

NIGHT BLIGHT

**A CPRE
Herefordshire
REPORT**

**NIGHT BLIGHT IN
HEREFORDSHIRE**

**How many stars can you
see?**

NIGHT BLIGHT

Results of a survey conducted by CPRE Herefordshire into light pollution in the County.

Introduction

Following a major awareness raising campaign by the Campaign to Protect Rural England and the British Astronomical Society, the Herefordshire Branch of CPRE launched an on-line information gathering survey to find out what light pollution occurred in Herefordshire, where it was and what people thought about the issue. The survey started in October 2003 and was endorsed by Sir Patrick Moore during his lecture in Hereford that month. To celebrate the wonder and beauty of the night sky, participants were also asked to name their favourite star gazing site.

An information pack, including an A3 poster/leaflet, was sent to all secondary schools in Herefordshire inviting them to take part in our survey, and to celebrate the night sky by arranging a star gazing evening. We suggested they might light to investigate the issues surrounding light pollution through the many links listed on the leaflet. To our disappointment not one single school responded to this initiative.

Information was also sent to all Parish Councils, including a map showing light pollution in the West Midlands. A number responded to the survey, but most appeared not to recognise that light pollution was an issue - even those with light pollution problems. Even fewer appeared to know what could be done about light pollution or to realise that Parish Councils have an important role to play in this issue.

Within a national context, light pollution in Herefordshire has increased by 24% in a decade.

The Survey

Participants were asked to choose from 3 types of light pollution [security lights on buildings & homes; floodlights; street lights] and to name where there were instances of these. They were also asked to say which of the three they most objected to and the majority of people said they most disliked security lighting.

More than 80 questionnaires were received from all over the County.

You should be able to see about 3000 stars - how many can you see on a clear night?

There are now more than 6.2 million street lights in the UK.

Before the 1950's it was common practice to extinguish street lighting after midnight.

The Millennium Commission has paid towards 400 church floodlighting projects across England at a cost of £2.2 million.

The Institute of Lighting Engineers recommends that 150 watt tungsten halogen bulbs are more than adequate for security lights at home - retailers continue to promote 300-500 watt lights.

CPRE estimate that each year between 100,000 and 500,000 tonnes of fossil fuels are being burnt to generate electricity for all types of exterior lighting across the country.

Reference: 'Night Blight' Campaign to Protect Rural England. 2003. ISBN: 1 902786 59 9

Suggested reading:
Lighting in the Countryside: towards good practice. ODPM 1997. www.planning.odpm.gov.uk/ltc/

Road Lighting and the Environment, DOT, 1993.

ILE Guidance Notes for the Reduction of Light Pollution, Institute of Lighting Engineers, 2000. www.ile.org.uk

The Results

80.7% of the responses referred to security and floodlights.
28.2% of the responses referred to street lights.

43% referred to general light pollution [either one or more of the 3 categories] in urban areas [towns and villages].

22% referred to commercial/industrial areas with security and/or floodlighting, in both urban and rural areas.

18% referred to floodlighting and/or security lighting at leisure or sporting facilities.

10% referred to supermarket premises.

6% referred to security and/or flooding lighting on schools and churches.

6% referred to individual properties, or roads & junctions.

The top 5 light polluters are:

Hereford and its satellite villages [23%]
Leominster town [15%]
Ledbury town [9%]
Somerfield supermarkets [4%]
Kington Golf Club [4%]
Safeway supermarkets [2%]

The location details of the survey revealed that light pollution is widespread throughout the County and affects both rural and urban environments.

The greatest surprise was the number and scale of light pollution in the countryside, illustrating how planning decisions which allow relatively small scale industrial development in rural locations can have a significant impact on the quality of life for residents. Several examples demonstrated that in a hilly landscape lights can have a major impact over a wide area, in some cases for many miles. Other cases illustrated how 'rural' diversification schemes can cause a 100% increase in local light pollution, particularly when there was none previously. 24 hour working at small industrial sites also resulted in a significant impact on nearby residents when flood lighting was on all night. Some residents found their properties floodlit during the hours of darkness which caused stress and misery.

The need for the widespread use of floodlighting on all manner of buildings is to be questioned.

Badly sited or aligned home security lights can impact upon neighbours and drivers.

Research has shown that in most cases security lighting is not a crime deterrent but that physical security is.

Street and road lights, of which there are now more than 6.2 million in the UK, can be a significant polluter. Certainly most need not be on all night. They are the main cause of 'night glow' [orange sky] from settlements. Lights in supermarket car parks can contribute to this effect.

North west and west Herefordshire were considered to be the least light polluted. Many people cited their garden as their favourite star watching place, but many also commented on the increasing lack of darkness.

The cumulative effect of all types of light, many of which extend their influence over considerable distances, is now affecting not only those who live in urban or semi-urban areas but increasingly those who consider they live in the depths of rural England.



Campaign to Protect
Rural England
HEREFORDSHIRE

RECOMMENDATIONS

That the **County Council** should::

- have a robust and explicit policy statement on light pollution in the Unitary Development Plan
- have an officer with special knowledge of this subject who can advise the public, Parish Councils and developers
- have a Planning Policy that operates in presumption AGAINST rural developments which have, or may have, a light impact upon an otherwise unpolluted countryside
- have a Planning Policy that requires developers to give details of lighting schemes, with sufficient technical data to allow an 'impact assessment' to be made
- have a Planning Policy that operates AGAINST all night lights on industrial or commercial premises in a rural or semi-urban area
- have a commitment to replacing all old style street lights with modern less polluting ones within a defined time scale and to consider solar powered lighting where appropriate
- have a Policy that recognises and seeks to promote the wider social benefits to be gained in personal health and well being of dark skies as part of a tranquil environment
- seek to encourage Herefordshire's children to appreciate and benefit from the relatively starlit skies of the County

That **Parish Councils** should:

- consider the lighting implications of all planning applications, request details of the schemes if appropriate and if the lighting may affect residents to request an impact assessment
- if development has a lighting impact the Parish Council could ask that the Planning Officer request changes by the developer
- to appoint a 'Dark Skies Officer' who could with other members of the community carry out an annual 'light audit'. Offenders can be contacted to request changes and the Officer could be a contact point for the residents of the Parish in respect of individual cases, information or advice
- to actively lobby the County Council to upgrade lighting schemes, to consider public amenity lighting and to promote a policy within the County for dark skies

CPRE Herefordshire would like to see both the County Council and Parish Councils take a much more proactive role in protecting residents against light pollution. Light pollution not only obscures our view of the stars and destroys the tranquillity of the environment, it can cause distress, it wastes fossil fuels, adds to carbon dioxide emissions and costs a lot of money.

The Campaign to Protect Rural England promotes the beauty, tranquillity and diversity of rural England by encouraging the sustainable use of land and other natural resources in town and country. We promote positive solutions for the long-term future of the countryside and to ensure change values its natural and built environment. Our Patron is Her Majesty The Queen. We have 59,000 supporters, a branch in every county, nine regional groups, over 200 local groups and a national office in London. Membership is open to all.

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CPRE Herefordshire is a Charity. No: 213951



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Campaign for Dark Skies

www.dark-skies.org

The British Astronomical Society is the UK's largest astronomical body, with some 3,000 members, which has 119 local officers.