



NATIONAL REGISTER OF ARCHIVES FOR SCOTLAND

**ARCHIVE PRESERVATION
GUIDELINES
FOR PRIVATE OWNERS**



*Group of Indian and British officers of a regiment of the Madras Infantry,
c.1885.*

ARCHIVE PRESERVATION GUIDELINES FOR PRIVATE OWNERS

	<u>Page</u>
Introduction	1
Accommodation	2
Security	3
Environment and Storage	4
Reprography	5
Disasters	6
Records Management	10
Local Authority Archives	11
Preservation Suppliers	14
Useful Addresses	16

Seventh Edition

INTRODUCTION

Since these *Guidelines* first appeared in August 1997 they have been in regular demand by both owners and archivists, with over one thousand copies being distributed throughout Scotland. This new edition has not only been revised and updated, but also includes a new section on records management mainly for the benefit of businesses, estates and institutions.

Archives may be defined as documents created in the course of the everyday activities of individuals, institutions and businesses, and retained by them for their own information. They can include not only papers, but also plans, photographs, and other media. The term is now also frequently applied to 'artificial' collections which have been formed deliberately around a particular subject area or type of material.

These guidelines have been compiled for the general information of private owners of archives, and should not be regarded as comprehensive. For practical reasons very few owners, if any, will be able to meet all of the recommendations, but it is hoped that these guidelines will help you to minimise the risks posed to your archives. More detailed information on the care of archives can be found in British Standard 5454: 2000, *Storage and exhibition of archival documents*, and *A Standard for Record Repositories*, (Historical Manuscripts Commission, second edition, 1997 (under revision)). Prevention is usually better than cure, and by following basic preservation measures you can help to protect your archives for future generations. Conservation treatments can be expensive, and not all damage is reversible. However, where documents are damaged or require treatment the National Archives of Scotland's¹ Conservation Unit will be pleased to advise on conservation services available commercially.

Professional advice on security, fire prevention etc should be sought from your local police and fire brigade, and from your insurers.

If you are unsure about any of the information in these guidelines, please to not hesitate to contact the NRAS for advice.

September 2005

National Register of Archives for Scotland

HM General Register House

Princes Street

EDINBURGH

EH1 3YY

Tel: 0131 535 1403/1405/1428

Fax: 0131 535 1430

E-mail: nra@nas.gov.uk

Senior Conservator

The National Archives of Scotland

Thomas Thomson House

99 Bankhead Crossway North

Sighthill Industrial Estate

EDINBURGH

EH11 4DX

Tel: 0131 270 3305/3308

Fax: 0131 270 3317

E-mail: linda.ramsay@nas.gov.uk

¹ The Scottish Record Office became the National Archives of Scotland (NAS) in January 1999. The NRAS continues as a separate branch within the NAS, compiling a record of papers of historical significance in private hands.

1. Accommodation

Provision of suitable accommodation is central to the preservation of archives. The room or area set aside for the storage of your archives should be:

- dedicated to that purpose and not used for anything else.
- capable of being isolated from other activities on the premises, whether domestic, commercial or industrial.
- soundly constructed of brick, stone or concrete, with adequate protection for all roofs, walls, floors, ceilings and openings against unauthorised entry, fire, flood and damp.
- free from undue hazards from external sources, including neighbouring properties or other parts of the same building.
- served by floors capable of bearing the combined weight of archives and shelving.
- supplied with a carbon dioxide fire extinguisher, in accordance with the advice of the local fire brigade.

Where possible avoid:

- attics and basements, owing to the risks of water ingress and the difficulty of evacuating them in the event of an emergency.
- ground-floor rooms, as they are more vulnerable to intruders.
- flat roofs, which are liable to leak.
- plumbing, plant, guttering or drains nearby.
- electrical plant and main switches, which should be located outside.
- gas and electrical installations and appliances, including computers and photocopiers, which are potential fire hazards.
- flammable finishes or fixtures
- chimneys, as they may provide a route for damp.
- windows and skylights, for security and environmental reasons.

