WHAT DAMAGES ARCHIVAL MATERIAL?

Acid naturally contained in paper and ink, or in atmospheric pollution causes “acid hydrolysis” which results in weak and embrittled paper.

Heat and Damp accelerates the effects of acid, encouraging the growth of mould and fungi. It also softens adhesives and weakens paper fibres. Heat alone will dry fibres out and cause paper to become more brittle.

Light weakens and embrittles paper and fades ink and pigments. It also yellows wood-pulp paper, most noticeably newspapers. The UV part of light is the most damaging.

Fluctuations in temperature and humidity put stress on the structure of highly hygroscopic materials, such as books, and results in distortion.

Insects and Rodents feed off proteins in paper, adhesives, leather, parchment and most archive materials.

Fungi and mould produce acids as by-products; they also damage the size and fibres in paper, leaving documents vulnerable to further deterioration. Mould also stains. Mould prefers an acidic environment to develop in.

People handling documents cause physical damage, pen inks, elastic bands, adhesive tapes and staples all damage paper and parchment but often we don’t think not to use them. Consider buying a pair of cotton gloves to handle your own documents with – fingers contain oils, which can damage paper.

Dust carried in the air often carries mould spores or metal particles, which will oxidise and cause staining.

Bad storage, with tightly crammed shelves and insufficient support will cause a lot of damage and acidic or sulphurous materials used for packaging will also add to the damage.

Accidents such as fire or flood – which can be as little as a leaking pipe can destroy your documents, even a collapsed shelf may cause damage.