



nature's voice

Tom Tew  
Chief Executive  
Environment Bank Ltd

By email only: [tomtew@environmentbank.com](mailto:tomtew@environmentbank.com); [ldf@medway.gov.uk](mailto:ldf@medway.gov.uk)

30 November 2012

Dear Tom,

**ENVIRONMENT BANK LTD FINAL DRAFT REPORT *BIODIVERSITY OFFSETTING TO COMPENSATE FOR NIGHTINGALE HABITAT LOSS AT LODGE HILL, KENT.***

**CHATTENDEN WOODS SITE OF SPECIAL SCIENTIFIC INTEREST AND ADJACENT HABITATS**

**MEDWAY COUNCIL CORE STRATEGY EXAMINATION**

---

The RSPB is grateful for the opportunity to comment on this “final draft” report.

In our view the Lodge Hill Strategic Allocation (LHSA) in the Core Strategy raises fundamental issues regarding the protection of designated sites and important populations of species of conservation concern in the context of adopting a Core Strategy that is sound. This was clearly at the heart of the Inspector’s concerns when she suspended the Core Strategy Examination and asked Medway Council to undertake work:

*“....to establish whether there is a reasonable prospect that adequate compensatory habitat could be established, thus reducing the residual impact of the development”*

In seeking to resolve those issues, we welcome the technical process that that has led to this report. However we have serious reservations about the report as a whole and the applicability of the methodology used to address the Inspector’s question. These concerns are set out below.

### **Introduction**

In this covering letter we set out our key concerns about the process and methodology, the assumptions made and conclusions drawn in the EBL report dated November 2012, produced after the Stakeholder Workshop held on 9<sup>th</sup> November 2012.

**South East England  
Regional Office**  
1st Floor Pavilion View  
19 New Road  
Brighton  
BN1 1UF

**Tel** 01273 775333  
**Fax** 01767 685535  
**[www.rspb.org.uk](http://www.rspb.org.uk)**



The RSPB's detailed comments on the EBL report are set out in a series of Annexes attached to this covering letter. These are as follows:

- **Annex 1:** Key comments on the main EBL report;
- **Annex 2:** Comments on Appendix 3 of the EBL Report – *Study of Nightingale Habitat Creation Opportunities across Kent*. Greening the Gateway -Kent and Medway; 31st October 2012;
- **Annex 3:** Timescales involved in nightingale colonisation of scrub and woodland;
- **Annex 4:** Summary comments relating to habitat compensation for nightingales.

Our comments in each of these annexes are made in the context of the RSPB's stated approach that any compensation measures should adhere to well-established principles (see RSPB submission on Matter 5, Lodge Hill to the Medway Core Strategy Examination). These are that such measures should be:

- **Targeted** at completely compensating for the damage caused by the plan or project;
- **Effective** in both ecological and legal terms;
- **Well-located** through compensation measures realised as close as practicable to the location where the damage will be caused; and
- **Well-timed** so that the compensation measures are fully functional before the damage is caused;
- **Sufficient** in extent to meet the ecological needs of the affected species and habitats.

It is the RSPB's view that the EBL report fails to provide the necessary confidence that these principles can be met and therefore the Inspector's question cannot be answered positively (see below and Annex 4 in particular).

We understand that this "final draft" report omits some key information (e.g. see email exchanges between EBL and Bioscan) and, in any case, may be revised again before it is finalised. Therefore, the comments set out in this letter and annexes are made without prejudice to any further revisions to the EBL report. Furthermore, we reserve the right to comment on any additional material that may come forward.

## Background

### *Nightingale population status: national and local*

1. The UK nightingale population has declined by 52% between 1995 and 2010, whilst its range has contracted significantly to the south and east of the Country over the past 60 years. It is currently "amber-listed" as a Species of Conservation Concern (see State of the UK Birds 2012:  
[http://www.bto.org/sites/default/files/shared\\_documents/press/associated\\_files/state-uks-birds-report-2012.pdf](http://www.bto.org/sites/default/files/shared_documents/press/associated_files/state-uks-birds-report-2012.pdf)).
2. A comprehensive national nightingale survey was undertaken by the BTO in 2012, and whilst the national results are still awaited (expected early 2013), the survey showed that the Lodge Hill area (including the Chattenden Woods SSSI) supported 84 singing nightingales in 2012. The Lodge Hill Strategic Allocation Area (LHSA) itself supported up to 71 singing nightingales in 2012 (two of these straddle the boundary with the existing SSSI).
3. It is very likely that Lodge Hill will prove to be the most important nightingale site in Kent in terms of numbers of territorial males, and it is also likely that it acts as a source for birds replenishing or colonising other sites on the Hoo Peninsula and possibly elsewhere in Kent.

Subject to the publication of the national results from the 2012 survey, it is also likely that Lodge Hill is one of the most important sites for nightingale in the UK.

4. On the basis of these figures, in July 2012 Natural England advised that the Lodge Hill area should be given the same weight as if it were an SSSI. This advice was recently reiterated in Natural England's letter to Medway Council dated 12 October 2012.

*Nightingale habitat requirements*

5. Based on the BTO report (dated 18 October 2012) and discussions during the technical process, it is possible to summarise the ecological requirements of nightingales as follows:
  - The most consistently occupied sites are characterised by a series of key biotic and abiotic parameters as set out in Chapter 7 of the BTO Report. We note that these parameters are not systematically presented and addressed in the EBL report.
  - There is considerable uncertainty regarding the ability to create the conditions which would deliver all these parameters.
  - The BTO advise that the natural regeneration of scrub is the preferred option to create breeding habitat for nightingales. Other habitats are sub-optimal. The RSPB agrees with this assessment.
  - The development of naturally regenerating scrub - to the point at which it becomes suitable for nightingale occupancy - typically takes between 15-20 years assuming favourable conditions, but it may take longer.
  - The development of naturally regenerated scrub to peak condition for nightingale occupancy is likely to take longer still.
  - The BTO advise that occupancy by nightingales is the only reliable indicator of whether habitat creation is working. The RSPB strongly agrees for reasons stated throughout the process: simply providing habitat, on any scale, is no indicator of success in species-led compensation.
  - The influence of social cohesion on nightingale occupancy of habitats is a key uncertainty in assessing whether or not they are likely to colonise any mooted compensation area.

**The key concerns of the RSPB on the Environment Bank Ltd report *Biodiversity Offsetting to compensate for nightingale habitat loss at Lodge Hill, Kent* (dated November 2012)**

6. These comments are made without prejudice to the RSPB's fundamental concern that the mitigation hierarchy (avoid and reduce) has not been adhered to in the Medway Core Strategy and that the Council has chosen not to commence its work on reviewing the Sustainability Appraisal (as advised by the Inspector) until after the discussions on compensatory habitat have essentially ended. The RSPB has raised these concerns on several occasions with the Council as we consider the Sustainability Appraisal and the search for the most sustainable location could have commenced several months ago.
7. The following comments draw out the RSPB's key concerns with the EBL report. These should be read in conjunction with detailed comments found in Annexes to this letter.

