

## Looking for bat evidence in the church interior

















## Bring with you

1 Survey form and a pen/pencil

2 Torch & binoculars (optional)

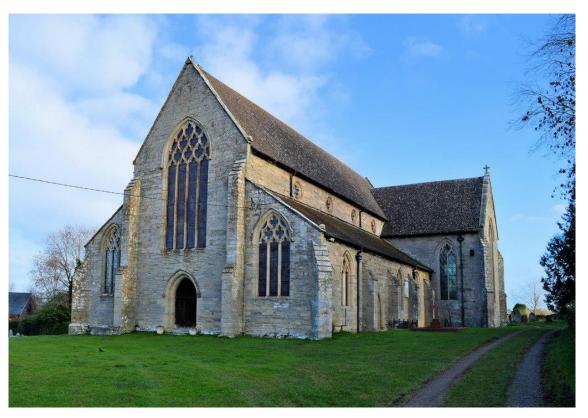
A survey buddy if you can (or let someone know where you're going and when to expect you home)



#### What you need to know

1 These are one-off surveys to look for bat evidence

2 Take place June-August



There are two surveys. The survey you're carrying out depends on the church you've selected.

NATIONAL BATS IN CHURCHES STUDY

CHURCH BAT DETECTIVES

National Bats in Churches Study

This is our priority survey. We aim to identify the bat species, if there are bats using the church. To do this we ask that you borrow equipment from us to collect bat droppings and to record any bat calls.





The survey involves:

- 1. Daytime survey to look for evidence of bats.
- 2.Questionnaire with your church contact
- 3.Collect droppings for DNA analysis
- 4.Leave a bat detector in the church for 2 nights



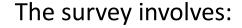
The 1000 churches in this survey were randomly selected. The sample is stratified to ensure it reflects the age structure of English churches and to ensure we have a large enough sample in each region.

Not sure if your church falls under this survey? Login to the survey portal batsinchurches.bats.org.uk and go to My Churches. You'll see a list of your selected churches and the survey they fall under.

## Church Bat Detectives

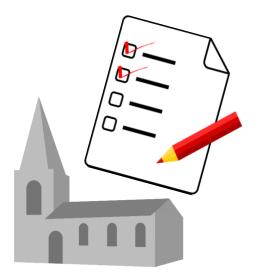
In this survey we want to understand whether there is evidence of bats using the church.

We do not aim to identify the bats



- 1. Daytime survey to look for evidence of bats.
- 2. Questionnaire with your church contact

You do not need to book equipment



This survey can be carried out 16.000+ in any Church of England or **Churches Conservation Trust** church that isn't part of National Bats in Churches Study-that's a lot of churches!



Confident with bat surveys and have your own equipment? Any additional work to identify species can be saved on our online system. It isn't necessary but a fantastic bonus if you can!



Optional extra if you have

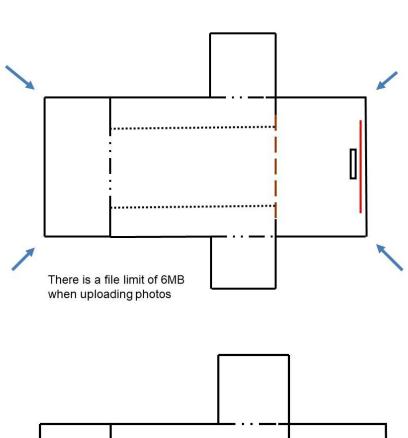
your own bat detector

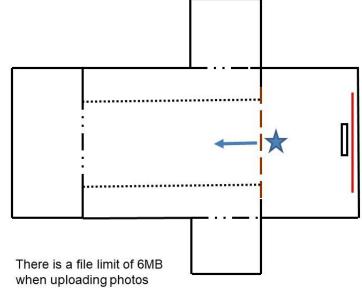
Not sure if your church falls under this survey? Login to the survey portal batsinchurches.bats.org.uk and go to My Churches. You'll see a list of your selected churches and the survey they fall under.

