Bat Evidence Survey for Places of Worship 2024

Survey Results

Place of Worship: All Saints, Kingston
Location: The Market Place, Kingston upon Thames, KT1 1JP
Case Reference: LON_KT11JP_170624
Volunteer Bat Roost Visitor: Alison Fure
Trainees: Elliot Newton & Emma Little
Date of Survey: 19 August 2024

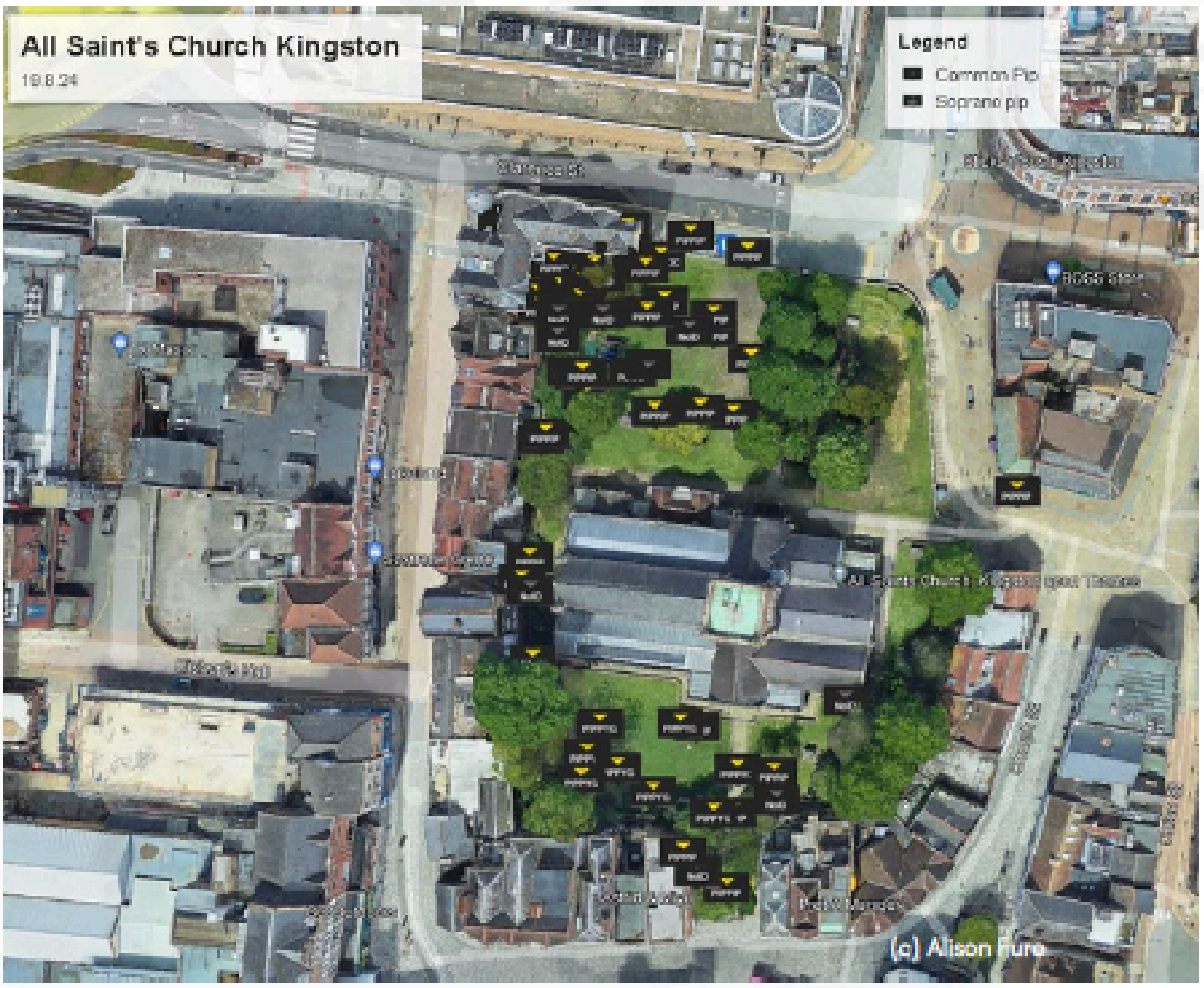

Figure 1: Photograph shows the main areas of recorded bat activity at All Saints, Kingston upon Thames

Thank you for taking part in the bat evidence survey for places of worship 2024 pilot. You are one of several churches this year who have participated in this pilot survey. With your help, we can develop our understanding of bats in churches with the aim of creating a world where church communities and bats thrive together.

Who did we find?

Bats navigate and hunt in the dark by emitting sounds through their mouth or nose and listening to the returning echoes that bounce off objects and prey in the environment. This is called echolocation and it's how the bats 'see' at night. Different species of bats have different types of echolocation call. By recording and analysing the calls on a bat detector, we can identify the species flying around your place of worship.

