WATER & ECOLOGY CASE STUDY

Bat Roost Mitigation Leads to Recolonisation

CHALLENGE

ECOSA was appointed to undertake an ecological assessment of a property and associated outbuildings in Hampshire. Previous surveys had confirmed the presence of bats, and a licence was required to permit reroofing works.

SOLUTION

Working closely with the client, the ECOSA team devised a suitable mitigation strategy to ensure that new bat roosting features could be installed without disrupting the reroofing plans.

RESULT

A population monitoring survey, carried out a year after the completion of works, recorded serotine roosting within the building. This provides clear evidence of bats recolonising after mitigation measures have been installed.

Previous bat surveys confirmed the presence of five species of roosting bats at a Hampshire property and associated outbuildings. ECOSA, a Trinity Consultants team, was appointed to undertake an ecological assessment, and a licence was obtained from Natural England to permit the reroofing works to be undertaken. Mitigation features were incorporated to compensate for the loss of day roosts and to provide long-term roosting opportunities for bats within the local area.

ECOSA had previously carried out a Preliminary Ecological Appraisal survey of the site, during which several of the buildings were identified as being highly suitable for roosting bats. Following best practice guidelines, three roost characterisation surveys comprising two dusk surveys and one dawn survey were undertaken.

These surveys confirmed the presence of day roosts for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Natterer's bat *Myotis nattereri*, serotine *Eptesicus serotinus* and brown long-eared bat *Plecotus auritus*.

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ECOSA Ecological Survey & Assessment

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CHALLENGE

The mitigation strategy proposed completely sealing the roof due to a cluster fly infestation. However, once the works were completed there would be a loss of all the present roosts; reroofing works have a potential risk of killing or injuring individual bats.

SOLUTION

Working closely with the client, the ECOSA team devised a suitable mitigation strategy to ensure that new bat roosting features could be installed while ensuring they were able to achieve the intended outcome of their proposal. This included four modified roof tiles, two modified ridge tiles, a soffit box and four bat boxes within the trees onsite. This ensured there was a range of suitable alternative roosting opportunities to meet the requirements of all the species recorded at the site. The incorporation of these additional bat roosting features will be left *in-situ* for the foreseeable - providing long-term roosting opportunities for bats within the local area.

Additionally, National England approved a European Protected Species Mitigation (EPSM) licence allowing the reroofing works to be undertaken legally. Therefore, all the reroofing works were conducted under the supervision of a suitably qualified ecologist and the roof deconstructed in a methodical manner to mitigate against potential impacts to individual bats.

RESULT

A population monitoring survey, carried out a year after the completion of works, recorded serotine roosting within the building. This provides clear evidence of bats recolonising after mitigation measures have been installed. The recolonisation of the site by the species demonstrates the success of the mitigation strategy implemented, with the best outcome for both the client and the day roosts achieved.

ABOUT TRINITY CONSULTANTS

Trinity Consultants, a leading global environmental consulting firm, provides services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Founded in 1974, Trinity has the technical expertise, industry depth, and capabilities to help clients achieve their goals across the natural and built environments.