

Response to 24/01529/REM

Introduction

For the last twelve years I have been conducting ecological surveys of one square kilometre of green belt bounded by the Biomedical Campus, the Nine Wells development, Babraham Road, Granham's Road and the railway line. The area is home to remarkable populations of red-listed farmland bird species of high conservation concern. My annual reports are available from johnmeed.net/ecology.

My objection to Application 24/01529/REM is based on the impact on biodiversity. Firstly, the assessment of ecological value is incorrect and seriously underestimates the red-listed species present. Secondly, there are important problems with the data sources which means that the baselines set do not provide a realistic picture of biodiversity of the site. And thirdly, these unreliable baselines mean that the mitigation measures proposed are insufficient to make good the loss of biodiversity. Taken together, the applications significantly underestimate the level of biodiversity and in consequence avoid appropriate mitigation. It is vital that this aspect of the applications is reconsidered and more appropriate mitigation measures proposed.

To put this in the wider context, it is no minor problem; the UK is classified as one of the world's most nature-depleted countries and the *State of Nature Report 2023* found 'no let-up in the decline of our wildlife, with one in six species at risk of being lost from Great Britain'. Grey partridge declined by 93% between 1970 and 2018 and corn bunting (right) by 89% – see the Appendix for more detail.

1: Biodiversity and red listed species of high conservation concern

The only mention of biodiversity in the *Design and Access Statement* is in this short section:

Section 3.7 Landscape and ecology

'The site currently comprises principally modified grassland and temporary car parking for ABCAM and 1000 Discovery Drive, both of which are considered to be of low ecological value and provide very few opportunities for protected and notable species. Opportunities for ground nesting birds exist on site, specifically within the grassland, and appropriate mitigation will be followed to ensure that no active nests are disturbed or destroyed during the construction phase of development.'

This statement is highly problematic. Prior to any of the Phase 2 work, the area in question was an arable field, part of a thriving wider farmland ecosystem, and my research shows that this field was home to the following red-listed species of high conservation concern:

- Grey partridge, now classified as 'vulnerable to extinction' in the UK. In 2016 the field was the centre of pairing activity for the whole area I study and at its peak 9 pairs were present there, of which 4 stayed to nest (the others nested nearby). Pairs were present in the field in most years with 4 pairs again in 2018; 2 pairs were there as recently as 2021. Similarly, in the autumn of 2015 I recorded 17 birds in the field, 14 in 2016, 20 in 2017 and

8 in 2018. Construction work and other disruption means that since 2021 no birds have nested the field though 1 pair was present on the other side of the cycle path in 2022 (and recorded in 2024).

- Corn bunting, classified as ‘near threatened’ meaning that they are considered likely to become at high risk of extinction in the UK in the near future: 1–3 pairs have used the field with males singing from the bushes including 1 pair in 2022 but none since, principally as a result of the development and disruption.
- 1–2 pairs of linnet and 1 pair of yellow wagtail, also ‘near threatened’, nested regularly; this is not now the case though both species are present in nearby fields in 2024.
- 2–3 pairs of yellowhammer nested in the bushes beside the ditch – 2 pairs were still present in 2023 and 2024.
- Good numbers of skylark: around 10 pairs nested in the field as recently as 2021; there are probably just 3 pairs in 2024.
- Other farmland species, notably reed bunting (1 pair in 2024) and whitethroat (4 pairs in 2024), use the ditch and bushes.
- In addition, endangered water voles use the ditch that runs beside the cycle path.

So, while it is true that there are now fewer ‘opportunities for protected and notable species’, this results from Phase 2 work, both construction of Abcam and 1000 Discovery Drive, and major disturbance of the remaining field. As a result, grey partridge, corn bunting, linnet and yellow wagtail no longer breed in the field, and numbers of skylark and yellowhammer are reduced. The further development proposed would remove skylark populations altogether.

2: Major issues with data sources

The question is then: why is there such a discrepancy between the assessment in Section 3.7 and reality? The assessment in Section 3.7 is based on three ecological surveys quoted in the *Ecological Conservation Management Plan Statement* and the *Biodiversity Net Gain Assessment* which require critical analysis.

All three surveys used the JNCC Phase 1 Habitat Survey methodology. This approach provides a rapid overview of habitats in a study area, principally mapping the different types of vegetation. Although surveyors will note species seen during their visit, such surveys do not generally provide detailed species information – supplementary methods are needed to do this. Other methods are often used for surveying arable land, eg for agri-environment scheme applications. My own surveys involve far more visits (over 40 last year), and my emphasis is on mapping bird and animal species.

The 2014 Habitat Survey

The *Ecological Conservation Management Plan Statement* refers briefly to an Ecosulis Phase 1 Habitat Survey from April 2014 carried out to ‘to establish the baseline interest and inform any future planning applications for this area’. While this survey is not available in the current documents I have been able to obtain copies of both the *Extended Phase 1 Habitat*

Survey report and Appendix 10.1: Ecological impact assessment from the outline application 16/0176/OUT.

