Supp Ev H ESBG NP Dark Skies Report

Ecchinswell, Sydmonton & Bishops Green Neighbourhood Plan

Comet NEOWISE, from Ratts Cottages (July 2020)

Dark Skies Evidence Report

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1. Introduction

1.1. This report has been prepared to support the submission of the Ecchinswell, Sydmonton and Bishops Green (ES & BG) Neighbourhood Plan. The report evaluates the current status of the Parish with respect to Dark Skies standards, discusses the impact of insufficiently dark skies on the environment and finally outlines the core principles underpinning the provision of efficient night-time lighting that minimises the impact on the surrounding neighbourhood and countryside.

2. Dark Skies Standards/Policies

2.1 National Legislation

2.1.1 The Environmental Protection Act (1990) was extended in 2005 to include reference to nuisance from lighting (para 79 (fb), focusing on "light emitted from premises so as to be prejudicial to health or a nuisance". This provides a framework for local authorities to take action against lighting deemed to cause a nuisance.

2.1.2. The Wildlife and Countryside Act (1981) also provides general protection for a wide range of species (e.g. all bats), and so could be invoked in cases, such as bats, where artificial light is shown to have adverse impacts.

2.1.3. The National Planning Policy Framework (NPPF) also references (Para 180) the need to "limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation".

2.2 Basingstoke and Deane Local Plan 2011 – 2029

2.2.1. Basingstoke and Deane Borough Council (BDBC) addresses issues relevant to maintenance of Dark Skies under a number of policies in the Local Plan.

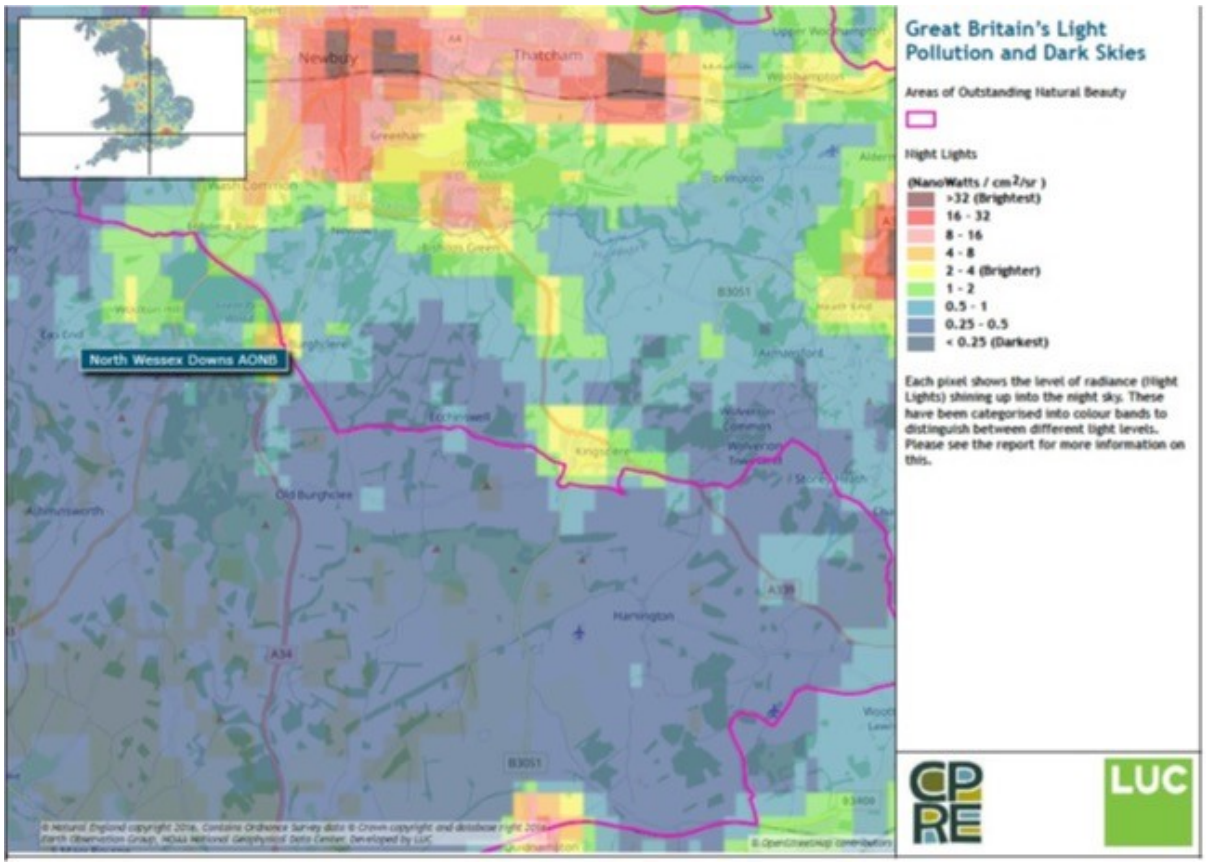
2.2.2. Policy EM1 (Landscape) states that "Development proposals must respect, enhance and not be detrimental to the character or visual amenity of the landscape likely to be affected, paying particular regard to: …" several characteristics, including "(f) Intrinsically dark landscapes". EM1 also highlights the importance attached to the North Wessex Downs Area of Outstanding Natural Beauty (AONB), and the necessity of complying with national planning policy as it relates to AONBs.

