site:
- 3.6 The data search showed records of protected species in the area, which could potentially occur on the Site. These are detailed within the relevant sections below.



Field Survey Results

- 3.7 The Site comprised horse grazed and mown paddocks adjacent to an existing menage/show jumping arena which was demarcated by post and rail fencing and with a sand substrate/floor. The eastern boundary was a post and wire fence that separated the proposed construction site from a bridleway/exercise route and mature hedgerow and woodland block. These habitats will not be directly impacted by the proposals; however, they are a high-quality commuting corridor for protected species that may be in the local area.
- Much of the grassland had very limited botanical diversity, with only scattered patches of yarrow (Achillea millefolium), cat's-ear (Hypochaeris radicata), dandelion (Taraxacum agg.), self-heal (Prunella vulgaris), white clover (Trifolium repens), and autumn hawkbit (Scorzoneroides autumnalis) amongst the grass. The easternmost grassland strip, immediately adjacent to the post and wire fence, had a greater abundance of ruderal species, such as broad-leaved dock (Rumex obtusifolius), ribwort plantain (Plantago lanceolata), and patches of ground carpeted with knotgrass (Polygonum aviculare). The paddocks were separated by post and electric tape fencing and a thin strip of longer grassland was noted beneath one of these fence lines. This was approximately 50cm wide, on a slight slope, and was approximately 1m high. Species noted along this line included creeping bent (Agrostis stolonifera), false oat grass (Arrhenatherum elatius), and fleabane (Pulicaria dysenterica).
- 3.9 Along the eastern boundary fence were areas of saplings, ruderal vegetation, and developing scrub. Saplings included elm (*Ulmus sp.*), ash (*Fraxinus excelsior*), field maple (*Acer campestre*), blackthorn (*Prunus spinosa*), and hawthorn (*Crataegus monogyna*).
- 3.10 A map showing the habitat types on Site can be seen in Appendix II.



4. Protected and Priority Species Within the Site & Potential Impacts and Recommendations

Statutory Designated Areas

- 4.1 The Site is within the Impact Risk Zone for Arger Fen SSSI site; however, it does not contain the species or habitats for which they are designated and will not significantly increase footfall or disturbance through the conservation areas.
- 4.2 Given the small size of the development and screening provided by surrounding residential dwellings, it was not considered necessary to carry out a Habitats Regulation Assessment for the development.

Flora

- 4.3 No species of interest were recorded during the survey and close grazed and mown grasslands were considered unlikely to support a rich flora. The desk study highlighted several species of rare plant have been previously recorded within 2km of the Site, this included those listed on Schedule 8 of the Wildlife and Countryside Act 1981 and classified as 'Vulnerable' and 'Endangered' on the England Red List. Almost all the rare and protected species highlighted within the data search are associated with marshland, arable land, heathland, and species-rich meadows. These habitats were not recorded within the Site.
- 4.4 The proposed development includes the creation of shepherd huts on an area of species-poor horse grazed and mown grassland paddocks. This will result in the loss a limited area of improved grassland. Whilst the lost habitat is not listed within the Section 41 of the NERC Act 2006 as being of principal important to the conservation of biodiversity within the UK, it (and the immediate adjacent areas) does provide opportunities for a range of protected species (discussed below).
- 4.5 No further botanical surveys are required.

Badgers

- 4.6 The Site was visually searched for evidence of the presence of badgers (*Meles meles*), including setts, footprints, latrines, and snuffle marks. Habitats within the Site were suitable for foraging animals; however, evidence recorded was of rabbits and fox only. The mature hedgerow and woodland, adjacent to the Site, were suitable for sett creation but won't be impacted by proposals.
- 4.7 Eighteen records of badgers were returned within the desk study; the nearest of which was from approximately 500m north-west of the Site.
- 4.8 No further survey is necessary; however, precautionary measures detailed in paragraph 4.25 should be adhered to, to avoid disturbing nocturnal species and foraging mammals.

