# reCollections

### **Caring for Collections Across Australia**

# MANAGING COLLECTIONS

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Detail of hand-coloured 19th century children's book. Photograph courtesy of Vicki Humphrey.



There are an estimated 41 million objects held in Australian museums, art galleries and historical collections. Collectively they tell the story of our history and our country and contribute to our sense of identity and national pride. Increasing the conservation skills of people who care for these collections is an important factor in protecting this heritage, and is a key goal of the Heritage Collections Council.

reCollections: Caring for Collections Across Australia has been developed with this goal in mind. This set of practical quidebooks is designed by the Council for use principally by non-conservators who are working with Australia's cultural heritage. The quidebooks are also a teacher-friendly resource which can be used in professional development workshops.

Many of Australia's most experienced conservators have been involved in researching, writing and editing **reCollections**, through the Conservation Training Australia consortium, led by Artlab Australia, which first developed the package, and through the Collections Management and Conservation Working Party of the Council.

The Heritage Collections Council's mission is to promote excellence in the management, care and provision of access to Australia's heritage collections so that together, they reflect Australia's cultural and natural diversity. The Council is a collaboration between the Commonwealth, State and Territory governments and the museums sector, and comprises people working in a wide range of cultural heritage institutions across the breadth of urban and regional Australia. **reCollections** is an important component of the Council's National Conservation and Preservation Strategy for Australia's Heritage Collections.

Rob Palfreyman

Chair

Heritage Collections Council

#### reCollections: Caring for Collections Across Australia

has been written by practicing conservators and is intended to provide a sound quide for the preventive care of cultural items. Active conservation treatment of cultural material should only be undertaken by, or on the advice of, a trained conservator. Before relying on any of the material in this quide, users should check its accuracy, currency, completeness and relevance for their purposes and should obtain appropriate professional advice.

### If in doubt, consult a conservator

To obtain the names of accredited practicing conservators who are in a position to meet your particular conservation requirements contact the

#### Australian Institute for the Conservation of Cultural Material (Inc.)

a national organisation for conservators and people interested in the preservation of cultural material.

> **AICCM** GPO Box 1638 Canberra ACT 2601

National Secretary Phone: (02) 6254 8695 http://home.vicnet.net.au/~conserv/aiccmhc.htm

# reCollections

#### **Caring for Collections Across Australia**

Our heritage is represented by a vast array of cultural material, from established national icons holding pride of place in major museums and galleries, to everyday items such as household appliances or newspapers which carry meaning for local communities or families. Yet so often the links to our heritage are tenuous because the objects which represent our culture are in danger of decay. However, there is a lot we can do to protect valued objects and collections and so prolong the life of our cultural heritage. reCollections: Caring for Collections Across Australia provides practical advice and quidance designed to help the reader care for their heritage.

**reCollections** explains how to apply preventive conservation techniques to cultural objects and collections. Preventive conservation optimises the environmental conditions in which objects and collections are housed. Controlling light and ultraviolet radiation, humidity and temperature, biological pests, and dust and pollutants helps to prevent damage and decay to cultural material. Preventive conservation also means ensuring that good handling, transportation, storage and display techniques are used at all times. Applying preventive methods to the care of cultural artefacts and collections can prolong and protect their life for current and future generations of Australians.

While **reCollections** provides conservation information about the care of cultural objects and collections, it is important to recognise that all except the simplest conservation treatments should be undertaken by trained conservators. Active conservation treatment is a response to the damage of cultural artefacts, a highly skilled field which often involves the use of chemicals and complicated technical procedures. Unless performed with a thorough knowledge of appropriate techniques and with the right equipment and materials, conservation treatments can do more harm than good to the objects being worked upon, and can be hazardous to the people performing the work. Conservation treatments should only be conducted by, or on the explicit advice of, a trained conservator.

To complement the preventive conservation advice contained in the volumes Damage and Decay and Handling, Transportation, Storage and Display, **reCollections** supplies detailed information concerning the care of some of the most common cultural materials. These range from the paper and other materials on which so much of Australia's cultural history may be seen, to special considerations in caring for Aboriginal and Torres Strait Islander cultural artefacts. In addition, modern practices concerning the management of collections and of the people who look after those collections are outlined.

# MANAGEMENT PRACTICES

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#### **Objectives**

At the end of this chapter you should:

- understand the principles of good management;
- be aware of how museums, galleries and libraries can benefit from good management practices:
- know the four basic tools of management; and
- understand how best practice and benchmarking can help museums, galleries and libraries.

#### Introduction

Operating a museum, gallery or library involves many tasks. These cover everything from running the building, maintaining the collection and organising the finances to communicating with visitors, promoting the exhibitions and dealing with staff. Coordinating these tasks, and making sure that all the activities involved work in harmony, is what management is all about.

#### What is management?

Management is the art of making effective use of resources to achieve your goals. It concerns planning, coordinating and implementing all aspects of an organisation's operation in a manner which fulfils the organisation's aims. In other words, once a museum identifies its purpose, good management helps to achieve it.

As different processes are needed to achieve various aims, we tend to discuss management practices in terms of particular functions. In museums, these can include business management, financial management, collections management, program management, and personnel management.

Regardless of the area being considered, all good management practices rely on four basic tools:

policies set the framework for decisionmaking in museums. Good management ensures that policies are developed, kept up to date, and are understood by all staff;

- plans are the blueprints for action, which set out how the aims and policies will be achieved. Policies need plans to turn them into realities. Good management creates and implements plans to cover relevant areas of museum operations;
- procedures are the step-by-step instructions on how to carry out tasks they carry out policy and implement plans. Good management develops procedures and ensures that they are followed; and
- people are the resources who make the operations of the museum possible. Good management provides for the needs of people.

This volume focuses on these tools and how they contribute to good management practices in museums, galleries and libraries.

#### Who manages?

In the past, museum management was often referred to as 'administration', and seen as covering the non-collection aspects of the museum's operations, like salaries and business dealings. Administration was the responsibility of a small, select group. Nowadays, administrative functions are regarded as only one aspect of management, and in management as a whole as a collective responsibility. Everyone in a museum who deals with some part of its operation has a role to play in good management. A well-managed museum is one in which:

- everyone has a clear idea of the purpose of his or her work and its value to the museum;
- staff work to a plan which has been devised for their area:
- clear procedures are followed for the activities which they undertake; and
- each section of the museum is involved in, and is responsible for, the efficient operation of its area.

So who manages a museum? You do!

## Recognising good management

Management practices must evolve and change to continue to meet the needs of an organisation. Over the years, this has given rise to a wide variety of management techniques, like scientific management, management by objectives, total quality management, risk management, and even crisis management. Numerous books on general business management each advocate some of these techniques. But for a small organisation good management is often a matter of using commonsense to determine what works in your particular circumstances.

Even large businesses recognise this. Increasingly, businesses are using two concepts to identify good management and measure management progress. Both these concepts are relevant to the running of museums, galleries and libraries.

Best practice involves examining the operations of a number of organisations and determining whose operations are most successful. Those organisations are deemed to have achieved best practice in those areas, and set the standard against which similar organisations are measured. Best-practice organisations are widely recognised as having achieved excellence in their fields.

Benchmarking is the process of comparing your current operations to those of an organisation which is recognised as having achieved best practice, in order to chart your progress towards achieving similar goals.

To apply these concepts to managing your organisation, think about a museum, gallery or library which everyone agrees is a leader in its field. It need not be a large organisation—perhaps a small museum you know has a well cared-for collection, interesting displays and an informed staff. Do you feel they have achieved a standard of excellence which it might be useful to follow? If so, use them as your best practice standard.

Look closely at what this best practice organisation does, and how it does it.

Does it have policies and procedures which you could adapt?

What resources does it need to keep its collection well cared-for. Can you use your existing resources to achieve similar aims?

Why are its displays interesting? Perhaps the scripts and documentation presented with the objects tell a story rather than just exhibit an artefact.

Are the staff well-informed because the museum offers training assistance or has internal mechanisms for keeping people up to date?

Next, see if you can adapt, change or introduce into your organisation practices that help you achieve a similar level of excellence. The aim is not to follow slavishly everything a best practice organisation does, but try to apply to your own circumstances some of its techniques which work well, in order to manage your organisation better.

You can do this by setting some goals; for example, one goal may be to improve your displays by introducing themes into your exhibits. Discuss with your best practice organisation what it required to produce theme-based exhibits.

As you begin introducing the changes needed to reach your goals, check your progress against your best practice organisation. Its example becomes the benchmark against which you can measure your achievements. As you achieve your goals, look for new examples of best practice to strive towards. Recognising excellence, implementing measures to attain it, measuring your progress and improving your operations—these are all part of good management!

#### A word about this volume

This volume and *Managing People* deal with aspects of management that can help ensure that resources are used to develop and care for your collections in the best way possible. Sound management practices will help you decide when, where and how to implement the preventive conservation techniques learned in this training package. They can assist you in setting criteria for which objects should receive conservation treatment. They will help you determine whether you have the staff and resources to undertake the conservation or collection development programs you desire, and to integrate effective conservation practices into your organisation's routines.

Each section of the volumes Managing Collections and Managing People provides basic information concerning policies, planning, procedures and people management. To place this information in context, we have focused on the issues important in small social-history museums, and used their examples to illustrate our points. So some of the procedures in the sections on collections management and access may be different from those developed for archaeological or natural history collections, larger museums, art galleries, historical societies or libraries. However, the principles which underlie the discussion of good management remain constant, and can be applied to all types of cultural collecting institutions.

Many other aspects of management—such as managing change, promotion and marketing, educating your visitors or promoting research activities—though important, are outside the scope of a conservation training manual. Museums Australia has developed national guidelines for regional, special and local museums and galleries that address all these core responsibilities. The quidelines are presented as a series of comments and questions designed for self-evaluation. They are framed to help museums explore their directions and plans for the future. When completed, they will be a useful framework for the development of management practices.

If you have a problem relating to good management practices, contact a conservator. Conservators can offer advice and practical solutions.

#### For further reading

Keene, Suzanne, 1996, Managing Conservation in Museums. Butterworth-Heinemann Publishers, Oxford, England.

Moore, Kevin, ed. 1991, Leicester reader in museum studies, Museum Management, Routledge, London.

Museums Australia (Inc). 1988, Caring for our culture: National guidelines for museums, galleries and keeping places. Department of Community and the Arts, Canberra.

#### Self-evaluation quiz

#### Question 1.

Why are the following statements false?

- Management is only a useful tool for large organisations.
- The people responsible for management are the organisation's director, advisory committee and financial staff.
- Even if you haven't got a clear idea of where your organisation is going, management will ensure that your museum, gallery or library runs properly.

#### **Question 2.**

How do policies, plans, procedures and people each contribute to good management?

#### **Question 3.**

Which of the following statements is true?

- Best practice organisations are recognised by their peers as having achieved a standard of excellence worth following.
- Everything done by best practice organisations should be reproduced by others, so that all organisations do exactly the same thing.
- Best practice organisations can be used as benchmarks against which others can measure their progress towards similar goals.
- All of the above.

#### Answers to self-evaluation quiz

#### Question 1.

#### Answer:

Management is the art of coordinating all activities of an organisation so that it runs smoothly and achieves its aims; therefore, management is just as useful for small

organisations as it is for large ones. In fact, because their resources are often more limited, smaller organisations cannot afford to have badly run operations—so in some ways good management becomes even more important.

- b) Although the director, the committee and the administrative staff are closely involved with management practices, good management is achieved only when all sections of an organisation are involved in and take responsibility for managing their operations. This includes curators, collection managers, guides, conservation staff and volunteers. Management is the whole approach to keeping an organisation going—not just specific jobs held by special people who deal with office matters.
- c) Management is based on trying to achieve the aims and goals of an organisation by making sure it operates efficiently. If you don't know what those goals are, you cannot manage effectively.

#### **Question 2.**

Answer: Policies set the framework for decision-making in a museum, gallery or library. Plans are the blueprints for action, that implement the policies. Procedures are the step-by-step activities that carry out the plans. People are the resources which ensure that the policies, plans and procedures are followed. Working together, these are the tools used to achieve good management.

#### **Question 3.**

Answer: a) and c) are true. Best practice organisations provide a model for others to follow. However, there will always be in individual museums, galleries or libraries operations which are special to that organisation. Therefore it is neither possible nor advisable to try to reproduce exactly what is done in a best practice organisation; instead, the most appropriate aspects of these organisations should be adapted to your situation.

# PURPOSE AND POLICIES

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#### **Objectives**

At the end of this chapter you should:

- understand the purpose of a mission statement:
- be aware of the relationship between mission statements and policies, and between policies and procedures:
- understand the value of policies, and why museums, libraries and galleries should formulate them:
- know the basic components of a collections policy; and
- be able to write a mission statement and collections policy for your museum, gallery or library.

#### Introduction



The result of not having a collection management policy! Photograph courtesy of the History Trust of South Australia

The fundamental building blocks for good management are a clear statement of the purpose of your museum, gallery or library, and guidelines to make sure all decisions are consistent with that purpose. Statements of purpose are also known as 'aims and objectives' or 'mission statements'. Guidelines are known as 'policies'.

Mission statements and policies are important to help guide your museum, gallery or library in its development. Setting out your purpose and goals helps you to make consistent decisions. It ensures that everyone knows what you want to achieve, and that all your work is focused on this purpose.

Maintaining written statements and policies, rather than 'keeping them in your head', makes it easier for new people to understand the practices of the organisation, and to help apply them.

#### Mission statement or statement of purpose

The most important working document in your organisation is your mission statement. This sets out the broad aims of the museum, gallery or library. All organisations need a clear identity, with stated aims understood by the membership and by those who work for the organisation, whether in paid or unpaid roles.

For an incorporated body, this statement of purpose is usually expressed in its Articles of Association. For a municipal museum, the local government authority's corporate plan will generally encompass it in terms of the organisational structure within which the museum operates.

A statement of purpose (also known as a mission statement) describes the reasons for having a museum in terms of who it is there to serve, and how it will do it. Ideally, this mission statement should be only one or two sentences. All policy development flows from this statement, and it should be the point of reference against which any policy decision is measured.

The following example of a mission statement was reproduced from the publication What's in your museum? a handbook on museum registration methods for local museums (3rd edition), compiled by the History Trust of South Australia and published by the University of Canberra.

The aim of the Axel Stenross Maritime Museum is to develop the existing residence and workshop of the late Axel Alfred Stenross into a Maritime Museum; foster active interest in the preservation of the tools, workshops and other relics formerly owned by the late Axel Alfred Stenross; and generally foster a public interest in the maritime history of the Port Lincoln area.

#### **Policies**

Museums are long-term operations which are supposed to last forever. While in reality this may not be achieved, museums are certainly expected to last longer than a single human lifetime. For a museum to continue long after we are gone, quidelines—commonly known as policies—must be developed.

Policies stem directly from mission statements and are developed to provide long-term frameworks for decision-making. They exist at all levels. National policies like the National Conservation and Preservation Policy for Movable Cultural Heritage help set the agenda for thinking about issues in conservation. Organisational policies set the agenda for the operations of your museum, gallery or library.

#### Uses for policies

Written policies have practical purposes in museums. They clarify the museum's views on issues, and can be referred to when decisions on those issues have to be made. This makes the operation of the museum easier, and makes decisions more consistent. Written policies make it easier to convince outside bodies that you have thought about your goals, and know where you are headed. This can be useful when applying for assistance, dealing with local councils, or meeting with industry.

In addition, every object your museum, gallery or library acquires has associated costs. In order to manage both the cost and the object, you must have a clear idea of why you want an item; whether it is important enough to obtain; what you will do with it after you acquire it; and the implications of handling and storing the item in terms of your funds, resources and time. Policies which clarify these issues can help you manage and contain your costs.

#### A collections policy

Many different aspects of museums, galleries and libraries can be covered by policies. Large organisations may have separate policies to cover such issues as: acquisitions, research, sponsorship, education, volunteers, cultural diversity, interpretation and exhibitions; collection management and conservation; and access to or the return of indigenous material, secret or sacred objects and/or human remains. Smaller organisations often develop a single document which incorporates the fundamental policies of the museum or gallery. This document is referred to as

a 'collections policy'.

Collections policies include:

- a mission statement setting out the purpose of the museum or gallery;
- an acquisition policy stating what the museum intends to collect, and defining the scope of the collection, how the material will be used, and the criteria for determining significance when acquiring material; and
- a collection management policy setting out the principles of how the museum will manage what it acquires, addressing all the issues relating to the care and maintenance of the collection, including guidelines for dealing with documentation, loans, conservation and care, storage and security, and deaccession and disposal.

These elements are the core of a collections policy; however, individual policies may include other types of material. These can be policy statements on special issues of importance, or references to other documents such as disaster plans, insurance policies or procedure manuals. Often policies include definitions of terms used in the document, or the reason why a policy is needed on an issue. In some areas in Australia, the term 'collection management policy' is used to encompass all these policy elements.

#### **Examples of policies**

The following policy statements demonstrate that policy documents do not have to be complex or legalistic. The first policy statement guides the Yackandandah and District Historical Society's museum, nominated Best Small Museum of 1985 in Victoria's Museum of the Year Category C. The second statement is the City of Unley's Museum Acquisition Policy.

#### Policies versus procedures

Policy statements set out the broad framework for development. They do not spell out the processes used to achieve the development. This is the task of procedures.

Procedures are step-by-step instructions on how to perform specific tasks. They are guided by policies, and are the result of implementing policies and

#### Yackandandah and District Historical Society Inc.

#### 1. The Mission Statement

We aim to provide a place where local information and objects can be collected and stored as a means by which that information and those objects can be looked after and shared.

#### 2. Acquisitions

The Bank of Victoria Museum and Manager's Residence is now an established Museum, furnished with banking and domestic furniture relevant to the buildings and their community from 1858 to 1893, and to later tailoring uses of the buildings to 1969. A research collection of information and photographs is also established, also relevant to the town and communities from 1852 to the present.

A small collection also exists of objects pertinent to the business of the town, from 1852 to the 1930s.

- We shall continue to enhance the collection with: 2a.
- 2a.1 Objects by gift or purchase only, unless for temporary display; donations with conditions will not be accepted;
- 2a.2 Objects and information concerning the Bank of Victoria in Yackandandah 1860 to 1893;
- 2a.3 Domestic furnishings of the 19th century relevant to the buildings;
- Objects and information relevant to the uses of the building by the Haig family 1893-1969; 2a.4
- Information and photographs relevant to the history of the town to the present day, with 2a.5 particular reference to gold, family history and local business;
- Oral and written histories of local relevance. 2a.6
- 2b. Collection criteria:
- The accepted item must be relevant to the collection. 2b.1
- 2b.2 Documentation and provenance must be available.
- 2h.3 The condition of the item must be reasonable.
- 2b.4 Storage and display conditions must be suitable to the item.
- Conditional terms will not be accepted. 2b.5
- Duplicates will not be accepted unless with particular relevant provenance. 2b.6
- The donor must demonstrate clear legal title. 2b.7
- All items are available for research or viewing; appointments may be made to view items not 2b.8 readily accessible or fragile.

