How Museums Care for Objects: Conservation Basics

- Build a shared vocabulary for preventive care and conservation
- Object care is core stewardship, access, and public trust
- Conservation umbrella: preventive, remedial, and restoration (ICOM-CC, 2008)
- Learn to spot risks, handle safely, document, and escalate
- Introductory overview—not a substitute for specialized treatment



What Conservation Means: Key Terms and Boundaries

Preventive

indirect actions—storage, handling, environment, pests, emergency planning



Remedial

direct action to arrest active deterioration or reinforce structure

Restoration

direct action on a stable object to aid appreciation and understanding

- Conservation: safeguarding heritage while ensuring access for present and future generations
- One line: Preventive: indirect actions—storage, handling, environment, pests, emergency planning
- Remedial: direct action to arrest active deterioration or reinforce structure
- Restoration: direct action on a stable object to aid appreciation and understanding
- One action can serve several aims; direct actions require a qualified conservator-restorer

The Conservation Ethos: Doing Least Harm

HERITAGE
PEOPLE
PURPOSE



- **Minimum intervention:** change as little as possible; sometimes no treatment is best
- **Reversibility:** avoid materials and methods whose results cannot later be undone
- **Compatibility:** added materials must be stable with the object
- **Detectability:** loss compensation should be visible to common examination methods
- **Documentation** before, during, and after any intervention is an ethical obligation
- **Clear roles:** conservators authorize treatment; others observe, record, and escalate

Observe → Document → Isolate → Escalate

The Ten Agents of Deterioration

- CCI framework names ten primary threats to heritage collections
- Physical forces, thieves/vandals, fire, water, pests, pollutants
- Light/UV/IR, incorrect temperature, incorrect RH, dissociation
- Each agent harms different materials: textiles fade, metals corrode
- Acute events like drops and leaks versus cumulative daily damage
- Prioritize by likelihood and impact; adapt lens to your role














Environment Basics: Temperature, Relative Humidity, and Light

PRESERVE
UNDERSTAND
SHARE

- Stability beats perfection: reliably controlled conditions outperform tight targets only occasionally met
- Working range for many hygroscopic materials: 40–60% RH, 16–25°C, ±10% RH per 24 hours
- RH swings stress organics: repeated swelling and shrinking causes cracking, warping, flaking
- Light damage is cumulative and irreversible; UV under 10 µW/lm; sensitive displays as low as 50 lux
- Use dataloggers and light meters: read trends and escalate unusual readings



Pollutants and Material Compatibility

PRESERVE
LEARN
SHARE

- Pollutants come from outdoors, indoors, and objects themselves; dust, soot, VOCs accelerate decay
- Off-gassing from wood, adhesives, foams, and paints corrodes metals and damages paper in sealed cases
- Oddy test exposes silver, copper, and lead coupons for 28 days at 60°C and high RH
- Ratings: permanent, temporary, or unsuitable for use near collections
- Ask suppliers for test results; avoid uncoated wood and unknown plastics near objects



Safe Handling: Planning, Gloves, and Supports

- Pre-handling checklist: review condition records, plan the move, clear the route
- Remove jewelry; wear powder-free nitrile gloves—cotton gloves are not a full barrier
- Lift with both hands, support the base and heaviest part; never lift by handles or rims
- Move one object at a time or use a padded cart; set objects down—never hand them off
- Paper and textiles travel on rigid supports; fragile objects in trays or custom housings



Observe → Document → Isolate → Escalate

Storage and Housekeeping That Protect Collections

- Use acid-free boxes and tissue, inert foam, powder-coated steel shelving
- Never overcrowd boxes; pad voids and pad folds in textiles
- Store heavy items low and accessible; use risers, not the floor
- Keep storage away from pipes, windows, exterior walls, and HVAC units
- Volunteers may dust and tidy, but never clean object surfaces without approval













Condition Reporting and Documentation

- **Purpose:** baseline records, loan exams, incident and treatment reports
- **Core fields:** accession number, date, examiner, materials, dimensions, damage, recommendations
- **Describe objectively:** location, extent, and type of damage—not opinions
- **Photos:** consistent angles and lighting, scale and color target, front and back, raking light
- **Escalate promptly:** active mold, unstable cracks, or pest evidence



