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DISASTER PLANNING FOR MARINE SCIENCE LIBRARIES

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ABSTRACT

"A disaster is something that happens only when you are not prepared for it" (Bohem, H. Disaster prevention and disaster preparedness.) Types of disasters will be discussed and the need for Marine Science Libraries to have disaster plans will be stressed. Methods of developing a disaster plan and acquiring a list of suppliers and resources will be presented. The aftermath of disaster and its effects on staff and physical plant will also be discussed.

INTRODUCTION

It is probably a truism to say that most of us are taken by surprise when a disaster strikes. How we react to a disaster may make the difference between minor damage or total loss. Prevention, a reliable disaster team and a good workable disaster plan are the keys to surviving a disaster with minimum loss. Methods of prevention and the development of a disaster committee and disaster plan will be discussed. Methods of dealing with disaster aftermath will be outlined and the disaster will be discussed in terms of material loss and human stress.

"Fire occurred when a janitor dusted the floor with an oily mop. The mop picked up a lighted cigarette. The lighted cigarette went unnoticed, but the fire could be seen for miles."⁴

"A study carrel window was left open. The cold winter night froze the hot water radiator. The next morning it thawed and the flood began."⁴

"August 3, 1970, Hurricane Celia came in over Corpus Christi Bay, packing winds that gusted to more than 160 mph. The University of Corpus Christi Library, overlooking the Bay was the hardest hit, losing more than 11,000 volumes when most of its windows were blown out and wind and water had a field day."³

Caused by man or nature, flood, fire or wind, a disaster simply defined is a sudden unfortunate happening -- or according to Hilda Bohem in *Disaster Prevention and Disaster Preparedness*, "something that happens only when you are not prepared for it."³

Of all possible natural disasters, the hurricane may be the most feared by Marine Science libraries. These libraries are often located in unprotected and vulnerable coastal areas. Added to their dilemma of wind and water is fire, caused by downed power lines and ruptured gas mains. Nowhere is there more truth about disaster prevention, especially for Marine Science libraries, than in the old saying, "An ounce of prevention is worth a pound of cure."

PREVENTION: THE MOST IMPORTANT STEP

Planning ahead for disaster not only eliminates or reduces the possibility of disaster related damages but may even prevent the disaster from happening. If libraries are located in areas where natural disasters are a possibility, then understanding the natural hazards of the area, anticipating problems and maintaining buildings and grounds to withstand these disasters may make the difference between total loss or minimal damage.²

Proper building maintenance and organization are the first preventative steps a library can take. Roofs, gutters and windows can be checked for leaks and patched. A "clear zone" can be established around the library by cutting back shrubs and trees that could break windows or cause structural damage to roofs and walls during storms with exceptionally high winds. Collections can be checked to determine if they are safely and properly stored (i.e. important collections not stored on floors, in basements, near or under windows, etc.)

Understanding the dynamics of air pressure and wind, the stress they put on buildings and learning sandbagging and flood-proofing techniques are a beginning in educating the library staff. In instances of flood and hurricane there may even be situations in which "wet flood-proofing," permitting water inside the building on a lower floor or basement, will prevent building collapse or movement by equalizing the water pressures.⁵

Even the simplest measures such as moving collections to higher levels, boarding up windows and wrapping card catalogs in plastic sheeting will help keep damage down.

PLANNING: THE IMPORTANCE OF PRIORITIES

When the library building has been made as safe as possible and staff educated as to possible damage control methods, a disaster plan should be developed, focusing on the identification of staff, supplies and outside resources that may be needed should a disaster occur. Planning for such calamities helps to eliminate panic, hasty decisions and will save time when time is critical to the salvage of the collection.⁶

The disaster plan should include a disaster recovery team that includes the chief administrator, the persons in charge of cataloging and collections and a member from the Physical plant and the Security staff.⁶ In

many Marine Science libraries the staff will be quite small and it may be necessary to recruit help outside the library itself. A list of names and telephone numbers of the disaster team should be drawn up and circulated within the library as well as to Security and Fire personnel.

In addition, there should be a second list that details emergency resources outside the institution, such as electricians, carpenters and the closest available conservator. Supplies of newsprint, electric fans, trucks and plastic sheeting should be identified. Most importantly, a local cold storage facility and a large supply of plastic milk cartons should be identified. Many commercial organizations are willing to provide assistance, free or at a minimal cost to local institutions. These facilities and resource people should be contacted before a disaster strikes, in order to make the response to an emergency as efficient as possible.