#### 3. Documentation

Staff members who are directly involved and trained in the management of the collection will fully document the process of acquiring an item into the collection. All pro-formas are kept in the administration files.

- 3.1 A donor form will be completed for each object, if appropriate.
- 3.2 Each item will be considered by the committee before being accepted.
- 3.3 On acceptance, the signed donor form copy, with letter of acknowledgment, will be sent to the donor.
- 3.3a If not accepted, the item is to be returned to the donor, personally if possible, with written explanation and thanks.
- 3.4 Purchased items begin at this point.
- 3.5 On obtaining title to the item, an accession entry is made, the item given a number, identified, and any conservation work or protection done. A photograph may be taken, or copy made.
- 3.6 Full detail is then entered on a catalogue sheet.
- 3.7 The item is then either stored or displayed.
- 3.8 Indexing, copying, or use of information from the catalogue may be done.

#### 4. Loans

- 4.1 Short-term loans will apply in order to further the intent of the mission statement.
- 4.2 Inward and outward loan forms are held in the files.
- Time limits are to be monitored. 4.3
- Inward loans 4a
- Short-term inward loans will be accepted for temporary display. 4a.1
- Completed loan forms will be kept under the file of the temporary display. 4a.2
- Documents and photographs offered for copying and return, if appropriate, may be accepted. 4a.3 Care must be taken that details are correct.
- 4a.4 Time limits are agreed upon by both the museum and the owner.
- 4a.5 Particular care will be taken with items not owned by the museum.
- 4h Outward loans
- 4b.1 Each request for an outward loan will be considered by the committee.
- Time limits will be agreed upon by both the museum and the borrower. 4b.2
- 4b.3 Conditions of display and transport will be closely monitored.
- 4b.4 The borrower will not modify, repair nor adapt any item loaned.

#### 5. Storage and conservation

- 5.1 Storage and display restrictions must be considered before acceptance of an item.
- 5.2 Upgrading storage and conservation work areas is a high priority (a new building is planned. Sponsorships are being currently sought to finance the project).
- 5.3 Temporary storage to be organised, not available to the public, to be the best we can do (not on the floor, nor piled high, nor inaccessible).
- Staff and visitors to be trained in the correct handling of items. Particular staff are trained in 5.4 the correct handling for processing of items.
- 5.5 Housekeeping will be efficient and regular. This will include checking for pests and atmospheric deterioration. Pest control is to be regular.
- Light and climatic conditions will be monitored and regulated. 5.6
- 5.7 Archival quality materials will be used for conservation, preservation and storage.
- A copy of the accession register, and where possible, up-to-date catalogue sheets, will be kept 5.8 separately.

#### 6. Deaccessioning may occur when:

- 6.1 The object is clearly owned by the Society and:
- the object is of no further relevance or use to the purposes of the collection; 6.1.1
- 6.1.2 the object is damaged beyond repair;
- 6.1.3 the object has been stolen with no hope of return;
- 6.1.4 the museum has identical objects, with identical provenance;
- 6.1.5 the object in question has no provenance nor known local connection;
- 6.1.6 the object is not within policy;
- 6.1.7 there is a reasonable request for return from the donor or family.

#### 6.2 Disposal may be by:

- 6.2.1 return to donor;
- 6.2.2 exchange, gift or sale to another museum or institution;
- 6.2.3 use for hands-on in the museum or outside;
- 6.2.4 public tender or sale;
- 6.2.5 destruction or recycling.

#### 7. Review.

This Policy will be reviewed at the Annual General Meeting.

#### City of Unley Museum

#### **Acquisition Policy**

Each of the following criteria should be met before an item is acquired as part of the collection.

It must have a distinctive and verifiable connection with the local area.

This may include the following:

- designed locally
- manufactured locally
- commonly used locally
- valued by sections of the Unley community for social, economic, cultural, spiritual or religious reasons associated with important themes in Unley's history.
- It should be in good condition or should be able to be conserved or restored to good consition. 2
- It can be readily stored and cared for by the Museum.
- It is an unconditional donation or purchase and the person donating the item has valid and/or legal title to it.
- Duplicates will only by acquired in the case of light sensitive materials that require changeovers during display and where duplicates assist in the interpretation of the items.
- In the case of photographs, if the donor is copyright owner, permission should be soght fot the transfer of copyright ownership to the Museaum.

NOTE: Items may also be collected by the Museum for use in 'hands on' activities or as props for displays if they do not meet the above criteria (they must always comply with point 4).

plans. Written procedures document what is actually done in an area. They take time to write down; and this often prevents small museums with limited resources from developing manuals on procedure. However, written procedures introduce a consistency into operating practices and reduce the risk of important steps being overlooked. They are especially useful if a number of staff or volunteers perform the same task. In the long run, they will save time and improve operations.

Procedures are required in any part of a museum, gallery or library where tasks are repeated regularly. They are most important in areas with complex sequences of tasks, for example, in collection documentation and conservation practices. reCollections is an example of a range of conservation procedures. The Management Practices chapter in this volume deals with the processes involved in managing collections, and provides advice on where to find assistance on specific procedures.

If you have a problem relating to good management practices for the storage or display of objects, contact a conservator. Conservators can offer advice and practical solutions.

#### **Self-evaluation quiz**

#### Question 1.

A mission statement should be:

- ideally only one or two sentences long;
- a point of reference against which policy decisions can be measured:
- understood and accepted by all members, employees and volunteers of the organisation;
- a statement of purpose clearly setting out the d) aims of the organisation;

all of the above.

#### Ouestion 2.

How can policies be used in practical ways to help museums, galleries and libraries operate more easily?

#### **Question 3**

Which of the following statements are true?

- Many different aspects of an organisation can be guided by policy statements.
- Mission statements, acquisition policies and collection management policies are three basic policy documents which should be maintained by all museums.
- An acquisition policy covers what an c) organisation intends to collect and how it defines significant material.
- A collection management policy addresses issues related to the care and maintenance of a collection.

#### Question 4.

How do policies differ from procedures?

#### Answers to self-evaluation quiz

#### **Question 1.**

Answer: e).

#### Question 2.

Answer: Policies ensure that consistent decisions are made about museum operations. They can be cited to back-up decisions on controversial issues. They can be used to convince funding bodies, councils and others that you know where you are heading. They can help manage your resources by guiding what goes into and comes out of your collection.

#### **Question 3.**

Answer: All the statements are true.

#### Question 4.

Answer: Policies provide a framework and quidelines that help an organisation reach its goals. Procedures are the step-by-step activities which implement policies.

# PLANNING AND BUDGETING

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#### **Objectives**

At the end of this chapter you should be able to:

- state the advantages of planning and budgeting, and be aware of the relationship between the two processes;
- describe the prerequisites for effective planning;
- describe the steps involved in planning via aims and objectives;
- differentiate between strategic and operational planning;
- describe the budgetary process in terms of planning, controlling and reviewing income and expenditure, and the achievement of objectives; and
- use appropriate procedures to frame a budget for a small museum or gallery.

#### Introduction

Planning and budgeting are essential for the effective and efficient use of resources in running a museum, gallery or library. Best use is made of these processes if they are in balance.

While budgeting should not determine the planning process, neither should unrealistic visions be pursued without any consideration of economic feasibility. Although each topic is treated separately below, in practice neither is carried out in isolation from the other.

#### **Planning**

Someone once said that if you don't know where you are going, then don't be surprised if you don't know when you've reached your destination. Most of us would not dream of trying to drive to a new place, in a direction we had not previously travelled, without using a road map. There are occasions when we don't mind ambling along from place to place. When on a business trip, however, with limited time and a tight budget, it would be extremely rare for anyone to set off on a journey knowing neither the destination nor the route.

Unfortunately it is the case that in some museums, galleries and libraries, despite the best intentions

of the people associated with the organisation, there are no maps to steer by. Such groups are often characterised by a sense of malaise, of being overwhelmed with so much to do that they don't know where to start. Frequently they don't. These groups often appear either to have lost their way or to have no sense of direction.

Planning would be of great benefit, giving them a focus and mechanisms by which to achieve their goals.

#### Definition of museum planning

Museum planning has been defined as being a professional response to challenges:

... the study and practice of facilitating the preservation and interpretation of material culture by ordering all those components that comprise a museum into a constructed or renovated whole that can achieve its functions with optimal efficiency. (Lord & Lord, 1991)

This may sound very high-powered and formal, but at its simplest level it involves developing a map to quide a museum along a path—whether it be a short-term activity, a major development project over several years or an annual program of activities. Planning is a process which can be learnt by all members of an organisation and used to great effect.

Plans try to anticipate opportunities and obstructions along the route, and attempt to provide a defined and trouble-free path which is still able to cope with the unexpected.

#### Why plan?

The goals of museum planning have been defined by Lord & Lord, 1991, as:

- to provide space and facilities that are both aesthetically pleasing and effective in preserving and interpreting museum collections for museum visitors;
- to establish and/or maintain an institution which can perform these functions efficiently; and
- to provide an organisation with the opportunity to anticipate and be prepared for likely future events. This reduces the stress of having to cope with the unanticipated.

#### Examples of planning in museums

It is difficult to answer the question, 'What sorts of plans are used in museums, galleries and libraries, and how detailed should they be?' While not every minor, routine activity warrants formal planning, clearly those activities which are complex in terms of personnel, resources, and the scale or time involved require careful planning.

Plans vary in scale and comprehensiveness. They can range from those required for an individual activity or function to a comprehensive plan for the whole organisation or a master plan integrating complex components of a major project.

Examples of plans include:

- long-term strategic plans;
- annual or semi-annual operational plans;
- master plans;
- project plans—often entailing a feasibility study component;
- collections management plans;
- conservation plans;
- safety and security plans;
- disaster plans; and
- information management plans.

At their simplest, plans set priorities and identify sequences of events and resources that may be utilised to achieve objectives.

#### Prerequisites for planning

Museums, galleries and libraries cannot really start to plan any activity until they have at least the basics of a policy framework for their organisation. This framework should include a mission statement, which sets out the purpose or goals of the organisation, as well as policies, which act as quidelines for decision-making. Once this framework is in place, plans can be developed to help the organisation achieve its objectives.

#### Planning via aims and objectives

This approach involves determining a set of achievable objectives, placing them in order of priority, and focusing on achieving them. To arrive at this stage requires a number of steps. These include:

- exploring visions;
- carrying out a Strengths, Weaknesses, Opportunities and Threats—SWOT—analysis;
- reviewing the result of the SWOT analysis against the mission statement;
- setting priorities; and
- defining objectives.

#### Dreaming the impossible dream exploring visions

In many ways the hardest step in museum, gallery or library planning is the first: the identification of visions. For complex museum projects, it may be desirable to bring in external expertise for quidance. Nowadays many local government authorities have staff trained to act as facilitators for these sorts of sessions. For larger projects, a museum planning consultant may be needed.

Keep your visions realistic. If you aim too high, you may fail. It is better to work toward a realistic level of stability than an overambitious program of development and change.

Visions are best developed by allowing everyone to come up with ideas and recording them on paper or whiteboard. At this stage the ideas should be encouraged to flow freely, without any critical analysis, and usually results in a variety of good ideas. Everyone has a say, and group or individual imagination is not hindered.

#### **SWOT** analysis

Once a list of visions has been established, it should be put aside temporarily while you go to the next step in the process. Rather than a critical look at the visions, the organisation and its environment are put under the microscope first.

The methodology of a SWOT analysis involves looking closely at the elements of the environment in which the organisation currently operates. In some cases, the analysis must take into account the possibility of changes in the organisational environment and the associated impacts of such changes.

During a SWOT analysis you identify the organisation's strengths, weaknesses, opportunities and threats.

Again, an outside facilitator may be of use in this process.

The product of this process will be pieces of paper or a whiteboard full of lists of factors under various headings. The likely factors are numerous and varied, but would be expected to include, among others, considerations of the building—security, suitability, ease of maintenance, space, the environment and so on—personnel; and finances and possibly even the political and economic environments.

There are no golden rules here. Each organisation and location is different. The significance of factors will vary because of the unique character of each institution and its associated environment. Some factors may in fact emerge under a couple of headings. Funding, for example, may appear under both the Threats and Opportunities headings.

Outside factors likely to affect your museum, gallery or library—either directly or indirectly—should also be considered. Examples which might emerge include:

- a major industry closing or a new one being established;
- development of a new State or regional tourism strategy;
- emergence of an indigenous artists' collective;
- changes in the local population base, such as an increase in the number of people born elsewhere or overseas; and
- changes in the local economy resulting from upturns or downturns in regional exports.

#### Identifying realistic, not idealistic, options

While museum visions need not be realistic, decisions about which visions to pursue must be.

On completion of the SWOT analysis, the wish list—the visions—should be revisited and critically assessed, to identify which of the idealistic visions can be reclassified into a subset of achievable options.

The SWOT analysis provides the factors against which the visions list may be compared and subsequently pruned. Factors such as available funds, personnel and projected demand often weigh-in heavily at this stage.

In addition to fulfilling this function, a SWOT analysis may also identify the need for further information or for more critical assessment. You may decide you need a feasibility study.

Achieving the achievable dream—assigning priorities

The achievable options must then be measured against the organisation's statement of purpose and its policies, to determine priorities. In reality, factors of internal and external political nature often come into play at this stage.

If a decision is taken to embark in a direction contrary to the aims of the organisation, then it must be asked whether the organisation's aims are out of date or whether those making the decision are out of line. Obviously such decisions should not be taken lightly—they challenge the fundamental reasons for the organisation's existence, and require input from the whole organisation.

#### A challenge for readers

Now that you understand the theory of a SWOT analysis, consider how you would apply this process to a museum situation. Use your own situation, or pick several factors from the environmental and outside factors listed above. Do a SWOT analysis. Note how each factor may have a negative and/or positive impact on your museum, and how it might provide opportunities for, or constraints to, museum operations.

Next, consider the following list of options identified as visions worth considering—add more if you like. Try prioritising them into a realistically achievable list measured against your SWOT analysis of environmental factors.

A new storage facility to house a collection of watercolours of great significance to the local community.

Development of a collection strength based around a long-established and distinct local industry which is about to be closed down.

The establishment of a conservation workshop equipped to handle large objects.

Modification of the environment of an exhibition gallery to meet loan requirements from a major collecting institution.

A simple but large-scale conservation project that will need input from volunteers, working under a conservator's supervision; the project entails cleaning a collection of items used at the nearby factory, and requires the specialised knowledge of former operators.

#### **Defining objectives**

The final stage in the overall process of 'Planning via aims and objectives' is to formalise the assigned priorities into a set of objectives. Objectives should be framed in terms of achievable and measurable outcomes. They should, therefore, be expressed in terms that are definite, not vaque; and it should be easy for everyone to recognise the point at which the objective has been reached.

These objectives should then be used to provide the focus for the museum, gallery or library. Knowing what you hope to achieve provides a focus. Resources, personnel and finances can be allocated and steps taken on the path to achieving the first objective.

#### **Planning cycles**

Regardless of whether any major new projects are under consideration, it is worthwhile undertaking organisational-level planning in regular cycles based on two, sometimes three, time-scales.

Longer-term planning for the general directions and major thrusts that an organisation sets out to achieve over an extended period is best covered by a strategic plan. Shorter-term organisation of projects and programs is best described using an operational plan that usually covers one or two years. A series of operational plans effectively acts as a subset for the achievement of the broader strategic goals.

Both types of plan must be monitored and reassessed by reference to the goals and objectives; and both should be subject to regular review.

Goals can be said to be the endpoint for which we aim, and objectives are the list of measurable achievements that provide milestones along the way.

When all the objectives have been achieved, we know the goals have been reached.

The need to identify clearly defined and measurable objectives cannot be overemphasised. Without milestones it is all too easy to lose one's way and not know whether a goal has been reached!

#### Strategic planning

A strategic plan outlines the organisation's longterm aspirations and goals. Without this plan, it is easy to concentrate on short-term objectives and consequently might constrain future development options.

Strategic plans have defined time-frames, and identify major goals and the staging of processes for their achievement. They may cover several years, in some cases 5 to 10 or more. They should not be inflexible and should be reviewed say, every three to five years, to take into account achieved goals and to consider changes in the museum's operating environment.

Strategic plans must present a broad overview and be holistic in scope. All aspects of the museum, gallery or library and its operational environment must be considered.

Different strategic plans vary greatly in their complexity. At its simplest, the strategic plan should include a list of strategic objectives, a summary of the key resources required to achieve them, and a staged time-line for their achievement. It should be entirely consistent with the museum's mission statement.

#### Operational plans

Operational plans are smaller-scale and are usually more detailed than strategic plans. They may cover a period of one to two years. They should consist of realistic, achievable and measurable objectives—lists of things that can and will be achieved.

Operational plans detail the resources that will be committed to achieving objectives. They should encompass ongoing activities or programs as well as fixed-term activities or projects, which in an operational plan must be consistent with the strategic plan and the mission statement. Museums, galleries and libraries should have clear, annual budgets consistent with, and based on, their operational plans.

Operational plans should be set and reviewed at least annually, with a focus on the achievement or otherwise—of objectives. This review process provides an indication of progress toward the achievement of longer-term goals outlined in the strategic plan. At the same time the realisation of objectives achieved is a source of satisfaction. with obvious implications for morale and future activities. The review process may also provide early warnings—changes in the operational environment, for instance. These should be noted and contingency plans formulated. Amended objectives may be necessary.

#### **Budgeting**

Budgeting is the process of planning income and expenditure for a specific time or project. It is an essential component of the planning process.

Measurement of actual income and expenditure against that projected in a budget provides key indicators, as well as warnings, for the achievement of objectives.

The variations in income and expenditure for small museums are almost as diverse as the museums themselves, which range from those fully attached to a parent body, such as local government, to those relying entirely on their own efforts to survive. The former may benefit from assistance in the areas of building, ground maintenance and administrative support. The independent museum normally has to rely on income derived from admission fees, sales, fund-raising, rent and grants. Sponsorship may also be a factor.

Expenditure is more complex. Outgoings can be grouped into various categories, but not all will appear in each year's budget, as changes in plans and objectives vary. Yet some expenses will be incurred every year, the only variable being the amount.

#### **Expenditure categories for small museums**

Many expenditure items are fixed expenses and must be allowed for each year. Other items relate to programs that are not necessarily ongoing. Outlined below are expenditure categories that should be considered when framing a budget.

