

- 5 FEB 2002

THE CANTERBURY DISASTER SALVAGE TEAM  
"Working Towards Saving Cultural Collections"

# NEWSLETTER

Number 24

September 2001

Editor  
Cynthia Cripps

This Issue:

## HANDLE WITH CARE (Summary of the Workshop)

### Introduction

- Introduction
- CDST Membership Change
- Talk Summaries: CDST 2001 Workshop
- Reader Survey Update

The annual Canterbury Salvage Disaster Team (CDST) workshop for 2001 was filled to capacity. Thirty-five people attended the day long series of talks and videos on preventive conservation issues such as handling, support mounts and environmental standards. Most attendees stayed for the entire day, but some preferred to 'pop in' for talks covering topics of special interest.

Roland Fretwell gave an in depth discussion of the bewildering amount of detail planning that went into and is still being fine tuned for the new Christchurch City Art Gallery. Dave Ashman spoke on issues surrounding the care and handling, storage and display of books. David Reeves presented a practical discussion about the project of moving the Te Papa Tongarewa Museum of New Zealand's collections into the new off-site storage facility. Jocelyn Cuming updated us not only on Standards for storing collections, but also on some of the issues relating to Standards in general. Bruce Rogerson gave an overview of the mobile storage products offered by Hydestor along with a brief comparison of static and mobile shelving. Roger Martin from Dunlop Foams was unable to attend, but has promised to provide all participants and presenters with a sample pack of Dunlop foam products. The CDST team will pass on the sample pack to participants as soon as they are received.

This edition of the newsletter will be devoted to summaries of these talks along with inserts of various handouts from the presenters containing further details and supplementary information.

### CDST Membership Change

Lynda Wallace has moved on to become Director of the Akaroa Museum. Jan Titus will now be representing the Historic Places Trust on the CDST committee.

#### MEMBERS:

Lynn Campbell, Robert McDougall Art Gallery  
Cynthia Cripps, Canterbury Museum  
Bill Durney, Macmillan Brown Library  
Andreas Fag, Canterbury University Library

Brian Lutott, Ferrymead Historic Park  
Rosemary O'Neill, Christchurch City Libraries  
Graham Penwell, Lincoln University Library  
Tony Sellwood, RNZAF Museum  
Jan Titus, Historic Places Trust

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## 1. Roland Fretwell, Project Manager – Buchan Group (Consultants for the New Christchurch Art Gallery)

### HOW TO BUILD A NEW CULTURAL FACILITY

Be prepared for extensive planning before, during and after a major building project.

#### Stage One: Client Preparation Work

- 1) Identify what they want - can be rough concepts at early stages. Often need to consult the wider community and professionals to determine;
  - Needs
  - Size
  - Budget
- 2) Produce a brief to go to all interested parties for review.
  - Start with all the bells and whistles
  - Assess possibilities in reference to money available
  - Size must be as accurate as possible to ensure accurate cost estimates
- 3) Once need, size and budget roughly determined start to develop details through "constant process of review".
- 4) Initiate hiring of a Project Manager to organise the project and Quantity Surveyors to track costs.
- 5) Assess fine details by discussing with all involved (ie staff) to estimate flow and relations between people and materials through building. Quantity surveyors cost out each room (materials, construction, mechanicals, etc.) for accurate estimate.
- 6) Once brief fully checked, develop recommendation and submit for tender.

For projects similar in size and scope to the Art Gallery, over one-half dozen consultants for building, acoustics, fire and safety, facade, mechanical, etc may be necessary.

When picking the designers make sure you get an architect who understands galleries or heritage/cultural structures.

- 7) Start the design process.
  - Determine constraints specific to site, ie parking requirements, environmental (climate) conditions, height limitations, etc.

By this time, will still not have appointed a design group – all submitted designs costed to ensure feasible.

#### Stage 2: Design Phase

After discussing project in detail with the client, the design companies submit briefs and drawings.

- Choice is made.
- Selected company produces a concept brief with all details from all consultants.
- Project done in stages. Each stage must be approved before it can continue.

#### Important details to remember:

- Have well-defined objectives (what can be achieved later versus what has to be done now). At some point will have to juggle budgets/resources to keep going.

- In designing, allow for mechanical components ie ducting and plant works.
- Have a contingency.
- Consider ongoing maintenance cost at onset to decrease surprises later on.
- When dealing with local government, get yes or no answers. If yes, go ahead. If no, try again.