If a suitable room cannot be found, then a cupboard or chest may offer acceptable storage conditions and protection, provided that certain materials and finishes are avoided. (See BS5454: 2000, 9.8 & 13.3.3)

2. Security

The room or area set aside for the storage of your archives should be secured against unauthorised entry. If papers are stored in accommodation which is also used for other purposes, then the strongroom or cupboard in which they are kept should be locked.

- The archive store should be fully covered by any domestic intruder alarm system.
- If located on the ground floor, windows should be protected by shutters, bars or mesh.
- Ensure tradesmen working in or around the archive store are aware of the importance of the contents and adjust their working practices accordingly. Ideally, contractors should be supervised at all times.
- Where a property is let to a tenant it is unwise to leave your archives on the premises unless they are securely under lock and key.
- A working finding aid to your archives is essential for their control and security.
- Access should be controlled by the owner or his/her staff, and a production book maintained in which access to particular papers is recorded.
- Researchers must never be allowed unsupervised access to papers. Any documents consulted by researchers should be carefully checked both before issue and on their return.
- Owners are advised to satisfy themselves as to the integrity of individual researchers.
- If you are unable to provide adequately supervised access for researchers on your own premises your local authority archivist may be able to assist. If you are able to transport the papers to and from Edinburgh then the NRAS can usually make arrangements for them to be made available to the researcher concerned in the Search Room at West Register House, Charlotte Square, Edinburgh.

Seek advice from your local Crime Prevention Officer and insurers.

3. Environment and storage

In addition to the provision of sound and secure accommodation, archives also require a stable environment and suitable storage conditions if their safety is to be assured. Over the years, unsuitable environments have proved to be the main cause of damage to archives. Too dry an environment may lead to the embrittlement of documents; dampness and poor ventilation may encourage the growth of mould; while high temperatures may accelerate degradation. The provision of a properly monitored and controlled environment should therefore be a priority. In general, a cool atmosphere with adequate ventilation is desirable.

- Many collections contain a mixture of paper, parchment, photographs and other media, and should therefore be stored at a constant environment of between 16-19°C (if frequently handled) and 13-16°C (if rarely handled), and 45-60% relative humidity. Swings of temperature and humidity are potentially damaging, and steps should be taken to ensure that the environment is stable. A recording thermo-hygrograph should therefore be installed to monitor temperature and relative humidity in order to determine if remedial action is necessary.
- Where there are windows or skylights the effects of light can be reduced by blinds, shutters or ultra-violet filters.
- Shelving (metal or wooden) should be adjustable and at least 150 mm above the ground. It should not be positioned below windows or against external walls owing to the risks of water penetration.
- Papers should be stored in suitable archive boxes. Metal deed boxes are not recommended for the storage of archives as they are heavy, likely to rust and will retain water in the event of flooding. *If you decide to re-box your papers take care to preserve the existing arrangement and referencing system, otherwise the NRAS survey will be rendered obsolete as a finding-aid.*
- Volumes should be shelved upright or flat, never on their fore-edges.
- Separate protection (eg wrapping in acid-free paper) should be given to outsize volumes, documents and maps.
- Loose photographic prints should be boxed and where possible placed in polyester sleeves.
- Inspect the archive store regularly for signs for water-penetration, mould growth, insect infestation etc. This is particularly important where archives are stored in an outbuilding.
- Keep the archive store free and clean of waste and rubbish, as dust and organic materials provide an ideal environment for vermin, insects and mould.
- No original documents should be permanently displayed, either in cases or framed on walls, as this can lead to irreversible fading and embrittlement.

4. Reprography

Photocopying

Photocopying may physically damage or fade archives. The following categories of material should therefore never be photocopied:

- damaged or fragile documents
- parchment
- documents with seals attached
- outsize documents and volumes
- original photographs
- tightly-bound volumes
- volumes with historic or decorative bindings.

Photography

Photography is usually a suitable alternative to photocopying, and will provide a negative for future use. Items should be photographed under supervision and on your own premises. The NRAS can advise on copyright matters.