#### Elements of the survey

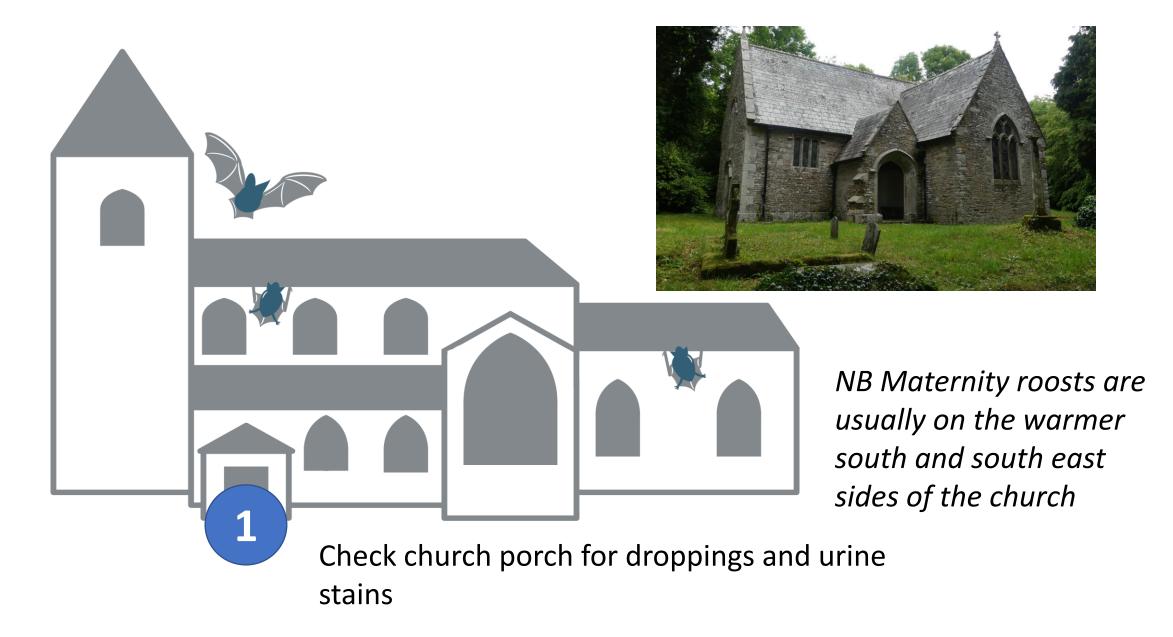
Outside the church. Take photos of the 4 corners of the church.

- Inside the church. Take two photos of the nave of the church, one of the body of the church and another of the ceiling.
- Look for evidence of bats within the church

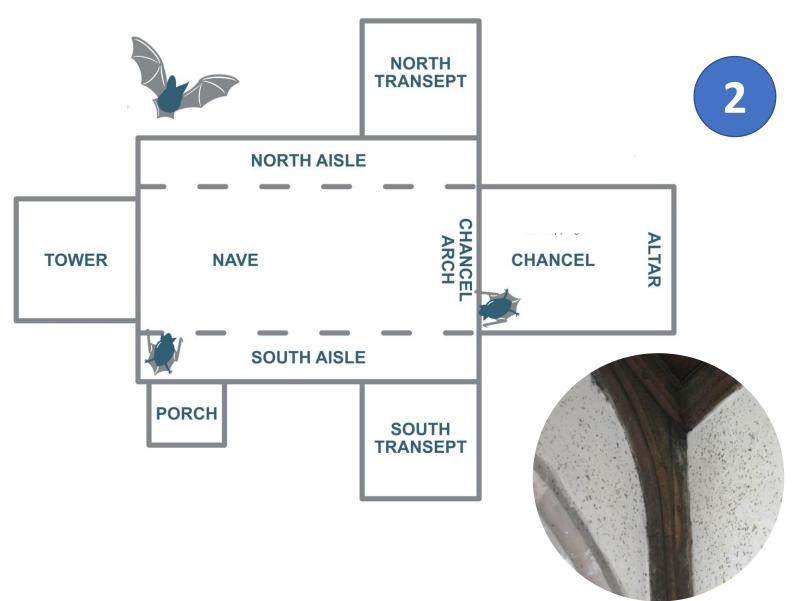




## Where to look for bat evidence?



#### Search the church interior



Systematically work round the interior to check for droppings:

- Walls
- Floors
- Pews
- Window sills
- Top of cupboards

NB behind the altar can be hard to clean!

