



Ecological Impact Assessment

Wiltshire Throwback Festival 2026, Melksham Rugby Football Club

For and on behalf of Gary Cooke

May 2025

DOCUMENT CONTROL SHEET

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1.0 Introduction

1.1 Herdwick Ecology Ltd has been commissioned by Gary Cooke to assess the impacts ecological impacts of a proposed Music Festival to be held at Melksham Football and Rugby Club in June. A pre-app was submitted to Wiltshire Council, with a response received 28 March 2025. In terms of ecology, the pre-app raised strong concerns regarding potential impact to protected species within the area.

1.2 This statement has been prepared to assess the possible impacts and aims to:

- Provide a summary of the species and habitats present on and adjacent to the site based on existing ecological data;
- Identify likely impacts associated within the proposals and possible effects on the species informed by scientific journals and studies into the effects of festival on the behaviour of species
- Set out any mitigation measures that could be implemented to avoid and minimise such impacts.

1.3 This report has been prepared by Ceri Griffiths, Director at Herdwick Ecology, who is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

2.0 Legislation and Planning Policies

2.1 In carrying out this assessment relevant legislation, planning policies, and best practice guidelines were consulted and include:

- Conservation of Habitats and Species Regulations 2017 (as amended);
- Wildlife and Countryside Act 1981 (as amended);
- Countryside and Rights of Way (CROW) Act 2000;
- Natural Environment and Rural Communities (NERC) Act 2006;
- National Planning Policy Framework 2024 (NPPF);
- Local Planning Policies

National Planning Policy Framework (NPPF) 2024

2.2 National planning policy on biodiversity and conservation is set out in the National Planning Policy Framework (NPPF). This emphasises that the planning system should seek to minimise impacts on biodiversity and provide net gains in biodiversity wherever possible as part of the Government's commitment to halting declines in biodiversity and establishing coherent and resilient ecological networks. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. Relevant policies are set out below:

- 2.3 Paragraph 185: *“To protect and enhance biodiversity and geodiversity, plans should: a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity...*
- 2.4 Paragraph 186 states: “When determining planning applications, local planning authorities should apply the following principles:
- a) *‘if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts) adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused’*
 - b) Relates to developments affecting SSSI
 - c) Relates to developments affecting irreplaceable habitats, such as ancient woodland
 - d) *‘Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity’.*
- 2.5 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.
- 2.6 The above approach encapsulates the ‘mitigation hierarchy’ described in British Standard BS 42020:2013, which involves the following step-wise process:
- Avoidance – avoiding adverse effects through good design;
 - Mitigation – where it is unavoidable, mitigation measures should be employed to minimise adverse effects;
 - Compensation – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm; and
 - Enhancement – planning decisions often present the opportunity to deliver benefits for biodiversity, which can also be explored alongside the above measures to resolve potential adverse effects.
- 2.7 The measures for avoidance, mitigation, compensation, and enhancement should be *‘proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development’*

- 2.8 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system

Environment Bill and Biodiversity Net Gain

- 2.9 The Environment Bill received Royal Assent on 9th November 2021, becoming the Environment Act; this includes the provision of biodiversity gain for developments in England, which will be mandated through an amendment to the Town and Country Planning Act 1990. The two-year transition period that follows Royal Assent means that mandatory Biodiversity Net Gain (BNG) became law on 12th February 2024, with small sites being mandatory on the 2nd April 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021)

Local Planning Policy

- 2.10 The Wiltshire Core Strategy Development Plan Document ('the plan') was formally adopted on 20 January 2015. The plan provides a positive and flexible overarching planning policy framework for Wiltshire for the period up to 2026. Policy 50 'Biodiversity and Geodiversity' states that: *'Development proposals must demonstrate how they protect features of nature conservation and geological value as part of the design rationale. There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term.... All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.* The policy goes on to state that all developments should seek opportunities to enhance biodiversity.