Lighting Guidance for Professional Photography

- Lighting may not exceed 1,000 lux under tungsten illuminance
- If metallic Halide lamps are used, this may increase to 2,500 lux.
- Flash photography is acceptable in certain circumstances: the upper limit for flash exposure is 20 lux-minutes or F22 on 100 ASA film or equivalent (see French National Committee of ICCOM).
- A UV filter over each flash is desirable.

The NRAS can provide a list of photographers on request.

5. Disasters

In the present context a disaster is an event or series of events placing your archives at risk of serious damage or even destruction. Natural disasters such as storms and floods cannot be prevented, but measures can be taken to eliminate or reduce their effects. Man-made disasters - such as fires, leaking roofs, broken pipes, blocked drains and building deficiencies - can usually be avoided. Regardless of the many forms a disaster may take, however, the actual damage to archives is usually caused by fire or water.

If your papers are stored in an historic property, make sure that they are included in any existing disaster plan for the evacuation and recovery of valuables. You should also approach your local Fire Brigade for their advice

Prevention

Identify and minimise the risk posed by the building, its services and fittings, and the natural hazards of its surroundings:

- Carry out a building inspection and alter factors which constitute a potential hazard. Pay particular attention to: weaknesses in building structure, eg roofs, guttering, windows, etc; presence of utilities such as gas, electricity and water; and nearby living or work areas with domestic/office/industrial appliances.
- Establish routine housekeeping and maintenance measures in buildings and surrounding areas.
- Install an automatic fire detection system.
- Take increased precautions during periods of increased risk, such as building renovation and bad weather.
- Switch-off and/or disconnect all inessential utilities when the premises are unoccupied.
- Arrange comprehensive insurance for the costs of salvage and conservation for your archives, and the reinstatement of fixtures and fittings.

Response

In the event of a disaster you should remain calm and take no risks. Whoever discovers the emergency should first raise the alarm and then, as far as is consistent with personal safety, take action to contain the incident or prevent damage.

Action checklist

1. Quickly assess the situation, extent and exact location of the problem.
2. Contact emergency services, staff and/or tradesmen, as appropriate.
3. Contact the NRAS and/or your local authority archivist for advice, and assistance in locating conservation expertise.
4. Protect all papers at risk but as yet undamaged with polythene sheeting or move them to another secure location.
5. Establish a salvage sorting area.

Practical guidelines

For both health & safety and preservation reasons you should bear the following points in mind when attempting to salvage archives:

- Papers that have fallen on to the floor should be cleared first.
- When clearing archives from shelves you should start at the top and work down for safety reasons.
- Where possible, archives should be removed from storage area *in order*; care should be taken that evacuated archives are labelled with their reference numbers. If you must write on an original document use a soft (2B) pencil, not ink.
- Do not attempt to stack boxes one on top of the other if wet, as they may disintegrate damaging their contents.
- Remove and replace all damaged boxing. Check first to find out if the contents require drying, as re-boxing damp material will cause serious mould problems within a very short period of time, leading to the loss of papers.
- Affected material should be laid out to dry on absorbent paper. Where necessary, clean blotting paper should be used to dry individual documents or be placed between the leaves of damp volumes.
- Wet items should be treated within 48 hours to avoid mould growth.
- In the event of extensive water damage, wet items (excluding photographic material) may be frozen in a domestic or commercial freezer. This action should prevent further deterioration in the documents before they can be assessed by a professional conservator.

Books

- Do not attempt to open or close wet books.
- Damp books can be dried by cold air from fans after being opened and stood on end. They should be checked periodically and turned head to tail to prevent sagging and damage to bindings.

Bundles, loose papers and files

- Where masses of papers are found stuck together there should be no attempt to separate them.
- Do not attempt to flatten folded items.
- Some single leaf items may be suitable for air drying.

Photographic material

- Wet photographic prints will begin to disintegrate and develop mould if left in piles. Wherever possible, air dry. Lay out wet photographs (including glass plates) on absorbent paper, *emulsion side up* for air drying. Seek expert advice as soon as possible.
- Water damaged microforms should be immersed in buckets of clean cold water until they can be reprocessed.

