

Evaluation of Ecological Impact Assessment (EcIA) and BNG
Habitat Management & Monitoring Plan (BNG/HMMP)
Land North of Colwell Farm, Haywards Heath

EcIA & BNG/HMMP Analysis

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1. Introduction

The EcIA report was put together by Ecosupport, a consultancy that specialises in ecological reports for developers.

The main issue with the report is the lack of transparency. By omitting the original data, and the conditions under which the data was collected, it is difficult to understand the quality of the data collected, the assumptions made and check their analysis.

The data has been curated and presented to support the case for development – downplaying the ecological value of the site, which has shone through despite their best efforts to hide it.

Despite referencing best practice in surveying wildlife, Ecosupport have repeatedly failed to follow it.

1a. Summary of findings:

2. Habitat mitigation flaws

- Developer has not considered unique ecological value of site
- Retaining hedges does not prevent catastrophic biodiversity loss

3. Badger survey & mitigation flaws

- Breach of confidentiality on location of Badger setts
- Omission of information on Badger territorial boundaries and the impact that the proposed development will have on the Badgers' territory
- Minimal mitigations that do not follow Natural England guidance

4.1 Bat survey flaws

- 4.1.1 Ground Level Tree Assessment (GLTA) – inappropriate use of this survey method. GLTA incorrectly used to distinguish individual and colony roost features. An additional PRF survey required for all trees with PRFs.
- 4.1.2 Night-time Bat Walkovers - do not meet BCT guidelines
- 4.1.3 Static Detectors – unsystematic data collection, potential under-recording of Barbastelle bats

4.2 Bat mitigation flaws

- 4.2.1 Inadequate inspection of trees before removal (as rely on GLTA rather than more detailed PRF survey)
- 4.2.2 Inconsistencies between EclA and Millers Home Lighting Strategy
- 4.2.3 Omission of additional light sources (cars, homes)
- 4.2.4 Barbastelle bat mitigation reliant on inaccurate and incomplete data
- 4.2.5 Missing mitigation measures including impacts on foraging and commuting habitats, direct mortality and injury to bats by construction, collision with road and predation by cats

5. Great Crested Newt survey flaws

- Pond assessments flawed as time of year guidelines not followed
- Missing data – only 2 of 7 ponds tested for Great Crested Newt
- Incomplete data set means Great Crested Newt may be present

6.1 Reptile survey flaws

- Insufficient visits (7 rather than 20) over a short period of time (2 rather than 5 months)
- Inappropriate locations for refugia (shade rather than sun)
- Suboptimal weather conditions (more than 70% shade on the majority of visits)
- Survey guidelines state only a 20-visit survey can determine population size

6.2 Reptile mitigation flaws

- Inadequate mitigation strategy based on inaccurate population size
- On-site mitigation should be a priority - developer has not offered options on this
- Off-site mitigation dependent on finding a similar site - developer has not suggested any possible sites

7.1 Hazel Dormice

- Inaccurate population assessment
- Further surveys required to evaluate population density
- This may deem the site of Regional or National value

7.2 Hazel Dormouse mitigation

- Hedges and Bramble scrub adjacent to Dormouse locations removed by Millers Homes in Winter 2024, without following its proposed mitigation strategies

8. Breeding Bird survey flaws

- Insufficient bird survey visits (4 rather than the required 6)
- No evening bird survey (as required)
- Surrounding habitat not surveyed
- Poor quality of reporting - no information on weather, timings, bird behaviour and how each bird was recorded (detection method)
- As survey guidelines not followed, Ecosupport cannot make inferences on local bird population and impact of the proposal

9. Biodiversity Net Gain

- Missing data - plant species and criteria met/unmet not included
- Line of trees incorrectly classified
- Possible incorrect classification for grassland
- Ecologists consider the site of high ecological value
- Site has markers of biodiversity eg. Hazel Dormice

2. Habitat mitigation

The EclA states that *“The development will primarily result in the loss of other neutral grassland which is considered to be of local value. The proposals will also result in the loss of small sections of treeline/ shrub to facilitate access which are considered to be of regional value (due to the presence of Barbastelles on site.”* (5.2.1)

Local ecologists, who have visited the site, describe the fields as having *“exceptional ecological value due to vital, ancient and 'unimproved' high diversity meadows with high invertebrate richness on which all species, especially the bats depend.”*

The fields at the site have been left fallow since the 1980s, but deer and rabbits graze the meadows, which are bordered by Ancient Woodland and streams. With no footpaths or roads leading through them, the secluded location has allowed wildlife to flourish.

Local ecologists state that the site is one of the few remaining south-facing sites linking the South Downs National Park to the High Weald Area of Outstanding Natural Beauty.

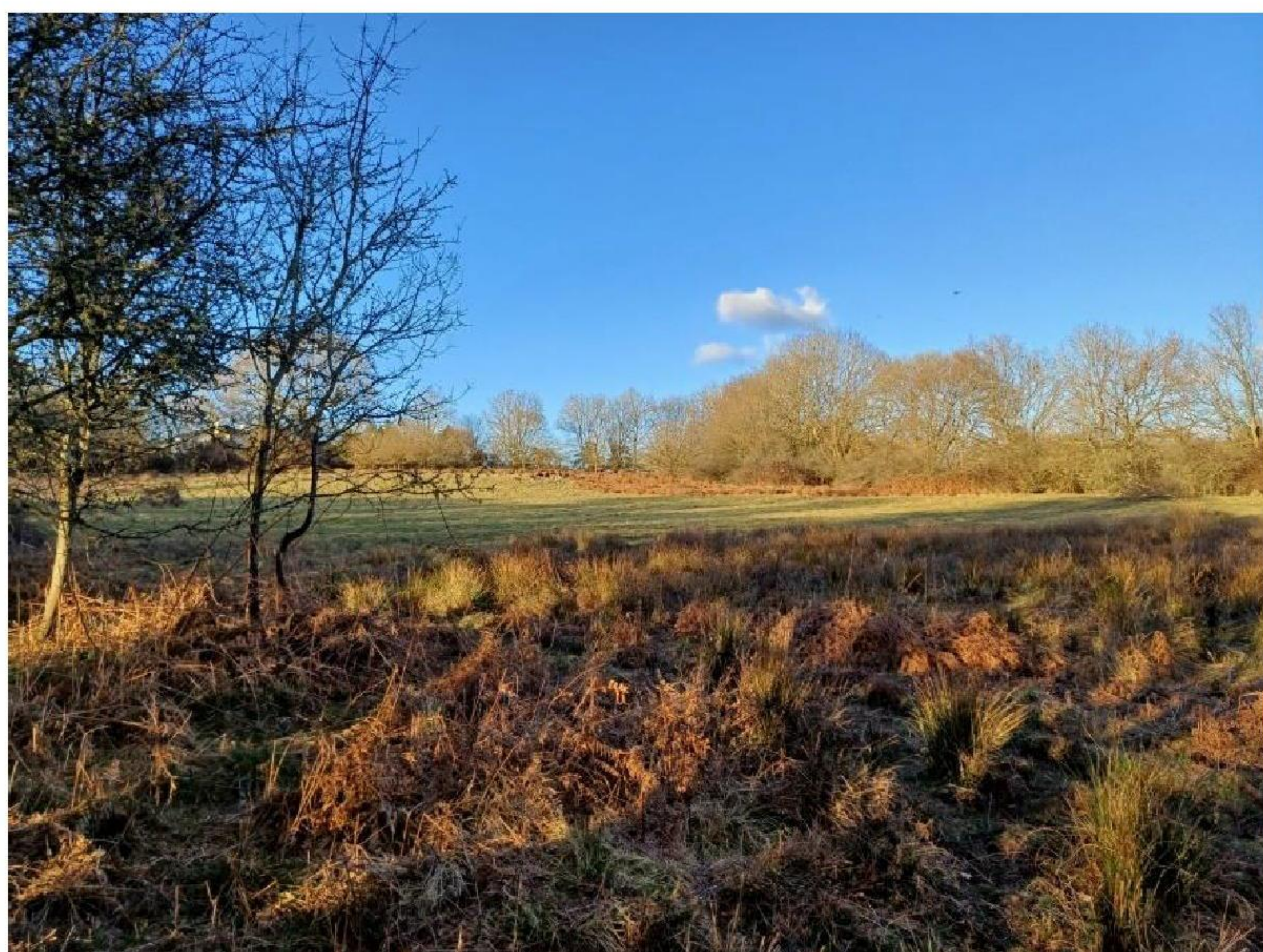


Photo 1: Field 2 in March 2025

The plant diversity of the site cannot be illustrated, as the developers have omitted this information for the report.

