

## STORAGE AND HANDLING

## 4.3 Cleaning Books and Shelves

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**INTRODUCTION**

Cleaning the books in a circulating collection extends their useful life. Regular cleaning reduces mold and insect infestation, abrasion and wear, and acid degradation. The frequency of cleaning will depend on how rapidly dust and dirt accumulate in storage. It is important to note that despite the benefits, cleaning procedures can damage fragile bindings, brittle pages, and flaking leather.

Understanding procedures and identifying potential problems will improve judgment when deciding when and to what extent to clean.

If books and shelves are to be cleaned in response to a mold outbreak, consult the NEDCC leaflet [3.8 Emergency Salvage of Moldy Books and Paper](#).

Cleaning books in special collections requires more expertise than described in this leaflet and a conservator should be consulted before beginning any large cleaning project.

**PREPARING FOR CLEANING**

Organizing a cleaning project will depend upon several factors:

- the physical condition of the books;
- the amount and type of soil to be removed (a light layer vs. a heavy accumulation of dirt);
- the significance of the books (is their value based on the information they contain, or do they have historic, artistic, or associational value as well?); and
- the scope of the cleaning to be undertaken (is cleaning ongoing to maintain every book in the library, or is it a limited project designed to clean only books in a particular area or collection?)

Once these questions have been answered, procedures can be developed for training purposes. This leaflet covers basic cleaning procedures for general collections. Details on specific cleaning topics can be found in the section, “Resources.”

**Preventative measures**

To reduce the amount of dust and dirt that accumulates on books and shelving, regular cleaning of floors is essential. The preferred method for floors is vacuuming, followed by a dust mop or mopping. Use a well-squeezed mop to avoid splashing on lower shelf books. Because sweeping stirs up dust rather than removing it, vacuuming and dust mops are preferable. To prevent excess dust, it also helps to change filters as recommended on HVAC systems and keep windows closed.

**CLEANING****Books**

Bindings and textblock edges can be cleaned with magnetic wiping cloths or by vacuum. Each method has advantages and disadvantages that should be weighed before cleaning begins.

For lightly soiled books, magnetic cloths work well—especially if the textblock is trimmed smoothly and the bindings are in stable condition (with no flaking of cloth or leather). Magnetic cloths do not contain chemicals or other substances that could be left behind on books and are, in general, not too “toothy.” For all these reasons, they are recommended over standard cleaning cloths. Standard cleaning cloths do contain chemicals that attract or repel dust and micro-fiber cloths.

Magnetic cloths should not be used on books with deckled or untrimmed edges, where the soiling is heavy, or on books that have been coated in soot. Under these conditions, the wiping motion used with these cloths can abrade items as well as rub dirt into paper fibers.

If books are covered with a heavy layer of dust or the number of books to clean is large, using a HEPA vacuum with a soft brush attachment (or separate brush) is recommended. The suction of the vacuum may also need to be decreased. To clean dirty books, regardless of the cleaning medium, follow these simple steps:

- Hold the book firmly closed to prevent dirt from slipping between the leaves.
- Gently wipe or brush away from the spine to avoid pushing dirt down into the spine of the binding and to avoid damaging the endcap.
- Clean the top (head) of the book first, as it is usually the dirtiest.

- Proceed to clean the rest of the book, wiping or vacuuming outward from the spine or center to the edges.
- Change magnetic cloths when they get dirty.
- Cloths used to clean shelves should not be used to clean books.



HEPA vacuum with variable speed settings

Two-person teams, using book carts and a vacuum, are best able to clean a large volume of books. The teams work one shelf at a time from top to bottom. Books are removed in shelf order, placed on the cart, and vacuumed. The shelf is then cleaned (as described below) while the books are being vacuumed. Once the books have been cleaned, return books to the shelf in order.

### Shelves

Metal shelves are best cleaned with a magnetic wiping cloth, which attracts and holds dust with an electrostatic charge. Dust cloths that are chemically treated to hold dust can be used to clean shelves but are not appropriate for cleaning books. Feather-type dusters, even a magnetic feather-duster, should

not be used. These dusters only redistribute the dust. As a result, more frequent cleanings are necessary.

Wooden shelves—or metal shelves with heavy coatings of dust—should be cleaned with a vacuum or be washed with a mild detergent. To prevent mold growth, they should be allowed to dry completely before books are returned the shelves. Spray cleaners may be used in place of water, but take care to shield surrounding items and shelves during spraying. Many of these cleaners are potentially very damaging to books due to their oils, detergents, or pH.

### CONCLUSION

Because improper cleaning is potentially damaging and storage without cleaning creates conditions hazardous to collections, informed, careful cleaning is the course that will most prolong the useful life of a collection.

By properly eliminating the dust and dirt that abrades pages and binding surfaces, attracts insects, and contributes to an environment that supports mold growth, staff members are contributing greatly to the preservation of their collections.

Instruction in careful handling techniques, clearly written procedures, and proper equipment are all essential to ensure quality and efficiency. While handling certain materials in a collection—even in order to clean them—will always be a cause for concern, proper cleaning techniques are always preferable to static storage.

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### RESOURCES

Bendix, Caroline, and Alison Walker. *Cleaning*. London: The British Library Preservation Advisory Centre, 2011. <http://www.bl.uk/blpac/pdf/clean.pdf>.

Ritzenthaler, Mary Lynn. *Preserving Archives & Manuscripts*, 141-44. Chicago: Society of American Archivists, 2010.

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University of Washington Libraries. "Stacks Cleaning Procedures." *University of Washington Libraries*. Accessed December 6, 2012. <http://www.lib.washington.edu/preservation/clean.html>.

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