HELPFUL FACTS ABOUT BOOKS

- Books are usually made of paper (bast, cotton, hemp or wood fibers).
- Fibers can vary in quality, can be coated, calendared, sized or unsized.
- Books react differently to water depending on their material composition, use, and current condition.
- Paper is 90% air and is very absorbent.
- Paper expands and contracts.
- Surface texture of paper can be very smooth to very rough; some are clay-coated.
- Fillers are added to paper to increase weight, density and strength.
- Paper has a "grain direction".
- Books are often made of different types of materials and complex in nature.
- Books can be constructed of parchment or other unusual materials.
- Books are usually shelved in a specific order that should be maintained when possible.
- Book covers can be made of a wide variety of materials including paper, cloth, leather and plastic. These materials can react differently than the paper inside.

WHAT TO EXPECT WHEN BOOKS GET WET

- Books can be very heavy when wet and difficult to pick up without support.
- Books on a shelf are likely to swell and may be dangerous or difficult to remove.
- Bookshelf may also be damaged – check first before removing any books.
- Printing inks, dyes and other media may bleed.
- Old repairs and some bindings (particularly rare books) will release if adhesives are water soluble.
- Capillary action in the paper fibers will wick up any moisture and create tidelines when dry. Staining is likely to occur.
- Pages will cockle (warp and wrinkle).
- Coated papers will stick together permanently if not frozen immediately. Even with freeze-drying, the page may remain stuck or damage to coatings may still occur.
- Mold growth is possible if books are not dried quickly in a controlled environment or frozen.

TIPS FOR DRYING WET BOOKS

- Use carrying supports such as a milk crate, Plexiglas sheet or other support that remains rigid when wet.
- Blot off excess water with paper towels, blank newsprint, white cotton towels, or blotter. Be careful of sensitive media.
- Isolate media that is bleeding or running from other objects or pages using wax paper or freezer paper. Make a temporary "book jacket" to protect from bleeding cover dyes.
- For small number of wet books, air dry by fanning out pages. Rotate spine direction at least once a day until dry.
- Help increase air drying by circulating air with fans. But, don’t aim fans directly at books since this can cause them to blow over.
- For larger scale disasters or when it isn’t possible to air dry small numbers of books, freeze the books ASAP to buy time and prevent mold outbreak.
Drying Wet Books – 2 Techniques for Air Drying

| Interleaving with paper towels and air drying with fans | “Fanned” books drying on a table |

Drying Wet Books – How to Pack for Freezing

- If packing books in patterned crate (i.e. milk crate), put paper or board on all interior sides to prevent transfer of pattern.
- To make packing easier, turn crate on its side.
- When possible, wrap each book in freezer or wax paper.
- Pack spine down.
- Pack in a single row.
- Do not pack too tightly or leave extra space. To prevent extra space, pad out gaps with crumpled paper or toweling.
- Pack flat ONLY when there is no other option (weight will damage bindings of books on the bottom). Place largest books on bottom.