#### Maintenance of building and grounds, general expenses

- heating and cooling
- security
- cleaning
- spraying, mowing
- insurance
- pest control
- health and safety issues—quard rails, fire prevention
- electricity—power, lighting requirements
- repairs

#### **Publicity and marketing**

- regular advertising in chosen publications
- special-occasion advertising—newspapers, radio and posters
- direct contact—phone and mail
- quide sheets
- education packages
- signage
- publications
- preparation of brochures
- membership of tourist associations

#### Volunteer services

- information dissemination—phone, information sheets, booklets and tours
- tea, coffee

- social events, thank-yous
- skills training

#### **Museum services**

- display maintenance, repair, cleaning
- conservation of displayed objects
- conservation of stored objects
- documentation of incoming objects for collection display development
- acquisition of required objects
- repair and restoration of objects in the collection, as appropriate
- development and maintenance of storage area

development of a reference library

#### Administration

- phone
- postage
- photocopying
- stationery
- computer hardware and software

#### A typical income and expenditure statement

During a period of development, a typical budget for a progressive, independent museum with annual visitor numbers of about 6,000 might be structured as follows:

Income (\$)		Expenditure (\$)	
Admissions	8,500	Rates incl. water	1,500
Shop sales	4,500	Repairs/maintenance	1,000
Fund-raising	2,000	Insurance	1,500
Rent	2,000	Light and power	1,500
Interest	500	Administration	900
Grant—Rotary	1,000	Wages (grounds)	500
Grant—MAGP	6,000	Cleaning materials	200
Grant—contributions	3,000	Pest control	300
		Stock for shop	3,500
		Fund-raising costs	250
		Amenities	100
		Transport costs	100
		Display—museum	4,500
		Conservation—museum	3,000
		Conservation—store	1,500
		Tourism membership	100
		Signage	1,000
		Petty cash	700
		Advertising	4,000
Totals	26,500		26,500

#### **Budget planning**

Review past budgets. Take into account strategic and operational plans. Consider initiatives alongside income and expenditure.

When framing a budget it is essential to take into account past budgets, and to examine the relationship between the budgetary performance and the achievement of objectives. For example, Were the objectives achieved? If not, why not? Was the failure to achieve the year's program related to availability of money? If this was the case what—if anything—can be done about it?

The review process may result in either a realignment of priorities or the reassessment of the proposed expenditure and sources of income.

As most of the income in small museums tends to be used in its day-to-day running, framing the budget may have to link some aspects of a program to specific fund-raising efforts.

The budget must take into account both the strategic and operational plans, with money allocated to projects described in those documents. There is an intimate relationship between planning and budgeting: budgetary constraints must be considered when objectives are set and, conversely, objectives of the organisation must be taken into account when framing the budget. Finding the correct balance between planning and budgeting is critical if an organisation is to have a realistic chance of achieving its objectives.

It is wise to build some flexibility into the budget, if possible. Despite the best plans and intentions, costs do blow out and anticipated revenue may not match that projected in the budget. In addition, unanticipated opportunities may arise, which you should take advantage of. Having a contingency allocation set aside would be of obvious benefit in both these instances.

Budget planning should also take into account the experiences of past years with respect to both income generation and expenditure. For a small museum or gallery which depends on admission fees and shop sales for most of its funding, there will be obvious peaks and troughs throughout the year, corresponding to school holidays and tourist patterns. By being aware of these patterns,

expenditure may be moderated, for example, in anticipation of an upcoming period of low income generation. It is important to monitor attendance figures, especially for institutions to which admission is by donation only. By analysing the income per visitor via the donation box and in relation to shop sales, strategies can be adopted to maximise returns in each of these areas. Monitoring attendances also provides valuable information which may be used as part of a package aimed at attracting sponsorship.

As well as considering the aspects mentioned above, it is also important when going through this planning process to examine initiatives in areas such as alternative funding sources. Is there the opportunity to seek corporate sponsorship? What grant sources are available that may be of assistance for particular projects? Both government and non-government sectors should be targeted. It is worthwhile contacting groups such as Museums Australia, the Heritage Councils and the Departments of Tourism, as well as local government agencies, for advice on funding sources.

#### **Control process**

During the financial year it is important to monitor expenditure and income. While it is acknowledged that money allocated for a period of 12 months will not be spent in equal amounts each month, it is useful to monitor the relationship between the period over which money has been spent and the corresponding proportion of the budget that has been spent. This may then prevent a blow-out in the budget.

Likewise it is important to monitor projected sources of income. Are visitor numbers and takings at the door sufficient to match the projected income? How successful have the fund-raising efforts been so far? By looking at both sides of the ledger, it may be possible to alter programs to take into account changed circumstances.

Monitoring and adjustment are important aspects of the budgetary process, especially for organisations which do not have a guaranteed annual income.

#### **Review process**

Reviewing the budget is not just an activity that takes place as the end of the financial year approaches. It is ongoing, and an inevitable part

of the processes associated with monitoring income and expenditure during the year. The review process should examine the following aspects of budgetary performance projected expenditure against that actually spent; projected income against that actually received; and the relationship between budgetary performance and the achievement of programs.

The outcomes of this review will influence the framing of the next budget, as well as operational and strategic plans. It is a time to evaluate overall strategies in light of performance. Any changes in circumstances must be taken into account at this stage.

#### Conclusion

Funding is often very restricted in small museums and collecting institutions, and it is therefore very important that the best use is made of available funds. Planning and budgeting will help you to do this.

Planning and budgeting also are vital steps to be taken toward providing proper care for museum, gallery and library collections. Without forward planning it is very easy for all available resources to be used in day-to-day operations. And if the day-today operations swallow up all the resources, expensive problems can be developing quietly in the background. It is wise to encourage the allocation of at least a portion of the budget to conservation.

The focus of spending on conservation should be directed to identifying what the problems are, fixing them and slowing down deterioration of the collections. Improving the conditions and the environment in storage and display areas will be of greater benefit in the long term than treatments applied to objects which are then returned to inappropriate storage or display environments.

#### For further reading

Lord, G.D. & Lord, B.L., 1991, The Manual of Museum Planning, HMSO, London.

#### Self-evaluation quiz

#### Ouestion 1.

Which of the following statements are false?

- Planning and budgeting have nothing to do with each other.
- Planning and budgeting should be balanced for the best results.
- Budgeting determines the planning process.
- Museum planning is a specialised area and cannot be done without expert knowledge and training.
- Organisations don't need to plan or budget these are just activities designed to fill in time.

#### **Question 2.**

What are the prerequisites for planning?

- Have a statement of purpose for the organisation.
- b) Carry out a SWOT analysis.
- Have policies in place to provide a framework for decision-making.
- Know what your budget will be for the next 10 years.

#### **Question 3.**

The steps involved in planning via aims and objectives are:

- work out all your broad aims and divide them up into detailed objectives;
- write down everyone's ideas on a whiteboard and be sure not to be critical;
- carry out a SWOT analysis, review its result against the mission statement, define objectives;
- explore visions, carry out a SWOT analysis, review its result against the mission statement, set priorities and define objectives.

#### **Question 4.**

#### A SWOT analysis looks at:

- a) the elements of the environment in which an organisation operates;
- b) the visions of the people in the organisation;
- c) what the organisation needs;
- the strengths and weaknesses of, and the opportunities for and threats to, a particular organisation.

#### Question 5.

Which of the following statements apply to a strategic plan?

- a) It is a plan which details the resources that will be committed to the achievement of objectives.
- b) It is a plan which outlines the long-term aspirations and goals for an organisation.
- It should identify major goals and the staging of processes that will lead to their achievement.
- d) It is a plan that identifies, in detail, the conservation program for the next year.
- e) All aspects of the organisation and its operating environment must be considered in the plan.

#### Question 6.

Which of the following statements are true?

- Budgeting is the process of planning income and expenditure for a specific time-period or project.
- When framing a budget it is essential to take into account past budgets and to examine the relationship between the budgetary performance and the achievement of objectives.
- c) Finding the correct balance between planning and budgeting is completely unnecessary for any organisation.

- d) Budgets, once developed, must be completely rigid. Changing them is irresponsible.
- e) During the financial year it is important to monitor expenditure and income.

## Answers to self-evaluation quiz

#### **Question 1.**

Answer: a), c), d) and e) are all false. Planning and budgeting are complementary parts of a management approach essential for the effective and efficient use of resources in running a museum, gallery or library. Best use is made of these processes only if they are in balance. To maintain this balance, budgeting should not determine the planning process, neither should unrealistic visions be pursued without any consideration of economic feasibility. Planning can be learnt by all members of an organisation. Planning and budgeting are necessary processes for the most effective use of resources and to provide the organisation with a focus for their operations.

#### **Ouestion 2.**

Answer: a) and c). Planning can take place without knowing your budget exactly. You may plan for programs that require you to look for alternative funds which are not part of your usual funding. A SWOT analysis is part of the planning process—you don't need to complete it before you commence planning.

#### **Question 3.**

Answer: d) lists the steps involved, in the order in which they should take place.

#### **Question 4.**

Answer: a) and d). A SWOT analysis provides the factors against which the visions can be compared; it does not examine these visions. It may identify needs, but it does not set out to examine the needs of the organisation.

#### Question 5.

Answer: b), c) and e). The other statements refer to plans that are more specific and narrower in focus than the strategic plan.

#### Question 6.

Answer: a), b) and e) are true, c) and d) are false. Finding the correct balance between planning and budgeting is critical if an organisation is to have a realistic chance of achieving its objectives. It is wise to build some flexibility into the budget if possible. Despite the best of plans and intentions, costs do blow out and anticipated revenue may not match that projected in the budget. Unanticipated opportunities may also arise, which you should take advantage of. Having a contingency allocation set aside would be of obvious benefit in both these instances.

# AQUISITIONS AND SIGNIFICANCE

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#### **Objectives**

At the end of this chapter you should understand:

- the ways in which items are acquired for a museum, gallery or library;
- the processes, policy considerations and legal issues involved in acquisitions;
- what significance means in relation to museum, library and gallery collections;
- why it is important to have criteria on significance as part of an acquisition policy;
- how knowing the significance of an object can help institutions set priorities for work programs and the allocation of resources.



Hand-drawn cart and fire hose reel with a horse-drawn Shand Mason fire engine in the background to the left. These rare pieces are from the South Australian Metropolitan Fire Services Historical Collections.

Photograph courtesy of the History Trust of South Australia

#### Introduction

Setting up the proper framework for your museum, gallery or library is just one side of the management process. The other is having a collection to manage. This section begins to focus on dealing with your collection, starting at the point of obtaining material. The following sections concentrate on what you do with the material you have acquired—collection management—and how you protect it while making it available to the public—access to collections.

A good collection does not necessarily just grow, it is developed through careful planning. Every

object in your collection should in some way contribute to the aims of your museum, gallery or library. Just as much thought should be given to refusing material as to obtaining it. Every item in your collection, even if it is a gift, costs money in terms of staff time, record-keeping, maintenance, storage and display. Wise decisions made about what material you accept could provide tremendous savings in the future, and ultimately result in a better collection.

The process of obtaining material, the decisions made about what to obtain and the policies that drive these decisions make up the acquisition process.

#### **Acquisition**



This telephone duplicates one already in the collection and has no associated documentation. It would not be accepted.

Photograph courtesy of the History Trust of South Australia

Acquisition is the process of obtaining legal possession of an item for accessioning into a collection. It can be by three methods:

- donation—the process of acquiring an item whereby a donor gives that item or a group of items to the institution:
- purchase—acquisition involving the transfer of legal ownership by exchange of money. Many institutions will not have to deal with this method, because they do not maintain acquisition budgets; and
- beguest—acquisition involving an individual transferring title of an item to the institution upon his or her death, through a will.

When an object is offered to an organisation, information about the object should be gathered, to be used in assessing the item at an acquisition committee meeting.

#### **Acquisition committees**

An acquisition committee is formed to decide which items are suitable for the institution to acquire, based on the information gathered about the items.

In large organisations, the committee is usually made up of a group of curators representing the various interests of the organisation. In smaller institutions, the committee could be made up of three or four people who have a particular interest in the development of the collection. They should be prepared to do some networking and research to find more information about some objects.

The work of an acquisition committee is made easier if the museum, gallery or library has a written acquisition policy to help guide the committee's decisions.

#### Contents of an acquisition policy

The Jewish Museum of Australia in Melbourne has a lengthy acquisition policy, divided into sections which clearly set out the aims of collecting and areas to be considered. An outline of its policy is presented here, as an example of what can be included in an acquisition policy.

#### **Policy considerations**

It is possible to refuse an item on the grounds that it does not fit into the acquisition policy of the institution. It is important not to accept items that the institution cannot afford to take. Items which are too large to be stored, which are too badly decayed to be conserved, which already exist in the collection or have no significance to the museum, gallery or library, should be refused.

There are also some categories of objects your institution may decide not to acquire, for example, Aboriginal skeletal remains or secret or sacred objects. It is important to determine what you should not acquire, and ensure that this is noted in your policy statements.

The following is an example of a checklist for acquisition, used by the History Trust of South Australia.

- The object is of historical significance.
- 2. The object fits the collection aim of the institution.
- The object is relevant to the purposes and collection aim of the institution.
- 4. The object is in good condition.
- The object can adequately and appropriately be conserved, catalogued and stored.
- The intending donor has legal title to the object.

#### The Jewish Museum of Australia

#### **Acquisition Policy (outline)**

- 1. Aims and Philosophy of the Jewish Museum of Australia
- 2. Why the Jewish Museum of Australia Collects
- 3. What the Jewish Museum Collects
- 4. (a) Selection of Acquisitions: Ritual, Historical and Personal
- 4. (b) Selection of Acquisitions: Works of Art
- 5. Contractual Considerations between Donors and Museum
- 6. Accessibility of Collection
- 7. Deaccession Policy

Courtesy of Museums Australia Inc. Victoria, with permission of the Jewish Museum of Australia

- 7. The object is donated free of encumbrances.
- The object has clearly established provenance.
- Acquisition of the object does not unnecessarily duplicate material already in the institution's collections.
- 10. Acquisition of the object does not unduly compete with acquisition policies of other public institutions.

Points 6 and 7 above are very important. You should confirm legal ownership before an object can be accessioned into the collection.

#### Legalities

Once the decision is made to acquire an object, it is important to:

- ensure that the donor understands the implications of signing an Object Donation form, which ensures that legal title of the item is transferred to the institution;
- deal with the legalities, in the case of bequests and purchases, to ensure the institution can use the object as it wishes. For example, the object may come to you with conditions that limit its use or make it uneconomical to accept. It may be possible to negotiate to have such restrictions relaxed.

When objects are donated, every attempt should be made to find out who owns the copyright. Copyright is a complicated issue, and specific inquiries should be made either to the Australian Copyright Council (02) 9318 1788, or the Arts Law Centre of Australia (02) 9356 2566.

#### Assessment of significance

It is a fundamental fact of life that some things are more important than others. We are confronted by this continually. If you're going on holiday, what items will you pack? What will you leave behind? Why are some issues given greater prominence in the news?

Most people would also be aware that something which is significant to one group of people may have little or no meaning at all to others. For example, religious icons sacred to some cultural groups are largely irrelevant to others. Similarly, an object may have no significance to one museum yet be quite significant to another. A mouldboard plough, for example, is of no interest to a doll museum, but might be highly relevant to a museum of farm machinery.

Uniqueness plays a part in significance. If an object is duplicated in a museum collection, its significance is often diminished.

The significance of an item will vary depending on what it is and what collection it is in. And its significance will, in turn, have a bearing on how it is managed and its future treatment in the collection.

#### What is significance?

Significance will be defined differently by each museum, gallery and library; and considerable work has been done by organisations which have already arrived at their own definitions of significance.

It is helpful to look at some of the broad categories already developed by others, in order to get a clearer picture of the values you may wish to include in a definition of significance.

The Australian National Committee of the International Council on Monuments and Sites (Australia ICOMOS) adopted a charter, known as the Burra Charter, in 1979, which provides ethical and practical quidelines for the selection of built heritage sites for conservation and for the conservation treatment of those sites. The charter is based on principles that are accepted worldwide. In 1984 the committee adopted guidelines to assist in determining cultural significance:

Cultural significance is a concept which helps in estimating the value of places. The places that are likely to be of significance are those which help an understanding of the past or enrich the present, and which will be of value to future generations

In the Burra Charter, assessing cultural significance means determining the aesthetic, historic, scientific and/or social value of a place.

Definitions of significance can be very broad or quite narrow. The Burra Charter is designed to cover sites and monuments over the whole country and therefore has to be broad enough to encompass a range of local differences. Most museums and galleries will be concerned with collecting only in relation to their own locality or

their special area of interest. Their definitions of significance should reflect this.

It should be noted also that although the definitions of significance in the Burra Charter are designed to cover sites and monuments, they can be applied easily to other types of objects, and have been.

#### Significance and collection management

The assessment of the significance of objects has an important function in both the decision to acquire an object and in collection management. Knowing the significance of an item can help museums, galleries and libraries determine such matters as:

- whether they should acquire an item;
- whether an item should have conservation treatment and whether there is a high priority for this treatment:
- how it will be conserved—what information and attached wrappings, labels and dirt, must be preserved along with the item;
- whether the item will go on immediate display and whether there are any protocols to be observed in the way the item is displayed;
- whether the item should be displayed in a particular way to give heightened emphasis to particular features; and
- how much interpretive material is required.

Many specialist and local museums face the problem of large backlogs of items which have yet to be registered. Assessing the significance of each object in turn will help the museum decide whether it should be accessioned or become Special Purpose Material. This process should also determine whether or not the object should even be accepted into the collection.

The assessment of significance is not always easy; and it is even more difficult to make judgments about the relative significance of objects. Taking three objects at random from a typical local museum, how would you rank the relative significance of a police baton, a corn dolly and a fob watch? The answer may depend not merely on the objects themselves, but on their provenance or accompanying documentation, which provides supporting information about their manufacture and history of use. For a great many museum objects, significance is greatly enhanced if information exists on their history of ownership and use. Such

information may lead you to research the item further, in order to establish its significance relative to other items in the collection.

#### Assessment of the significance of acquisitions

As stated earlier, most museums and galleries will be concerned with collecting only in relation to their own locality or their special area of interest. It is worthwhile to clearly define that locality or special interest in order to:

- develop curatorial guidelines to assist in decisions about allocation of resources;
- develop an acquisition policy; and
- make it clear to other organisations what your interests are. This can lead to greater cooperation between organisations, and reduces the chance of clashes with other museums or galleries in the region. By networking you can be more aware of what other institutions are doing.

When determining whether or not to acquire an object, test each object against a list of curatorial criteria. Lists of criteria are often contained in the collections policy. There is no set number of criteria which each object should fulfil. It may be that only one of the criteria is met but, if the supporting evidence is strong enough, this might be sufficient to justify acquisition of the object.

Below is an extract from the History Trust of South Australia's acquisition policy document, which sets out its criteria for historical significance. These criteria are quite detailed and reflect this organisation's position as a large collecting institution. Smaller organisations may have less complex criteria.

Other factors in determining whether or not to acquire an object could include:

- its future display purpose;
- whether it is original or has been substantially restored;
- whether it will increase our understanding and knowledge of some aspect of our history if placed in association with other related objects, for example, if it were one of a group of devotional objects; and
- the size of the object.