Volunteers conducted an emergence survey using bat detectors and recorded two species of bat:

- Common pipistrelle
- Soprano pipistrelle

Further Bat Evidence

Our Volunteer Bat Roost Visitors look for other physical signs of bat evidence whilst they survey. As bats fly around a building, they often leave droppings or urine behind, tell-tale signs that bats are using the building. You may also find small piles of droppings in specific areas around the building. This is usually indicative of the bats' roosting locations. Droppings can be used to identify species too. Another obvious give away is feeding remains; some bats will leave a pile of insect remains beneath their roosting location.

The volunteers found butterfly and insect remains inside the tower, as shown in figure 2, which could be indicative of a species like brown long-eared bat using the tower.

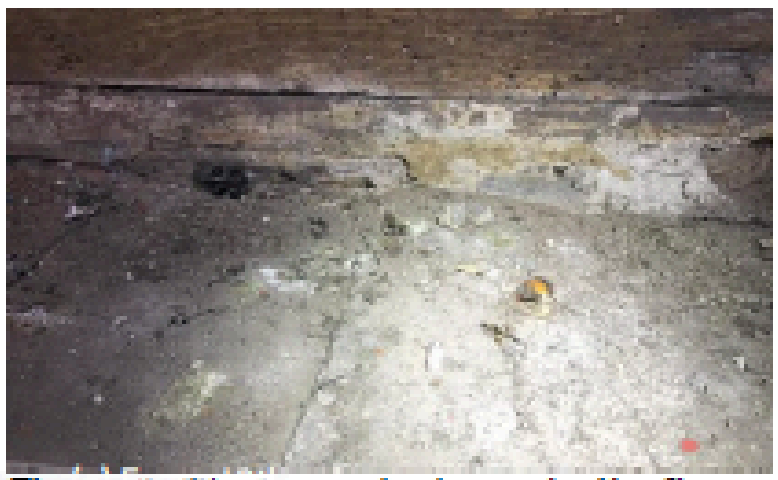

Figure 2: Photograph shows butterfly and insect remains in the tower.

Roost Type

Bats are known to use churches throughout the year for different types of roosting. Female bats will use warmer areas of a church as a maternity roost, where they can birth and raise their pups. Some bats will use colder areas of the church for hibernation, and other bats will use churches as a quiet, safe place to sleep during the day in the summer time.

Unfortunately, it wasn't possible to confirm the roost type at the time of the visit. It seems likely that the site is within the core sustenance zone of a nearby colony of common pipistrelle bats and is an important foraging area for them.

What bat features did we find?

Churches have been home to bats for hundreds of years. Between 60-90% of historic churches now have protected bat roosts. Churches provide voids and crevices for roosting, safe flight spaces and plenty of insects to feed on in the surrounding churchyards. As such, churches are important roosting sites for bats, and many provide a refuge for bats in a landscape of habitat loss. Old churches in particular are often complex in structure, and over the centuries many gaps have formed that allow bats to enter the building.

Roosting Site

Different species of bat will often choose different features of a building to roost in. For example, pipistrelle species are known as crevice dwellers and like to roost in tiny gaps, such as in timber joist gaps, or under tiles. Brown long-eared bats on the other hand, prefer to roost in timber rafters, simply hanging in the open space.

The church was deemed to be low potential for bats although there is potential for roosts under the ridge tiles of the nave, in the roof apex of the north transept and south transept, and door frame and roof void of the tower.

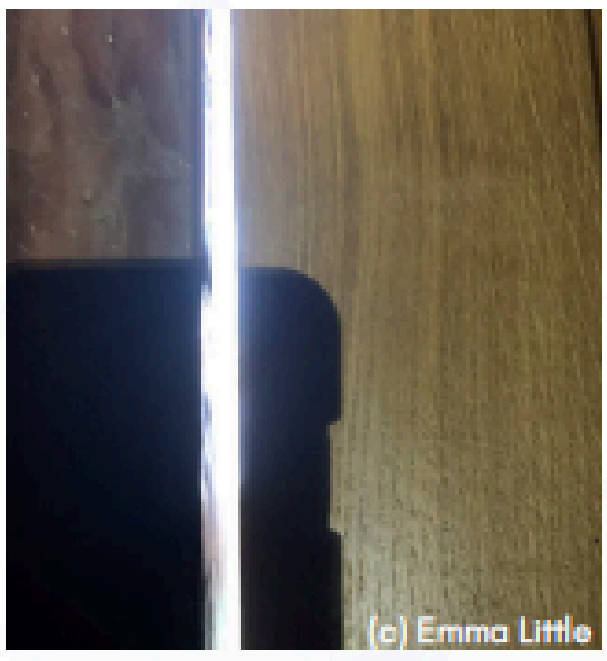

Figure 3: Photograph shows potential access point via gap around the tower door.

Bat Access

As bats are very small, they can gain entry to their roosts through a gap as small as 15mm x 50mm. Slipped or broken tiles, gaps around windows and doors, gaps under eaves, and lifted lead flashing are all very common bat access points. In very old buildings, like many churches are, there are often numerous potential opportunities for bat access.