Species Protection

- 2.11 All species of bat found in the UK are listed under Schedule 5 of The Wildlife and Countryside Act 1981 (as amended) and are afforded protection under Section 9(4) (b&c) and Section 9(5) of Part 1 of the Act.
- 2.12 Under this legislation, a person is guilty of an offence if a person intentionally or recklessly:
- disturbs any bat while it is occupying a structure or place which it uses for shelter or protection;
 - obstructs access to any structure or place which any bat uses for shelter or protection.
- 2.13 In addition the protection afforded through UK legislation, further protection is provided to a small group of species, commonly referred to as 'European Protected Species', including all UK bats, under the Conservation of Habitats and Species 2017 (as amended) (also known as the Habitats Regulations).
- 2.14 With regards to European Protected Species listed under Schedule 2 of the Act, it is an offence to:
- Intentionally or deliberately capture or kill, or intentionally injure the animal;

- Deliberately disturb the animal or intentionally or recklessly disturb them in a place used for shelter or protection;
- Damage or destroy a breeding site or resting place;
- Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.

2.15 The Habitats Directive provides for the derogation from these above prohibitions for specified reasons and providing certain conditions are met. Those derogations are transposed into the Regulations by way of a licensing regime that allows what would otherwise be an unlawful act to be carried out lawfully. Among the reasons why a licence may be granted and the reason relied upon by developers when seeking a licence to carry out operations for the purposes of development, is that there are imperative reasons of overriding public interest why the operation should be carried out.

2.16 Whilst Natural England is the licensing body, the LPA must have due regard for the Habitat Regulations during the planning process and that the following three derogation tests will be met:

- Test 1: *Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.*
- Test 2: *Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”.*
- Test 3: *Regulation 53(9)(b) states: the appropriate authority shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*

3.0 Methodology

Data Search

3.1 A data search was undertaken to look for designated sites and records of protected and notable species. This can provide important contextual information to gain an understanding of the site and surrounds. Online sources were reviewed, such as MAGIC¹ and NBN Gateway².

3.2 In addition, there are numerous historic and recent planning applications immediately adjacent and within the surrounding locality that were supporting by detailed ecological surveys. These reports were

¹ <https://magic.defra.gov.uk/>

² <https://nbnatlas.org/>

reviewed on the Wiltshire Council planning portal and included the original surveys that were undertaken in 2012/2013 in support of the construction of Melksham RFC.

- 3.3 Extensive research was also undertaken on available journals and papers regarding the impacts of music festivals on the ecology of a site and surrounding area. Whilst data is limited at present, some research has been taking place on some of the larger festivals with a focus on impacts to habitats from disturbance and pollution events. In addition, there has been studies on the behavioural changes to species, such as bats and birds.
- 3.4 Update surveys are not considered necessary to inform this assessment. There is detailed surveys data for the adjacent land over a number of years, and from the site itself in 2013. It has been assumed that specific species are present based on this data and taking a 'worse case scenario' to ensure impacts and all sensitive ecological receptors have been identified and assessed fully.

Site Walkover

- 3.5 The site was surveyed on 2nd May 2025 by Ceri Griffiths, Director of Herdwick Ecology, with full membership of Chartered Institute of Ecology and Environmental Management (CIEEM) and a Natural England bat and great crested newt licence holder. Weather conditions were dry, overcast with a temperature of 11°C.

Evaluation

- 3.6 The evaluation of ecological resources and characterisation of potential effects was undertaken in general accordance with the CIEEM's Guidelines on Ecological Impact Assessment (EcIA) (CIEEM, 2018). As set out in the guidelines, the impact assessment process involves:
- Identifying and characterising impacts;
 - Incorporating measures to avoid and mitigate (reduce) these impacts;
 - Assessing the significance of any residual effects after mitigation;
 - Identifying appropriate compensation measures to offset significant residual effects
- 3.7 Initially, the process needs to determine which ecological features are important and should be subject to detailed assessment. Ecological features can be important for a variety of reasons, for example, the quality or extent of designated sites or habitats, habitats/species rarity, the extent to which they are threatened throughout their range, or their rate of decline (CIEEM, 2018).
- 3.8 The importance of an ecological resource and features should be considered within a defined geographical context. The following frame of reference has been used for this assessment:
- International;
 - National;
 - Regional;

- County
- District
- Local; and
- Site

Designated Sites

3.8 Some sites have already been assigned a level of nature conservation value through designation, and the guidelines recommend that the reasons for this designation need to be taken into account in the assessment. Such designations include:

- Internationally important sites such as SACs, SPAs and Ramsar sites;
- Nationally important sites such as SSSIs and NNRs; and
- Regional/County important sites.

3.9 Where a feature has value at more than one designation level, the assessment will consider the impacts of the development in respect of each of the features for each of the designations, to distinguish between them in accordance with the respective legislation and policy.