#### **Historical Significance**

#### Discussion

An object, site, activity, idea or the like is considered historically significant if it is important to the history of South Australia.

The History Trust of South Australia describes the historical significance of an object according to the criteria set out below.

The practice varies between the History Trust's divisions. The National Motor Museum, for example, has a national rather than a South Australian focus.

The following criteria are always applied within the context of the History Trust and divisional aims and objectives as well as acquisition policies.

#### Criteria

- Objects which were designed locally a)
- b) Objects which were manufactured locally
- Objects which were used locally c)
- d) Objects which demonstrate important social or technological changes
- e) Objects reflecting creative communal or technical accomplishment
- Objects which are valued by sections of the South Australian community for social, economic, f) cultural, religious or spiritual reasons
- Objects which demonstrate important social customs q)
- h) Objects associated with important themes in the State's history, such as early non-Aboriginal settlement, political and social change and the impact of war
- Objects which are the first or last of a series i)
- Objects which are rare examples of once commonly available types (note: the History Trust j) distinguishes sharply between rare survivals of the once common and the rare survival of the always rare. The National Motor Museum rejects vehicles fitting into the latter category)
- Five additional criteria are applied where objects meet any of the above criteria: k)
  - extent of accompanying documentation i)
  - ii) condition of the object
  - iii) cost of preserving and storing the object
  - relationship to other objects which reinforce its significance
  - availability in collections elsewhere. v)

Courtesy of the History Trust of South Australia

### Objects significant to your collection

How do you decide what is significant for your collection?

Consider this. Imagine you are the curator of the Mythical Museum in a small coastal country town settled by Europeans in 1845. Mythical was originally a base for sealing and whaling and was once a busy shipping port with a railway line connecting it to the interior, a busy centre for agricultural exports. It is now a busy service community whose economic future will be strongly linked to tourism as well as to agriculture and other service industries.

Would you accept or reject the following items which have been offered to your museum? This example was adapted from a book by Ellis Burcaw (1975).

- 1. The wedding suit of the town's first mayor;
- a well-catalogued collection of North American birds' eggs;
- a stone reputedly brought back from the shores of Gallipoli by a veteran of World War I;
- 4. a header harvester in poor condition;
- 5. the uniform of a local Aboriginal soldier who served in World War I;
- 6. a small collection of carnival glass—there is no accompanying documentation;
- 7. the piano owned by a woman who taught music to children from the district for 30 years;
- 8. a BSA motor bike, restored by an enthusiast who brought it with him to the district two years ago;
- a quilt made by the local branch of the Country Women's Association to commemorate the town's 150th anniversary;
- 10. a meteorite collected from another State by a local identity 30 years ago.

Some suggested answers in numerical order are:

- 1. yes
- 2. no
- 3. no

- 4. no
- 5. yes
- 6. possibly for exchange
- 7. yes
- 8. possibly for exchange
- 9. yes
- 10. It would depend on how important the local identity had been in the town's history, and what other objects relating to him are held by the museum.

There are no right answers for any of these. Each object should be examined individually. What is important to one group of people, say with an interest in Mythical's civic history, may be considered insignificant and of no interest by another group with a passionate interest in sealing and whaling.

Some items could be worthwhile keeping as Special Purpose Material, which could be held for possible future exchange or for educational purposes. If acquiring an object is completely out of the question, it may be possible to refer the would-be donor to a more suitable museum or collecting institution.

## Objects not significant to your collection



A rare surviving example of a Cornish bier, used in funeral ceremonies at Moonta, South Australia, from the 1880s. Displayed at the Moonta Mines Museum.

Photograph courtesy of the History Trust of South Australia Once you have established your criteria for assessing significance, it won't be long before objects are identified as not significant. At this stage, the action you take will depend on whether the objects have been accessioned into the collection or not.

If the object has not yet been accessioned into the collection:

- it is important to explain politely to the potential donor why it is unsuitable for the collection. Everybody believes their object has value, whether monetary or sentimental. It is important when refusing an object to explain clearly and concisely why it does not fit within your organisation's acquisition policy;
- outright refusal to accept an object without explanation and giving no alternative may offend the would-be donor, so it is worthwhile offering some alternatives. There may be other museums, galleries or libraries which would welcome the object;
- remember that the potential donor may have other objects which are considered both significant and worthy of collection. An insensitive refusal may quarantee that those objects are never offered to your institution, or to any other; and
- when acquiring objects, it is vital to be aware that every item has an associated cost for storage and conservation. Accepting an unsuitable object will merely add to the financial burden of the institution, which is probably already stretching the dollar as far as it will go.

If an object is already in the collection and is judged to be not significant, it can be deaccessioned. Examples of objects deaccessioned because they were not considered significant to particular collections include a Lutheran Bible from the National Motor Museum and an AWA Radiola receiver from the South Australian Telstra Historical Collection.

The reverse situation can also occur—some objects at first appear to have little relevance to collections until their history is established. An example of this is a pair of pliers from the South Australian Telstra Historical Collection.

These examples are explained in more detail in the following section.

#### Examples of significance and decision-making

#### Lutheran bible from the National Motor Museum

The National Motor Museum aims to establish a collection of objects representative of Australian road motor transport history.



Lutheran bibles from the National Motor Museum. Photographs courtesy of the History Trust of South Australia

The Lutheran Bible was originally accepted when the museum was both a motor museum and a local history museum. Since then the collection policy was refined, so that the museum now specialises only in motor vehicles. At that time the Bible was offered to the nearest local museum, but was not accepted. The museum already had an extensive collection of Lutheran Bibles and was not prepared to add to their duplication.

When the original donor found that the Bible was not being displayed, he requested it be returned to him.

Obviously, the Bible does not meet the collection criteria of the National Motor Museum, and it has no significance to Australian road motor transport history. The museum feels it is entirely appropriate that it be returned to the original donor, and has recommended to its governing body that the Bible be deaccessioned.

#### **AWA Radiola receiver**

The South Australian Telstra Historical Collection has two main criteria to establish significance within that collection:

- technological objects designed and/or manufactured in South Australia; and
- objects with a direct relevance to the activities of Telstra and its predecessors in South Australia.

# AWA Radiola Reciever-Not as special as I look!

This attractive console radio receiver will not be taken into the collection because:

- it has no connection with the history of telecommunications in South Australia;
- there is no provenance or history of use information associated with this object;
- it has no connection with Telstra:
- it was designed and manufactured by AWA in Sydney; and
- it does not appear in official company catalogues, so may be a prototype rather than a production model.



AWA Radiola receiver.

Photograph courtesy of the History Trust of South Australia

# Pair of pliers—Thousands like me!

This 19th century pair of pliers is important to the collection because:

• it has established provenance, including the name of the lineman who owned it;



Pliers used in the construction of the Overland Telegraph Line.

Photograph courtesy of the History Trust of South Australia

- it was used in the construction of the Overland Telegraph Line, one of the collection's defined areas of interest; and
- there is archival information, including work details of the lineman and the Overland Telegraph construction in general, to provide a context for this otherwise undistinguished object.

# Assessment of significance and setting priorities

Objects which have been identified as significant within a collection should be given priority in terms of their conservation. At its simplest, this means ensuring that they are given preference when it comes to providing secure covered storage or display space. If a conservation survey shows that a number of objects require treatment, again, the most significant items should have priority.

Keep in mind that an object which was made locally but which may not have been widely used outside your district may be more significant to your museum than a similar object which enjoyed wider use. For example, there may have been a blacksmith or implement maker who built a successful local business but could not compete later with larger manufacturers. One of his ploughs could still be more important to your museum than another type used locally but manufactured elsewhere. If so, its conservation should have greater priority.

If you have a problem relating to the acquisition and significance of objects, contact a conservator. Conservators can offer advice and practical solutions.

# For further reading

Buck, Rebecca A., Jean Allman-Gilmore, eds. 1998, *The New Museum Registration Methods*, American Association of Museums, Washington DC.

Burcaw, G. Ellis, 1975, *Introduction to Museum Work*, The American Association for State and Local History, Nashville.

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- ICOMOS 1975, The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter), ICOMOS, Burra Burra, Australia.
- Speirs, Goeff, 1990, Collecting South Australian History, Community History Unit, History Trust of South Australia, Adelaide,
- Thompson, John M.A. et al., eds. 1992, Manual of Curatorship—A Guide to Museum Practice, 2nd edn, Butterworth-Heinemann, Oxford & Boston.

# **Self-evaluation quiz**

# Question 1.

Name three methods by which objects are acquired.

#### **Ouestion 2.**

Some of the main reasons why museums should assess the significance of objects for their own collections are:

- they may already be duplicated in the collections, or other museums in the locality or region may hold examples;
- objects of particular significance should be given priority for conservation work;
- some of them may be secret or sacred objects which can only be viewed, for example, by initiated Aboriginal men;
- it would be desirable to feature particular aspects of some objects in displays, for example, the weighted return on a stump jump plough;
- some objects need guite a lot of interpretation before visitors can properly appreciate them;
- f) all of the above.

# **Question 3.**

Assume that you are the curator of a local history museum in a small town from a region renowned for its wheat and barley farming. Would you accept

or reject the following objects offered to you as a donation?

- An operational Hornby Dublo model railway collection, acquired over many years by a local enthusiast.
- A Diamond T fire engine used in the district for many years.
- A mid-Victorian rosewood chair on cabriole supports, made in England and offered by a local resident who inherited it from her mother in Sydney.
- A Scottish niblick with a steel head, leather grip and hickory shaft.
- A forge and bellows used for many years by a local implement maker.

# **Question 4.**

If someone offers you an object which is not significant from the point of view of your collections, you should:

- acquire it anyway;
- refer it to your committee for consideration;
- refuse it at the time of the offer;
- refuse it after committee consideration, with a polite letter explaining why the object is not suitable for your collections;
- direct the would-be donor to a more appropriate museum or collection.

# Question 5.

An object offered for donation could be refused because:

- the object duplicates an object already in the collection;
- the object has no supporting documentation;

- the object is in so bad a condition that it would either be too costly to repair or not feasible to try;
- the object has no significance to the role of the institution;
- any of the above.

# Question 6.

A local museum should acquire an object if:

- it is rare now but once was in common use in the district:
- it is a rare survival of something that was always rare;
- it was made elsewhere but commonly used locally;
- there is very little known about the object, but it has value as an antique;
- it has no special significance but it is only

# Answers to self-evaluation quiz

#### Ouestion 1.

Answer: Objects are acquired through purchase, donation or bequest.

# Question 2.

Answer: f). Museums should be aware of the significance of objects before they acquire them. Particularly important objects should be given priority for conservation work; some may have restrictions on how they can be viewed, while others may need to have particular features emphasised, or require a great deal of interpretation so that their significance can be understood.

# **Question 3.**

#### Answer:

- a) No
- Yes, provided suitable storage can be found
- c) No
- d) No
- e) Yes

# **Question 4.**

Answer: b), d) and e). The decision to accept or reject should be made by the organisation, not by an individual within it. Potential donors are entitled to an explanation as to why the object offered is not suitable; and there may well be another museum which would be eager to acquire it.

# Question 5.

Answer: e).

#### **Question 6.**

Answer: a) and c). If it was in common use it represents an important aspect of local history, whereas if it was always rare it has little historical meaning. Even if it was made elsewhere, its history of use in the district is important. Objects of antique value may have no local significance whatever, and museum collections will soon become cluttered and inaccessible if they take the easy option and accept everything.

# COLLECTION SURVEYS AND CONDITION REPORTING

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# **Objectives**

At the end of this chapter you should:

- understand the value of examining and recording the condition of your collection and individual items in the collection;
- appreciate the use of collection surveys as a collection management tool;
- appreciate the need for condition reports to accompany travelling exhibitions;
- have a clearer understanding of what to report and the language to use in reporting; and
- understand the use of photographs and diagrams in condition reporting.

# Introduction

This section is essentially about the examination of collections, of the individual items in collections and/or the environments in which collections or items are kept. Examining items to determine their condition is an extremely important part of collection management.

There are two commonly used examination procedures are collection surveys and condition reports.

Collection surveys serve as a snapshot of the collection, or part of the collection, at a particular time. The level of detail of surveys will vary according to what you wish to know. The information gained can be extremely useful for planning for the future; and it should give you a very clear picture of the extent of the problems you face in maintaining and managing your collection. Knowing the extent of the problem and setting up a program of action to deal with it is far better than being taken by surprise.

Condition reports can be used as part of the survey process, if you are looking at individual items in detail. They are also prepared before conservation treatments, and are commonly used for travelling exhibitions and for loans. Before an item leaves your museum, gallery or library for a travelling exhibition or on loan, you should document its condition. If the item is going to a number of venues, it is wise to have condition reporting documents that travel with it. These forms should be filled out on arrival at and departure from each

venue. If a work is damaged, these forms will help in determining what damage occurred, how the damage occurred, and how to prevent the problem recurring. They can also assist in insurance claims.

# **Examining objects**

Examination of items can occur at any time, but there is much to be gained from a systematic approach.

Firstly, it is wise to examine items which you are thinking of acquiring. It may be that you decide not to acquire an item if its poor condition will make it a liability.

A good time to examine items and record their condition is when they are being accessioned. This way you have a record of their condition from the beginning and can compare this with future condition reports.

Surveys are also a fundamental part of developing a conservation plan for your collections. Conservation plans provide museums, galleries and libraries with a framework for managing the preservation and conservation of their collections. Collection surveys identify the conservation needs of the collections and can also identify any problems with storage and display environments.

Before you examine any items, decide on the information you want to know and the amount of detail you will find helpful. Planning will allow you to record relevant information, and reduce the risk of overlooking important points. It will also help you decide whether you want to examine every item or a representative sample of the collection.

The method of recording the information is equally important. Information resulting from the examination should be readily accessible for it to be of maximum use.

Planning ahead and preparing a suitable space for the examination will reduce the risk of damage. Don't examine items on cluttered desks or where there is constant activity—this is courting disaster.

Examination of collections can involve taking items off display; and it is therefore important to plan the timing of this activity, so that it doesn't coincide with peak visitor period and does happen when your most experienced staff and volunteers are available.

It is vital that during the examination of objects they are handled correctly and supported adequately, so that they are not damaged.

#### For more information

For more information on the correct handling of objects, please see Handling, Transportation, Storage and Display.

# Examination—getting ready

Proper preparation for the examination can make things much easier and allow you to be more efficient. Before examining items from your collection:

- ensure you have a clear, dedicated space with adequate lighting and a tabletop large enough for the job;
- the place for examination should be at the same temperature and relative humidity levels as the usual display or storage environment. If necessary, let the objects become conditioned gradually to the new environment;

# For more information

For more information on the effects of exposing objects to fluctuations in relative humidity and temperature, please see Damage and Decay.

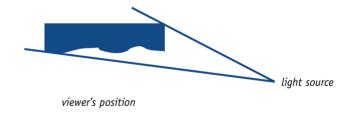
- lighting in the examination area is likely to be brighter than usually recommended for display, but this is necessary to see detail clearly. Objects should be exposed to these higher light levels for short periods only;
- plan how to move objects from their usual position to the examination area;
- consider gathering together some basic equipment;
- lamps or torches can be used for additional light and to provide directional or raking light;
- small magnifiers such as thread counters or photographic magnifiers are reasonably cheap and come in magnifications of about 8x or 10x. This magnification is perfect for routine examination of most items;
- if you have access to a light box, it can be very useful for examining paper, textiles and paintings. If the item is larger than the light box, you will still need to support the item fully;

- white cotton gloves will protect your objects from oils, salts and sweat from your hands. Clean, close-fitting surgical gloves are a good alternative to cotton gloves;
- pencils—not pens—are to be used for recording your findings;
- camera and film if you are planning to photograph items;
- a fine palette knife or stamp handling tweezers to help lift fine delicate materials;
- have your recording system planned and prepared before you commence. Use the same system for similar materials; and
- discuss the terms you will use to describe the items if a number of people are to be involved in the examination. People's use of language is very subjective, and this can lead to inconsistencies in the description of the condition of items.

# Lighting for examination

In addition to examining objects under good even light, it can be helpful to use:

raking light. This is light which is very strongly directional and emphasises surface characteristics:

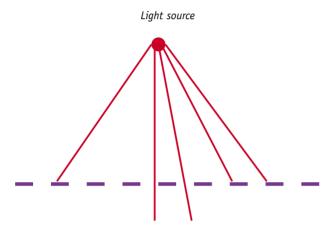




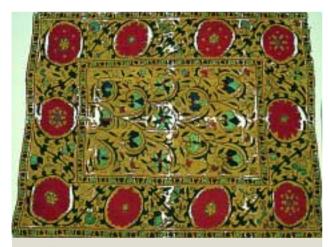
Raking light emphasise the uneven surface of this creased and damaged poster.

Photograph courtesy of Artlab Australia, reproduced with the permission of The South Australian Performing Arts Collection

- strong light reflecting off the surface of the object can also be useful in examination, because it emphasises detail and can help determine the surface texture, the continuity of surface coatings and the differences in ink qualities on a document, as well as distinguishing between surface and ingrained dirt: and
- transmitted light—for example—by placing an item on a light box will reveal splits, insect damage and small tears and areas of weakness in paper, textiles and paintings.
   Sometimes such damage is not clearly visible until the object is examined with transmitted light.



Viewer's position



This floral embroidery has been placed on a light box; the light transmitted through the object clearly shows areas of damage.

Photograph courtesy of Artlab Australia, reproduced with the permission of Ms M Gabb

Other diagnostic tools and techniques are available; however, they require specialist equipment, and many require specialist knowledge to interpret the results.

#### What to record

# Type of item

This could be:

- watercolour on paper
- 19th century dress
- wooden mask with feathers
- plough
- oil painting on canvas
- leather harness
- photograph
- certificate
- ceramic bowl
- book
- sword
- lace tablecloth
- cutlery
- bark painting
- acrylic painting on door
- Bakelite radiogram
- ivory miniature glass jug

#### Item details

- title of object, if any;
- name of artist, manufacturer, author;
- provenance, if known; and
- date and place of manufacture.

# **Dimensions**

These should be recorded in millimetres. For example, an A4 piece of paper is 297 mm x 210 mm. The convention is that height is recorded first.

The dimensions of three-dimensional objects are recorded in the order of height, width and depth.

For recording the dimensions of irregularly shaped objects, agree within the examining group on what dimensions you will record. For example, for a teapot you might record height, circumference, and distance from the tip of spout to the furthest point of the handle.

For flat-image items, further descriptive conventions can be useful. Where the height is greater than the width the work is said to be in 'portrait format'. Where the height is less than the width it is called 'landscape format'.

# Number of parts

The number of parts which go to make up the item. This could apply to:

- a set of books;
- a broken object;
- a chess set;
- a game;
- domestic appliances;
- cutlery sets;
- agricultural tools;
- bottles with bottle tops;
- furniture;
- sculpture;
- items in a time capsule; and
- a ripped-up photograph.