A full plant list, along with abundance information, should have been provided in either the EclA or BNG/HMMP. Omission of this, does not meet CIEEM's Guidelines for Preliminary Ecological Appraisal¹. According to these guidelines, a habitat survey should include *"descriptions of plant species present and their abundance"*.

The developers plan to retain part of the hedges, but remove all the surrounding grassland. Habitats are interdependent and removing one habitat undoubtedly has an impact on other habitats.

To illustrate the issues of retaining a hedge, but removing all habitats around it, below is a photo taken at The Oaks, Wivelsfield. This is a Cala Homes' development of 96 homes on greenfield land. The hedge has been fenced in by builders to "protect it", but this mitigation will not have stopped a dramatic reduction in biodiversity.

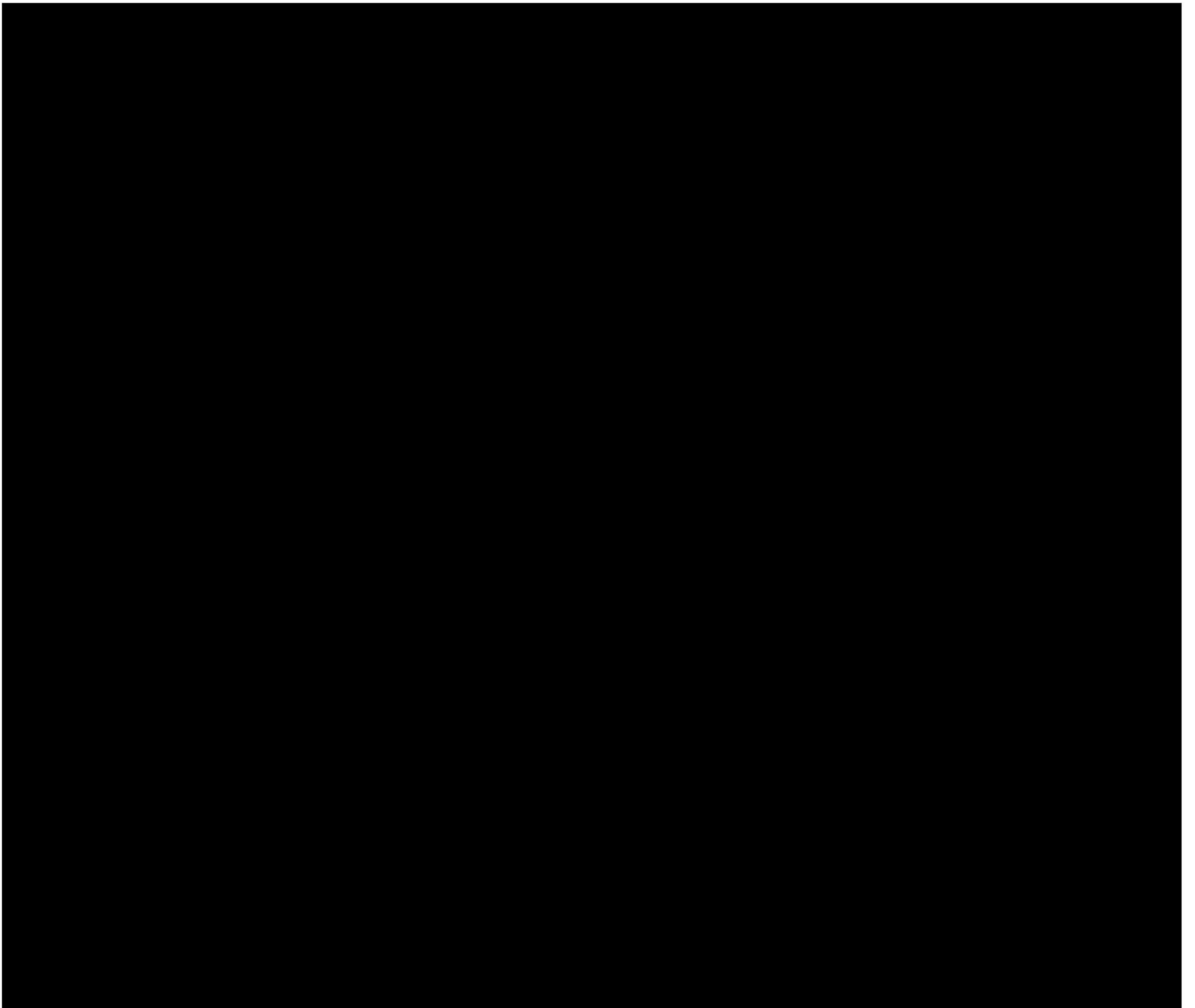
¹ CIEEM - Guidelines for Preliminary Ecological Appraisal (Second Edition)
December 2017

<https://cieem.net/wp-content/uploads/2018/01/Guidelines-for-Preliminary-Ecological-Appraisal-Jan2018-typo-edit.pdf>



Photo 2: Boxed in hedge at The Oaks, Wivelsfield (March 2025)

3. Badgers



4. Bats

4.1 Methodology & Results Analysis

4.1.1 Ground Level Tree Assessment

in 3.2.3.1, Ecosupport state they carried out a GLTA, and list 4 categories of trees in Table 2 - None, FAR and PRF-I and PRF-M. PRF-I is a roost for individual bats, while a PRF-M is a roost suitable for multiple bats and may be used by a maternity colony. Ecosupport claim they are following Bat Conservation Trust (BCT) guidelines: *“This followed BCT (Collins (ed) 2023) best practice survey”* (3.2.3.1 PRA)

In 4.3.2.1, Ecosupport state that *“The trees were all therefore classified as PRF-I.... These trees are to be removed under current proposals.”*

⁴ Badger Setts
Badger Trust website
<https://www.badgertrust.org.uk/badgers>

There is a flaw in their methodology. The GLTA is limited and a more detailed PRF inspection is recommended by the Bat Conservation Trust (BCT) to categorise trees as PRF-I and PRF-M.

In the BCT's *"(Collins (ed) 2023) best practice survey"* referenced by developers (this survey is called "Bat Surveys for Professional Ecologists"⁵), the BCT states that the downsides of the GLTA is that it is *"Crude because PRFs at height cannot be inspected. Some PRFs may not be visible from ground level."* (Table 6.1)

In addition, the BCT states: *"During a GLTA, the suitability of trees and PRFs can be categorized...However, at this stage, the PRFs are not inspected in any detail and therefore this is only an estimate of their potential for supporting roosting bats."* (Section 6.7.1.4)

BCT recommends a more detailed PRF inspection survey to distinguish PRF-I's and PRF-M's. It states the pros of a PRF aerial inspection survey (which was not conducted by Ecosupport) are: *"Catalogues the available roost resource in a more accurate way. Allows a search for evidence of bats in low and higher level features. Whilst in the tree can look for PRFs that are not visible from the ground."* (Table 6.1)

4.1.2 Night-time Bat Walkover

In 3.2.3.2, Ecosupport state they carried out a Night-time Bat Walkover. According to Ecosupport: *"Night-time Bat Walkovers (NTBW) were carried out on site. The surveys followed the methodology of 'night-time bat walkover survey' outlined within best practice guidelines (BCT, 2023)."*

According to Table 7, Night-time Bat Walkovers (NBW) were carried out:

- on 29/5/24 between 21:02 and 23:32
- on 3/7/24 between 21:17 and 23:47
- on 16/9/24 between 19:11 and 19:41

It is best practice, to record sunset times on the date of recording. I can confirm that sunset times were 21:02, 21:17 and 19:11 on these dates⁶.