2.2.3. Policy EM 4 (Biodiversity, Geodiversity and Nature Conservation) states that "development proposals will only be permitted if significant harm to biodiversity or geodiversity resulting from a development can be avoided, or if that is not possible, adequately mitigated". The policy also specifically states that damage to Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves must be avoided. Ecchinswell, Sydmonton & Bishop's Green has no LNR's, but a great many SINCs.

2.2.4. Policy EM 12 (Pollution) includes the case of Light Pollution. It states that "Development will be permitted provided that it does not result in pollution which is detrimental to quality of life, or poses unacceptable risks to health or the natural environment. Development that would result in unavoidable pollution will only be permitted where measures to adequately mitigate these polluting effects can be implemented." Paragraph 6.107 specifically addresses light pollution, stating the need to mitigate potential impacts "in line with recognised industry methods and should conform to recognised guides."

3. Ecchinswell, Sydmonton & Bishops Green Dark Skies Overview

3.1. The map below has been extracted from the "Nightblight" mapping tool of the Campaign for the Preservation of Rural England (CPRE), and covers the Parish of Ecchinswell, Sydmonton & Bishop's Green and surrounding areas. The boundary of the North Wessex Downs AONB is shown.



3.2. The extended north-south nature of the Parish means that there is a considerable variation in the degree of light pollution experienced by residents. In the area of Bishop's Green, closest to Newbury and adjacent to the Greenham Business Park, light pollution is at best moderate and can reach significant levels. In the region of Ecchinswell, the level is consistent with that of a small rural village. Finally, to the south, within the AONB, the light pollution levels drop much lower and approach the darkest skies achieved anywhere in the region. It should be appreciated that this data refers to general lighting levels; it is obviously the case that within a generally dark zone, isolated instances of poor lighting can significantly impact their immediate surroundings.

3.3. The key conclusion to be drawn is that Ecchinswell, Sydmonton & Bishop's Green Parish is the custodian, particularly within the AONB, of a significant Dark Skies resource and has a responsibility to safeguard this both in guiding future development and in educating Parish residents to improve the quality of existing lighting.

4. Dark Skies and the North Wessex Downs AONB

4.1. The North Wessex Downs AONB takes very seriously its role as a custodian of Dark Skies. Dark Sky maps showing the full extent of the AONB demonstrate the generally low levels of light pollution across the area, in comparison with the neighbouring urban areas such as Reading, Newbury, Swindon and Didcot.

4.2. In support of a desire to defend the current state of affairs, the AONB has issued "Dark Skies of the Wessex Downs – A Guide to Good External Lighting". This document provides guidance both to private citizens and businesses on Best Practice, but also advice to local planning organisations considering applications for development, including Parish Councils looking to produce Neighbourhood Plans. As a result, it is highly relevant to the development of the ES & BG Neighbourhood Plan.

