

Bat droppings and urine on artefacts

For Conservators, House Stewards, Building Managers, Property Managers.

Key points

- Bats may enter certain buildings where artefacts are stored or displayed such as churches, baronial halls, attics, cellars and stores/warehouses.
- Bat droppings and urine land on walls, floors and objects.
- There is the risk of damage to the objects, especially from urine.
- Some form of covering or moving the objects may be the remedy.
- In extreme cases it may be possible to move the bats.

1. BACKGROUND

- Most buildings managed by the National Trust house bats. Usually bats roost away from the areas primarily used by humans, and are found in roof voids, outbuildings and barns.
- In some situations, however, there may be closer links, such as in churches where bats commonly roost in the roof of the nave or chancel, or in barns that are used as a visitor centre or tea room.
- Bats also use large buildings such as in churches, barns and baronial halls at night to fly around in. The purpose of this activity is yet unknown.
- These activities can create conflict because the bat droppings and urine land on objects below and some damage can occur. The droppings are not known to be a health hazard; they consist of undigested remains of insects, but they can land on a porous surface such as plaster and provide nutrients on which fungi and algae can grow. This can cause microscopic loosening of the top surface and so cause damage to, for example, wall paintings. The urine can corrode metal and marble surfaces, and mark wood. It is most noticeable on shiny surfaces such as tomb stones, brass plates and wooden furniture. On plaster the urine again acts as a nutrient for algae and fungi.

2. POSITION

The National Trust looks after buildings and their interiors for the benefit of the nation. The Trust is also committed to looking after the wildlife associated with the buildings, some of which, such as some bat species, are nationally rare. Usually there is a solution to all problems involving bats so that the bats are disturbed as little as possible, and damage to artefacts is prevented or minimised. In extreme cases it may be necessary to obtain a licence to exclude the bats, but this can be an expensive and difficult option.

National Trust Act 1907

The National Trust was established in 1895 for the “permanent preservation for the benefit of the nation of lands and tenements (including buildings) of beauty or scientific interest and as regards lands for the preservation... of their natural aspect features and animal and plant life”.

3. ACTIONS

a) Sometimes it is possible to stop damage due to droppings and urine by moving or covering the objects.

Attics, outhouses, barns: most droppings land in a line beneath the ridge, so store goods either side of this line. A cover of polythene will give added protection. Cover open water tanks.

Churches: the droppings may be concentrated beneath the roost (often amongst roof timbers). If possible, move any artefacts that are beneath this point.

It may be possible to erect a protective shelf beneath the roost to collect most droppings, but first seek advice from the local Statutory Nature Conservation Organisation (SNCO) – English Nature, Countryside Council for Wales or Environment and Heritage Service for Northern Ireland.

General scatterings of droppings and urine can be prevented from landing on sensitive areas by covering. Examples include:

- cloth covers for altar ornaments, cloths for alabaster and marble, wax polish for wood and metal surfaces (wax will give temporary protection and will need regular application, but seek advice from a Conservator as to which surfaces it is acceptable to coat). Some covers can be draped, others set up as a canopy.
- seat cushions can be turned over when not in use.
- plastic sheet can protect other surfaces and be removed before use.

It is more difficult to prevent droppings and urine from landing on walls, but some success has been gained by hanging muslin banners (fire resistant) nearby to deflect the bats' nightly flights.

Seek advice from your local bat group or the SNCO.

Care must be taken when covering rare, delicate and valuable objects to prevent any damage, such as trapping moisture or micro-scratches.

b) In some situations the problem cannot be solved and bats may have to be excluded. This is often a physically difficult operation and, since the bats are protected by law, advice must first be sought from the local SNCO.

c) In the living areas of buildings, such as halls, any bats regularly flying around can be excluded without the need to seek permission, but expert advice is usually important. Occasionally a few bats may roost or hibernate in such places in which case it would be sensible to seek advice from the local SNCO before harmlessly removing them if they are causing problems. In all cases the local bat group may be able to give advice on how the bats entered and the best approach to solving the problem.

Further information

Payne S., Bats in Churches, English Heritage and English Nature (pubs) EH code XH20094
Sargent G., The bats in churches project, Bat Conservation Trust 1995
See also Guidance Notes on Bats Indoors, Bats and the Law.
Bat Conservation Trust (for local Bat Group details), 020 7627 2629

Conservation Directorate Guidance Note Information

Author: Phil Richardson, Bat Conservation Officer

Contact: Conservation Directorate, 33 Sheep Street, Cirencester, Gloucestershire GL7 1RQ

Tel: 01285 651818 Phil.Richardson@nationaltrust.org.uk

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