According to the BCT's Bat Surveys for Professional Ecologists: *"At the start of the NBW surveys, ecologists should be on site before sunset."* (8.2.15)

Local ecologists advised me that best practice is to be on site a minimum of 30 minutes before sunset.

The BCT states that NBW should take 2/3 hours after sunset. See Table below.

⁵ Bat Surveys for Professional Ecologists (Bat Conservation Trust)

<https://cdn.bats.org.uk/uploads/pdf/Resources/For-professionals/Bat-Survey-Guidelines-4th-edition-AMENDED-27.03.24.pdf>

⁶ Sunset times: <https://www.timeanddate.com/sun/uk/haywards-heath?month=5&year=2024>

<https://www.timeanddate.com/sun/uk/haywards-heath?month=7&year=2024>

<https://www.timeanddate.com/sun/uk/haywards-heath?month=9&year=2024>

Table 1: Table from Bat Conservation Trust’s Bat Survey for Professional Ecologists (Collins, 2023):

Table 8.2. Recommended start and end times for activity surveys.		
Survey type	Start time	End time
Automated bat detector survey ^a	30 minutes before sunset	30 minutes after sunrise
NBW surveys	Sunset ^b	2/3 hours after sunset
Vantage point survey	Sunset ^b	When surveyors can no longer see bats due to falling light levels, unless supported by NVAs
a Set detectors with location to track sunset/sunrise as the season progresses. b Adjust to earlier if in darker habitats such as woodland or if data justifies (e.g. if bats are already out by sunset on previous surveys or automated detectors show pre-sunset activity).		

Ecosupport appears to have not followed guidelines as they were only on site at sunset (not before, as recommended by BCT) and the walkover on 16/9/24 only took 30 minutes, rather than the recommended 2/3 hours.

4.1.3 Static Detectors

In 3.2.3.3, Ecosupport claim *“Five nights of data per month (April – October) was collected, as specified in best practice guidelines (BCT, 2023).”*

Ecosupport’s results in Table 8, show a range of dates – varying from 5 to 8 nights, and starting on a different day of the week each time.

Date information from Table 8

- Monday 15 - Monday 22 April (7 nights)
- Tuesday 21 - Wednesday 29 May (8 nights)
- Friday 21 - Thursday 27 June (6 nights)
- Tuesday 23 - Monday 29 July (7 nights)
- Monday 19 - Monday 26 August (8 nights)
- Tuesday 24 - Sunday 29 September (5 nights)
- Wednesday 23 - Sunday 27 October (5 nights)

The static data picked up at least 9 species of bats. It did not distinguish between different species of *Myotis*, so it is possible all 3 species of *Myotis* were present (as outlined in 4.3.5.1).

In their analysis, Ecosupport claim: *“Although Barbastelles were recorded on site during the majority of months, activity was generally low with a small number of passes recorded on static detectors.”* (4.3.5.2)

BCT Guidelines state: *“The convention in bat surveying is to use timings that are systematic, for example, collecting five nights of data each month from May to September...detectors may need to be deployed for longer periods outside the summer months.”*

Ecosupport presented static detector from different number of nights, and different periods within the week each month. This does not meet BCT guidelines about systematic data collection.

Annex II Species Barbastelle bats were picked up by the following static detectors (static 2 highlighted in red, highest frequencies marked in bold):

- A2 (April – Static 2) – 3 passes
- C1 (June – Static 1) – 1 pass

- C2 (June – Static 2) – 5 passes
 - D2 (July – Static 2) – 7 passes
 - D3 (July - Static 3) – 2 passes
 - E1 (August – Static 1) – 5 passes
 - E2 (August – Static 2) – 35 passes
 - F1 (September – Static 1) - 31 passes
 - F2 (September – Static 2) – FAILED
 - F3 (September – Static 3) – 1 pass
 - G2 (October – Static 2) - 1 pass
- Total = 88 passes

It is noted that Static 2, which picked up the majority of the Barbastelle bat records, failed during September. 35 passes had been recorded by Static 2 in August, and Static 1 recorded 31 passes of Barbastelle that month, so the missing data set is likely to be equally high.

It is noted that during September, only 5 nights of data were recorded (vs 6-8 nights in earlier months).

Ecosupport's claim in 4.3.5.2 that Barbastelle "activity was generally low" is based on missing data sets and fewer data collection days in the month where Barbastelle was most active.

4.2 Mitigation analysis

Ecosupport states: *"The site has been identified as being of regional importance for commuting bats and county importance for foraging bats with the Annex II Barbastelle bat recorded on site. The work will result in a loss of foraging resources (grassland/ scrub) and any disruption to commuting routes (from external lighting or loss of portions of hedgerow) would likely have a **moderate adverse impact** at the **Regional** level of significance."* (5.2.2.1).

They outline various mitigation measures, but these are incomplete and flawed.

4.2.1 Inadequate inspection of trees before removal

Ecosupport states: *"If any trees other than those already assessed are to be removed under the current proposals an updated ground level roost assessment should be undertaken."* (6.2.1)

As explained in 4.1.1, Ecosupport used a GLTA, rather than the more detailed PRF inspection, to inspect trees and therefore should not remove any trees from the site until a full PRF inspection of these trees has taken place (including those already assessed to be removed).

4.2.2 Inconsistencies between EcIA and Millers Homes' Lighting Strategy

Ecosupport claim that: *"lighting on site, will be kept to a level below 1 Lux on site, however it will be kept below 0.1 lux in areas of importance for light-sensitive bat species thus limiting the disturbance to foraging and commuting bats."*

Below is Figure 27 from the EclA:

Figure 27. The location of the dark corridors to be implemented into the development, indicated by grey hashing. Light levels in these areas will remain below 0.1 lux.



This statement and map contradicts to Millers Homes' statement and map in the Lighting Strategy, prepared by WLC Lighting Design and submitted by the developer in support of their proposal for Land at North Colwell Farm.

In the Lighting Strategy, Millers Homes states: *"An exterior lighting system is required to facilitate safe and secure movement around the Proposed Development for all users."* (2.1.1)

WLC proposes Lighting Levels for street lighting that are minimum average 3 lux, maximum average 5 lux (Table 2). The developer includes the following map in the Lighting Strategy, which contradicts Figure 27 in the EclA.