Habitats

3.10 The guidelines recommend that the value of areas of habitat and plant communities should be measured against published selection criteria where available. Habitat types of European (International) conservation importance are listed on Annex I of the Habitats Directive. Habitat types that are considered priorities for conservation in England and Wales are listed as habitats of principal importance under sections 41/42 of the NERC Act 2006.

3.11 Locally important habitats may be listed in local Biodiversity Action Plans.

3.12 For habitats that do not meet the necessary criteria for designation at a specific level, the guidelines recommend that the ecologist may consider the local context, if appropriate.

Species

3.13 The guidance deals with species that need to be assessed because they are of biodiversity value, rather than because they are legally protected (although some species may fit in both categories).

3.14 In assigning value to a species, it is necessary to consider its distribution and status, including a consideration of trends based on available historical records. The valuation of populations should make use of any relevant published evaluation criteria. Species that are considered priorities for conservation in England and Wales are listed as species of principal importance under sections 41/42 of the NERC Act 2006.

Zone of Influence

- 3.15 The 'zone of influence' for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries. The zone of influence will vary for different ecological features depending on their sensitivity to an environmental change. It may therefore be appropriate to identify different zones of influence for different features.

Assessment of potential impacts

- 3.16 In accordance with the CIEEM guidelines, the next step is to characterise the likely impacts of predicted biophysical changes on ecological resources as far as possible. This process entails consideration of all impact characteristics such as: impact magnitude, extent, duration, reversibility, timing, frequency, in order to determine which impacts are significant in ecological terms (see below).
- 3.17 Impacts during the operation phase only of the Proposed Development were assessed. Similarly, impacts were also separated into those which were directly or indirectly associated with the development and whether they were of a temporary or permanent nature. Judgement of the magnitude of each potential impact was based on the best available knowledge of the sensitivity, vulnerability, and recoverability of the habitat, species or assemblage being assessed.
- 3.18 Mitigation measures are developed iteratively through the assessment and design process to avoid, reduce or remedy any significant adverse impacts, as far as possible, throughout the assessment and project design process. It is sometimes difficult to distinguish between pure mitigation measures and features of the project that mitigate potential adverse effects 'through design', also known as 'inherent mitigation'.
- 3.19 Finally, the CIEEM Guidelines recommend that any residual impacts, whether positive or negative, be reviewed against planning policy to determine the implications for action, the acceptability of the proposals and/or the requirements for additional compensation.

Criteria for Assessment

- 3.20 Significant effects encompass impacts on structure and function of defined sites and ecosystems. For the purpose of EclA, a significant effect is: *'an effect that either supports or undermines biodiversity conservation objectives for important ecological features or for biodiversity in general.'*
- 3.21 The conservation objectives will vary depending on the ecological features. For example, they may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local.

- 3.22 For habitats, conservation status is: *“determined by the sum of the influences acting on the habitat and its typical species that may affect its long-term distribution, structure and functions as well as the long-term survival of its typical species within a given geographical area”*.
- 3.23 For species, conservation status is: *“determined by the sum of influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within a given geographical area”*.
- 3.24 In order to assess whether the conservation status of any ecological features is likely to be affected by the Proposed Development, potential impacts on all features are given a value that must be fully characterised as described above. On the basis of all of these factors, available scientific knowledge of the feature, and available information on sensitivities to predicted biophysical changes, a professional judgement can then be made as to whether there would be a potential effect on the conservation status of the feature, in other words, whether the impact would be 'significant' in ecological terms. The 'level of significance' can then be defined by stating the value of resource affected or restored/created through the effect e.g. *'a significant negative impact at the County level'*.

4.0 Proposals

- 4.1 The proposals are for a two day music festival to be held at Melksham Rugby and Football Clubs. Oakfield Stadium and grounds. The arena will be located towards the southeastern side on the existing pitches. A maximum of 3000 tickets per day will be sold, and no camping is proposed. There is will two gate entrances, one via the main entrance to Melksham RFC and the other from Melksham Oak School via a pedestrian route through the existing pitches. Parking will be provided, as illustrated on Plate 2 on the existing pitches.
- 4.2 It is understood that all amplified music will finish no later than 2300, with the proposed timing being:
- Friday 26th June 1800 – 2300 (gates at 1600, with lights off by midnight)
 - Saturday 27th June 1400 – 2300 (gates at 1200, with lights off by midnight)
- 4.3 The entire site will be fenced using Heras fencing around the perimeter, with regular security monitoring the areas.
- 4.4 Lighting will include:
- Walkways with existing streetlights or added festoon lighting
 - Arena / parking – Existing sports flood lights
 - Added Portable flooding as needed