*General approach to compensatory habitat provision*

8. The primary approach adopted by EBL utilises the Department for Environment, Food and Rural Affairs (Defra) biodiversity offset metrics. It has been made clear by Defra that biodiversity offsetting is still experimental and untested in the UK, and that whether it will be adopted depends on a number of pilot projects due to report back in about two years' time. It is not Government policy, as stated in the report.
9. As has been stated in previous correspondence and during the workshops, Defra's approach is a habitat, not species, led approach. It concerns itself with the replacement of completely destroyed and/or degraded habitats and does not address impacts on species per se. In seeking to manage the risks inherent in habitat replacement, it relies substantially on habitat area/distinctiveness. Critically in this case, Defra's approach does not rely on the successful establishment and maintenance of habitat of suitable quality to support new or enhanced nightingale populations at targeted sites. This is manifest in the approach set out in the EBL report which is based on calculating alternative habitat areas for nightingales, and as additional risks and uncertainties have arisen, responding by changing the mathematical calculation leading to an increase in the projected compensation area. Though we note from correspondence between EBL and Bioscan that not all risks may have been addressed by EBL.
10. Little or no time has been spent on a detailed investigation of those factors which might actually attract nightingales to use compensation areas in sufficient numbers despite the several months that have elapsed since the Examination was adjourned.
11. The decision to take this route was that of Medway Council and EBL. The RSPB remains unconvinced it was the correct one and consider it has failed to make substantive headway in respect of answering the Inspector's question. We consider the uncertainties associated with the ability to provide adequate compensation have increased rather than decreased.

*Relevance of Natural England's advice*

12. It has been made clear by Natural England that, in addition to the existing Chattenden Woods SSSI, (part of which is within the development site) the wider area at Lodge Hill should be given the same weight as an SSSI for planning purposes given the size of the nightingale population (currently considered to be 84 territorial males). In its guidance on offsetting, Defra makes it abundantly clear that they agree with the Lawton report that offsetting should not change existing levels of protection for biodiversity. In their own guidance, EBL see these strictures as applying to SSSIs, and yet what they are proposing to do here goes against Defra guidance and their own guidelines. It is of concern that EBL chooses to side-step the SSSI issue and thereby fail to provide the Inspector with advice on a key aspect of applicability of the very approach it has selected.

*Impacts of development at Lodge Hill on the timing and delivery of compensatory requirements*

13. The EBL report confirms the BTO's view that development of the LHSA would cause the probable loss of c.66 nightingale territories and possible loss of 71. This is based on an assumption of phased development of the site and a combination of direct habitat loss and indirect effects on the Rough Shaw Pasture part of the SSSI that lies within the LHSA.
14. We agree with this presumption and welcome the acceptance in the EBL report that all nightingales on the development site including that part of it within the existing SSSI will be lost. However, it does not address indirect effects (e.g. recreational disturbance and cat predation) on those nightingale territories lying in that part of the SSSI outside the LHSA. Using the same logic, it could be assumed they would be vulnerable to loss.

15. However, the report fails to recognise that the large Lodge Hill nightingale population (which could account for some 7-8% of the Kent population) may be a source population for neighbouring areas (recognised in the BTO report). As such, its destruction may not only affect populations of nightingales elsewhere in the county, but that this in turn could affect the availability of nightingales to colonise any temporary or permanent compensatory areas. This is a critical consideration in terms of the ability to have a reasonable prospect of establishing adequate compensatory habitat.
16. This concern is exacerbated by the revelation by the Defence Infrastructure Organisation (DIO) at the Stakeholder Workshop on 9<sup>th</sup> November 2012 that they would be required to clear the site of vegetation and ordnance before development started. This would happen in less than a year, and at the start of the process. This would result in the immediate loss of habitat supporting 53 nightingale territories (63% of the 84 territories) from within the LHSA that is not part of the current SSSI. It is unclear whether or not the DIO work would also need to extend to that part of the SSSI that is within the LHSA (Rough Shaw Pasture). If that was the case, the number of nightingales lost would increase to 71 territories (85% of the 84 territories) according to the BTO.
17. The DIO intention to clear the site (including all or most scrub habitat) before development started has been entirely ignored in the EBL report. Yet it has a critical effect on the ability to answer the Inspector's question. The RSPB considers this a serious and fundamental flaw of the report.
18. The clear message from the comparator sites and the opinion of nightingale experts is that it would take 15-20 years or longer to reach a condition that would be suitable for nightingale *colonisation*, and likely longer to reach peak condition for nightingales on such sites. This presents a time lag of around 20, if not 30 years in providing compensation (assuming all the parameters and uncertainties identified by the BTO and others are met). This places considerable uncertainty over whether there is a reasonable prospect that adequate compensatory habitat could be provided in the context of the Medway Core Strategy timescales.
19. The report addresses the issue of the sudden loss of up to 71 pairs of nightingales extremely obliquely and in a way that obfuscates. It is not known what the local, county or even national population effects on nightingales may be, given the very different timescales over which habitat loss and habitat creation take place. Furthermore, it appears that conspecific attraction and social cohesion could be important components in the establishment and maintenance of viable (local) nightingale populations (see BTO report). If as seems likely, Lodge Hill is a source population, its sudden loss could have significant destabilising impacts on the local and Kent populations. The EBL report does not address this issue and certainly not in the context of the 20-30 year time lag likely in compensatory habitat provision, set against an ongoing national population decline. Instead, the EBL report seeks use of "simulated social attraction" to reassure the Inspector of an increased likelihood of colonisation. Yet the report fails to acknowledge that there is no evidence base to support a technique over which the BTO express serious misgivings in their report (misgivings the RSPB shares). This adds even further uncertainty.
20. The suggested provision of temporary offsetting measures by woodland coppicing during the 15-20 years for more permanent measures to come into condition is also full of uncertainties. Such an approach is untested on this scale, poses considerable practical difficulties and would be relied on at a time when nightingales have been moving out of

woodland into scrub. It is also unclear whether there would be any suitable woodland available to provide this function.

21. At all stages, the EBL report takes the optimistic rather than the realistic position. For example, the report fails to draw attention to the obvious negative factors associated with some of the selected receptor sites that will undermine their effectiveness. As such the RSPB strongly disagrees with the conclusion of the EBL report.
22. The apparent acceptance of a significant delay (at least 15-20 years, if not longer) in the provision of compensatory habitat in the EBL report represents a significant move away from the Council's stated objectives in policy CS6 of the draft Core Strategy and the draft Lodge Hill Development Brief. This will have critical implications in respect of the planning framework currently being proposed by the Council and goes to the heart of the question posed by the Inspector for the Core Strategy examination.

### Conclusions

23. In summary the RSPB has grave concerns regarding the impact of the proposed development and whether there can be *"a reasonable prospect that adequate compensatory habitat could be established, thus reducing the residual impact of the development"* as requested by the Inspector. These concerns can be summarised as follows:
  - The nightingale is a species of increasing conservation concern undergoing a national decline, with a complex and not fully understood ecology. No-one has sought to deliver habitat compensation for this species before to the knowledge of both the BTO and the RSPB, and certainly not to address this magnitude of impact.
  - The Lodge Hill site is almost certainly the most important site for this species in Kent, and probably the most important site in the UK. Consequently Natural England have recommended that the site should be given the same weight as an SSSI.
  - According to Defra's own guidance, that would mean that biodiversity offsetting is not an appropriate tool to use in this case. In any event, the Defra approach is habitat and not species-led which greatly undermines its relevance. The EBL report does not, in the RSPB's view, adequately address this and other relevant issues to ensure the Inspector is properly advised.
  - This is further compromised by the timing and magnitude of habitat loss, the uncertainty surrounding land identification and assembly, habitat management and the chances of nightingale establishment on compensation sites. It is compounded by the very different timescales over which these various elements would take place, even if the level of certainty was appropriate. We consider the uncertainties associated with the ability to provide adequate compensation have increased rather than decreased.
  - The DIO intention to clear the site (including all or most scrub habitat) before development started has been entirely ignored in the EBL report. Yet it has a critical effect on the ability to answer the Inspector's question. The RSPB considers this a serious and fundamental flaw of the report.
  - Overall, we are presented with a time lag of around 20, if not 30 years in providing compensation (assuming all the parameters and uncertainties identified by the BTO and others are met). If as seems likely, Lodge Hill is a source population, its sudden loss could have significant destabilising impacts on the local and Kent populations. The EBL report does not address this issue and certainly not in the context of the 20-30 year time lag likely in compensatory habitat provision, set against an ongoing national population decline. This places considerable uncertainty over whether there is a reasonable prospect that adequate compensatory habitat could be provided in the context of the Medway Core Strategy timescales.

