

International Preservation News

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on Preservation and Conservation



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Contents



- 4** **Library Experiences with Natural Disasters:
Hurricanes and Volcanoes (Montserrat)**
Gracelyn Cassell

- 12** **Skills Development
and Management
for Disaster Mitigation Planning:
the Specific Case of Electronic
Equipment and Digital Data**
Jo-Ann Georges



- 15** **Risks Associated with Hurricanes
in the Caribbean**
Steve Pollonais



- 23** **Survey on Disaster Planning
in National Libraries**
*Marie-Thérèse Varlamoff
and Marie-France Plassard*



- 39** **News**

- 41** **Publications**

- 42** **Events and Training**

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Recent disasters like the fire of the Amalia Library in Weimar remind us that no one is shielded from a catastrophe and that it can happen to any of our institutions. Furthermore, having a solid disaster plan may prevent small disasters to turn into a major catastrophe. So those who retort that they cannot afford to spend time, money and staff on the elaboration of a disaster plan, I would simply answer that the initial expenses are nothing compared to the cost of response and recovery after a disaster and that protecting our memory is the only way, and our duty, to decently prepare the future of our children and grand-children.

The results of the survey on disaster planning (see page 23) launched among national libraries early in 2004 underlined the fact that most libraries which had not yet implemented their disaster plan lacked models. A situation which is surprising enough if we consider the numerous guidelines, leaflets and books on the issue already available. The problem seems to be that most models are so detailed that libraries with limited human and/or financial resources cannot use them. This is why, in the framework of the Blue Shield, IFLA-PAC has decided to implement the publication of a basic manual focused on the threats and needs in developing countries. The manual which is aimed to serve for archives as well as for libraries will be prepared by a team from IFLA and ICA under the leadership of John McIlwaine, former chair of the section PAC. The manual will be trilingual English, French and Spanish and should be ready for publication in the early 2006. We hope this initiative will raise more awareness on the urgent necessity to take measures for the protection of our cultural and documentary heritage.

Marie-Thérèse Varlamoff
IFLA-PAC Director



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On May 21st-22nd, 2004, at the National Library of Trinidad and Tobago, the Association of Caribbean University, Research and Institutional Libraries (ACURIL) and IFLA-PAC presented a workshop on the theme: « Mitigating the Consequences of Natural Disasters for Caribbean Libraries and Archives ». It aimed at discussing the risks of hurricanes and other natural disasters, how to deal with them and take adequate preventive measures in order to mitigate their consequences. This was the second of a series of workshops on disasters that PAC organises in the Caribbean area, a region regularly threatened and damaged by natural disasters. The third one will be hosted by the National Library José Martí, in Cuba, in 2005.

These workshops are meant to gather participants speaking the same language and coming from a restricted neighbouring area. However, as communications might interest library and archives professionals from other regions, we have decided to publish some of the papers presented in Trinidad and Tobago, May 2004, in this issue of 'International Preservation News'.

Corine Koch
Editor

Des catastrophes récentes comme l'incendie de la Bibliothèque Amalia à Weimar nous rappellent que personne n'est à l'abri et que nous pouvons tous être victimes d'un sinistre. Par ailleurs, le fait de se doter d'un plan d'urgence sérieux peut empêcher que de petits incidents ne se transforment en catastrophe de grande envergure. A ceux qui rétorqueraient qu'ils n'ont pas les moyens financiers, le temps ou le personnel suffisant pour élaborer leur plan d'urgence, je répondrai simplement que les dépenses initiales ne sont rien en comparaison du coût de la remise en état et de la réhabilitation après une catastrophe et que protéger notre mémoire est la seule manière, mais aussi le devoir de tous, de préparer le futur de nos enfants et petits-enfants.

Les résultats de l'enquête sur les plans d'urgence (voir page 29) lancée par l'IFLA au début 2004 auprès des bibliothèques nationales ont mis en exergue le fait que la plupart des bibliothèques qui n'avaient pas encore de plan d'urgence se plaignaient de n'avoir pas trouvé de modèle. Réponse surprenante si l'on considère le nombre important d'ouvrages, de manuels ou de brochures déjà publiés sur la question. Le problème semble plutôt venir du fait que ces modèles sont si détaillés et complexes que les bibliothèques disposant de ressources financières et humaines limitées ne peuvent guère les utiliser. C'est la raison pour laquelle dans le cadre du Bouclier Bleu, IFLA-PAC a pris l'initiative de développer la publication d'un manuel de base, utilisable à la fois par les archives et les bibliothèques. Cette publication préparée par un groupe de travail réunissant archivistes et bibliothécaires sous la houlette de John McIlwaine, ancien président de la section PAC de l'IFLA devrait être prête au début 2006. Elle sera trilingue français, anglais, espagnol. Nous espérons que cette initiative sensibilisera encore davantage à l'impérieuse nécessité de prendre des mesures pour la protection de notre patrimoine culturel et documentaire.

Marie-Thérèse Varlamoff
Directeur d'IFLA-PAC

Les 21 et 22 mai 2004, à la Bibliothèque nationale de Trinité et Tobago, l'Association des Bibliothèques universitaires, des bibliothèques de recherche et des bibliothèques d'institutions de la Caraïbe (ACURIL) et IFLA-PAC ont présenté un atelier autour du thème suivant : "Comment limiter les effets des catastrophes naturelles sur les bibliothèques et les services d'archives de la Caraïbe ?". Dans cet atelier, il était question des dangers que représentent les ouragans et les autres catastrophes naturelles, des moyens d'y faire face, et des mesures préventives à prendre pour en atténuer les conséquences. Cet atelier était le second d'une série organisée sur ce thème par le PAC, dans la Caraïbe, une région régulièrement menacée et frappée par les catastrophes naturelles. Le troisième aura lieu à la Bibliothèque nationale José Martí à Cuba, en 2005.

Ces ateliers visent à rassembler des participants d'une même communauté linguistique, qui viennent d'un périmètre restreint de régions limitrophes. Mais dans la mesure où des professionnels des bibliothèques et des archives d'autres régions du monde peuvent être intéressés par ce sujet, nous avons décidé de publier, dans ce numéro de 'International Preservation News', certaines des communications présentées à Trinité et Tobago, en mai 2004.

Corine Koch
Responsable de publication



Photo : Sylvie Biscioni



Library Experiences with Natural Disasters: Hurricanes and Volcanoes (Montserrat)



by Gracelyn Cassell
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Background

A quick survey of the chronology of major events on Montserrat, a tiny British dependency in the Caribbean, provides a reminder that the island is prone to all kinds of natural disasters. There was a hurricane in 1667. A massive earthquake occurred in 1672, and in 1767, both hurricane and flooding were experienced, with Fort Ghaut overflowing its banks and threatening Plymouth (Fergus 288). These disasters occurred with startling regularity and continue to do so, affecting library services on the island.

1. Public Library

Falling under the Ministry of Education, Health and Community Services, the Montserrat Public Library was, in 1989, located in an annex to the Government Headquarters building in Plymouth. At the time, it was the only library with a full staff complement of one Principal Librarian, two librarians, one library assistant, two clerical officers, one library attendant and a part-time cleaner. It coordinated and assisted with the development of a library at the Ministry of Agriculture and at the Montserrat Secondary School. In close proximity to the Public Library and also falling under the library's administrative umbrella, was the National Documentation Centre that was started in the early 1980s for the delivery of information services to government officials and private sector personnel involved in development work. It was the repository for government reports and official publications.

2. School of Continuing Studies Library

The University Centre, or University of the West Indies, School of Continuing Studies, had a collection to support its extra-mural programmes. Its collection of 3,000 items included text books, journals, cassette tapes, and a West Indiana collection. Students and tutors made use of the lending and reference services offered at the Centre. Students from the Secondary School were also allowed to use the collection.

3. Salem Community Library

This library operated as a free lending library with separate collections for adults and children. The collection of mainly fiction was the result of donations from friends of the community, expatriates and the Public Library. Volunteers manned the library and a small reference collection was maintained.

4. The Offshore Medical School (AUC) Library

The off-shore medical school, The American University of the Caribbean (AUC), which in 1980 started offering medical training to students recruited mainly from North America, had a library to support its teaching programme. The collection had 8,000 titles including books, medical journals, videotapes, popular magazines and some works of fiction. Lending, research and photocopying services were offered to faculty and students at this School.

5. National Disaster Coordinator

It is important to note that the Government of Montserrat had appointed a National Disaster Coordinator in 1986. The post was established within the Government Information Office and was twinned with that of Government Information Officer (Evan-Wong, 8). The Governor had overall responsibility for Disaster Preparedness. A revised National Disaster Plan for the island appeared in 1987 but it dealt mainly with hurricane management. Wong notes that this plan provides no guidelines for the education sector responsible for library services (9).

1. Preparedness

In 1989, Montserrat experienced the fury of Hurricane 'Hugo', and the Public Library was not spared. Following the hurricane warning on September 16, an effort was made to secure the vulnerable areas of the Public Library. Equipment, including computers and the fax machine in the library office on the ground floor, had been covered with garbage bags. Tape was placed diagonally across glass panes to prevent shattering. Unfortunately, a request to the Public Works Department to batten down the back door, which was obviously a vulnerable point, fell on deaf ears. Staff in the Department of Agriculture secured their more recent and more valuable library materials in a bunker. They doubted that the wooden building housing the library would survive the hurricane's wrath. These activities constituted the sum total of preparedness activities in libraries on the island.

2. Damage Assessment

It was two days after the passage of 'Hugo' before staff was able to assess the damage in the Public Library. By then, roads that had been impassable had been cleared and those members of staff who had personal emergencies with which to contend had addressed those. As feared, the back door leading to the children's section had been blown in and most of the damage to the library was in the immediate area of that door. Broken window panes and furniture were strewn on the floor. Children's books were lying in water. A cabinet of local history materials from the Montserrat National Trust was broken and the materials it held suffered water damage. They were, however, salvageable. The library was under approximately four inches of water. Materials from the newspaper and paperback racks and from the magazine display had ended up in the water gathering on the ground.

The entrance to the library formed part of the general lobby for Government Headquarters, and with the roof of that wing blown away, each time it rained, water continued to run down into the library annex until the damaged roof was eventually covered with plastic sheeting. The library office, with computers and fax machine, and the Documentation Centre, with its collection of government publications, were located on the ground floor section of the Government Headquarters building. They suffered no damage, although the threat to materials and equipment became real while we waited for the roof to be

covered. Spotting on the ceiling of these rooms indicated that the water collecting on the floor above was slowly seeping through the concrete.

Many of the other library collections on the island had various degrees of damage. After a survey of these collections, Sue Evan Wong reported that the roof of the University Centre Library was partially gone and about half of the stock had suffered rain damage (15). The Secondary School Library, located as it was on a top floor, had lost its roof completely, and the winds in excess of 165 miles per hour (Fergus 232) had shredded the books and periodicals, most of which were new. Although the Agricultural Library had lost its roof, the materials had already been secured in a bunker and were therefore safe from harm. Damage to the Offshore Medical School, AUC, was such that it was temporarily relocated to Texas while repairs were done to the Campus. The collection was reduced to 5,000 items.

3. Recovery Efforts after 'Hugo'

An effort was made to salvage irreplaceable materials in the Public Library. Reading Tables were taken outdoors when the sun finally emerged, and armed with spray tins of 'Lysol' and rolls of white paper towels, library staff set about saving library materials. While approximately a thousand books were lost within the Public Library, its overall losses were far greater because more than 5,000 books out on loan were destroyed when borrowers' homes were damaged. The radio stations and the newspaper were used to appeal to library users to get their water damaged books to the library as soon as possible for library staff to salvage.

'Lysol' was sprayed on the damp material to prevent mould growth, while paper towels were interleaved between pages to prevent them sticking together. Once treated in this way, the books were left on tables in the sun to dry. The loss of materials was therefore contained by this action.

Unfortunately, the University Centre allowed its materials to dry without taking any such action and most of the books had to be discarded.

4. Lessons Learned

Hurricane warnings should be taken seriously. Some persons thought the preparedness measures that were undertaken for Hurricane 'Hugo' were unnecessary. Subsequently, people had to live with the knowledge that they had the opportunity to do more to protect property and valuables and they had done nothing.



Phreatic eruption

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The general observation was made that collections housed on the ground floor two storied buildings or under concrete roofs fared better than those immediately under roofs susceptible to strong winds. Buildings with concrete roofs and secure windows in wood or aluminium were therefore recognized as being preferable for providing safe storage in the event of hurricanes.

The importance of taking flooding into consideration when developing disaster preparedness plans was also highlighted by the 'Hugo' experience. Space constraints in libraries usually lead to boxes of materials being placed on the floor. The hurricane experience provided a reminder that these boxes should be placed at least four inches off the ground. With hindsight, there were some other precautions that could have been taken to reduce the impact of the hurricane. Firstly, paperback racks had been left laden with books. These had toppled once the broken door allowed free entry to the wind and rain. The materials on the newspaper rack and periodicals display case were also blown into the water pooling on the floor. These could easily have been secured before the hurricane.

It was only after users saw the library's salvaging operations that they started returning wet materials. Some were rescued while the majority had to be discarded. By the time people started coming for advice to save their own materials, it was too late.

It was then realized that other people would have benefited from having instructions for handling wet books. Although airtime on radio during that crucial week after the hurricane was taken up with conveying messages from concerned relatives overseas, undoubtedly, the library would have received the usual cooperation and this could have reduced the losses. This information would have been useful for the other libraries as well, since a lot of their material was damaged when their roofs were lost.

One other important lesson learned was that the library needed to factor into its disaster plan, alternatives to centralised government assistance, since in the Government's attempt to address the needs of an entire community, the library's needs may not necessarily get priority treatment. This was demonstrated when the staff from the Public Works Department responsible for battening down Government buildings, did not see the need to secure the back door that had been identified as a vulnerable area. Nor did they support the suggestion to put plywood over the glass windows. Then, after the hurricane, with efforts concentrated on assisting the many homeless people, there was no immediate response to the request for plastic sheeting to cover the roof of Government Headquarters so that further damage to library materials and equipment in ground floor accommodation would be reduced. The library office, which suffered no damage, soon had water seeping down its walls from the floor above.