#### **Accessories**

For example:

- frames;
- mounts;
- instruction manuals;
- covers or cases: and
- belts, hat bands.

#### **Materials**

It is sometimes difficult to determine precisely the materials of which the object is made, so it is advisable to indicate where you are not certain. The convention for recording information you are unsure of is to enclose it in square brackets, for example, [silver gelatine photograph]. If precise identification is required, seek expert advice.

Examples of materials which can cause confusion include:

- paper and vellum;
- printing ink and handwriting inks;
- linen and cotton;
- watercolours and reproduction prints;
- acrylic paint and oil paint;
- silver gelatine prints and albumen prints;
- glass and ceramic;
- silk and some synthetic fabrics;
- leather and synthetics; and
- paint and ink.

# **Damage**

For example:

- losses:
- insect damage;
- tears;
- mould;
- creases;
- slack canvas;
- splits;
- discolouration;
- yellowed varnish;
- breakage;
- fading;
- foxing;
- accretions;
- stains;
- cuts;
- holes;
- rust stains;
- flaking paint/ink;
- distortion;

- damaged bindings;
- cracks:
- metal corrosion;
- yellowed sticky tape;
- brittle paper;
- cockling;
- abrasion:
- previous repairs;
- frayed edges;
- graffiti; and
- bronze disease.

#### **Examination Details**

Who examined each object and the date on which it was examined.

# Consistency in recording

If a number of people are to be involved in the examination, discuss the terms you will use to describe the items—so that your reports have some consistency. The sections in this package on the care of different types of objects will provide you with more terms for description of damage, as well as photographs of some typical types of damage.

Remember to use simple straightforward language in all reporting. Other people who use the reports in future may not have the same technical knowledge that you have.

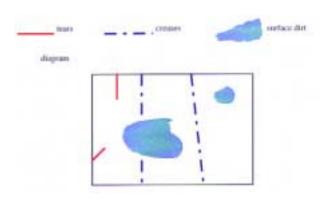
Terms such as good, fair, reasonable, poor are often used in condition reporting, but can create problems. What is poor to one person may be fair to another. If you use these general terms, try always to qualify them with a more detailed description of the object.

# Graphic reporting on condition

In addition to written reports on the condition of objects, diagrams and photographs can be used. These are especially useful to indicate the location of damage. Photograph or draw the objects from as many angles as necessary to record the damage.

When using photographic prints to record condition, you can attach an overlay of Mylar to the photograph and, using permanent markers, note damage on the overlay sheet. This is especially helpful for consistency of recording. The verbal description together with the graphic recording give a much fuller picture of your findings.

Provide a key to the symbols you use in the diagram or on the overlay. For example:



# Producing an overlay

To produce an overlay:

Take a piece of Mylar taller than the photographic print, and fold the Mylar at the top. Attach the Mylar fold-over to the back of the photographic print with double-sided tape, and then note down the condition on the face of the Mylar.



Take a piece of Mylar taller than the photographic print and fold the Mylar at the top. Attach the Mylar fold-over to the back of the photographic print with double-sided tape and then note condition on the face of the Mylar.

# **Collection surveys**

Collection surveys have the potential to provide an enormous amount of information vital to planning the management of your collection. But to be truly effective, surveys require proper planning. They take time, and require a good set-up for the safe examination of the objects.

Before commencing a survey, think about what you want to find out. This will determine the level of detail and the scope of the survey.

Do you want to know:

- how your storage and display environment compares to recommended levels;
- the details of the condition of all items in your collection:
- the details of the condition of one class of objects within your collection;
- the details of the condition of a sample of one class of objects in the collection;
- what you have in the collection;
- how many of each class of item you have in the collection:
- which items within the collection are priorities for treatment;
- what storage needs upgrading;
- whether the building is sound or if it needs maintenance:
- what sections of the display need upgrading;
- priorities for salvage in a flood or fire?

Or do you just want a general overview of the condition of the whole collection?

Once you have established the level of detail and the scope of the survey, you will have an idea of the extent to which it will disrupt normal operations. You will then be able to decide when and how to carry it out, and where to set up the examination area, if one is needed.

Allow time for reporting after all examinations are complete. A survey is most effective if the

findings are used as a basis for planning. They may be used in the collection management plan, the building maintenance plan, the museum, gallery or library improvement plan, in a disaster response, a risk management plan, or in developing a conservation plan.

In view of this, a survey is really not complete until the findings have been written up, conclusions drawn and recommendations put forward.

Most importantly, use the information, don't just file it away.

# **Survey forms**

There are no predefined rules for carrying out a survey correctly. You are better off setting up your own structure. Once you have decided what information you want to gather, design a form to record that information. Using such a form, you are less likely to forget some of the details you have to record for each object.

The form on the right is provided as a guide only. It was designed by Helen Halley, a paper conservator at Artlab Australia, for a very specific purpose: a survey of the condition and previous treatment of works of art on paper owned by Carrick Hill in South Australia.

# **Carrick Hill Survey of Paper Works Summary Sheet**

Accession No.			
Name of Artist			
Name of Work			
Type of Work/Medium			
Existing Storage Display	System/Location		
Dimensions			
Accessories			
Condition			
Proposed Treatment Sur	nmary		
Troposed Treatment Sur	minary		
Treatment Steps	Hours	Materials	Cost Estimate
Treatment Priority			
Con No.			
Previous treatment	☐ Yes ☐ No	Year	
Recommendations			
Signature		Dat	e

# **Condition reporting**

# **Condition reports**

Condition reports are usually produced after a detailed examination of objects. They need to be clear and concise. They may be the result of a collection survey.

They are most often produced as documentation to accompany travelling exhibitions or loan items. If items are going to several venues, it is wise to have condition reporting documents that travel with them, filled out at each arrival and departure point. No-one anticipates confrontation over responsibility for damage. But damage does occur, and it is important to have an accurate record of the existing condition, including damages and repairs, before the items leave.

Condition reports are often accompanied by some graphic condition report such as a diagram or photograph with an overlay.

It is advisable to keep copies of condition reports. Documents travelling with exhibitions can become lost or separated from the objects they are supposed to be with.

Some samples of condition report forms used in travelling exhibitions are shown following.

The first—3 pages—is a very general one which can be used to cover a broad range of items. The second—2 text pages and a diagram page—is one commonly used for paintings. The diagram page is used to note damage to frames. The example supplied has been filled out so that you can see how the form is to be used. Marks denoting damage are usually colour-coded.

They are provided as a guide only. Use them as they are, or as a basis for designing your own forms.

Crate Number:	(your logo)	
Control Number:	(your address)	
Exhibition:	(phone number)	
Condition	Report	
Origin:		
Artist:		
Title:		
Owner:	Accession Number:	
Dimensions: H:		
mm (Actual Size) W:		
D:		
Description of Item:  Accessories:  Instructions		
Do not remove from frame or exhibition stand or treat	t work without permission from:	
<ul> <li>Please ensure installation teams comply with special installation instructions when setting up, dismantling and repacking—handle with white cotton gloves at all times.</li> <li>Please check the work against the condition report on page 2 and the accompanying photograph overlay. Record any changes on page 3.</li> </ul>		
Page 1		

Exhibition:	Crate Number:
Artist:	Control Number:
Title:	
Brief summary of condition of work	on departure from owners:
Examined by:	Date:
Note: Specific observations are indicate	ed on the accompanying photograph overlay.
Overlay key:	
Condition on return:	
Chindibion.	
Changes in condition:	
No changes apparent	
Examined by:	Date:
	Page 2
	raye 2

chibition: Crate Number:	
rtist:	Control Number:
tle:	
VENUE A:	VENUE A:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:
VENUE B:	VENUE B:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:
VENUE C:	VENUE C:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:
VENUE D:	VENUE D:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:

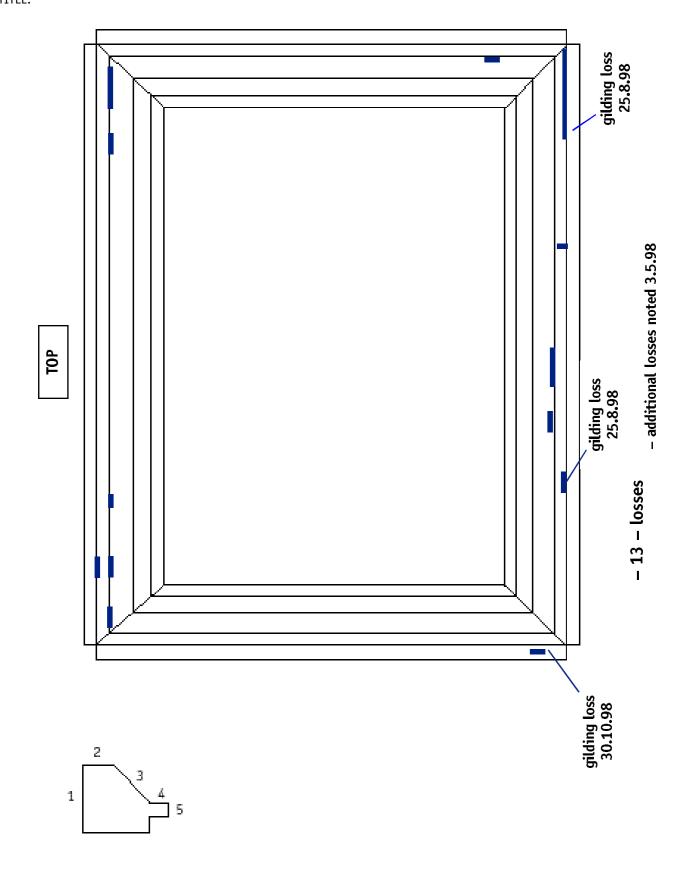
The total number of pages used in the Condition Report is determined by the number of venues for the travelling exhibition.

CATALOGUE NUMBER:	CRATE	NUMBER:		
TRAVELLING	${\color{red}\textbf{CONDITION}}$	REPORT—	- PAINTINGS	
EXHIBITION:				
ACCESSION NUMBER:				
ARTIST:				
TITLE:				
DATE:				
MEDIUM:				
DIMENSIONS:				
PAINTING SUPPORT				
1. Tension/strength:				
2. Surface plane:				
3. Damages:				
AUXILIARY SUPPORT				
PAINT FILM				
4. Craquelure pattern:				
5. Cleavage/cupping:				
6. Losses:				
7. Scratches/abrasions:				
SURFACE				
8. Appearance:				
9. Surface dirt:				
10. Abrasions/damages:				
FRAME				
11. Rigidity:				
12. Splits/cracks/losses:				
13. Gilding/paint losses:				
FITTING				
14. Secured by:				
15. Backboard:				
16. Glazing:				
17. Alignment:				
GENERAL COMMENTS:				
NAME:	DATE:			<b></b> .

ANY CHANGES IN CONDITION SHOULD BE NOTED.	
VENUE A:	VENUE A:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:
VENUE B:	VENUE B:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:
VENUE C.	VENUE C.
VENUE C:	VENUE C:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:
VENUE D:	VENUE D:
Arrival	Departure
New damage:	New damage:
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:
VENUE E:	VENUE E:
Departure	Departure
Now damage:	New damage:
New damaye.	new damage.
No apparent change in condition:	No apparent change in condition:
Conservator:	Conservator:
Date:	Date:

# **TRAVELLING CONDITION REPORT - PAINTINGS**

ARTIST: TITLE:



If you have questions about how to conduct a collection survey or want more information about condition checking, contact a conservator. Conservators can offer advice and practical solutions.

# For further reading

- Allen, Errol J. 1992, Condition Reporting and Conservation Guidelines for Touring Exhibitions, National Exhibitions Touring Structure for Western Australia, Perth.
- Kelly, Sara 1994, Travelling Exhibitions—A Practical Handbook for Non-State Metropolitan and Regional Galleries and Museums, National Exhibitions Touring support for Victoria, Melbourne.
- Richard, Mervin, Mecklenburg, Marion F., Merrill, Ross M., eds. 1991, Art In Transit—Handbook for Packing and Transporting Paintings, National Gallery of Art, Washington D.C.
- Stolow, Nathan 1987, Conservation and Exhibitions: Packing, Transport, Storage and Environmental Considerations, Butterworths & Co., London.
- Thompson, John 1994, Manual of Curatorship: A Guide to Museum Practice, Butterworths, London.

# Self-evaluation quiz

#### **Question 1.**

Examination of objects is undertaken to:

- a) record their condition from the beginning to enable future comparison;
- b) build a history of items in your collection;
- c) determine whether you want to acquire them;
- d) identify the conservation needs of your collection and assist in planning;
- e) all of the above.

# Question 2.

Which of the following should be determined in advance when carrying out a survey?

- a) The depth and scope of the survey.
- b) The outcome of the survey.
- c) Where and when the survey will take place.
- d) The descriptive terms that will be used in reporting.

#### Question 3.

Condition reports are used:

- a) as part of the survey process when looking in detail at an item;
- to accompany items on loan or in travelling exhibitions;
- c) to determine how damage occurred to an item whilst on loan, or with a travelling exhibition:
- to assist with insurance claims if an item is damaged;
- e) all of the above.

#### Ouestion 4.

Your record should include:

- a) the number of parts that go to make up the item:
- b) broad statements using language and terms that match your technical knowledge;
- a note of any accessories of the object, including frames, mounts and instruction manuals;
- d) only terms such as good, fair, reasonable and poor;
- e) details of any damage to items;
- f) the title of the object, name of artist, date and place of manufacture.

# **Question 5.**

Why is the use of photographs and diagrams important as part of condition reporting?

- They indicate the location of the damage to a) the object.
- Together with the written report, photographs and diagrams help give a fuller picture of your findings.
- They improve the presentation of your report.
- You can attach an overlay of Mylar to the d) photograph and use permanent markers to note the damage on the overlay sheet.
- e) They allow you to produce a visual record from a number of different angles.

# Answers to self-evaluation quiz

# Question 1.

Answer: e).

# Question 2.

Answer: a), c) and d).

# Question 3.

Answer: e).

# Question 4.

Answer: a), c), e) and f). The terms good, fair, reasonable and poor can be used if it is clearly understood what you mean by them. It is better to give detailed descriptions using language and terms that match your technical knowledge than to be too vague or too complicated in the descriptions.

#### Question 5.

Answer: a), b), d) and e). If you've answered c), this is not a vital consideration, but may be useful in some circumstances.

# COUNTER-DISASTER PLANNING

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# **Objectives**

At the end of this chapter you should be able to:

- conduct a hazard assessment for your own collection;
- decide on the appropriate materials required to assemble a disaster bin, and implement preventive procedures;
- prepare a counter-disaster plan for your organisation;
- understand the need to assess the extent of a disaster, and quickly assemble the resources you need to deal with it;
- produce a recovery plan for a disaster;
- implement safe practices for the reaction phase;
- prevent mould outbreaks and cope with them if they occur;
- understand the need for efficient and effective disaster recovery;
- appreciate the need for training, so that response and recovery teams can work effectively;
- select and identify items and formats that need specific attention, should a disaster occur: and
- implement drying procedures.

# Introduction

Everyone is familiar with the damage that can result from fire, flood and earthquake. Every year, collections all over the world are affected by such disasters and, more commonly, by water from leaking roofs, burst pipes and overflowing gutters. No institution is immune.

In addition to the well-known natural disasters or acts of God such as cyclones, earthquakes, volcanoes and floods, there are those caused by accident or by criminal acts, including vandalism, arson and bomb attack. Some are caused by carelessness—such as smoking in the building, leaving doors or windows open, leaving taps on in washrooms, kitchens and laboratories—and, finally, there are those related to building maintenance or

extensions. In addition to leaking roofs, burst pipes, and overflowing gutters and downpipes, these include blocked drains, air-conditioning failure, faulty sprinklers and faulty wiring.

Despite this long list of potential hazards, many custodians and collection managers remain unaware of the role they can play in disaster prevention and preparedness.



This personal computer melted during a fire in an office.

Photograph courtesy of Artlab Australia

# **Counter-disaster management**

Counter disaster management is about:

Trying to prevent disasters by being aware of the risks to collections and acting to minimise them.

Being prepared for the possibility of a disaster by maintaining:

- current contact numbers and addresses for emergency services;
- lists of people you can call on in an emergency;
- supplies of materials and equipment; and
- lists of suppliers for equipment and materials.

Knowing how to react to a disaster and knowing how to recover from a disaster as soon as possible.

Advanced planning for potential disaster can prevent damage to collections and make the difference between temporary loss of service and catastrophe. A written counter-disaster plan is the key to fast recovery because it provides the organisation with an immediate response mechanism. With proper planning, damaged materials can be salvaged and treated successfully, losses are dramatically reduced and service is resumed in a timely matter.

Being prepared and implementing preventive practices is an integral part of preservation.

# **Summary of important points**

Advanced planning for potential disasters involves:

- hazard assessment;
- implementing preventive practices;
- developing and documenting a counterdisaster plan; and
- being familiar with reaction and recovery procedures.

Careful preparation will prevent or minimise damage occurring or, if unavoidable, it will enable damaged materials to be salvaged and treated successfully, dramatically reducing losses and getting services back into operation promptly.

The following points are worth remembering.

Disasters do happen. Many are predictable, and therefore avoidable.

Some 95% of disasters result in water damage.

Fire will result in water damage from sprinklers or fire hoses.

The most common causes of water damage are burst or leaking pipes, leaking air-conditioning systems, and blocked drains or gutters.

Disasters can be prevented by identifying hazards and taking appropriate action.

The extent of a disaster can be minimised by planning, regular rehearsals and the presence of well-equipped counter-disaster bins.

The success of recovery rests on the preparation of a recovery plan, and the organisation of the recovery team.

The extent of damage should be documented, both in writing and photographically.

Freezing prevents mould from growing; but not all materials can be frozen safely.

It is important to stabilise the affected area before returning dried books and objects to shelves.

# Prevention

Prevention begins with a hazard assessment. It involves listing all potential hazards in the building itself and in the local environment, and assessing whether the risk is high or low. When you know what potential hazards and risks exist, you can take steps to minimise the risks where possible, and to protect your collections in the event of a disaster.

As risks are identified, problem areas should be marked on a map of the building; and where possible, action should be taken to improve the situation. The following list may help in hazard reduction;

- effective building security;
- protective storage of flammable materials;
- selection of fire-resistant furnishings and fixtures:
- storing items in boxes and containers;
- cleanliness and tidiness;
- smoking restrictions:
- installation of smoke and heat detectors;
- installation of sprinkler systems;
- regular servicing of electrical and airconditioning systems;
- liaison with the fire brigade;
- sensible work practices;
- unplugging electrical equipment when it is not in use:
- training and awareness programs for staff, volunteers and the local community;

- examining incoming collection materials for mould or insect activity; and
- storing collection items at least 100 mm off the floor.

Once you have assessed the potential hazards, the next step is to prepare.