- There has never been an attempt to create nightingale habitat on this scale, and we take the view that no robust evidence is offered here that would confidently predict the chances of success in this case. The degree of risk is even higher for a declining species such as nightingale.

**24. It follows that, for the reasons set out above:**

- (i) The RSPB does not believe that this report delivers the confidence to the Inspector that there is a “reasonable prospect of adequate compensatory habitat” arising from the development of the LHSA.**
- (ii) The RSPB does not agree with the conclusion set out on page 13 of the EBL report that states that:**

***“...restoring or creating c.500 ha of nightingale habitat would compensate for the loss of Lodge Hill nightingale habitat and that there is a reasonable prospect that this can be achieved within Kent”.***

- (iii) It is the RSPB’s view that, based on the available information, the answer to the Inspector’s question must be no.**

25. The RSPB remains of the view that the implications of this development for a site that is so important for nightingales - at county, regional and UK levels - are such that it cannot be allowed to proceed on the basis of what is, in our view, untested and unproven compensatory measures.

I trust that the above is clear, but if there are any questions arising from it, please do not hesitate to get in touch.

Yours sincerely,



Samantha Dawes  
Conservation Manager

cc All participants in the Medway Core Strategy Lodge Hill Nightingale Workshops

## **ANNEXES**

- Annex 1:** Key comments on the main EBL report
- Annex 2:** Comments on Appendix 3 of the EBL Report – *Study of Nightingale Habitat Creation Opportunities across Kent*. Greening the Gateway -Kent and Medway; 31 October 2012.
- Annex 3:** Timescales involved in nightingale colonisation of scrub and woodland
- Annex 4:** Summary comments relating to habitat compensation for nightingales



## Annex 1

### Key comments on the main EBL report

The following table sets out key comments on the final draft EBL report. These should be read in conjunction with these and other comments made in the body of the draft report, as well as the other Annexes. Our main comments and concerns are summarised in the covering letter.

Page	Para(s)	Comment
3	3	<p>The RSPB wishes to correct the statement made in the EBL report that “biodiversity offsetting” was announced as Government policy in 2011. It is clear from a reading of <b>both</b> the Defra Natural Environment White Paper and the DCLG National Planning Policy Framework, that the Defra form of “biodiversity offsetting” has not yet been adopted as Government policy for application to the planning system. CLG has not yet given its support. It is instead being trialled through a series of pilots, and as such is experimental. This is, as the White Paper states, to provide the evidence for Government to “<i>decide whether to support greater use of biodiversity offsetting in England and, <b>if so</b>, how to use it most effectively.</i>” (emphasis added).</p>
3	3	<p>The RSPB considers it would be appropriate for this section of the EBL report to make explicit that the Defra form of “biodiversity offsetting” is expressly concerned only with habitat compensation for the impacts on habitat and fails to address habitat compensation for residual impacts on <b>species</b>. This is made explicit in paragraph 20 of the Defra Technical Paper (<a href="http://www.defra.gov.uk/publications/files/pb13745-bio-technical-paper.pdf">http://www.defra.gov.uk/publications/files/pb13745-bio-technical-paper.pdf</a>). In the case of Lodge Hill, this is a critical difference that the Inspector should be made explicitly aware of at the beginning of the report.</p> <p>This issue was discussed at the Technical Workshop and addressed in the workshop notes where the “habitat metric” or “pairs lost” approach was described. This arose from the concerns of the RSPB and others that too much focus was being given to the Defra offsets system in preference to a species-led approach. The stark difference between the two approaches is apparent elsewhere in the EBL report, albeit unfortunately somewhat buried at p.11, para 1, bullet point 4 which states that BTO advise that: “<i>occupancy by nightingales is the only reliable indicator of whether the habitat creation is working.</i>” The RSPB wholly concurs with this advice from the BTO, and considers it should be given due prominence in the conclusions to the report.</p> <p>The over-dependence in the report on the Defra offset metrics appears to the RSPB to have misdirected the effort and resources of the exercise towards a habitat-centric approach that fails to address the central question: can sufficient suitable habitat be provided that will be occupied by the requisite number of nightingales in perpetuity, and before damage from development occurs? This, it</p>

Page	Para(s)	Comment
		<p>seems to the RSPB, is the ultimate test on which to advise the Inspector, and not whether it is feasible to provide sufficient area of habitat <i>per se</i>. While that is important, it is not, as the BTO advise, the key test. The habitat compensation will have failed if no or insufficient nightingales turn up.</p>
3	3	<p>The RSPB welcomes reference to Natural England’s consideration of the Lodge Hill area for notification as a SSSI. However, we consider it <b>is</b> appropriate for the EBL report to give some consideration to this matter and not simply to push it to one side as is done here. The reasons we consider it appropriate are:</p> <ul style="list-style-type: none"> <li>• Natural England’s advice that, given the nature conservation importance of the Lodge Hill Strategic Allocation area, it would be “<i>appropriate to give it weight similar to that which would normally be given to an SSSI.</i>” This advice is repeated in Natural England’s letter of 12<sup>th</sup> October 2012.</li> <li>• That Defra’s White Paper states (para 2.40) that biodiversity offsetting should “<i>complement existing habitat designations that are designed to protect our most valuable biodiversity: the current arrangements for managing protected sites remain in place. Offsets should help to expand and restore the ecological network in England.</i>”</li> <li>• This is translated in to “<i>not change existing levels of protection for biodiversity</i>” in paragraph 17 of the Defra Technical Guidance on biodiversity offsetting, and summarised in this section of the EBL report.</li> <li>• EBL’s own guide to offsetting says “<i>The second key principle is to recognise that there are limits to what can be offset and when; this is best characterised by the rule of thumb that offsetting does not apply in situations where there is damage to a protected wildlife site (such as SSSIs). The existing legislation to protect nationally important sites is there for a good reason, and biodiversity offsetting should not be used to circumvent that</i>” and “<i>The Environment Bank is fully supportive of these offsetting principles, recognising that three of them are key for guaranteeing success in the UK</i>”. These include the protection of existing levels of biodiversity such as SSSIs.</li> </ul> <p>However, the EBL report fails to “join the dots” and acknowledge that a discussion of this issue is highly pertinent to a report that seeks to advise the Inspector on whether there is a reasonable prospect that adequate compensatory habitat can be established for the nightingale population of Lodge Hill.</p> <p>If the EBL report had avoided these legal/quasi-legal questions entirely, that might have been understandable. However, it has not. Elsewhere in the report, it has concerned itself with whether or not there will be a permanent reduction in the nightingale population of Kent (including the 2<sup>nd</sup> bullet in the conclusions, p.12) and appears to use this to downplay the key issue of temporal lag to help support a positive answer to the Inspector’s question (see below for further</p>