4.3. In seeking to provide a framework for protecting Dark Skies, the AONB has adopted the recommendations of the Institution of Lighting Professsionals (ILP) in declaring a range of Environmental Light Control Zones (see "Dark Skies of the Wessex Downs", Section 5), with varying levels of restriction for new lighting. Of the ILP's zone designations of E0 (darkest) to E4 (urban), it is significant that the part of ES & BG Parish within the AONB is covered by significant areas of E0, while the remainder is E1. The definition of these zones can be found in the ILP "Guidance Note 1 for the Reduction of Obtrusive Light" (updated 2021). Zone E0 is at the level of Dark Sky Reserves, and so contains significant restrictions in what is considered acceptable. Zone E1 is less restrictive but not appreciably so. The AONB "recommend using these zones and their corresponding ILP parameters when considering any policy framework, new development or lighting requirement".

4.4. Of course, a substantial part of ES & BG Parish falls outside the AONB. However, the AONB also provides guidance that relates to the "Setting" of the AONB. This does not have a strict geographical extent, but is defined as any area adjacent to its boundary where changes or development "could negatively impact on the natural beauty and special qualities of the North Wessex Downs." Lighting is very much regarded as an aspect of development that could have a negative impact on the AONB, but observes that "with regards to lighting the impact on the AONB will vary in each case, but will particularly depend on the topography of the area". From the point of view of ES & BG, there is obvious need to take this into account, especially for the centre of Ecchinswell which is directly adjacent to the AONB boundary. The worst case would be the need to apply the E1 zone, but a case might be made to apply zone E2, which is for rural settlements and economic hubs.

5. Dark Skies Best Practice

5.1. The "Dark Skies of the Wessex Downs" provides a wide range of advice on the best practice for external lighting. The following is a brief summary of some of the most important principles.

5.2. Light pollution comes in several forms, generally categorised as:

- Glare – when a light is uncomfortably bright against a dark background.
- Light Intrusion (or 'trespass') – when light spills into neighbouring properties and creates a nuisance.
- Sky glow – when towns or other brightly-lit areas cause an overall brightening of the sky.

5.3. Light pollution has negative impacts on a range of wildlife, including Songbirds, Frogs & Toads, Bats, Insects and Trees. All these are affected by having their normal cyclical behaviour patterns disrupted. Human beings can also be affected in similar ways, where excess light disrupts sleeping patterns.

5.4. There is little evidence that additional external light is a significant deterrent of crime. There is no proven link between lighting levels and crime rates. In fact, exterior lights may create contrasting dark spots that criminals can hide in.

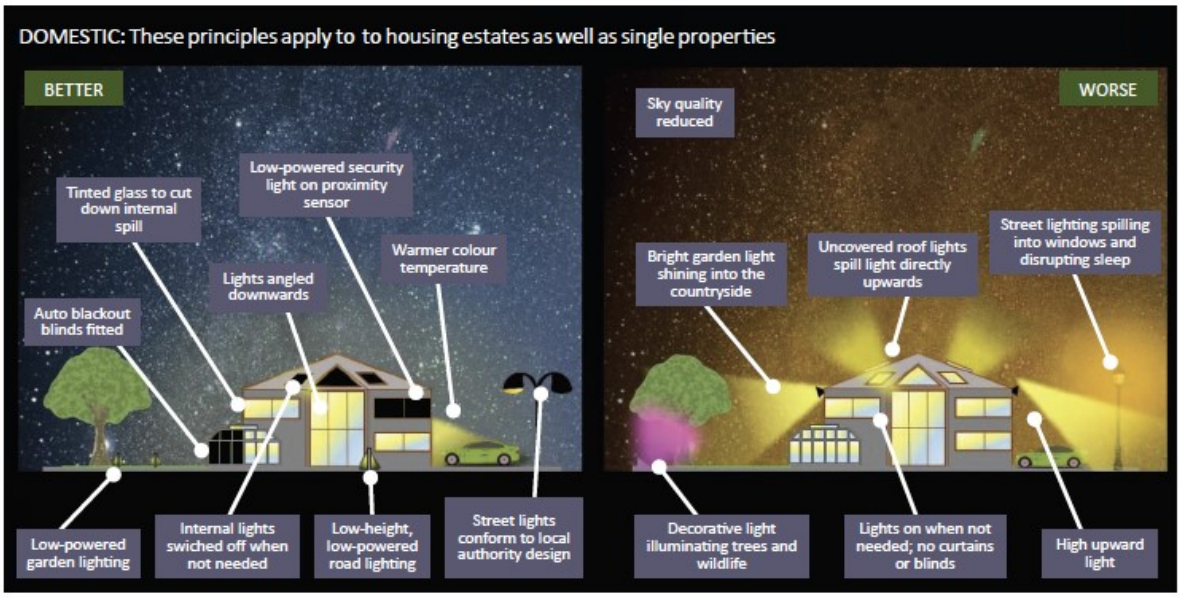
5.5. Excessive external lighting is an additional cost and contributes to carbon emissions and climate change.