The human element is something that needs to be considered in developing preparedness plans. There needs to be recognition that individuals may not be able to function well during disaster recovery if the disaster has had an impact on their personal lives as well. Many people had to deal with the shock and stress of having lost their homes and belongings. They also needed to secure whatever was left of their lives. It was automatically understood that early involvement of these persons in recovery efforts would simply not be possible. However, if disaster recovery planning includes steps understood by all, the process need not wait for the designated leader to be available and roles could be changed.

The library, having lost some 6,000 books and some furniture estimated at EC\$250,000 as a result of the hurricane, raised the issue of property insurance. However, the official response was that Government was its own insurer. The library, however, never received any additional funds from government for replacing any of the losses. Overwhelming support in the form of technical assistance and book donations came instead from the rest of the Caribbean and the wider world.

As a result of the 'Hugo' experience, the Public Library drew up a draft outline of a disaster preparedness plan. It included telephone numbers for all members of staff and a list of essential items for disaster recovery activities. This assisted library staff in disaster mitigation activities for all subsequent hurricane threats and, more importantly, guided action to some extent once the volcanic crisis started.

Volcanic Crisis

1. The Soufriere Hills Volcano

The Soufriere Hills Volcano, that had long been dormant, rumbled to life on July 18, 1995, marking the start of a crisis that continues today. In 1995, the Public Library had been in its location upstairs of a supermarket on Marine Drive in Plymouth for two years. Once the decision had finally been made to demolish 'Hugo' damaged Government Headquarters in 1993, the library had then moved to rented accommodation that was fully air-conditioned. By 1994, construction work had begun on a new Public Library building that would be part of a 'Hugo' reconstruction effort.

Despite fears of increased volcanic activity, the library was encouraged to implement its Annual Children's Library Summer Programme in 1995. It was realized that it would help the youngsters forget the crisis that was affecting everyone's life. Contingency plans for the prompt evacuation of participants in the programme in the event of heightened activity were put in place. The activities came to a successful and uneventful end shortly before the scientists placed the island in a state of heightened alert.

August 21, 1995, subsequently dubbed 'Ash Monday', signaled increased volcanic activity. A huge phreatic eruption darkened Plymouth and its environs around 8 a.m and two days later, the first evacuation order was given for all areas south of Belham. There ensued a mass exodus to the north of Montserrat, the area that the scientists had designated as the safe zone during the volcanic crisis.

2. The First Evacuation

One of the first things done by library staff during this evacuation order was to identify safe storage for the irreplaceable material that included local publications and archival material. Our parent ministry was unable to secure the building housing the Salem Community Library as we had suggested, and this was instead

prepared to receive prisoners from the Plymouth jail. Once we had ascertained that Government had no alternate location for the collection, we made private arrangements with persons sympathetic to the library cause who lived in the designated northern 'safe zone'. The sturdy basement area was fitted with pallets to avoid material getting wet in the event of flooding. Plastic sheeting covered in excess of fifteen boxes that had been removed after several trips into Plymouth punctuated by nervous glances at the smoking mountain (Cassell, Library Services 48).

It was in this safe area that the material weathered both hurricanes 'Luis' (September 4) and 'Marilyn' (September 15) that visited Montserrat in its year of experiencing a host of natural disasters. There was no library service as such during this first evacuation. The home of a member of staff already living in the safe zone became the hub for staff discussions as to the way forward. Relocated library staff had their hands full trying to find somewhere to live.

Shortly afterwards, the evacuation order was lifted and the library returned to its home in Plymouth. The irreplaceable collection was, however, left in storage in the northern safe zone. The scientists had warned that the volcanic crisis was not going to be over in a hurry, but with no prior experience, people had difficulty conceptualizing life without access to the capital of Plymouth. This made discussions concerning the future of library services particularly difficult. We also realized at this point that the responsibility for accommodation had been left to the library. The realization came too late, however, because all calls made in an attempt to find a building that met our criteria for a secure library service were fruitless.

3. The Second and Third Evacuation Orders

A second evacuation order was in place by December 2, 1995. At this point the library had not even found anywhere for its relocation. Again, the home of the staff member living in the safe zone became the hub of operations. It was there that some equipment from the library, for example, computers and the fax machine, were secured. While most relocated staff tried to organize their personal lives, others tried to find a suitable location for the library. "The competition was fierce, but finally an unfinished building was identified for a temporary library and the move started from the rented accommodation in Plymouth" (Cassell, Volcanic Activity 16). The intention was that a mobile service would be offered in the absence of space for full library services. But before the library could proceed with these plans, the evacuation order was lifted at the end of December and the trek back



Temporary facility in Woodlands

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into Plymouth began. The Government decided that with the new library in Plymouth nearing completion, it did not want to continue paying for rented library accommodation. A decision was then made to move the library into a newly constructed Education Resource Centre in Plymouth, but that was not for long.

No sooner were the library services in operation after months of packing, moving, unpacking and rearranging materials, than the third (and final) evacuation order was given on April 2, 1996. Material had to be moved once again to the temporary library in Woodlands to the North of the island. A mobile service was launched using an old and leaking school bus. The materials were organized in boxes and with each run the boxes had to be emptied and the books dusted to free them of copious amounts of ash. As inadequate as that arrangement was, the loss was felt when the bus was recalled for evacuation purposes. The mobile service ground to a halt (Cassell, *Volcanic Activity* 16).

Library Services in the Safe Zone

For several years, the library operated out of its temporary facility in Woodlands. More than half of the collection, as well as most of the shelving, had to be left behind in the Education Resource Centre in Plymouth. Subsequently, when trips back into Plymouth were authorized, some more shelving and materials were taken from the Resource Centre and placed in temporary basement storage at the relocated Governor's Office. At one point when the material was being recovered, it was discovered that termites had eaten through some of the materials in storage in this location, an indication that the various threats to a storage area need to be fully assessed.

Once the library started functioning again, the irreplaceable materials had to be retrieved for use and were taken out of storage. With multi-volume reference works no longer available, the library

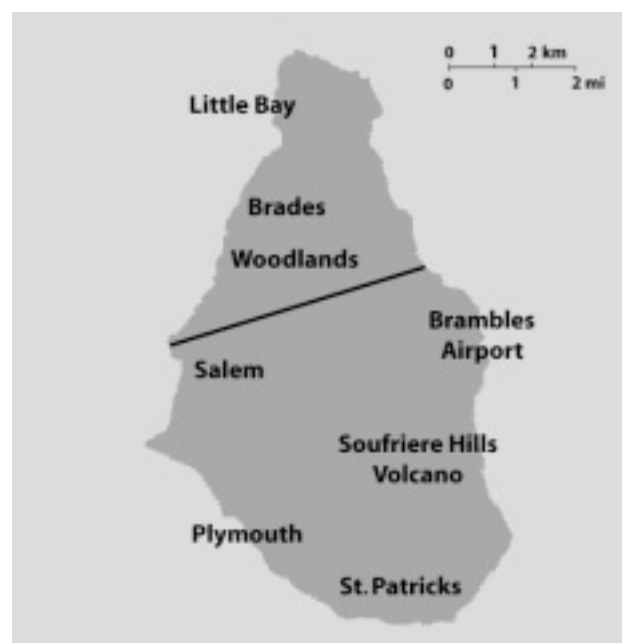
increasingly depended on CD-Rom reference tools, once the Government provided a multimedia computer system for the library's use by the end of 1996. Internet connectivity also assisted in the delivery of information services (Cassell *Information Technology*, 4-5).

By 1997, staff numbers were reduced to one librarian, one library assistant, one clerical officer and a part-time cleaner. In anticipation of staff losses, a decision was made to acquire 'Bibliophile', a cataloguing package that was bought from the Library Corporation in West Virginia to facilitate the continuous processing of material for the collection.

The limited space in the temporary library facility, was used by some civic groups for their meetings. The 'Cercle Français', the Montserrat equivalent of an 'Alliance Française', the 'Writers Maroon', a creative writing group and the PALS support group for women needing coping skills, used the temporary facilities on a regular basis in the absence of any other space for community activities in the safe zone.

Today, the Public Library is housed in bigger and more amenable accommodation in a mini-commercial complex in Brades. Library services were suspended temporarily in preparation for the move into the new accommodation. On July 18, 2001, the air-conditioned and more spacious library facility was officially opened.

Some services that had been shelved have since been revived. For example, children were once again treated to story hour on a Saturday morning. More recently, one volunteer undertook craft workshops in conjunction with the storytelling effort. However, these activities are highly dependent on volunteers, whose numbers have been reduced as a result of migration.



Map of Montserrat Showing the Northern Safe Zone

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Over the period of the crisis, support staff participated in training workshops, attachments and staff development programmes. However, it became evident that the various relocation efforts, changes and challenges had taken their toll on staff energies and this in time affected the composition of the staff. Some people migrated, others moved into other government jobs with more of a career path, and one member of staff retired. Currently, the staff complement includes a newly trained librarian recruited from Jamaica, one library assistant with more than twenty years of service in the Montserrat Public Library, two clerical officers who are high school graduates and a part-time library assistant.

Interest in Montserrat resulted in fundraising efforts by schools in the United Kingdom for a bookmobile for the island. The funds raised by the schools combined with assistance from MAC89, a UK Charity and a number of other donors resulted in the handing over in June 2003 of a refurbished vehicle inclusive of a stock of books. Shipping from the UK to Antigua was provided gratis by Geest Bananas Ltd. The mobile service which got off the ground in October 2003 is offered twice per month to each of the three remaining primary schools. In the six months of operation, the circulation count amounted to 4,674 in a primary school population of under 500.

In the middle of May 2004, the Government provided the library with four new terminals on which high-speed internet access is offered to the public. The telecommunications company, Cable and Wireless, is offering the service free of cost to the Government of Montserrat. Funds have been earmarked for a new library building in the safe zone and a location identified for it in the Government Headquarters complex. However, the secondary school, the University Centre and the Montserrat Community College that is currently under construction, are located in a separate complex.

Lessons Learned

In a 1988 report, Wadge and Isaacs highlighted the threat of the Soufriere Hills Volcano and suggested that consideration be given to strategies for mitigating damage to the island by the loss during eruption of the centralized facilities in Plymouth (1-2). Following Hurricane 'Hugo', Her Majesty's Government in the UK made funds available for rebuilding and several major government structures, including the new library, were erected in Plymouth only to be lost to the ravages of volcanic activity. Indeed, construction work continued on the library even after the start of volcanic activity despite suggestions that perhaps whatever funds were left could



Rented accommodation after 'Hugo'

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be saved for a building in the North. Unfortunately, the political will to support the suggestion was lacking.

Unlike most other natural disasters that have a beginning and an end, a volcanic crisis can be protracted. Once the eye of the hurricane passes, it is expected that the tail of the hurricane will follow, marking the end of that event. Unfortunately, no scientist has been able to say when the volcano in Montserrat will go back to sleep. July 2005 will mark the 10th year that the volcano has been active and during these 10 years, the Montserrat Public Library has experienced a number of changes and interruptions in service that no disaster preparedness plan could have anticipated.

The importance of being proactive was highlighted. While library staff waited for the Ministry of Education to indicate alternative accommodation for the library, other institutions were able to capture buildings that would have provided better accommodation for the library. Again, the lesson that contingency planning should not be dependent on Government reared its head. When library staff finally decided to seek accommodation, it had little choice but to take the unfinished house that eventually became the temporary library facility.

Flexibility in the delivery of library services became important as well. The crisis necessitated emergency measures that under normal circumstances would conflict with the modus operandi of libraries. While in the temporary facility, the dress code changed to suit the dusty conditions under which staff worked. Casual wear and dusk masks became commonplace. There was a radio constantly tuned to Radio Montserrat as a security measure, since staff had to be on the alert to take action if necessary.

Although reasonably settled in its new location in the North, the library at this point in time, has to live with a number of resource constraints and social changes, all directly related to the crisis and all having implications for service delivery.

The island has undergone significant demographic change, with approximately 20% of the reduced population falling into the non-resident category. Once Montserratians opted to relocate overseas for any of a number of reasons, including having lost homes, jobs or educational opportunities for their children, there was an almost immediate change in the social structure on the island. Many men stayed on island while allowing their wives and children to migrate. Skills shortages on island in turn attracted many workers from overseas, particularly other Caribbean islands.

The new librarian, recruited from Jamaica, has decided to conduct a survey to get a better understanding of the information needs of her clientele. Not only are they new to her, but most likely their information needs may be significantly different from pre-volcano users. There is currently also a stronger Hispanic component in the population, to the extent that the Catholic church caters to their needs. The library may need to respond to different information needs as well.

The Alliouagana Library Friends that was started in 1989 to assist with fundraising activities for special programmes has lost many of its members to migration. This is reflected in the intermittent delivery of some outreach programmes although the library still benefits from a lot of goodwill.

The impact of the volcanic crisis on use of the library is partly reflected by the circulation data for the period as indicated in Table 1, where low circulation figures signal periods of evacuation while the absence of data coincides with those times when the library was being relocated.

Conclusion

As part of their disaster preparedness plans, libraries need to consider how to handle assistance from well-meaning individuals and institutions wanting to assist with disaster recovery. Requests for reports on the status of the library must be anticipated and done in such a way that they can be provided without requiring an excessive amount of staff time for their preparation. There must be a clear idea of the immediate needs to be met, so that assistance can be appropriate and timely where possible.

Libraries may want to consider getting information out to the general public to reduce the impact of the disaster on materials on loan to the public. The experience with both disasters suggests that losses are greatest because of the amount of material out to users.

Disaster preparedness in libraries requires flexibility and responsiveness, since experience has demonstrated that not all possible scenarios can be determined beforehand. Having a written and carefully developed plan, however, helps with determining action in emergency situations. Such plans should also be reviewed regularly and updated where necessary. Data on people often change and where new and more effective techniques can replace old procedures, these should be incorporated.

