

The Conservation Workshop



What is archive conservation?

West Sussex Record Office collects and preserves the documentary and recorded heritage of the County of West Sussex. This could mean anything from a sheet of 13th Century paper, 16th Century book or Map, wax Seal, or Wartime identification tag.

Almost everything in an archive is original and therefore irreplaceable.

The Conservation workshop plays an important role by providing the skills and knowledge needed to preserve, conserve and make accessible this wide variety of archives.

Archive conservators must be able to treat, and advise on, a wide variety of records such as paper, parchment, books, seals, maps and plans- the list is almost endless. More recently the preservation of digital media has also been added.

We have a variety of ways to treat the documents in our care such as (careful!) vacuum cleaning, surface cleaning with rubber granules, washing, supporting tears and damage, or humidification to open stiff parchment documents, etc.

Conservation is the active care of an archive - washing, repairing etc.

Preservation is the passive care of an archive - cleaning, packaging etc.

and an archive conservator works to the following principles:

Conservation must not diminish, falsify or obscure the original document or the information within it.

- Conservation must not damage or weaken the original document.
- Conservation must be sympathetic to, and compatible with, the original document.
- The nature and extent of all applied conservation treatment must be evident and not treated as restoration.
- All conservation should be the minimum required to stabilise the document, and reversible without further damage to the document.

I strongly recommend that no measures to repair any document are undertaken without first seeking professional advice.



What can damage documents?

Dirt, damp, insects and mould, water and fire are just a few of the things that can damage documents.

If dirt isn't cleaned from an archive, particularly a book before it is stored, should there be any changes in atmospheric conditions, the repeated swelling and shrinkage will lead to damage and distortion.

Increased temperature and humidity also speeds up degradation by adding energy to the cocktail of chemicals and materials in a document, which over time breaks their chemical bonds.

Should humidity vary outside a safe range it is also likely that mould will grow.

If a document is in a poor or weakened condition, incautious handling could be enough to start the process of degradation, so under certain circumstances a document may need conservation before it can be used for reference.

Light is also destructive, damaging and bleaching anything it touches. All light is damaging, but the shorter the wavelength (ie the UV found in day and electric light) the greater the damage.

It doesn't need to be direct light - anything near a window is at risk.

Take a watercolour or photograph that seems to be in perfect condition; if it is removed from the frame you will find the part of the image covered by the mount to be darker.

Some do's and don'ts

An archival document could be a book, piece of paper or parchment, have had a lot of use and quite very old, so in whatever way we need to study it we must be sensitive to its age!

One of our basic rules for making notes from original documents is that only pencils can be used. Even pencil can be difficult to remove from a document, but it is easier than ink from a pen!

To avoid the risk of staining and so as not to encourage rodents or insects, no food or drink should be taken anywhere near documents.

And we should always handle documents with clean hands!

Ballpen or spirit based inks are virtually impossible to remove from a document and need very firm pressure, so the pressure of writing itself will leave an imprint in a document no matter how careful we have been. There are solvents that may affect ballpen ink (but there will always be a residue of ink left). A spirit based ink will also penetrate deep into a document thanks to the solvent in the ink.

Nitrile or latex gloves must always be worn when handling anything photographic, sensitive to moisture, or where extra care is needed.

Cotton gloves are baggy and limit the sensitivity of our fingers, so will reduce dexterity and therefore cause more damage.



How to hold a document flat

Don't try to force a document flat; if you feel it begin to resist, please ask advice.

Documents can be held using a variety of weights; bar, snake and padded.

Melinex is a thick, optically clear sheet that can be used to protect a flat document to allow careful tracing and protect the surface from scuffing and smudging during use.

If you gently open a book or fold of paper or parchment you can often feel how fragile it is.



Handling documents

All historical documents should be handled with great care.

A book is a deceptively clever piece of engineering that becomes progressively less tolerant of poor handling and more prone to damage the older it gets. Once damaged a book can

quickly degrade with the covers becoming detached, sections of pages dislodging and spines falling off.

Always read one of our historical books (even if already damaged) using a sponge book support. When books are badly opened beyond a certain point the animal glue holding the backs of sections, and the endpapers and cover board attachments, will fracture.

A sponge book support will adjust to books of different depth, hold the book at the correct angle to minimise stress on the covers, and present the book at a comfortable angle to read. It will also support a book with a tight or hollow back.