A third list would identify the high priority collections as well as valuable objects in the library. The location of these high priority collections should be marked on a floor plan, a copy of which should be given to members of the disaster team and to Fire and Security personnel. Highest priority should be given to the salvage of the shelf list and other catalogs and circulation records.⁶

THE RECOVERY PROCESS: PEOPLE AND BOOKS

The recovery process itself must also be planned in advance. Most disasters involve fire and/or water damage. Therefore the first step to be taken after a disaster, as soon as the building is declared safe to enter, is to evaluate the extent of the damage. Then, staff members should examine the collection according to the priorities previously established. Dry materials that are charred or soot covered are stable and there is no need to take care of them immediately. Dry materials can be protected from further damage by covering them with plastic sheeting against the weather or leakage from other areas.

In the event of a wet or damp collection, the salvage process must begin immediately. Wet or even damp paper will support the growth of mold, within a 48 hour period. If priorities have been established, the wet books can be packed, spine down, one layer to a milk crate, the contents recorded and sent as fast as possible to the pre-determined cold storage location. This will effectively stop the formation of mold and will serve to stabilize the condition of the inks and paper. It will also allow the staff time to deal with the manageable part of the disaster and the wet books can be defrosted and freeze-dried a batch at a time when there is an opportunity to make thoughtful decisions about what to keep and what to discard. Methods for salvaging wet materials can be found in Peter Waters, *Procedures for Salvage of Water-Damaged Library Materials*.

Problems are not over when the collection is dry. It is estimate by George Cunha (Northeast Document Conservation Center) that following a disaster:

1. 10% of the damaged material will be discarded outright.
2. 20% of the damaged material will be replaced with new copies.
3. of the remaining 70% requiring restoration:
 - a. 10% will require drying only,
 - b. 50% will require commercial binding.
 - c. 10% will require repairs by a professional conservator.
(\$500/vol)⁹

Since the salvage process is very expensive, only publications, research materials and special collections that cannot be easily replaced, should be considered for salvage.

Aside from the actual physical damage to the library building and collections, there is also the human problem to be considered. Generally, disaster causes personnel transfer, layoffs and other traumatic job-related changes.⁴ The salvage team may be under severe physical and mental strain. The person in charge should be aware of these stresses and be prepared to alleviate them.¹⁰ Staff may be re-assigned, temporarily and should be kept working and busy. Those staff members working directly with the salvage operation should be sent off for rest before the stress level becomes too high. Since your staff are the most important part of your operation, part of the planning process must be to give the human problems the attention they deserve.

In summary:

1. Prevention and preparation are the best approaches to disaster.
 - a. Make sure the library building is maintained in good condition and collections are stored in appropriate areas.
 - b. Be familiar with the methods for handling disasters.
 - c. Form a disaster team and draw up a workable disaster plan that includes a list of priorities, outside resources and supplies.
2. After the disaster:
 - a. Wait until the library is safe to enter.
 - b. Assess damage according to pre-determined priorities.
 - c. Remove wet or damp material. Send to the cold storage facility or air dry and treat according to Waters.¹⁰
 - d. Make sure that staff, disaster team, and volunteers receive necessary support and rest.

Above all, remember, disaster can and does strike at any time. A simple, workable disaster plan is your best response.

BIBLIOGRAPHY

1. Bohem, Hilda. 1978. *Disaster Prevention and Disaster Preparedness*. University of California. Berkeley, California.

2. **Buchanan, Sally.** 1981. Disaster: Prevention preparedness and action. *Library Trends*. 30(2): 241-252.
3. **Goetz, Arthur H.** 1973. Books in peril ... a history of horrid catastrophes. *Wilson Library Bulletin*. 47(5):428-439.
4. **Griffith, J.W.** 1983. After the disaster: restoring library service. *Wilson Library Bulletin*. 58(4):258-265.
5. **Levere, Alan.** 1985. *Coastal Homeowner's Flood Manual*. Connecticut Department of Environmental Protection, Natural Resources Center. Hartford, Connecticut.
6. **O'Connell, Mildred.** 1983. Disaster Planning: Writing and Implementing Plans for Collection-Holding Institutions. *Technology and Conservation*. Summer: 18-26.
7. **Schappert, Alice D.** 1974. What did Marion do after Agnes left. *Wilson Library Journal*. 48(8):664-665.
8. **Sellers, David Y. and Strassberg, Richard.** 1973. Anatomy of a library emergency. *Library Journal*. 98(7): 2824-2827.
9. **Swartzburg, Susan G.** 1981. Words to the wise. *Library Scene*. 10(3):22.
10. **Waters, Peter.** 1979. *Procedures for Salvage of Water-Damaged Library Materials*. Library of Congress. Washington.
11. **Wright, Gordon H.** 1979. Fire anguish and emergency planning. *Canadian Library Journal*. 36(5):254-260.