



CARING FOR YOUR ST JOHN COLLECTION

The St John Ambulance Historical
Society of Australia

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MUSEUM CURATORS ARE BORN STORY TELLERS

**THE STORIES ENCAPSULATED IN YOUR COLLECTION ARTEFACTS ARE
WHAT WE ARE TRULY PROTECTING.**

ABOUT THE ST. JOHN HISTORICAL SOCIETY OF AUSTRALIA



The Historical Society is open to all members and friends of St John Ambulance who are interested in learning more about the long history of the Order of St John. Founded in 2001, the Society grew from an earlier informal 'Priory History Group' that began meeting in 1999.

The Historical Society is a federal body with State and Territory branches. Each of its gatherings includes an annual general meeting and a history seminar at which various members present papers based on their historical research.

The Society publishes a quarterly newsletter, *Pro Utilitate*, and a high-quality annual journal, *St John History*. Members receive both publications free.

CARING FOR YOUR ST JOHN COLLECTION

DOCUMENTS, PHOTOGRAPHS, BOOKS, ITEMS AND EPHEMERA

You have a collection to care for.... Where do you start? What should you do? How do you proceed? To be responsible for the care of an institution's history and heritage can be a daunting task. Hopefully this booklet will help you get started to build your confidence with preserving your St John collections and historic material. In the pages that follow, this booklet will outline various preservation techniques and explain:

- Fundamental Principles
- The kinds of materials you might encounter in your collection
- The ideal conditions in which to store your collections
- Storage Solutions
- How and when to contact and hire a professional conservator or archivist.



FUNDAMENTAL PRINCIPLES

GLOVES, GLOVES AND MORE GLOVES



Although you may not know it, your hands can be the most damaging thing your collection will come into contact with. The outer layer of skin contains microscopic pores that secrete sweat and oils. The sweat can contain salt, amino acids and proteins, that can irrevocably damage your collection. Never handle collection assets or your archive unless you are

gloved. The industry standard currently is surgical grade, powderless nitrile gloves. Make sure you have every size on hand, as skin-tight fitted is best, it allows for you to retain your dexterity when handling delicate pieces.

For those who cannot wear nitrile due to allergies or other medical reasons, a suitable alternative is white cotton. They are washable and ensure a relatively safe barrier between your hands and the assets.



PROVENANCE

Provenance is defined as the chronology of ownership, custody or location of an historical object. In short, the history of where a collection asset came from, who owned it, and what is the historical significance/ story of the piece. Remember, we are custodians of stories, these objects and collections inculcate these stories. In every instance, protect, gather, and research your assets provenance; this is the key to understanding and interpreting your collection. Never dispose or destroy evidence of provenance.

ORIGINAL ORDER

When presented with boxes of documents to be accessioned into your archive, where do you start? There is one rule of thumb that stands above all others, retain Original Order. This concept is a practice that records should be maintained in the same order as they were made by their creator. So as you come to terms with what you have in front of you, do not rearrange until you thoroughly understand what it is you are working with, and ensure when you do that you retain Original Order for the integrity of your archives and collection.

INVENTORY

It is a truism of archive administration that *"It is better to have some control over everything, rather than absolute control over next to nothing."* The most important administrative tool of your collection is your Inventory. This has many names, your Accession Register, your Collection Management Database, your Survey List etc. they all describe the same thing; a master list of what you have, and a record of every bit of information about that asset. Collection Management software is expensive. If you can develop a business case for one that is excellent however in the meantime, a suitable alternative is an Excel Spreadsheet, key word searchable, user friendly and it provides you an excellent start that can be merged with any software in the future.

To build this inventory and catalogue your collection, first settle on a style for your accession numbers. Each piece must be either inscribed or labelled with an accession number; a unique identification that can be used to track the object henceforth. A good choice is an annual recurring figure, for example

2021.1

The first four digits being the year the item was accessioned, a decimal point, and then the number of the object accessioned in that year. This means in several years' time you don't end up with an accession number 10 digits long.

