

MUSEUM AND ART GALLERY NORTHERN TERRITORY

Summary of **Conservation Handling & Preventive Basics Workshop**

Presented by: MAGNT Conservation Section

V1 05/10/2026

Key Message:

Good conservation is mostly about prevention.

Small improvements in handling, storage, cleaning and environmental management can significantly extend the life of culturally significant collections.

1. What is Preventive Conservation?

Preventive conservation focuses on preventing damage before it occurs rather than treating damage after it has happened.

Why is it Important?

- Extends the life of collection items.
- Reduces repair and treatment costs.
- Protects cultural heritage.
- Improves workplace safety.
- Maintains collection significance and value.



Image: web image

2. Personal Safety and PPE

Before Handling Objects

- Remove dangling jewellery and lanyards
- Wear enclosed footwear
- Avoid loose clothing
- Tie back long hair
- Plan your route before moving objects
- Assess risks before lifting

Personal Protective Equipment (PPE)

Use PPE When Required

P2 Mask

- Protects against dust and mould

Safety Glasses

- Protect eyes from dust and debris

Disposable Gloves

- Protect from mould, pesticides, contaminants and residues

Be Aware

Some older objects may contain:

- Historic pesticides
- Lead-based paint
- Dust contamination
- Mould spores
- Asbestos

Gloves

Gloves protect you and protect the object

- Keep gloves clean
- Try not to touch your face or hair as oils will transfer from the glove to the object
- If reusing gloves, ensure they are the right way out – not inside out
- Nitrile gloves can be washed (while on your hands) and reused

3. Safe Artwork Handling

Golden Rules

- ✓ Stop and assess before lifting
- ✓ Identify fragile areas
- ✓ Clear your path
- ✓ Use both hands
- ✓ Lift from strong structural components
- ✓ Ask for help if required

Common Vulnerable Areas

Watch for:

- Flaking paint
- Bark splitting
- Basket handles
- Sculpture limbs
- Loose ceramic lids and handles
- Weak joins and repairs



Image: Shutterstock

4. Handling Works on Paper

Best Practice

- Never allow paper to support its own weight
- Support from underneath
- Use rigid support boards
- Avoid lifting by one corner

Raking Light

Use angled light to identify:

- Creases
- Tears
- Cockling
- Surface distortions

Using raking light



Image: without raking light. MAGNT SYee



Image: same item using raking light. MAGNT SYee

5. Handling Paintings

Do

- Hold stretched canvases by the stretcher frame
- Support paintings fully during movement
- Use blocks and spacers during storage
- Store paintings securely

Don't

- Touch painted surfaces
- Lift between the canvas and frame
- Lean paintings in unstable positions
- Press fingers into canvas from front or back

Storage Tips

Store away from:

- Air-conditioning outlets
- Windows
- Doors
- Water sources

Rolling Paintings

- Use large diameter tubes (20-30 cm)
- Include protective interleaving materials
- If using bubble wrap, place the smooth side against the artwork.

Stacking paintings



Incorrectly stacked paintings – on floor against each other Image: Konfetti web



Correctly stacked paintings – off floor back to back and face to face with interleaving between Image: FAE Design web

6. Collection Risks

Pests

Museum pests commonly damage:

- Paper
- Wood
- Natural fibres
- Textiles
- Plant materials

Signs of Pest Activity

- Live insects
- Larvae
- Frass (insect powder)
- Exit holes

If Pests Are Found

- Isolate affected objects
- Assess the activity
- Monitor nearby collections
- Seek advice on treatment options

Some common insect pests

Cigarette Beetle

Feeds on:

- plant material (e.g. pandanus basket, tea)
- dried protein (e.g. freeze-dried specimens, Gravox)



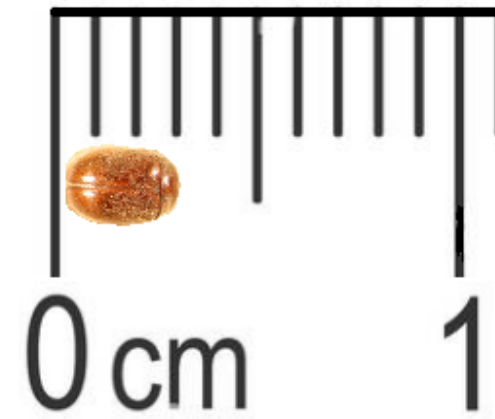
Image: SYee



Image: CMcLennan



Image: CMcLennan



Powderpost Beetle (borer)

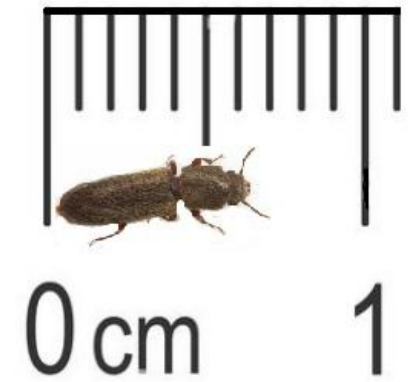
Sapwood (e.g. untreated wood)



Image: SYee



Image: SBassett



Silverfish

- carbohydrates (e.g. paper)
- protein (e.g. wool)