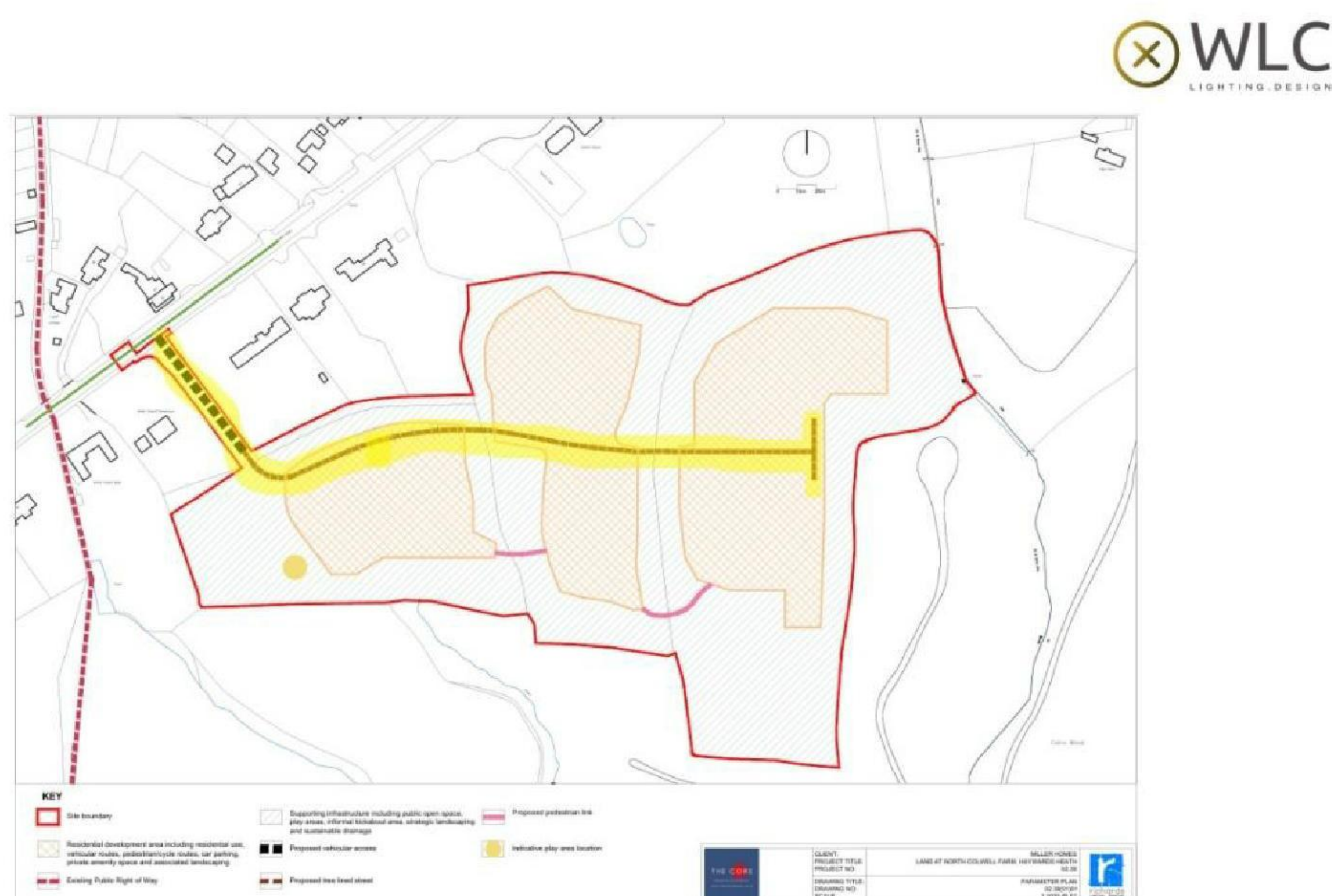


Figure 1 : Lighting Strategy (Land at Colwell Farm Haywards Heath)

In addition, in the Lighting Strategy, the developer proposes a “pre-curfew” lighting of 10 Lux and a “post-curfew” lighting of 2 lux. They do not explain at what time the post-curfew lighting starts.

4.2.3 Omission of additional light sources

Ecosupport does not highlight other sources of light pollution that may impact bats.

Residents at the proposed development will be able to install their own outdoors lighting. Internal lighting levels can be up to 1000 Lux⁷ for home office spaces, and some of the lighting will escape through open curtains and blinds.

Cars driving in the development at night will dramatically increase lighting levels. The LightAware charity states: *“LED vehicle headlights are much bluer and brighter than the halogen headlights they replace. They usually have a brightness of 3,000 to 6,000 lumens.”*⁸

A 6000 Lumen light source illuminates 1 square meter with 6000 Lux.

The Bat Conservation Trust reports that *“significant impacts have been recorded [on bats] from as low as 3.6 lux.”*⁹

Bats are highly sensitive to light, it can cause them to change foraging behaviour, make detours when commuting, and can impact roosting, where roosts/roost entrances are illuminated.

The BCT guidelines on Artificial Lighting and Wildlife¹⁰ state: *“Light falling on a bat roost exit point, regardless of species, will at least delay bats from emerging, which shortens the amount of time available to them for foraging.”*

“In addition to causing disturbance to bats at the roost, artificial lighting can also affect the feeding behaviour of bats and their use of commuting routes.”

“Lighting can be particularly harmful if it illuminates important foraging habitats such as river corridors, woodland edges and hedgerows used by bats. Studies have shown that continuous lighting along roads creates barriers which some bat species cannot cross.”

Barbastelle bats are particularly sensitive to even low levels of light. *“The slower flying, broad-winged species, such as long-eared bats, barbastelle, greater and lesser horseshoe bats and the Myotis species generally avoid external lights,”* state the BCT guidelines.

4.2.4 Barbastelle bat mitigation reliant on inaccurate data

⁷ Lighting, thermal comfort, working space, noise and vibration (Health & Safety Executive)
<https://www.hse.gov.uk/humanfactors/topics/lighting.htm>

⁸ Modern vehicle headlights dazzle drivers and may compromise road safety (LightAware 2023)
<https://lightaware.org/wp-content/uploads/2023/12/Vehicle-headlight-glare.pdf>

⁹ Bats and artificial lighting in the UK (Bat Conservation Trust, 2018)
<https://cdn.bats.org.uk/uploads/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?v=1542109349>

¹⁰ Bat Conservation Trust - Interim Guidance on Artificial lighting and wildlife (June 2014)
https://cdn.bats.org.uk/uploads/pdf/BCT_Interim_Guidance_Artificial_Lighting_June_2014.pdf

Ecosupport claims: *"Recordings were obtained during April (A2, 3 passes) and June (C1 & C2, 6 passes total). (see Table 8 & Figure 2 for locations). As only low numbers were recorded it is considered unlikely there will be any significant impacts to roosts of significant importance, or severance to flight lines for bats associated with SAC."* (6.2.4)

This is an inaccurate summary of the data in Table 2, which found a total of 88 passes over 6 months (see 4.1.3). In addition, this figure may have been underestimated due to a faulty detector in September.

Therefore, the statement that it is unlikely to have an impact on roosts or flight lines is based on incorrect data.

4.2.5 Missing mitigation measures

In the UK Bat Mitigation Guidelines (Reason & Wray, 2023)¹¹, a reference guide that Ecosupport used to evaluate the site in Table 9, there are numerous issues that Millers Home has not considered.

Below is a list of some of the measures recommended by the UK Bat Mitigation Guidelines (this is not an exhaustive list, but illustrates the lack of detail in EclA's mitigation measures):

- Loss or modification of a roost access point. *"This can occur either directly (e.g. being blocked by construction works), or indirectly (e.g. through the removal or planting of vegetation close to the roost access point)." (4.3.3)*
- Disturbance to bats in their roosts. *"Disturbance to bats in their roost can be caused, for example, by noise, lighting or direct human interference."*(4.3.5)
- Impacts on foraging or commuting habitats. *"Foraging or commuting habitat can be lost directly through a development's land take or indirectly when habitats are abandoned after being disturbed (e.g. by floodlighting or noise)." (4.4.1)*
- Modification of, or disturbance to bats using, foraging habitats or commuting routes/flight-paths. *"Foraging habitats and flight-paths...can be modified either directly (e.g. due to a change in land use or draining of land), indirectly (e.g. through the use of pesticides which may reduce prey availability), or through disturbance (e.g. from artificial lighting or noise which dissuades bats from using them). (4.4.8)*
- Direct mortality or injury impacts on bats. *"Bats may be accidentally killed or injured through roost destruction during construction works, or through-collision with road/rail traffic...Some developments, such as new housing schemes, may increase predation risk to bats; cats in particular can be a significant predator of roosting bats."* (4.5.1)

In conclusion, the mitigation measures outlined by Millers Homes are incomplete and flawed. This includes inadequate inspection of trees before removal, inconsistencies between EclA and Millers Home Lighting Strategy, omission of additional light sources (cars, homes), inaccurate data analysis of Barbastelle bat and missing mitigation measures including impacts on foraging and commuting habitats and

¹¹ UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1.

