

Date: 30 November 2012
Our ref: 70230
Your ref: -



Tom Tew
The Environment Bank Limited

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

By email only, no hard copy to follow

Dear Dr Tew

Lodge Hill biodiversity offsetting report

Thank you for circulating the consultation draft of your report, 'Biodiversity offsetting to compensate for nightingale habitat loss at Lodge Hill, Kent'.

1. This response is concerned with the specific question posed by the Core Strategy Inspector of '*whether there is a reasonable prospect that adequate compensatory habitat could be established, thus reducing the residual impact of the development*'.
2. It is important to note that at this stage, all that is possible is make a prediction of the amount of compensation land that may be required to offset the potential loss of nightingale at Lodge Hill. This necessitates a range of assumptions which can only be tested at the point when specific parcels of land have been identified and can be secured through the planning process. Thus it is necessary to consider a range of scenarios and the amount of land which would be needed in each, to provide confidence that habitat compensation would attract nightingale in numbers which would offset likely impacts.
3. In summary Natural England's advice on the report is as follows
 - a. We welcome the approach taken, in that it uses expert opinion to assess the technical feasibility of habitat compensation and uses more than one approach to assess the scale of habitat compensation that would be required.
 - b. The advice from the British Trust for Ornithology (BTO) provides reason to consider that habitat compensation for the loss of nightingale at Lodge Hill would have a good chance of success, if of adequate scale and design, but it would not be without risk.
 - c. The estimates of the scale required, derived from BTO's expert opinion and from application of the pilot offsetting metrics, could in our view both prove to be underestimates. The BTO figure does not take account of time lag and delivery risks. The offset metrics estimate makes unsafe assumptions about: habitat distinctiveness; delivery time lag; and technical difficulty.
 - d. Habitat compensation would be likely to rely on habitat creation, as opposed to restoration, and therefore it would be prudent to plan on the basis of the estimate for the former.
 - e. Whilst it might be possible to compensate for losses within the 500ha suggested in the report, it would be prudent to plan on the basis of at least the high distinctiveness figure, 894ha, which is also indicated in the report.
 - f. The work undertaken by Greening the Gateway Kent and Medway (GGKM) suggests that: a large proportion of Kent provides conditions which may be suitable for habitat creation; target areas of high potential can be identified; and that landowners are willing to negotiate over the provision of land. Securing the land on the scale which may be required will be a challenge and therefore, in itself presents a risk to delivery.

4. This advice is set out in more detail, in Annex A of this letter.

Yours sincerely

Robert Cameron
Principal Advisor, Land Use

Annex A

General approach taken by the Environment Bank

1. We very much welcome that the consultation on habitat creation has been informed by acknowledged experts on nightingale in the UK, including those at the British Trust for Ornithology (BTO). In addition, whilst we have some reservations about the methods used for calculating the scale of habitat creation that would be required, we welcome that more than one method has been used. It is logical to select a middle figure from a range of estimates, to balance the likelihood of underestimation in one method and overestimation in another, to reflect reasonably the risks of reliance upon compensatory habitat.
2. We recognise that at this stage the estimates of scale required can only be approximate. Until specific parcels of land are selected, assumptions cannot be fully tested. Thus we would not expect precise estimates to be produced at this stage. We refer below to the estimates made in the report to a level of precision of a single hectare but this should not be taken to imply that we consider them accurate to this level.

Technical feasibility

3. The BTO report suggests a relatively good understanding of how habitat could best be developed to attract nightingale and it conveys some confidence that if appropriate conditions are provided, then nightingale can be attracted in numbers. The case examples which it provides describe locations at which nightingale habitat has developed of its own accord, as opposed to being the result of a deliberate plan. Also it does not contain descriptions of cases in which apparently suitable habitat has not been colonised by nightingale, nor attempt to estimate how frequently these cases arise. Thus it is possible that the successes which it describes may not reflect circumstances which can be achieved in this case.
4. Weighing up these considerations does not enable us to provide a quantitative estimate of the probability that compensatory habitat would prove successful. Our advice, on the basis of the available information, is that it would have a good chance of success, if of adequate scale and design, but it would not be without risk.

The estimates of scale - BTO

5. BTO estimated that 300-400ha of habitat would be required to attract the number of nightingale which could be lost from Lodge Hill. This estimate allows for habitat heterogeneity and management. It assumes that the site is optimal in terms of location and quality. BTO made clear in the first workshop that it did not take into account the risks of time lag or difficulties in delivery. As a result we consider it to be an underestimate.

