



**Conservation Research and Development for the National Archives:
Strategy and Implementation Plan 2009 – 2011**

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A Conservation Research and Development Strategy Development for The National Archives 2009 – 2011, Collection Care Department

1. Introduction

This paper outlines the strategy and implementation plan for conservation research in The National Archives (TNA) to 2011. The research programme for TNA to 2011 will support the work of Collection Care as defined by organisational objectives.

2. Context

The Conservation Research Strategy has been developed in the context of:

2.1 The National Archives' vision:

- Lead and transform information management.
- Guarantee the survival of today's information for tomorrow.
- Bring history to life for everyone.

2.2 The National Archives' Research vision, *'to support decision-making in The National Archives through developing and testing new ideas, and through the interpretation of information and research findings for the benefit of government, the information community, staff and a wider constituency'*

2.3 Organisational priorities and strategic aims.

3. Conservation Research, what is it and why do we need it at The National Archives?

3.1 Conservation research is central to the activities of the fully established Department of Collection Care. The interpretation and dissemination of technological and scientific findings should be at the heart of preservation and conservation activities as a bridge of communication between disciplines. Integration of technological innovation, the application of convergent knowledge, skills and expertise from conservation professionals and allied disciplines, enables innovation and revision of current theories and practice.

3.2 The Conservation Research section at The National Archives has an expanded strategic role in the Collection Care Department. Defining a conservation research strategy provides an opportunity to provide evidence base for policy development and to integrate fully within the overall development of TNA's research programme. On a national level we are in prime position to influence the current development of the National Heritage Science Strategy and therefore be in the forefront; taking the lead in areas that support the conservation research agenda for libraries and archives in the UK.

4. Vision

Our 3-year vision for Conservation Research is to:

- To create opportunities for research to be carried out in order to support the strategic aims of the organisation, the preservation requirements of TNA's collections and the wider professional community.
- To become a nationally recognised centre of research with expertise in developing practical and sustainable solutions for the stewardship of archival collections.

5. Programme

TNA's Conservation Research programme will be:

- **Predictive**
The information required to support a comprehensive preservation and conservation programme in the next five to ten years will reflect what we believe will be emerging priorities and new scientific and technological developments. In view of this, all research projects will aim to support the challenges of providing a programme of responsible stewardship of the collection. This will be achieved in part by improving our understanding of archival records chemically and physically and their long-term stability. In turn, this will enable better prediction of preservation problems, and ultimately to assess the efficacy of preservation policy and practice.
- **Inter-disciplinary**
We will routinely consider the work of other disciplines such as engineering, biochemistry, art history, materials science, economics, computational science etc. to enable convergence of expertise to support the work of the Department of Collection Care.
- **Interpretative**
Particular attention will be given to the interpretation and dissemination of existing research and technological innovation in areas that will provide practical dividends and evidence base for policy development.
- **Collaborative**
We will actively pursue partnerships and work with other national and international bodies where TNA's strategic aims can be advanced and research gaps can be filled.
- **Far-reaching**
We will invest in research that targets the main deterioration factors and top risks to TNA's collections, so that the majority of the collection benefits from the research findings.

6. Research Themes

6.1 The three-year research strategy will support projects in three key areas:

6.2 Sustainable Collection Care

We will invest in research that targets wider collection management issues in order to provide solutions for sustainable stewardship of TNA's collections. We will achieve this by developing:

- Collection care management tools

Challenge empirically accepted collection care practices by adapting business and economic models and statistical or risk based approach to aid evidence-based decision-making.

- Sustainable preservation environments

Refrain from numerically specified environmental targets to a holistic approach that includes principles of sustainable operation, statistical assessment of environmental conditions and utilizes building performance.

6.3 Managing Material Change

To enable us to predict the long-term stability of our holdings it is necessary to fully understand the materials used to create records, degradation processes and the steps required to mitigate them. We also need to know more about the relationship of materials to the environment in which they are kept, stored and handled. In view of this, our work will focus on:

- Understanding degradation
- Modern materials
- Materials assessment

6.4 Problem Solving and Evidence Mining

We will target discrete outstanding questions around current preservation and conservation practices in order to gather evidence to support review of practice and formulate future research requirements. These questions will be explored through:

- Conservation science clinic
- Evidence mining

7. Summary

The National Archives conservation research programme will inform the policies and procedures of Collection Care and support organisational objectives through a dedicated research strategy aimed to establishing sustainable stewardship of TNA's collections. This work, where possible, will be collaborative with a primary aim of delivering practical outcomes to better understand how to sustain the UK's archival heritage within the context of a national research agenda. We aim to build a body of knowledge on the stability of TNA holdings through the interpretation of current literature, and the technical study of materials past and present using scientific methods and analytical techniques. We will exploit opportunities to develop new collection management tools and improve conservation practice.

I. Implementation Plan

This implementation plan sets out the main activities of the Conservation Research Section for 2009/11.

Main Activities for 2009/10

- Advance key research activities within the context of organisational priorities. To include:
 - Project manage 'Building Environment Simulation' (BES) collaborative research project with Centre of Sustainable Heritage, UCL.
 - Carry out environmental monitoring and assessment.
 - Explore the potential of econometrics as a decision-making tool for collection care management.
 - Support AHRC/EPSRC Heritage and Science Programme collaborative PhD - 'Colour photographic media: material, environmental and managerial aspects of preservation'.
 - Deliver research cluster EGOR: Environmental Guidelines Opportunities and Risks in collaboration with Tate and Centre for Sustainable Heritage. Funded by AHRC/EPSRC Heritage and Science Programme.
- Establish a Conservation Science Clinic to support and promote scientific and evidence based investigation of discrete and outstanding questions, for example:
 - Evaluate the risk of salt deposits on TNA records at DeepStore.
 - Set out experimental procedures and provide support for evaluating conservation treatments in conjunction with current conservation projects e.g. scraperboard and brittle paper.
- Communicate the results of our work to our internal and external stakeholders by improving the content of the Conservation Research web page, participating at conferences and professional groups.

Main Activities for 2010/11

- Advance key research activities both internally and nationally.
 - Integrate research findings from BES and other projects to a holistic plan of providing sustainable preservation environments.
- Forge collaborative relationships with other institutions, nationally and internationally.
- Identify business critical questions and exploit funding opportunities in order to support research.
 - Study of tolerances of materials to agents of deterioration.
 - Identify metrics for permanence and establish mechanisms to capture relevant data.
- Communicate the results of our work to our internal and external stakeholders through the website and representations at various bodies and events.