Page	Para(s)	Comment
		<p>comments on this issue). The EBL report’s treatment of the effects of temporal lag on the nightingale population immediately impinges on separate legal questions as to the various legal duties on Medway Council and other public bodies in respect of the conservation of this species.</p>
4	3	<p>The RSPB consider this list of views/issues is incomplete and omits a <u>fundamental point</u> made at the Stakeholder meeting on 9<sup>th</sup> November by the Defence Infrastructure Organisation that has a major bearing on the Inspector’s question and, thereby, to the wider legal and policy considerations she will have to address.</p> <p>This point is DIO’s confirmation that as part of the handover to Land Securities, DIO would have to completely clear the site of trees and shrubs in order to carry out the removal of ordnance. Essentially, all nightingale habitat within the LHSA would have to be destroyed before any development is allowed to take place. This equates to 53 nightingale territories. It is not clear whether the clearance will involve the Rough Shaw Pasture component of the SSSI within the LHSA: if so, the number of territories affected would increase to 71.</p> <p>This is central to the Inspector’s question as to whether or not there is “<i>a reasonable prospect that adequate compensatory habitat can be established for Lodge Hill?</i>”. That question has both an ecological context (the main focus of the technical work) and a planning context (given the Council’s current policy that compensatory habitat must be in place and functioning before development starts (policy CS6 and Development Brief), and the assumption that development at Lodge Hill would be phased). It is therefore of considerable concern to the RSPB that this key piece of information has not informed the whole EBL report and, in particular, its conclusions.</p>
6	3, bullet point 4 (Stakeholder meeting)	<p>As noted above, DIO stated at the 9<sup>th</sup> November meeting that the Lodge Hill site would be completely cleared of vegetation, before development could take place, in order to clear the area of ordnance.</p> <p>Therefore, the RSPB considers this record of the Stakeholder meeting risks being seen as disingenuous for several reasons:</p> <ul style="list-style-type: none"> <li>• it ignores entirely the discussion around the DIO statement and so fails to provide the Inspector with a clear understanding of the practical schedule of development as outlined by DIO;</li> <li>• it continues to suggest that development would be phased, when it is clear that it will not in respect of the impacts on nightingale habitats, and;</li> <li>• it suggests that any temporary loss could be mitigated by changes to the development schedule, when the practical reality is that all (or most) nightingale habitat will have been removed before the development itself starts.</li> </ul>

Page	Para(s)	Comment
6	3, bullet point 5	It follows that if the complete, immediate loss of existing nightingale habitat were to take place, and given the uncertain but likely high importance of proximity to other nightingales, such an event would probably compromise the residual population at Lodge Hill, and may have an impact on the stability of nearby populations.
6	3, bullet point 6	Whilst it was noted that the two techniques (Defra biodiversity offsetting vs. expert opinion) may be “complementary and supportive”, it is not the case that the “expert opinion” technique is seen as “risk free” by the authors (BTO Report 2012). Rather it is caveated by those issues on which we have little or no certainty given our current knowledge of nightingale ecology (eg the importance of “proximity” for successful establishment of local nightingale populations and the uncertainty surrounding the key factor of social cohesion.
6	3, bullet point 1	Given the direct habitat loss and effects of disturbance post construction the RSPB acknowledges that the habitat retention and onsite habitat creation are not factored into the metric calculations.
7	1, bullet point 1	We are concerned that a literal rather than an ecologically functional approach has been taken to the definition of “like for like”. The focus should be on providing habitat that supports the ecological functions required by nightingales e.g. those set out in Chapter 7 of the BTO report.
7	1, bullet point 3	The RSPB considers 25 years to be inappropriate in this and any other compensation case. Rather the management agreement should be based on “in perpetuity”. This is particularly relevant for a species which requires periodic intervention to maintain an appropriate mosaic and age structure of component habitats. Furthermore, given the range of risks associated with habitat creation for nightingales, there is no guarantee that a sufficient number of sites will be successful at the 25 year point.  This assumption needs to be re-cast to reflect the need for “in-perpetuity” management.
7	1, bullet 4	Whilst the RSPB would be broadly supportive of this statement, it is not relevant here as the objective is to provide the best possible nightingale habitat.
8	Table 1	The calculation from area of habitat(s) lost to the development to the required credit is – of course – habitat <i>not</i> species based. As such it does not necessarily reflect the best possible extent of habitats <i>and</i> mosaic of those habitats to secure the best possible conditions for nightingales to re-establish.
9	1	It is worth noting that if the assumption set out in this paragraph were the case, it is very likely that the site would be notified as a Site of Special Scientific Interest. In that situation, application of the Defra offsetting approach would be inappropriate and in conflict with both Defra and EBL guidance. This point aside, this approach still focuses on a habitat-led approach and not one that secures the best possible outcome for nightingales.

Page	Para(s)	Comment
9	2	It would be helpful if the “nightingale-specific criteria based on...the BTO report” were set out clearly here. We consider it essential the report transparently sets out the nightingale specific criteria described by the BTO and then indicates clearly which of these were used by EBL
9	2, bullet point 1	A minimum requirement of 50ha may have been suggested, but does not appear to have been recorded in the notes attributed to the Technical Workshop.
9	2, bullet point 3	Please clarify which parameters were considered during the preliminary site visit.
9	2, bullet point 6	It would be helpful to set out how landowners were approached. For example, what explanation was given for the enquiry? On whose behalf was it being made? Were landowners made aware of the need for freehold or long leases to deliver the outcomes? How was the willingness or otherwise of landowners assessed and recorded? This is important to understand whether any of the sites identified in Appendix 3 are in any way realistic prospects.
9	3	<p>The report should make clear which three sites are considered to meet the criteria. Furthermore the addendum to the GGKM report suggests that there are five suitable sites. The last sentence of this paragraph makes the assumption that these sites are available (see comments above on landowner reaction) when there is no evidence to support this assumption.</p> <p>For reasons set out above and in Annex 2 to this letter, the RSPB has serious concerns regarding the suitability of some of the sites put forward, and the failure to acknowledge constraints. We question whether it is possible at this stage to be so confident that sufficient suitable sites will be available. The RSPB is very much aware of the challenges posed by land assembly and it is not clear that the report gives sufficient weight to these issues. A detailed explanation setting out the evidence to support this conclusion should be provided.</p>
10	1	It is equally likely that the last sentence of this paragraph might result in the rejection of any additional sites identified as the number of qualifying criteria increase.
10	2	<p>The RSPB disagrees with the first sentence of this paragraph.</p> <p>While this may be current experience, it is not “invariably” the case. This comes down to the underlying objective to be applied in any specific case. We acknowledge the Defra metrics recognise the issue of temporal lag and the use of multipliers. However, the use of multipliers is only relevant if you can retain confidence that the impacted asset (in this case the nightingale population) will occupy the newly created habitat. That is not the case here. This is why the requirement for fully functional habitat in advance of damage is critical in this case.</p> <p>This is also why, in this case, we must be guided by the Council’s stated intentions:</p>