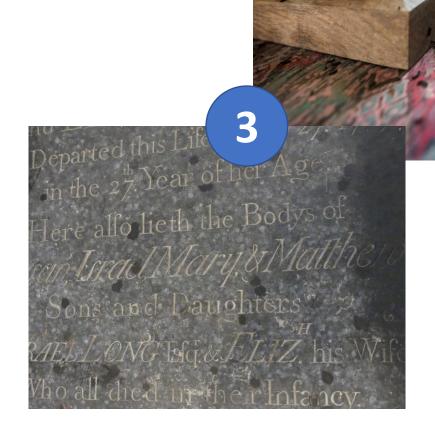
#### Search around furnishings

Check church furniture for droppings/urine stains

- Altar
- Memorials
- Brasses

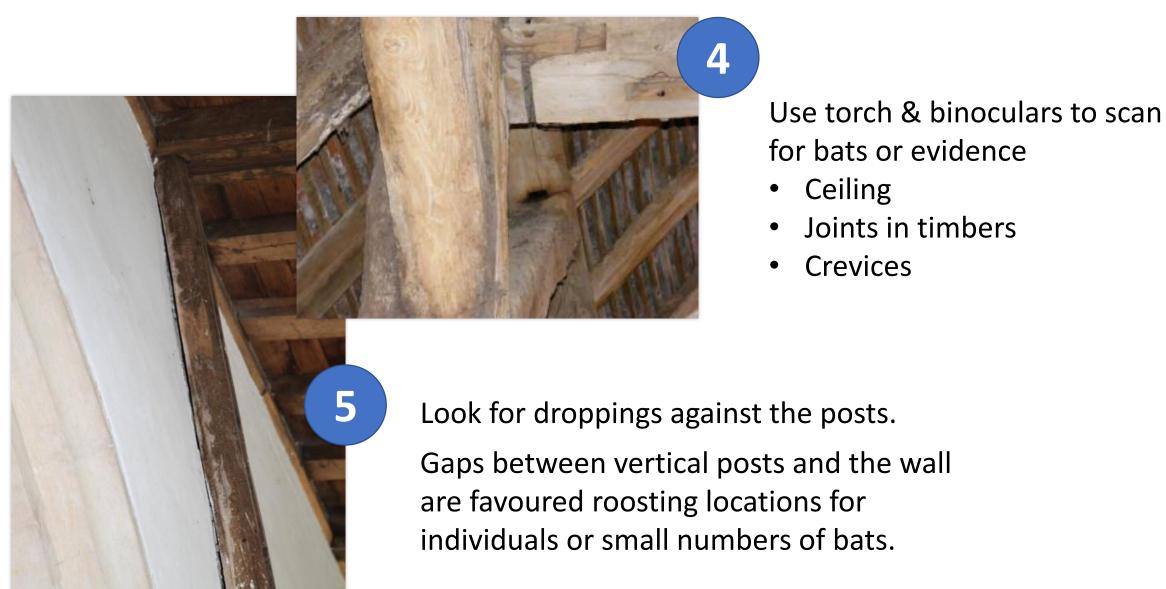
#### Check behind:

