

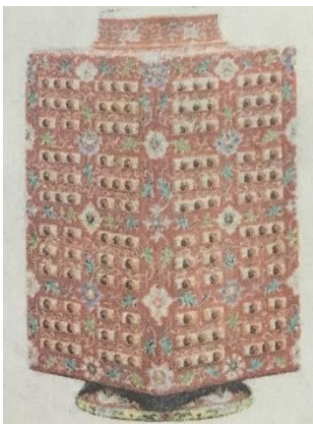
## Church Cleaning – Top Tips

How to clean church buildings and conserve the unique history of fixtures, fittings and objects.



*Making cotton swabs on a conservation cleaning workshop in 2019*

In 2006 a Chinese vase was sold at auction for £92,000; it could have fetched more than £1 million had it been in perfect condition. The 200-year-old vase described as "a lost treasure of the Qing dynasty", was given to a cleaning woman as a retirement present in 1940. She cherished the gift, but unfortunately, she polished it so much that she rubbed off most of the gold enamel.



Sometimes less is more, particularly when it comes to caring for historic objects. Many of us wouldn't question using our domestic cleaning products to clean the interior of churches, but not only could we be doing more harm than good, we might actually be cleaning far more than we need to. Of course, a lack of cleaning can cause problems too. Dust and dirt can build up and attract moisture and insects, it can also be compacted into layers and harden causing dust cementation.

Changing practices and attitudes can take time, but with an understanding of the basic principles you can aim for an ideal and do the best you can in the meantime. This introductory guide has been produced to help you review your practices and consider making changes. It was produced specifically for church volunteers by professional conservator Claire Fry. A list of further reading and details for specialist suppliers can be found at the end of the document.

## MATERIALS

### DUSTERS AND CLOTHS

Yellow dusters have fibres which can easily catch on things and cause damage. They also tend to leave yellow fibres over surfaces which, in addition to looking unsightly, can trap more dust. Feather dusters should be avoided because the feathers are liable to snap, leaving a sharp edge which will scratch the surfaces they pass over.

Microfibre cloths used to be the most popular answer, but water pollution caused by the washing of synthetic materials has caused them to fall out of favour. If you do use microfibre cloths, it is recommended that you use a special washing bag to clean them in, such as Guppyfriend, available from *Lakeland* and *Amazon*. Fine washable cloths made from material like bamboo (*Arcare*) are a good alternative, as are lint-free, colourfast cotton cloths.

Suppliers: All types of cloth can be purchased from conservation suppliers such as *Preservation Equipment Ltd*, but they tend to be expensive. Cheaper versions can be found in high street shops and supermarkets but take care to ensure they are lint-free and where possible, avoid using coloured cloths as they contain chemical dyes.

Lamb's wool and microfibre dusters can be purchased from *Lakeland*.

### BRUSHES

*Why use brushes?*

Dusters and cloths do not get rid of all the dust in crevasses and carvings. As dust builds up it will attract moisture and insects and become gritty and sharp. In the right conditions, dust can be compacted into layers and harden causing **dust cementation** (often appears dark or grey to the eye) which is very difficult to remove.

Wherever possible, brushes with natural bristles should be used. Avoid using the same brush on different types of materials and wash brushes with a gentle washing-up liquid (see detergents).

- Hog's hair for stone and woodwork
- Pony hair for gilding and textiles
- Goat hair for books
- Badger hair for photographs
- Banister brushes made from pony or goat's hair for larger areas. These are less expensive than other brushes and are acceptable for general use.

Wherever possible, vacuum up the dust as you brush (brush into the nozzle of the vacuum). An alternative is to flick the dust onto a cloth.

Suppliers: *Edward W Mason Brush Manufacturers*, *Rex Britton*, *Preservation Equipment Ltd*



### SMOKE SPONGES

These can be used to dry clean hard surfaces. They are used a bit like a pencil eraser but leave no residue. Cosmetic sponges can also be used as long as they contain no chemicals.

## GLOVES

*Why should I wear gloves?*

The skin secretes oils and metabolic wastes, including various salts, which react aggressively with some materials causing irreversible damage. For example, fingerprints can cause corrosion on metal. To protect the objects from these secretions, gloves should be worn when handling most objects.