The Montserrat Public Library has so far weathered the many natural disasters that have come its way. It continues to deliver information services in an island with its population reduced to 4,500 from an approximate 10,500 and confined in a space that is only a third of the island's size. No doubt, there are more challenges along the way, but the experience gained over the years would have prepared staff for responding to these challenges.

Table 1: Library Circulation Statistics 1995 – 2003

	1995	1996	1997	1998	1999	2000	2001	2002	2003
January	2666		783	565	788	637	668	1239	1151
February	2730		965	679	746	755	600	1247	1213
March	2716	918	1087	723	778	535	548	1214	1323
April	2794	51	1344	642	777	689	63	1437	1059
May	2909		1197	674	626	573		1239	1250
June	2481		931	607	583	541		1118	974
July	2497		1070	874	652	681	756	1088	1063
August	1028	251	421	594	597	601	1480	994	1040
September	84	322	365	635	699	652	1410	1286	947
October	1147	383	652	725	610	612	1747	1411	1144
November	1548	530	790	740	611	583	1538	1351	1016
December	59	568	516	715	494	404	876	666	786
TOTAL	22659	3023	10121	8173	7961	7263	9686	14290	12966

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Ouragans et volcans à Montserrat : comment faire face ?

Au cours de son histoire, Montserrat a souffert toutes sortes de catastrophes, ouragans, tremblements de terre, inondations. En 1986, le gouvernement a nommé un responsable chargé de coordonner les actions en cas de catastrophe et, un an plus tard, le plan d'urgence national a été révisé.

Mais en 1989, lorsque l'ouragan 'Hugo' s'est abattu sur l'île, malgré les mesures prises à la Bibliothèque publique par exemple, il a fallu faire face à des dégâts considérables : fenêtres et mobilier brisés, toitures arrachées, ouvrages inondés.

Néanmoins, on a pu tirer de cette catastrophe un certain nombre d'enseignements : la nécessité de privilégier les toitures en béton, de placer les boîtes de stockage en hauteur ou encore de donner des informations sur la meilleure façon de manipuler des livres mouillés. Quelque temps après, la Bibliothèque publique a rédigé les grandes lignes de son plan d'urgence et a compris qu'il était nécessaire d'envisager une aide extérieure à celle de l'Etat qui, en cas d'urgence, se consacre en priorité au relogement des victimes.

En 1995, c'est le volcan de la Soufrière qui s'est réveillé, dont l'éruption continue encore à l'heure actuelle. Deux ouragans ont frappé l'île au même moment.

Les collections ont souffert des déménagements successifs et le personnel a diminué. Aujourd'hui, la bibliothèque est établie au nord de l'île dans une région censément plus sûre mais son activité est étroitement liée à la catastrophe et à ses conséquences, la baisse de la population par exemple.

Malheureusement, les scénarios sont nombreux en matière de catastrophe. Pour faire face au pire, un plan d'urgence modulable, écrit et régulièrement mis à jour, reste donc un outil indispensable pour les bibliothèques.

¿Cómo enfrentar los huracanes y volcanes en Montserrat ?

Durante el curso de su historia, Montserrat ha sufrido todo tipo de desastres, huracanes, terremotos, inundaciones. En 1986, el gobierno designó a una persona encargada de coordinar las acciones en caso de desastre y un año más tarde se revisó el plan de emergencia.

Sin embargo, en 1989, cuando el huracán 'Hugo' golpeó la isla, a pesar de las medidas tomadas, por ejemplo, en la Biblioteca Pública, fue necesario hacer frente a daños considerables: ventanas y mobiliario rotos, techos desprendidos, obras inundadas. No obstante, este desastre ha permitido aprender varias lecciones, como por ejemplo, la necesidad de darle preferencia a los techos de hormigón, colocar las cajas de almacenamiento en alto o incluso dar información sobre la mejor manera de manipular los libros mojados. Posteriormente, la Biblioteca Pública redactó los lineamientos generales de su plan de emergencia y tomó conciencia de la necesidad de considerar recurrir a ayuda distinta a la que brinda el Estado que, en caso de emergencia, se dedica de manera prioritaria a proporcionarle albergue a las víctimas.

En 1995, el volcán 'Chance's Peak' entró en actividad, cuya erupción continúa en el presente. Además, dos huracanes tocaron la isla al mismo tiempo.

Las colecciones han sufrido mudanzas sucesivas y el personal ha disminuido. En el presente, la biblioteca está ubicada al norte de la isla en una región que podría considerarse más segura, pero su actividad está estrechamente relacionada con el desastre y sus consecuencias, entre las que se encuentra la disminución de la población.

Lamentablemente, los escenarios son numerosos en materia de desastres. Para enfrentar lo peor, un plan de emergencia escrito y actualizado en forma regular sigue siendo una herramienta indispensable para las bibliotecas.

Skills Development and Management for Disaster Mitigation Planning: the Specific Case of Electronic Equipment and Digital Data



by **Jo-Ann Georges**
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Introduction

Disaster planning/recovery for computers, digital media and networks is important for libraries and archives because these technologies are essential to the business of providing services to patrons and for performing regular administrative tasks in the most productive manner. Not only are finding aids usually automated but links to other resources are generally dependent on technology as well. Staff, of the libraries, especially are dependent on these technologies for ordering, claiming and receiving library materials, charging and discharging of library materials to patrons, and the provision of reference service. Every hour of downtime is extremely serious, therefore, a library must give disaster planning for computers and digital media a high priority.

Each organisation must decide what it is trying to achieve i.e. what is the objective of its planning for electronic equipment and digital data within the framework of its overall planning for disaster mitigation.

An organisation may have as its objective:

- to restore operations as quickly as possible with the latest and most up-to-date data available or,
- to re-establish normal business operations or,
- to continue in a deliberately degraded mode.

Each of these objectives will require a different set of strategies and actions. All of them require some basic actions.

Preparedness

1. Designated Officers

It is important to state in the disaster plan not only what recovery procedures are to be followed if a disaster occurs, but also who has what responsibility. Who calls whom and what information should they

be prepared to give? Who performs the needed diagnostics? Who restores the files? What are the instructions for packing and shipping the corrupted files?

Recovery of data from a computer hard drive or storage tape can be critical after a fire, flood or explosion. Many of the techniques used to recover data from damaged or seemingly destroyed data is similar to data recovery from failed hard drives and tapes in less severe conditions.

The value of the data can be immense. In many cases, companies and other entities who experience a disaster are faced with a double or more failure. Even those companies who back up their data on a regular basis are at risk unless they store the backup data in a remote location. Rebuilding patron files, financial records, inventory records, and catalog data can be impossible. Ensure that designated officers know the procedures to follow to ensure the best chance of recovering data from affected equipment and media.

2. Servers

Every institution with a server should have a server room that is secure. A combination lock is best as there is no danger of keys going missing or being duplicated. A reinforced door with a deadbolt at least 1.5 inches long is ideal. The room should be windowless, but if this is not possible the windows should be barred. The room should have both fire / heat detection and water detection sensors, these are not difficult to obtain but at a minimum, it should have fire extinguishers suitable for electrical fires. The server room should be reinforced to allow it to withstand hurricane and earthquake forces. These may be ideal conditions not possible to achieve in our small island developing states but we must do our best.

3. Backup of Data

- A standard procedure for systems backup could be as follows.
- A full systems backup will be performed weekly. Weekly backups will be saved for a full month.
- The last weekly backup of the month will be saved as a monthly backup. The other weekly backup media will be recycled for other uses or destroyed.
- Monthly backups will be saved for one year, at which time the media will be recycled or destroyed.
- Incremental backups will be performed daily. Incremental backups will be retained for two weeks,

at which time the media will be recycled or destroyed.

- All backups will be stored in a secure, off-site location. Proper environment controls, temperature, humidity and fire protection, shall be maintained at the storage location.
- All backup media that is not re-usable shall be thoroughly destroyed in an approved manner. Backup media that is used for other purposes shall be thoroughly erased.
- Periodic tests of the backups will be performed to determine if files can be restored.

During a Hurricane Watch / Warning

Hurricanes do not arrive without warning; there is usually some time to prepare for this natural disaster and tasks and activities to be done during a hurricane watch / warning must be developed.

The library / archive will be declared closed and will be evacuated.

- Lock library doors and post appropriate signs;
- shut down and unplug all terminals, control units, modems, and other electrical equipment;
- move library materials and equipment, as appropriate, away from doors and other areas of potential water damage;
- lock all internal doors;
- cover all equipment with tarpaulins.

Natural disasters, hurricanes and earthquakes, will cause the following hazards for which planning can be done:

- water damage,
- loss of power,
- impact / crushing,
- wind damage.

All of these may partially or totally destroy computer equipment and media.

Damage Assessment and Recovery

1. After the Hurricane Has Passed

Early efforts should be targeted at protecting and preserving the computer equipment. In particular, any magnetic storage media (hard drives, magnetic tapes, diskettes) should be identified and either protected from the elements or removed to a clean, dry environment, away from the disaster site.

2. Water Damage

If the hard drive has been under water for only a short time, the probability is that the head assembly has

not been penetrated by the water. While the data recovery remains difficult, it can be done.

If water has penetrated the head assembly, it is important that the drive be kept wet. In requesting data recovery, it is important to seal the drive, as well as other media, in a container with a minimum of a damp sponge. Successful recovery of data has occurred when a drive has been kept in distilled water until delivered to the data recovery firm.

A standard technique used by companies specializing in restoring damaged computer equipment is to bake components for a time to dry them out. This technique has worked quite well for computer boards, but can be disastrous for computer hard drives. The availability of data recovery services locally may be problematic so arrangements may have to be made to send damaged drives overseas.

3. Fire Damage

Data can be recovered from many drives even if all plastic components are melted, and otherwise the hard drive looks like a blackened mess.

The second risk is water used by fire fighters entering the small hole in the assembly head. In this case, speed is of the essence. If the platters are accessed before the water dries, then there is still a chance of recovering the critical data on the drive. If the water does dry, it leaves behind minerals, dirt and other foreign materials throughout the drive, most importantly, the head assembly and platter(s). The chances of recovery at this point are less.

Another risk to the head assembly is that the heat was so intense that the platters experienced melting. In this case, there is no hope of recovering the data.

Even blackened drives can have undamaged head assemblies. The challenge in recovering data is to rebuild the electronics to access the data.

Restore Operations

Alternatives, dependent upon the evaluation of the computer function, may include.

1. Hot Sites

This is probably the most expensive option for being prepared for a disaster, and is typically most appropriate for very large organizations. A separate computer facility, possibly even located in a different area, can be built, complete with computers and other facilities ready to cut in on a moment's notice in the event the primary facility goes offline. The two facilities must be joined by high speed communications lines so that users at the primary campus can continue to access the computers from their offices and classrooms. This

would not usually be an option for a library / archive in the Caribbean.

2. Cold Sites

A cold recovery site is an area physically separate from the primary site where space has been identified for use as the temporary home for the computer and network systems while the primary site is being repaired. There are varying degrees of 'coldness', ranging from an unfinished open area all the way to space where the necessary raised flooring, electrical hookups, and cooling capacity have already been installed, just waiting for the computers to arrive.

3. Reciprocal Agreements

Some organizations will team up with others in a partnership with reciprocal agreements to aid each other in the event of a disaster. These agreements can cover simple manpower sharing all the way up to full use of a computer facility. Often, however, since the assisting partner has to continue its day-to-day operations on its systems, the agreements are limited to providing access for a few key, critical applications that the disabled partner must run to stay afloat while its facilities are restored. The primary drawback to these kinds of partnerships is that it takes continual vigilance

on behalf of both parties to communicate the inevitable changes that occur in computer and network systems so that the critical applications can make the necessary upfront changes to remain operational.

4. Replacement Equipment

This plan contains a complete inventory of the components of each of the computer and network systems and their software that must be restored after a disaster. The inevitable changes that occur in the systems over time require that the plan be periodically updated to reflect the most current configuration. The issue here would be the ability of the supplier to provide replacement equipment.

Conclusion

Depending on the method of restoration used - hot site, cold site, reciprocal etc. - the procedures to be followed will fall into place. In any event, equipment must be put in place, data restored from backups and operations resumed.

On-going assessment of the situation continues in order to determine how best to restore the organisation to its former state.

Matériel et documents électroniques : quelles solutions en cas d'urgence ?

Lors d'une catastrophe naturelle, le matériel électronique et les données numériques nécessitent une attention spécifique. Un certain nombre de mesures préventives permet d'anticiper les risques et d'y répondre du mieux possible. Par exemple, la salle des machines doit être sécurisée, équipée d'une serrure à combinaison et d'une structure qui puisse résister à un ouragan ou un tremblement de terre. La constitution d'une collection de sauvegarde, stockée sur un autre site, représente également un moyen efficace de retrouver des données précieuses.

Lorsque la catastrophe survient, il faut prendre quelques mesures indispensables : fermer les portes, débrancher les postes, éloigner les équipements des endroits où ils pourraient être endommagés par l'eau.

Il faut ensuite intervenir le plus rapidement possible. En effet, si un disque dur a été en contact avec l'eau pendant peu de temps, il ne sera pas impossible d'en récupérer les données. On peut également retrouver des données sur des équipements touchés par le feu, même lorsque les pièces en plastique qui s'y trouvaient ont fondu. Mais, l'une des difficultés peut consister à reconstruire le système électronique pour accéder aux données.

Après la catastrophe, plusieurs alternatives sont possibles parmi lesquelles l'utilisation d'un site de secours relié à l'institution d'origine par des lignes de communication à grande vitesse ou le soutien d'un autre établissement ; dans tous les cas, il faudra réinstaller les équipements et restaurer les données à partir des copies de sauvegarde.

Soluciones para manejar los equipos y documentos electrónicos en caso de emergencia

Cuando se produce un desastre natural, los equipos electrónicos y los datos digitales requieren atención específica. Varias medidas preventivas permiten prever los riesgos y responder de la mejor manera posible. Por ejemplo, la sala de máquinas debe estar asegurada, equipada con una cerradura con combinación y con una estructura que pueda resistir huracanes o terremotos. La creación de una colección de respaldo, almacenada en otro lugar, representa igualmente un medio eficaz para recuperar información valiosa.