## 2. Dave Ashman, Senior Book Conservator – National Library of New Zealand

### SAFEGUARDING BOOKS

#### A. Care & Handling B. Storage C. On Display

- A. Books are familiar everyday items. This familiarity often carries through to the care and handling given to heritage items, with damaging results. Conservation is done by those with professional training, preservation can be by everyone. Books are damaged by people (handling methods), environment (humidity and temperature) and pests (insects/rodents). These damages can be prevented.
  - Clean hands regularly. Gloves can be used to remove books from shelves, but are often clumsy for looking through fragile/brittle pages.
  - Don't open the book too wide as this damages the binding.
  - Don't grab the top of the binding or back edges.
  - Do reach into the shelf and hook a hand over the front edge. Push the book out until enough spine is exposed to get a firm grip. Alternately, push books away on either side, if space allows, until enough room to reach in for a good grip.
  - Prepare a receiving space prior to moving book.
  - Use a soft surface for delicate books (ie, a felt pad).
  - Supports: pillow (Make valley in centre for spine) / snake weights to hold pages down. Covers for pillows are a good idea because can be washed.
  - Carry only one or two at a time. For more use a crate or trolley.
  - For big items get help.
  - Don't pile books on edges. Pile horizontally and only a couple high. Don't put a book onto another with metal/raised fittings.
  - Pencils only. Don't write with paper on top of book.
  - Don't force book flat on photocopier.
  - If dust on top edge – DON'T OPEN. Hold tightly closed and brush carefully with soft brush. Brush too hard and dust may be forced inside or into paper.
  - Provide acid-free bookmarks for customers/visitors.
- B. APES (Archival Protection Enclosures)
  - Good: completely enclosed, book doesn't move much within but so tight could cause damage.
  - Bad: Slip cases.
  - 4 flap folder – book in good condition or been preserved (made from card)
  - Phase box – same as 4 flap but from thicker card with snap rivets (flaps need to be full size of book to prevent

pressure marks)

- Clam Shell box - not as high a level protection because can open if dropped
- Book Shoes - exposes spine for visibility while supporting shape and text block
- Ensure book ends correct size for book. Too small and the book will fall over, be dented or strain the binding.
- Don't store books on an angle as this will strain the spine.
- Store books with weak bindings horizontally.
- Don't let books hang over shelf edge. An overhanging shelf also protects from water leaks.

#### C. Book Supports made individually for book.

- From archival card or perspex. Use Mylar strips (in strong area of cover near spine) to hold down pages. Staples better to secure Mylar (to card) - double-sided tape not hold.
- Use a card under fold out pages for support.

### 3. David Reeves, Registrar – Auckland City Art Gallery

#### MOVING COLLECTIONS SAFELY

An overview and lessons learned in moving the National Museum/The Papa's collections to the new permanent off-site storage building.

The new building was a warehouse/commercial storage building purchased and converted. The floor space was good and the interior could be fitted to suit storage needs, but it leaked and had to be brought up to museum standards first.

#### Before Moving:

- Make sure things will fit through doorways and passages.
- Moving collections safely starts with considering building design. Develop safe routes.
- Decrease movement of collections.
- Storage systems that double as transport very good.
- Define scope and get management buy-in.
- Develop communication strategies.
- Follow appropriate lines of communication for changes, eg ask the architect rather than the builder.
- Talk to each person regarding their area.
- Try to arrange a risk management workshop for those to be involved
- Developed personal relationship with the builders. They may alert you to problems before they get too big to solve.
- Developing move stages will help everyone keep to schedule.
- Use flexible/adaptive problem solving. You won't be able to get it all right at once.

#### General Notes:

- Important to consider flow through building.
- Moving heavy items can raise serious health and safety issues for staff. Better to hire a moving company and train in museum issues.
- Keep pace equal between sending and receiving ends.

- Project manager software can be useful in tracking activities and developing timelines.
- *(Editor's note: programs like AutocadLT can be invaluable when designing space use in new storage areas in the development stages.)*
- Give all involved an overall of project activities to improve chances of coherency between what groups are doing.
- Motion triggered light in storage areas found not to work because they turn off when a person is still or sensors are blocked by shelving.
- Teams worked very well. Prevents "overwhelmed" feeling and helps motivate staff.
- Used a manual inventory system because not all items on database.
- Barcoding deemed not cost effective as only moving items once or twice
- Two labelling systems. The first to identify item if lost. The second to tell movers where it goes.
- Made movers record both numbers as this helped slow them down and decreased chances of handling damage.
- For large items developed storage supports that doubled as a trolley for moving (eg waka).
- Birds in cabinets: moving crates were built to include existing drawers.
- Plastic pallets preferred over wooden. Better forklift access, lighter, and holes make it easier to tie down, but may cost a bit more.
- Set aside adequate time to move large fragile items slowly.
- Social occasions and celebrations important to keep moral up and acknowledge achievements.
- Plastic tubs/trays good for moving.
- Open crates - increase visibility, decrease handling damage. Make skids around 100mm deep - standard pallet height.
- Have enough trolleys (different sizes) with good wheels and lifts/pallet jacks.

### 4. Jocelyn Cuming, National Preservation Officer – National Preservation Office

#### NATIONAL PRESERVATION OFFICE: AN UPDATE – STANDARDS ON STORAGE

- A. National Preservation Office (NPO): Outline + Workshops for this year
- B. New Zealand and International Standards
- C. Unbound Paper/ Archive Materials: Storage, handling and care

A. The NPO was set up two years ago by the National Library & Archives of New Zealand to acknowledge that important collections exist throughout the country.