*Types of Gloves*

- White cotton gloves have traditionally been used by conservators, but they are no longer recommended for two main reasons:
  - ~ their thickness and seams can restrict feeling
  - ~ cotton does not completely protect against sweat thus will not stop oils coming through from the skin.
- Nitrile gloves are a better option, however, they do cause your hands to sweat and are a single-use plastic.
- The best and most expensive are nitrile-cotton mix gloves which can be washed and re-used.

Suppliers: [www.justgloves.co.uk](http://www.justgloves.co.uk) and other various online sites.

## MOP

A flat-head cotton mop is recommended. These are available from high street hardware shops and online.

## POLISHES AND DETERGENTS

Cleaning products should be used as a last resort; generally dusting is enough or the application of a little moisture. Be wary of commercial cleaning products, particularly those that claim to be 'environmentally friendly' or 'used by conservation professionals'. If in doubt, seek advice.

Popular brass cleaning products and spray polishes are not appropriate to use on historic materials. Brasso, for instance, contains ammonia which is known to cause stress fractures in metal, whilst Pledge contains silicone which coats the surface in a layer trapping dust underneath it, some people believe it even attracts more dust. The silicone tends to repel any product applied over it which can make repairs difficult.

Cleaning products for specific materials are mentioned in the following sections. For general cleaning purposes, to remove more stubborn marks, use gentle products such as *Surcare* washing-up liquid and *Boots Sensitive Skin* washing-up liquid – use just one tiny drop in a jam jar of water.

## FACEMASKS

FFP3 masks are recommended when cleaning areas/items which could contain mould spores, bat or pigeon waste, or other hazardous substances.

Suppliers: [www.protectivemasksdirect.co.uk](http://www.protectivemasksdirect.co.uk) and other online sites.

## VACUUM CLEANER

It is preferable to use a vacuum cleaner with adjustable or lower suction. Suction can be lowered in a normal vacuum by inserting a length of hosepipe tubing into the nozzle. You don't need to seal it in place, just tape it into position or use string to hold it.

If you are concerned about hoovering up bits that might need to be retained, place a nylon over the end of the vacuum nozzle to catch bits.

For a floor vacuum, use a vacuum that has a built-in bristle brush head so that the metal plate of the vacuum head does not make contact and scratch historic flooring when in use.

## TECHNIQUES AND TIPS

### WOOD

Wooden objects can be dry brushed using a hog's hair brush or banister brush as appropriate. Wherever possible, vacuum up the dust as you brush (brush into the nozzle of the vacuum). An alternative is to flick the dust onto a cloth.

Brown wood objects can benefit from regular waxing. The frequency will depend on use or wear, but often once a year is enough. Pews, particularly those not in regular use, may only need to be waxed every 2-3 years, then simply buffed with a chamois as and when needed. Waxing too often will cause a layer of wax to build up on the wood which can become unsightly over time.

*Harrell's* (colourless) *Wax Polish* is highly recommended. If you have dark woodwork with scratches or bleached bits you can use the antique colour wax.

For smooth wood surfaces, put the wax on using a muslin cloth and buff using a plain, cotton, lint-free rag. A chamois is good for a final buff and regular buffs after. These can be purchased on *Amazon*.



For carved surfaces, use one furniture brush to apply wax and one furniture brush to remove excess wax, a bit like when polishing shoes.

'Huff and Puff' – for more stubborn marks breathe onto a chamois to add a hint of moisture to clean the surface.

If a piece of wooden furniture needs to be moved, examine it for any vulnerable or damaged parts and make sure drawers and cupboards are empty and secured so that

they will not swing open. Check you have enough people to safely move an item, separate large items into smaller elements where possible, straps or trolleys may be needed for heavy pieces of furniture. Always lift by the lowest load-bearing member. Never drag objects, even when on castors as this can damage the object and the floor and never use handles to carry as these are normally decorative rather than functional.

Store wooden objects and furniture under clean dust sheets when not in use to protect from dust.

Wooden objects can be attacked by pests such as furniture beetle. *Constrain™* insecticide ([www.historyonics.com](http://www.historyonics.com)) can be used to treat infested objects.