Hang tags provide an excellent, cheap way of labelling your objects and items. What information do you capture? At the very least, capture the following:

- Accession Number
- Date Received into the collection
- Title of asset
- Date Range
- Provenance Information
- Condition (Damaged, Poor, Fair, Good, Excellent)
- Collection Category
- Current Location with detail (Building, Room, Shelf, Row, Bay)
- Accompanying notes

NOTE - Accession Numbers should never be reused even if there are gaps due to disposal of an item or transfer to another collection



MATERIALS YOU ARE LIKELY TO ENCOUNTER

When you are planning to preserve your collections, it is important to understand what materials you are likely to encounter. Some materials simply last longer than others. Organic materials—ones that come from plant or animal sources—are more likely to deteriorate than inorganic. Other materials break down more quickly because of inherent vice, deterioration caused by agents present in the material composition of the object.

When planning to preserve your historic collections, remember to consider what the materials are made from. Bearing in mind some materials last longer than others, for example, organic is more likely to deteriorate rather than inorganic materials. Other items by virtue of their chemical makeup possess more acidity thus degrade more rapidly, for example papers with high wood pulp content produce acid as they degrade. The following is a description of materials you are likely to encounter and how these elements cause these items to deteriorate.

VELLUM

Rare items maybe be produced on Vellum or Parchment. Vellum is the prepared skin of usually a calf, goat, sheep or sometimes in modern day even kangaroo; used typically for scrolls, codices, older books, illuminated manuscripts and letters patent. Amongst the most stable of writing materials, historically being able to withstand stable environments for up to 500-1000 years.



The Royal Charter of Queen Victoria that established the Grand Priory of the Order of the Hospital of St John of Jerusalem in England, written on vellum.

PAPER

The most common materials you will find are paper records. Paper is made of plant fibres such as cotton or flax (derived from cotton or linen rags) or wood, that have been reduced to pulp, suspended in water, and then matted into sheets.



The earliest known surviving St John Ambulance Association First Aid Certificate awarded to D Melville on 20 March 1884. Printed on Cotton Rag Paper, and in good stable condition.

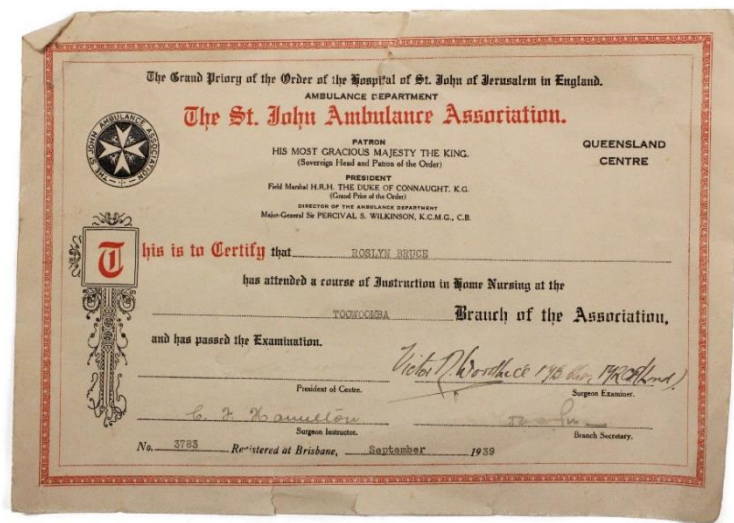


MR. DON FEATHERSTONE holding the Insignia of the Order of St. John, which was awarded to his late father, Mr. Featherstone has been awarded a similar medal, which he will receive from the State Governor on July 27 at Government House.

Identifying the period of the paper will generally provide insight into the stability of the paper itself. Paper from the 1700's and early 1800's is generally stronger and forgivingly flexible due to the cotton rag content. However, in the 1800's, the rise in technology and faster processes brought wood pulp into general production. It is less expensive, but less enduring. This process of grinding the wood pulp, produces acid which causes fragility and embrittlement to the fibres of the paper.

A newspaper clipping of Mr Don Featherstone's investiture, printed on non-archival paper consisting mainly of wood pulp; as you can see it has yellowed (Foxed), and has deteriorated significantly.

INK



The ink used on this St John Ambulance Association First Aid Certificate was relatively stable.