Chartered Institute of Ecology and Environmental Management
(Reason & Wray, 2023)

<https://cieem.net/wp-content/uploads/2023/09/Bat-Mitigation-Guidelines-2023-V1.1.pdf>

direct mortality and injury to bats by construction, collision with road and predation by cats.

5. Great Crested Newt

5.1 Methodology & Results Analysis

in 3.2.4.1, Ecosupport claim: *“A Habitat Suitability Index (HSI) was carried out on a number of ponds located within proximity to the site using the following the guidance provided with ARG (2010) [sic]”*

Ecosupport lists the factors used to assess the ponds for suitability to support Great Crested Newt (GCN): *“Location of Pond, Surface Area, Permanence, Water Quality, Shade, Presence of Waterfowl and Fish, Number of Ponds within 1km, Quality of Terrestrial Habitat and Macrophyte Cover”*

They claim in 4.6.4 that *“Ponds 1, 2, 3, 4 & 7 were subject to a HSI assessments”, which found that only Pond 1 and 3 were of Average suitability.”*

eDNA tests were only carried out on Pond 1 and 3. Ecosupport admits that Pond 5 and 6 were not surveyed *“due to landowner requests not to survey and/or no response from attempts to organise access.”*

Following its eDNA survey of 2 of the 7 ponds near the site, Ecosupport claims that *“it is unlikely the site supports GCN”*.

Regarding mitigation, Ecosupport claim in 6.5 that *“Pond 3 will be subject to an Environmental DNA (eDNA) survey...Attempts are still being made to access ponds 5 & 6...The mitigation strategy will be compiled once further data has been obtained.”*

Ecosupport did not provide information on the 10 factors that form the GCN Habitat Suitability Index for the 5 ponds that they assessed, only providing photos of the ponds (Figures 21a – 21e). This means independent ecologists are not able to check their workings.

In the Amphibian and Reptile Groups of the UK (ARGUK) guidance that Ecosupport followed¹², ARG states that Macrophyte Cover should be estimated between March and the end of September. It states: *“Estimate the percentage of the pond surface area occupied by macrophyte cover. This includes emergents, floating plants (excluding duckweed) and submerged plants reaching the surface. Make an estimate between March and the end of September.”*

Ecosupport provides photos of the ponds, which it is assumed were taken at the time of assessment.

¹² Great Crested Newt Habitat Suitability Index (May 2010)
Amphibian and Reptile Groups of the UK (ARGUK)
<https://www.arguk.org/info-advice/advice-notes/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5/file>

The dates the ponds were assessed were as follows:

- Pond 1 – December 2023
- Pond 2 – December 2023
- Pond 3 – January 2025
- Pond 4 – April 2024
- Pond 5 – January 2025

As 4 of the 5 ponds were assessed for Macrophyte Cover outside the time recommended by ARGUK, their assessment of pond quality cannot be relied upon.

Assessing the pond quality in winter will also have impacted other factors including

- Pond area – ARGUK Guidelines state: *“Pond area is the surface area of the pond when water is at its highest level (excluding flooding events). This is usually in the spring.”*
- Terrestrial Habitat – ARGUK Guidelines state: *“Good terrestrial habitat offers cover and foraging opportunities and includes meadow, rough grassland with tall sward height, scrub, woodland or mature gardens.”*

In addition, the HSI is a measure of habitat suitability and should not be used as a definitive measure of whether or not a pond supports newts. ARGUK states in the first page of its guidelines: *“The HSI for great crested newts is a measure of habitat suitability. It is not a substitute for newt surveys. In general ponds with high HSI scores are more likely to support great crested newts than those with low scores. However the system is not sufficiently precise to conclude that any particular pond with a high score will support newts, or that any pond with a low score will not do so.”*

In conclusion, Ecosupport’s Pond Assessment is inaccurate and incomplete. Ecosupport cannot make any claims about whether or not the site supports GCN from their inadequate study.

6. Reptiles

6.1 Methodology & Results Analysis

Ecosupport state they carried out a Reptile survey *“in accordance with best practice guidelines as stated in various resources (Froglife 1999) (Gent & Gibson 1998) during April and May 2024...The distribution of 124 pieces of refugia throughout the identified suitable habitat on-site. Seven visits to the site were subsequently undertaken during suitable weather conditions.”* (3.2.5)

In Figure 17, they demonstrate the location and number of artificial refugia.

Figure 17. The location and number of the artificial refugia used during the 2024 reptile presence/absence surveys. Blue = reptiles absent; yellow = Slow Worms present; green = Common Lizards present; red = Grass Snake present.



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According to Table 10, the weather on 4 out of the 7 days had over 70% cloud cover.

Survey date & percentage cloud cover (from Table 10):

- 8/04 – 40%
- 11/04 – 100%
- 29/04 – 70%
- 08/05 – 5%
- 10/05 – 80%
- 20/05 – 5%
- 23/05 – 80%

According to Froglife’s Surveying for Reptiles¹³ (referenced by Ecosupport), refugia should be placed in hotspot locations. Froglife’s Surveying for Reptiles (SfR) states: *“Within an area of suitable habitat you will need to focus in on key areas or ‘hotspots’ that will be attractive to reptiles. These hotspots offer good potential for basking with a south facing sunny aspect and cover.”*

Froglife advises that surveying is best carried out in certain weather conditions: *“Bright sunshine is favourable on cooler days and hazy or intermittent sunshine is favourable when warmer.”*

Ecosupport did not follow the guidance to place refugia in “hot spots” and instead positioned refugia over all locations of the field, including the southern edge of the field adjacent to the tree line and the eastern sides of the hedgerows, which would have been in shade during the morning survey.

¹³ Surveying for reptiles
Froglife (2016)

<https://www.froglife.org/wp-content/uploads/2013/06/Reptile-survey-booklet-3mm-bleed.pdf>

This is collaborated by the fact that the majority of the reptiles found in the study were found in the northern part of the field, which was in full sun in the morning.

Ecosupport also did not follow guidance about weather conditions, carrying out the majority of the survey on days with high cloud cover. This is collaborated by the fact that the only grass snake siting, and the highest number of slow worm sitings was on the day where there was the lowest (5%) cloud cover.

By placing refugia in inappropriate locations and checking them in the wrong weather conditions, Ecosupport will have underestimated reptile population size.

In addition, Froglife's SfR recommends seven site visits over a six month period:

- *visit 1-2: Mid-March - early April*
- *visit 3-4: April - May*
- *Visit 5-6: Late May - end June*
- *Visit 7: Late Aug - Late Sept*

Ecosupport did not follow best practice by carrying out all visits during April and May, rather than spreading them out over the year.

In it's evaluation, Ecosupport claims that *"Given the size of the suitable habitat, the number of refugia deployed and the maximum count of reptiles recorded... 'Low' populations of Slow Worms, Common Lizards and Grass Snakes are present on site (as defined by the Froglife guidance 1999). These reptile species are relatively widespread and as such the site is considered to be of Local Value for reptiles."*

Ecosupport relies on the classification system provided in the Froglife Advice Sheet 10 - Reptile Survey (1999)¹⁴, however has not carried out enough site visits to estimate population size.

The Froglife guidance states: *"To establish presence, generally at least seven visits in suitable weather conditions at the appropriate time of year may be required. For detailed surveys to gain some idea of relative population size or to identify key areas, at least 20 visits per season, in suitable weather, are recommended."* (Page 8)

In addition to requiring a minimum of 20 surveys, the inference of "low reptile populations" relies on refugia being placed at a density of up to 10 per hectare.

Given the proposed site is approximately 6 hectares in size (according to Table 1 in BNG/HMMP), Ecosupport should have only placed 60, rather than 124 refugia around the site.