Page	Para(s)	Comment
		<p>- Policy CS6 of the draft Medway Core Strategy states that such strategies should be in place and functioning prior to the commencement of development.</p> <p>- The Lodge Hill Development Brief states (4.73) that “new habitat must be ecologically functioning before the area it is replacing is developed”.</p> <p>This aligns with the Council’s statement at the Workshop that re-iterated this position. Acceptance of temporary loss indicates a significant move away from these stated objectives. This will have critical implications in respect of the planning framework currently being proposed by the Council and goes to the heart of the question posed by the Inspector for the Core Strategy examination.</p>
10	3	<p>Habitat loss is only unavoidable if priority is given to the development schedule. The Council did not in their Core Strategy and Development Brief. Furthermore, this does not take account of the “need”, identified by the DIO at the second workshop, to clear the site of ordnance - and hence scrub – in one operation if permission were to be granted.</p>
10	5	<p>We are not aware of any advice from the BTO in the available material <i>“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 compensatory habitat was close to it.”</i></p> <p>In any event, this comment is at least heavily qualified - if not contradicted by - the following statement that <i>“all existing populations require constant top-up from recruits anyway – it seems likely that Lodge Hill is one source of such recruits for both its own and other populations, and this does increase its importance from a conservation perspective, making it a key site for nightingales in Kent.”</i></p> <p>As it seems highly likely that Lodge Hill is the most important nightingale site in Kent – its function as a source site for others areas may be critical and its loss would not only severely compromise the integrity of the Lodge Hill population, but quite possibly that of other sites too.</p> <p>It follows that it is hard to see the logic in the statement that :</p> <p><i>“...both of which [nightingale habitat selection and behaviour] would increase the chances of recruits from other areas being available to occupy the newly created offset habitat, and would reduce the chances of permanent reduction in the Kent population.”</i></p>

Page	Para(s)	Comment
10	6	The suggestion that “temporary loss” could be avoided if habitat creation was “underway” is misleading. At the very least a proportion of the offset habitat equivalent to that which would be lost at any stage would have to be <u>fully functional</u> .
11	1	Clearly a delay in any one or a combination of these various elements would delay the effectiveness and timing of offset creation and management.
11	1, bullet point 4	This is the critical test of success, with which the RSPB wholly concurs.
11	1, bullet point 6	The RSPB’s advisor on nightingale ecology, Andrew Henderson strongly agrees with the preference for natural regeneration. Indeed the RSPB takes the view that the report is recast to properly reflect this critical view from nightingale experts.
11	1, bullet point 7	It is not clear what this point means. It should be reworded to make its meaning clear.
11	2	The RSPB agrees that there are a very wide range of issues that need to be properly addressed, but does not agree with the apparent implication here that the report s currently presented takes us close to “the next step from “ <i>is there a reasonable prospect</i> ” to “ <i>so how would you deliver?</i> ””
11	Table 2	See Annex 3 to this letter: <i>Timescales involved in nightingale colonisation of scrub and woodland</i>
12	1, bullet point 1	For reasons given elsewhere, the RSPB is highly sceptical of the role of “habitat offsetting” in this case and does not agree that it is an appropriate compensation mechanism in the case of Lodge Hill.  The primary focus must be on the provision of compensatory habitat that will support breeding nightingales in the relevant numbers and in perpetuity. This statement places the focus on the simple provision of the habitat as opposed to its successful colonisation by nightingales. We consider this <i>inappropriate</i> and strongly recommend it is recast. We agree that there are significant uncertainties and the key one remains whether nightingales will colonise compensatory habitat in sufficient numbers <i>and</i> be retained. Furthermore, the use of this approach to compensate for the (partial) loss of a notified SSSI is contrary to the Defra guidance.
12	1, bullet point 2	The RSPB <u>does not accept</u> this point on two counts. First, as was noted at the Stakeholder Workshop, we do not see it as the function of this report to comment on planning timescales – that aspect sits outside the scope of the Inspector’s question. Second, we do not accept that temporary loss of habitat <i>will not</i> lead to a permanent reduction in the breeding population of Kent.  It is quite clear that Lodge Hill is one of the most important sites in Kent for this species, and loss of habitat will not only compromise this population, but may also impact on others if recruitment of birds from Lodge Hill play a substantial role in supporting those populations.

Page	Para(s)	Comment
		It is also clear from the BTO's work that "social interaction" plays an important - but not fully understood - part in the establishment and maintenance of local nightingale populations. The removal of such a large proportion of the Lodge Hill population (through what we now understand to be a one-off clearance of much of the habitat that supports them) could have serious consequences for the integrity of the wider Kent population, and inevitably impact on the success of birds establishing successfully in offset habitats.
12	1, bullet point 3, indent 2	This statement appears to assume that compensatory and/or restored habitat would be initially unoccupied by nightingales, but then occupied to capacity (whatever that may be) as soon as it was "ready". Given the scale of the issue, and the complexities of nightingale habitat selection, this seems highly optimistic at best and frankly unachievable at worst.
13	1 (cont.), bullet point 4	From the information presented to date it is simply not clear whether "enough suitable areas" are <u>available</u> "to create or restore adequate nightingale habitat". The list of criteria for site selection are currently very vague and have produced a rough list that is not clearly defined geographically, has not been subject to on-site investigations nor contact with owners. There is no assessment of existing interest, presence of nightingales, current recreational pressure or planning background - amongst other factors that would be critical to progressing any of these. For reasons set out in Annex 2, the RSPB consider many of the receptor sites identified exhibit significant constraints that reduce their potential value. As an indication of whether suitable areas exist, the RSPB consider this strongly suggests this point is overly optimistic.
13	1 (cont.), bullet point 5	<p>The corollary of this point is that the effectiveness of any compensatory land would need to be assessed <i>before</i> it could be confirmed that it <i>does attract and retain breeding nightingales</i> in sufficient numbers to compensate for the losses incurred at Lodge Hill in advance of development going ahead.</p> <p>From the evidence gathered in the course of the workshop process, it appears that the lead time involved would be a minimum of 20 years, and even then this would need to be shown to be sustainable over time, perhaps a further ten years, or one full scrub or coppice rotation i.e. 30 years. This clearly places it well outside the Core Strategy timeframe.</p>
13	1 (cont.), bullet point 6	It follows that the RSPB believes that the level of uncertainty is so great that we cannot agree with this statement. Indeed it is hard to see how this conclusion can be realistically drawn from the preceding material. It is clear that a period of at least 20 years (probably nearer 30 years) is needed to deliver and sustain an equivalent nightingale population to that which would be lost, assuming all the considerable uncertainties could be overcome, of which the RSPB has serious doubts. Therefore we consider that it is not possible to reach the positive conclusion stated here and that the answer to the Inspector's question must be "no".



## Annex 2

### Comments on Appendix 3 of the EBL Report – *Study of Nightingale Habitat Creation Opportunities across Kent. Greening the Gateway - Kent and Medway; 31 October 2012.*

1. The GGKM report identifies areas of land in Kent, many of which have the *potential* to develop habitat suitable for nightingales. Unfortunately, it fails to assess the significance of existing constraints affecting these areas, and – in the context of the Lodge Hill proposals – critically fails to address the key question of timescale.
2. There is some confusion about how many suggested habitat creation opportunity sites are being proposed. GGKM's report includes five 'green' areas plus (in the Addendum) five – excluding those described as 'not worth pursuing' – from the earlier report dated 31<sup>st</sup> July 2012. Some of these comprise groups of two or three discrete areas from the earlier report. The main EBL report (paragraph 2 of section 3) suggests that only three of the latter group meet the criteria, but it is not made clear which these are. Furthermore Figure 2 includes Area 7 of the first group twice, once evidently in the wrong location.
3. For the purpose of these comments, we assume here that ten areas (five from the first report and five from the second report) are considered to be 'worth pursuing'.
4. The BTO report (dated October 2012) listed the following as factors that need to be considered in creating new habitat:
  - *key uncertainties* – the speed at which new habitat will become suitable, the degree to which social attraction plays a role, and the effects of existing development close to the site;
  - *major limiting factors* – geographical location, proximity to existing concentration of nightingales, proximity to Lodge Hill (probably not important), altitude, soil type, drainage, positive and negative effects of adjacent habitats, and positive contribution by existing and past habitats.
5. The GIS mapping (see Figure 2 of the EBL report – note that the interactive pdf referred to in the GGKM report has not been made available) only took into account geographical location, soil type, altitude, and the distribution of existing woodland and scrub.
6. Site selection appears to have begun with these parameters in mind, but then sidestepped the GIS process and become reliant on suggestions, from Countryside Management Projects and others, of potential offset areas, some of which do not even meet the simplified BTO criteria used to produce Figure 2. No explanation is given for the exclusion from further consideration of large parts of Kent shown in Figure 2 as meeting the simplified criteria.
7. The descriptions of the potential habitat creation areas do not deal systematically with how each meets - or does not meet - the criteria. Often there is a somewhat optimistic interpretation, as in the summaries of existing habitats, or the practicalities or timescales of management for nightingales. They sometimes fail to draw attention to obvious negative factors, such as the proximity of existing housing, or statutory and non-statutory nature conservation designations. These could constrain the types of management that might be necessary to produce suitable nightingale habitat.