Ink has been made from a variety of materials throughout the centuries. Some are more stable than others. In the 1700's and 1800's, the most common ink was Iron Gall, mixed from iron salts and tannic acids from vegetable sources. As such it fades when exposed to light and can burn into the paper, creating cracks, holes, and instability. In contrast, more

recent carbon-based inks, which were often made from lampblack or soot mixed with a binding agent, does not fade due to light exposure, and does not damage the paper.

PHOTOGRAPHS

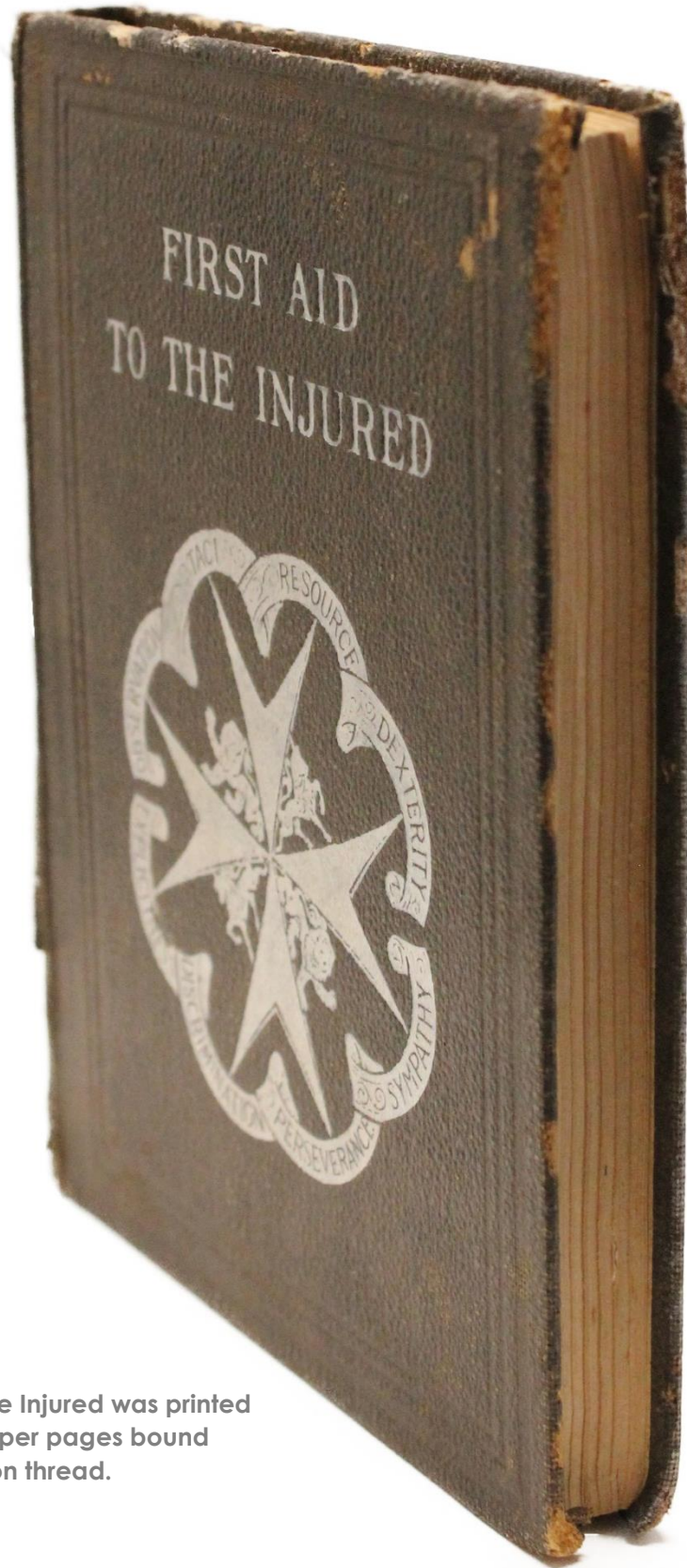
Naturally photographs will encompass a large portion of your collection. Photographs consists of a structural support, usually paper, with an image-bearing top chemical layer, called emulsion; the most common being Gelatin. The image is formed when the emulsion is exposed to light. The image on most black-and-white prints is made of a fine metallic silver dust. Moisture, extremely high and low relative humidity, air pollutants, heat, dirt, and skin oils can all damage photographs.