Recovery

Contact insurers. A photographic record of the affected archives may assist when negotiating claims

Determine priorities for conservation work in consultation with a professional archivist and archive conservator.

Useful disaster equipment and materials

Equipment

Water vacuum cleaner
Trestle tables
Collapsible crates
Torches
Heavy duty polythene (on roll) - *for protecting papers in situ.*

Protective Clothing

Waterproof clothing/overalls
Wellington boots
Rubber gloves
Helmets
Dust masks

Cleaning and Recovery

Plastic buckets
Lining paper - *for laying out damp documents*
Blotting paper - *for drying wet documents*
Fans - *for drying volumes*
Absorbent cloths
Clear plastic bags (freezer bags) (410 mm x 610 mm and 510 mm x 760 mm) - *for freezing wet documents*
Bin liners
Scissors
String
Masking tape
Luggage labels

6. Records Management

So far these *Guidelines* have dealt with archives, records which are no longer required on a daily basis, but which merit permanent retention because of their long-term value. In contrast, this section considers records which are in everyday use. Although what is said below is particularly relevant for businesses, it also applies to estate offices, clubs, societies and individuals.

A record is any information, in any format, which is required for the conduct of business. For instance accounts, correspondence, staff details, drawings and so on are all records, whether they are held in paper form, microform, computer files or any other format. Records are created to fulfil an immediate business purpose, which can be:

- administrative (their value to daily business operations);
- fiscal (their value to financial management);
- legal (their value as proof that statutory requirements are complied with).

Records management therefore is the systematic control of records within an organisation, from their creation to their destruction. It includes practices such as filing, naming conventions for computer files, and making sure that information is kept in an appropriate way, and as long as required (for instance in order to comply with regulations covering Data Protection, finance, taxation, employment, health and safety). Beyond the immediate reason for their creation, there are three principal factors to bear in mind when deciding whether to keep particular records for a longer period of time. These are their potential use for:

- information (to enable operations to be carried out appropriately, and to facilitate decision making);
- evidence (to provide proof if faced with legal action);
- compliance (to prove that regulations have been adhered to).

The principal practical benefits of records management are:

- improved efficiency (less time wasted looking for records);
- more efficient use of storage space (records which are no longer required are not retained).

Finally, legal advice should be sought on how long to retain particular records.

7. Local Authority Archives

Many local authorities in Scotland have set up archive services, although some are still considering the provision they require. If no local authority archive service is listed for your area, please contact the NRAS for information on the current position.

<p>Miss Judith Cripps Aberdeen City Archives Town House Broad Street ABERDEEN Tel: 01224 522521 AB10 1AQ Fax: 01224 638556</p>	<p>Mrs Fiona Scharlau Angus Local Studies Centre Montrose Library 214 High Street MONTROSE Tel: 01674 671415 DD10 8PH Fax: 01674 671810</p>
<p>Mr Murdo MacDonald Argyll and Bute Council Archives Manse Brae LOCHGILPHEAD Argyll PA31 8QU Tel: 01546 604774 Fax: 01546 606897</p>	<p>Mr Kevin Wilbraham Ayrshire Archives Centre Craigie Estate AYR Tel: 01292 287584 KA8 0SS Fax: 01292 284918</p>
<p>Mr Ian Murray Clackmannanshire Council Archives Library Services 26-28 Drysdale Street ALLOA FK10 1JL 722262 Tel: 01259 Fax: 01259 219469</p>	<p>Ms Sarah Chubb Archivist/Records Manager East Dunbartonshire Information & Archives William Patrick Library 2 West High Street KIRKINTILLOCH G66 1HW Tel: 0141 776 8090 Fax: 0141 776 0408</p>
<p>Miss Sian Collins East Lothian Archives Library and Museum Headquarters Dunbar Road Haddington EH41 3PJ 229 Tel: 01620 828</p>	<p>Mr Craig Geddes Records Manager East Renfrewshire Archives East Wood Park Rouken Glen Road Glasgow G64 6JF Tel: 0141 557 3000</p>
<p>Miss Marion Stewart Dumfries and Galloway Archives Archive Centre 33 Burns Street DUMFRIES DG1 2PS Tel: 01387 269254 Fax: 01387 264126</p>	<p>Mr Iain Flett Dundee City Archives 21 City Square DUNDEE DD1 3BY Tel: 01382 434494 Fax: 01382 434666</p>
<p>Mr Richard Hunter City Archivist Edinburgh City Archives City Chambers High Street EDINBURGH Tel: 0131 529 4616 EH1 1YJ Fax: 0131 529 4957</p>	<p>Ms Elspeth Reid Falkirk Council Archives Falkirk Museums History Research Centre Callendar House Callendar Park FALKIRK Tel: 01324 503778 FK1 1YR Fax: 01324 503771</p>