8. Our commentary below, on the ten potential habitat creation areas does not pretend to be any more systematic, but we do draw attention to features not mentioned in the GGKM report. We have provided the approximate size of each area, and added what we believe to be important positive and negative qualities (the pros and cons) to the summaries given by GGKM.
9. Those aspects which are not, or scarcely, covered by the GGKM report but *which would be critical to the success of habitat creation schemes* include the availability of freehold or other appropriate tenure of suitable areas, the existence of planning or similar constraints, the practicalities and costs of land management, and the time it would take to attract nightingales at target densities.
10. Comments on individual habitat creation areas

(i) **Abbey Farm and Nagden, nr Faversham** (Area 5 in GGKM report)

**Area:** c.300ha (our estimate)

**GGKM key points:** Arable plus some semi-natural habitats including scrub; owners have taken part in compensation schemes; development options may compromise suitability.

**Pros:** Already a few nightingales; history of land use/habitat change indicates suitability.

**Cons:** Development potential (two applications refused already); proximity of parts to Faversham.

(ii) **Stour valley, Grove Ferry to Sandwich** (Area 7 in GGKM report)

**Area:** c. 700ha (our estimate)

**GGKM key points:** Mainly grassland with some scrub; low diversity & riparian habitats.

**Pros:** Large area (actually mainly arable), theoretically capable of developing appropriate habitat.

**Cons:** In area of east Kent with no history of regular nightingale population; substantial existing interest in ditch flora and water bird communities could be compromised; highly productive farmland.

(iii) **Dibgate Camp & St Martin's Plain** (Area 9 of GGKM report)

**Area:** c. 179ha (from Thomson Ecology report, 14/09/2012)

**GGKM key points:** Varied grassland, woodland, scrub habitats with spring lines; has "the feel" of Lodge Hill though hard to see much.

**Pros:** Appropriate geology and habitat mix, with potential for scrub development; MoD property.

**Cons:** Area around Hythe not traditionally holding many nightingales & none here in recent years; parts may have existing biological interest; quite close to housing areas.

(iv) **Conningbrook Lakes & area** (Area 10 of GGKM report)

**Area:** c. 300ha (our estimate)

**GGKM key points:** Low and wet with some scrub and woodland; high quality arable liable to flood; could be linked with Conningbrook Lakes proposals.

**Pros:** Topography & soils similar to other nightingale areas; adjoins former gravel workings proposed as country park.

**Cons:** Part close to growing town of Ashford; area formerly held a few nightingales but now gone; query likelihood of landowners cooperating – high quality farmland.

(v) **Snodland-Leybourne Lakes – the Medway gap** (Area 13 of GGKM report)

**Area:** c. 200ha (our estimate)

**GGKM key points:** Scrub & wetland supporting nightingale population; meets GIS criteria; opportunity may exist for more scrub.

**Pros:** Clearly suitable as c 50 males here in 2012.

**Cons:** Query how much more scrub possible; some open areas have existing interest (including SSSI); much housing and recreational pressure; more development possible.

(vi) **Higham area** (area A of GGKM report addendum)

**Area:** 56ha (from GGKM)

**GGKM key points:** Wet grassland with encroaching scrub.

**Pros:** Soil, topography and incipient scrub could develop to suitable condition, and nearby nightingales near railway.

**Cons:** All or most is within South Thames Estuary & Marshes SSSI (i.e. of existing biological interest); damp grassland, both grazed and ungrazed, with some reedbed and scattered scrub; of value for breeding & overwintering birds.

(vii) **Decoy Farm, High Halstow** (area C of GGKM report addendum)

**Area:** 24ha (from GGKM)

**GGKM key points:** Arable land close to Northward Hill NNR where many nightingales; soil fertility reduction might be desirable.

**Pros:** Parallel treatment of former arable on RSPB land has produced nightingales.

**Cons:** None identified other than rather small size (but similar land continues to east).

(viii) **Dagnam Farm** (Area D of GGKM report addendum)

**Area:** 9ha (from GGKM)

**GGKM key points:** Semi-improved cattle pasture with incipient scrub; small area and remote but landowner interested.

**Pros:** Removal of grazing likely to result in appropriate scrub.

**Cons:** Very small; may be too close to north facing estuary shore to be suitable; may be used by estuarine waterfowl.

(ix) **Cockham Woods etc** (Area F of GGKM report addendum)

**Area:** 32ha (from GGKM)

**GGKM key points:** Hawthorn scrub & oak woodland that could be coppiced; geological SSSI; also horse pastures.

**Pros:** Close to Lodge Hill, with a few even closer nightingale territories.

**Cons:** SSSI is biological as well as geological; query whether coppicing of oak would be appropriate; uncertain if mature hawthorn would regenerate suitably if cut; hawthorn part subject to illicit biking etc.

(x) **Gillingham Riverside CP** (area G of GGKM report addendum)

**Area:** 16ha (from GGKM)

**GGKM key points:** Arable & fallow land amenable to natural succession or planting.

**Pros:** A few nightingales nearby.

**Cons:** Small. Heavy recreational pressure; nearby housing; small area.

11. Other areas, similarly capable - theoretically at least - of developing suitable habitat for nightingales, could have been identified by a more systematic GIS-based search. It is our view that all the GGKM suggestions raise a range of significant constraints affecting any land in a densely populated and biologically rich county such as Kent. Even if these constraints could – hypothetically – be overcome, the difficulty of the timescale for acquiring and managing land to the desired condition would remain.

## Annex 3

### Timescales involved in nightingale colonisation of scrub and woodland

1. This note is a critique of Table 2 *Illustrating the range of factors associated with different methods of habitat creation for nightingales* on page 11 of the final draft EBL report dated 13 November 2012.

#### General points

2. Column 2 “Time to come into condition” – as stated in the table caption, it should be stressed that this is the time until sites would be *first* colonised by nightingales and *not* until peak numbers would be present, which would take several years more in each case.
3. Column 6 “Notes (simulated social attraction is assumed)” – if this implies that recording playback would be used to attract nightingales, then we draw attention to the final paragraph of the BTO report (p.35) which states the unknown efficacy of this method, and its possible undesirability. The RSPB is not aware of any studies that would support the use of playback in these circumstances, and agrees with the BTO that it would be undesirable in any event.