Pages can be held flat with a snake weight.

Photographs and negatives

Photographs and negatives are complex pieces of chemistry, often mounted on card, paper, acetate or glass, but can also appear on pottery or metal.

While some black and white images were very well processed when made, others were not and can be badly silver tarnished. They can also have breaks, cracks and tears from incautious handling and poor quality acidic mounts.

As such a photograph is itself acidic the mount itself may not be a problem, unless it could break and damage the photograph.

Always handle a photograph or negative by its edges, never the image surface.

Never allow sunlight to shine on your historic photographs.

A colour photograph can also degrade in light, and during storage from the interaction of their pigments. A colour image made from a computer printer will be similarly prone to fading and is also highly dependent on the quality of the paper and ink.

Drying wet papers

Never use heat to dry anything, which will cause stresses and strains in whatever is being dried, whether books, paper or parchment.

Parchment will also be denatured, causing it to become hard and brittle, and discolour and shrink. Wet or damp parchment will need the immediate services of a conservator to stop it becoming damaged.

Spread out loose papers and fan the pages of a wet book to dry in a flow of cool air.

Art paper, heavily loaded to make it hard and shiny, will become badly stuck together when wet but trying to separate the pages wet will probably cause more damage. Unfortunately the book will never look the same again.

If an item has become mouldy, dry as above and don't try to remove any mould until it is completely dry.

Mould is a health hazard so always use the correct mask, and gloves (to avoid breathing in or ingesting the spores), and work outside or in a well-ventilated space, using a soft brush to remove any encrustation. Never try to scrape it off as this will only cause damage.

Mould spores cannot be killed, only controlled by storage in low humidity.



Safe storage for documents

Never use staples or remove old staples using a staple removal tool.

To fasten pages together use a brass paper clip with a fold of paper over the documents to protect them.

Try to use a storage place that is dark, cool, dry and away from outside walls.

Never store material in plastic wallets or envelopes. Paper can become stuck, ink and images can easily become offset to the plastic, and envelopes are often acidic. Items that are folded, and single sheets or pamphlets in good condition can be stored in melinex. Individual melinex folders can be obtained from the Record Office for a small charge.

Wrap awkwardly shaped items in a piece of clean cotton sheet. This will keep dirt and dust off, absorb some impurities and is easily cleaned.

Always keep weight off folded items and where possible store in a sturdy box or enclosure, but not corrugated card or plastic, after wrapping.

Try to store your old books flat on their sides. This eases the strain on covers and text blocks.

Never put a buffered (alkaline) paper next to a photograph or negative. Photographic processes are acidic and storing them with an alkali will change their chemistry and cause their degradation. Therefore photographs should always be wrapped in Silversafe paper or,

depending on their condition, put in a melinex pocket.

Never use any self-adhesive tape. It will become yellow, the adhesive will stain and become encrusted on the paper, and it will eventually fall off after damaging the item.

Digital preservation and files on computer

Traditionally, our advice on preservation has always been for the owners of paper-based documents; however we now also provide the same service for those whose archive is made up all or in part with digital media.

How can I look after the files on my computer?

There are some simple ways in which we can all start protecting ourselves against the loss of our own important computer data.

Never rely on one form of storage for your digital information (for example on one hard drive, CD or pen drive) and, where possible, store your information in more than one format.

When you change your computer always remember to backup, and change the format of your documents if appropriate, to ensure they will open with any new or updated software.

Where possible store your computer files without file compression or encryption.

If you find that a file will not open with a new piece of software or PC, you may find that one of the programs from an Opensource suite will allow you to open it, though possibly with some loss of feel and functionality. You will find that newer versions of the Windows Operating System have much-improved compatibility features than earlier versions.

Never destroy the original if you create a digital copy of an original paper document or photograph, in case the digital copy becomes damaged.

Only use the electronic version to make copies for friends, family, or presentations, as it is highly likely that your original archive will outlive any electronic copy and you will need it to make another copy.

Where can I get some practical help?

We can offer free advice on the care, storage and preservation of your personal papers.

We can also conserve and preserve your documents but would have to charge for that Service.

If you damage a document or book at home, please ring or bring it to us straight away and I will be able to advise you on the best way to treat it.

Please feel free to contact Simon Hopkins, the Senior Conservator at the Record Office on:

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