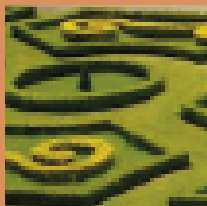
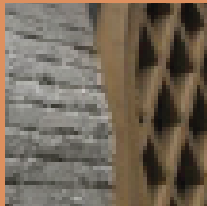
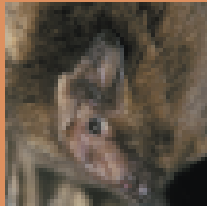


# ELVASTON CASTLE

## BAT ROOST MITIGATION LISTED BUILDING



### CHALLENGES

Set four miles South East of the city of Derby is Elvaston Castle Country Park, a picturesque site featuring over 200 acres of woodlands, parkland and formal gardens. At the heart of the estate lies Elvaston Castle surrounded by famous Grade II\* Listed gardens, and within those gardens a Moorish Temple, much vandalised and in need of restoration.

With known bat roosts in the building, Baker Consultants was commissioned by Derbyshire County Council to undertake a survey and scope what was thought to be some simple mitigation work.

Survey techniques included dusk/dawn surveys and a visual survey of the roof space. In total, seven bat roosts were discovered within the building; "surprising when you realise that the building is only 4 by 4 metres in size, had water pouring in through the roof and was exposed to the elements," commented Paul Howden-Leach.

### METHODOLOGY

Baker Consultants' licensed bat workers drew up a detailed mitigation plan and were available on site to supervise the building works. What made this job particularly difficult was the range of roosts, which include a maternity roost and a hibernation roost.

Generally in dealing with hibernation roosts the best time to work is during the summer however this has a direct conflict with the maternity roosts, where the best time to work is during the winter months when bats have moved to hibernation sites.

Although carefully planned before the project commenced, the work did meet with a number of significant issues, including inclement weather (a foot of snow and the -18°C temperature). The complete removal and replacement of the roof was extremely invasive but no bats were knowingly disturbed throughout the works and the majority of the workers had a genuine interest in the bats in the building.



The construction company (CR Crane and Son Ltd of Leicestershire) used hand tools for the whole job and more importantly asked advice if they were in any doubt of an issue relating to bats. It is important that site sub-contractors are aware of the issues around protected species in order to comply with legislation and avoid potentially harmful mistakes. Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000), and by the Conservation of Habitats and Species Regulations 2010.

The smooth running of the project was helped by regular meetings organised by the team at Derbyshire County Council, and the consultative way that Baker Consultants approached the task.

Working with the Simpson and Brown Architects, Baker Consultants designed replacement roosting features that were unobtrusively built into the refurbished building and additional roosting opportunities were installed around the temple. The project has proved to be a success with bats now using the building again. Recorded to date are three pipistrelle roosts and a significant number of brown long-eared droppings inside the building, showing that the work was a success. To date we have not inspected the hibernation roost, but we are hopeful that the bats will have returned and continue to use this part of the building.

### THE FUTURE

Baker Consultants will be visiting in 2012 for a final visit to monitor the effectiveness of the mitigation.

Records will be submitted to the biological records centre run by Derbyshire Wildlife Trust (former residents themselves to Elvaston castle).

Charles Heaney, Derbyshire County Council project manager said: "Well done to all involved in the project, the bats have probably been here since the building first existed so hopefully they will now have a roost for the next hundred years."

### WHY BAKER CONSULTANTS

"Baker Consultants' approach to the project kept it to time and budget whilst ensuring that our legal obligations regarding protected species were met to the letter, vital for anyone and certainly for a local authority project."

Charles Heaney, Derbyshire County Council project manager

### ABOUT BAKER CONSULTANTS

As well as habitat and protected species surveys, we offer a full pre-development ecology planning service from site assessment to mitigation design and implementation. Our terrestrial, fresh water and marine ecologists provide services to developers, engineers, local authorities and other disciplines.

Our services include

- protected species surveys (bats, badgers, great crested newts, dormice, water voles, barn owls)
- higher and lower plants
- invertebrates
- tree surveys (including tree climbing)
- breeding and wintering birds
- vantage point surveys
- aquatic and marine surveys
- bio-acoustic monitoring
- planning and legal consultancy