#### Mulching or re-instating coppicing in broad-leaved woodland

4. The rotation time would be longer than the 10 years for traditional coppicing, perhaps as long as 15-25 years. Nightingales occur in coppice at relatively high density for as few as five years during a rotation. Coppice is typically occupied by nightingales at between 3-7 years’ growth on rich soils, and 5-10 years’ growth on poor soils (see BTO report).
5. The method is accorded “*high likelihood and predictability*” but it has been used with success for nightingales at only one location (Orlestone Forest). It is possible that other adverse long-term effects on woodland biodiversity (e.g. flora, invertebrates and perhaps even birds) could result from associated shifts in soil fertility and tree species composition.
6. The availability of a sufficient area of suitable woodland (relatively young stands without biodiversity or planning constraints) is, in our view, doubtful. It is also of note that the majority of native species coppice in Kent has not been cut for well over one rotation.
7. Kent now reflects the more general decline in coppice management, such that the majority of coppice woods are now 25, 30, 40 or more years old - a severe test for mulching and likely (as per BTO) to produce inferior nightingale habitat. Native species coppice tends to be older (ie longer since it was last cut) and there would be a serious risk of killing the coppice stools through coppice reinstatement.
8. The majority of coppice of younger age is sweet chestnut - and typically rather pure stands - which is unlikely to be attractive to nightingales. That unsuitability is accentuated by the fact that a lot of the extant chestnut coppice is on the Downs. Chestnut stands that *do* hold nightingales (e.g. Church Wood, Blean RSPB) tend to have contain a high proportion of ‘weed’ species such as birch and bramble.

9. The majority of woodland in Kent is ancient, and this certainly applies to most woodland blocks in excess of 50ha. It is likely that ancient woodland status would be a major constraint on novel practices such as mulching, and of course, many large woodland blocks are notified as Sites of Special Scientific Interest (SSSIs), which would further restrict options.

#### **Sweet chestnut coppice**

10. The traditional chestnut coppice rotation would normally be about 12-16 years, rather than the 10 years suggested here. Reducing coppice rotations has adverse implications for its economics (lower product value & high labour costs for shorter rotations), and potentially for the wider woodland biodiversity.

#### **Planting trees and shrub**

11. Evidence suggests that plantations, especially in the absence of natural growth or adjoining scrub/woodland, can be slower and less effective at attracting nightingales (see also EBL report, *Practical aspect of compensatory habitat delivery*, page 11, para 1 bullet point 6). Only in ideal circumstances, where natural succession occurs alongside planting, does colonisation occur more quickly.

#### **Natural regeneration on poor soils**

12. The slow development of scrub on poor soils is confirmed by case studies. Nightingale colonisation may not occur until 15 years or more, and peaks typically occur at 25-40 years.
13. There is relatively little experience of long-term management of scrub for nightingales (see BTO report) and, where it has been attempted, it has not always been successful. The assumption in the table that it would be less demanding than other methods is possible, but unproven. Furthermore, with scrub-enriched soil fertility, it would come closer in dynamics to that on richer soils.
14. While naturally developing scrub in suitable areas of Kent often does attract nightingales, there are examples of scrub that has not attracted them, or where use has been intermittent (e.g. some coastal areas of north and east Kent). Thus, while it may have “high likelihood and predictability”, nightingale use cannot be guaranteed.
15. The use of ‘created’ in the notes column might imply deliberate human intervention - ‘naturally developing’ would be a preferable description.

#### **Natural regeneration on fertile soils**

16. Colonisation by the first nightingale *can* occur as suggested, in 10-12 years, or even sooner if nearby vegetation is suitable and/or already holds them. Elsewhere however, there are examples of localities where even initial colonisation may take 15 years or more (see Northward Hill example below).
17. As for the previous option, there is little or no experience of successful long-term management of scrub on rich soils for nightingales.

## **Combination of natural regeneration and planting**

18. We have not found evidence to suggest that the proposed management techniques have been attempted on any large scale, let alone that it has produced the accelerated colonisation suggested. Experience at, for example, Northward Hill, is that planting does not significantly accelerate colonisation even in close proximity to an existing nightingale population.

## **Scrub development & nightingale colonisation case study – Northward Hill**

19. As shown by the BTO (Habitat Compensation Report, 18 October 2012), information on the rates of colonisation by nightingales of newly established scrub tends to be lacking in detail. The reasons for this include the long timescales involved, intermittent recording, and the patchy nature of vegetation development within an area. A more complete example concerns scrub developing on the RSPB Northward Hill Nature Reserve on the Hoo Peninsula in Kent. Nightingale colonisation of this scrub, even given the nearby presence of nightingales and natural growth augmented by planting on relatively fertile soils, has taken between 12-18 years in the various parts of the site.
20. The site at Northward Hill comprises a series of former arable fields and two small abandoned orchards to the north and west of the Northward Hill wood. These areas were acquired by RSPB in 1990-1991, and total area is 36 ha. The wood itself and various hedges adjoin parts of the site. Over half was allowed to develop scrub naturally from 1991, with small amounts of oak and maple planted locally. The remainder, (15ha close to Bromhey Farm) continued to be cultivated until 2000, when scrub development began here. Damp clay soils predominate, though it is slightly sandier and drier on the higher ground. A strong existing nightingale population (c.11-16 males in the 1990s) is present in the wood (Kent/BTO nightingale surveys, RSPB).
21. Survey work has shown the following changes in the nightingale population since 1991:
- after 3 years, 1994 - 0 territories
  - after 8 years, 1999 - 0 territories
  - after 14 years, 2005 - 0 territories
  - after 15 years, 2006 - 1 territory
  - after 19 years, 2010 - 3+ territories
  - after 20 years, 2011 - 12 territories
  - after 21 years, 2012 - 11 territories

## Annex 4

### Summary comments relating to habitat compensation for nightingales

Below we set out our comments on the EBL report and related issues against these principles.

#### Targeted

1. The RSPB remains concerned that there has been only partial and incomplete consideration of the major limiting factors presented by the BTO in its report, and that the presentation of the criteria used has not been set out clearly (see RSPB comments set out in Annex 1 and Annex 2). As noted elsewhere in this response and by others, a key issue is what is being targeted – habitats or species?
2. In addition, and as noted in Annex 1, the draft report fails to acknowledge the stark and immediate impact of site clearance as described by DIO at the Stakeholder Workshop on 9<sup>th</sup> November. This is a key element in understanding the nature, magnitude and timing of the adverse effect that will give rise to the requirement for compensatory habitat. It also informs the objectives to ensure that it is effective, well-located, well-timed and sufficient. We are particularly concerned that the report seems indirectly to obfuscate this issue by suggesting that there will be no permanent reduction in the nightingale population in Kent. It does so without setting out either the BTO's own caveats on this statement, or the assumptions on which EBL have based it. For reasons set out elsewhere, we consider this a serious omission.

#### Effective

3. The RSPB has serious concerns that EBL has not addressed whether it is possible to generate suitable and effective habitat compensation that has a realistic possibility of supporting breeding nightingales in the required numbers, with particular reference to the following:
  - For reasons set out in Annex 3 to this response, there are significant time lags in delivering suitable habitat, and there is no guarantee of successful colonisation.
  - The report has failed to adequately address the limiting factor - and significant uncertainty - associated with the role of social attraction in the population ecology of nightingales. This issue raises genuine and fundamental uncertainty as to whether compensatory habitat *would* be colonised, and that that colonisation would be sustained at the requisite levels over the long term;
  - The report seems to gloss over this difficult issue by assuming that the successful use of “simulated social attraction” to attract nightingales to receptor sites (Table 2) with absolutely no explanation or justification. The RSPB assumes this refers to the use of tape lures, a technique which the BTO states (p.35 of the BTO Report, 18<sup>th</sup> October 2012) is of unknown efficacy as well as undesirable as it could establish an “ecological trap”. The RSPB is not aware of the use of this technique for habitat compensation purposes, and shares the BTO's concerns regarding its possible impacts.
  - The report fails to draw attention to the obvious negative factors associated with the selected receptor sites that will undermine their effectiveness (see Annex 2). This includes the proximity of housing and existing statutory or non-statutory nature conservation designations e.g. biological SSSIs. Both of these factors undermine the likely effectiveness of such sites as compensatory habitat.



