Carlson Library

April 2007

DISASTER RECOVERY MANUAL

CONTENTS

DISASTER-RECOVERY MANUAL MAINTENANCE

This disaster recovery manual will be ineffective if your staff is not aware of it, if it is out-dated, or if you cannot find it during the recovery process!

CURRENT LOCATION OF ALL DISASTER RECOVERY MANUALS

Copy assigned to	Location
Academic Support	On reception desk next to the computer
Canaday Center	On lateral filing cabinet outside Director's office
Circulation	Circulation desk
Dean's Office	On shelving unit in Executive secretary's office
Distance & e-Learning	Reception desk at main entrance
Engineering Library	Front desk at entrance
Government Documents	On top shelf, to the left of the office entrance
Information & Research	to be determined
Maps	On shelf next to Map Librarian's desk
Microform & Multimedia	On top of credenza, next to student desk
Systems	Coordinator of Systems office
Tech Services	Director's office
Web version	www.utoledo.edu/library/info/docs/disasterrecovery.pdf

1. Keep this manual in plain sight.

2. Disaster-recovery personnel should be aware of his/her responsibilities, as outlined in this manual, during recovery.

5. Always consider building, personnel, floor plan, and collection changes and update this manual accordingly.

6. This manual will be reviewed for accuracy the every summer.

Microform & Multimedia supervisor is the person responsible for updating disaster-recovery procedures in all copies of this manual.

Director of the Canaday Center is the person responsible for updating the external-resource vendor telephone numbers in all copies of this manual.

Library Web Master is the person responsible for updating the web version of this manual.

Coordinator of Access and User Services is the person responsible for updating and replenishing the disaster-recovery supply kit and refreshing batteries.

March 12, 2007

DISASTER RECOVERY SUPPLY KIT

DISASTER-RECOVERY KIT IS LOCATED AT THE CIRCULATION DESK

Note: **Plastic sheeting** is located on fifth floor -- room 5033 (janitorial closet -north side of bldg - next to Canaday Center). The door is usually open; otherwise, the Circulation department supervisor has the key. (#471731) A key is also available at the Dean's office or from the Circulation department safe.

CONTENTS OF DISASTER RECOVERY KIT:

1	Absorbent material
2	Caution signs
4	Duct tape
5	Dust masks
6	First aid kit
7	Flashlight
8	Garbage bags
9	Hand sanitizer
10	Megaphone
11	Paper toweling rolls
12	Plastic storage bags
13	Radio, (windup)
14	Vinyl gloves
15	Wax paper

Coordinator of Access and User Services is the person responsible for replenishing/updating the disaster recovery kit.

KEEP THE KIT IN PLAIN SIGHT.

RE-EVALUATE THE KIT AND REFRESH THE BATTERIES ON A REGULAR BASIS!

Collection Priority Team

NAME	TITLE	TELEPHONE EXTENSION
Crosetto, Alice	Acquisitions Librarian, Acquisitions department	2760
Duhon, Lucy	Serials Librarian, Serials department	2838
Floyd, Barbara	Director, Canaday Center	2170
Rajagopalan, Susan	Library Associate, Microform & Multimedia	2843
Suter, Marcia	Director of Library Services, Main Campus	2629

EXTERNAL RESOURCES

PROBLEM	RESOURCE CONTACT	OFFICE PHONE WEB SITE
General conservation advice and consulting	Eric Honneffer, Conservator Center for Archival Collections; BGSU	1-419-874-4128 fhonnef@bgnet.bgsu.edu
Water damaged collections	BMS Catastrophe Ft. Worth, Texas	1-800-433-2940 www.bmscat.com/index.shtml
Need freezer space – on campus	Thomas Trimble, Assistant Director - Student Union	Extension 2525 thomas.trimble@utoledo.edu
Dry and wash microfilm	Eastman Kodak Co. Disaster Recovery Lab	1-800-352-8378 www.kodak.com

DAMAGE ASSESSMENT

MAKING DAMAGE ASSESMENT

SMALL DISASTERS: (Those involving fewer than 500 items) can be handled with existing library resources

MODERATE DISASTERS: (Those involving between than 500-1000 items) can be handled with existing library resources

LARGE DISASTERS: (Those involving more than 1000 items) are likely to be part of a larger situation, such as major storm damage, engulfing fire, or widespread flooding. Large disasters require expertise and resources not available internally in the library. It is the responsibility of the dean of the library to assess when damage is large enough to require external assistance and resources.

COLLECTION PRIORITIZATIONS

Note: In most disasters, it will be impossible to save all of the damaged materials; much of the work will have to be done on site, item by item. Within the book collection, subject specialists should develop a basic priority listing of collections or areas that should be focused on first. Such detailed work should be assigned to the subject specialists for those particular areas.

