

External Lighting for Biodiversity

Changes in lighting can affect commuting, foraging and roosting bats. No construction works should take place in the hours of darkness or under artificial lighting. The following (modified from Bats and Lighting in the UK (ILP 2018)) should be undertaken:

- The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible.
- This lit area must avoid being directed at, or close to, any retained vegetation.
- A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats, as well as people and other wildlife.

For any security lighting, the following should also apply:

- It is rarely necessary to use a lamp of greater than 2000 lumens (150W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for wildlife.
- Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed.
- If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.
- The requirement for security lighting in each instance should be carefully considered and only used where absolutely necessary to deter crime. The use of non-UV LED lighting (preferably using warm spectrum wavelengths of <3000 Kelvin) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.