- The description of receptor sites does not deal systematically with how each meets - or does not meet - the BTO criteria for suitable nightingale habitat (see Annex 2);
- Several receptor sites have an optimistic interpretation of the existing habitats and/or the practicalities and timescales of their management (see Annex 2);
- Small, fragmented sites are retained in the list of potential receptor sites that are below the minimum 50ha block area agreed at the Technical Workshop without any explanation as to why.

### **Well-located**

4. A considerable focus of the EBL work has been on the identification of potential receptor sites for compensation habitat, in order to demonstrate to the Inspector that there is a reasonable prospect of it being successful. We note in Annex 2 that the site selection process appears to have begun with a GIS based approach, but then sidestepped it in favour of suggestions by some stakeholders. This is unfortunate as it suggests a lack of rigour in the process and therefore must undermine the report's conclusion.
5. We note the following specific concerns:
  - There is considerable confusion over those receptor sites considered to have potential;
  - Key uncertainties identified by the BTO are not properly addressed (see Annex 2);
  - There has been a failure to apply the BTO criteria in full;
  - There has been a failure to apply those BTO criteria County-wide with no explanation given;
  - There has been a failure to identify obvious constraints with suggested receptor sites;
  - There has been a failure to draw attention to obvious negative factors associated with suggested receptor sites, including:
    - Proximity of housing;
    - Existing statutory or non-statutory nature conservation designations e.g. biological SSSI;
    - Several of the sites have no/no recent history of nightingale presence in the surrounding areas and therefore are unlikely to be of high priority, or that otherwise strong contenders would be less likely to attract nightingales.

### **Well-timed**

#### *Habitat development*

6. The BTO have made clear that natural scrub regeneration was preferred (and was likely to be more successful in providing nightingale habitat) than planted scrub. Expert advice to the RSPB supports this view. The BTO reported<sup>1</sup> that this process could take fifteen to twenty years to provide suitable habitat for breeding nightingales. The RSPB agrees with this view, and considers that this is likely to be the earliest at which initial colonisation could reasonably be expected to occur (assuming that all compensation requirements are met *and* that nightingales

---

<sup>1</sup> Hewson, C. M.& Fuller, R. J. 2012. Viability and success of biodiversity offsetting to compensate for nightingale loss.

“find” the new habitat suitable). It is likely to be longer before such a site would support optimal densities of breeding nightingales.

7. This means that there could be a period of fifteen or twenty years between the removal of most nightingale habitat at Lodge Hill and alternative habitat being made available. In paragraph 4 of the section *Temporary loss of habitat – delivery lag* the report says 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”*

*(emphasis added)*

8. This is new advice not discussed at either the Technical Workshop or the Stakeholder meeting, but it would appear that EBL clearly felt it necessary to request the BTO’s view in the light, we presume, of the DIO’s statement at the 9<sup>th</sup> November Stakeholder Workshop that the site would have to be cleared in one operation.
9. In any event, this new BTO advice raises several key questions that the EBL report fails to address, which have a clear bearing on it’s conclusions:
  - What is the effect on the wider population of the loss of nightingales at Lodge Hill, if as the BTO considers likely, it is itself a key source population in Kent?
  - What are the likely effects of a sudden loss of one of the most significant source populations on the ability of the Kent population to sustain itself for (at least) 15-20 years, pending provision of suitable habitat? This for a declining species known to exhibit conspecific attraction (see BTO report p.13 Section 3.6)
  - What do these effects mean in terms of the maintenance of the “source” populations with respect to:
    - The wider Lodge Hill population;
    - The Hoo Peninsula population;
    - The Kent population;
    - The UK population?
  - Where are the other “source” populations relied upon by the BTO (and EBL) to conclude there would be no permanent reduction in population?
  - How do these “source” populations relate to the proposed receptor sites identified in the EBL report?
10. In the RSPB’s view, the destruction of nightingale habitat by the DIO for munitions clearance at what is the best site in Kent for nightingales will not only risk a permanent reduction in the county population, but could have knock-on effects at other nightingale sites if the Lodge Hill site is currently producing a surplus of young birds which are able to augment or increase nearby populations or provide colonisers of new sites.

#### *Additional temporal factors*

11. There have been major changes in the nightingale's UK population and distribution within the last 20 years. This is characterised by a serious decline in numbers, a major range contraction and changes in the most favoured habitat as birds have moved from coppiced woodland to scrub. These changes have been accompanied by wholesale changes in the English countryside with an increase in intensive farming, an increase in wild deer populations (which browse trees and shrubs and can thus affect nightingale habitat), abandonment of formerly productive woodland and an increase in leisure activities in wetland habitats.
12. If the time lag in providing potentially suitable and large-scale nightingale habitat extends, as seems inevitable, to at least 15-20 years, this could also be accompanied by further changes in countryside use, leisure pursuits and planning, as well as continuing climate change, leading to further uncertainties in relation to the success of any scheme for compensation land.

#### **Sufficient**

13. In habitat compensation/offsetting discussions it is usual to address any increased risks to success (these may relate to time lags or failure to restore or create the desired habitats for example) to apply multipliers to increase the offset area. This is the approach taken by EBL in the report when applying the Defra offsetting metrics.
14. However, as is noted in the Defra Technical Guidance paper:

*"If the worst case risk is realised (i.e. the restoration or expansion fails to deliver), a multiplier will not solve the problem. In terms of the overall outcome it will make little difference whether the offset is the same, twice or five times the size of the impacted site, if the offset fails to develop into the target habitat or required condition. A simple multiplier is therefore not going to be appropriate in all cases, and some projects will require a more complex approach to ensuring the biodiversity outcomes are delivered".*

15. In the present case, the BTO report and verbal reports to the technical workshop confirms that, as far as they are aware:
  - no large scale nightingale creation sites have been attempted;
  - that in a number of places where apparently entirely suitable habitat exists, it has remained unoccupied by nightingales;
  - the development of suitable habitat takes many years (15-20 years in some cases) and the speed of nightingale colonisation varies between sites;
  - that even where apparently suitable habitat has been created there is uncertainty with respect to whether the entire suite of (nightingale) requirements, including food sources, would become sufficiently established within 15-20 years;
  - that even if habitat conditions can be made as suitable as possible, this may not be enough due to social factors;
  - even where habitat is occupied by nightingales, there may be uncertainty over factors including food supply and predation pressure, potentially resulting in the creation of an 'ecological trap', where recruitment from outside exceeds productivity; and lastly
  - There is little experience of long-term management of scrub for nightingales, and some attempts have been unsuccessful.

16. It has been noted by most of the stakeholders engaged in this process that the successful creation of alternative nightingale habitat is neither straightforward nor guaranteed.
17. In essence, the use of multipliers to address risk (as done by EBL in respect of the Defra metrics) does little to address the uncertainties identified by the BTO and others in respect of the prospects of successful, large-scale, habitat creation for nightingales.
18. As noted at the Technical Workshop by the RSPB, this has been recently borne out in compensation cases associated with intertidal wintering waders. Here, the provision of “like-for-like” habitat (at a 2:1 scale) immediately adjacent to that lost had, historically, been assumed to be sufficient given that wintering waders were highly likely to locate and utilise the new habitat. However, in some estuarine locations, this has proven insufficient for waders with more specialist feeding requirements. This is consistent with the RSPB’s advice that an ecological function approach should be adopted in assessing the likely efficacy of habitat compensation for any particular species.