In conclusion, there are the following flaws in Ecosupport's methodology:

- **Insufficient visits (7 rather than 20) over a short period of time (2 months)**
- **Inappropriate locations for refugia (shade rather than sun)**
- **Suboptimal weather conditions (more than 70% shade on the majority of visits)**

¹⁴ Froglife Advice Sheet 10 - Reptile Survey (1999)

https://www.wildcare.co.uk/media/wysiwyg/pdfs/froglife_advice_sheet_10_-_reptile_surveys.pdf

As Ecosupport did not follow survey guidelines, they cannot make inferences on on population size.

Mitigation analysis

Ecosupport claims: “this mitigation strategy has been produced in accordance with best practice guidelines relating to reptiles and development, published by Gent & Gibson (1998) and the HGBI (1998).

They propose to capture reptiles and move them to a receptor site, although they do not propose a location. They state that *“The proposed receptor area must be located within an area that is safeguarded from future development.”* (6.4.5.5)

Ecosupport claim to be following HGBI guidelines on minimum capture effort: *“guidelines recommend a minimum of 60 capture effort days are to be expended with a recommended refugia density of 50 per hectare (Table 13)...given the low density of reptiles recorded per day (peak count 7) this may be reduced to 30 days.”* (6.4.5.3)

They claim that post-completion monitoring is not necessary. *“Given the population size of slow worms present and the residential nature of the site, it is not considered necessary to conduct any monitoring post completion.”* (6.4.5.6)

As outlined in 6.1, Ecosupport did not follow guidelines and therefore cannot make inferences on population size.

Therefore, the first step in mitigation is to conduct a full reptile survey, including a minimum of 20 site visits over a 6 month period, with optimal weather conditions and refugia in appropriate locations.

Once they have a more accurate of population density, they can look at the minimum effort days for capture – if the population is higher then more effort days will be required.

As briefly discussed in the EclA, the recommendation for reptiles is to provide a protected area for them on site. Gent & Gibson’s Herpetofauna Workers’ Manual¹⁵ (referenced in the EclA) states: *“The first recommended approach is to request some form of 'on-site' (in situ) conservation so that a suitable quantity and quality of habitat is either retained or provided within the development and that this be made a condition of the planning application...”* (page 108)

The Herpetofauna Workers’ Manual (HWM) outlines that translocations should be a last resort as their success cannot be guaranteed. *“Reptiles are harder to catch. Often a rescue may need to extend over two full seasons to ensure that all the population has been removed and released within the recipient site. The likely success of such projects also needs to be considered: their success cannot be guaranteed. Therefore translocations to mitigate for loss of amphibian or reptile habitats should only be considered as a last resort.”* (page 108)

¹⁵ Herpetofauna Workers’ Manual
Gent & Gibson (2003)

<https://data.jncc.gov.uk/data/9d7da8c4-9d76-4b65-8263-6b925b3433a4/Herpetofauna-Workers-Manual-2003.pdf>

The Herpetofauna Groups of Britain and Ireland (HGBI)'s Best Practice Guide¹⁶ (referenced in the EclA) gives guidance about determining a suitable receptor site:

“Suitable receptor sites - should ideally:

- a) be local to the donor site, and as close as possible to it*
- b) not currently support a population of the species to be translocated...but be capable of supporting them*
- c) not be subject to planning or other threats in the foreseeable future*
- d) be subject to a written, agreed and funded pre- and post-translocation management agreement*
- e) be subject to a written, agreed and funded pre- and post-translocation monitoring programme”*

Local ecologists have told me that the Land at North Colwell Farm site is one of the few remaining south-facing sites between the South Downs National Park and High Weald AONB that have not been developed.

It is highly unlikely that Millers Homes would have access to another south-facing site that is not at risk of development.

Ecosupport claims that post completion monitoring is not necessary due to low population size, however, as outlined in 6.1, Ecosupport did not follow guidelines and therefore cannot make inferences on population size. In addition, both HWM and HGBI outline that monitoring is key for any reptile mitigation, no matter the population size.

In conclusion, Ecosupport have provided an inadequate mitigation strategy, based on incorrect population inferences. On-site mitigation should be a priority and off-site mitigation is dependent on finding a similar site that is also a south-facing slope, does not currently support a reptile population and is protected from planning.

7. Hazel Dormice

7.1 Methodology & Results Analysis

Ecosupport carried out a Hazel Dormouse (*Muscardinus avellanarius*) study and found one dormouse and 3 dormice nests.

The EclA claims: *“Due to the presence of nests, it is considered likely there is a breeding population on-site. Using the valuation outlined within CIEEMs Guidelines of Ecological Assessment in the United Kingdom (2018) the site can be considered to be of County Value For Dormice.”* (4.7.4)

Ecosupport's own methodology stated that the survey was *“undertaken to determine their presence or likely absence.”* (3.2.6)

¹⁶ Herpetofauna Groups of Britain and Ireland - Evaluating Mitigation/ Translocation Programmes: Maintaining Best Practice and Lawful Standards (1998)
<https://www.arguk.org/info-advice/scientific-and-technical-reports/4-evaluating-local-mitigation-translocation-best-practice-and-lawful-standards/file>

There is no information in the CIEEM Guidelines of Ecological Assessment¹⁷ about how to qualify Dormice as County value, so this is a misleading reference.

The EclA references that it followed the methodological guidance for Dormouse surveys from The Dormouse Conservation Handbook (Bright et al 2006).

According to The Dormouse Conservation Handbook (DCH)¹⁸, Dormice population density can only be estimated by mark-recapture techniques (which were not carried out by Ecosupport).

“Dormouse density can be estimated using mark-recapture techniques, normally based on captures in nest boxes...Other survey techniques, such as nut searches or nest tubes are intended to detect the presence of dormice and do not permit an estimation of density.” (3.6)

In conclusion, further surveys would be required to evaluate the population density at the site, and this may deem the site of Regional or National value.

7.2 Mitigation analysis

As Ecosupport states in the EclA: *“The presence of Dormice was established on-site and some areas of suitable habitat will require removal in order to deliver the development (trees/scrub). Without mitigation procedures put in place, this would result in the direct harm of individuals and a reduction in the local population. This would therefore be contrary to the provisions of the Conservation of Species and Habitat Regulations (2019). This will have a **moderate adverse impact at the County level of significance.**”*

Millers Home make detailed mitigation proposals, which include:

- **Applying for a European Protected Species licence** - *“A European Protected Species Licence (EPSL) for any works impacting the hedgerows/ mature trees and bramble scrub and such works to be carried out under the EPSL.” (6.6.1)*
- **Installing nest boxes prior to vegetation removal** - *“Prior to the removal of the vegetation (to include Bramble scrub) on site, the retained, trees/ woodland along the western boundary of the site will have a total of 6 wooden nest boxes erected.” (6.6.2)*
- **Using hand tools** - *“Hand tools will be utilized to sensitively cut vegetation down to ground level in a single stage.” (6.6.2)*
- **Removing clippings immediately** - *“Cut material will be removed from the areas and chipped and removed from site or area of operations.” (6.6.2)*
- **Carrying out work outside breeding and hibernation periods** - *“Works will take place outside of the core breeding periods (June – September inclusive) and avoid the hibernation period (late November to March).” (6.6.2)*

¹⁷ Guidelines for Ecological Impact Assessment (EclA) - Version 1.3
(September 2024)

<https://cieem.net/wp-content/uploads/2018/08/EclA-Guidelines-v1.3-Sept-2024.pdf>

¹⁸ The Dormouse Conservation Handbook - Second edition
(Bright et al, 2014)

<https://ptes.org/wp-content/uploads/2014/06/Dormouse-Conservation-Handbook.pdf>

However, in recent months, the developer has cut down sections of hedges between fields 1, 2 & 3, adjacent to where Dormice nests were found, and has cleared bramble between fields 2 & 3, adjacent to where a live Dormouse was found.