# **Preparedness**

While you can take action to minimise potential hazards, it is practically impossible to prevent disasters happening. So it is important to be prepared—to minimise the extent of the damage.

# Preparedness involves:

- preparation of a counter-disaster plan;
- purchase of materials and equipment for dealing with the first stages of reaction and recovery;
- establishing a team of people prepared to be called on in an emergency; and
- training them so that they are familiar with procedures for responding to a disaster.

# Counter-disaster plan

The counter-disaster plan incorporates all the information you may need if a disaster occurs, including:

- day and night emergency contact numbers;
- names, addresses and contact numbers of people available to help;
- addresses and contact numbers of suppliers of equipment, materials and services that may be needed:
- an inventory of holdings, including a list of priorities for recovery;
- details of insurance policies;
- floor plans;
- initial response procedures;
- documentation procedures; and
- recovery procedures.

# Materials and equipment

Once the counter-disaster plan is in place, the next step is to purchase equipment and supplies for use in disaster recovery. While a cupboard is a suitable storage space, mobile disaster kits or bins are commonly used. The purpose is to have ready access to resources for dealing with minor water damage.

Disaster stores are also commonly found in larger organisations. These are usually rooms dedicated to holding more extensive supplies for disaster recovery, including stock to replenish the disaster bins. The choice between bin or store, location and number will vary according to your needs.

# A practised team

The third step in preparedness is getting some practice before the event, so that the procedures you have developed become second nature.

All staff should be trained in the use of fire extinguishers. All people likely to be available in the event of a disaster should also be trained in handling and treating different types of wet material. Running a simulated disaster is an effective way of checking how well prepared your organisation is.

It is advisable to form a disaster response team: to respond when a disaster is reported, to assess the situation and plan the recovery phase. Many tasks must be undertaken before and during the recovery, so it will be important to assign team members specific responsibilities.

In the event of damage to the collection, you need to form recovery teams as well. These are often made up of volunteers, led by a member of the disaster response team. They undertake the recovery procedures.

If you have only a few people to call on, or if budgets for materials are very tight, regional networks should be established with similar organisations so that you can pool scarce resources. Networks should also be established with services to help in the event of a disaster. These include the local fire brigade, regional emergency services and companies with freezing facilities, such as butchers or ice works. You need to explain to them the emergency procedures outlined in your counter-disaster plan.

# Reaction

When a disaster occurs, a number of steps must be taken. In all circumstances, the safety of people has priority over the collection.

# CAUTION:

If you are unsure about whether it is safe to enter the disaster site or not, evacuate all people and ensure that no-one can enter until the local fire brigade or emergency services centre gives the clearance to enter.

A simple document outlining initial response procedures should be included at the front of your counter-disaster plan, and copies kept near your phone. The following is one example of initial response procedures when water is threatening or has affected the collections:

# Before entering the area

Contact the person responsible for security include—contact names and numbers.

Assess the situation by asking these questions:

Is it safe to enter the affected area?

Can the water be stopped or diverted?

Can the collection be protected where it is?

Can the collection be moved to a dry location? and,

Can a start be made on drying and cleaning up the wet areas?

If the collection has been affected, contact a recovery coordinator or a recovery specialist.

#### **Documentation**

It is essential to document all action taken before. during, and after the recovery phase. Documenting a disaster means having a written and photographic record of the disaster. This is essential for:

- insurance records and claims;
- assisting in the recovery phase;
- evaluating the success and shortcomings of the counter-disaster plan; and

keeping track of the locations of the objects.

Documentation should include written details and photographs of the:

- cause of the disaster;
- number and value of items damaged;
- number and value of items replaced:
- number and value of items repaired;
- cost of maintenance of the affected area:
- amount of staff time expended in the recovery operation; and
- cost of disaster supplies.

# Recovery plan

Before commencing the recovery phase, produce a recovery plan. This documents the order in which you are going to recover damaged items, and how you propose to treat them. Options may vary from simply moving items into a drying area, to packing them for freezing. Unlike the counter-disaster plan, the recovery plan cannot be prepared ahead of time. It will vary, depending on the situation.

Having documented the recovery plan, it is time to assemble the recovery work-teams and brief them on the tasks to be done. In addition to clarifying your expectations of them, it is important to cover safety issues.

#### Recovery

# Recovery includes:

- sorting: grouping materials by type after the disaster. Materials are stored by the type of damage, for example, water, fire; by the extent of damage, for example, wet, damp; and by the type of material, for example, photographic, textiles;
- documenting: maintaining a written record of the original location of items, where they are moved, and what treatment they are to undergo. The aim is to allow prompt retrieval of an item, should it be requested, and to keep a record for insurance purposes of all materials disposed of;

- drying: air-drying wet material by removing visible water, and placing items in an area which has a good supply of clean, cold, moving air. Fans are often used to stimulate air movement:
- cleaning: removing mud, dust or dirt from the surface of an item:
- rehousing: replacing damaged boxes and folders;
- repairing: the application of treatments to make a damaged item structurally sound; and
- relabelling damaged items: replacing damaged or missing labels. Labels are often detached during a disaster, and/or the inks run and become difficult to read.

The recovery operation must be planned to suit the needs of the particular situation and of the damaged materials. The recovery operation is not complete until all items are back in the storage area and available for use.

Ideally, the recovery operation begins after the disaster has been contained. However, where particularly vulnerable items are damaged, or at risk, it may be necessary to begin the recovery operation before this point. Consider the following situation. A water pipe has burst and water is spraying over the part of the storage area in which costumes are held. As the costumes are likely to have soluble dyes, you may decide to move the costumes which are in the vicinity of the water before turning off the water. It depends on how easy it is to turn off the water supply.

Recovery follows the preparation of a recovery plan. Usually there is more than one type of salvage procedure that can be employed, depending on the nature and extent of the disaster. Recovery may take a few days, or even months, before it is complete, depending on the extent of the disaster. In examples like the Florence floods of 1966, in which vast numbers of rare and irreplaceable books and manuscripts were affected, the recovery phase has still not been completed. It is advisable to seek advice from a recovery specialist when recovering from a disaster.

# Recovery priorities

Ensure that the disaster area is cordoned off to prevent sightseers from getting underfoot, and to secure the area from pilfering. Security must not be overlooked, because there can be many people other than staff in the building. It is very easy for some unscrupulous person to walk out with items from the collection. Make sure that a register is set up to record the name and associated company of every person who enters the building, and secure unaffected areas so that people cannot wander through them.

After preparing the work areas for sorting, packing and drying, the different materials should be treated in order of the priority lists set out in your recovery plan, and depending on the extent of damage and their sensitivity to water.

It is usual to consider the wettest material first, and to look for items which may have water-soluble media or which may suffer structural damage from swelling—as is the case for canvas paintings and furniture. With mixed collections such as those often found in historical societies, it is important to identify the items most sensitive to water. Seek assistance from a recovery specialist on this matter, because they will vary with each collection.

# **Recovery procedures for different materials**

It should be noted that 95% of all disasters result in water-damaged materials, and mould will develop within two to three days in a warm, humid environment. Fire will result in water damage from sprinklers or fire hoses; earthquakes and tremors often cause water pipes to crack and/or burst. So the emphasis in this chapter is on recovery procedures for water-damaged items. Tips on the treatment of items affected by fire and smoke are also included. The typical types of damage vary, depending on the materials.

You should also note that water is usually not clean, so there may be accompanying staining. Water from sprinklers is usually rusty; and floodwater may contain mud, oil and sewage.

Different types of materials have different drying requirements. The recovery procedures for electronic media, microforms, colour photographic materials, black and white photographic materials, glass plate negatives, and historical photographic materials differ quite dramatically from those for paper-based items such as documents, books, maps, plans and posters. See Procedures for the recovery of particular types of materials later in this chapter.

# Disasters in Australia's climatic zones

# Arid

This climate is generally very dry, however, in arid areas, it is often very hot during the day and very cold at night. This wide fluctuation in temperature is matched by wide fluctuations in relative humidity.

It is important to note that:

- fast drying of wood and items made from mixed materials can cause splitting and warping;
- water affected items are at risk of mould growth; and
- mould growth can be controlled by reducing humidity and increasing air circulation.

Suppliers of humidifiers should be included in the counter-disaster plan under emergency contacts and suppliers.

# **Temperate**

A temperate climate is considered a moderate climate, however, temperate climates tend to have a greater range of temperatures than tropical climates and may include extreme climatic variations.

When preparing for disasters in temperate zones it is important to note that routine building maintenance, including clearing drains and gutters is necessary to prevent water entering the building when it rains heavily.

Remember mould grows in temperate climates. If the collection does suffer water damage, the climatic conditions will need to be considered. If the temperature is high, the collection will be at risk from mould growth. If the relative humidity is high, the drying process will be slower, increasing the likelihood of mould growth.

# **Tropical**

These climates are characterised by heavy rainfall, high humidity and high temperatures. Heavy rainfall will put more strain on gutters and drainage so it is essential to ensure that they are checked and cleaned regularly.

If the collection suffers water damage in tropical regions it is important to note that:

- mould thrives readily;
- metallic components are prone to corrasion;
- high humidity will slow the drying process; and
- air circulation is critical in preventing mould growth when the relative humidity is high.

Suppliers of dehumidifiers, fans and desiccants should be recorded in the counter disaster plan under emergency contacts and suppliers.

Freezing can be used to control mould growth if large quantities of paper or textiles have been affected by water. Note: Do not freeze photographic materials.

# MORE ABOUT COUNTER-DISASTER PLANNING

# Hazard assessment

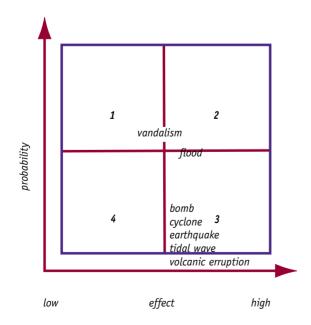
Hazard assessment involves a survey of potential hazards, to identify possible risks or threats to the building and its collections. It includes identifying hazardous materials such as the chemicals stored in cleaners' storerooms and in photographic laboratories.

#### Hazard assessment model

Models like the following can be useful in hazard assessment:

- the first step is to identify all potential hazards:
- the next step is to assess the probability of each hazard on the vertical scale, then chart the possible effects to the organisation on the horizontal scale; and
- the final step is to bring this information together, and plot it on a grid;

The example below illustrates this process for a small country museum in Australia. The most likely hazards in this example are bushfires and vandalism.



Bushfires could wipe out both the collection and the building, while vandalism could result in

breakage or in fire, so it could fall into either category.

In this case, the building is on a hill in an area not known to flood; but the box guttering is known to block up and cause leaks in heavy rain. if not cleared out regularly. So the probability of flood from the overflowing gutters is guite high and, if not detected quickly, could result in extensive damage to the collection.

Bombs, cyclones, tidal waves, earthquakes and volcanic eruptions are not likely in this area; but the effects of any of these would cause considerable damage to the building and collection, if not total loss.

These hazards are charted according to their probability and the effect they will have on the collection or the building.

Bushfires and vandalism are of most concern: but it must be remembered that risks don't remain static—they vary as conditions change. For example, the risk of fire is much greater when building modifications are taking place, than during normal operations.

Hazard analyses will produce different patterns for different organisations. Factors such as geographic location, building construction, the political environment, the number of staff, the existence of overcrowding and use patterns will all have a bearing on the results of the analysis.

Using the hazard analysis, preventive measures can be put in place to minimise the likelihood of some disasters, or at least the probable effects. In the example discussed above, knowing that the box gutters are likely to cause a flood in the museum could result in the following procedures:

- replacing the gutters with a more appropriate style of guttering; or
- alternatively, cleaning out the gutters regularly, perhaps even monthly, and checking the building and the collection after every heavy rainfall;

# Some causes of damage in a disaster

The following lists of possible hazards may help you in identifying hazards in your museum, gallery or library.

# Possible hazards

Water is a common cause of damage to collections and may arise from:

- rain;
- hail;
- leaks;
- rising damp;
- burst pipes;
- open streams and rivers nearby;
- damaged fire hoses;
- sprinkler malfunctions;
- underground streams beneath the building(s);
- overflowing sinks in kitchens and washrooms.

Mould growth is evidence that water has entered the area or that humidity has been high. In addition to checking for potential sources of water, look for places where water may enter, including:

- access points to roofs and basements;
- windows:
- skylights;
- basements;
- qutters;
- down pipes;
- drains: and
- roofs.

Fire is also a major threat. Fires can be caused by:

- electrical wiring and equipment
- chemicals—for cleaning and photography;
- fuel spillage;
- gas leak;
- arson;
- lightning; and
- air-conditioning systems.

Any spark may cause a fire. Most collections contain highly flammable materials such as paper, cotton and wood.

#### Other hazards are:

- dust, which may be transmitted through airconditioning and from any building work;
- air-conditioning malfunction;
- structural damage caused by earthquake, earth tremor, accident or inherent defect:
- building alterations or maintenance—the time when buildings are most vulnerable and special care should be taken;
- insects and rodents;
- bombs;
- vandalism;
- demonstrations or other disturbances;
- alternative building uses—such as leasing out facilities for functions—which are potentially damaging; and
- restaurant, exhibition and other specialist functions.

# Water

Flood, fire, leaking roofs and burst pipes are all common causes of water damage. In many cases the water will be dirty, so that recovery involves cleaning as well as drying. Floodwater usually contains mud, oil and other impurities. Sprinkler water can be black, and water from pipes is often rusty.

In addition to wetting and soiling, water damage introduces the risk of mould. The only materials not at great risk from mould are glass and metal. Because mould can grow within 48-72 hours under warm, damp conditions, drying should begin within the first 48 hours after the objects become wet.

Other forms of damage associated with water are staining, warping, splitting, rusting, and items sticking together or falling apart because glues have been reactivated by the moisture.

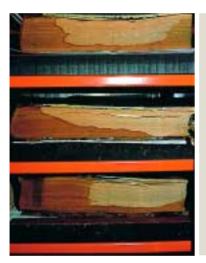
Stains can be caused by water-soluble inks and dyes that might be part of the item or an adjacent item.

Water causes paper, canvas, textiles and wood to swell. This contributes to the warping of book covers, detachment of spines and covers, and the splitting of wooden furniture.

Canvas and panel paintings will also swell if wet, which puts stress on the paint layers. They must be dried under controlled conditions to prevent the wood panels from splitting and the paint from cracking and flaking.

Coated and glossy papers and photographs will stick together if not separated during drying; and photographic emulsions may actually separate from prints and negatives if they are left wet longer than 48 hours.

Metals may begin to corrode or rust, if left wet or left in a humid environment for too long.



These thick books absorbed water when the roof leaked. Prompt action to dry the books prevented mould growth and distortion of the book structure.

Photograph courtesy of Artlab Australia



Wood can be badly damaged by water. Care must be taken to control the drying of wood, to ensure that it does not split or warp.

Photograph courtesy of the State Library of New South Wales

# Mould

Mould damage can result from exposure to water in a disaster, or from high humidity levels—greater than 65%RH—in the storage environment. Wet material will begin to grow mould within 48-72 hours, perhaps earlier if the temperature is above 22°C.

In addition to the visible damage in the form of permanent stains on paper, cloth and leather, mould will cause physical damage to the structure of these materials. The affected area becomes powdery, and will disintegrate if handled.

To prevent or minimise further mould growth, first control the environment. The temperature and relative humidity in the disaster area should be stabilised; ideally, the area should be kept at 20°C and 50%RH. You may need to install dehumidifiers and fans—cold cycle only—to help circulate the air. Recovery specialists should be contacted for further advice.

Mould-damaged items should be removed from the storage area as soon as they are identified. Every effort must be made to minimise the chance of other items becoming affected. There are several options for the treatment of mould-affected material.

Mould-damaged materials have traditionally been fumigated to kill the mould. But most fumigation chemicals used in the past are either extremely toxic or ineffective, and are no longer recommended for use. Check with a recovery specialist about the suitability of using specific fumigants, because some can cause harm to certain materials. It is critically important to prevent mould from growing.

Freezing will not kill mould, but will prevent further growth, giving you extra time to seek further advice.

An alternative is simply to vacuum the material, stabilise the humidity in the storage area and continue to monitor it for further outbreaks.

Remember that mould growth is retarded by reducing the humidity to 60%RH or less, and by ensuring good air circulation.



Mould growth on the backing of a map. Photograph courtesy of the State Library of New South Wales



An outbreak of mould can be seen in this flood-affected showcase.

Photograph courtesy of the Australian Museum

Regardless of which option you choose, mouldaffected material must be cleaned before returning it to storage. Ensure that you protect yourself by wearing a dust mask, gloves and protective clothing. Work in an open area, and brush the mould and dirt into a vacuum cleaner. The storage area should also be thoroughly cleaned and disinfected before materials are rehoused.

Your plan needs to set out clearly how you will deal with mould, and should list fumigation companies to contact in an emergency.

#### For more information

For a comprehensive guide to dealing with mould, see Mold, by Lois Olcott Price. For more information about moulds, please see Biological Pests in Damage and Decay.

# Fire- and smoke-damaged materials

# Treatment of fire-damaged material

When moving fire-damaged materials, wear cotton gloves, and be careful not to allow ash to mark materials any more than it has already.

Wrap or interleave items as you remove them from the shelves—they may be brittle and need support.

Place materials on a trolley and move to the designated disaster-recovery work area.

#### Charred material

Little can be done for badly burnt materials.

They should be handled very gently, because they are very fragile.

Cotton gloves must be worn at all times when handling charred materials. They prevent soot being permanently absorbed by paper, leather and textiles.

Charred items should be placed in boxes or between sheets of cardboard, and wrapped in any clean, unprinted paper for protection.

If they are suffering from the effects of only smoke and ash, restoration treatment could just include soft brushing.

It is important to note that sooty residue can be difficult to remove.

Before attempting any other treatment, contact a recovery specialist for advice.

# Smoke-damaged materials

Should be placed in an area where there is a lot of rapidly moving air. This will dispel most lingering odours.

Placing small quantities of items in a refrigerator will also reduce the odour...

Large quantities of paper materials affected by smoke have also been successfully treated in ozone chambers. Despite reports that this treatment is effective at removing odours, there are concerns that it may be damaging to materials.



Fire can cause extensive damage to paper, as shown in this photograph of fire-damaged musical scores.

Photograph courtesy of the State Library of New South Wales



This photo illustrates the process by which soot can be removed using chemically impregnated sponges.

Photograph courtesy of the State Library of New South Wales

# The counter-disaster plan

It is essential that every collecting organisation has a comprehensive, well-documented counterdisaster plan detailing procedures to be followed in case a disaster occurs.