1. Library faculty subject specialists will be responsible for setting priorities for collection salvage. The Coordinator of Collection Development will contact these individuals

SALVAGE FACTORS TO CONSIDER

1. Whether an item can be replaced, and how difficult replacement might be. (Replacement should include electronic or microfilm formats.)
2. Whether the items are part of a large collection which gives items value beyond what value might exist individually.
3. The value of the material for scholarly research, particularly how the item relates to institutional research priorities and mission.
4. The monetary value.
5. The likelihood that the item can be successfully salvaged.

Continued on next page…⇨

⇦…Continued from previous page

OBVIOUS PRIORITIZATION

1. Special collections material, first priority
2. Within special collections, manuscripts and university archives have the highest priority.
3. Rare books housed in the locked file cabinets and safe should be the first priority for the rare-book-collection
4. Circulating book collection is second priority.
5. Serials preservation should focus on older editions, expensive subscriptions and unique or rare series.
6. Government documents and maps recovery should focus on older items and those most relevant to the research interests of the faculty.
7. Reference recovery should focus on expensive sets, older items, and heavily used sets. Recent editions and those available in other formats should have lower priority
8. Microfilm and multimedia materials may be the easiest to replace. Exceptions to this rule are recognized.

Note on salvaging costs: According to Western New York Library Resources Council, "contrary to popular belief, it is almost always less expensive to repair library materials than to replace them. This situation is largely due to the staff costs for locating, purchasing, and processing replacements." Whether to repair or replace the items should take into account whether the items need to be simply readable or merit special attention, does it need to be preserved in its original format, will important features be destroyed during repair, etc. With many items available electronically, replacement may be more cost effective for items such as serials and reference works.

WATER DAMAGE RECOVERY - BOOKS

BOOK RECOVERY

Note: Since books are paper-based, they are highly susceptible to water damage. The glues and adhesives that hold books together are often water soluble, and books will fall apart when wet, or pages will stick together, or both. Backing-boards, used in bindings, are generally cardboard and will absorb water; this makes them swell in size and break the bindings. Cloth covers on books may bleed their dyes when wet. Leather bindings may shrink when they dry, or harbor mold. Coated papers used in many high-end books will fuse together within 6 hours of becoming wet. Paper in general will swell in size and some inks may run.

USE THE FOLLOWING STEPS FOR BOOK RECOVERY

Recovery supply list and location of the kit - see page 2

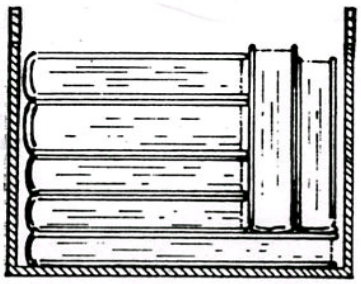
1. Stabilize the environment. Open windows, if possible, turn on fans, and try to reduce the temperature and humidity levels.
2. If water is still flowing into the area, protect with plastic sheeting and direct water to the outside or into containers.
3. If possible, carefully move items to drier areas to be sorted
4. Establish a sorting area, with long tables covered in absorbent paper
5. Place books in plastic cartons binding side down to move them making sure not to crush smaller books, do not over-pack the cartons or improperly support the items. SEE PAGE 8.
6. Books that will not be salvaged should be removed from the area. However, they should not be disposed of until they can be inventoried to insure cataloging records are accurate.
7. For books worthy of salvage, freezing must be done quickly to restrict damage. Freezing also gives the library time to assess a larger disaster or set recovery priorities.
8. For smaller and medium disasters, arrangements may be made with the local food service contractor in the Student Union for freezer space. See page 4. For larger disasters, commercial vendors should be contacted. See page 4.
9. To prepare for freezing, wrap a sheet of wax or freezer paper around the back of the book, being sure not to completely wrap the book in a way that will slow the evaporation of water.
10. Secure the boxes and transport quickly to a freezer.
11. Once frozen, the books should be sent to a disaster recovery firm for freeze drying.

Continued on next page...⇨

⇦…Continued from previous page

USE THE FOLLOWING STEPS TO PACK BOOKS CORRECTLY

1. Wet books are fragile; do not open closed books; do not compress swollen books.
2. Place books in milk crates or boxes (about ¾ full.)
3. Stand books on spine or lay flat; see example below.
4. Separate the books with wax paper or freezer paper. Do not wrap individually.
5. Do not label crates and do not bother keeping books in order.
6. Single sheets; do not try to separate them. Freeze as is.



Proper methods for packing "wet" books.
Flat or Spine Down

YES

Improper methods for packing "wet" books.