### Bat Waste

Wear a face mask and brush dirt off, then buff wooden surfaces. Stubborn areas of dirt can be cleaned using a tiny bit of detergent. Try to avoid the urine getting onto surfaces by covering them with *Trivex* or catering roll.

### Pests



Pest infestations and woodworm are usually the result of environmental problems so try to address these before treating the symptoms. Silverfish are generally a sign of damp.

Sticky traps are good if you want to identify the bugs and where they are focused, but they are not good for bats as the bats can also get stuck in them. If your church has bats you cannot use these traps.

Insecticides - *Constrain* is good, but you cannot use it where bats are present.

Moth problems – freeze the object if possible.

## TEXTILES

Only robust textiles should be cleaned. Seek specialist advice for delicate or fragile textiles. Handle textiles with clean dry hands or wear nitrile gloves.

Keep textiles covered with a clean cloth or acid-free tissue when not in use, to reduce exposure to light and build-up of dust. If textiles need to be folded to be stored, then a thin sausage shaped roll of acid free tissue should be inserted into the fold to prevent the crease from becoming permanent and damaging the textile.

Robust textiles can be dusted with a soft brush. Test to see if a textile needs dusting in the following way: use a vacuum with reduced suction (conservation grade or with inserted hosepipe). Cover the nozzle of the vacuum with a piece of muslin (secured with a rubber band) to catch the dirt that will be cleaned off the textile. Choose a small patch of the textile to test clean. Hold the nose nozzle? of the vacuum above the surface of the area to be cleaned and gently brush the surface with a soft pony hair brush. When the textile patch has been cleaned, look at the muslin. If there is dirt on the square then the textile needs cleaning, so continue with the same method outlined above. If there is no or little dirt, then there is no need to clean the rest of the textile. If you see any coloured fibres on the muslin that look the same as on the textile **stop cleaning immediately** and seek specialist help.

Alternatively, textiles can be vacuumed on a low suction through netting (such as nylon mosquito netting). The edges of the netting should be hemmed so they do not catch on the textile. Gently take the nozzle of the vacuum over the surface – avoid touching the netting and keep a greater distance if the textile is particularly fragile in places. The same technique can be used for carpets.

Textiles should not be washed or wet cleaned. If this needs to be done a textile conservator should be contacted.

If an historic textile becomes wet or a liquid is spilled on it then it needs drying as soon as possible. Remove excess liquid by blotting with clean white towels or white kitchen roll. Avoid using excess pressure or wringing the textile as wet textiles can be fragile. Use a desk top fan or a hairdryer on the cool setting to circulate cool air around the textile to dry it completely, but don't aim the blast of air directly at the object.

Textiles can be attacked by pests such as moths and carpet beetles. Textiles can be frozen to kill any insects. The textile should be wrapped and sealed in polythene and frozen for at least two weeks. Ensure the textile is not crushed in the freezer and let the textile return to room temperature before unwrapping to prevent condensation forming on the textile. If in doubt consult a conservator.

Vacuum carpets head to toe – “stroke them like a cat”. Carpet fibres lay in one direction just like the hairs on a cat, vacuum in that direction and not against it.

## Bats

If the textile has wet bat urine on it, dab the area with a lint free cloth or cotton wool bud.

To clean off bat urine use cotton wool buds – satay sticks topped with cotton wool are good. Put the cotton wool in water, dab it dry and then very gently roll the bud over the surface of the textile.

## METAL

Always wear nitrile gloves when handling metals, as it is particularly susceptible to damage from oils and salts found naturally in our skin.

Metals are particularly susceptible to poor environmental conditions. Damp conditions normally found in churches can encourage corrosion or tarnish of metals. Maintain conditions in the church building to reduce damp. If this cannot be achieved, where possible move metals to a safe secure place within the church where the conditions are the least damp.

All metal objects, except the most fragile, can be dry cleaned using a pony hair brush to flick off dust.

Tarnished brass and copper objects can be cleaned gently with Goddard's Long-Term Silver Cloth (making sure the cloth is only used for copper/brass objects).

Lightly tarnished silver objects can also be cleaned with Goddard's Long-Term Silver Cloth. Do not use the same cloth to clean different types of metals, buy several cloths and clearly mark one for cleaning silver, one for brass etc...