- At Midnight or before all additional lighting except streetlighting will be turned off

5.0 Baseline Conditions

Site Location



Plate 1: Site location and Proposed Festival Layout (Google, May 2025)

- 5.1 The site comprises improved grassland fields bounded by hedgerows, adjacent to the school. A relatively new residential housing development is present to the north of the site. The site is centred on OS grid reference ST 920 630.
- 5.2 The site is located in semi-rural habitats on the eastern edge of Melksham. Improved grassland fields and associated hedgerow networks extend to the east of the site, with arable fields to the north. The planting that was implemented under Planning Ref 13/06739/FUL for the new football and rugby club has established along the northern and northeastern corner.

Data Search

Designated Sites

- 5.3 There are no designated sites within 2km of the site boundary. The Wiltshire Bat Special Areas of Conservation (SAC) which includes the following; Bath and Bradford-on-Avon Bats SAC, Chilmark Quarries Bats SAC and Mottisfont Bats SAC are located 4.5km south of the site, and is of International Importance. The site does not lie within the consultation zone for this SAC.

5.4 Furthermore, there are no non-statutory sites within close proximity to the site. The closest is the 'Eighteen Acre Plantation' that lies 940m to the northeast.

5.5 There are no predicted impacts to designated sites given the distance and short term and temporary nature of the proposals. Therefore, they are no considered further in this assessment.

Habitats

5.6 There are no Priority Habitats adjacent to the development site, however there are numerous parcels of deciduous woodland located within 2km. This habitat is of County importance for nature conservation due to its status as a priority habitat. There are no predicted impacts to Priority Habitats given the distance and short term and temporary nature of the proposals. Therefore, they are not considered further in this assessment.

Site Walkover

5.7 The site comprises sports pitches and therefore the grassland is closely mown and well maintained species poor improved grassland dominated by a mix of hybrid ryegrass and fescue. Towards the edges, there is a small increase in floral diversity with white clover, creeping buttercup, dandelion and daisy. The scrub and trees are becoming well established in the mitigation areas around the northern and eastern edges.



Plate 2: View looking northwest from the proposed stage area

5.8 Whilst the boundary features of the site are of greater nature conservation value, the site itself comprises common and widespread habitats and given its use and high level of disturbance is considered to be of negligible value.

5.9 Whilst the habitats around the periphery are of higher value, the proposals include Heras fencing to extend the entire way around the perimeter. Therefore, there should be no impacts on these areas and they are considered to be outside of the Zone of Influence.

Biodiversity Net Gain

5.10 As the impacts as of a short term and temporary nature, a Biodiversity Net Gain assessment is not considered necessary to inform the planning application. The BNG user guide states that '*You do not need to record a habitat as lost when there are temporary impacts to a habitat and the area can be restored to both:*

- *baseline habitat type within two years of the initial impact; and*
- *baseline condition within two years of the initial impact'*

5.11 In addition, there will be no change or loss in habitats and whilst there will be additional trampling, the grassland will be allowed to recover to its current condition. Therefore, there is no applicable data to inform the metric.

Species

Amphibians

5.12 Great Crested Newt surveys have been undertaken for a number of planning applications adjacent to the site. GCN were only recorded within the pond highlighted in Plate 1. Eggs were also recorded confirming the pond as a breeding pond for GCN. No other amphibians have been recorded during the extensive surveys and no records have been returned from the local environmental records centre. The closely mown grassland is suboptimum habitat for amphibians. Whilst the pond lies within 85m of the site boundary, as the site will be fully fenced, there will be no access and it is considered that there will be no detrimental impact to the great crested newts.

5.13 Therefore, amphibians are not considered further in this assessment.

Badgers

5.14 Badgers are known to be present within the locality. The site itself does not offer any suitable sett building habitat and, whilst badgers may use the site to forage, the surrounding habitats are more suitable, offering greater opportunities. As the site will be fenced, there will be no impacts to these areas. Badgers may be susceptible to human disturbance from noise, vibration, and light/visual impacts.

However, there is sufficient habitat surrounding the site towards the north and west so that any impacts would be considered negligible as foraging would not be restricted.