- Radiators
- Hangings
- Pictures

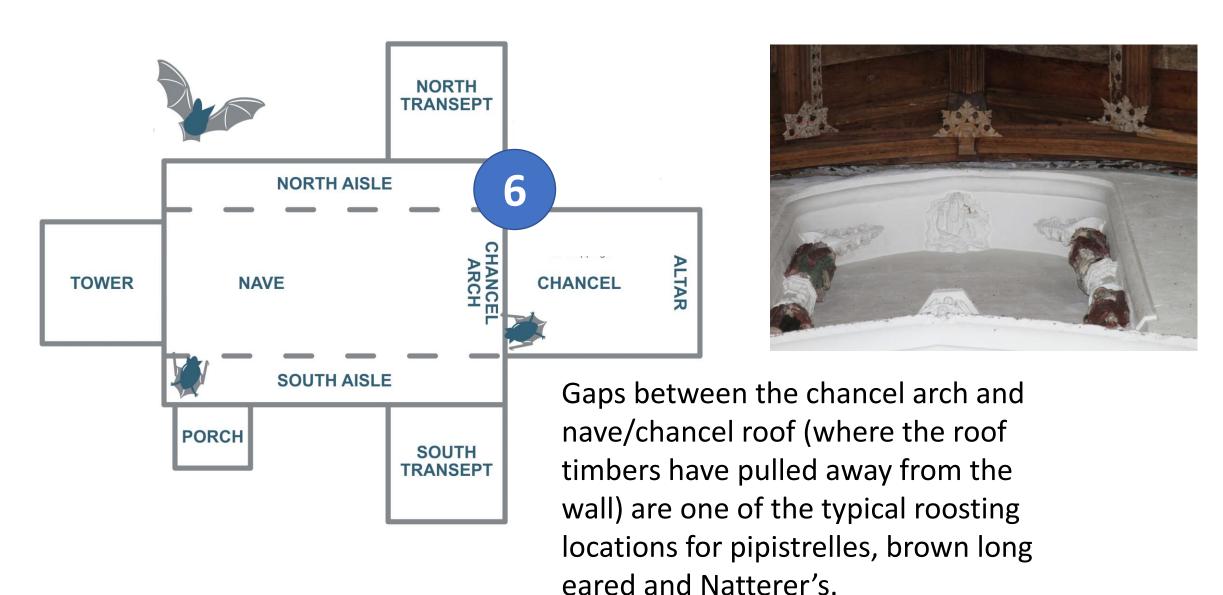


Bat urine can cause a lot of damage to brass, flooring and pews.

#### Looking for bats



#### Chancel arch

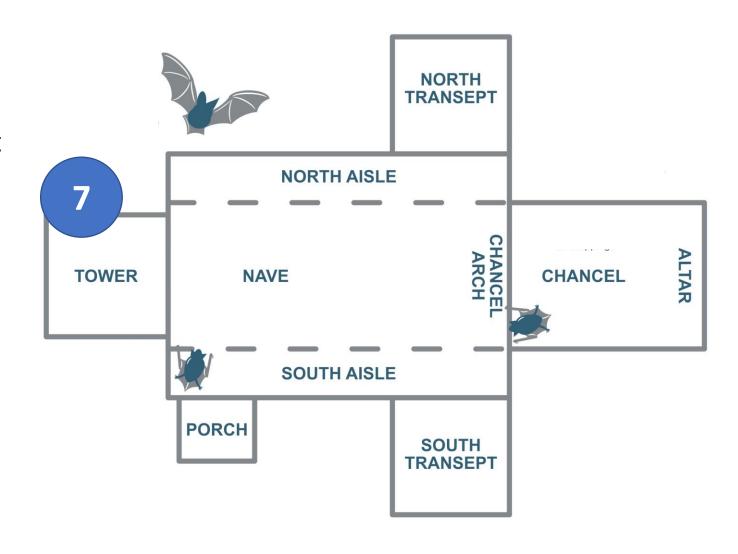


#### Looking for bats – click a number on the checklist

If it is easy to look around the tower please do so, but you don't need to go into locked areas of the church.

#### Please do not:

- Go into the belfry
- Climb ladders
- Go into voids



## When you find evidence

On the survey form you're asked:

- 1. WHERE in the church you found it (i.e. chancel, nave)
- 2. WHAT it is (i.e. droppings or urine)
- 3. HOW MANY (if it's droppings we ask you to tell us roughly how many. There are three categories, see image below)
- 4.PHOTO. Have you taken a photo of the bat evidence?