NO

⇦…Continued from previous page

USE THE FOLLOWING STEPS FOR BOOKS THAT ARE NOT TOO WET AND COULD BE AIR DRIED

1. Place the books on tables on their top edges, and let them dry slowly until their pages separate. Do not attempt to force the pages apart. If pages are not completely wet and can be opened easily, interweave about every ten pages with paper towels (unless printed on coated stock). Replace these towels as they become wet.
2. Leave the books to dry completely, upright and with the pages fanned, for at least a week.
3. Books should be checked periodically for signs of mold growth
4. Once dry, the books can be flattened carefully under weights.

USE THE FOLLOWING STEPS FOR DOCUMENT RECOVERY

Note: The primary difficulty in drying unbound materials such as manuscripts is that a single collection can contain many different types of paper, inks, and even formats. Therefore, knowing how to handle each is a challenge. Do not remove papers from their folders unless the folders themselves are soaked. If the folders are soaked, make certain that the materials remain together and are identified by the folder title. Original order is a fundamental principle of archival administration, and significant information on the relationship between documents can be lost when this order is lost.

1. If the documents must be frozen, place the materials, firmly supported, in their folders in plastic cartons.
2. If an entire box of papers is wet, the entire box can be frozen
3. After freezing, the materials should be sent to a professional disaster recovery firm for freeze drying. See page 4.
4. If the items are to be air dried, place the documents on tables in piles. As the top documents dry enough to separate safety, do so, and move to the documents further down in the pile.
5. If windows are open and fans are in use, be careful not to blow papers around.
6. Once dried, re-house in new folders and boxes

WATER DAMAGE RECOVERY- PHOTOS

USE THE FOLLOWING STEPS FOR PHOTOGRAPHIC RECOVERY

Note: Because photographs are produced using a wet process, it is best to keep them wet until they can be handled rather than letting them dry in stacks, which will cause their emulsions to stick together. Carefully immersing them in cold, clear water until they can be handled individually will keep them from drying together. Freezing may be appropriate if the photographs cannot be dealt with quickly, but freeze drying photographs is not a good idea. Because photographic materials may involve many different mediums and issues, it is best to consult a professional if dealing with large quantities of photographs Also, reformatting by scanning may be one solution to preserving the images of damaged photographs.

1. Place damaged photographic prints in cold water, and gently agitate tray. (Never use warm water!)
2. Once dirt is removed and photographs have separated, rinse the prints and dry flat or hang on a clothesline with rust-free clips. Do not attempt to flatten them as they dry.
3. For film, negatives (including glass plate negatives), and slides, consult a professional conservator quickly once an assessment is made of what should be salvaged. See page 4.

USE THE FOLLOWING STEPS FOR MICROFORM RECOVERY

Note: There are some conditions you can control to protect the collection. Keep a check on storage areas. Diminish the risk by storing microform off the floor, away from plumbing, in cool dry cabinets or at least on pallets. Safeguard the material during construction with waterproof tarps. For priority recovery, flag the vital and valuable records. (The periodical holding shelf-list cards are flagged with Red Jackets for items that are **number-one- priority** recovery.)

1. For large amounts of microform, store microfilm/fiche for a few days in clean, cold water by placing it into thick plastic garbage bags, inside of clean trashcans. Do not remove rolls from their boxes! Hold the boxes and their labels together with rubber bands. Wrap groups of boxes of film together with plastic wrap. Label containers as "wet film for rewashing & drying." Fill the trash bags with clean water, keeping them light enough to move.
2. Once the microfilm is contained, call a microform recovery service. See page 4.
3. For small amounts of microfiche, keep wet and they can be cleaned by hand (within 2 days) by blotting and wiping dry with clean lint-free cloth wipes.
4. For small amounts of microfilm, keep wet as indicated above and ship to a microform recovery service. See page 4.

Note: The "Silver Halide" film has been identified (and stamped "Silver Halide" in red on each box). Boxes not stamped, and most fiche, are diazo or vesicular. Since diazo and vesicular are impervious to water and silver halide must be kept in containers of water, all reels and fiche should be kept in containers of water for shipment to a vendor for recovery.

WATER DAMAGE RECOVERY - DVD/CD

USE THE FOLLOWING STEPS FOR DVD/CD (DISC) RECOVERY

Note: If water has condensed inside a DVD/CD case, treat the item as wet.

1. Clean off mud and/or sewage by washing the disc in a detergent solution. Do not rub the disk because dirt could scratch the tracks.
2. Rinse in distilled water.
3. Dry on vertical racks or blot with a soft lint-free cloth. If you use cloth, always wipe from center spindle hole outward to edge of disc. Never wipe a disc in a circular motion around it.
4. Wash and dry the DVD/CD cases, re-label if necessary
4. The DVD/CD booklets are usually glossy, if you decide to keep them, they should be freeze dried. Call a vendor for recovery. See page 4.