- 5.15 Therefore, badgers are not considered further in this assessment.

Breeding Birds

- 5.16 Extensive bird surveys were undertaken for the adjacent application with data obtained in 2023, 2022 and 2020 on the existing farmland. The species assemblage will be reduced for the application site, given its use as sport pitches. However the northern/northwestern boundary is assumed to be used by nesting birds, with wren and whitethroat frequently recorded within the hedgerows in 2023. No skylarks were recorded in 2023.
- 5.17 The site itself does not offer any nesting building habitat. The surrounding hedge, scrub and trees will offer suitable opportunities and a large rookery was noted during the walkover within the nearby tree (close to the pond shown in Plate 1). It is considered that the bird assemblage onsite is of Local importance.
- 5.18 Potential impacts are considered within the following sections.

Bats

- 5.19 The following European Protected Species (EPS) licences for bats were identified within 2km of the site. These included:
- Destruction of a resting place for brown long-eared bat, (dated 2015-2025) - 1km north
 - Destruction of a resting place for common pipistrelle, (dated 2015-2020) - 1km north
 - Destruction of a resting place for brown long-eared bat, common pipistrelle and serotine, (dated 2015-2025) - 1.5km west
 - Damage of the breeding site and resting place of brown long-eared bat, common pipistrelle, serotine, soprano pipistrelle and whiskered bat, (dated 2019-2024) - 1.6km
 - Destruction of a resting place of soprano pipistrelle, (dated 2019-2025) - 1.8km south
 - Destruction of a resting place for brown long-eared bat and common pipistrelle (dated 2017-2018) - 1.9km south.
- 5.20 Extensive bat surveys including activity transects, static deployment and emergence surveys on trees, were undertaken for the adjacent application in 2020, 2022 and 2023. These surveys incorporated the hedge/scrub line to the north of the application site and therefore provide a good indication of species present onsite and its surrounds. Historic survey data is also available for the application site with surveys undertaken in 2006 & 2013.

- 5.21 The activity surveys recorded generally low activity with the same nine species recorded in 2022 and 2023. This species were:
- Common and soprano pipistrelle
 - Noctule
 - Serotine
 - Leisler's
 - Brown long-eared
 - *Myotis species'*
 - Barbastelle
- 5.22 The survey did find higher activity along the Clackers Brook, as expected given the high value of habitat, as well as around the pond that lies close to the application site.
- 5.23 The static detectors recorded the same species as the activity surveys with the addition of lesser and greater horseshoe bats. However, these records were very infrequent, and it is noted that calls from barbastelle, greater and lesser horseshoe bats only equated to 0.4% of the total calls – which were dominated by common and soprano pipistrelle.
- 5.24 The 2013 surveys did not record any horseshoe species, with activity dominated by common and soprano pipistrelle. *Myotis species'* were also recorded onsite. One hedgerow, shown below, did record moderate activity and was highlighted as a possible key commuting and foraging route (see hedgerow in Plate 2 below).
- 5.25 In conclusion, the site itself is unlikely to offer many foraging opportunities and the habitats onsite will have declined in suitability from 2013 when they were managed for hay. However, the mitigation planting that has been implemented is likely to still offer good habitat for bats and the range of aforementioned species are still considered to be present within the wider site. Therefore, taking into account the extensive survey data from the adjacent site and surrounds, and the relative proximity of the SAC, the wider site (within the Zone of Influence) can be considered to be of County Importance
- 5.26 Potential impacts are considered within the following sections.



Plate 3 Hedgerow as identified as well used for commuting and foraging in 2013

Reptiles

- 5.27 Previous surveys have not recorded any reptiles on site and there are minimal local records. A single grass snake was recorded during the surveys on the adjacent site in 2023. Again the application site has negligible potential but the surrounding habitat will offer some opportunities. As this area will be fenced, there will be no impacts should reptiles be present. Therefore, the species are not considered further in this assessment.

Invertebrates

- 5.28 There is limited data available for invertebrates. However, the pitches will have negligible potential for notable species of invertebrates. The hedge/scrub will provide some opportunity, but as this is likely to be common species of less than local value. As the site will be fully fenced, there will be no impact to these habitat. Whilst invertebrates can be impacted on by artificial lighting the site is often lit by the floodlights and lies within close proximity to the urban edge. Therefore, no further assessment is required.