Al producirse el desastre, es necesario tomar algunas medidas indispensables: cerrar las puertas, desconectar la electricidad, alejar los equipos de los sitios donde podrían dañarse por efectos del agua.

Luego, hay que intervenir lo más rápidamente posible. Efectivamente, si un disco duro entra contacto con agua durante poco tiempo, es posible recuperar los datos. Se puede igualmente recuperar datos de equipos afectados por el fuego, incluso cuando las piezas plásticas que contienen se han derretido. Sin embargo, una de las dificultades podría ser reconstruir el sistema electrónico para tener acceso a la información.

Después del desastre, existen varias alternativas entre las que se encuentran la utilización de un sitio de emergencia conectado con la institución de origen mediante líneas de comunicación a gran velocidad o el mantenimiento de otro local; en todo caso, será necesario reinstalar los equipos y restablecer la información a partir de las copias de seguridad.

Risks Associated with Hurricanes in the Caribbean



by **Steve Pollonais**
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SIDS (Small Island
Developing States) -
Caribbean Project

Introduction

In the Caribbean, we are reminded each year of the advent of the hurricane season which runs from 1st June to 30th November and we reflect on the jingle:

*“June too soon,
July stand by,
August it must,
September remember,
October all over”.*

Somehow, November has been discarded and if we have been paying attention to the latest hurricane statistics over the past few years, 2003 in particular, you would have noticed a complete disregard of the jingle by hurricanes of late, in that they are now occurring in as late as December. The reason for this is somewhat unclear and one suspects it to be as a result of increased global warming due to climate change.

I believe that in order to give this talk, several concepts pertaining to the topic should be made clear. Please therefore allow me the space to offer some definitions.

- **Tropical Depression**

An organized system of clouds and thunderstorms with a defined anti-clockwise surface circulation and maximum sustained wind speed of 38 mph (33 kts) or less.

- **Tropical Storm**

An organized system of strong thunderstorms with a defined anti-clockwise surface circulation and maximum sustained winds of 39 - 73 mph (34 - 63 kts). At this point, the system is given a name.

- **Hurricane**

An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 mph (64 kts) or higher.

- **Saffir-Simpson Hurricane Categories:**
These categories are determined according to the strength of the winds. A category 1 storm has the lowest wind speeds while a category 5 has the strongest. Please be aware that these are relative terms because due to a number of factors, lower categories of storms can sometimes inflict greater damage than higher category storms depending on where they strike and the particular hazards they bring. In this regard, flooding comes easily to mind.

Category Number – Likely Effects – (based largely on North American building standards).

- **One** - Winds 74 - 95 mph
No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal road flooding and minor pier damage.
- **Two** - Winds 96 - 110 mph
Some roofing material, door and window damage to buildings. Considerable damage to vegetation, mobile homes and piers. Small craft in unprotected anchorages break their moorings.
- **Three** - Winds 111 - 130 mph
Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures, mobile homes are destroyed. Flooding near the coast destroys smaller structures, with larger structures damaged by floating debris. Terrain may be flooded well inland.
- **Four** - Winds 131 - 155 mph
More extensive curtainwall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Major damage to lower floors of structures near the shore. Terrain may be flooded well inland.
- **Five** - Winds greater than 155 mph
Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Major damage to lower floors of all structures located near the shoreline. Massive evacuation of residential areas may be required.

With the above mentioned storm categories, three and higher are classified as major hurricanes.

With the approach of a tropical storm or hurricane, meteorological authorities inform the public of its

threat via 'watches' and 'warnings'.

A **storm or hurricane watch** is a bulletin that tells the listener that the system is likely to affect an area within 36 hours and that preparedness action should be initiated in anticipation of the storm's likely arrival in your area.

A **storm or hurricane warning**, on the other hand, advises the listener that a storm or a hurricane shall strike the targeted area within 24 hours and all preparedness activity including evacuation, should be completed before the forecast time of arrival of strong winds and heavy rains. It is important that the public understand the difference of these terms as inappropriate action may lead to loss of property and life.

Hurricane Basics

1. What is a hurricane?

A hurricane is a type of cyclone (a low pressure system) that generally forms in the tropics. In the northern hemisphere, strong winds rotate counter clockwise around the center near the earth's surface and is accompanied by thunderstorms and heavy rain. Slower moving storms are more likely to be heavy rain bearers bringing sometimes some 6 to 12 inches of rain during passage. It is interesting to note that the major danger to life in hurricanes comes from the effect of water and not wind speeds.

2. Birth and Life Span

Tropical cyclones form over warm waters from pre-existing disturbances. These disturbances periodically emerge off the coast of East Africa every three to four days as tropical waves. Not every tropical wave becomes a hurricane, but one can expect storm formation from one in approximately ten waves that emerge. Tropical cyclones can also form from the trailing ends of migratory cold fronts or from upper-level cold lows. However, the process by which the disturbance develops into the hurricane is by no means straightforward.

Several pre-existing conditions must be present before this can happen:

- there must be a pre-existing disturbance with thunderstorms;
- warm (at least 26.5°C) ocean temperatures to a depth of about 150 ft;
- light upper level winds that do not change much in direction and speed with height throughout the depth of the atmosphere (i.e. low vertical wind shear).

Heat and energy for the storm are gathered by the disturbance through contact with the warm ocean water. An understanding of the transfer of heat through a process known as the 'latent heat of condensation' is necessary here to grasp the significance of water vapour as a source of energy for the storm. Winds spiral into the storm's center in a counter clockwise direction at the surface and rise to the top exiting in a clockwise spiral. As the water vapour condenses into raindrops, more heat is released which further drives the system. Thunderstorms form and cloud tops rise higher and higher into the atmosphere.

The life span of the average hurricane is about two weeks once it remains over warm oceans. Longer periods have been documented. The system begins to decay if atmospheric conditions become unfavourable i.e. strong vertical wind shears that can tear the storm apart. Moving over cooler water or drier areas can also lead to weakening as well. Landfall will definitely do it, as friction and the removal of the moisture (heat energy) source are inimical to the survival of the system. However, a weakening storm or hurricane can reintensify if it moves again into a favourable environment.

3. Structure, Size and Movement

The main parts of a hurricane are the rainbands on its outer edges, the eye and the eyewall.

– Eye

As mentioned earlier, air spirals towards the center in a counter clockwise pattern at the surface and out the top in an opposite spiral. In the very center of the storm, air sinks, forming the cloud free, calm eye. Eye diameters are typically 20 to 40 miles across. On eye passage, fierce winds can suddenly stop, the sky clears even with a bit of sunshine but just as quickly, the winds and rains begin again this time from the opposite direction.

– Eye wall

There is a dense wall of thunderstorms surrounding the eye and where the strongest winds reside. Changes in the structure of the eye and eyewall can cause changes in the wind speed which is an indicator of the storm's intensity. Due to these changes, the eye can grow or shrink in size and double (concentric) eyewalls can even form.

– Spiral Rainbands

The storm's outer rainbands often with hurricane or tropical storm force winds can extend a few hundred miles from the center. These dense bands of thunderstorms which spiral slowly counter clockwise range in width from a few miles to tens of miles and are 50 to 300 miles long. In Trinidad and Tobago, media

personnel tend to call them the 'tail of the hurricane' and are quite aware of their destructive potential. Contrary to what the weather map may indicate, a hurricane is more than a point on the map and its path is more than a line. It is a large system requiring that precautions be taken far from where the eye is predicted to come ashore.

4. Hurricane Size

Typical hurricanes are about 300 miles wide but this figure can vary considerably. Size is not necessarily an indication of intensity. Hurricane force winds can extend outward to about 25 miles from the center of a small hurricane and to more than 150 miles for a large one. The area over which tropical storm force winds may extend is even greater, ranging as far out as almost 300 miles from the eye of a large hurricane.

5. Hurricane Speed and Trajectory

Wind speeds on a hurricane are greater on the right side of the system (relative to the direction it is traveling). This is as a result of the additive effect of the flow that the storm is embedded in and the direction of rotation of the storm. The left hand side of the storm conversely is the weakest. The storm system is embedded in a flow of air known as the steering current which in effect is a river of air that steers the hurricane forward. Sometimes this river is sluggish and the storm tends to meander leading to great difficulties in forecasting its track. Therefore a hurricane's path and speed depend on complex interactions between the storm's own internal circulations and the earth's atmosphere. This is the remaining challenge for meteorologists in the prediction of hurricane landfall. So far computer models have done an amazing job in the determination of intensity changes, seasonal predictions, formation development. Trajectory predictions, while in the most part are competently forecasted still have the unfortunate quality of offering up surprises. As a result of this shortcoming, accurate landfall probabilities remain at 3:1 meaning that forecasters will give an area three times as wide for a targeted location.

6. Hurricane Destructive Potential

This has to do with the destructive power of the wind speed. It is wrong to believe that a storm of 150 mph will do twice as much damage as one of 75 mph. As wind speed increase, the destructive potential increases exponentially viz in relation to the square of the wind speed. In addition, in most landfalling hurricanes, tornadoes tend to develop mainly on the forward edges of the hurricane and mostly on the more intense right side. After landfall, tornadoes tend to be spawned as the system continues inland.

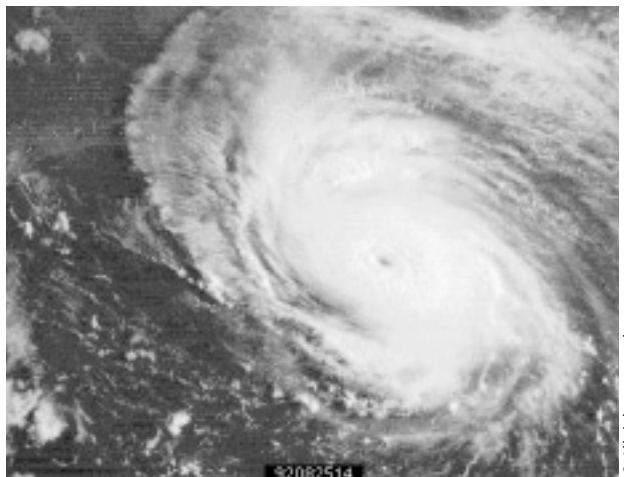
1. Storm Surge

The combination of astronomical (tidal), barometric and dynamical forces over water as a storm invades an area gives rise to an interesting and deadly phenomenon known as the storm surge. Put simply it is this. The very low pressure in the center of a hurricane causes the sea surface to rise at a rate of 1cm for every 1hpa of pressure fall. This may appear to be small but superimposed on the tidal rise in sea level the height of the level of the sea begins to become significant. In addition, the strong winds at the sea surface, especially on the intense right side of the hurricane circulation push extra water forward to the coast in the shape of a large dome. Finally you have wind-generated waves superimposed on all this topping off the surge. It is instructive to note that the height of water waves is inversely proportional to the depth of the seabed. In other words, as the depth becomes shallower, waves increase in height. A trip to the beach will confirm this.

The storm surge is the single largest cause of death and destruction of ocean front/coastal property in hurricane situations. One record is a storm surge of 42ft occurring in Australia in 1899. Hurricane 'Camille' in 1969 was responsible for a surge of 25ft above sea level. Can you imagine such a situation occurring in Port of Spain in 2004?

2. Flooding

It is claimed that the greatest danger in a hurricane comes as a result of the water associated with it. Storm surges are one such threat. Flooding is another. The unique feature of hurricanes is the phenomenal amount of rainfall they produce. 6 to 12 inches of rain is not uncommon during the passage of an average speed and size hurricane. In the event that the system is slow moving or for that matter has stalled, the rainfall effects can be devastating. Lives, infrastructure,



Graphics: <http://ww2010.atmos.uiuc.edu/University of Illinois>

agriculture, transportation, health and general social activity are all seriously affected with phenomenal recovery costs. Just think of the loss of say bridges in Northern Trinidad alone to get an idea of the social dislocation that will exist.

3. High Winds

While it is unlikely that we may ever suffer the onslaught of a category 3 hurricane mainly due to our somewhat fortunate location at the southern boundary of the Caribbean hurricane belt, hurricanes can and have occurred in Trinidad and Tobago before. The 1933 hurricane that devastated the southern peninsula in the areas of Cedros and Icacos. Fortunately, population density was and continues to be light. Contrary to what we see on the movies, strong winds pose the smallest threat to life and limb. With adequate warnings and the use of common-sense, we stand a chance of survival. Wind damage affects structures mostly, a roof blown away here and there, weaker structures blown down, agriculture severely affected etc. Human beings properly warned can take refuge in shelters, and through evacuations.

Conclusion

Apathy is the one single area where the advantages of science, technology and the best laid management plans in disaster preparedness can be completely frustrated and brought to naught. I am referring here to public apathy in the acceptance and utilization of the warning message. How many times have you heard the remark "Don't bother with the met office, they are never right", or "God is a Trinidadian, he would never harm his children". Another aphorism, 'the



Graphics: [http://www2010?atmos.uiuc.edu/University of Illinois](http://www2010?atmos.uiuc.edu/University%20of%20Illinois) and <http://www.nhc.noaa.gov/HAW2/>

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weatherman lying' the words of an old calypso that has caught the imagination of the average person, has been responsible for a perpetuation of this attitude. It is certainly not true to believe that the country's northern range of mountains will serve as an effective barrier against any approaching storms. As a matter of fact, due to the orientation of these hills, it may very well serve as a conduit for westward moving systems.

It is vitally important to accept the fact that while meteorologists may not get it right every time, they will most of the time, and are the most competent experts to advise the public through the array of technology and scientific knowledge they have at their disposal on the meteorological situation at any time. To be safe one must listen and act appropriately. Hurricane parties and turning to prayer as one's only reaction will one day surely lead to one's demise. Remember, God helps those who help themselves.

El riesgo que representan los huracanes en el Caribe

No se puede pensar en el tema de los huracanes sin recordar las costumbres y modo de pensar propios de los habitantes del Caribe. En efecto, varias creencias populares o religiosas pueden llevar a subestimar el peligro y tener repercusiones trágicas. Este artículo revisa esas creencias y reúne información indispensable para actuar de manera eficaz en caso de emergencia.