The report describes the field as ‘amenity grassland and construction site’ and this is reflected in the *Ecological impact assessment*. This goes on to say that while grey partridge, corn bunting and skylark are found in the area, ‘it is unlikely that the site supports notable farmland birds’, ‘does not provide opportunities for grey partridge and corn bunting’ and offers only ‘reduced nesting opportunities’ for skylark, yellowhammer and reed bunting.

This assessment is problematic:

- The designation as ‘amenity grassland’ is puzzling as the field was used for arable land before and after spring 2014. Checking back through my field records I found that on June 9 of that year I had recorded wheat in the field in question, not grassland. The site remained arable in the following years – the Ecology Solutions 2020 survey shows that even after construction of Abcam and the heliport the rest of the field was arable.
- Above all, the assessment of opportunities for ‘notable farmland birds’ is incorrect. In the spring of 2014 2 pairs of grey partridge nested in the field, and 2 more in the field across the cycle path; their success meant that 44 grey partridges spent the autumn in the two fields. My records show that linnet, yellowhammer and yellow wagtail (as well as skylark) were also using and nesting in or beside the field in spring 2014 (as did corn bunting in subsequent years prior to Phase 2 development).
- The survey pays little attention to the wider context. The field was of value to farmland wildlife because it formed part of the local network of arable fields. Focusing on a small field in isolation makes it easier to dismiss its wider importance.

It is difficult to understand how an ‘experienced ecologist’ can have reached these conclusions. Grey partridge are well camouflaged and highly skilled at keeping their presence secret – only repeated visits at the right times of day and year give a full picture of their populations. There is also often the assumption that arable land – as sadly is often the case elsewhere – supports little wildlife.

Whatever the explanation, his assessment has led to some major errors in establishing baseline data. It allows the *Ecological Conservation Management Plan Statement* for 24/01529/REM to state ‘At the time of the survey, the site consisted of a works area with temporary buildings and amenity grassland and contained very little ecological value and did not provide any significant opportunities for protected species’ and to add weight to Section 3.7 in the *Design and Access Statement* that the field is ‘of low ecological value’.

The 2020 and 2023 Habitat Surveys

Two further Phase 1 Habitat Surveys by Ecology Solutions are quoted in the *Ecological Conservation Management Plan Statement*: the first carried out in March 2020 and the second in October 2023. A summary of findings forms a key part of the *Statement* and the *Biodiversity Net Gain Assessment*.

The first habitat survey in March 2020 following the Abcam development recognised that the rest of the field (apart from the helipad) was arable land. By the time of the second survey in October 2023 1000 Discovery Drive construction was almost complete, the helipad had been

moved, the rest of the field was grassland and breeding was over. It was unsurprising that the survey that year revealed reduced quality habitats and few species.

There are again significant issues with these surveys:

- Once again, the surveyors underestimated the presence of farmland species, and only recorded skylark. My own data show that in 2020 yellowhammer (2 pairs) and linnet were still breeding in or near the field, in addition to 10 pairs of skylark (and 3 pairs each of whitethroat and reed bunting). A group of 7 grey partridge used this field and that across the cycle path in the autumn and winter and 4 pairs bred across the two fields (2 in each) during the spring of 2021.
- The *BNG Assessment* twice states that at the time of the 2020 survey the crop was ‘not yet discernible’ – despite this the surveyors did not return later in the year to make a more accurate assessment which might have revealed more species.
- The discussion of arable land is uncomfortable – the *Statement* accepts the assessment of the 2014 report as grassland without question, despite the 2020 survey showing some arable. There is just one very brief mention of the previous arable land in the *Statement* which otherwise ignores it completely. Confusingly, the *BNG Assessment* twice states that ‘site predominately comprises modified grassland and arable land’ – which of course is no longer true (and the *BNG Assessment* for 24/01589/REM makes no mention of it). However the condition assessment was set as N/A and no further reference made to it.
- The *BNG Assessment* proudly describes itself as ‘a baseline Biodiversity Net Gain assessment of the proposed development’ and states that ‘to ensure consistency, the 2020 baseline will be applied for the remaining development parcels’. This is despite the fact that both surveys were carried out after Phase 2 construction was well underway and that by 2023 a formerly good level of farmland biodiversity had already been degraded. In fact, at least three studies commissioned for the Biomedical Campus have now set baselines, each less demanding than the previous one.
- Once again there is little awareness of the broader context, or the fact that grassland can add value to farmland wildlife as part of the wider habitat mix. In 2014 2 pairs of grey partridge used the temporary grassland that later became the Anne McLaren Building. Partridge also used the helipad grassland where I have also recorded whinchat and wheatear on passage (including one this year). Other patches of grassland support colonies of invertebrates including brown argus and small copper butterflies, and provide seeds for linnets and other birds.

As a result, no mitigation for the loss of arable habitat and farmland species is proposed. This suggests that the Biomedical Campus may be prepared to disregard the damage they have done and the impact on threatened farmland species.

3: Mitigation problems

So how can this damage be properly mitigated? In the *Design and Access Statement* the only mention of this is that ‘appropriate mitigation will be followed to ensure that no active nests are disturbed or destroyed during the construction phase of development’. While this is a minimum requirement it is clearly far from adequate.

