

Mr M Peacock
Case Officer

Welwyn Hatfield Borough Council
The Campus
Welwyn Garden City
AL8 6A

Ask for: B. Tranter
Our Ref:
Your Ref: S6/2013/2275/MA
Tel: 01992 555220
Date: 21/11/2013

Dear Mr Peacock,

Planning application: S6/2013/2275/MA. Park Farm Equestrian Centre, Northaw Road West. Retention of 8 floodlights, manege and 4 stable buildings.

Thank you for consulting us on the above application. We have the following comments to make.

1. Database and ecological evaluation

The LRC database does hold a record for a bat roost in one of the barns at Park Farm. However, the construction of stables and the manege is highly unlikely to have had an impact on the bat roost, or any other protected species. However, it is possible that the floodlighting may have a minor impact on bats.

2. Floodlighting

As the floodlighting is in a rural location it will have a more significant impact upon wildlife or the landscape than it would in an urban setting.

Light pollution is an issue that is receiving growing environmental concern. Poorly designed and badly aimed lighting may have adverse effects. Light spill may impinge directly on to homes, destroying their sense of privacy and interfering with people's ability to sleep. There can also develop a subtle, adverse, cumulative effect on the character of landscapes that tend to blur the distinction between urban and rural areas.

Research has shown that wildlife suffers many of the same effects as human beings by light pollution. Day length, which influences the activities of plants and animals, may become altered or extended. Impacts are most prevalent among insect populations and nocturnal mammal species. Nesting and roosting birds may also be affected, and natural diurnal rhythms may be disrupted. Continuous lighting along roads creates barriers that bats cannot cross and floodlighting will deter bats from using foraging areas. Floodlighting can be particularly harmful if used along river corridors, near woodland edges and hedgerows. It can also deter bats from using their roost sites if entrances are floodlit, whilst some species are deterred if even the adjacent area is floodlit. Therefore, only careful lighting schemes that avoid detrimental impacts on wildlife and minimise glare should be encouraged

3. Comments and recommendations

- Whilst we have no grounds to object to this proposal, we would ask that the LPA makes a full assessment of the impact of the existing floodlighting on the local environment and that light spillage and sky-glow are kept to a minimum. We would also ask for operating hours to be restricted such that the lights are always turned off by at least 10pm every night of the week.

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- The floodlighting should be designed to minimise light spill with the lighting columns fitted with baffled, downwards pointing units and the column heights should be the minimum required to provide an adequate spread of light.
- Concerning the type of lighting used, modern LED lights produce light of a single wave length and are UV free and **to minimise impact on wildlife we favour the use of LED or low pressure sodium bulbs in the floodlights.** Sodium lighting, though less efficient than modern LED lighting has less impact ecologically than either mercury vapour or modern metal halide lamps, as insects find sodium lighting less attractive than those that emit UV light. The more 'yellow' this lighting is, the less attractive it becomes to insects.

[Modern metal halide lighting produces a whitish light and current research suggests that this light is highly attractive to night flying invertebrates such as moths and is being linked to a decline in the population of moths within the UK and elsewhere. Mercury lamps emit light over a very broad spectrum including UV light to which insects are particularly sensitive.]

We trust these comments are of assistance and should you require any further information or advice, please do not hesitate to contact us.

Yours sincerely,

Barry Tranter PhD MCIEEM
 Ecology Advisor, Hertfordshire Ecology
 Natural, Historic & Built Environment Advisory Team,
 Environmental Resource Planning
 Hertfordshire County Council, County Hall, Pegs Lane, Hertford, SG13 8DN

[Please note that the BRC function has now transferred to the Herts & Middlesex Wildlife Trust (and is now known as the Hertfordshire Environmental Records Centre). The advisory service is still hosted by HCC and our email address is changing from hbrc.planning@hertsc.gov.uk to ecology@hertfordshire.gov.uk.]