#### EVIDENCE OF BATS

	Location within the	Evidence Type	Photo	If droppings, how	DNA
	church	(droppings, urine,	taken?	many?	Sample
		dead or live bat)		1-10/ 11-100/ 100+	Collected?
	Chancel	Droppings	Yes	11-100	Yes
1					
2					
3					
4					
5					
6					
7					

DNA column for National Bats in Churches Study only. Please indicate if you've collected a sample.

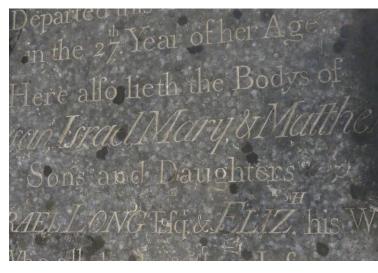
## What kind of evidence may you find?



**DROPPINGS** 



**BATS** 



**URINE** 



**FEEDING REMAINS** 

#### Bat Droppings

 Accumulations of bat droppings can be found underneath roosts or their points of access in and out of the church.

- You might see scattered droppings where bats have been flying around the building.
- Bat droppings look similar to mouse droppings.
   They're around 6-15mm in length, but each bat species has slightly different looking droppings.
   Don't worry, we're not asking you to identify the bats from the shape of their droppings!

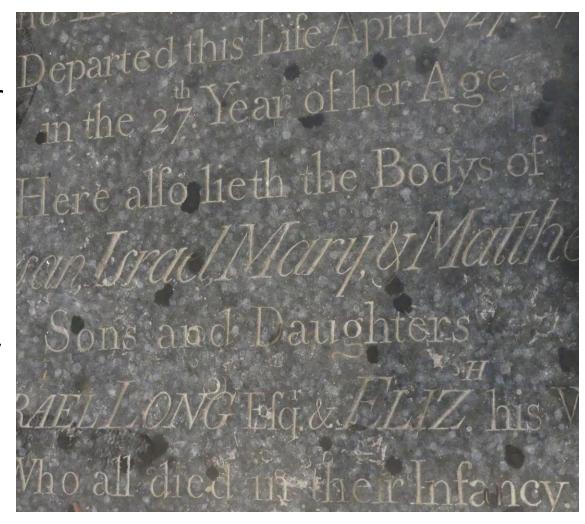
#### **Crumble Test**

Unsure whether it is bat or mouse droppings? Use a pair of gloves or tissue and rub it between you fingers. Bat droppings will crumble easily, as they're made up of insect exoskeletons.



#### Bat Urine

- You may find these small urine splashes
   (whitish marks are the dry urine and the darker
   are fresh wet splashes).
- You may see urine staining around wood, below roosting locations.
- Not sure if it's bat urine? It can sometimes be hard to differentiate urine and other issues, like water damage. If there's urine there's likely to be droppings too, so look thoroughly for droppings. You can always send us a photo as well if you're not sure.



#### Photo credit:

#### Live or dead bats

- If you come across a roosting bat, please leave it alone and don't shine your torch at it.
- If you see a bat flying in the day or on the floor it may need help. If this happens seek help from The National Bat Helpline. Importantly, if you need to pick up a bat to rescue it, you must wear gloves.
- Hopefully, you will not find a dead bat, but if you do and it is physically intact, you can support the Animal and Plant Health Agency (APHA) surveillance for rabies, a disease found in a small number of bats in the UK. To find out more, or request a dead bat pack, see the Bat Conservation Trust website

www.bats.org.uk/advice/found-a-dead-bat/testing-dead-bats



The National Bat Helpline

0345 1300 228

Opening hours between May-September for emergency bat care calls:

Mon-Fri 9:30-16:30 & 18:00-22:00

Sat-Sun 10:00-22:00

You can find information online at www.bats.org.uk/advice/help-ive-found-a-bat

Photo credit: Common pipistrelle by Hugh Clark / www.bats.org.uk

#### Feeding remains

We aren't specifically looking for feeding remains in this survey but accumulations of moth and butterfly wings can indicate the presence of bats.