<p>Mr Andrew Dowsey Archivist Fife Council Archive Centre Carlton House Balgonie Road MARKINCH Fife KY7 6AQ</p> <p style="text-align: right;">Tel: 01592 413256</p>	<p>The Archivist Glasgow City Archives Mitchell Library North Street GLASGOW G3 7DN</p> <p style="text-align: right;">Tel: 0141 287 2910 Fax: 0141 226 8452</p>
<p>Ms Susan Beckley Highland Council Archives The Library Farraline Park INVERNESS IV1 1LS</p> <p style="text-align: right;">Tel: 01463 220330 Fax: 01463 711128</p>	<p>Mr John Mackenzie North Lanarkshire Archives Lenziemill CUMBERNAULD G67 2BA</p> <p style="text-align: right;">Tel: 01236 737114 Fax: 01236 781762</p>
<p>Ms Sylvia Blyth Midlothian Council Archives Library Headquarters 2 Clerk Street LOANHEAD Midlothian EH20 9DR</p> <p style="text-align: right;">Tel: 0131 654 9074 Fax: 0131 440 4635</p>	<p>Mr Graeme Wilson, Local Heritage Officer Moray Council Heritage Centre Grant Lodge Cooper Park ELGIN IV30 1HS</p> <p style="text-align: right;">Tel: 01343 562644 Fax: 01343 549050</p>
<p>Ms Rachael Taylor North Highland Archives Wick Library Sinclair Terrace WICK KW1 5AB</p> <p style="text-align: right;">Tel: 01955 606432 Fax: 01955 603000</p>	<p>Ms Wiebke Redlich North Lanarkshire Archive 10 Kelvin Road Lenziemill CUMBERNAULD G67 2BA</p> <p style="text-align: right;">Tel: 01236 737114 Fax: 01236 781762</p>
<p>Ms Alison Fraser Orkney Archives The Orkney Library Laing Street KIRKWALL KW15 1NW</p> <p style="text-align: right;">Tel: 01856 873166 Fax: 01856 875260</p>	<p>Mr S J Connelly Perth and Kinross Council Archives A K Bell Library 2-8 York Place PERTH PH2 8EP</p> <p style="text-align: right;">Tel: 01738 477022 Fax: 01738 477010</p>
<p>Ms Pam Menicol Renfrewshire Council Archives Room 2.4 North Buildings Cotton Street PAISLEY PA1 1TR</p> <p style="text-align: right;">Tel: 0141 840 3703 Fax: 0141 840 3199</p>	<p>The Archivist Scottish Borders Archive & Local History Centre St Mary's Mill SELKIRK TD7 5EU</p> <p style="text-align: right;">Tel: 01750 20842 Fax: 01750 22875</p>

<p>Ms Susan Beckley Stirling Council Archives 5 Barrowmeadow Road STIRLING 450745 FK7 7UW</p> <p style="text-align: right;">Tel: 01786 Fax: 01786 473713</p>	<p>Ms Jennifer Tait West Lothian Council Archives 9 Dunlop Square Deans Industrial Estate LIVINGSTON West Lothian EH54 8SB</p> <p style="text-align: right;">Tel: 01506 773770 Fax: 01506 773775</p>
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8. Preservation suppliers

The companies on this list are drawn from the *Directory of Suppliers of Materials, Equipment and Services for Archive and Book Conservation, Storage and Display*, published by the Society of Archivists.