Bats

- 4.9 There were no buildings or trees within the Site boundary. The Site did not provide potential for roosting bats.
- 4.10 The Site offered very limited foraging potential as the overall extent of the grassland is small and the habitats on Site were very unlikely to support assemblages of invertebrates (prey species).



- 4.11 The mature hedgerow and woodland block east of the Site boundary offered good quality commuting and foraging routes for bats; however, these areas will not be directly impacted by the proposals.
- 4.12 The data search returned records of at least nine species of bat within 2km of the Site; these were barbastelle (Barbastella barbastellus), daubenton's (Myotis daubentonii), serotine (Eptesicus serotinus), Myotis sp., common pipistrelle (Pipistrellus pipistrellus), soprano pipistrelle (Pipistrellus pygmaeus), noctule (Nycatalus noctula), natterer's bat (Myotis nattereri), and brown long-eared (Plecotus auritus) bats within 2km of the Site.
- 4.13 No further survey is necessary; however, the Site should incorporate sensitive lighting ensuring the adjacent hedgerow is not illuminated as it could be an important commuting corridor for nocturnal species.

Birds

- 4.14 There were no hedgerows or trees within the Site boundary. Habitats adjacent to the Site boundary were suitable for nesting birds; however, these will not be impacted by proposals.
- 4.15 The grassland lacked a suitable structure for ground nesting species and would be regularly disturbed throughout the nesting season by grazing animals and mowing activities. This grassland was suitable for foraging birds and flocks of jackdaws (*Corvus monedula*) and pied wagtails (*Motacilla alba*) were seen in adjacent fields.
- 4.16 The data search returned a high number of records of common and protected species that have been observed in the local landscape. The Site did not offer suitable habitat for these species.
- 4.17 No further survey is necessary.

Great Crested Newts & Reptiles

- 4.18 Habitats recorded throughout the Site were sub-optimal/unsuitable for herptiles, were limited in extent, and not connected to good quality habitats. The grassland did not have the structure for foraging or sheltering animals; it offered limited basking potential for reptiles commuting through or near to the Site. Suitable habitat was limited to a thin strip of longer grassland beneath a fence (not grazed or mown), but this was isolated from the hedgerow/corridor habitat.
- 4.19 Several ponds were highlighted on OS maps within 500m of the Site boundary; however, these were not accessible at the time of survey.
- 4.20 There were ten records of GCN returned in the data search; other amphibians were also recorded in the local area; common frog, smooth newt, and common toad a NERC S41 species of principal importance in England. Three species of common and widespread reptiles (slow-worm (*Anguis fragilis*), grass snake (*Natrix helvetica*), and common lizard (*Zootoca vivipara*)) have been recorded frequently in the local area.
- 4.21 No further survey is necessary.

Hedgehogs

4.22 Grassland habitats within the Site offered potential foraging habitat for hedgehogs; the shorter grassland provided good access to potential prey items, such as beetles and worms. The adjoining paddocks offered an extension of this habitat, and the mature hedgerow was a potential commuting



- corridor, cover for sheltering and hibernating animals, and further foraging opportunities. Fallen leaves from deciduous trees could provide nest building material.
- 4.23 Although no evidence of hedgehogs was recorded during the survey, the data search returned 15 records of hedgehog within 2km of the Site from 2006 to 2020. The nearest of these records was from approximately 300m south-west of the site.
- 4.24 No further survey is necessary; however, as the Site provides suitable foraging habitat for foraging mammals, and hedgehogs and badgers have been recorded in the local area, construction works should implement several precautionary measures, including the following:
 - Covering excavations overnight to prevent animals falling in, or the provision of an escape ramp;
 - Safe storage of materials that may harm animals; and
 - Security lighting to be set on short timers to avoid disturbing nocturnal animals using the Site and immediate surrounding area particularly the mature hedgerow east of the Site.