En una primera parte, consagrada específicamente a los huracanes, el autor explica cómo se produce este fenómeno meteorológico, cuánto tiempo puede durar y cómo está compuesto; nos aporta también información sobre la velocidad y la trayectoria de un huracán, y su poder de destrucción. Nos enteramos, por ejemplo, de que el agua puede representar para los habitantes un peligro mayor que la velocidad de los vientos. Finalmente, explica distintas categorías de huracanes clasificados de 1 a 5 en la escala de Saffir-Simpson.

La segunda parte se ocupa más particularmente de los fenómenos asociados a los huracanes, mareas, inundaciones y vientos fuertes. Aquí, el autor nos informa, por ejemplo, que mientras menor sea el fondo, mayor será la altura de la ola.

En conclusión, recuerda la tendencia de los habitantes del Caribe a desestimar los riesgos e insiste en la necesidad de confiar en las recomendaciones de los especialistas.

Les risques associés aux ouragans dans la Caraïbe

Par Steve Pollonais

Chef du projet caribbéen
pour les petites îles en voie de développement

Introduction

Dans la Caraïbe, on nous rappelle chaque année la saison des ouragans qui s'étend du 1^{er} juin au 30 novembre et nous nous souvenons de ce poème :

« en juin, il est trop tôt,
en juillet, tiens-toi prêt,
en août, c'est pour bientôt,
en septembre, souviens-toi,
en octobre, c'est fini. »

On a plus ou moins oublié le mois de novembre et si l'on étudie les statistiques des dernières années, 2003 en particulier, on observe que le poème ne se vérifie absolument pas quant à la fin de la saison ; en effet, les ouragans frappent maintenant jusqu'au mois de décembre. On ne sait pas vraiment pourquoi mais l'on soupçonne que c'est un effet du réchauffement de la planète.

Je crois qu'il est préférable de donner quelques précisions sur le sujet avant de commencer. Permettez-moi donc de donner ici quelques définitions.

• Dépression tropicale

Système organisé de nuages et d'orages, accompagné d'une circulation bien définie (dans le sens inverse des aiguilles d'une montre) et de vents soutenus de 61 kms/h au maximum (33 nœuds).

• Tempête tropicale

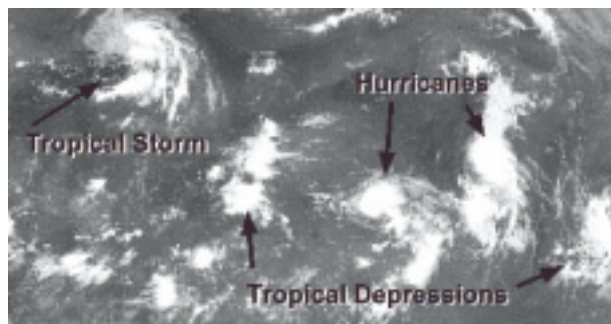
Système organisé d'orages violents avec une circulation bien définie et des vents soutenus (dans le sens inverse des aiguilles d'une montre) de 63 à 117 kms/h. C'est à ce stade qu'on donne un nom au phénomène.

• Ouragan

Phénomène météorologique tropical intense caractérisé par des orages violents, accompagné d'une circulation d'air bien définie et des vents soutenus d'au moins 119 kms/h (64 nœuds).

• Catégories d'ouragans sur l'échelle de Saffir-Simpson

C'est la force des vents qui détermine ces catégories. Une tempête de catégorie 1 comporte les vents les plus faibles, une tempête de catégorie 5, les plus violents. Ces termes sont relatifs et dépendent d'un certain nombre de facteurs ; en effet, des tempêtes de faible catégorie peuvent parfois avoir des conséquences beaucoup plus graves que des tempêtes de



Graphics: [http://ww2010.atmos.uiuc.edu/University of Illinois](http://ww2010.atmos.uiuc.edu/University%20of%20Illinois)

catégorie élevée. Cela dépend de l'endroit où elles frappent et des risques spécifiques qui leur sont associés. A cet égard, on pense immédiatement aux inondations.

Définition des différentes catégories – Conséquences probables (largement basées sur les normes de construction nord-américaines)

- **Catégorie 1** - Vents de 119 à 153 kms/h
Aucun réel dégât occasionné aux constructions. Dégâts touchant d'abord les maisons mobiles, les arbustes et les arbres. D'autre part, inondations sur les routes en bordure du littoral et légers dégâts sur les jetées.
- **Catégorie 2** - Vents de 154 à 177 kms/h
Dégâts occasionnés aux toitures, portes et fenêtres. Dégâts considérables sur la végétation, les maisons mobiles et les jetées. Les embarcations légères ancrées dans des zones non protégées sont arrachées de leurs amarres.
- **Catégorie 3** - Vents de 179 à 209 kms/h
Dommages à la charpente des petites résidences et des constructions utilitaires avec quelques dégâts sur les murs-rideaux. Les maisons mobiles sont détruites. Les inondations sur le littoral détruisent les constructions plus petites, les plus importantes étant endommagées par les débris flottants. L'intérieur des terres peut être très inondé.
- **Catégorie 4** - Vents de 211 à 249 kms/h
Dégâts plus importants sur les murs-rideaux. Les toitures des petites maisons ne résistent pas. Importante érosion des plages. Importants dégâts aux étages inférieurs des bâtiments du bord de mer. L'intérieur des terres peut être très inondé.
- **Catégorie 5** - Vents supérieurs à 249 kms/h
La toiture de nombreuses maisons et constructions industrielles ne résiste pas. Certains bâtiments entièrement détruits, certaines constructions utilitaires

retournées ou emportées. Dégâts importants aux étages inférieurs de tous les bâtiments situés sur les côtes. L'ordre d'évacuer les quartiers résidentiels peut être donné.

Dans la classification ci-dessus, les catégories 3, 4 et 5 correspondent à des ouragans très violents.

A l'approche d'une tempête tropicale ou d'un ouragan, les services météorologiques avertissent la population grâce à des avis et des avertissements.

Un **avis** de tempête ou d'ouragan est un bulletin qui informe l'auditeur que le phénomène touchera probablement la région dans les 36 heures et qu'il faut prendre des mesures pour se protéger.

Un **avertissement** de tempête ou d'ouragan d'autre part prévient l'auditeur qu'une tempête ou un ouragan s'abattra sur une zone précise dans les 24 heures et que toutes les mesures pour y faire face, y compris l'évacuation, doivent avoir été prises avant l'arrivée prévue de vents violents et de pluies importantes.

Il est important que la population comprenne la différence qui existe entre ces termes parce que des actions inappropriées peuvent entraîner la perte de biens et de vies humaines.

L'ouragan : notions essentielles

1. Qu'est-ce-qu'un ouragan ?

Un ouragan est une sorte de cyclone (phénomène de basses pressions) qui se forme généralement dans les Tropiques. Dans l'hémisphère nord, des vents forts tourbillonnent autour du centre de la tempête, dans le sens des aiguilles d'une montre, près de la surface du sol, et sont accompagnés d'orages et de fortes pluies. Des tempêtes qui se déplacent lentement sont plus susceptibles de provoquer de fortes précipitations, parfois de 15 à 30 cms de pluie. Il est intéressant de noter que, pendant un ouragan, c'est l'eau et non la vitesse du vent qui représente le principal danger pour la vie.

2. Naissance et durée

Les cyclones tropicaux se forment au-dessus des eaux chaudes à partir de perturbations pré-existantes. Ces perturbations arrivent des côtes d'Afrique de l'Est de façon cyclique (tous les trois à quatre jours) sous forme de vagues tropicales.

Une vague tropicale ne devient pas forcément un ouragan mais environ une vague sur dix peut être à l'origine d'une tempête. Les cyclones tropicaux peuvent aussi se former à partir des restes de fronts froids migratoires ou des phénomènes de basses pressions d'air froid dans les couches supérieures de l'atmosphère. Cependant, le processus selon lequel la

perturbation se transforme en ouragan n'est absolument pas simple.

Plusieurs conditions préalables doivent être réunies pour que ce phénomène se produise. Il doit déjà exister :

- une perturbation accompagnée d'orages,
- une température chaude (au moins 26,5°C) de l'océan à une profondeur d'environ 45 mètres,
- des vents légers qui soufflent à la même vitesse et dans la même direction dans toutes les couches supérieures de l'atmosphère (i.e peu de cisaillements verticaux).

C'est la corrélation entre la perturbation et la température chaude de l'océan qui provoque la chaleur et la puissance nécessaires à la formation de la tempête. C'est le processus appelé 'chaleur latente de la condensation' qui fait de la vapeur d'eau une source d'énergie pour la tempête. Les vents soufflent de façon circulaire (sens des aiguilles d'une montre) autour du centre de la tempête et s'échappent vers le haut en une spirale ascendante. Quand la vapeur d'eau se condense en gouttes de pluie, cela libère plus de chaleur, ce qui accélère le phénomène. Des orages se forment, les nuages s'élèvent de plus en plus haut dans l'atmosphère.

Un ouragan de moyenne importance dure environ deux semaines à partir du moment où il stationne au-dessus des mers chaudes. On a enregistré des périodes plus longues. Le phénomène commence à faiblir si les conditions atmosphériques deviennent contraires, i.e si des cisaillements verticaux puissants viennent 'déchirer' la tempête. Le déplacement vers des eaux plus froides ou des régions plus sèches peut aussi contribuer à atténuer le phénomène. La terre l'affaiblira de façon définitive dans la mesure où la résistance et l'absence d'humidité (énergie thermique) sont hostiles à la permanence du phénomène. Néanmoins, une tempête (ou un ouragan) qui décline peut être ré-intensifiée si elle se déplace à nouveau dans un environnement favorable.

3. Structure, ampleur et mouvement

Les éléments principaux d'un ouragan sont les bandes de pluie sur ses bords extérieurs, l'œil et le mur de l'œil.

– L'œil

Comme indiqué plus haut, l'air tourbillonne à la surface et autour du centre, dans le sens des aiguilles d'une montre, et descend du haut en une spirale opposée.

Au centre de la tempête, l'air s'affaisse et forme l'œil, calme et sans nuage.

Le diamètre de l'œil est généralement long de 32 à 64 kms. Au passage de l'œil, il arrive que des vents violents s'arrêtent subitement, le ciel s'éclaircit avec parfois même un rapide rayon de soleil, puis les vents et la pluie recommencent, en venant cette fois de la direction opposée.

– Le mur de l'œil

Un mur épais d'orages entoure l'œil, où se trouvent aussi les vents les plus violents. Des changements dans la structure de l'œil et du mur de l'œil peuvent modifier la vitesse du vent, source d'information quant à l'intensité de la tempête. En fonction de ces changements, la taille de l'œil peut grandir ou diminuer et de doubles murs (concentriques) peuvent même se former.

– Bandes spirales de pluie

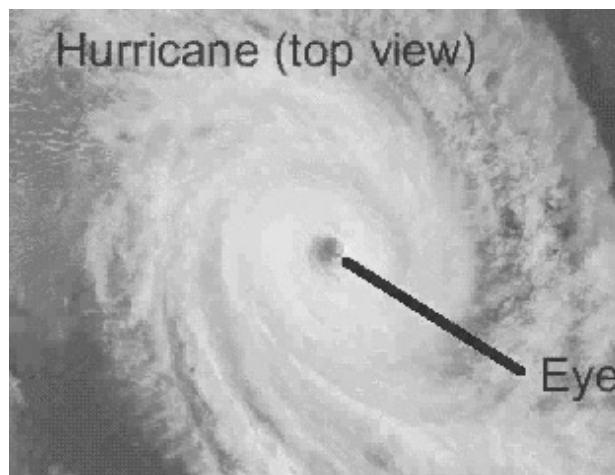
Les bandes de pluie sur les bords extérieurs de la tempête tropicale ou de l'ouragan peuvent, avec la force des vents, s'étendre jusqu'à quelques centaines de kilomètres du centre. Ces épaisses bandes d'orages s'enroulent lentement autour du phénomène dans le sens des aiguilles d'une montre, mesurent de quelques kilomètres à des dizaines de kilomètres de large et de 80 à 483 kilomètres de long. A Trinité et Tobago, les journalistes leur donnent généralement le nom de 'queues d'ouragan' et sont parfaitement conscients de leur puissance de destruction. Contrairement à ce que peut indiquer une carte météorologique, un ouragan représente plus qu'un point sur une carte et sa trajectoire plus qu'une ligne. C'est un phénomène important qui nécessite de prendre des précautions bien avant le moment où l'œil doit arriver sur le rivage.

4. Ampleur de l'ouragan

L'ampleur d'un ouragan moyen est d'environ 483 kms mais ce nombre peut varier considérablement. L'ampleur du phénomène n'est pas forcément révélatrice de sa puissance. Dans le cas d'un petit ouragan, les vents peuvent avoir une amplitude de 40 kms, de plus de 241 kms pour un ouragan important. L'amplitude peut être encore plus grande et aller jusqu'à presque 483 kms à partir de l'œil d'un ouragan important.

5. Vitesse et trajectoire de l'ouragan

La vitesse des vents est supérieure dans la partie est du phénomène et dépend de la trajectoire de l'ouragan.



Graphics: <http://ww2010.atmos.uiuc.edu/University of Illinois>

Elle résulte également de l'interaction des vents qui portent la tempête, avec le mouvement de rotation de la tempête. Inversement, la partie ouest de la tempête est la plus faible. Le phénomène est contenu dans une masse d'air dite 'courant directeur', véritable rivière d'air qui entraîne l'ouragan vers l'avant. Parfois, le mouvement est lent et la tempête a tendance à serpenter ; il est alors très difficile d'anticiper sa trajectoire. La trajectoire d'un ouragan et sa vitesse dépendent donc d'interactions complexes entre les circulations internes de la tempête et l'atmosphère de la terre. C'est le défi qui reste à relever pour les météorologues qui cherchent à prévoir l'étendue d'un ouragan. Jusqu'à présent, grâce à l'imagerie virtuelle, on a énormément progressé dans la définition des changements d'intensité, les prévisions saisonnières, le développement d'un phénomène. Prévoir la trajectoire d'un ouragan, ce qui est le plus souvent bien anticipé, peut toujours réserver de mauvaises surprises. Résultat, les prévisions les plus sûres comportent une marge d'erreur dans la mesure où les spécialistes considèrent que l'étendue d'un ouragan peut excéder trois fois la surface du territoire touché.