The counter-disaster plan might include:

a list of hazards:

- an initial response procedures;
- disaster kits—list of contents and locations;
- the location and description of smoke detection and fire-fighting equipment;
- day and night emergency contacts for staff and specialists:
- the names and addresses of suppliers of emergency equipment and materials, including day and night telephone numbers;
- the emergency funding procedures;
- insurance details:
- the emergency contact for computer problems;
- the contact numbers for the disaster response team, together with notes on their roles and responsibilities;
- an assessment checklist;
- a list of known leaks and problem areas;
- recovery procedures for types of damage wet/burnt and different formats;
- freezing facilities;
- procedures for dealing with mould;
- priority lists for recovery;
- documentation procedures;
- emergency evacuation procedures; and
- disaster reaction procedures.

# **Disaster kits**

Disaster kits should contain the equipment and materials you are likely to need to cope with minor disasters. Disaster kits can be mobile or static. Institutions around Australia have developed a range of models, adapting wheelie bins, ordinary bins, metal trunks and cupboards to suit their needs. Some organisations also have disaster stores.

When putting together a disaster kit, you should ask:

- why is the kit needed?
- what is the best kind of kit for the organisation?

- what size should it be?
- what should go in it?
- how many are required? and,
- where should they be located?

Advantages of disaster kits in wheelie bins:

- easy to move into affected areas;
- fit between shelves:
- can be used for removing items from the disaster site; and
- can be easily identified.

Disadvantages of disaster kits in wheelie bins:

- they can be heavy;
- they are difficult to get up stairs, so you need one on each floor unless you have lifts. The lifts may not be operating after a disaster;
- people still think of them as rubbish bins;
- it can be difficult to reach the contents at the bottom of the bin.

# Other alternatives:

- trolleys to remove large flat items and artefacts; and
- vegetable trolleys.

#### Location of the disaster kit

- they must be accessible to all staff members—but not to the public, and must be able to be moved quickly and safely; and
- disaster kits should have the minimum necessary material, to make them less attractive to pilferers.

#### Contents of the disaster kit

The disaster kit might include:

- perforated paper towelling;
- clear polythene storage bags;

- pre-cut plastic sheeting;
- chalk:
- gloves—cotton and rubber;
- string;
- pens, paper, clipboards;
- foam sponges;
- masking tape;
- blue garbage bags for collecting objects;
- scissors;
- black garbage bag for wet rubbish;
- a bucket; and
- twist ties.

The following should also be included in the kit:

- a checklist of procedures or emergency information sheets; and
- a list of emergency contacts.

Disaster kits need to contain only enough resources to cope with minor water-damage. More extensive supplies are kept in a disaster store.

# Disaster stores

An in-house store—centrally located or at a location known to staff and the disaster response team—is useful. The locations of the keys to the store and of the contact people should be recorded.

It is also helpful to liaise with other local institutions and local government bodies, to find out whether they have equipment and supplies which could be useful and, if so, to record afterhours contact numbers.

Counter-disaster networks can be set up where individual resources are minimal. By setting up regular meetings, the group can pool resources and information.

The following is a sample list of possible supplies. You may not need all of these items.

# Contents of the disaster store

# **Protection**

- plastic sheeting;
- Stanley knife;
- adhesive waterproof tape;
- pins;
- staple gun;
- scissors;
- ties (gardening twine); and
- sandbags.



An example of a well-equipped disaster store.

Photograph courtesy of the State Library of New South Wales

#### Removal

- cardboard boxes;
- milk and bread crates;
- trolleys;
- bins;
- blotting paper;
- plastic, Mylar; and
- plastic bags—2 colours.

# Recovery

- clothes lines;
- safe storage;

- trestle tables;
- clean newsprint, blotter;
- paper towels—perforated, non-coloured;
- spray bottles/misters;
- distilled water; and
- Nylon net for shaping three-dimensional objects such as garments and costumes during drying.

# **Humidity control equipment**

- thermohygrographs or other monitoring equipment;
- dehumidifiers; and
- fans.

# **Communications**

- radio:
- mobile telephones;
- whistles;
- chalk;
- loud hailers;
- large sheets of paper;
- walkie-talkies; and
- thick waterproof pens.

# Plant and safety equipment

- torches, batteries, globes;
- first aid kits:
- emergency lighting;
- pumps; and
- generators.

# **Protective clothing**

- rubber boots;
- gloves, rubber and cotton;
- plastic macintoshs or Tyvetc overalls

- hard hats;
- dust masks:
- respirators;
- aprons;
- sleeve protectors; and
- overalls.

# Clean-up

- sponge-type mops;
- brooms:
- buckets; and
- sponges.

#### **Documentation**

- paper, pens, chalk;
- disaster lists:
- tags;
- clipboards; and
- disposable camera.

# Disaster response team

The role of the disaster response team is to:

- respond when a disaster is reported:
- assess the situation: and
- plan the recovery phase.

The recovery procedures are then implemented by the recovery team(s).

While a number of tasks need to be assigned to people on the disaster response team, the critical points are:

- there should be an overall Team Leader. responsible for coordinating the recovery operation:
- someone needs to be assigned responsibility for maintaining records of damaged materials and what happens to them, for example,

- whether they have been sent off-site for freezing, discarded, or set aside for further treatment: and
- you need someone to assemble supplies and equipment and obtain food and drinks for work breaks.

Record who is to be assigned the following responsibilities:

- ensuring that administrative procedures are followed:
- allocation of funds:
- public relations, for example, media releases and handling reporters;
- damage assessment;
- training and supervision of recovery teams;
- photographing the extent of the damage.

In a small organisation, the disaster response team and the recovery team may be one and the same.

All members of the disaster response team should be trained in the use of fire extinguishers; and some should have training in first aid.

# Networks

Counter-disaster planning and disaster recovery are both labour-intensive and potentially stressful exercises. Performed in isolation, they are a trial. If shared, they can be challenging and rewarding. Involve people from the community with relevant expertise: the fire brigade and regional emergency services, for example. It is important that they know what you intend to do in the event of a disaster, and that you have emergency and counter-disaster procedures in place.

In the event of a fire or structural damage, you will want to get into the building as quickly as possible, to inspect the damage to the collection and plan the recovery phase. Access will be restricted by the fire brigade or emergency services. Building a relationship with these organisations beforehand can save vital time in implementing the recovery phase.

There are other services you can contact in advance, to make sure that they can help in an emergency. Companies which have large freezers may be willing to let books and documents be frozen until assistance arrives. Check with butchers, ice works and chicken processors.

Drying areas may also be needed. What about the town hall, school auditorium or any unused warehouse? Call them and explain that you are preparing a counter-disaster plan and need to list some options for recovery areas. They may also be prepared to lend a hand in an emergency, in exchange for your assistance if they have problems.

# Safety during a disaster

People will be under pressure to retrieve material. Make sure that you take time to ensure that this is done efficiently and with the least likelihood of danger of injury to yourself and your staff. If the building is structurally unsound you will not be allowed to enter it, often the case if the building has been affected by fire, even if the fire was in an adjacent building. Use this time to plan the recovery phase in as much detail as possible.

# Assess the situation

Assess the level of risk. Note wet floors, poor lighting, items on the floor and collapsed shelves.

Will mechanical aids like trolleys and steps be useful?

Will materials need to be carried up and down stairs, and if so, how can this be done safely?

Ensure that equipment and supplies are placed in a convenient location.

# Safe handling methods

- Avoid excessive bending of the back.
- Keep loads close to the body and use leg muscles to lift.
- Avoid twisting or side bending when lifting.
- Use kick-stools or step ladders to remove materials from the top shelves.
- Vary the work, so that different muscles are

- used. Don't perform work using the same muscles for longer than 30 minutes.
- Ensure that assistants take regular breaks.

During the recovery and post-recovery phases, it is important to remember that people will react to the situation in different ways. Disasters are stressful events: some will cope well, others will fall to pieces. Under such circumstances, people who would normally work efficiently without supervision may need special care and attention. They need clear instructions, and may need supervision.

# Recovery plan

The recovery plan sets out exactly what you are going to do, and in what order.

It starts with an assessment of the extent of damage, which covers the quantity of material affected and the categories of damage. For example, some items may be very wet, some damp, and others dry.

Start with wet organic material such as paper, wood and textiles—these will be more prone to mould growth than inorganic material such as metal, glass or ceramic.

#### CAUTION

Dried botanic specimens may germinate, so they should be placed high on the recovery priority list.

Use the priority lists from your counter-disaster plan to document which items need immediate attention, and which can wait.

Using this information, decide how many people will be needed to assist in the recovery phase, where the recovery will be undertaken, and what resources are needed.

You may also need to decide which method to use in order to recover damaged materials, or whether to get a recovery specialist to assist. The choice of recovery method will depend on the nature of the materials themselves, and what resources are available.

#### Consider the:

rarity of material;

- value of material;
- use of material:
- significance; and
- condition of the material.

The options for recovery after a disaster may include:

- discarding replaceable damaged items—for instance, a publication in print;
- copying damaged items;
- restoration: and
- accepting items in their damaged state, and providing them with physical protection.

A major decision is whether to freeze waterdamaged materials. Remember that freezing only buys time. Frozen materials must be dried out later. Regardless of the drying technique chosen, this will be a time-consuming and costly process.

It is advisable to include an assessment checklist to prompt these actions.

# Assessment checklist

This list includes questions to prompt information for both the recovery plan and the documentation for insurance and administrative purposes.

# What caused the damage?

- fire?
- water?
- insects?
- rodents?
- vandals?
- dust?
- structural failure?
- other?

# What is the impact of the damage?

Fire may cause smoke staining and charring, and water damage which results from fighting the fire.

Water damage may be caused by clean or contaminated water; mud or ash may be involved; water may need to be extracted; dust particles may he in the air.

- Is it safe to enter? What hazards are in the area?
- What has been damaged, for example, equipment or fixtures?
- What kinds of materials are affected?
- Will they be replaced or salvaged? Replacement may be cheaper than conservation or repair; but it may not be possible. If decisions can be made about items to be discarded, they should be made before salvage operations begin. Then effort is not wasted on items that are not worthwhile.
- What materials should be given priority? Materials to be given priority for salvage may be the same as those given priority for freezing.
- How much material or equipment is affected? Assess this in terms of metres of shelving, or numbers of items.
- Will the tasks of salvaging mean closing the building or office, or will business be able to operate as usual, with salvage operations going on behind the scenes?
- What areas can be used for sorting, cleaning, packing and drying? Are they on-site or offsite?
- What kind of special equipment and materials are needed for the salvage operation?
- Will transport or freezing facilities be required?
- How many people will be needed?

# **Recovery teams**

Before starting the recovery phase, spend some time documenting a recovery plan—so that the recovery proceeds smoothly and efficiently.

The next step is to assemble recovery teams to undertake the many aspects of recovery, including packing, sorting, moving, cleaning, drying, rehousing and relabelling. These activities often involve volunteers led by a member of the disaster response team.

Teams of four to five people are recommended. Many people will turn up to help, even for a minor disaster. The key to a successful recovery is to organise these assistants so that the recovery progresses in an orderly fashion. They will need to be trained in safe handling methods, and be given clear tasks and responsibilities. Include demonstrations of their tasks—don't rely on verbal instructions alone.

Contacting disaster recovery specialists, or calling for volunteers from the staff of other local institutions who have disaster-recovery training, should also be considered.

#### CAUTION

Asthmatics and people with other respiratory conditions should not be exposed to mould or heavy dust.

When teams have been formed and allocated specific responsibilities, they must be briefed. The following aspects should be covered:

- clearly identify the team leader, and explain his or her role and responsibilities;
- explain the responsibilities of each team, and demonstrate safe handling techniques and the tasks to be performed;
- introduce members of the team, if they don't know each other;
- explain where the following facilities are:
  - toilets
  - first aid kit
  - exits and entrances
  - telephones
  - areas allocated for specific tasks
  - refreshment area;
- explain job rotation and breaks—these should happen every hour. Refreshments and food

- should be provided for the volunteers by the host organisation; and
- establish communication channels and safety signals for emergency evacuation, if necessary.

### For more information

For further information about occupational safety issues, please see the chapter on Health and Safety in Managing People.

# **Recovery specialists**

These are people and organisations who offer expertise in particular recovery procedures. Some offer overall cleaning and drying of office and storage areas; others offer cleaning, drying and repair of specific items, such as books, paintings or furniture. This last group includes conservators.

It is usual for conservators to be specialists in the treatment of one type of material, such as paintings. This is the way conservators are trained. This point should be well understood, because a variety of conservators may be needed if the collection contains many different types of items. Your counter-disaster plan should contain a list of people to contact for advice and assistance.

The following list is a starting point only. Contact your State museum, library or art gallery for a list of their contacts, or your State division of the Australian Institute for the Conservation of Cultural Material, Inc. (AICCM). You can locate your State division of AICCM by phoning the National Secretary on (02) 6254 8695 or by writing to:

ATCCM Secretariat GPO Box 1638 CANBERRA ACT 2601

Recovery consultants and services: planning, prevention, cleaning, drying, repair and restoration

#### Artlab Australia

70 Kintore Avenue Adelaide SA 5000 Phone: (08) 8207 7520

Fax: (08) 8207 7259

# Australasian Recovery Services Pty Ltd

Suite 4, 14 York Street South Melbourne VIC 3205 Phone: (03) 9690 1373

# **Conservation Access** State Library of New South Wales,

Macquarie St Sydney NSW 2000 Phone: (02) 9230 1676 Fax: (02) 9233 3192

Specialists in the treatment of books, photographs,

documents and works of art on paper.

### **International Conservation Services,**

53 Victoria Avenue Chatswood NSW 2067 Phone: (02) 9417 3311 Fax: (02) 9417 3102

Specialists in the treatment of furniture, textiles, metals, paper, paintings and mixed media.

# Keith Adkins Bookbinding and **Conservation of Books**

66 Cameron St Launceston TAS 7250 Phone: (03) 6327 3549

Specialist in the treatment of books.

# Queen Victoria Museum and Art Gallery **Commercial Preservation Service**

Wellington St Launceston TAS 7250 Phone: (03) 6371 1296

Specialists in treatment of books, photographs, documents, works of art on paper, paintings,

textiles and objects.

## Freeze-drying services

### **Fischers Steamatic**

PO Box 709 Braeside VIC 3195 Phone: (03) 9587 6945

24-hour hotline: (03) 9587 6333

Fischers have a mobile freeze-drying chamber, so offering services Australia-wide. Also known

as BMS Catastrophe.

## **Moisture Control Services**

PO Box 2

Pinkenba OLD 4008 Phone: (07) 3868 2442 Fax: (07) 3868 1033

24-hour Australia-wide service:

Free call: 1800 800 675

## Queen Victoria Museum and Art Gallery

Rocherlea Annex Wellington St Launceston TAS 7250 Phone: (03) 6371 1296

## **Drying services**

# **Ayline Cleaning and Restoration System**

Unit 22/28 Vore Street Silverwater NSW 2142 Phone: (02) 9748 4507 Fax: (02) 9748 4639

#### **Moisture Control Services**

PO Box 2

Pinkenba QLD 4008 Phone: (07) 3868 2442 Fax: (07) 3868 1033

24-hour Australia-wide service: Free call: 1800 800 675

### **Munters Moisture Control Services:**

Albury Head Office 21 Union Road North Albury NSW 2640

Phone: (02) 6025 6422 Fax: (02) 6025 8266

Munters offers Australia and New Zealand-wide services in structural drying, document restoration, humidity control, disaster planning, and consulting.

## Restoration: office furnishings and equipment

## **Fischers Steamatic**

PO Box 709 Braeside VIC 3195 Phone: (03) 9587 6945

24-hour hotline: (03) 9587 6333 Fischers offers services Australia-wide.

# **Ayline Cleaning and Restoration System**

Unit 22/28 Vore Street Silverwater NSW 2142 Phone: (02) 9748 4507 Fax: (02) 9748 4639

# Restoration: computer systems

### First State Computing

Level 7, Underwood House 37-49 Pitt Street Sydney NSW 2000 Phone: (02) 9256 9999

Fax: (02) 9256 9910

# Freezing

Freezing has been used after many disasters to minimise damage to books, documents and other items such as textiles and leather, before rehabilitation can take place. If freezing space is limited, priority should be given to materials in the following order:

- materials which have already developed mould;
- materials printed on coated paper;
- artefacts with water-soluble components, inks, watercolour, tempera, various dyes; and
- leather and vellum-bound books.

Books should be packed spine down, in a single layer, in plastic crates or boxes. If there is time, every second book should be wrapped loosely in waxed paper or freezer paper to prevent the books sticking, and to stop colours running from one item to the next.

Flat items should be supported between boards, or inside a container. Heavy weights should not be placed on top of frozen flat items. If putting more than one flat item between a set of boards. interleave them with a material to allow them to be easily separated: Reemay or freezer paper, for example.

The materials should be frozen in the containers in which they are packed. Blast-freezing is preferred, because the speed of this process minimises the chance of ice crystals forming. The freezer should be maintained at minus 10°C or below. This stabilises the materials in the condition in which they were found, preventing further deterioration. Freezing is not a drying method; nor will it kill mould. Freezing provides time for priorities, treatment methods and disposal and replacement programs to be established.

Once the frozen material is to be treated, there are several drying techniques to choose from. These include freeze-drying, vacuum-drying and air-drying.

### CAUTION

Freezing unique and original materials is a last resort, and should be used in only the worst possible circumstances. Some materials should not be frozen, including photographs of any type, and electronic media. For advice on materials not covered here, contact a recovery specialist.

# **Drying wet objects**

# Air-drying

Air-drying is the most common drying method in Australia suitable for most materials, because there are few facilities which can undertake vacuum- or freeze-drying for large quantities of materials.

Air-drying requires an area with good air circulation.

Open windows and pedestal fans can assist air circulation.

Drying surfaces should be covered with blotting paper or other absorbent paper. This paper, and any interleaving, is changed regularly to improve drying.

Prompt removal of damp rubbish, such as replaced paper towel, wet mounts and boxes, can help keep the humidity down.

Shape three-dimensional objects such as historic costume and leather objects correctly while they dry, to minimise distortion. Nylon netting can be used to pad out three-dimensional objects.

Dehumidifiers can be installed to assist the drying process. These are electrical machines that reduce humidity in the atmosphere. Some models have a chamber where the condensed water collects. This needs to be emptied regularly, often twice a day, morning and afternoon. If not emptied, the machine has a fail-safe mechanism to stop it operating when the chamber is full, thus preventing overflow. But the humidity increases when the machine is idle. Different models of dehumidifiers have different capacities; you may

need to check how many units are needed for the room area. For example, two units would be needed if using a portable refrigerant model like the Oasis 2700 in a room of 50 square metres.

# Freeze-drying

Freeze-drying is a process in which pre-frozen materials are dried without the ice melting. This is called sublimation. The frozen items are placed in a freeze-dry chamber. Then the air is removed from the chamber, creating a vacuum. Mild heat is introduced to speed up the drying process; and the ice crystals sublimate to water-vapour, which is pumped out of the chamber. This has the advantage that books and coated paper do not stick together as a result of drying, and watersoluble media like inks do not feather any more than they have already.