Specialist catalogues can be confusing, so you may wish to discuss your needs with the supplier and then contact the NRAS or the NAS' Senior Conservator if you need further advice. The technical requirements of archives mean that preservation materials are unlikely to be obtainable from local suppliers.

General preservation suppliers

Conservation by Design
5 Singer Way
Woburn Industrial Estate

Kempston Tel: 01234 853555
BEDFORD MK42 7AW Fax: 01234 852334

www.conservation-by-design.co.uk
www.preservationequipment.co.uk

Preservation Equipment Ltd
Vinces Road
Shelfanger

DISS Tel: 01379 647400
Norfolk Fax: 01379 650582

Conservation Resources (UK) Ltd
Unit 1
Pony Road

Horspath Industrial Estate
COWLEY Tel: 01865 747755
Oxfordshire OX4 2R Fax: 01865 747035

Archive boxes, folders, etc

C A Coutts Ltd
Caspian Works
55 Violet Road

LONDON Tel: 0207 515 6171
E3 3QL Fax: 0207 987 6839

*G Ryder & Co Ltd

Denbigh Road
Bletchley
MILTON KEYNES

Buckinghamshire Tel: 01908 375524
MK1 1DG Fax: 01908 373658

www.ryderbox.co.uk

* In certain circumstances orders for standard archive boxes can be routed through the National Archives of Scotland's Senior Conservator.

Environmental monitoring equipment

British Rototherm Co Ltd

Kenfig Industrial Estate

PORT TALBOT

West Glamorgan

SA13 2PW

Tel: 01656 740551

Fax: 01656 745915 www.rototherm.co.uk

Casella (London) Ltd

Regent House

Wolseley Road

Kempston

BEDFORD

MK42 7JY

Tel: 01234 844100

Fax: 01234 841468 www.casellacel.com

J S Holdings

Unit 6 Leyden Bond

STEVENAGE

Hertfordshire

SG1 2BW

Tel: 01438 316994

Fax: 01438 316995 www.jsholdings.co.uk

Shelving

N C Brown (Storage Equipment) Ltd

Hutchinson House

Firwood Industrial Estate

Thicketford Road

BOLTON

BL2 3TR

Tel: 01204 596200

Fax: 01204 596219

Dexion Comino Ltd

Forbes House

Harris Business Park

Hanbury Road

Stoke Prior

BROMSGROVE

B60 4BD

Tel: 0800 581583 www.dexion.com

Dehumidification services

Munters Moisture Control

Unit D Block 6

Westmains Industrial Estate

GRANGEMOUTH

FK3 8YE

Tel: 01324 489333

9. Useful addresses

British Standards Institution

British Standards House
389 Chiswick High Road
LONDON
W4 AL
Tel: 0208 996 9000
Fax: 0208 996 7001

Business Archives Council of Scotland

Advice to businesses on the care and management of their historical records

Surveying Officer
Business Records Centre
University of Glasgow
13 Thurso Street
GLASGOW
G11 6PE
Tel: 0141 330 4159
Fax: 0141 330 3127

Scottish Records Association

Forum for promoting the preservation and use of archives in Scotland

Mrs Carol Parry
Royal College of Physicians and Surgeons of Glasgow
232-242 St Vincent Street
GLASGOW
DD1 3BY
Tel: 0141 2273234
www.scottishrecordsassociation.org

Society of Archivists, Scotland

Professional body of archivists and archive conservators

Elaine MacGillivray, Secretary
c/o Glasgow City Archives
Mitchell Library
North Street
GLASGOW
G3 7DN
Tel: 0141-287 2910
elaine.macgillivray@cls.glasgow.gov.uk

Scottish Conservation Bureau

Maintains a professional register of conservators working in Scotland

Longmore House
Salisbury Place
EDINBURGH
Tel: 0131 668 8668
Fax: 0131 668 8669

NAS Archive Conservation Grant

For further information you should write to:

The Keeper of the Records of Scotland
HM General Register House
Princes Street, EDINBURGH EH1 3YY
Tel: 0131 270 3308 (Head of Preservation) Fax: 0131 270 3300