6. Potentiel de destruction de l'ouragan

Il est très lié à la puissance destructrice des vents et à leur vitesse. On a tort de penser qu'une tempête soufflant à 241 kms/h fera deux fois plus de dégâts qu'une tempête avec des vents de 121 kms/h. Quand la vitesse des vents augmente, le potentiel de destruction augmente de façon exponentielle et devient égal au carré de la vitesse des vents. De plus, de nombreux ouragans, en abordant la terre ferme, comportent des tornades qui se développent principalement à l'avant ou sur la partie est (qui est aussi la plus violente) de l'ouragan. Après s'être abattues sur la terre, les tornades ont tendance à se multiplier pendant que le phénomène se propage dans l'intérieur des terres.

Phénomènes météorologiques associés

1. Raz-de-marée

Lorsqu'une tempête s'abat sur un territoire, c'est la conjugaison de forces astronomiques (marées), barométriques et dynamiques au-dessus de l'océan qui donne lieu à ce phénomène intéressant et meurtrier que l'on appelle le raz-de-marée. Plus simplement. La pression atmosphérique très basse au centre de l'ouragan provoque une élévation de la surface de la mer à raison de 1 cm pour une baisse de pression de 1 hectopascal.

Cela peut sembler peu mais quand s'y ajoute la marée montante, le niveau de la mer commence à atteindre une hauteur considérable. En outre, les vents violents qui soufflent à la surface de la mer, particulièrement dans la partie est de l'ouragan (la plus violente), projettent encore davantage d'eau sur la côte sous la forme d'un immense dôme. Enfin, les vagues provoquées par le vent s'ajoutent à tout cela pour donner lieu au raz-de-marée. Il est bon de savoir que la hauteur des vagues est inversement proportionnelle à la profondeur de l'eau. En d'autres termes, moins il y a de fond, plus les vagues sont hautes. Il suffit d'aller sur la plage pour s'en rendre compte.

Le raz-de-marée est la première cause mortelle en cas d'ouragan ; c'est également le phénomène le plus dévastateur pour les propriétés situées sur les côtes. Le plus important s'est produit en Australie en 1899 et a atteint une hauteur de 13 mètres. L'ouragan 'Camille', en 1969, a provoqué un raz-de-marée avec des vagues de 7,6 mètres au-dessus du niveau de la mer. Imaginez une telle situation à Port of Spain en 2004.

2. Inondations

On affirme que ce qui est le plus dangereux dans un ouragan, c'est l'eau qui lui est associée. Le raz-de-marée est l'une de ces menaces. L'inondation en est une autre. La caractéristique commune à tous les ouragans, c'est le degré impressionnant de précipitations qu'ils produisent. Il n'est pas exceptionnel qu'un ouragan de vitesse et de taille moyenne provoque de 15 à 30 cms de pluie. Lorsque le phénomène progresse lentement ou s'il est retardé pour cette raison, les effets de la pluie peuvent être dévastateurs. L'existence de chacun, l'infrastructure, l'agriculture, les transports, le système de santé et l'organisation sociale en général sont sérieusement touchés par les dépenses importantes que représentent les réparations. Imaginez la disparition de tel ou tel pont au nord de Trinidad et vous aurez une idée du désordre social qui en résulterait.

3. Vents violents

Même s'il est improbable que nous soyons touchés par un ouragan de catégorie 3, principalement grâce à notre situation relativement favorable à la frontière sud du champ d'action des ouragans de la Caraïbe, le phénomène peut se produire et s'est déjà produit à Trinidad et Tobago. En 1933, un ouragan a ravagé la péninsule sud dans la région de Cedros et Icacos. Heureusement, la population y était et y est toujours peu nombreuse. Contrairement à ce que nous voyons sur nos écrans, les vents violents représentent un danger moindre. Avec suffisamment d'avertissements

et un peu de bon sens, il nous reste une chance de nous en sortir. Le vent endommage principalement les constructions, balaie un toit ici ou là, renverse les constructions plus légères, affecte sérieusement l'agriculture etc. Les êtres humains correctement avertis peuvent trouver refuge dans des abris et être évacués.

Conclusion

L'indifférence est le seul domaine dans lequel les progrès de la science et de la technologie, et les mesures les plus efficaces en matière de prévention des risques peuvent être complètement vains et tourner au cauchemar. Je parle ici de l'indifférence que peut manifester la population par rapport aux messages d'alerte. Combien de fois avons-nous entendu la remarque suivante : « Il ne faut pas écouter la météo, ils se trompent toujours » ou « Dieu habite à la Trinité, il ne ferait jamais de mal à ses enfants. »

Un autre adage, celui du météorologue qui dément les paroles d'une vieille rengaine ancrée dans l'imagination de tous, perpétue ce comportement. On a certainement tort de croire que la ligne des montagnes situées au nord du pays sera un rempart efficace à l'approche des tempêtes. Au contraire, la position de ces collines pourrait bien représenter un canal favorable aux phénomènes météorologiques qui se dirigent vers l'ouest.

L'urgence est vitale d'accepter que, si les météorologues se trompent quelquefois, ils ont la plupart du temps raison ; ils sont les mieux à même d'avertir la population grâce à l'étendue des connaissances technologiques et scientifiques dont ils disposent à tout moment sur la situation météorologique.

Pour être en sécurité, il faut écouter les avertissements et agir de façon appropriée. La seule réaction qui consiste à se rassembler et prier en cas d'ouragan pourrait bien un jour conduire à la mort. Souvenez-vous du dicton : « Aide-toi et le ciel t'aidera. »

Survey on Disaster Planning in National Libraries



by Marie-Thérèse Varlamoff
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NB: this survey was presented during the joint session of PAC, the Section on National Libraries and the Section on Preservation and Conservation, at the IFLA Congress, Buenos Aires, August 2004.

Introduction

The success of the Berlin Pre-conference "Preparing for the Worst, Planning for the Best: Protecting our Cultural Heritage from Disaster" led the IFLA-PAC Core Activity to organise this session jointly with the IFLA National Libraries and Preservation and Conservation sections. This survey has its origin in a resolution voted at the end of the IFLA Conference in Glasgow, a resolution intended to raise awareness of the importance (for institutions responsible for safeguarding the national documentary heritage) of preparing for disaster and of writing and implementing disaster plans: "*Be it resolved that, considering the many risks that threaten the cultural heritage, all libraries responsible for collections of national significance should set up, test, implement and regularly update a disaster plan*".

Joint Survey

In this perspective a joint survey was launched in order to determine how many libraries have a disaster plan in all its relevant aspects. For this purpose a questionnaire on disaster preparedness was sent in February 2004 by the PAC office to 177 national libraries (using the CDNL roster). Replies were requested by 25 March. The report I am presenting now has been elaborated by Marie-France Plassard. The questionnaire covered such areas as disasters having occurred in the last five and the last ten years, their number and their nature.

Institutions were also asked to report whether they were located in an area threatened by natural disasters and what kind could be expected.

Buildings were the subject of another section:

- was the institution located in one or several buildings?
- How old were the buildings?
- Did the respondents share them with other organisations?

A much longer part of the questionnaire was devoted to the disaster plan itself. If the institution did not have one and did not intend to write one, it was asked to state reasons. All aspects of the plan were covered, such as alarms, insurances, staff involvement and eventual co-operation with other organisations. Replies were accepted till 30 April 2004. As of that date 73 institutions had replied (about 41%).

Disaster Plan: Yes or No?

39 institutions of these 73 respondents reported that they had a disaster plan (about 53%): Argentina, Australia, Belize, Canada, Chile, China, Colombia, Cuba, the Czech Republic, Estonia, Fiji, France, Iceland, Indonesia, Italy (Firenze), Jamaica, Korea, Kuwait, Kyrgyzstan, Mauritius, Moldavia, Myanmar, the Netherlands, New Zealand, Peru, Portugal, Romania, Singapore, Slovenia, Switzerland, Syria, Trinidad and Tobago, Ukraine, the United Kingdom (the British Library, the National Library of Scotland and the National Library of Wales), Uzbekistan, Venezuela and Vietnam.

The 28 that answered that they had no disaster plan but intended to write and implement one were in

various stages of doing so. These are located in the following countries: Barbados, Benin, Costa Rica, Croatia, Egypt, El Salvador, Germany, Ghana, Greece, Guatemala, Hungary, Italy (National Library of Rome), Japan, Latvia, Lesotho, Madagascar, Maldives, Nicaragua, Norway, Panama, Seychelles, Slovakia, Spain (Catalunya), Sweden, Togo, Tunisia and Tuvalu, as well as the Vatican Library. Only six countries have no plan and do not intend to write one: Armenia, Burundi, Gambia, Pakistan, Tonga and Thailand.

The reasons vary but are mostly related to lack of human and financial resources and the lack of a model. Some respondents thought that there were few risks in their region. Armenia, Gambia and Tonga reported that they were in an area threatened by disaster, and only Thailand and Tonga that they had suffered from disasters in the last ten years.

Influence of Disasters

It is difficult to determine whether recent disasters pushed the 28 libraries to write disaster plans. Most of the libraries intending to write disaster plans did not have any disasters during the last ten years except for Costa Rica, Egypt, El Salvador, Greece, Guatemala, Latvia, Lesotho, Maldives, Panama and Slovakia. 'Few risks' is mentioned by some even though at the same time they report that they suffered from disasters in the last ten years. Lack of resources and lack of staff to write and implement the plan are most frequently mentioned, as well as lack of a model, such lack implying the desirability to obtain a model and guidelines.

Of the 39 libraries which have a disaster plan, 15 reported that they had suffered from a disaster in the last ten years.

31 respondents indicated that they were in a region threatened by disasters. Some which had suffered disasters obviously felt they were accidental, since they did not report that they were in a threatened area.

- Fire, cited 45 times is considered as most likely to happen;
- floods come next (30),
- then earthquake (24),
- terrorism (13),
- internal conflicts (5)
- and wars (3).

Other disasters include:

- hurricanes (mostly in the West Indies),
- man-made disasters,
- biological ones, (e.g. fungi and insects in the Baltic States).

Building

Concerning buildings:

- 47 institutions have more than one building, ranging from 2 to 15 (only one case). Some are located in different cities, e.g., in Germany and Norway.
- 26 share with other organisations.
- 8 buildings are over 100 years old: they are in the Czech Republic, France, Greece, Norway, Spain (Catalunya), Sweden, Tunisia and the Vatican.
- 18 are between 50 and 100 years old,
- 16 between 25 and 50,
- 21 between 10 and 25,
- and 18 buildings are between five and ten or less than five years old.

The question was related to the age of the main building, but several countries gave the age of all buildings; therefore the total number is higher than the number of respondents.

It is interesting to assess the correlation of disaster plans with the age of the buildings concerned. Of the eight countries which have buildings over 100 years old, only two have a written plan (the Czech Republic and France); the others intend to have one. Of those institutions located in buildings between 50 and 100 years old, eleven have a disaster plan, six intend to have one, and only one has no plan and does not intend to establish one. Among the category of buildings ranging between 25 and 50 years old, eight of the countries concerned have a disaster plan, six intend to have one and two have none. Of those located in buildings between 10 and 25 years old, eleven have a plan, seven intend to create one and three have none. Lastly, eleven of the countries having buildings between five and ten years old (some less than five) have a plan, and the rest intend to have one.

Updating Disaster Plans

Regarding the disaster plans, one might note that most of them are not part of a national plan; only 13 are. Some plans in existence are more than ten years old (9) and are usually updated yearly except in three cases (in one case there is no update foreseen). The majority are less than five years old (20) and the update occurs mostly every five years, in a few cases every two years, which means that most of them have never been updated; and two institutions have no intention to update the plan. The rest of the plans are less than one year old and understandably no yet updated. The plans are mostly created in consultation

with firemen, although local administration ranges second. The army is only mentioned once. One country reported consulting the police as well.

Regarding establishment of priorities, some countries having a disaster plan have not established priorities (only six) whereas countries intending to create a plan have sometimes established some (8); of the six countries having no intention to have a plan, three have established priorities.

One question was related to the security of persons, buildings and collections. 20 respondents state that their plans are dealing with all three, whereas the others mention only collections or buildings. Except in the answers mentioning all three, 'persons' occurs only seven times but the reason is, in some cases, that human safety procedures are not harmonised with the disaster plan.

Testing the Disaster Plan

When it comes to testing the disaster plan, 25 of the respondents who have a plan, report that they have tested it. Five of the countries intending to create a plan write that they have tested it, which seems to indicate that their plan is well in progress. Rather confusing is the fact that two of the countries which have no intention to have a plan indicate they have tested it!

About half of the institutions concerned organise exercises or drills, and these are only regular in some 28 cases. Getting help from institutions is slightly less common than contacting companies, which about half of the respondents do. Services most often mentioned are related to equipment and transport. Freezing figures more seldom. Other services include disinfection, expert support, liophilisation, logistics, restoration, site cleaning, space dehumidification, storage and training. Technical recommendations are available at about half of the institutions.

A very important component of the implementation of a disaster plan is the existence of a member of the staff responsible for the implementation of the disaster plan, as well as updated lists of staff to contact in case of emergency or disaster. 51 countries indicate that they have lists and the same countries (except two) report that they have a member of staff responsible for the disaster plan. Among these 51 countries are two which had reported they did not intend to write a disaster plan.

Preventive Measures

The last section of the questionnaire dealt with prevention. The first question was whether the libraries had emergency kits easily accessible: 42 institutions answered that they had. The next group of questions concerned alarms, the kind (fire and intrusion) and whether they were regularly tested. 59 respondents have fire alarms and 31 out of those 59 have alarms against intrusion. Only one country has an alarm against intrusion but not against fire. Alarms are tested in 50 libraries.