Photographs are usually printed on an emulsion covered paper. These can fade and embrittle over time, particularly after long periods of display.

BOOKS

Your collections may have books that were published more than 100 years ago. Books are composed of many different materials, including paper, ink thread, glue, cloth, semi-precious metals, leather, and gilding. As with paper, the quality of materials varies dramatically. As discussed earlier, paper with high wood pulp content, will naturally degrade faster due to the acid content. The result will be a yellowing of pages and embrittlement of the paper fibres. However, a book printed on cotton rag will provide a stable surface, if stored in the appropriate environment.



This First Aid to the Injured was printed on cotton rag paper pages bound with waxed cotton thread.

MEDALS AND INSIGNIAS

The medals and insignias of the Order are always present within any St John Collection. Generally, they are relatively stable, apart from tarnish and fraying of the ribbons. These pieces are composed of a number of materials, including silk, watermark moire ribbons, metal gilt, bronze, brass, silver and gold. These items can be damaged by the oils and acidity on your hands which can expedite tarnish and deterioration.



The service of the Order Medal is a cupro-nickel, rhodium plated metal, suspended by a black and white ribbon

TEXTILES

The textiles within your collection will span from ceremonial mantles, banners, apparel such as caps, badges, patches and uniforms. Materials vary from wool, silk, fur, protein fibres,



This Eastern Subs Division Patch has been stored flat and out of sunlight, with good airflow, free of moisture.

cotton, linen, jute, flax baste or other cellulose fibres. Your textiles are amongst the most sensitive items, particularly to light exposure and UV radiation. Moisture, mould and heat pose a continual threat, as well as pests such as beetles, moths, silverfish, rats, mice and even birds.

IDEAL STORAGE CONDITIONS

Where you store your collection is as important as how you store it; incorrect storage can shorten your asset's lifespan by decades. While you have little control over the materials your objects were made from, you can control how they are stored. This section will help you understand how light, temperature, and relative humidity can affect these collections and what you can do to make your storage environment more conducive to their long-term preservation.

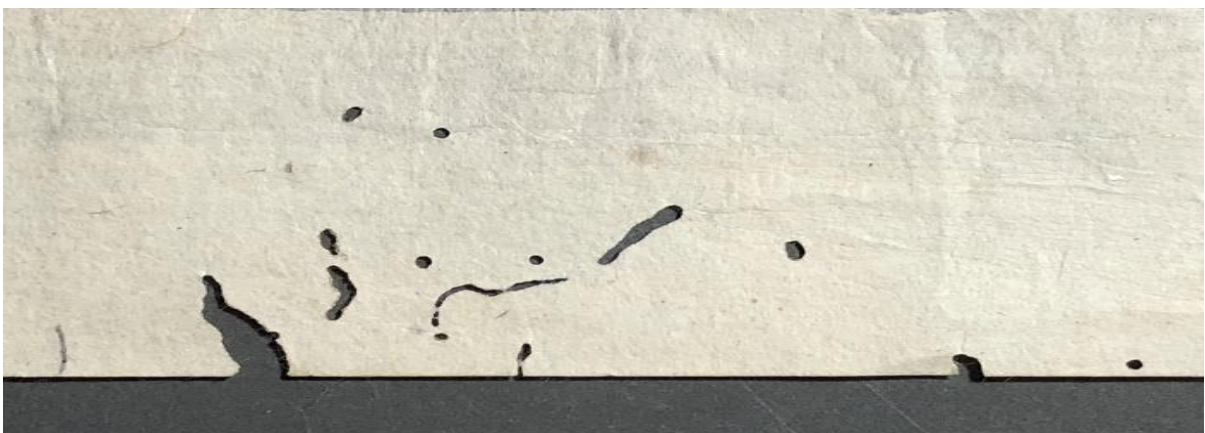
SECURITY

Security is everything; to help preserve your collection establish a secure storage area, preferably one central locked room. Restrict access to ensure the integrity of your collection. You are the custodian of these objects. Access to them should only ever be through you or your committee.

