Impacts of Modifications to Approved Development at St. Edmund's upon the local bat fauna



Brian Keeley B.Sc.(Hons) in Zool.

December 2021

Introduction

This site has been the subject of a planning application and construction is currently underway. There is a revision to the original approved application to include for increased heights of 3 blocks and a change from a terrace of houses to an apartment block. In 2019, a bat survey provided a determination of low bat activity and very low bat roost potential, with no clear roosting opportunities for bats within these trees visible. The impact of roost loss was considered likely to be slight and long-term if there was any roost loss as any roost was highly unlikely to be used by anything other than a single bat on rare occasions. It was considered improbable that the trees served for anything other than shelter for feeding and commuting.



Bat activity within the site in 2019

The paddles indicate bat activity at these locations and of two separate species but very sporadically and from this and an overnight monitor it is clear that bat activity is very limited within the site. Given the passage of two years, it was considered appropriate to examine the trees in late 2021 for any evidence of roost opportunities arising from damage or rot to the trees.

Methodology

The trees within and adjoining the site were examined on 6th December 2021 for any evidence of roosting bats or bat roost potential with the aid of a high powered hand torch and a fibrescope.

The location of the tree relative to traffic, lighting and other potential disturbances were all taken into consideration when assessing the likelihood of a bat roost.



Trees at St. Edmund's and Roost Potential

No bats were noted within any of the trees based on a basic evaluation of the trees (this did not involve climbing or a hoist). There are no signs of use from staining, droppings or actual bats. The trees are close to street lighting and traffic. The site was not an area of good foraging and the area is not highly prized bat habitat overall. Closer to the River Liffey, there is high quality habitat but the surrounding Liffey Vally shopping and N4 make this area low priority overall for bats. There are trees with minor suitable cavities but given the level of disturbance, they are very unlikely roost sites.



PROPOSED ADDITIONAL TREE REMOVAL



Additional Impacts From Alteration of the Site and Tree Removal

There will be further very minor tree loss from the proposed changes within the site. This will see the removal of some beech trees along the western perimeter at the current entrance.

Proposed Mitigation

Checking of all trees for the presence of bats prior to felling

The beech trees (and any other trees fore removal) shall be checked by a bat specialist prior to felling to ensure that no bats are killed or injured and that any disturbed bat roost is removed under licence from NPWS and with proper compensatory mitigation. A derogation shall be sought if a bat or evidence of bats is noted during or prior to the assessment of the trees by a bat specialist or by any construction operative. Conservation measures additional to those provided in this and the previous application would be required in such a circumstance.

Incorporation of 3 bat boxes

The incorporation of 3 Woodstone Build-in bat boxes) is proposed into the new buildings on the site to provide bat roost opportunities. All bat boxes must be *unlit* and should be at least 2.5 metres above ground height and preferably 3 metres or higher.



The bat boxes shall be installed within buildings facing south. away from lighting and scrub.

Left: Woodstone Build-in Bat box

These boxes are invisible once the building has been plastered or rendered

Planting of vegetation

Where there is an opportunity to provide vegetative cover, native and local plant species should be employed including typical plants such as oak (the greatest value for most wildlife), hawthorn, blackthorn, elder, gorse, bramble, in addition to other species such as dog rose with an encouragement of species such as *Clematis* and other species attractive to moths.

Lighting

Lighting should be controlled to avoid light pollution of green areas and should be targeted to areas of human activity and for priority security areas.

- Motion-activated sensor lighting is preferable to reduce light pollution.
- All luminaires shall lack UV elements when manufactured and shall be LED
- A warm white spectrum (ideally <2700 Kelvin but as low as the Council limitations allow) shall be adopted to reduce blue light component
- Luminaires shall feature peak wavelengths higher than 550 nm