The question of insurance came next. Only 23 institutions have insurance for their buildings; one reported that only some of their buildings were covered. The reasons vary high cost of insurance, government coverage ('unfortunately' added one institution), and cost of valuation. Even lower (16) is the number of institutions which have insured their collections. 19 have insured their equipment.

The last question was related to the kind of preventive measures considered as most useful and appropriate in the event of a disaster. Those listed were: duplication of documents and storage elsewhere, sprinklers, alarms, and keepers, regular rounds. 13 respondents listed all of them. Duplication was obviously considered the most useful, as it appeared altogether in 50 answers. Over half of the respondents listed alarms, and slightly less keepers. Sprinklers came last, cited by about a third of the libraries. Additional measures mentioned included expert support and having funds immediately available in the event of a disaster.

Conclusion

It is difficult to estimate the general situation since only 41% of the institutions contacted replied. It is equally difficult to determine why the other 59% did not reply. Problems of communication might have occurred: some countries indicated that the questionnaire had taken weeks to reach them; they had received it very close to the deadline.

1. During the reading of the replies, it became evident that the institutions which have a sound disaster plan, tested and regularly updated, are **not always** located in the big **industrialised countries**. To single out only a couple: Cuba has a disaster plan, has tested it, organises drills regularly, has a member of staff responsible and insures buildings, collections and equipment; Singapore is one of the few countries which update their plan every year. The library has alarms against fire and intrusion, and insures collections and equipment.

2. The reasons invoked for not having a disaster plan vary, as indicated above, but are mostly related to **lack of resources** (human and financial) and the lack of a model.

3. It thus appears necessary to **raise awareness** of the importance of disaster preparedness, which should be part of the priorities, even in libraries with very limited budget. The National Library and Archives of Tuvalu reported trying to raise such awareness, a good example to follow.

4. **'Few risks'** was an additional reason given for having no disaster plan. It is worth pondering the fact that a country is never really free of risks. Some of the countries which did not feel any threat reported that they had suffered from disasters (obviously unexpected!) in the last ten years.

5. Another aspect of risks should be studied: their correlation with the **age of the buildings**. And the importance of having adequate insurance should not be underestimated.

6. Concerning the plans, the necessity of producing a **model and guidelines** (or revising and updating the existing ones) has already been noted.

7. It is also worth reflecting on the fact that only a third of the plans in existence are part of **national plans**. Should disaster plans be integrated into national policies?

8. The importance of **testing** the plans and **updating** them should be emphasised. A plan which is not updated or at least reviewed every year loses some of its value.

9. **Establishing priorities** is also a necessity; yet the percentage of positive answers to the relevant question was rather low.

10. Equally low was the number of respondents who reported having **technical recommendations**, which is, however, another essential component of disaster preparedness.

Recommendation

Co-operation between institutions should be encouraged, especially but not exclusively, when institutions with limited budgets are concerned. Only half of the respondents indicated that they co-operated with other institutions. And finally one cannot stress enough the fact that it is indispensable to have a member of the staff responsible in case of disaster, co-ordination being essential for an efficient operation.

An IFLA-PAC Manual on Disaster Planning?

Considering the results of the survey and the discussions which took place during the two seminars on disasters organised at the initiative of PAC, first in Mexico, October 2003, then in Trinidad & Tobago, May 2004, considering also the discussions of the archivists during their 2nd International Conference on Preservation of Archives in Tropical Climates that took place in Curaçao, November 2003, PAC has decided to contribute to the already long list of publications dealing with disaster planning.

PAC intends to elaborate a basic and practical manual on the model of "IFLA Principles on the Care and Handling of Library Material" published as number one of "International Preservation Issues" in 1998, which has become a sort of 'best-seller' with translations in more than ten different languages.

The manual will present the various risks threatening our documentary heritage and the items to be taken into consideration when establishing a disaster plan. It should also bring practical solutions in order to mitigate the consequences of most disasters. Aimed at librarians as well as at archivists, the manual will be elaborated by a joint advisory committee gathering colleagues from ICA (International Council on Archives) and IFLA. John McIlwaine, former Chair of the PAC Section and Ted Steemers, Chair of the Committee of Preservation of Archives have accepted to assist me in this task. Volunteers are most welcome.

The manual is expected to be published in 2006 and will be available in a trilingual version (English-French-Spanish).

IFLA Questionnaire on Disaster Preparedness

To be sent back to:

Marie-Thérèse Varlamoff
IFLA-PAC
Bibliothèque nationale de France
Quai François-Mauriac - 75013 Paris - France

BEFORE MARCH 25, 2004

A - Institution

- A.1 Name of institution:
- A.2 Name of director:
- A.3 Address:
- A.4 Phone:
- A.5 Fax:
- A.6 E-mail:

B - Disasters

- B.1 Has your institution suffered from disaster during the last
✓ 5 years yes no
✓ 10 years yes no
- B.2 What kind of disaster was it?
 natural man-made
- B.3 How many disasters have you suffered from these last 10 years?
 1 2 3 more:.....
- B.4 Is your institution located in a region or place threatened by natural disaster?
 yes no
- B.5 What kind of disasters are most likely to happen?
 fire volcanic eruption
 floods wars
 earthquake internal conflicts
 landslide terrorism
 tsunami others:

C - Buildings

- C.1 Is your institution located in:
 one building
 several buildings: 2 3 4
 5 more:.....
- C.2 Is your main building:
 less than 5 years old 5 to 10 years old
 10 to 25 years old 25 to 50 years old
 50 to 100 years old more than 100 years old
- C.3 Do you share the building with other occupants?
 yes no

D - Disaster Plan

**A disaster plan is a written document which concerns the safety and rescue of collections and the safety of the building.
It must not be assimilated to safety measures that deal with the security of the public and that are compulsory.**

- D.1 Do you have a written disaster plan?
 yes no
- D.2 If no, do you intend to write and implement one?
 yes no
- D.3 Give the main reasons why such a disaster plan does not exist:
 few risks
 no staff available to write and implement it
 lack of model to write it
 lack of resources to implement it: lack of staff lack of money
 proximity of fire brigade
 others, please detail:

- D.4 If yes, is it part of a national disaster plan?
 yes no
- D.5 Does it deal with the security of:
 persons building collections
- D.6 Have you established priorities to save your collections?
 yes no
- D.7 When was the disaster plan established?
 less than 1 year ago less than 5 years ago more than 10 years ago
- D.8 Do you update it regularly?
 yes: every year every 2 years no every 5 years less
- D.9 Has your disaster plan been established in consultation with civil security teams?
 firemen army local administration
- D.10 Have you tested your disaster plan?
 yes no
- D.11 Are drills or exercises organised to train staff?
 yes no
- D.12 Is your staff regularly trained?
 yes no
- D.13 Have you contacted other nearby cultural institutions susceptible to help you in case of a disaster?
 yes no
- D.14 Have you contacted companies who could respond immediately in case of a disaster?
 yes no
- D.15 What kind of service can they offer?
 transport equipment freezing
 others
- D.16 Do you have updated lists of staff to contact in case of an emergency or a disaster?
 yes no
- D.17 Have technical recommendations been written concerning the rescue of damaged material?
 yes no
- D.18 Is a member of your staff responsible for the disaster plan and its implementation?
 yes no
- D.19 Name and position of this person (not compulsory):

- D.20 Do you have emergency kits easily accessible?
 yes no
- D.21 What kind of alarm systems do you have?
 against fire against intrusion
- D.22 Are your alarm systems regularly tested?
 yes no
- D.23 Is the building insured?
 yes no
- D.24 Are the collections insured?
 yes no, why?
- D.25 Are the equipment insured?
 yes no, why?
- D.26 Which preventive measures do you consider most useful and appropriate in the event of a disaster?
 duplication of documents (collections, catalogues) and storage elsewhere
 sprinklers
 alarms
 keepers, regular rounds

E - Information about the person who filled in the questionnaire

- E.1 Name:
- E.2 Function:
- E.3 E-mail:
- E.4 Phone number:

Enquête auprès des bibliothèques nationales sur la prévention des catastrophes

par Marie-Thérèse Varlamoff
et Marie-France Plassard

NB : cette enquête a été présentée lors de la session organisée conjointement par le Programme PAC, la Section des Bibliothèques nationales et la Section 'Préservation et Conservation', au Congrès de l'IFLA à Buenos Aires, en août 2004.

Introduction

Le succès de la pré-conférence de Berlin « Preparing for the Worst, Planning for the Best » a conduit le Programme fondamental IFLA-PAC à organiser cette session en coopération avec les sections des bibliothèques nationales et de la conservation. L'enquête dont je vous donnerai les principaux résultats est la suite de la résolution adoptée à l'issue de la conférence de l'IFLA à Glasgow en 2003, résolution destinée à sensibiliser les institutions responsables de leur patrimoine national, à la nécessité de se doter d'un plan d'urgence afin de mieux prévenir les catastrophes.

Enquête

C'est pourquoi cette enquête fut lancée afin de déterminer quelles étaient les bibliothèques nationales qui possédaient un plan d'urgence et les différents points que ceux-ci comportaient. A cet effet, en février 2004, le PAC rédigea et envoya un questionnaire à 177 bibliothèques nationales en utilisant le fichier de la CDNL. La date limite pour les réponses était fixée au 25 mars.

Le questionnaire couvrait les domaines suivants : nombre et nature des catastrophes survenues au cours des cinq et dix dernières années. Les bibliothèques devaient indiquer si elles se trouvaient dans une zone menacée de catastrophes naturelles et la nature de cette menace.

Le bâtiment constituait une autre partie du questionnaire :

- la bibliothèque était-elle répartie dans plusieurs bâtiments ?

- Quel était l'âge des bâtiments ?
- Partageait-elle le bâtiment avec d'autres institutions ?

Une partie importante du questionnaire concernait le plan d'urgence lui-même. Si la bibliothèque n'en avait pas ou n'avait pas l'intention d'en avoir un, la question était posée de savoir pour quelles raisons. Les différentes parties du plan étaient passées en revue, en particulier les systèmes d'alarme, les assurances, l'investissement du personnel et la coopération éventuelle avec d'autres institutions ou organismes.

Plans d'urgence ?

39 bibliothèques sur 73 ont répondu qu'elles possédaient un plan d'urgence ce qui représente un pourcentage de 53%. Ce sont les pays suivants : Argentine, Australie, Belize, Canada, Chili, Chine, Colombie, Corée, Cuba, Estonie, Fiji, France, Indonésie, Islande, Italie (Florence), Jamaïque, Kirghizstan, Koweït, Maurice, Moldavie, Myanmar, Nouvelle-Zélande, Ouzbékistan, Pays-Bas, Pérou, Portugal, République Tchèque, Roumanie, Royaume-Uni (British Library, National Library of Scotland et National Library of Wales), Singapour, Slovénie, Suisse, Syrie, Trinité & Tobago, Ukraine, Venezuela, Vietnam.

Les 28 bibliothèques qui ont répondu qu'elles n'avaient pas de plan d'urgence mais qu'elles avaient l'intention d'en écrire un et de le mettre en œuvre en étaient à différents stades de réalisation. Ces bibliothèques nationales se trouvent dans les pays suivants : Allemagne, Barbade, Bénin, Costa Rica, Croatie, Egypte, Espagne (Catalogne), Ghana, Grèce, Guatemala, Hongrie, Italie (B.N. Rome), Japon, Lituanie, Lesotho, Madagascar, Maldives, Nicaragua, Norvège, Panama, Salvador, Seychelles, Slovaquie, Suède, Togo, Tunisie, Tuvalu ainsi que le Vatican. Seuls six pays n'ont aucun plan et n'ont pas l'intention d'en écrire un. Ce sont l'Arménie, le Burundi, la Gambie, le Pakistan, Tonga et la Thaïlande.

Les raisons énoncées varient mais sont la plupart du temps liées au manque de personnel, au manque de moyens financiers et à l'absence de modèle. Certains pays pensent qu'il y a peu de risques dans leur région.

Si l'Arménie, la Gambie et Tonga ont admis qu'ils se trouvaient dans des zones à risques, seules la Thaïlande et Tonga ont fait mention de catastrophes survenues au cours des dix dernières années.

Influence des catastrophes

Il est difficile de déterminer si les 28 bibliothèques qui ont l'intention de se doter d'un plan d'urgence le font à la suite et à cause de catastrophes survenues récemment. La plupart des bibliothèques ayant l'intention d'écrire un plan n'ont pas subi de catastrophes au cours des dix dernières années exceptés Costa Rica, l'Égypte, le Salvador, la Grèce, le Guatemala, la Lituanie, le Lesotho, les Maldives, Panama et la Slovaquie. Quelques bibliothèques font mention de risques limités bien qu'en même temps, elles mentionnent avoir été victimes de catastrophes au cours des dix dernières années. Le manque de moyens financiers et le manque de personnel pour écrire et mettre le plan en œuvre sont les arguments les plus fréquemment mentionnés ainsi que l'absence de modèle. Cette absence de modèle fait ressortir le souhait de se procurer un modèle et des directives.

Sur les 39 bibliothèques qui ont un plan d'urgence, quinze mentionnent qu'elles ont été victimes d'une catastrophe au cours des dix dernières années.

31 mentionnent qu'elles se trouvent dans une région à risques. Certaines qui ont été victimes de catastrophes pensent que, de toute évidence, celles-ci étaient accidentelles, puisqu'elles ne mentionnent pas qu'elles se trouvent dans un endroit à risques.

Les catastrophes les plus fréquemment citées sont :

- l'incendie (45 cas),
- l'inondation (30 cas),
- le tremblement de terre (24 cas),
- les actes de terrorisme (13 cas),
- les conflits internes (5 cas),
- la guerre (3 cas).

Parmi les autres catastrophes :

- les ouragans (surtout aux Antilles),
- les catastrophes dues à l'homme,
- les catastrophes biologiques (comme les moisissures et les insectes - infestations - dans les Pays Baltes).

Bâtiment

Quant aux bâtiments :

- 47 bibliothèques comportent plus d'un bâtiment chacune (ce qui peut aller de deux à quinze).