It should be noted that if inks have already bled, the stain will be set, and pages which have started to block or stick together will not release as a result of the drying process. Items will dry in the shape they were in, which means that a book may dry with a distorted or warped cover and cockled or wrinkled paper.

# **Vacuum-drying**

Vacuum-drying is used to dry wet—not frozen material, by evaporation. Wet materials are placed in a vacuum chamber, and the air is removed to create a vacuum. Heat can be used to speed up the drying.

Freeze-drying and vacuum-drying are good options when a large number of items is involved. Staining and smoke odour are reduced. Coated paper has been successfully salvaged using both these methods.

### CAUTION

Frozen material can be dried in a vacuum chamber but the material will thaw, carrying the risk of bleeding inks and blocking of coated paper. Photographic materials should not be dried by either of these methods.

# Procedures for the recovery of particular types of materials

The following information can be used as a basic quide to the recovery of different types of materials; however, it is not advisable to rely solely on this information. Disaster training will greatly improve skills in this area. Handling wet objects is very different from handling dry objects—they are heavier, and behave differently.

# **Aboriginal and Torres Strait Island** collections

These collections can include a wide range of materials, such as bark paintings, wooden implements, masks and ceremonial adornment made from wood, grasses, shells and feathers, and stone implements.

The first thing to establish is whether the collection contains any secret sacred material. If so, the relevant community must be contacted to undertake the recovery, or to give permission and instructions regarding recovery operations.

Most items can be air-dried carefully, although special attention is needed to prevent wood and bark from splitting, and to ensure that grasses and decorative elements retain their shape.

#### Bark paintings

Do not put any weight on the bark at this stage to try to flatten it.

Air-dry on blotting paper with the painted surface face-up.

#### Masks

Use rolls of tissue paper under grass elements to assist it to dry in shape.

Air-dry on blotting paper with the face up.

# Wooden implements

Air-dry on blotting paper, turning at intervals.

# Stone implements

Blot dry using a soft absorbent cloth, and air-dry.

# Black and white photographic materials

Do not freeze.

Treat photographic prints first, because film is more stable.



Water-damaged black and white prints can be pegged on drying lines.

Photograph courtesy of the State Library of New South Wales

Air-dry if this can be done immediately. Peg the prints or film to drying lines, making sure that they do not overlap; or lay them flat, emulsionside up, on clean, absorbent paper.

If air-drying can't be done immediately, immerse the wet prints or film in clean, cold water. Immersion time must not exceed three days. They can be air-dried as described above, or sent packed in the clean cold water to a photographic processing laboratory for treatment.

## **Books**

Treat books in the following order:

- books with coated or glossy paper;
- weak and very wet books;
- weak and damp books;
- strong and wet books;
- strong and damp books.

If the books cannot be dried immediately, pack them in plastic crates or boxes, spine down, and send to a freezing facility. Do not pack the crates too tightly—the books may swell. Do not attempt to press wet or swollen books.

Alternatively, air-dry the books, using cold-air fans to speed up the drying process and dehumidifiers to reduce the humidity.

### CAUTION:

Some humidifiers need to be emptied regularly, as often as twice a day.

To air-dry, follow these steps:

- do not try to close open books;
- remove plastic covers where possible;
- interleave coated pages by placing paper towel. Reemay or waxed paper between every page pair, or freeze. If paper towel is used, change it regularly;
- if the book is wet, interleave every 3-5 mm with paper towelling, and stand it with the wettest end up. If the book is too weak to stand, lie it flat. You might need to open the books, but do so only partially, to prevent damaging the spine. Covers can be supported with rolled paper or cardboard;



Lightweight books and pamphlets can be carefully suspended to dry.

Photograph courtesy of the State Library of New South Wales

- change interleaving regularly. Suspend pamphlets, light volumes and magazines over drving lines;
- for books with thick covers, place a sheet of water-resistant film such as polyester inside the front cover to prevent moisture migrating to the text; and

do not hang heavy or sodden books, newspapers or magazines.



Fan the covers open to help the books stand. This method also allows maximum ventilation of the wet pages.

Photograph courtesy of the State Library of New South Wales

# Colour photographic materials

Do not freeze.

If wet, immerse in clean cold water and send packed in the clean cold water to a photographic processing laboratory within 48 hours.

If your water-damaged film has completely dried, it may still be salvageable. Set it aside in a clearly marked location, and take it to a processing laboratory for treatment.

#### **Documents**

These instructions cover documents, manuscripts and files on paper. Please note that parchment documents should be treated as for leather, vellum and parchment.

Documents must be kept in their original order.

Leave files in suspension hangers in filing drawers, and place them in front of a fan to air-dry. If the file drawers are full, divide the contents into two sections in order to assist the drying process.

For those items not in filing cabinets, follow these steps:

Remove the items from boxes, envelopes and other enclosures, recording all relevant information.

If inks are bleeding, interleave the pages, and freeze them. If not, remove paperclips, ties and wet covers.

Air-dry using one of the following methods:

- if space is limited, place the files in clean paper folders, then into manila folders or suspended file-holders and, finally, into openmesh plastic baskets or crates. These can be placed in front of fans, to assist air-drying. Use cool air only, no heat;
- suspend the files from drying lines;
- lay them flat on clean absorbent paper; or
- interleave them with clean blotting paper, place a board on top, and weight it evenly.

### Electronic media

### Audio and video tapes

Do not freeze.

Dry within 24 hours.

If a back-up tape is available, it may be better to discard the damaged copy and make a new one from the back-up. If there is no back-up copy, implement the following steps:

- remove it from the water;
- open the case;
- if there is condensation inside and no copies. drain the water and send the tape to a specialist for drying, cleaning and copying;
- check the returned copy for readability; label it and discard the original; and
- do not attempt to play the originals, because they can damage the equipment on which they are being played.

### Floppy disks

Do not freeze floppy disks.

Open the shell or jacket.

Remove the disk from its shell or jacket.

Do not touch the surface of the disk; do not bend, fold or abrade it.

Clean it in a tray of distilled water.

Gently blot the disk dry using a soft, lint-free cloth, or air-dry on a clean sheet of paper for 8 hours.

When it is dry, place the disk in a temporary shell or jacket.

Copy the disk.

Check the copy for readable data, and label the disk.

Discard the original.

Do not attempt to play the damaged disks, because they can damage the equipment on which they are played.

#### CDs and LPs

Do not freeze CDs and LPs.

Handle them by the edges.

Remove each from its case or cover.

Wash off any dirt in distilled water.

Air-dry vertically, not flat.

Dry with a lint-free towel. Wipe perpendicular to grooves, not in a circular motion.

Place them in clean covers or containers.

# Furniture and wooden objects

Wet or waterlogged wood must be dried very slowly. The process can take several months.

Remove the object from the water.

Call a recovery specialist.

## Glass and ceramics

Remove these from the water.

Dry each object with a soft cloth.

If dirty, the non-porous objects such as china and glass can be washed with a mild soap.

## **Glass-plate negatives**

Do not freeze, freeze-dry or vacuum-dry any of these.

Air-dry them immediately, laying flat with the emulsion side—the duller side—facing up, on clean absorbent paper, or stand them upright in a dish rack to dry.

## Historic photographic materials

Historic photographic processes items such as daquerreotypes, tintypes and ambrotypes need special treatment. As for other photographic materials, they should not be frozen.

Handle carefully, face-up at all times.

Remove the item from its case and air-dry it immediately.

Call a recovery specialist.

# Leather, vellum and parchment

Support these items using trays or boards when handling, because wet leather, parchment and vellum can be very fragile.

Call a recovery specialist immediately, especially if you have wet parchment or vellum.

If you can't contact a recovery specialist straight away, interleave or wrap items and freeze them.

# Maps, plans and posters

If the items are hand-coloured, or if inks appear to be bleeding, interleave the items with freezer paper, and freeze them immediately.

If the paper appears glossy, place sheets of Reemay on either side to prevent the paper sticking to the blotter; or you could allow the paper to dry without any paper on top.

Alternatively, air-dry as follows:

interleave individual items with sheets of blotting paper. These need to be larger than the items:

- place a board on top of a pile of up to 10 maps or plans, and weight it evenly; and
- change the blotting paper regularly, at least daily, if not more often.

#### Metal-based items

Remove these from their boxes or other enclosures.

Dry each with a lint-free cloth, unless the item has surface coatings. Some items should be washed in ethanol to prevent corrosion, or should stay immersed until fast drying procedures can be implemented. It is advisable to consult a recovery specialist.

Where the item has surface coatings, position it so the water drains off, and call a recovery specialist.

#### **Microforms**

Do not freeze.

If wet, immerse these in clean cold water, and send them, packed in the water and within 48 hours, to a microfilm processing company for reprocessing and drying.

## **Natural history collections**

Natural history collections can include botanic specimens, taxidermic specimens, and shells and skeletal specimens. You will find both dry and wet specimens in these collections.

### Dried botanic/herbarium specimens

Information identifying the specimens must be kept with the specimens.

If seeds are present, there is a risk that they may germinate, so drying should be undertaken promptly. Specimens may be frozen to prevent germination, then transferred for freeze-drying.

They should be treated in much the same way as documents, that is:

- remove the specimens from enclosures, recording relevant information; and
- air-dry by laying the specimens out on blotting paper.

#### Wet specimens

Because these are preserved in liquid, water damage should not be a problem. If, however, the bottles have broken placing affected specimens in new jars with the relevant preserving fluid is a high priority.

## **Taxidermic specimens**

These should be frozen if very wet.

If they are only damp, air-dry them.

## Shells and skeletal specimens

Gently dab the surface with a soft, absorbent cloth to remove the water.

Then air-dry them.

# **Paintings**

Call a recovery specialist immediately. Paintings need professional care during the drying phase.

If the specialist(s) can't get to you for a few days, and the paintings are considerably wet, proceed as follows.

### Paintings on canvas

Handle each painting on canvas horizontally only, with the image facing up.

Do not freeze the paintings.

Unframe the paintings, if possible.

Drain and air-dry them as follows:

- check for any surface damage;
- if the surface is damaged—that is if there is any lifting, buckling or blistering of the paint, air-dry the artwork face-up, and don't place anything on top of it;
- if the paint looks stable, place the work facedown on a layer of blotter covered with unwrinkled tissue paper, preferably Japanese tissue. Unprinted newspaper will suffice if you can't find anything better. Note: if the tissue sticks to the face of the painting when it dries, contact a conservator. Do not try to remove it yourself;
- cut a piece of thick blotting paper to fit over the back of the painting inside the stretcher;

- cover this with a piece of Perspex cut to the same size;
- put a thick filler material such as 7mm-thick felt or board cut to the same size, on top of the Perspex;
- place another piece of thick blotting paper over the stretcher, so that it extends beyond the edges of the work; and
- place another piece of Perspex, larger than the stretcher, on top; then weight down the stack evenly.

## CAUTION

Too much weight could damage the painted surface. Weights need to be only 500 grams. Six of these weights would be sufficient for an average-size work of art, about 80cm x 60cm. Weights can be simply small bars of steel or soft drink cans filled with lead shot.

## Paintings on Masonite or artist board

Drain and dry as follows:

Check for any surface damage.

If the surface is damaged, that is, if there is any lifting, buckling or blistering of the paint, air-dry the item face-up, and do not place anything on the surface.

If there is no surface damage, place the painting face-up on a sheet of blotting paper.

Lightly smooth a sheet of tissue paper—preferably Japanese tissue—over the surface, using your hand.

If possible, cover this with thick felt—7mm—then with a piece of thick blotting paper. If you don't have felt, use additional layers of blotting paper to cushion the peaks of impasto. The higher the impasto, the thicker the padding needs to be.

Place a sheet of Perspex or Masonite on top. This final layer should be larger than the object underneath.

Weight the package, taking care to distribute the weights evenly.

#### Textiles

Freeze wet textiles if they are stained, or the if dyes are bleeding, or if drying can't be done quickly.

Do not hang wet woollen or silk items.

Do not carry wet textiles without some sort of support, because they are heavier when wet, and can tear. Textiles can be placed on Nylon netting, to be carried.

Lay objects out flat on polyester screens or blotting paper to dry.

Place wads of bunched-up Nylon netting inside garments. This improves air flow inside them, and therefore aids drying. It also holds them in shape and minimises the risk of distortion.

Set up cold air fans to assist drying.

Call a recovery specialist if any further treatment is needed.

## Works of art on paper

Carefully remove works from their frames.

If the medium is pastel or oil, place the work faceup on a sheet of blotting paper, and allow it to air-dry.

If the medium appears soluble, support the item between Reemay and boards, then freeze.

Alternatively, place it between sheets of blotting paper and dry it under a pressing board.

If you have a problem relating to hazard assessment or other similar matters, contact a conservator. Conservators can offer advice and practical solutions.

# For further reading

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# Self-evaluation quiz

#### Ouestion 1.

What is the aim of counter-disaster management?

- To prevent disasters by being aware of the risks to the collection and acting to minimise them.
- To be prepared for the possibility of a disaster by preparing a counter-disaster plan.
- To be prepared for the possibility of a disaster by stocking counter-disaster kits or stores and training teams.
- To know how to react to a disaster and how to recover from a disaster as soon as possible.
- All of the above.

#### Question 2.

Which of the following statements is false?

- When conducting a hazard assessment you should identify all potential hazards.
- It is helpful to mark problem areas on a map of the building.
- Conducting a hazard assessment will stop disasters happening.
- When conducting a hazard assessment, you can ignore such issues as geographic location, building construction and political environment.

#### Ouestion 3.

Which of the following can help in hazard reduction?

- Protective storage of flammable materials.
- Selection of fire-resistant furnishings and fixtures.
- Storing items in boxes and containers.
- Cleanliness and tidiness. d)
- Installation of smoke and heat detectors.
- Installation of sprinkler systems. f)
- Regular servicing of electrical and airconditioning systems.
- h) Unplugging electrical equipment when not in use.
- Training and awareness programs for staff, volunteers and the local community.
- All of the above.

#### **Question 4.**

Which of the following statements are true?

- Preparedness involves waiting for a disaster to happen.
- Preparedness involves preparation of a counter-disaster plan.
- Preparedness involves buying equipment and

- materials that you can use to assist you in reacting to and recovering from a disaster.
- Preparedness is irrelevant because you don't know if or when a disaster is going to happen.

## Question 5.

## A counter-disaster plan:

- incorporates all the information you may need if a disaster occurs;
- should include a list of the location and contents of disaster bins:
- should have the names and addresses of suppliers of emergency equipment and materials:
- should include information on initial response procedures;
- should include floor plans of the building with information on the fire-fighting and smoke detection equipment;
- all of the above. f)

## Question 6.

## Disaster kits should:

- contain a checklist of procedures or emergency information sheets;
- include extensive supplies of materials to be used in a disaster;
- have a list of emergency contacts;
- be locked away to prevent theft; d)
- contain items such as perforated paper towelling, gloves, pens, paper, clipboards, masking tape, bucket, scissors;
- all of the above

#### **Question 7.**

#### A recovery plan:

- sets out in the right order what you should do; a)
- b) needs to be prepared before the disaster occurs;

- should start with an assessment of the extent of damage, which covers the quantity of materials affected;
- should detail how you will treat damaged items.

#### **Question 8.**

Once you have assembled recovery teams, you should:

- make them work as hard and for as long as possible—after all, they may lose interest before the job is done;
- clearly identify team leaders;
- give each team well-defined responsibilities and instruct them in safe handling techniques;
- establish communication channels and safety signals for emergency evacuation if necessary;
- let them get on with the work—too much talk before the recovery task could waste precious time.

#### Question 9.

When assessing the impact of the damage:

- always check to establish if it is safe to enter;
- determine what has been damaged, for example, equipment and fixtures;
- check what areas can be used for sorting, cleaning, packing and drying;
- determine what kind of special equipment and materials will be needed:
- all of the above.

#### **Question 10.**

What personal safety methods should you use?

- Avoid twisting or side-bending when lifting.
- Ensure the same assistants perform the one task all day so you do not have to train others.
- Avoid excessive bending of the back.

- Use your back when lifting, not your legs.
- Keep loads close to your body. e)

#### Ouestion 11.

If items are mould-damaged, you should:

- first control the environment, to minimise further growth;
- stabilise the temperature and relative humidity in the disaster area;
- check whether the air needs to be circulated, and if so, install dehumidifiers and fans:
- remove damaged items from the storage area, to minimise the risk to other items;
- ensure you thoroughly clean the affected material before returning it to storage.
- all of the above.

#### Question 12.

Which of the following statements are true?

- People's safety has priority over the collection.
- Everybody who has been trained in disaster response will be cool-headed and calm in the aftermath of a disaster.
- Some 95% of disasters result in water damage.
- The extent of damage should be documented in writing and photographically.
- Not all materials can be frozen safely.
- All members of the disaster response team should be trained in the use of fire extinguishers, and some should have training in first aid.

# **Question 13**

When air-drying books:

- do not attempt to press wet or swollen books;
- do not hang heavy or sodden books, newspapers or magazines;

- interleave coated pages by placing paper towels between every pair of pages;
- change the interleaves regularly;
- remove plastic covers where possible;
- all of the above.

# **Answers to** self-evaluation quiz

### Question 1.

Answer: e).

### Question 2.

Answer: c) and d) are false. Conducting a hazard assessment will not stop disasters happening, but if hazards are recognised steps can be taken to minimise their impact and to protect the collection, should a disaster occur. Issues such as geographic location, building construction and political environment should be considered because they may be the source of potential hazards.

## **Question 3.**

Answer: j).

#### Question 4.

Answer: b) and c) are true. Other aspects of preparedness are establishing a team of people prepared to be called on in an emergency and training them so that they are familiar with procedures for responding to a disaster.

### Question 5.

Answer: f).

#### Question 6.

Answer: a), c) and e). The kit should contain enough resources to cope with minor water damage. More extensive supplies are kept in a disaster store. The disaster kit should be easily accessible but should not be too public or too attractive to pilferers.

#### Question 7.

Answer: a), c) and d). Unlike the counter-disaster plan, the recovery plan cannot be prepared ahead of time as it will vary depending on the situation.

### Question 8.

Answer: b), c) and d). People get very tired working in difficult conditions and can be quite emotional after a disaster. Therefore it is important to rotate jobs and have breaks from the work these should happen every hour. Refreshments and food should be provided for the volunteers by the host organisation. It is also important to brief people properly before they commence the recovery phase. They will need clear instructions backed up by demonstrations of their tasks. This can contribute greatly to their safety and to the safety of the objects they are recovering.

#### **Question 9.**

Answer: e).

#### Question 10.

Answer: a), c) and e).

### Question 11.

Answer: f).

## Question 12.

Answer: a), c), d), e) and f) are true. b) is false. People can react quite unpredictably to disasters. People who are usually cool-headed and efficient can become emotional and disoriented, even if they have had disaster-response training.

## Question 13.

Answer: f).

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