Invertebrates

- 4.25 The grazed and mown grassland areas were unsuitable for supporting assemblages of common and rare/protected terrestrial invertebrates. Much of the habitat was disturbed, and there was limited forb, ruderal or scrubby/woody species. Encroaching scrub growing along the fenceline offered very limited foraging opportunities; however, much higher quality and abundant habitat was available within the adjacent hedgerow.
- 4.26 The data search included records of numerous S41/UKBAP moths, flies, and rare butterflies such as white letter hairstreak (*Satyrium w-album*) butterflies which are listed as 'Vulnerable' on the England Red List. Also returned were a high number of stag beetle (*Lucanus cervus*) records; however, the Site lacked suitable deadwood for this species to breed/for grub development.
- 4.27 No further survey is necessary.



5. Conclusions

- 5.1 The preliminary ecological appraisal found the Site contained habitats suitable for supporting protected species hedgehogs in particular. The following recommendations are made to minimise the risk of harm to individual animals:
 - Covering of excavations and/or provision of exit ramps is recommended during works to prevent harm to mammals.
 - Recommendations for **precautionary working methods** should be followed during clearance of any trees, rubble piles, potential hibernacula, or vegetation, to prevent harm to hibernating/sheltering hedgehogs.
- 5.2 It is very unlikely that the proposed creation of shepherd huts would cause a significant long-term impact to the conservation status of protected species in the area or to the conservation sites in the surrounding area.
- 5.3 However, short-term impacts to species populations or individuals would be minimised through the incorporation of the above recommendation prior to, and during construction.
- 5.4 Enhancement features, such as native planting could be incorporated into the final designs and therefore provide additional breeding, foraging, and sheltering opportunities for a range of wildlife.



6. References

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Stace, C. (1997). New Flora of the British Isles (2nd Edition). Cambridge University Press, Cambridge.

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Appendix I: Site Photos







Grazed fields separated by post and tape fencing



Western boundary adjacent the menage



Species-poor grassland with autumn hawkbit



Southern boundary – a continuation of grazed paddocks



Appendix II: Species Lists

Plants

Species
Acer campestre
Achillea millefolium
Agrostis stolonifera
Arrhenatherum elatius
Cirsium arvense
Cirsium vulgare
Crataegus monogyna
Fraxinus excelsior
Geranium pusillum
Holcus lanatus
Hypochaeris radicata
Jacohaea vulgaris
Plantago lanceolata
Plantago major
Polygonum aviculare
Pulicaria dysenterica
Prunella vulgaris
Prunus spinosa
Ranunculus repens
Rosa canina
Rubus fruticosus agg.
Rumex crispus
Rumex obtusifolius
Scorzoneroides autumnalis
Sonchus asper
Taraxacum agg.
Trifolium repens
Ulmus sp.
Urtica dioica
Veronica persica



Appendix III: Figures

Phase 1 Habitat Map





Appendix V: Relevant Protected Species Legislation

Species	Legislation	Protection
Bats	 Conservation of Habitats and Species Regulations (2010) (as amended) Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended) Wild Mammals Act (1996) 	It is an offence to: Intentionally kill, injure or take any bat Intentionally or recklessly disturb a bat Intentionally or recklessly damage, destroy or obstruct access to a bat roost
Great Crested Newts	 Conservation of Habitats and Species Regulations (2010) (as amended) Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended) 	It is an offence to: Intentionally kill, injure or take a great crested newt Intentionally or recklessly disturb a great crested newt Intentionally or recklessly damage, destroy or obstruct access to any place used by a great crested newt for shelter or protection
Widespread Reptiles	• Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended)	It is an offence to: Intentionally kill or injure a reptile Sell, offer or expose for sale, have in possession or transport for the purpose of sale any live or dead reptile or any part of, or anything derived from, a reptile
Birds	■ Wildlife and Countryside Act (WCA) (1981 (as amended)	It is an offence to: Intentionally kill, injure or take any wild bird Intentionally take, damage or destroy nests in use or being built Intentionally take, damage or destroy eggs Species listed on Schedule 1 of the WCA (1981) are afforded additional protection, making it an offence to intentionally or recklessly disturb such species at, on or near an active nest