Integrated Pest Management:
Prevent, Monitor, Respond

PRESERVE
PEOPLE
STORIES
FOR TOMORROW



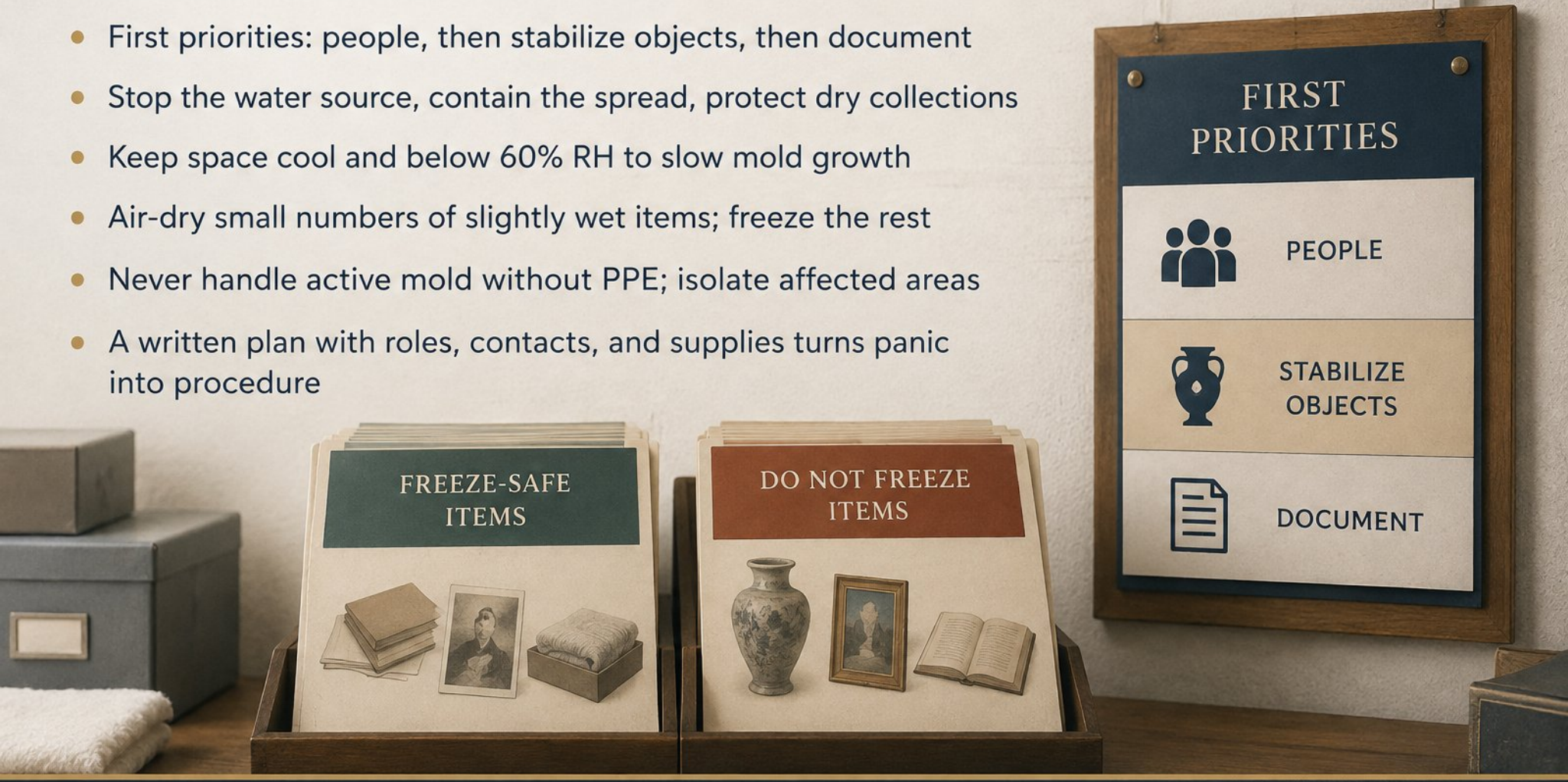


- IPM cycle: prevent, monitor, identify, respond with least-toxic methods; chemicals only by licensed professionals
- Know the signs: frass like sawdust, exit holes, webbing, larval casings, live insects
- Quarantine and inspect all incoming objects before they enter collection spaces
- Freezing: -20°C for 1 week or -30°C for 72 hours; bag and seal; avoid damp, layered, or plastic objects
- Document every pest treatment and keep the record with the object's file

Observe — Document — Isolate — Escalate

Emergency Readiness: Water, Fire, and Mold

- First priorities: people, then stabilize objects, then document
- Stop the water source, contain the spread, protect dry collections
- Keep space cool and below 60% RH to slow mold growth
- Air-dry small numbers of slightly wet items; freeze the rest
- Never handle active mold without PPE; isolate affected areas
- A written plan with roles, contacts, and supplies turns panic into procedure



A CALMER TOMORROW PRESERVES OUR SHARED HISTORY

OBSERVE → DOCUMENT → ISOLATE → ESCALATE

Working with Conservators:
When to Call and How to Prepare

PEOPLE
OBJECTS
LONGER
TOMORROWS

- Call a conservator for active deterioration, instability, mold, or persistent pests
- Anything beyond your training—cleaning, repair—needs professional authorization
- Prepare a brief: materials, condition, history, environment, urgency, desired outcome
- Find referrals through AIC's Find a Professional tool or regional conservation bodies
- Compare options; expect a written proposal and a final treatment report



CARE TODAY
PRESERVES TOMORROW

Practical Scenarios: Putting It All Together



- White crystals on ceramic: don't wipe; isolate, photograph, consult a conservator



- Fading, pest-damaged textile: cut light, freeze if safe, improve storage, document



- Leak near archival boxes: stop water, protect dry items, lower RH, freeze wet material

- Non-conservator habit: observe, document, isolate, escalate
- Adopt five safe habits; never clean or repair objects beyond your training

Assessment and Your Next 30 Days

PEOPLE
PRESERVE
WHAT MATTERS

- Quick check: agents, handling, documentation fields, escalation triggers
- Name one local risk and one action you can take this week
- Write a dated 30-day action plan and commit to it
- Free next steps: CCI self-paced courses, AIC and IIC resources, Icon training, AASLH collections care
- Care is shared; prevention is the most cost-effective conservation



QUICK CHECK

- agents
- handling
- documentation fields
- escalation triggers



CONSERVATION
STRENGTHENS
COMMUNITIES

PersonWise.

PersonWise • AI digital-human course platform

Scan the code or click anywhere to watch this course live, with voice Q&A

personwise.ai/t/2a2e0405/public