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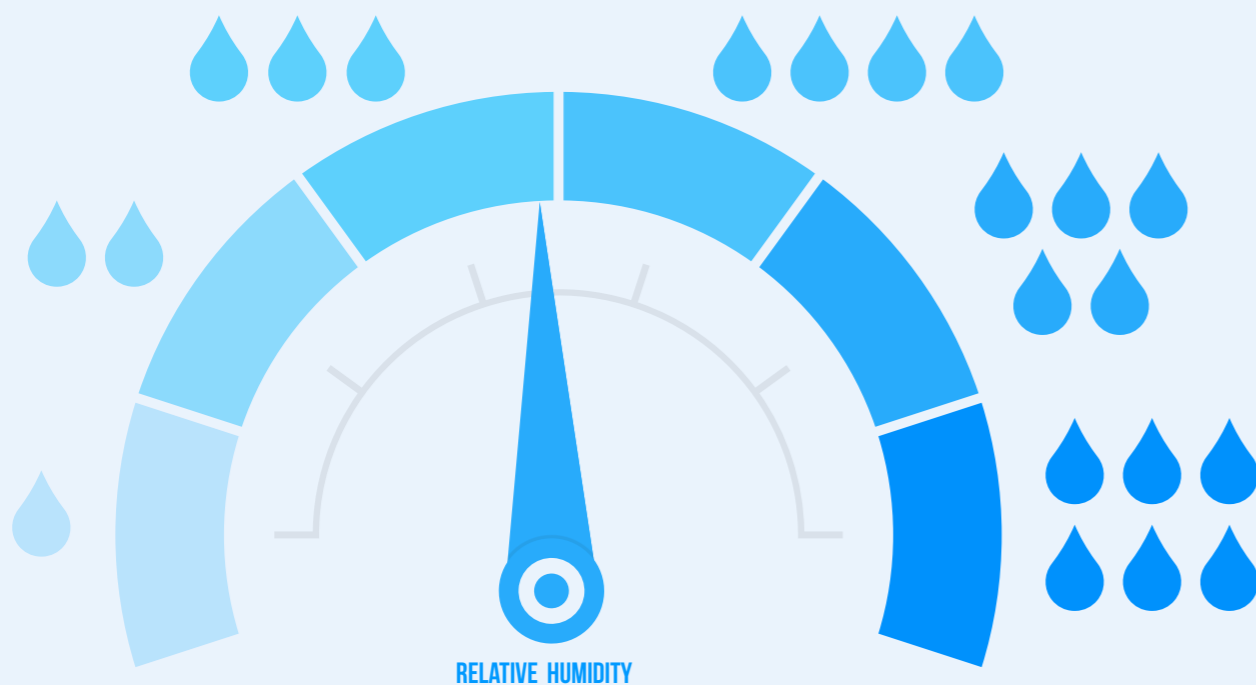
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CONSERVATION IN A CLIMATE CRISIS

Here we share Icon's guidance note on environmental management for collections and climate sustainability



This short guidance note was prepared by a group of committed Icon accredited conservators and conservation scientists. Its aim is to support cultural heritage institutions to operate in a more sustainable manner in response to the global climate crisis, rising energy costs and local and national carbon reduction policies.

Background

Since the 1970s a set of narrow parameters for relative humidity

(RH) and temperature have come to be accepted as the 'gold standard' for preventive conservation. However, achieving and maintaining these narrow parameters has proven difficult and costly, both financially and in terms of greenhouse gas emissions. For the vast majority of historic materials, there has been no need to store or display within these narrow parameters.

As a result, conservation professionals are moving away from the idea of a one-size-fits-all set of parameters to a context-based approach. This means providing

environmental conditions which mirror the historic conditions the materials have been kept in for decades or even centuries, based on historic annual RH averages, local climate, seasonal changes and geographical location, which also take risk into account, for objects which have survived reasonably well.

In day-to-day practice, the greatest risk to materials is poor handling (often referred to as physical force). Other risks include fire, water, pests, theft, vandalism, neglect, chemical deterioration, temperature and light.

What does this mean for you?

It means three key things:

1. As experienced conservation professionals, we can offer reassurance that maintaining RH in the range of 35% to 65% is proven to be safe and sustainable for materials housed in a well-maintained building (in the UK).
2. Keeping rooms cooler over winter will help to maintain RH above 35% and reduce energy bills.
3. For storage areas and display spaces that are closed for extended periods over the winter, such as show rooms in historic houses, temperature levels can be lowered even further, to above 5°C. It is important to maintain at least 5°C to minimise the risk of water freezing in pipes and causing a leak. Cold temperatures represent a low risk to most historic materials and actually increase preservation lifespans of objects.

Why does RH matter so much?

RH mainly affects organic materials such as wood, paper and textiles made of natural fibres. It influences the rate of damaging chemical reactions, mould growth and insect

activity. Fluctuations outside of 35% to 65% can cause cracking, warping and other forms of irreversible damage to organic objects in collections. However, it's useful to note that many organic objects will safely and slowly acclimatise to the environment they are kept in over time, even when it is less than ideal. In this case moving the objects or changing the average RH levels may pose a greater risk of causing damage.

Remember that maintaining a consistent relative humidity around 35% to 65% is the key to preserving collections. Drift within these parameters is okay but large variations is not. By focusing on maintaining



35% TO 65%

MAINTAINING A CONSISTENT RELATIVE HUMIDITY AROUND 35% TO 65% IS THE KEY TO PRESERVING COLLECTIONS

consistent levels to those achieved in previous years, perhaps a bit cooler over winter, will help with energy costs and reduce climate impact without compromising the preservation of collections. It's a win-win situation.

Non-conservation professionals are encouraged to seek specialist advice for a small number of materials including archaeological iron and copper, and panel paintings and parchment, which require specific conditions and RH control measures.

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Why is this guidance being published now?

The climate emergency is exponentially increasing while practice around environmental control continues to follow guidance based on temperature and RH bands.

There were several discussions during 2023, at UK and international levels, about the relevance and appropriateness of older environmental guidance. Arts Council England is in the process of updating the Government Indemnity Scheme Guidance to reflect an approach based on risk management rather than temperature or humidity values; the Bizot Group updated their Green Protocol in December 2023 which follows the same path; and the National Museum Directors' Council advocate a risk management

approach to lending collections items.

What is its purpose?

As we are moving away from recommending set ranges for materials and following a risk management approach, Icon is conscious that there are a number of organisations that will not have the conservation expertise to aid in such decisions, therefore we felt it appropriate to publish this guidance. It is also an opportunity to advocate for a risk-based approach to decision making around temperature and RH levels to reduce energy use.

Who drafted this guidance?

It was drafted by Lorraine Finch ACR and Dr David Thickett (November 2023). The guidance was also discussed with members of Icon's Policy Forum.

If you would like to join the Icon Policy Forum or you have specific feedback about the guidance, please email Patrick Whife at pwhife@icon.org.uk

How can I pledge my support?

If you would like your name/institution added to the list of supporters online, please contact Patrick Whife at pwhife@icon.org.uk

How do I find out more?

Please scan the QR code to read the Environmental Statement from Heads of Conservation in the UK (April 2023).



Where can I find references?

For a fully referenced version of this article, please visit www.rb.gy/2sbrl2