

Monitoring Biodiversity in the City of London

Summer 2024 Report

IMPERIAL



BIODIVERSITY

Biodiversity in cities provides many benefits to inhabitants, including thermal regulation, stormwater retention, recreational areas, and aesthetics. Additionally, exposure to nature is associated with improved sleep, higher levels of physical activity, and protective effects on brain function and mental health. It is crucial that we understand the biodiversity present in our urban spaces and what we can do to increase it.



A COMMON PIPISTRELLE (*PIPISTRELLUS PIPISTRELLUS*), ONE OF THE THREE BAT SPECIES OBSERVED IN THE CITY OF LONDON IN SUMMER 2024.

CREDIT: CREATIVENATURE.NL / ADOBE STOCK



THE EURASIAN WREN (*TROGLODYTES TROGLODYTES*), THE MOST OBSERVED BIRD AT INNER TEMPLE GARDENS THIS SUMMER.

CREDIT: VINCENT VAN ZALINGE / UNSPLASH

OUR WORK

In the summer of 2024, researchers from Imperial College London, in collaboration with the City of London (CoL) Corporation and the Friends of City Gardens, conducted field research on the biodiversity on green roofs and in gardens in the square mile. The research used bioacoustics and AI to monitor bird and bat diversity. 21 sites were surveyed: eight gardens, three conventional roofs, and ten green roofs.

RESULTS FROM INNER TEMPLE GARDENS

Inner Temple Gardens was surveyed between July 2 and July 9, 2024. Both bird and bat activity was found to be higher in gardens when compared to conventional, paved roofs and extensive green roofs.

At Inner Temple Gardens, 21 species of bird were observed during that week.

Bat activity was particularly high at Inner Temple Gardens, with 3,101 bat passes. 87% of the passes were identified as the Common pipistrelle (*Pipistrellus pipistrellus*) and 13% were identified as the Soprano pipistrelle (*Pipistrellus pygmaeus*).

FUNDINGS SUMMARY

21

bird species

3,101

bat passes

TOP TEN BIRDS

- | | |
|---------------------------|----------------------|
| 1. Eurasian Wren | 6. Herring Gull |
| 2. European Robin | 7. Carrion Crow |
| 3. Common Wood-Pigeon | 8. Dunnock |
| 4. Eurasian Blackbird | 9. Eurasian Blue Tit |
| 5. Eurasian Collared-Dove | 10. Gray Wagtail |