It is noted:

- No nest boxes have been installed
- Cut marks on the hedgerows have the appearance of a chainsaw, rather than the hand tools, proposed by the developer (see images 2 & 4).
- The material removed has been left on site (see images 3 & 7)
- Work is believed to have been carried out between November 2024 and February 2025 (no regrowth is visible on cut areas of hedge, tyre tracks in fields which suggests it happened during the wet winter months)



Image 1: Photo taken from Field 1 demonstrating where developer has cut through hedgerow to access Field 2 with heavy machinery (February 2025)



Image 2: Photo taken from Field 1 showing cut edges of hedgerow plants (February 2025)



Image 3: Photo taken from Field 1 showing cuttings from hedge clearance by developer (February 2025)

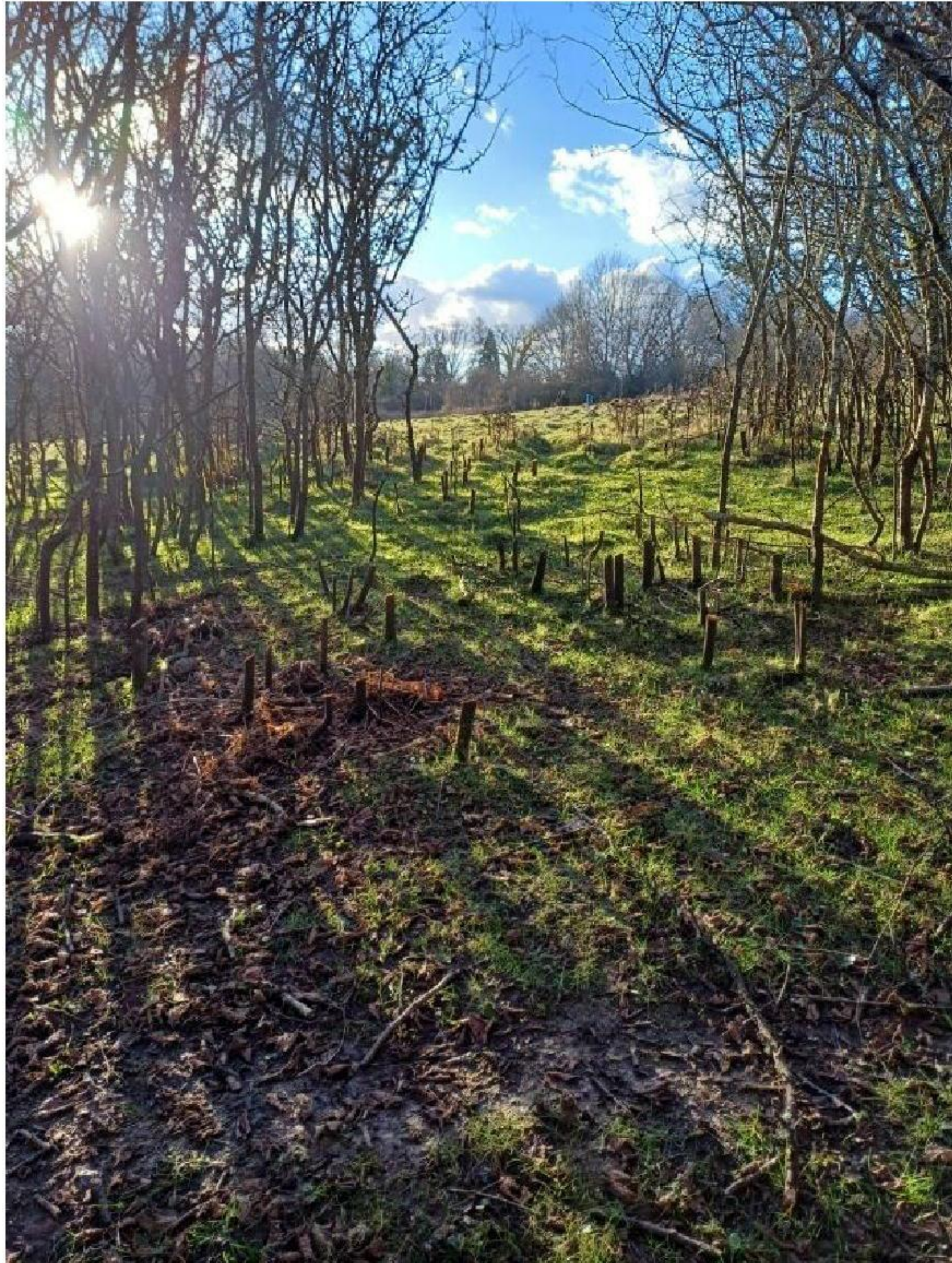


Image 4: Photo taken from Field 2 towards Field 1 showing destruction of hedge (February 2025)



Image 5: Photo taken at top of Field 2, showing bramble clearance by developer (February 2025)



Photo 6: Photo taken towards Field 3, showing bramble clearance by developer (February 2025)



Photo 7: Photo taken from Field 3 showing cuttings from hedge clearance by developer (February 2025)

In conclusion, Millers Homes has already demonstrated that it will not carry out the mitigation measures it outlined to protect Hazel Dormice and therefore its mitigation measures should not be trusted.

8. Breeding birds

8.1 Methodology & Results Analysis

Ecosupport claim their Breeding Bird survey methodology *“was broadly based upon the British Trust of Ornithology (BTO) Breeding Bird Survey (BBS) and Common Bird Census methods, including the BTO Standard Recording Codes (BTO, 2004).”* (3.2.7)

Ecosupport claim: *“Four surveys were undertaken covering April-June during favourable weather conditions (with little or no rain, little to no wind and good visibility). The survey visits were carried out at dawn, taking approximately 140 minutes each.”*

According to the Bird Survey & Assessment Steering Group's Bird Survey Guidelines¹⁹, a bird survey should include:

- *"Six bird survey visits to site*
- *Generally, breeding bird surveys start between half an hour before sunrise, and half an hour after sunrise.*
- *At least one of the six visits should be undertaken into the evening and should be continued after sunset.*
- *The surveys should be spread as evenly as possible between late March and early July."*

The Bird Survey Guidelines states: *"Six visits is considered sufficiently robust to identify the majority of bird species using lowland deciduous woodland in the breeding season and establish a good understanding of the numbers and distribution of species present. Lowland deciduous woodland is one of the most complex habitats to survey, due to the range of bird species it can support, and the dense vegetation leading to a heavy reliance on vocal encounters...Any deviation in the number of surveys must be supported with detailed and robust justification."*

Ecosupport only did 4 rather than 6 survey visits and did not do a bird survey in the evening. It did not supply any justification for reducing the number of surveys.

In addition, it did not survey the surrounding habitat, which is recommended by the Bird Survey Guidelines: *"Surrounding habitat (outside of the redline boundary) should also be surveyed to a reasonable distance – particularly land immediately surrounding the site itself, and any nearby potentially valuable habitat which is likely to be impacted by development/disturbance (including but not restricted to waterbodies and woodland)."*

When presenting its results (in 4.8), Ecosupport did not provide the date, time and weather information for each survey, so it cannot be assessed whether the surveys started at the right time and were spread evenly across the assessment period.

It is also possible the survey missed rare birds, such as Nightingale, which is generally only reported over a short period between the end of April and mid May (see Figure below). The NBN Atlas²⁰ indicates 18 records of Nightingale within a 2km radius, so it is possible Nightingale are on the site.