The *Ecological Conservation Management Plan Statement* does claim the objective ‘to ensure that the site continues to support a similar complement of species to that already existing’.

Details of the ecology measures proposed are provided in the *Biodiversity Net Gain Assessment*. However, as stressed above, the major problem is that these assume that the 2020/2023 surveys – after the once thriving habitat was degraded by development work – provide a suitable baseline for mitigation.

Any genuine attempt to mitigate Phase 2 development needs to take a reliable baseline of the population levels present at least before the Phase 2 development began, and to take genuine steps to restore these. I can provide copies of my own relevant data and reports. The 2006 *Cambridge Biomedical Campus Expansion Environmental Statement Volume 1A* – itself intended to provide baseline data for the campus – recorded grey partridge, corn bunting, linnet and yellowhammer in the field. In addition the *Cambridge Farmland Birds Breeding and Wintering Bird Survey Report* produced for Cambridgeshire County Council by Applied Ecology Ltd in October 2014 provides similar species data for the adjoining fields closer to Babraham Road.

So far, the red-listed species have continued to breed in the as-yet undamaged arable land bounded by the Campus, railway line and Granham’s Road; however, their populations are under pressure, particularly as the land across Granham’s Road is far less welcoming to most of the species due to the absence of hedgerows, margins and other landscape features that they require.

Any mitigation more distant from the site will not tackle the species loss – grey partridge in particular are highly sedentary and will only move to nearby habitat. Some alternative is needed close by.

One option would be for the Biomedical Campus, developers and planners to work actively with landowners and farmers to improve the adjoining land between Granham’s Road and Hinton Way to provide replacement habitats for displaced species. There is no shortage of research to help with such mitigation and I am happy to advise on such matters, and to contact other experts in the field.

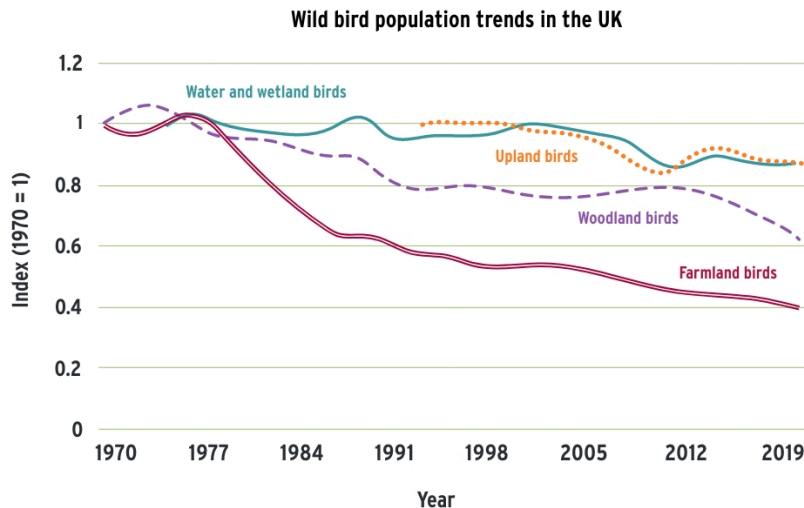
Some form of genuinely effective mitigation could also provide a template that other councils could adapt to help to save species that otherwise are at risk of extinction in the UK.

John Meed, June 2024

See johnmeed.net/ecology

Appendix: The decline in farmland birds

This brief appendix outlines why safeguarding our farmland birds should be a high priority. The following graph shows how, as the *State of Nature* report puts it, 'bird species most closely associated with farmland have declined more severely than birds in any other habitat' since 1970.



The national declines of the red-listed species most affected by Phase 2 development and Application 24/01529/REM are as follows:

Grey partridge	-93%	Yellowhammer	-60%
Corn bunting	-89%	Skylark	-56%
Yellow wagtail	-68%	Linnet	-56%

Declines in bird populations indicate much deeper problems – the habitat and foods they depend on have also gone. The *State of the UK's Butterflies 2015* report showed that we lost over half of our farmland butterflies between 1976 and 2014, and other farmland invertebrates have also been hit hard. Key factors are changes in farming practices including the loss of mixed farming, a move from spring to autumn sowing of arable crops, changes in grassland management, increased pesticide and fertiliser use, and the removal of hedgerows, but also loss of land to development.

The km² I study supports 50-60 pairs of skylarks, 12-18 pairs of grey partridge, 13-20 pairs of linnets, 8-11 pairs of corn buntings, 10-15 pairs of yellowhammers and 1-3 pairs of yellow wagtails. Habitat variety (the combination of arable crops with hedgerows, ditches and grassy margins) and land management (field size, crop rotation, targeted pesticide use and winter cover crops) contribute to the richness of the area.

Data from the BTO shows that grey partridge, corn bunting and yellow wagtail are increasingly restricted to eastern England. However, even here their distribution is patchy; in Cambridgeshire grey partridge are typically recorded in a fifth of the Breeding Bird Survey squares, and corn bunting and yellow wagtail in a quarter.