HOUSEKEEPING

Good housekeeping ensures your collection remains protected against pest infestation and mould outbreak.

- Monitor your storage environment monthly to catch insect or mould damage early
- Never consume food and drink in your storage room
- Eliminate dirt and dust with thorough regular vacuuming.
- Employ sticky traps for insects in order to monitor which pests are present.
- Keep a written log of problems along with your inventory



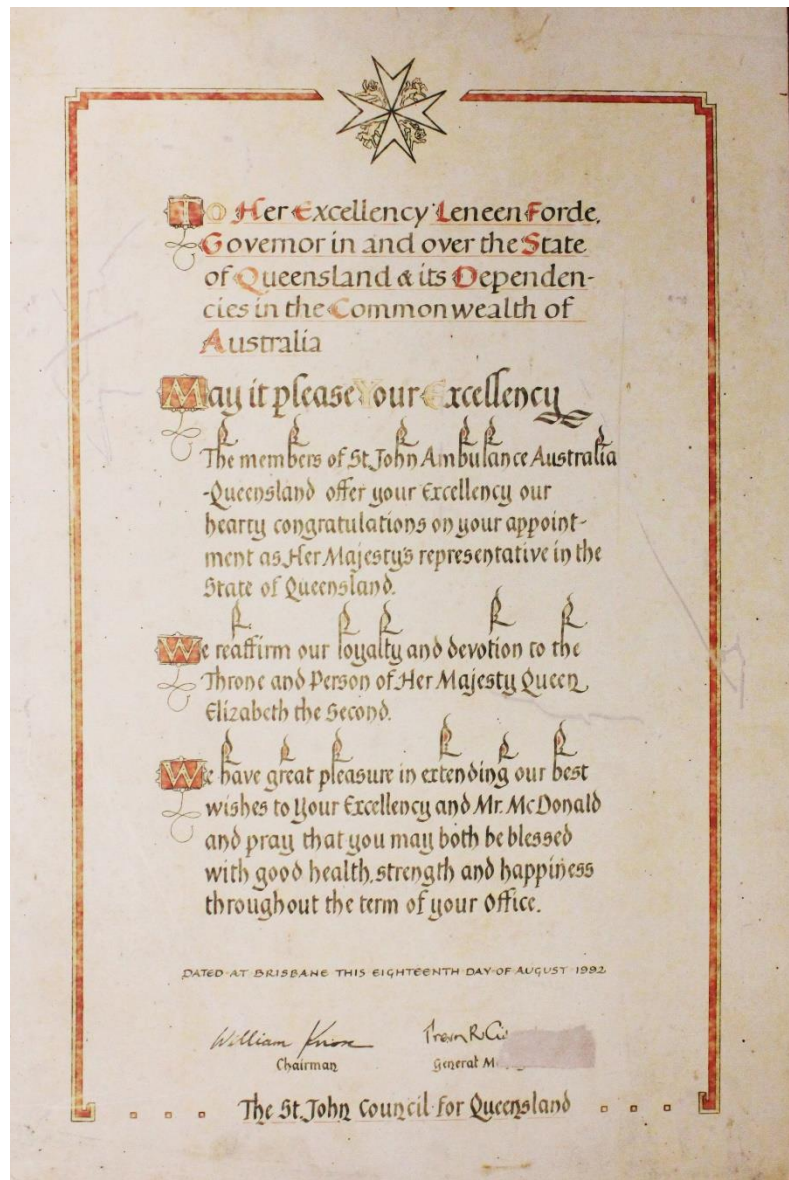
This piece shows obvious signs of insect damage.

LIGHT AND LUX EXPOSURE

One of the most damaging and unforgiving elements that pose a threat to your collection is UV Radiation, i.e., Light. This damage is cumulative and irreversible. Make no mistake, once a document has faded from exposure to light it cannot be restored. For this reason, paper-based items in your collection should never be on display for more than four months at a time. For longer display times, a suitable alternative is to display a copy document/an archival facsimile, rather than utilising the original. When your documents are exposed to light, the fibres are weakened, causing embrittlement, as well as bleaching or at times yellowing and darkening. Ink can fade and information lost, particularly when your image is dye based, rather than pigment based.