- The main focus is on conservation assessments of collections and assistance cataloguing collections.
- Three major national symposiums are planned for this year.
  1. Maps, Plans, and Architectural Drawings
  2. Digital Preservation of Collections: reformatting printed material to digital ("Born again Material") and capturing material already in electronic form.

3. Preservation Management: how to get a preservation component included in the MLIS (Masters of Library Information Studies).

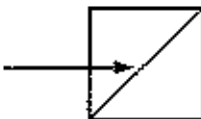
B. Application and use of Standards:

- Standards are used for one of two things; measuring against or defining excellence, or to create consensus on core principles for use by a group of professionals.
- Mandatory Standards: must be complied with by law, eg building standards.
- Voluntary Standards: no legal enforcement of compliance, eg preservation field.
- Literature is constantly changing, so it is important to keep up to date.
- Standards important because; of the growing demand on institutions to be accountable and energy efficient, recent diversification of materials used in archives and libraries, and new research in energy usage technology.
- Are useful in convincing management/funding bodies that following a specific activity/getting certain equipment is important.
- Strong copyright laws control the use of and protect Standard documentation. Many cannot be printed off the Internet due to protective software. However, Christchurch City Library has a comprehensive collection.
- The language used for Standards can be difficult to read and implement, even at a minimal level.

C. Storage:

- Keep flat. Upright storage has the potential for slumping and damaging of fragile items.
- In map cabinets: use folders and cut to size of drawer, not object. This prevents movement of the object in the drawer and possible damage. For smaller items, have smaller folders in main folder or interleave items.
- "Paper fingers": folded triangles of acid free paper or card. Good for handling fragile items.

FOLD LINE



- Very large items: roll onto outside of a tube. Minimum tube diameter 200mm, and a minimum length of 100mm more than the item.
- Encapsulation: Mylar commonly used, but can add weight to large collections and doesn't "breathe". A spun polyester backing helps enclosure to "breathe".
- Keep like materials together.
- Be careful all issues considered before removing components like clips and staples.
- Watch the term "Archival", frequently used improperly. Storage materials need to be acid-free. Buffered (pH 8.5 ideal) best with paper because of the alkaline reserve (paper is acidic, especially as it ages), but materials like blueprints and water colour pigments can be damaged by buffered paper. Important to consult with a conservator or conservation professional.
- Storage Furniture: wood not good, especially if unsealed. Powder coated metal best.
- Watch out for claims of "formaldehyde free" wood. Tests

results often contradict.

### 5. Bruce Rogerson, Branch Manager – Hydestor Manufacturing Ltd.

Overview:

- Product: powder coated steel (does not offgas, warp/bend, expand or contract).
- New Zealand made, 96% sourced.
- Plan from the inside out. What is being stored? What room is needed?
- Free consultancy process, revisions necessary. Can give assistance with planning.
- Do both large and small projects.

Mobile Shelving:

- Takes up less area than static: can save up to 50% of area used.
- Mechanical assistance: geared wheel with a chain drive. Necessary because banks are too heavy to move without.
- Can cost 2 to 3 times more than static.
- Weight loading of the floor can be a concern since mobile shelving allows for more material to be stored in the same area. May need reinforcing or an area with a high weight loading. An engineer's report is essential.
- Units on tracks: either recessed or within a false floor. Guide present in the tracks for seismic restraint, will not allow unit to tip over.
- Front of shelving: retaining systems may be required. Can manufacture special lips on shelves.
- Heights adjustable, but better to use standard as more flexible for future change/growth or unexpected changes.

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### READER SURVEY UPDATE

I'd like to thank all of you who replied to our Reader Survey. The mail out list has been changed to reflect the information received. If you know of anyone who missed out on the survey or who would like to add their name to the list, contact us at;

The Canterbury Disaster Salvage Team  
The Robert McDougall Art Gallery  
PO Box 2626  
Christchurch, 8001  
Fax (03) 3653 942

## **Some useful standards**

BS 5454 – 2000	Storage and Exhibition of Archival documents.
ISO 3897-1997	Photographic plates: storage practices
ISO-1997	Safety photographic films: storage practices
ISO 6051-1997	Reflection prints:storage practices
ISO 10214-1991	Photographic materials: filing enclosures for storage
AS 3674-1989	Storage of Microfilm (This standard is currently being revised )

## **Other standards and guidelines.**

Storage Standard –2000      National Archives of New Zealand.

Guide to Preservation Microfilming 2000 Published by the National Preservation Office,  
British Library.

Dodson, S & Wellheiser, J Bibliography of Standards and Selected References related to  
Preservation in Libraries. Canada: National Library of Canada 1996  
Website:<http://www.nlc-bnc.ca/resource/presv/eintro.htm>

## **Standards Organisations.**

### **British Standards Institution**

Fax +44 0 181 996 9001  
<http://www.bsi.org.uk>

### **Standards Australia**

Fax +61 2 9746 47645  
<http://www.standards.org.au>

### **Standards New Zealand**

Fax 04 498 5994  
<http://www.standards.co.nz>

International Organisation for Standardisation

<http://www.iso.ch>

### **American National Standards Institute**

<http://www.ansi.org>