Image: web image



Image: web image

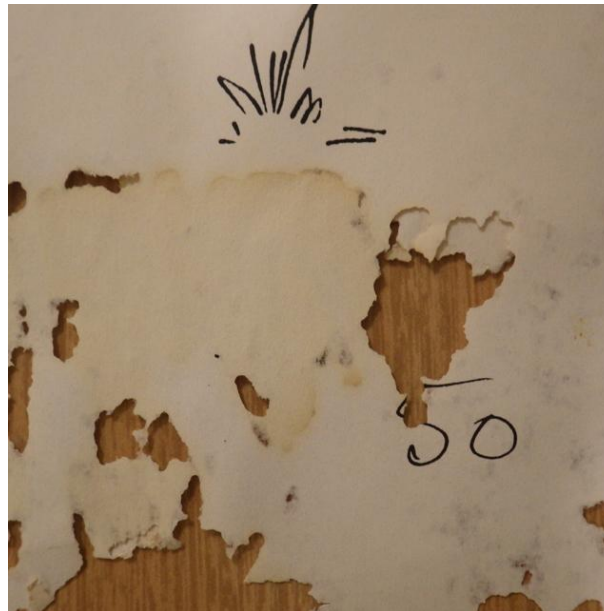


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Case Making Clothes Moth

- protein (eg wool, feathers, hair, fur)



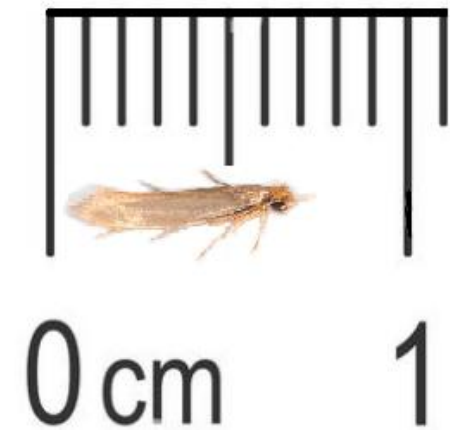
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Image: CMcLennan



Image: SYee



7. Light Damage

Effects of Light Exposure

- Fading
- Yellowing
- Colour change
- Embrittlement

Important

Light damage is permanent and cumulative.

Reduce Risk By

- Keeping collections away from direct sunlight.
- Using curtains or blinds.
- Limiting display periods.



The poster in the foreground was stored in a drawer.

Image: web archive



Silk scarf – light damage

Image: SYee

8. High Relative Humidity / Mould Risks

Mould Needs

- Moisture
- Food source (dust and oils)
- Poor air circulation

Prevention

- Improve airflow
- Reduce humidity
- Keep collections clean
- Remove dust regularly

Safe Response

Always wear:

- P2 mask
- Disposable gloves
- Safety glasses

Seek conservation advice in doubt



High relative humidity damage to negatives
Image: SYee

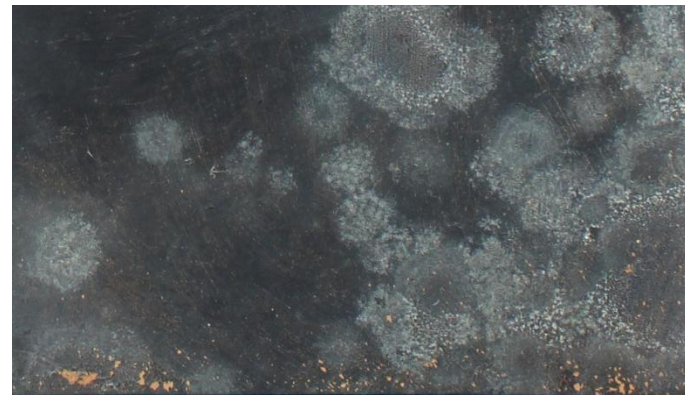


Image: LMonk

Mould basics

Mould flourishes when:

- **High humidity** - Over 65% for long periods can be enough for mould to start growing.
- **Still/stagnant air** - Corners where fans don't reach, with lots of material or artworks stacked close, are places mould likes to grow.
- **Food source** – such as dust, sweat, skin cells and food stains can start mould.

What you can do:

- **Personal protective equipment** – P2 rated mask, goggles/glasses, disposable gloves, long sleeve clothes (wash afterwards).
- **Regular cleaning** - regularly dusting all surfaces and floors to reduce food source.
- **Cleaning artwork**
 - Make sure you do treatments outside with good airflow.
 - Brush mould off artworks, outside or in well-ventilated areas.
 - use gentle sunlight to kill mould, but take care, it can cause staining and fading. Morning sunlight for no more than 20 minutes each side.
- Vinegar can be used to clean walls and benches, **DO NOT USE ON ARTWORKS.**

Ongoing care:

- Regularly dust artworks
- Improve air movement around artworks
- Check your artworks regularly for signs of mould

9. Routine Collection Care

Cleaning Collections

Recommended tools:

- Soft hake brush
- HEPA-filtered vacuum cleaner (low suction)

Benefits

- Removes dust and mould food sources
- Improves preservation
- Assists condition monitoring
- Helps identify damage early

10. Disaster Preparedness

Potential Emergencies

- Water leaks
- Flooding
- Storm damage
- Fire
- Pest outbreaks

Emergency Kit Essentials

- Plastic sheeting
- Gloves
- P2 masks
- Torches
- Absorbent materials
- Camera or phone
- Documentation materials
- First aid supplies

Emergency Priorities

1. Ensure personal safety
2. Stop the source of damage
3. Protect collections
4. Document affected items
5. Seek assistance promptly

Quick Conservation Care Guide

DO

- ✓ Wash hands before handling objects
- ✓ Use appropriate PPE
- ✓ Lift from strong supports
- ✓ Keep collections clean
- ✓ Monitor for pests and mould
- ✓ Report damage early
- ✓ Store collections away from sunlight and water

DON'T

- ✗ Touch painted surfaces
- ✗ Lift by handles or weak components
- ✗ Store works under air-conditioning units
- ✗ Place bubble wrap directly against painted surfaces
- ✗ Ignore insect activity
- ✗ Handle mould without PPE
- ✗ Leave collections in direct sunlight

Any questions please contact magnt.conservation@magnt.net.au