Other NERC species

- 5.29 It is likely that species such as hedgehog are present within the locality and may move across the site and forage within the surrounding habitat. However, as the site will be fenced, there will be no impacts to these areas. Species, such as hedgehog, may be susceptible to human disturbance from noise,

vibration, and light/visual impacts. However, there is sufficient habitat surrounding the site towards the north and west so that any impacts would be considered negligible as foraging would not be restricted.

5.30 Therefore, hedgehogs, and other NERC species, are not considered further in this assessment.

5.0 Impact Assessment

5.1 The description of the proposals is given in Section 4, with a likely operational site plan provide in Plate 4 below.



Plate 4: Indicative Proposed Site Layout

Potential Impacts

5.2 The proposed festival will result in an increase in human activity across the site for two days, with some minor impacts for four days prior, and three after, allowing for the set up and removal of equipment. There will be daily workday of 800 to 2000 for main works. There will be a lighting test on Thursday 19th at 2200.

5.3 The impacts are considered to be only those associated with disturbance, as all impacts to habitats of higher value will be avoided through fencing and security. The sensitive ecological receptors that will be assessed within this section are; breeding birds and bats. The impacts are those associated with:

- Noise
- Lighting

Breeding Birds

- 5.4 Impacts to nesting birds as a result of anthropogenic noise pollution is relatively well researched, and is considered likely to affect behaviour and reduce species diversity and numbers. However, many of these studies focus on more permanent and long term noise levels, such as road noise. As stated in Environmental Pollution (March 2024)³ research on the effects induced by outdoor musical events are still scarce. The researcher carried out studies on music festival within urban and 'agro-mosaic' habitats. The paper concluded that after the event that species diversity fell in comparison to the control site. However, this was mainly associated with the urban site and it may be that this is as there are limited adjacent habitats to which the birds can disperse. However, the paper concludes that further studies are necessary to fully understand impacts at species level.
- 5.5 Another paper specifically looked at traditional festivals that are held in Valencia each year and their impacts on house sparrows. In one year it was noted that juvenile productivity was lower in the festival town in comparison to the control area. However, interestingly following Covid 19, productivity was the same in both towns, meaning that lockdown did not increase this species' juvenile productivity in the control localities in 2020 *versus* 2019⁴
- 5.6 In conclusion, the possibility of the music festival causing some degree of disturbance to nesting birds cannot be discounted. However, the local bird population is at best, of local value and that there will be some habituation to human disturbance due to the proximity of the RFC and frequent use of the field for dog walking/recreation. Whilst there may be insufficient research on noise and light impacts from festivals, all impacts will be temporary, short term and are considered reversible and unlikely to impact on the survival or population in the long term. Therefore, it is concluded that there will be no significant impacts on nesting birds as a result of the proposals.

Bats

- 5.7 As with the nesting birds, research on the impacts of music festivals is not well researched. However, the effects of lighting on bats and their behaviour is well documented. As part of the planning application for the RFC (Ref: 13/06739/FUL) dark corridors were highlighted where lux levels would not exceed 1 lux throughout the year, irrespective of whether the floodlights were on (see Plate 5 below). There will be an increase in lighting within these areas during the festival for which minimal additional mitigation can be implemented.

³ C. Battisti (2024) Changes in bird assemblages following an outdoor music festival: A BACI (before-after-control-impact) monitoring from central Italy. Environmental Pollution Vol 344

⁴ Bernat-Ponce et al (2021) Recreational noise pollution of traditional festivals reduces the juvenile productivity of an avian urban bioindicator. Environmental Pollution Vol 286