5.6. Artificial lighting is degrading the character of rural landscapes, eroding and destroying their tranquillity and sense of remoteness.

5.7. Lighting best practice can be summed up by the following principles:

- Install lights only **IF** needed
- Shine lights only **WHERE** needed
- Use only **AS MUCH** light as needed
- Use lights only at times **WHEN** needed

The following diagram illustrates good and bad practices in the case of domestic lighting.



More detailed advice on individual uses of light can be found in the "Dark Skies of the Wessex Downs", both for domestic and commercial circumstances.

6. Dark Skies and Neighbourhood Plans

6.1. The "Dark Skies of the Wessex Downs" specifically addresses the development of Neighbourhood Plans. The AONB as a whole strongly recommends that communities wholly or partly within the AONB make reference to the AONB Management Plan and supporting

documents. In the case of Dark Skies, the relevant publication is the North Wessex Downs AONB Dark Skies and Artificial Light Position Statement.

6.2. The overall message is that Neighbourhood Plans and the AONB can work constructively together, with the AONB providing protections and presumptions with regard to retaining the landscape character, while the Neighbourhood Plan in return supports the AONB by seeking to retain and enhance the special character of their local settlements and surroundings. Policies with regard to light pollution and dark skies can make a key contribution to this.

6.3. The "Dark Skies of the Wessex Downs" provides examples and suggestions for measures that could be adopted via a Neighbourhood Plan. The most obvious is the inclusion of intentions with regard to lighting levels for any new development, but other ideas include overt implementation of zoning as discussed above, and protection of particularly good dark areas by proposing Dark Sky Discovery Sites – places that are accessible to all for enjoyment of the night sky. The need for consultation and information/education is emphasized.

7. Summary and Conclusions (Key Messages)

7.1. The following comprise the key outcomes of the evidence gathering exercise conducted with regard to Dark Skies within Ecchinswell, Sydmonton & Bishops Green Parish.

- **Section 2. - Dark Skies Standards/ Policies**: - Both National and Local planning policies reference the need to preserve darkness of the night sky, for the benefit of wildlife, to limit the impact on neighbouring communities, and to preserve the opportunity for people to experience the night sky under good conditions.
- **Section 3. - ES & BG Dark Skies Overview**:- light pollution in the Parish ranges from substantial in the north to very low in the far south. ES & BG Parish is a custodian of significant Dark Skies resource and has a responsibility to look after it.
- **Section 4. - Dark Skies and the North Wessex Downs AONB**: - The North Wessex Downs AONB takes Dark Skies seriously and provides a framework under which action to preserve Dark Skies can be taken. The far south of ES & BG Parish falls within the AONB and it, plus the immediate adjoining area (Ecchinswell village) come under this framework.
- **Section 5**. **– Dark Skies Best Practice**: - Good advice is available on dark skies best practice and this could and should be made available and promoted in the Parish.
- **Section 6**. **– Dark Skies & Neighbourhood Plans**: - The North Wessex AONB provides Dark Skies advice specifically aimed at those involved in making Neighbourhood Plans, including examples of measures that could be adopted.