Be mindful that it is not just natural light that can be harmful. Fluorescent lights emit high level of UV radiation, and can be as destructive as fire. Ideally, when not in use, your documents and items should be stored in the dark; folders and boxes help to accomplish this end. If your storage unit has windows, covering them with drapes, shades or blinds that block the sun is a simple solution.

It doesn't sound like much, but these simple steps can truly protect your historical material from unnecessary damage.



This plaque having been exposed to excess light has faded with time and doesn't hold the vibrancy it once did.

TEMPERATURE AND HUMIDITY

The optimum climate condition for your storage, Temperature wise, is 20 or 21°C \pm 2 and relative humidity is 55%RH \pm 5. Consistency is everything where possible; the parameters above should be maintained. If this is not possible, get as close as is possible and minimise high and low fluctuations as much as practical.

The Australian Institute for the Conservation of Cultural Materials clearly explains why; *increase in temperature will increase chemical reaction rates which will affect materials prone to auto-catalytic and self-perpetuating deterioration. Diurnal variations in temperature are small in hot humid climates and large in hot dry and temperate climates. Large diurnal variations in temperature and relative humidity are more likely to damage objects composed of restrained layers through the action of expansion and contraction.*

Above 70% RH there is a reasonable probability of fungal growth, corrosion of unstable metals and crizzling of unstable glass. **Below 40% RH** there is a reasonable probability that organic materials will begin to desiccate.

WATER AND MOSITURE

Avoid warm, moist environments. These are a haven for both insects and mould. By adhering to the temperature and humidity levels stated above, you will create an inhospitable environment for insects and mould. Always remember that mould spores are everywhere, and they become active when relative humidity hits a certain threshold. Inspect your areas and objects for white fuzz, or black growth on the surrounding walls; corners can result in dead air pockets and a build-up of moisture which is ideal for mould accretion. If there is mould present, tackle this by airing out the space to remove stagnant air. Wear nitrile gloves and disposable respirators when removing the items from the affected area. Wipe the room, shelves and boxes with bleach and warm water. Once the space is dry and aired adequately, your collection pieces can be returned.



This corner harboured a dead air pocket and trapped moisture, causing black mould to form and the paint to peel.

STORAGE SOLUTIONS

DOCUMENTS

Your St John documents, certificates, letters etc should be stored in archival folders and arranged by category in appropriate boxes. These storage enclosures provide structural support and protection for your documents. Be mindful that items should be stored in small groups. The enclosures should match the size of the items in it. Never overfill; all enclosures should be able to close completely without anything being damaged. Only purchase your archival materials from reputable suppliers. A list of preferred suppliers is available at the back of this booklet.

First remove all damaging materials, staples and paperclips that cause rust/erosion, rubber bands which can stain and excrete oils as they degrade and dispose of all acidic folders which can damage your documents. Place unstable and rare items in protective mylar sleeves for structural support and protection. After clearing damaging materials, place them into acid free folders. Once you have your documents in suitable folders, place them in appropriate boxes. Similar items should be stored together, as heavy/bulky items can damage lighter, smaller documents if stored together.

The acidity from wood pulp can affect any paper it comes into contact with, so you should separate highly acidic items from others. Newspaper for example can stain and discolour other paper and materials if not kept separate. If you have documents that have been folded, do not attempt to flatten them. The fibres at this stage require conservation to reverse the folds. It is safer to store them folded and retain the integrity of the document.

You may feel tempted to preserve something and give it strength by heat laminating it. Do not laminate an original document. Lamination causes irreversible damage.



Documents stored in archival grade folders and an archival grade box.

PHOTOGRAPHS

Clear Dupont Melinex Mylar Polyester Sleeves are recommended for protecting your photos. They are Inert & slightly rigid, providing support for very fragile items (NB not suitable for charcoal, pastel & similar mediums).