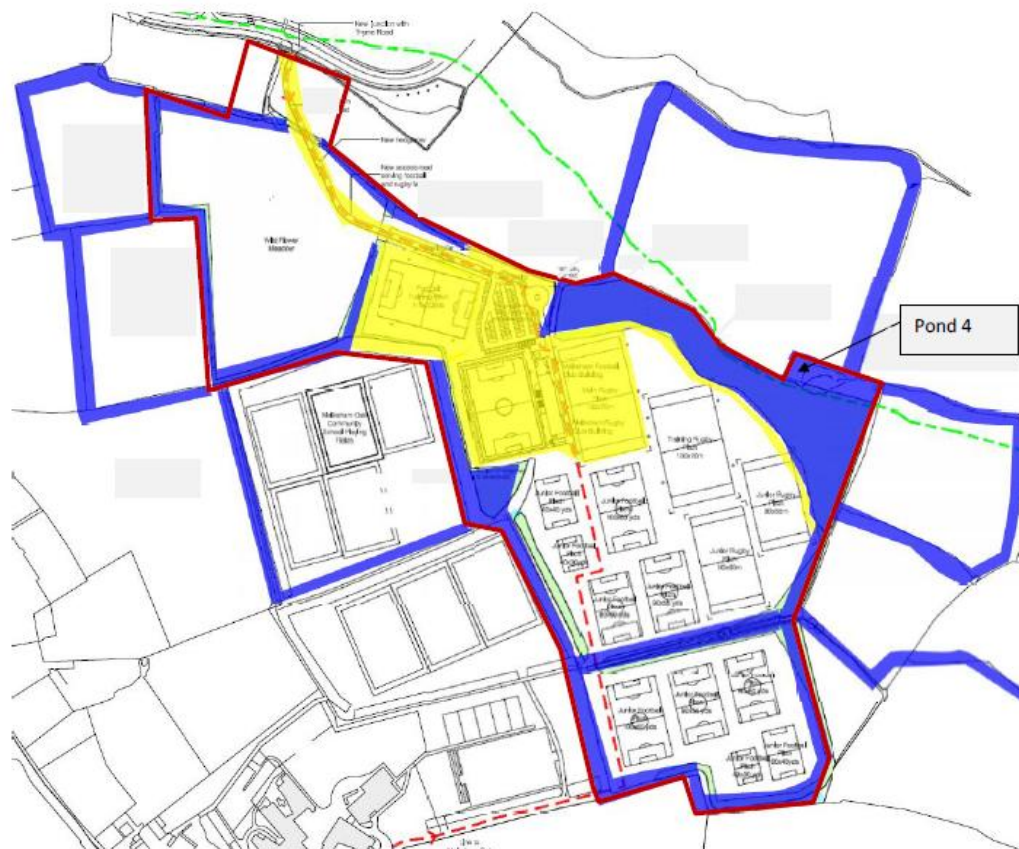


Plate 5: Blue areas highlight ‘dark corridors’⁵

- 5.8 The impacts will relate solely to bat commuting and foraging behaviour as there are no known roosts present. The extensive surveys undertaken on the adjacent site, and the historic surveys onsite, show that activity is low across the area and dominated by common and soprano pipistrelle. Pipistrelles are well known to be more tolerant of anthropogenic impacts and have become the one of the more well adapted UK bat species for living within urban environments. Research that has been carried out on the impacts of noise from music festivals⁶ have shown that whilst some species, such as *Nyctalus*/ *Eptesicus* spp showed a 47% decline in activity along a wood edge whilst loud music (up to 98.74 dB) was played, compared to a 32% decline for pipistrelle species.
- 5.9 It is acknowledged that there will be impacts on bats as a result of the festival. However, this will relate to foraging and commuting habitats only. It can also be assumed that the bats will adapt their behaviour and use alternative routes and foraging areas during the festival as there will be no fragmentation or

⁵ Ecosulis (2023) *Ecology Statement* Ref: WILCOU-MELCAM-C4982

⁶ J Hooker at al (2023) *Assessing the impact of festival music on bat activity* Bristol University

isolation from nearby roosts to the foraging grounds, given the current existing open landscape surrounding the site.

- 5.10 All impacts will be temporary, short term and considered to be fully reversible. As the majority of the activity on site was recorded to be pipistrelles, it is also less likely to impact on their behaviour, even in the short term.
- 5.11 Therefore it is concluded that there will be no significant impacts on the local bat population as a result of the proposals and no overall detrimental impact on the favourable conservation status of the species.

6.0 Conclusion

- 6.1 In conclusion, the festival has the potential to impacts on nesting birds and bats (commuting/foraging). Sufficient data is available on the site from the historic surveys undertaken on the site and the extensive surveys that have been undertaken on adjacent site for the proposed residential developments.
- 6.2 There is limited research on the impacts of music festivals on species, and whilst it is acknowledged that there will be a increase in lighting and noise disturbance, all impacts will be temporary, short term and considered to be fully reversible. Furthermore, there will be no direct impacts to the habitats and sensitive areas are to be fully fenced. Therefore, it is concluded that there will be no significant impacts to any sensitive ecological receptor as a result of the proposals.