

DISASTER SALVAGE TEAM

Working Towards Saving Cultural Collections

Correspondence to: the Robert McDougall Art Gallery
PO Box 2626 Christchurch
Phone (03) 3650 915 Fax (03) 3653 942

ISSN N° 1172-8949

NEWS LETTER

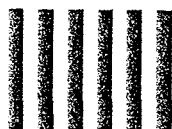
No 18 Sept 1998

Care of Books from the National Library
of New Zealand

Guest Editor: Lynn Campbell

Executive Committee

Robert Appel - Canterbury Regional Council
Lynn Campbell - Robert McDougall Art Gallery
Robert Clendon - Canterbury Museum
Jill Durney - National Archives
Andreas Eng - Canterbury University Library
Rosemary O'Neill - Canterbury Public Library
Tony Sellwood - RNZAF Museum
Sasha Stollman - Canterbury Museum
Lynda Wallace - Historic Places Trust



Fact Sheet

Conservation Services

Care of Books

Books are made up of organic materials (paper, wood, leather and cloth) which naturally deteriorate as they age. This deterioration process is accelerated by adverse environmental conditions and careless handling. With proper care, the useable life of your books will be extended, whether they are rare books, treasured family heirlooms or modern publications.

Care and Handling

Ensure your hands are clean while using a book. Unseen dirt such as grease and sweat accumulate and can cause damage and staining. Avoid eating, drinking and smoking while handling books.

Use common sense when carrying books. Carry only a few at a time or place them in an appropriate container for carrying.

Never remove a book from a shelf by hooking your finger over the top of the spine, or by gripping the back edge with your fingernails. Ensure there is room to reach over the top of the book to the fore-edge and pull it from the shelf. Alternatively you can push back the books on either side of the one to be removed, giving enough room to get a firm hold on either side of the spine.

Never force a new or tightly bound book to open flat, as this could result in a broken spine. When opening a new book for the first time, turn the pages section by section from the front, pressing gently along the fold. When you reach the middle, repeat from the back. Undertake this procedure several times.

Rather than turning the corners of pages to mark your place, use a bookmark. The ideal would be a strip of acid-free paper which would cause no staining or discolouration if it remained there indefinitely.

Dust is potentially damaging to books. It can act as an abrasive and will attract moisture which can be a catalyst for harmful chemical activity or mould growth. It makes good sense to routinely clean dust from shelves and books. Remove all books one shelf at a time. Check for signs of mould, insects or rodents. Hold the book firmly by the fore-edge keeping it tightly closed to avoid pushing dust down into the pages. Using a soft brush, such as a shaving brush, sweep along edges, always brushing away from the spine when cleaning head and tail. Do this work outside or in a well ventilated area.

Do not use pressure sensitive tapes such as Sellotape and masking tape or self-adhesive labels, as they will cause staining and damage. If it is necessary to inscribe or otherwise mark a book, do so on the first blank fly leaf at the front using a soft 2B pencil.

Do not use metal paper clips, staples or pins. The inherent moisture content of paper will cause the metal to corrode and result in staining and embrittlement of the paper.

Leather dressings and polishes are potentially damaging. Seek the advice of a qualified conservator before undertaking these treatments.

Do not undertake repairs without first seeking the advice of a qualified conservator. Well meant but inappropriate repairs can often result in irreparable damage. It is better to protect and stabilise damaged bindings by wrapping them in acid-free tissue or placing them in purpose-made archival boxes.

Storage

Book shelves should not be positioned against an outside wall or exposed to strong light such as sunlight, spotlights or fluorescent lighting. Exposure to light will cause fading of leather and bookcloth, and discolouration of paper. This is clearly demonstrated by the faded spines of many old books.

Books need to be shelved upright so that they support each other. Books of similar size are best shelved together. Do not pack the shelves so tightly that books are difficult to remove.

Avoid pushing books to the back of the bookshelf. A space needs to be left between the fore-edge of books and the back of shelves to allow for air circulation and the safe removal of books. Good ventilation is important to reduce the risk of mould growth.

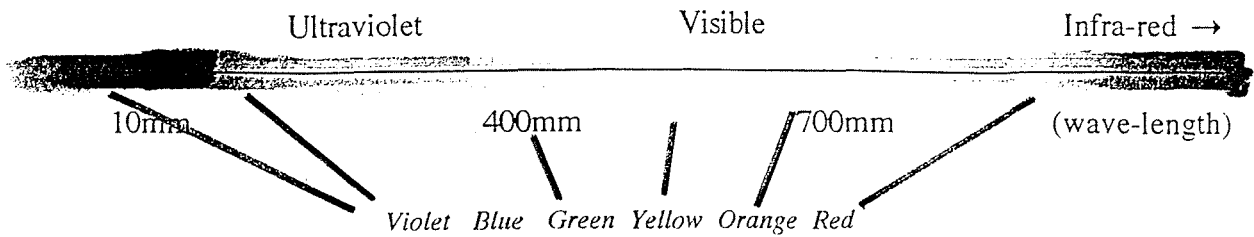
Individual books which are particularly valuable and those with loose pages or detached covers can be wrapped in acid-free tissue and tied with flat cotton tape or housed in archival purpose-made boxes.

Books, like all organic artefacts, require a stable temperature and relative humidity. Warm, humid conditions can promote mould growth and dry conditions will cause paper and leather to become desiccated, brittle or powdery.

For more information, see the other fact sheets in this series:

Preserving Family Collections, Care of Archival Materials, Care of Artworks on Paper,
Care of Photographs, Care of Sound Recordings

A BEGINNER'S GUIDE: LIGHTING FOR CONSERVATION



The shorter the wavelength the more damaging is the radiation: ultraviolet radiation causes the most damage, whereas infra-red is the least damaging.

Light will damage everything except stone, metal, ceramics and glass.

The most noticeable damage caused is fading and colour change, but photo-chemical reactions can also cause surface and/or structural deterioration.

The conservator's aim is to cut out all U.V. radiation and as much visible radiation as possible, particularly that of shorter wavelengths.

There are three main tools for measuring light:

- a. Light meter
 - measures visible radiation in lux (lx)
 - ideal level = maximum of 50 lux, but oil and tempera paintings, bone and ivory can take up to 150 lux.
- b. U.V. monitor
 - measures ultraviolet radiation in microwatts per lumen (ux/l)
 - ideal level = maximum of 75 uw/l
- c. Colour/temperature meter - measures the proportions of radiation of different wavelengths.

Tungsten light: is the ordinary light bulb and has an acceptable U.V. level.

Fluorescent light: most contain more U.V. radiation than the tungsten light (with exceptions, e.g., Philips 37).

Daylight: contains six times as much U.V. as tungsten lighting.

To reduce the damaging effects of light the conservator is concerned with

- a. intensity
- b. length of exposure
- c. proportions of U.V. and shorter wavelength radiation.

Intensity and length of exposure can be controlled with tinted glass, curtains and controlled artificial lighting.

U.V. light can be controlled with U.V. filters. These are available in several forms:

- a. acrylic sheet - to be used in place of glass
- b. coated glass
- c. thin foil - to be laid on glass or slipped over fluorescent tubing
- d. varnish - to be painted onto surfaces.