The estimates of scale – the offsetting metric approach

6. Though it has not been designed for application to protected areas or individual species, offsetting is useful in that it applies a systematic set of questions to ensure that well defined risks are each reflected quantitatively, and are neither missed, nor double counted. The multipliers which have been used are reasonably clear but it is difficult in the report to see exactly how they have been applied to each component habitat on the site and to its proposed offset. Thus we have found it difficult to see the precise effect which each multiplier has on the end calculation of area required. It appears to us that the assumptions underlying the metrics have not been adjusted sufficiently to reflect the objective of habitat compensation in this case, which is to attract a single species, rather than just to replace the fabric of habitat which would be lost. This view is explained in the following paragraphs.

a. Distinctiveness

- i. The report says, '*Any site designations (e.g. BAP priority habitat) confer a biodiversity*

distinctiveness of 'high'; this is because species or habitats present have been deemed to be of value on either a local, regional or national level.' However, the report does not categorise all habitat used by nightingale on the development site as being of high distinctiveness. For example, it categorises scrub as 'medium distinctiveness, even though it is the core habitat for nightingale on the site. We have already offered advice that the nightingale interest is potentially of national importance, and can advise here, with a high level of confidence, that it is at least of regional importance. Therefore our advice is that any habitat used by nightingale on site should be categorised as being of high distinctiveness. The report does not comment on whether this is appropriate but reports that assuming high distinctiveness across the site would elevate the area required to between 546ha (for habitat restoration) and 894ha (habitat creation).

ii. It could be argued that this should be adjusted further upwards if the site was notified as an SSSI, because the standard multiplier for high distinctiveness reflects that the offset metrics are not expected to be applied to designated sites.

b. Time lag.

i. It is agreed by most parties and reflected in the report that there would be a time lag between landtake impacts and offsetting, if development was to proceed as proposed. This raises the question of whether there will be a sufficient source population of nightingale to colonise new habitat. You have reported that, *'The BTO advise that temporary loss of habitat probably wouldn't lead to a permanent reduction in the breeding population, provided that a suitable source population persisted in the area and that the compensatory habitat was close to it. It is believed that the Kent population of nightingales is, however, still in decline so it is difficult to predict with certainty whether this condition will be met.'* The understanding we took from the workshops was that population of nightingale in Kent was declining more slowly than elsewhere in its British range and the BTO experts voiced in the first workshop their expectation that the population *should* still enable new habitat to be colonised when ready. Thus whilst we would advise that there is a risk in the time lag, we do not consider this so grave as to rule out habitat compensation as worthwhile for nightingale, as long as measures are taken to minimise this risk.

ii. What is more, this risk could be reduced by adjusting the scale and distribution of habitat compensation. The more habitat is provided, and the wider its distribution, the more quickly one would expect potential nightingale colonists to encounter it when it is first ready.

iii. The report categorises the delay in creation of dense scrub and scrub mosaic habitat as 5 and 10 years respectively, though in the same document it reports both that natural regeneration (as opposed to planting) creates the best habitat and that it takes 10 to 20 years to develop, depending on soil fertility. Taking the midpoint in this time range, one could accept therefore that suitable scrub will take on average 15 years to develop. Ms Benmayor emailed on 26th November and said that application of the 15 year multiplier to the scrub area alone would increase the area of scrub required by 20% or 40ha. However, it is reasonable and not precautionary to assume that nightingale are unlikely to use any other habitat in a mosaic before the scrub is ready, so one could reasonably advise that the whole offset area should build in the multiplier for 15 years. If this calculation was to be done, it would further increase the estimated requirement to above 546ha (for habitat restoration) and 894ha (habitat creation).

iv. Technical difficulty

The report categorises the technical difficulty of restoring or creating the habitats on site as being of medium or low difficulty. This does not reflect that there are no case studies of deliberate habitat creation specifically for nightingale, and therefore, the reality that success has not been demonstrated in any case. Habitat creation or restoration for nightingale could

therefore be argued as of high or very high difficulty. This would double or triple the multiplier used and could therefore double or triple the area requirement. We are not advising that this level of adjustment is necessary but note that the estimates of 546ha (for habitat restoration) and 894ha (habitat creation) do not fully reflect these concerns about time lag or technical difficulty. Given this we do not regard these area figures as precautionary.

c. **The balance between habitat restoration and habitat creation**

Whilst the report has provided separate estimates for the area that would be required if the offset was restoration as opposed to habitat creation, it has not defined what would fall into each of these two categories. Table 2 indicates the types of action which could provide habitat compensation. Summarising the detail, these fall into the following categories or a mix of them: cutting or mulching over stood coppice; tree and shrub planting; or natural regeneration to create scrub habitat. Only the first of these is easily described as restoration. Planting and natural regeneration are likely to be seen as creation, unless the habitat has started to develop already, in which case it might not be seen as providing additionality. It is recommended by BTO that the focus of offsetting should be natural regeneration of scrub rather than planting or coppicing (coppiced woodland is described by BTO as sub-optimal habitat). Thus it appears likely that the majority of offsetting is likely to be habitat creation, and therefore the higher area estimate is likely to be required. That is, we would advise at this stage that it would be prudent to plan on the basis of the 894ha estimate for habitat creation necessary, rather than the 546ha estimate for restoration.

Securing land for habitat compensation

7. Greening the Gateway Kent and Medway (GGKM) has, in mapping some basic land characteristics, shown that offsetting might be possible over a large proportion of Kent. In identifying specific areas with high potential and opening initial discussion with landowners, GGKM has shown that it is possible to target areas and that landowners are willing to negotiate. It has not shown how much suitable space there is in total in the target areas, nor that any specific area is definitely available. Stakeholders have expressed some views as to why parts of the sites presented by GGKM (even those seen as most promising) are not suitable. However, GGKM has longstanding delivery experience in Kent and the areas are sensibly described. They do in our opinion present reason for optimism that land could be found for offsetting but the areas which are suggested above are large enough to make securing of adequate land a substantial challenge. Other factors aside, this must be considered a risk in itself.