

Dealing with Bat Droppings

Introduction

This note provides very basic advice on cleaning up bat droppings and urine in historic buildings, particularly churches. Cleaning up after bats should focus on removing urine and droppings, not stains or etching – these should only be dealt with by conservation cleaners who have experience of vulnerable historic materials.

The note has been prepared by Historic England in consultation with the Churches Conservation Trust, The Cathedral and Church Buildings Division of the Church of England, Natural England and the Bat Conservation Trust in response to specific issues raised at the Bats in Churches Conference in May 2016. It is not intended to cover all issues related to cleaning after bats or protecting vulnerable historic fabric as these are complex issues needing expert ecological and conservation advice on a case by case basis.

Protecting Yourself

In small numbers bat droppings do not normally cause any problems and are not considered a health risk. Large concentrations require more attention. Any health risks can be avoided by following simple precautions and maintaining basic standards of hygiene.

WARNING: If you find a grounded or injured bat you should avoid picking it up. If you need to do so **WEAR GLOVES** due to the small risk of a rabies type virus from a bite/scratch. More information at: <http://www.bats.org.uk/pages/containingabat.html>

RISK	PRECAUTION
Gastro-intestinal infection from accidental hand-to-mouth transfer	Hands should be washed after exposure to bat droppings and urine, and gloves worn when cleaning.
Dust inhalation from dry bat droppings	Avoid inhaling dust from dry bat droppings. When cleaning up quantities of bat droppings, a dust mask can be used to reduce the risk of inhalation. Dispose of the droppings in sealed refuse bags.
Allergic reaction	Parasites that live in bat droppings can cause allergic reactions in some people. Reactions are rare and no particular precautionary measure is advised. Medical advice should be sought if you become concerned that you are reacting to the droppings.

Cleaning

WARNING: You are advised to avoid the use of chemical cleaning products, including standard products you would use at home, or large amounts of water, as these may inadvertently cause more damage to historic material than bat droppings. Dry cleaning methods are safest, a damp cloth at the most.

All UK bats feed on insects. Their droppings are made up of the remains of insect exoskeletons so they contain little moisture and in a dry environment quickly dry out and crumble. Bat droppings and urine tend to accumulate under the main roosting sites or beneath the access points where the bats leave and enter buildings and roosts. Depending on flight patterns, there may also be scattered droppings throughout the building.

Bat droppings settle mainly on horizontal surfaces but will also stick to walls and other vertical surfaces. They are sometimes confused with mouse droppings at first appearance - you can tell the difference using a quick 'crumble test' (with gloves or a tissue). Bat droppings will usually be very dry, and will crumble to dust under very little pressure, unlike mouse droppings which will remain hard or smear.

Bat urine is more difficult to see, but fresh droplets will appear darker as the moisture is absorbed. In time these areas may turn lighter, as the moisture evaporates, leaving a bloom of salts. You may also be able to smell it.

Apart from forming unsightly deposits and stains, bat urine and droppings may cause damage to historic surfaces by contamination of soluble salts and alkaline solutions. The effects are currently being studied and more information will be made available when appropriate. For more information see the websites of [Historic England](#) and the [Bat Conservation Trust](#).

Dry cleaning by careful vacuuming or gentle brushing

- Regularly dust and vacuum up urine and droppings. The frequency will depend on the amount of deposits.
- Take exceptional care with more delicate objects such as monuments. The area should be vacuumed using a soft-bristled brush to direct any dry, loose debris into the vacuum hose. The vacuum hose should not come into contact with the object surface as this could cause damage. A dust mask should be worn to prevent dry urine or droppings being inhaled.
- Empty out the vacuum cleaner immediately afterwards.

Damp cleaning using minimal amounts of water

- After vacuuming, the floor should be regularly wiped with a slightly damp mop, rinsed frequently in clean water. This will help reduce the damage done by urine and reduce the pungent aroma. This process should not saturate the floor since excessive water could react with soluble salts, leading to further discolouration and potential decay.
- In a similar way, furniture such as pews can be wiped with a damp lint-free cloth.

- Do not attempt to wet clean important historic artefacts or structures, such as church monuments, alabaster panels or brasses without seeking professional advice, as in some cases wet cleaning can cause irreversible damage.

Seek professional advice

- Bat urine and droppings may result in dark staining and can be particularly disfiguring, especially if on pale materials such as marble. More complex cleaning processes may be appropriate, but these should only be carried out by a professional conservator. You can find a conservator through the [Conservation Register](#) or your diocesan or denominational advisory body. Church of England contacts are available [here](#).

Equipment and materials

General

- Rubber or nitrile gloves
- A round, long handled, soft-bristled brush, available from decorator or artist suppliers, e.g. hog's hair brush
- Refuse bags

Dry clean

- Vacuum cleaner with hose attachment
- Dustpan and brush
- Dust masks

Damp clean (water only)

- Clean water
- Mop
- Lint-free cloth
- 2 buckets: one for clean water and one for squeezing and rinsing dirty cloths and mops

Protection to minimise damage

Bats are legally protected wildlife and it is illegal to destroy bats or their roosts. Therefore, any cleaning methods must avoid harming or disturbing them. The best way to minimise damage caused by bat urine or droppings is to prevent contact with historic surfaces (see below). Where this is impossible, regular careful cleaning can reduce the build-up of urine or droppings and consequently any harmful effects they might have.

Protect surfaces

- Lay disposable paper beneath the roost to catch urine or droppings. Catering 'banquet roll' is ideal. This is easily and cheaply available and should be changed regularly.
- Cover all monuments and furnishings with dust sheets. They should be changed and washed regularly.
- Plastic sheeting can be detrimental to surfaces and should not be used.
- Any protection other than sheeting is likely to require permission. Natural England and the denominational or diocesan advisory committee, or local authority conservation officer, should be consulted for advice both about the legal requirements for wildlife and historic fabric.

Bat Helpline for churches

Those caring for churches buildings in England are eligible for free advice about bats provided by Natural England through the Bat Helpline 0345 1300 228. This advice, which may include a free roost visit by a trained volunteer, can be obtained in the following instances:

- Bats are causing a nuisance inside the church
- Repairs or building work is planned
- Grounded bats are found

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