Ensure your sleeves are slightly larger than your photographs. There should not be any pressure exerted on the photograph during insertion or storage and should not distort their shape. The photographs can be stored vertically or flat, so long as there is not excessive pressure from other photographs on top. Unmounted photographs should be stored in rigid, supportive folders or sleeves. You can insert a piece of acid-free paperboard into the sleeve, behind the photo, to provide this support. **Do not cut a photograph's surrounding to fit into a housing, use a slightly larger housing or wrap in suitable material.**



Once this process is complete you can store your photographs upright or flat, as long as adequate support is present, and the images are not bending. Archival grey board or polypropylene boxes are recommended for storing your photographs to prevent bending, cracking and damage to the emulsion.

Accession and label the box and store appropriately.



Photographs housed individually in mylar sleeves, and then stored flat in a polypropylene box.

BOOKS

Your books should always be stored upright. Laying your books flat can strain the binding and the spine can become warped, or "cocked". Bookends are recommended for stability and your shelves should be full but never tight. When books lean to one side, the binding again can become strained and if the shelving is too tight, the covers can become damaged when removing the books from the shelf. It may seem obvious, but when removing a book

from the shelf, grasp the middle of the spine, never the top of bottom. Large, oversized books may be stored laying down. As with archival documents, before shelving, remove all damaging materials such as bookmarks, newspaper clippings or paperclips as these are acidic and will damage your books. Never



attempt to restore a book yourself; always consult a book conservator.

Fragile books may be stored in custom-made boxes designed for structural support and long-term protection against light, dirt and dust. These boxes should be made of acid-free, lignin-free paperboard, which will protect the books from the acid and oils in leather bindings that

migrate into paper and cloth bindings of nearby books and can speed deterioration.

Phase boxes, such as those depicted here, are an affordable option which can be made on site with little expense.



Phase box made from archival cardboard and pH Neutral glue.

Clamshell boxes are more expensive but provide the most suitable support and protection to your rare books. Clamshell boxes consist of a case and two trays that fit into one another, usually custom made, bound in book binding cloth.

Each box should fit comfortably around the book in question. If the book is too loose, it means it can move unrestrained within the box and can be damaged and will not give the support necessary for protection. Too tight and the edges/cover of the book can be damaged during insertion and removal.

These boxes can be expensive as they are made to order; reserve these for your most significant pieces.



Hand made
clamshell
box, storing
an early 20th
century
minute book

OBJECTS AND TREASURES



Your objects and treasures will span everything from medals and insignias, to helmets, cases and ephemera.

Flat files lined with buffed archival tissue or a thin layer of ethafoam is an

excellent solution for your smaller objects; this ensures a secured environment, protected from light, dirt and dust.

Your larger objects are best stored on shelves, lined with archival tissue or a thin layer of ethafoam. If you feel the items need further protection, you can wrap the objects with a layer of Tyvek. Tyvek is an opaque, inert spunbonded polyethylene used for wrapping and interleaving, as well as a protective covering for larger items.



A large roll of Tyvek is affordable and user friendly.

For items to be boxed, use archival grey cardboard boxes, line the base with thick sheets of archival Ethafoam – it is a rigid, chemical inert packing foam, which can be carved to create recesses to match the shape of your objects to ensure a secure fitting. Placing a sheet of Tyvek between the object and the foam will ensure further support and protection. If the objects require further stability, they can be secured with cotton spaghetti yarn. Only do this step if the items are not fragile or unstable.



Ceremonial Vessels boxed, with an ethafoam base, Tyvek lining and secured with cotton spaghetti yarn.

Your boxes should be numbered and labelled clearly with corresponding accession numbers of the items enclosed, a brief description, and an image of the box's interior/specifically the items. This ensures that if you can inspect your box's contents quickly without having to move the boxes or unpack. This is useful if you are looking for something specifically.

Box Label Example

<p>Accession Numbers – 2021.56 - 2021.57 - 2021.58 - 2021.59</p>	
<p>Ceremonial Vessels</p>	
<p>BOX 1</p>	

TEXTILES

Your textile collection pieces are amongst your most fragile, and can deteriorate rapidly in the wrong environments.