¹⁹ Bird Survey Guidelines for assessing ecological impacts
Bird Survey & Assessment Steering Group (2025)
<https://birdsurveyguidelines.org>

²⁰ NBN Atlas is the UK's largest repository of publicly available biodiversity data
<https://nbnatlas.org/>

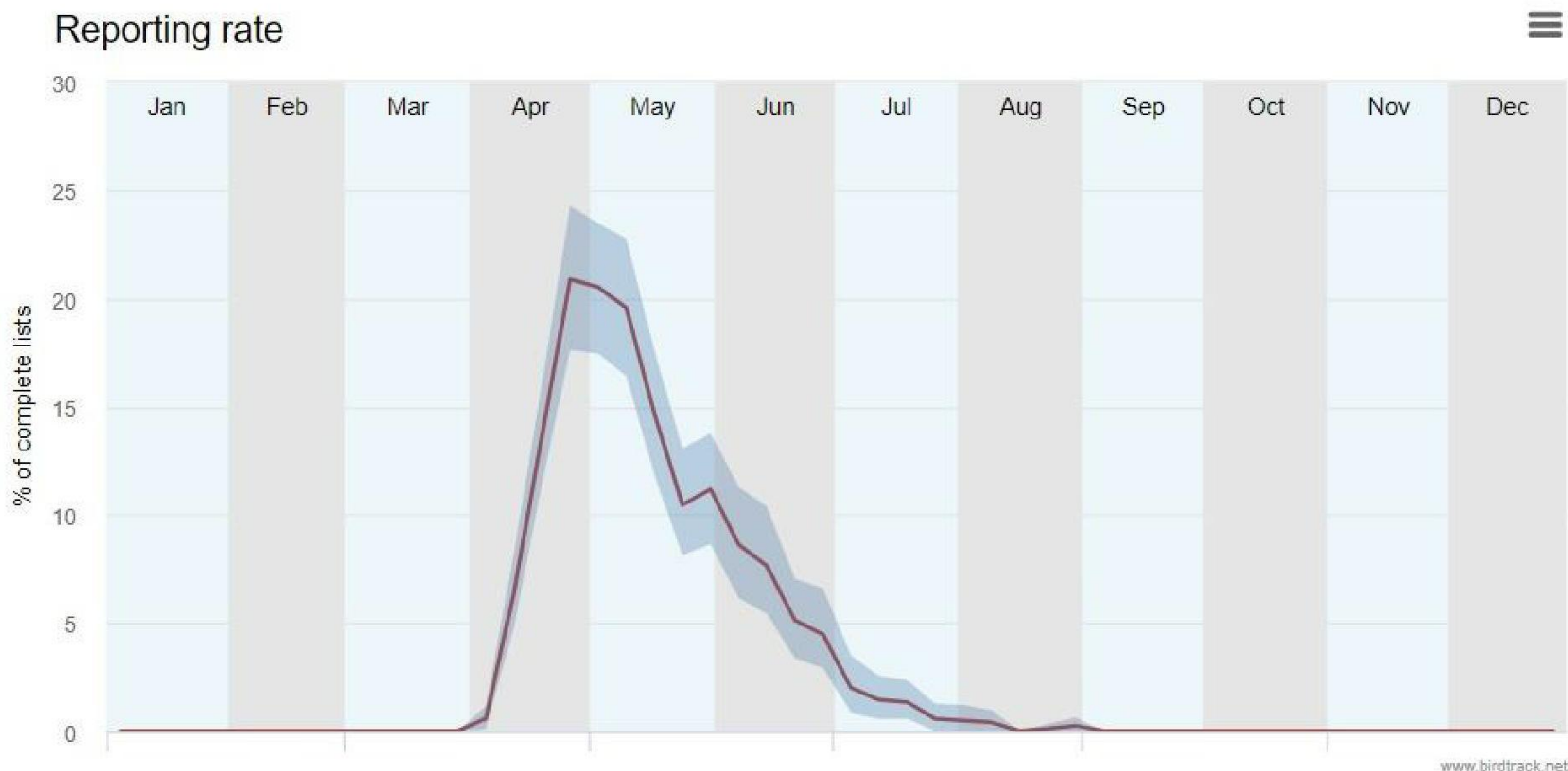


Figure 1: Historical Nightingale reporting rate in West Sussex by month (Birdtrack.net)

The results from all four surveys are presented in one map (Figure 25). Ecosupport does not list how each bird was recorded: by sight, call, or by song; and whether any behaviours such as territorial fighting, or juvenile birds were seen.

The Bird Survey Guidelines state: *“The approximate locations of priority species should be plotted on a site map together with behavioural notation where appropriate.”*

Omitting all this information is bad practice and makes independent, scientific analysis of the data difficult.

Ecosupport found 50 notable Species of Conservation Concern birds within 1km of the site on SxBRC (Sussex Biodiversity Record Centre), suggesting that additional birds would be found if a full survey took place.

In its evaluation, Ecosupport claims of the Red and Amber-listed species: *“1 species was found to be nesting/breeding within the entire site and 2 species had territories on site...Given the relatively small, single figure numbers of breeding or suspected breeding pairs within the site, it is not considered that the displacement of...Red and Amber listed bird species would be significantly detrimental to the overall populations.”*

It claims that *“due to the considered low number of BoCC5 [Birds of Conservation Concern 5] Red and Amber listed nesting pairs/territories present on the site....the site is considered to be of Low ecological value to breeding and nesting birds and it is not considered that the loss of bird populations and the communities present would be significantly detrimental.”*

A local ornithologist said the Ecosupport evaluation is “incongruous”. She explained that singing birds are defending their territory, and that it be “highly unusual” if only 3 of the 25 species on site were singing, given the species, time of year and habitat.

As Ecosupport did not follow survey guidelines, they cannot make inferences on the site being of “low ecological value” or the impact of the proposed development on the bird populations.

In conclusion, there are the following flaws in Ecosupport's methodology:

- 4 - rather than the required 6 - bird survey visits
- None of the bird survey visits were in the evening
- Surrounding habitat was not surveyed
- Poor quality of reporting - no information on weather, timings, bird behaviour and how each bird was recorded

As Ecosupport did not follow survey guidelines, they cannot make inferences on the local bird population and the impact of the proposed development.

9. BNG/HMMP Analysis

The BNG/HMMP suffers from the same lack of transparency and attention to detail as the EclA. Details of which criteria were met and not met for each of the habitats should have been included.

In the BNG/HMMP, Ecosupport states that the majority of the site is *“other neutral grassland”* and that the condition is *“Poor”*. The woodland is considered in *“good”* condition. The Line of trees that will be removed to create the access road are termed *“Poor”* condition.

Ecosupport states that the *“Line of trees”* is in *“Poor condition”*, but that *“Criteria A, B and E were met”*. If Criteria A, B and E are met, then it should be marked as *“Moderate condition”*, according to the Statutory Biodiversity Metric²¹.

Ecosupport states that the grassland meets criteria A of the Statutory Biodiversity Metric: *“The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type.”*

Local ecologists, who have visited the site, said it is unusual for a site to have passed criteria A, which is the *“most challenging of the 5 characteristics”* and to then *“fail”* three of the other characteristics.

As Ecosupport has mistakenly classified the line of trees as *“Poor”* condition, despite meeting at least 3 of the criteria, it is possible that it has not correctly assessed the condition of the grassland.

Overall, the biodiversity of the site is likely to have been understated. Local ecologists deem the site of high ecological value as it has ancient and unimproved high diversity meadows with high invertebrate richness. It is also one of the few remaining south-facing sites linking the South Downs National Park to the High Weald Area of Outstanding Natural Beauty.

The site has various markers of biodiversity as detailed in the EclA. The presence of Hazel Dormice is important as an indicator species, their presence or absence reveals the health of woodlands and hedgerows²². In addition the site has high bat diversity, high bird diversity, numerous reptiles and badgers.

²¹ Biodiversity Net Gain Condition Assessments

https://assets.publishing.service.gov.uk/media/669e5db4fc8e12ac3edb0198/Statutory_Biodiversity_Metric_Condition_Assessments23.07.24.xlsx

²² Hazel Dormouse Fact Sheet

Millers Home's biodiversity calculation shows that developing the site will reduce biodiversity, despite the incorrect classification of the tree-line and possibly the grassland.