

# Conservation Basics

## Risks to collections

- Physical Damage
  - Include catastrophic damage and wear and tear.
  - Correct handling and cleaning procedures reduce risk.
  - Changes of use of space increase risk, e.g. events, building work.
- Light
  - Cumulative and irreversible, UV light more damaging than visible light.
  - Causes fading of colours and structural damage.
  - Monitor levels with light monitors and Blue Wool Standards.
  - Reduce light levels, control with UV filters, blinds, covers, rotation, facsimiles.
- Incorrect Relative Humidity
  - High RH causes corrosion of metals and mould growth.
  - Fluctuating RH causes warping of organic objects, loss of veneers.
  - Monitor environment, control with heating, dehumidification/humidification.
- Theft
  - Loss of object, risk reduced by adequate security measures.
- Vandalism
  - Minor to severe damage, loss of value, risk reduced by adequate security measures.
- Water
  - Small leaks to large floods, small scale staining to severe damage.
  - Regular building and service maintenance to reduce risk of water ingress.
  - Emergency plan with spill kits and sorbents to respond.
- Fire
  - Catastrophic event, major loss and damage.
  - Risk reduced with electrical safety, reduced fire loading and compartmentalization.
  - Emergency plan, salvage exercises with/without fire brigade, priority objects.
- Pollution
  - Stimulate chemical change in various materials, e.g. metal tarnish and corrosion.
  - Can come in from outside or be emitted from display materials.
  - Use inert display materials and reduce pollutants from entering.
- Pests
  - Insect and non-insect pests cause minor to major damage to objects.
  - Monitor pest activity using traps and treat infested objects.
  - Good housekeeping to reduce food and harbourage to reduce risk.
- Dust
  - Visibly unattractive and exacerbates deterioration of materials.
  - Identify and reduce sources of dust, use doormats, keep windows and doors closed.
  - Conservation cleaning to remove dust without causing unnecessary damage.

## Handling Techniques

- Use clean hands or gloves (always use gloves for metals).
- Use both hands, for smaller objects use one hand to support bottom the other to support the side, for larger objects support from the lowest load bearing part, do not use handles.
- Use enough people and trays/trolleys/sliderz to move complex or heavy objects.
- Separate loose parts and secure moving parts (i.e. with cotton tape) before handling.
- Avoid touching fragile areas and provide support for vulnerable objects.
- Ensure that the moving route is clear, remove obstacles, open doors.
- Handle and move objects as infrequently as possible.
- Prepare padded workstations where objects can be handled safely.

- Be aware of health and safety, lifting heavy objects, handling dangerous materials.

## Cleaning

### Dry cleaning

- To remove surface dust.
- White cotton cloths, microfibre cloths, soft cloths can be used on robust surfaces.
- Hogs-, pony- and goats-hair brushes used to remove dust from intricate surfaces.
- Use the brushes to flick the dust off the object into the nozzle of a vacuum cleaner.
- Muslin cloth can be tied around the end of the vacuum nozzle to prevent loose parts from being lost and monofilament net can be put over textile surfaces to protect during cleaning.
- Dry sponges (smoke sponge, makeup sponges, conservation sponges) and groomstick can be rubbed gently across materials to remove surface dirt.
- Need to strike a balance between cleaning to remove damaging dust and causing damage through overcleaning.

### Polishing

- To remove tarnish or corrosion on metals, only when necessary.
- Silver polishing cloths to remove yellowy/black tarnish on silver objects.
- Use peek/autosol/pre-lim polishing pastes to remove unwanted tarnish/corrosion from other metals, use cotton swabs or soft cloth to apply as little as possible, rinse as per wet cleaning to remove polish residue.
- Activated charcoal bags (eg Silver Keeper – Hagerty or Town Talk Polish Company Ltd) can be used to inhibit the formation of silver sulphide in stored objects.

### Wet cleaning

- To remove ingrained surface dirt, only when necessary on robust objects.
- Use deionised water with a little drop of mild surfactant (e.g. Surcare), apply with cotton wool swabs or soft cloth (damp not wet), rinse area with deionised water to remove surfactant again using cotton wool swabs or soft cloth (damp not wet), dry area thoroughly with cotton wool swabs or soft cloth.
- Many materials are sensitive to water, use sparingly and cautiously.
- Do not wet clean books, paper or textiles.

### Protection

- Waxes can provide surface protection for wood and metal objects.
- Apply microcrystalline wax (eg Renaissance wax) with soft cloth or brush to metal objects, buff with a soft cloth.
- Wax (e.g. Harrall's or NT furniture polish) can be applied to wood floors/panelling/furniture with a brush or cloth and buffed. Check that wax is a suitable surface coating for your object/interior.

### When to call in the professionals

- For any treatment more interventive than the surface cleaning, treatment and protection methods mentioned above professional advice is needed, this includes repairs, deeper cleaning and material specific advice on complex objects.
- Accredited conservators can be found on the [Icon Conservation Register](https://www.iconregister.org/).