WATER DAMAGE RECOVERY – VHS/TAPE

USE THE FOLLOWING STEPS FOR VHS/TAPE RECOVERY

Note: If water has condensed inside a VHS or audiocassette case, treat the item as wet. The only cassette tapes we have in the collection are a few audio books-on-tape and they are identified with a label that says "TAPE FORMAT"; the rest of the audio books are on CD.

VHS:

1. If only the outside of the VHS is wet, dry it with absorbent paper towels.
2. If it appears damp inside, un-screw the VHS cassette, blot the surfaces dry then stand them in a vertical position to air dry.
3. After drying, run through a VHS tape-cleaning machine if there is one available.
4. Wash, rinse, towel dry the VHS sleeves/cases. Replace the labels if necessary
5. Dry, replace or discard paper inserts/covers

AUDIO CASSETTE TAPES:

1. Dry off outside of cassette with paper towels
2. If the tapes appear to be wet inside, disassemble the cassette and air dry.
3. Re-record tape after drying.
4. Wash, rinse, towel dry the cases. Replace the labels if necessary
5. Dry, replace or discard any paper inserts/covers

Note: For large amounts of water damaged material (VHS/Cassette tapes), contact a vendor for recovery. See page 4, or depending on priority, discard.

MOLD INFESTATION RECOVERY

Note: Mold can be extremely dangerous, and even toxic. For large mold outbreaks, it is best to use caution, cover your mouth and nose with a mask, and remain in the area for only brief periods at a time. Any health reactions that result should be treated seriously, and many necessitate removing yourself from the salvage and recovery process.

USE THE FOLLOWING STEPS FOR SMALL MOLD INFESTATIONS

1. Move to stabilize environment by decreasing temperature and humidity, and circulating the air.
2. Isolate materials that show evidence of mold growth from the rest of the collection quickly to prevent spores from spreading to other items
3. Seal affected volumes in plastic bags.
4. For small outbreaks of mold, individual items can be treated by wiping the volumes with a soft cloth dampened with alcohol. Do so in a well ventilated area. Some book cover dyes may run, so try a small area before proceeding to the entire volume
5. Leave books to air out in a well-ventilated area to reduce odor of mold
6. Professional fumigation may be required. See page 4.

PEST INFESTATION RECOVERY

Note: Pests (rodents, insects like silverfish) can be attracted to food, clutter, plants, dust, dirt, warmth and humidity. [Silverfish are pictured below and their eggs look like poppy seeds. Carpet beetle larvae are pictured below and usually eat cloth book covers]. Strongly discourage eating and drinking near the collections and in storage areas. Keep the collection and floor area free of dust and clutter. Keep the collection in a temperature/humidity controlled environment if possible. Periodically check the collection for infestation. Check packing material and new items for pests. Check material being returned from inter-library loan or returned from the general public. Check gift and/or second hand books for infestation before they are added to the collection.

USE THE FOLLOWING STEPS FOR SMALL RODENT INFESTIONS

1. Small mouse traps can be set up for small infestations
2. Keep all food sources and clutter away
3. If it is a large infestation, report to the Dean's secretary at extension 4488.


Mouse

USE THE FOLLOWING STEPS FOR SMALL INSECT INFESTATIONS

1. Isolate the area that is affected, and request that the shelving and surrounding carpet be thoroughly cleaned.
2. Do not use insect sprays on the material.
3. If the infestation is too large be cleaned page by page with a soft brush, report to the Dean's secretary at extension 4488.
4. Another possible way to eliminate an insect infestation is to freeze the material


Carpet Beetle larvae


Silverfish

Note: Substances like dirt and soot left on collections are usually the result of larger disasters. Once the disasters have been mitigated, careful cleanup of individual items judged worthy of salvage can begin. Remember: not all items can be saved, and time and resources must be allocated appropriately.

USE THE FOLLOWING STEPS TO REMOVE DIRT AND SOOT

1. Much dirt and soot can be removed simply by brushing the volumes with a soft cloth or chemical rubber sponges.
2. Wallpaper cleaner and white erasers can be used to remove more stubborn residues
3. When dealing with flat items, be careful not to damage the item in attempting to clean it
4. Stains may result from dirt and soot which cannot be removed
5. Photocopying or scanning may be the best solution for preserving the informational value of items that are heavily soiled
6. Fire damage will make books and papers brittle. Careful handling is best until decisions can be made as to whether the item can be saved
7. Rebinding may be possible for volumes charred only in the margins

Disaster preparedness and response
http://palimpsest.stanford.edu/bytopic/disasters

Book preservation: Disaster planning for libraries
http://www.librarysupportstaff.com/jobhelp4.html

Belfor Inc., Restoration services
http://www.belforrestoration.com/techlibrary

INDEX

Carlson Library
DISASTER MANUAL