**Agents of Deterioration[[1]](#footnote-1)**

|  |  |
| --- | --- |
| **Agent of Deterioration** | **Nature of Agent** |
| Physical Forces | Cumulative or catastrophic forces, including sudden and gradual physical forces (e.g., impact, shock, vibration, pressure); deterioration caused by the intrinsic nature of the material (inherent vice) |
| Thieves and Vandals | Human activities, intentional damage, security issues. |
| Dissociation | The tendency of ordered systems to fall into disorder (entropy); damage from misplacing objects; removing tags or labels, recording information in an illegible, ambiguous, or non-permanent manner; errors in transcription, curatorial neglect |
| Fire | Damage from fire, smoke, heat, the water and other fire suppression chemicals; damage from the clean-up process |
| Water | Flooding; leaking pipes; inadequate seals on windows; penetration through roof or ceiling |
| Pests | Any organism that damages collections or serves as a food source for other pests |
| Pollutants and Contaminants | Organic and inorganic gases; particulate pollutants (acidic and/or abrasive) |
| Radiation | Ultraviolet, visible, and infrared radiation |
| Incorrect Temperature | Temperatures that are too high, too low, or with extreme fluctuations |
| Incorrect Relative Humidity | Humidity that is too high, too low, or with extreme fluctuations. |

**Selected Resources**

American Institute for Conservation of Historic and Artistic Works (AIC). “Definitions of Conservation Terminology.” <http://www.conservation-us.org/index.cfm?fuseaction=Page.viewPage&pageId=620>

Artim, Nick. “An Introduction to Automatic Fire Sprinklers, Part I & II.” *WAAC Newsletter* 15. no. 3 (1994): 20.

<http://cool.conservation-us.org/waac/wn/wn16/wn16-3/wn16-309.html>

<http://cool.conservation-us.org/waac/wn/wn17/wn17-2/wn17-206.html>

Baril, Paul. “Fire Protection Issues for Historic Buildings.” *Canadian Conservation Institute (CCI) Notes 2/6.* Ottawa, ON: Minister of Public Works and Government Services, 1998.

<https://www.canada.ca/en/conservation-institute/services/conservation-preservation-publications/canadian-conservation-institute-notes/fire-protection-historic-buildings.html>

British Library, Preservation Advisory Centre. “Using Collections.” 2013.

<https://www.bl.uk/britishlibrary/~/media/bl/global/conservation/pdf-guides/handling-library-and-archive-collections.pdf>

CCAHA. “Freezing and Drying of Book, Paper, and Photographic Materials.” Philadelphia, PA: 2012.

<https://ccaha.org/resources/freezing-and-drying-books-paper-and-photographic-materials>

CCAHA. “Managing a Mold Invasion: Guidelines for Disaster Response.” 2013.

<https://ccaha.org/resources/managing-mold-infestation-guidelines-disaster-response>

Kerschner, Richard L. "Providing Safe and Practical Environments for Cultural Property in Historic Buildings - and Beyond." Contributions to the Experts' Roundtable on sustainable Climate Management Strategies, held April 2007, in Tenerife, Spain. <http://www.getty.edu/conservation/our_projects/science/climate/paper_kerschner.pdf>

National Fire Protection Association. *NFPA 909: Standard for the Protection of Cultural Resources Including Museums, Libraries, Places of Worship, and Historic Properties*. Quincy, MA: 2021.

Available for purchase, or online as a read-only document. Requires free registration:

<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=909>

RBMS Security Committee. “ACRL/RBMS Guidelines Regarding Security and Theft in Special Collections.” 2008.

<https://www.ala.org/acrl/standards/security_theft>

Museum Galleries Scotland. “Advice Sheet: Monitoring Light and UV Radiation in Museums.” 2003. <https://326gtd123dbk1xdkdm489u1q-wpengine.netdna-ssl.com/wp-content/uploads/2016/11/Monitoring-light-and-UV.pdf>

Scottish Museums Council. “Factsheet: What is Environmental Monitoring?”

<https://collectionstrust.org.uk/wp-content/uploads/2016/11/What-is-environmental-monitoring.pdf>

Strang, T. J.K. 1996. “Preventing Infestations: Control Strategies and Detection Methods.” *Canadian Conservation Institute (CCI) Notes 3/1.* Ottawa, ON: Minister of Public Works and Government Services. <https://www.canada.ca/en/conservation-institute/services/conservation-preservation-publications/canadian-conservation-institute-notes/preventing-infestations.html>

1. J.E. Simmons (2006) “Table 12.1. Agents of Deterioration in Collections (after Michalski, 1994a; Rose and Hawks, 1995; and Waller, 1995 and 2003),” *Things Great and Small Collection Management Policies.* Washington D.C.: American Association of Museums. p. 101. [↑](#footnote-ref-1)