Silver objects in regular use should be washed in warm water with a few drops of a mild detergent, rinse with clean water and dry.

Abrasive cleaning to remove corrosion and tarnish must only be done when necessary as excessive abrasive cleaning can wear away the sound metal surface and remove decorative and plated surfaces. Avoid metal cleaning products which contain ammonia, such as Brasso; they are known to cause stress fractures which weaken metal. Pre-Lim surface cleaner and Peek cleaner are recommended but should be used as a last resort. They are abrasive and will get stuck in crevasses and leave a residue. To remove this, use a cotton swab dipped in white spirit. Remember to do a COSHH assessment when using solvents. Consult a metals conservator if more interventive cleaning is thought to be necessary.

A thin wax coating can be applied to metals to slow down corrosion and tarnish. Renaissance wax can be applied directly to a clean metal surface using a soft clean cloth or hog's hair brush and then buffed with a soft clean cloth when dry.

Keep lead alloy objects, including pewter, away from sources of volatile organic compounds, such as oak, cardboard or MDF. Silver objects should be kept away from protein-based materials, such as wool, silk or leather, as these contain sulphur compounds which cause tarnishing.



## STONE

Stone can be dry cleaned using a brush, such as a hog's hair brush or bannister brush, to flick dust and dirt into the nozzle of a vacuum cleaner.

It is better not to wet clean stone objects as many types of stone are porous and will retain water below their surface which can cause damage over time. Also, some stonework such as alabaster is slightly soluble in water. It is better, therefore, to restrict cleaning to dry brushing.

External stone work, such as headstones, can be cleaned using a bucket of warm water and a soft brush. Avoid cleaning unnecessarily though, as you might remove things that help to protect the

stonework such as lichen, or disturb the balance created through natural weathering causing the erosion of the stonework to accelerate. Never use washing-up liquid or laundry detergent as they will cause blackening of the stone surface. Other commercial products, even those which claim to be environmentally safe, are generally not safe for use on historic objects or for use in churchyards which are havens for wildlife.

For heavily stained stonework, seek advice from a stone conservator.

Good building maintenance is important to prevent water-related damage to stonework.

## **FLOORS** -including stone, wood and tile

The majority of resilient floor types can be vacuumed. The bristles in the vacuum head should be down for hard floor types to avoid scratching.

Wood, tile and smooth stone floors can be dry mopped with a clean, flat-head cotton mop to remove dust. For waxed wood floors a nearly dry cloth that has been soaked in 50% paraffin and 50% vinegar can be wrapped around the mop to buff and dust the floor at the same time.

Wet mopping should be done sparingly, only when necessary on hard floor types using a damp mop only. Avoid over wetting. Follow with a dry mop to dry the floor.

Waxed wood floors should be re-waxed when necessary. Areas that receive more foot traffic will need more frequent waxing than others. Floors should be cleaned and dried thoroughly before being waxed. Wax should be applied by hand using a cotton cloth and be buffed when dry by hand or using a domestic or industrial electric buffer. Use a non-slip floor wax to prevent accidents.

Divert footfall away from vulnerable brasses and carved floor inserts.

## **WINDOWS**

Windows, especially stained-glass windows should be left to specialist conservators to clean and conserve.

Cobwebs can be removed carefully using a lamb's wool or microfibre duster.

Extendable poles can be used to remove cobwebs from high level windows but always ensure that the duster is fully controllable when using at high level, to prevent accidentally knocking or breaking any fragile glass.

## **BOOKS**

Handle books with clean, dry hands. Make sure your hands do not have products on them i.e. hand creams, residue from hand washes etc... Gloves are not recommended because they dull your sense of touch – you need to be able to feel the corners of the pages in order to carefully turn them. If books are mouldy, however, nitrile gloves should be used.

Books are best stored on bookshelves. When not in use, dust covers can be placed over the top edge of the books on the bookshelves.

Do not touch the spine of a book when extracting from a bookcase as spines are generally the weakest or most damaged part of a book. To extract a book, put your hand over the top of the



book and onto the fore-edge to draw it out, alternatively push the two volumes either side towards the back of the bookcase until the selected book protrudes by at least 3cm so it can be grasped either side of the spine, or place fingers on the top edge of the boards, press down and draw the book out.