On this occasion, it was not possible to confirm where the access points might be at your church, but potential access points were identified. A gap around the tower door to the roof could provide access for bats, as shown in figure 3, as well as gaps below lead flashing on the roofs of the nave and chancel, as shown in figure 4.

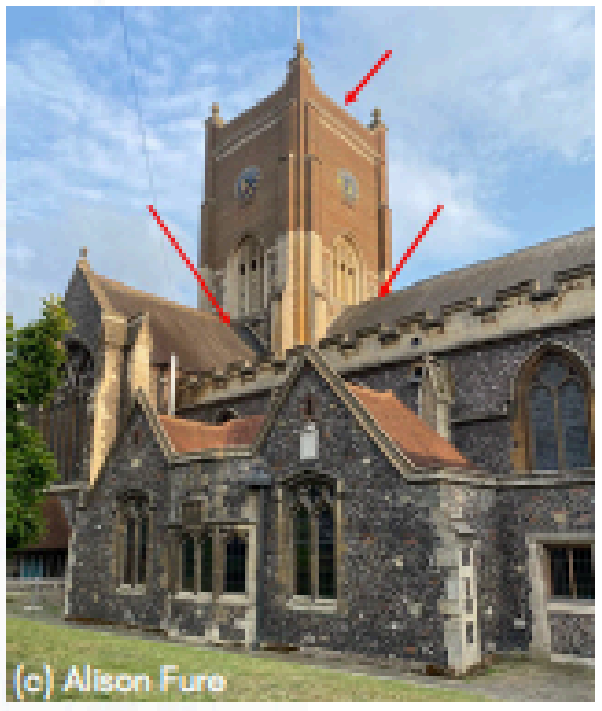

Figure 4: Photograph shows potential access points via the roof.

Get to know your bat community

Common pipistrelle

The common pipistrelle is one of the commonest British bats, weighing around 5 grams (same as a 20p piece). A single pipistrelle can eat thousands of tiny insects in just one night! They are the species you are most likely to see around your garden.

Summer roosts of common pipistrelles are usually found in crevices around the outside of newer buildings. They can be found behind hanging tiles, soffit and barge or eaves boarding, between roofing felt and roof tiles or in cavity walls.

Common pipistrelle is also known to roost in tree holes and crevices, and also in bat boxes. Summer roosts support smaller colonies than soprano pipistrelles, with numbers averaging around 75 bats. Common pipistrelle maternity colonies are more likely to move between roost sites than those of soprano pipistrelles.

In winter, common pipistrelles are found singly or in small numbers in crevices of buildings and trees, and also in bat boxes. They are often found in relatively exposed locations and rarely underground.

Soprano pipistrelle

The soprano pipistrelle is one of the commonest and most widespread of all British bat species. It is very similar to the common pipistrelle but has a paler face and it echolocates at a higher frequency.

Summer roosts of both common and soprano pipistrelles are usually found in crevices around the outside of often newer buildings, such as behind hanging tiles, soffit and barge or eaves boarding, between roofing felt and roof tiles or in cavity walls.

This species also roosts in tree holes and crevices, and also in bat boxes. Summer roosts of soprano pipistrelle support colonies of an average size of 200 bats, but they can be even larger with numbers reaching several hundred to over a thousand bats.

In winter soprano pipistrelles are found singly or in small numbers in crevices of buildings and trees, and also in bat boxes. They are often found in relatively exposed locations and rarely underground.

Planning future work

The presence of bats should be considered when planning works to any building. As bats are known to roost at this church, it is always advisable to seek advice from Natural England prior to planning works. It is best to seek advice at the earliest possible stage of planning to allow for adequate survey work to be arranged and in case any alterations to the plan of works is necessary.

If in the future any works are proposed at this church (such as those included on, but not limited to, the list below), please contact Natural England1 for advice at your earliest opportunity.

1. Roof repairs, chimney/flashing works, replacement of lead
2. Internal and external pointing works and other masonry repairs
3. Timber treatment, repairs or replacement
4. Renewal or repairs of fascias, soffits, bargeboards, rainwater goods, hanging slates or any work at the eaves
5. Work within the roof space such as insulating or plumbing
6. Window (including stained glass pane replacement), door or porch works
7. Electrical wiring works
8. Control of rodents, wasps, cluster flies or birds
9. Changes to internal and external lighting (including street lighting and flood lighting)
10. Internal and external re-decoration (including lime washing, surface wood treatments), renewal/ repairs to ceilings and walls
11. Removal and/or replacement of pews
12. Use of any scaffolding; internal/external
13. Installation of high level heaters
14. Investigative works
15. Crypt works

Please note that some works may not fall within the scope of the free advice service, for example some lighting projects, full roof replacements, conversions and extensions, and you may be advised to employ an ecological consultant.

Contact Natural England via the Bat Conservation Trust (a registered charity in England, Wales and Scotland) on their helpline 0345 1300 228. The Bat Conservation Trust is currently contracted to provide the Natural England Bat Advice Service.

Thank you for taking part in the bat evidence survey for places of worship.