They should be inventoried, and stored in polypropylene boxes, lined with buffed archival tissue. Handle only

with gloves; the same as the rest of your collection. Your boxes should be numbered and labelled clearly with corresponding accession numbers of the items enclosed, a brief description, and an image of the box's interior; specifically the items.



Buffed archival tissue provide a structural support and an additional protective layer.



Your boxes should be stored, label facing out, never stacked too high.

SHELVING

Once you have your collection in folders and boxes, you can put everything on shelving in a locked storage area. Your shelves and flat file storage should be made of anodised aluminium or steel with various powder coating. These have the benefit of being smooth, non-abrasive.

Careful storage of items will protect them and make it easier to handle them safely when you need them.

If possible, you should arrange your shelving away from the exterior walls. This ensures a further level of protection against leaks and moisture. Always avoid water and steam pipes, air-conditioning equipment and any other sources of water.

Store your collection at least 10-15cm off the floor and at least 30-40 cm from any wall or ceiling.



After you have properly shelved and inventoried your collection, you will have far better control of your collection.

WHEN DO YOU NEED A CONSERVATOR?

Some items in a collection of historic documents, photographs, or books, are so significant and fragile, that they need conservation. Conservation treatment chemically stabilizes and physically strengthens items to lengthen their lives, often using non-original material. Although conservation can be expensive, it is sometimes necessary to protect your rare and valuable documents, books and artefacts.

Conservation is a highly specialised field; ensuring you have a qualified and vetted professional is crucial. You can contact a local museum, library, gallery, university, or the Australian Institute for the Conservation of Cultural Materials for referrals to professional conservators who practice in your field.



Be prepared to provide the conservator with information about:

- the type of problem you want solved (for example, torn paper, brittleness, fading image, or detached binding)
- how you expect to use the piece (for example, for an exhibition)
- environmental conditions such as light, temperature, and humidity in your storage area
- what type of folders, boxes, and shelving you are using
- what outcome you desire from treatment of your item (for example, repair a torn certificate, reattach the binding to a book, flatten a rolled photograph).

Once an inspection of the piece in question has been carried out, if you decide to proceed, the conservator will likely prepare an in-depth report/quote regarding the materials and structure of the item, and the location and extent of the damage to be repaired.

After the conservator finishes treatment of the document, photograph, or book, he or she will provide you with a final report listing the techniques and materials used. It should also include images showing the condition of the piece both before and after treatment. You should keep this report in your collection management records in case the item needs additional treatment later.

CONCLUSION

This booklet has recommended techniques you can use to preserve your St John Collection. By the end of your cataloguing exercise, you should have every item in your collection inventoried, labelled, and correctly stored for the future. This is just a small piece of a complicated industry, but the protection of our heritage doesn't have to be daunting; it's about taking one step at a time and doing what is best for your collection.

If you have any questions, need some guidance or want to brainstorm some solutions, feel free to contact the National Executive Committee of the St John Historical Society of Australia for guidance or the author directly at +61 402457701 or sketcher151994@hotmail.com, Brodie.Taylor@usq.edu.au Remember

It is better to have some control over everything, rather than absolute control over next to nothing.

HELPFUL RESOURCES

FURTHER READING

Keep it for the Future, every year in Australia many community groups organise their records, photographs and other material into archives. This book will help aspiring archivists embarking on such a project. Basic archival principles and terms are explained in plain english. Practical advice is provided on deciding which records to keep, and organising, storing and preserving them. <http://shop.naa.gov.au/p/643028/keep-it-for-the-future.html>

FINDING A CONSERVATOR

Australian Institute for the Conservation of Cultural Material, <https://aiccm.org.au/>

ARCHIVAL SUPPLIES IN AUSTRALIA

Archival Survival, <https://archivalsurvival.com.au/>

Conservation Resources, <https://www.conservationresources.com.au/html/home/products/>

Pinpak, <https://www.pinpak.com.au/>

Zetta Florence, <https://zettaflorence.com.au/>



PRO FIDE, PRO UTILITATE HOMINUM