Books ideally should be cleaned once a year, but it's not essential. The best time to clean is when you have time to clean and excessive dust necessitates.

Books should be assessed to make sure there is no mould growth as cleaning books with mould without PPE (personal protective equipment) may cause adverse health problems.

Hold the book **firmly closed** to prevent settled dust falling in between the pages. Brush the dust using a soft pony-hair brush into a vacuum nozzle. Start at the spine and brush along the top to the fore-edge. Then brush along the edge of the book. Finally, brush from the spine along the bottom of the book towards the fore-edge. The top edge of a book is referred to as the head, the bottom is called the tail and the side with the edges of the pages is called the leading edge.

If very dusty, the inside of a book may need cleaning, making sure not to open the book wider than 90°, use a clean pony-hair brush to clean the first few and last few leaves of the book by brushing radially out from the centre of the joint. Further leaves can be cleaned if needed.

Mouldy books can be cleaned in the same way using a HEPA filter vacuum and wearing nitrile gloves and FFP3 face masks for health and safety.

**Top tip** – clean books into a cardboard box with a hole cut in the side to put a vacuum nozzle through. Hoover as you dust.

To reduce the amount of dust on books a layer of Melinex can be placed over them. Melinex is a very soft material a bit like silk damask.

Modern books unfortunately will not last the test of time. Modern paper literally attacks itself causing irreparable damage, even Penguin Classics cannot be conserved.

## PHOTOGRAPHS

UV light and visible light can both cause damage. Put a piece of textile over a picture frame to stop light reaching the image and degrading it. Add a label to encourage people to lift the fabric to view the image.

Use a badger hair brush to clean photographs.

## PROFESSIONAL ADVICE

If in any doubt seek advice from a conservation professional. The Institute of Conservation (ICON - <https://icon.org.uk/>) has a register of qualified conservators and restorers which is free to use <http://www.conservationregister.com/>

## SPECIALIST SUPPLIERS

The following have been recommended by qualified conservators, but other suppliers are available.

### Preservation Equipment Ltd

Vinces Road, Diss, Norfolk IP22 4HQ

Tel: 01379 647400



Email: [info@preservationequipment.com](mailto:info@preservationequipment.com)

[www.preservationequipment.com](http://www.preservationequipment.com)

**Supply a range of materials including gloves, brushes, acid-free tissue and Renaissance Wax**

#### **Edward W Mason Brush Manufacturers**

14 Brownfields, Welwyn Garden City, Herts AL7 1AN

Tel: 01707 331911

Email: [masonsbrushes@btconnect.com](mailto:masonsbrushes@btconnect.com)

**Supplier of quality brushes, particularly hog's hair and pony hair, often cheaper than comparable cosmetic brushes.**

**Harrell's Wax** - [www.harrells.co.uk/](http://www.harrells.co.uk/)

**Bannister brushes** – [www.rexbritton.co.uk](http://www.rexbritton.co.uk)

**Polishers** - domestic or industrial [www.johnlewis.com](http://www.johnlewis.com) and online

#### **FURTHER READING**

**The National Trust Manual of Housekeeping 2011** | ISBN: 9781907892189

**Churchcare** - <https://www.churchofengland.org/more/church-resources/churchcare>

**Historic England** guidance sheets - <https://historicengland.org.uk/advice/>

**V&A** conservation guidance - <https://www.vam.ac.uk/info/conservation>

**Bats in Churches** – cleaning booklet will be available from <https://www.batsandchurches.org.uk/>

The Chinese vase article can be found here:

<https://www.telegraph.co.uk/news/uknews/1523595/Gift-to-cleaning-lady-sells-for-92000.html>



This guidance was produced as part of the Diocese of Ely's Stitch in Time project, supported by funding from the National Lottery Heritage Fund. The 2019-2020 project consisted of a series of workshops to support volunteers responsible for looking after historic church buildings; topics included conservation cleaning. This document combines information taken from the workshops and accompanying advice sheet provided by Claire Fry, of Spencer and Fry professional conservators, whose references included those listed above.