Some bat species eat large prey such as moths and take them to a regular feeding perch. They'll eat the abdomen and discard the unpalatable wings.

If you see this, it is likely that you'll also find evidence of bat droppings and urine.

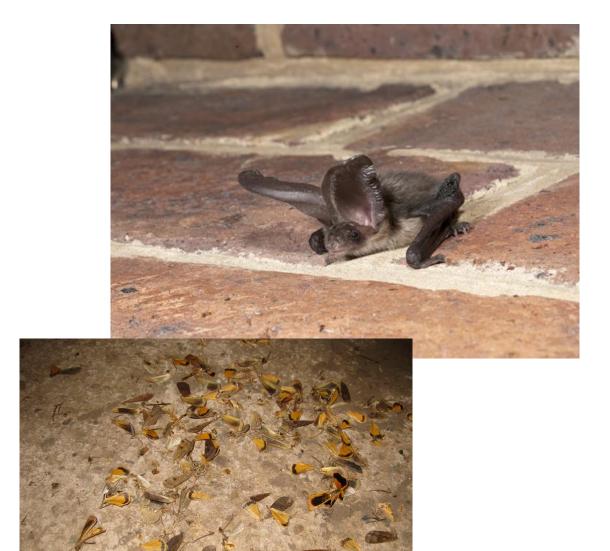


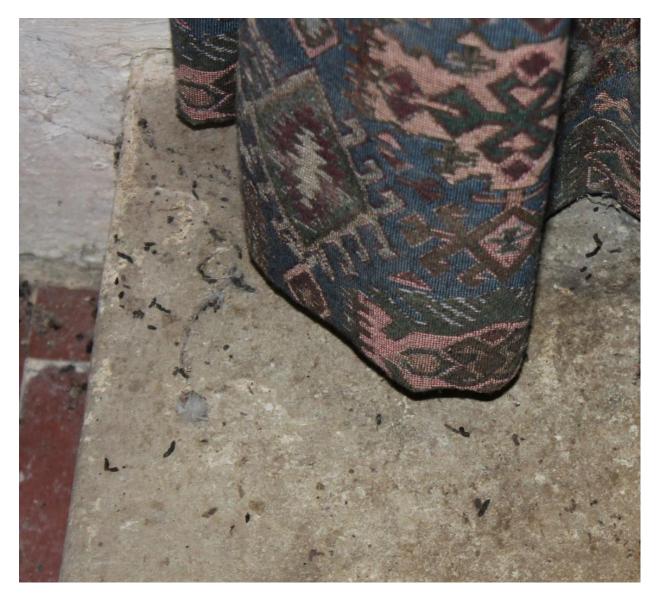
Photo credit: Brown long-eared bat by Hugh Clark / www.bats.org.uk

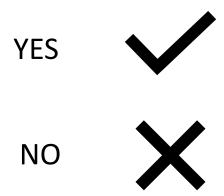
## Can you see any bat evidence in this photo? Answer on the next page



Photo credit: Philip Parker

#### Answer





Bat droppings were found under the curtains.

Photo credit: Philip Parker

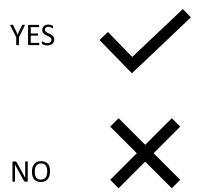
## Can you see any bat evidence in this photo? Answer on the next page



Photo credit: Shirley Thompson

#### Answer





Bat droppings can be seen clinging to the wall under this Daubenton's roost in the porch.

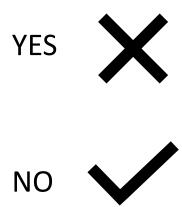
Photo credit: Shirley Thompson

## Can you see any bat evidence in this photo? Answer on the next page



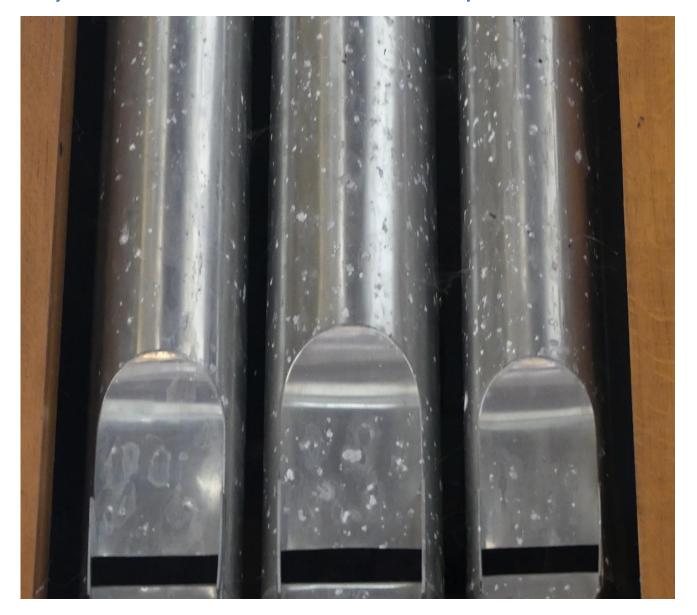
## Can you see any bat evidence in this photo?





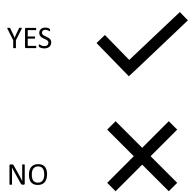
The mess here is from the candle wax.

## Can you see any bat evidence in this photo? Answer on the next page



#### Answer





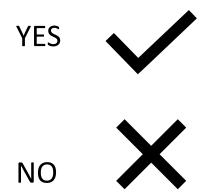
You can see urine marks/splashes on the organ pipes.

## Can you see any bat evidence in this photo? Answer on the next page



#### Answer





Bat urine is slightly acidic so it can cause damage to the brass. You can see these small urine splashes.

## Can you see any bat evidence in this photo? Answer on the next page



#### Answer







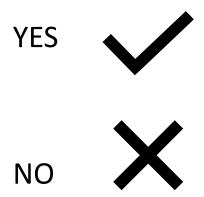
It's not just bat urine that can cause damage. This damage to the brass was caused by a non-breathable covering.

## Can you see any bat evidence in this photo? Answer on the next page



#### Answer





There are a few circular splashes of bat urine on the table if you look closely.

## Check your learning with our quiz!

You're asked to take 6 photographs (4 outside and 2 inside), plus a photo of any bat evidence you find. Answer on the next page.

TRUE FALSE











## Check your learning with our quiz!

You're asked to take 6 photographs (4 outside and 2 inside), plus a photo of any bat evidence you find-Click on your answer















#### I need to survey my selected church for multiple years

TRUE FALSE











## I need to survey my selected church for multiple years-Click on your answer





No, these surveys are one-off surveys. However, if you'd like to monitor the roost on an ongoing basis it would great to take part in the NBMP Roost Count.











# Droppings that crumble easily are bat droppings and not mouse droppings-Click on your answer





The crumble test is a great way of telling whether they're bat droppings. Please use a tissue or gloves and wash your hands afterwards











# We hope you're more confident looking for bat evidence, but if not...

#### click a number on the checklist

- You could try contacting your local bat group. You may find an experienced bat surveyor who would be interested in joining you or they may be able to provide support. <a href="https://www.bats.org.uk/support-bats/bat-groups">www.bats.org.uk/support-bats/bat-groups</a>
- Bring a survey buddy. Two people looking for bat evidence is better than one.
- If after doing the crumble test you're still not sure they're bat droppings, note it down, take a photo and send it in. If you're doing the National Bats in Churches Study collect it in one of the vials provided.
- You may not find bat evidence and this is okay! Not all churches will have bats roosting in the interior. Plus, we do not assume that after a one-off evidence survey, that bats definitively do not use the church. We can only confirm the positive, where bat evidence has been recorded. If you don't find bat evidence it is still an important record. Please fill in the online survey form to record your visit!

## Good luck with your survey!

The full instructions are on your resources page batsinchurches.bats.org.uk