Certains bâtiments se trouvent dans des villes différentes. C'est le cas en Allemagne et en Norvège.

- 26 bibliothèques partagent leur bâtiment avec d'autres institutions.
- Huit bibliothèques occupent des bâtiments vieux de plus de 100 ans : Espagne (Catalogne), France, Grèce, Norvège, République Tchèque, Suède, Tunisie, Vatican.
- 18 bâtiments sont vieux de 50 à 100 ans ;
- 16, de 25 à 50 ans ;
- et 21, de 10 à 25 ans ;
- 18 bâtiments ont moins de 10 ans.

La question concernait le bâtiment principal mais plusieurs bibliothèques ont donné l'âge de tous les bâtiments qu'elles occupaient, ce qui explique le nombre supérieur de bâtiments par rapport aux réponses. Il est intéressant de comparer l'existence d'un plan d'urgence à l'âge des bâtiments. Sur huit pays dont les bibliothèques ont plus de 100 ans d'existence, seuls deux d'entre eux ont un plan écrit (la République Tchèque et la France). Les six autres envisagent seulement de s'en doter.

Quant aux bibliothèques occupant des locaux vieux de 50 à 100 ans, onze ont un plan, six envisagent d'en avoir un, et une seule n'en a pas l'intention.

Pour les bâtiments vieux de 25 à 50 ans, seulement huit ont un plan, alors que six l'envisagent et deux pas du tout.

Pour les bâtiments vieux de dix à quinze ans, onze ont un plan, sept ont l'intention d'en avoir un, et trois pas. Enfin onze pays ayant des bâtiments récents (vieux de moins de dix ans) ont déjà un plan ou ont l'intention de s'en doter.

Mise à jour du plan d'urgence

En ce qui concerne les plans d'urgence, on peut remarquer que la plupart (sauf treize d'entre eux) ne font pas partie d'un plan national : neuf des plans existants ont plus de dix ans et sont en général mis à jour chaque année sauf pour trois d'entre eux (dont un pour lequel aucune mise à jour n'est envisagée). La majorité des plans ont moins de cinq ans (20) et leur mise à jour se fait tous les cinq ans (serait-ce une coïncidence due à l'enquête !) dans quelques cas seulement tous les deux ans. Deux bibliothèques n'ont pas l'intention de mettre leur plan à jour !

Le reste des plans ont moins d'un an et n'ont pas encore, et pour cause, fait l'objet d'une mise à jour. Les plans sont en général établis après consultation des pompiers, puis de l'administration locale. La consultation de l'armée est mentionnée une seule fois, ainsi que la police.

En ce qui concerne l'établissement de priorités, six pays qui ont un plan d'urgence n'ont pas établi de priorités tandis que huit pays ayant l'intention d'établir un plan ont parfois déjà établi des priorités. Parmi les six pays n'ayant pas l'intention d'établir un plan, trois ont établi des priorités.

Une question concernait la sécurité des personnes, des bâtiments et des collections. Vingt réponses concernent la sécurité des trois tandis que les autres mentionnent seulement la sécurité des collections ou des bâtiments. Mises à part les réponses concernant les trois, la sécurité des personnes est citée sept fois seulement, sans doute parce que dans certains cas, les procédures de sécurité pour les personnes ne font pas partie du plan d'urgence.

Fonctionnement du plan d'urgence

Quant aux tests du plan d'urgence, 25 réponses indiquent qu'aucun test n'a été fait. Cinq pays ayant l'intention de se doter d'un plan, disent qu'ils l'ont testé, ce qui semble indiquer que leur plan est presque achevé. Plus troublant, est le fait que deux pays n'ayant pas l'intention de se doter d'un plan indiquent qu'ils l'ont testé !

Environ la moitié des institutions concernées organisent des exercices ou des simulations, dans 26 cas seulement, de façon régulière. Demander ou recevoir l'aide d'autres institutions est moins répandu que de prendre contact avec des prestataires de service, ce que font la moitié des institutions. Les services les plus fréquemment mentionnés sont ceux susceptibles de procurer du matériel ou des organismes de transport. Les entreprises de congélation sont plus rarement mentionnées. Parmi les autres services mentionnés citons : la désinfection, les experts, la lyophilisation, la logistique, la restauration, le nettoyage du site, la déshumidification des locaux, le stockage, la formation. Environ la moitié des bibliothèques peuvent fournir des recommandations techniques.

Une composante très importante de la mise en œuvre d'un plan d'urgence est la désignation d'un membre du personnel comme responsable, ainsi que des listes à jour de personnes à contacter en cas d'urgence. 51 pays indiquent qu'ils ont des listes et les mêmes pays (sauf deux) qu'ils ont désigné un responsable. Parmi ces 51 pays, deux ont répondu qu'ils n'avaient pas l'intention de se doter d'un plan d'urgence.

Mesures préventives

La dernière partie du questionnaire concerne la prévention. La première question concernait des kits d'urgence. 42 ont répondu qu'elles en possédaient. Les autres questions concernaient les alarmes contre l'incendie ou l'intrusion et la régularité de leur contrôle. 59 pays ont des alarmes incendies dont 31 ont également des alarmes anti-intrusion. Seul un pays a répondu qu'il avait une alarme anti-intrusion mais pas d'alarme incendie. Les alarmes sont vérifiées dans 50 bibliothèques.

La question suivante concernait les assurances. Seules 23 bibliothèques ont une assurance pour leur bâtiment. L'une d'entre elles a répondu que seulement une partie de ses bâtiments était assurée. Les raisons invoquées sont multiples et variables. Coût élevé des assurances, prise en charge par l'Etat (« malheureusement » d'après l'une des bibliothèques) et coût de l'évaluation. Le nombre de bibliothèques qui ont assuré leurs collections est encore plus faible (16). 19 bibliothèques ont assuré leur matériel.

La dernière question concernait le type de mesures préventives considérées comme les plus utiles et appropriées en cas de catastrophe. Ce sont la duplication des documents et le stockage des copies dans un autre lieu, les sprinklers, les alarmes, puis les gardiens, les rondes régulières. Treize bibliothèques ont énuméré la totalité de ces mesures. La duplication était de toute évidence considérée comme la mesure la plus utile, car on l'a retrouvée dans 50 réponses. Plus de la moitié des réponses ont cité les alarmes et un peu moins les gardiens. Les sprinklers arrivent derniers, cités par environ un tiers des bibliothèques. Parmi les autres mesures, furent mentionnés le recours à des experts et la mise à disposition de fonds immédiatement disponibles en cas de catastrophe.

Conclusion

Il est difficile de donner une image précise de la situation dans toutes les bibliothèques nationales puisque seulement 41% des institutions contactées ont répondu. Il est également difficile de déterminer pourquoi 59% d'entre elles n'ont pas répondu. Il se peut qu'il y ait eu des problèmes de communication. Certains pays ont indiqué que le questionnaire avait mis plusieurs semaines à parvenir à destination et qu'ils l'avaient reçu très peu de temps avant la date limite.

1. En dépouillant les réponses, il s'est avéré que les bibliothèques qui avaient un plan d'urgence solide, testé et régulièrement mis à jour, n'étaient **pas systématiquement situées dans un grand pays industrialisé**. Pour n'en citer que deux : Cuba a un plan d'urgence, l'a testé, organise régulièrement des exercices, a nommé un responsable parmi les membres du personnel et assure bâtiments, collections et matériel. Singapour figure parmi les pays (très peu nombreux) qui mettent à jour leur plan chaque année. La bibliothèque possède des systèmes d'alarme contre le feu et l'intrusion et assure ses collections et son matériel.

2. Les raisons invoquées pour ne pas avoir de plan d'urgence varient, comme on l'a dit plus haut, mais sont surtout liées au **manque de moyens** (en personnel ou financiers) et à l'absence de plan-type.

3. D'où il ressort qu'il s'avère nécessaire de **sensibiliser** à l'importance de la prévention des catastrophes, ce qui devrait faire partie des priorités, même dans les bibliothèques ayant un budget limité. La bibliothèque et les archives nationales de Tuvalu ont signalé qu'elles s'efforçaient d'attirer l'attention sur ce point, un bon exemple à suivre.

4. « **Peu de risques** » est une raison supplémentaire avancée pour ne pas se doter d'un plan d'urgence. Il faut réfléchir au fait qu'un pays n'est jamais totalement à l'abri d'une catastrophe. Certains pays qui se sentent totalement à l'abri ont rapporté qu'ils avaient souffert de catastrophes (inattendues certes !) au cours des dix dernières années.

5. Il faut étudier un autre aspect des risques : leur corrélation avec l'**âge des bâtiments**. De plus, l'importance d'avoir une bonne assurance ne doit pas être sous-estimée.

6. Quant aux plans, on a déjà parlé de la nécessité de produire un **plan-type** et des recommandations (ou de réviser et mettre à jour ceux déjà existants).

7. Il faut aussi réfléchir au fait que seulement un tiers des plans existants font partie d'un **plan à l'échelle nationale**. Doit-on intégrer les plans d'urgence dans une politique d'urgence nationale ?

8. Il faut souligner l'importance de **tester** les plans et de les **mettre à jour** régulièrement. Un plan non mis à jour et pas revu intégralement au moins une fois par an perd de son efficacité.

9. Il est également indispensable d'établir des priorités, pourtant le pourcentage de réponses positives à cette question a été relativement bas.

10. On constate le même taux de réponses peu élevé concernant les établissements dotés de recommandations techniques, ce qui pourtant, constitue un des composants essentiels du plan d'urgence.

Recommandation

La coopération entre institutions doit être encouragée spécialement, mais pas exclusivement, lorsqu'il s'agit d'institutions à petit budget. Enfin, on ne saurait trop insister sur le fait qu'il est indispensable de désigner un membre du personnel responsable en cas de catastrophe. La coordination étant le facteur essentiel pour assurer l'efficacité des opérations.

Un manuel IFLA-PAC sur les plans d'urgence

À la lecture de ces résultats et après avoir organisé deux séminaires : à Mexico, d'abord, en octobre 2003, sur les tremblements de terre et à Trinité & Tobago en mai 2004 sur les catastrophes dans les Caraïbes, et participé à la deuxième réunion internationale sur la conservation des archives en climat tropical, Curaçao, novembre 2003, le PAC a décidé d'apporter sa contribution à la déjà très longue liste des publications sur les plans d'urgence.

Il s'agit d'un manuel de base, du type des «Principes de Conservation» de l'IFLA publiés en 1998, sur les risques éventuels à considérer et les éléments à prendre en compte lors de l'établissement d'un plan d'urgence. Ce manuel, commun aux archives et aux bibliothèques, sera élaboré par un comité comprenant des représentants des archives et des bibliothèques.

John McIlwaine, Président de la section PAC (Préservation et Conservation) et Ted Steemers, Président du comité de conservation des archives ont bien voulu accepter de m'assister dans cette tâche.

Le manuel sera trilingue (français, anglais, espagnol). La publication est prévue en 2006.

IFLA Enquête sur la prévention des catastrophes

A renvoyer à :

Marie-Thérèse Varlamoff
IFLA-PAC
Bibliothèque nationale de France
Quai François-Mauriac - 75013 Paris - France

AVANT LE 25 MARS 2004

A - Institution

- A.1 Nom de l'institution :
- A.2 Nom du directeur :
- A.3 Adresse :
- A.4 Téléphone :
- A.5 Fax :
- A.6 Adresse électronique :

B - Catastrophes

- B.1 Votre institution a-t-elle été victime d'une (de) catastrophe(s) au cours des :
✓ 5 dernières années oui non
✓ 10 dernières années oui non
- B.2 De quel type de catastrophe s'agissait-il ?
 naturelle causée par l'homme
- B.3 De combien de catastrophes avez-vous été victime ces dix dernières années ?
 1 2 3 plus :
- B.4 Votre institution est-elle située dans une région ou dans un endroit menacé de catastrophe naturelle ?
 oui non
- B.5 Quel type de catastrophe redoutez-vous le plus ?
 incendie éruption volcanique
 inondation guerre
 tremblement de terre guerre civile
 glissement de terrain terrorisme
 raz de marée autres :

C - Bâtiments

- C.1 Votre institution comporte-t-elle ?
 un seul bâtiment
 plusieurs bâtiments : 2 3 4
 5 davantage :
- C.2 Le bâtiment est-il vieux de :
 moins de 5 ans de 5 à 10 ans
 de 10 à 25 ans de 25 à 50 ans
 de 50 à 100 ans plus de 100 ans
- C.3 Partagez-vous le bâtiment avec d'autres institutions ou organisations ?
 oui non

D - Plan d'urgence

Un plan d'urgence est un document écrit qui concerne la sécurité et le sauvetage des collections ainsi que la sécurité du bâtiment. Il ne doit pas être confondu avec les mesures de sécurité qui traitent de la sécurité du public, qui sont une obligation.

- D.1 Avez-vous un plan d'urgence écrit ?
 oui non
- D.2 Si vous n'avez pas encore de plan d'urgence, avez-vous l'intention d'en établir un par écrit et de le mettre en œuvre ?
 oui non
- D.3 Quels sont les raisons pour lesquelles vous n'avez pas de plan d'urgence ?
 les risques sont nuls ou presque
 nous n'avons pas le personnel disponible pour l'élaborer et le mettre en œuvre
 nous n'avons pas de modèle
 nous manquons de : personnel d'argent pour le mettre en œuvre
 nous sommes à côté de la caserne de pompiers
 autres raisons à détailler SVP :

- D.20 Avez-vous un plan d'urgence et de sa mise en œuvre ?
 oui non
- D.21 Avez-vous du matériel d'urgence (des boîtes ou chariots) facilement accessible ?
 oui non
- D.22 De quel type de système d'alarme disposez-vous ?
 contre l'incendie contre l'intrusion
- D.23 Vos systèmes d'alarme sont-ils testés régulièrement ?
 oui non
- D.24 Le bâtiment est-il assuré ?
 oui non
- D.25 Les collections sont-elles assurées ?
 oui non, pourquoi ?
- D.26 Le matériel et les équipements sont-ils assurés ?
 oui non, pourquoi ?
- D.27 Quelles sont les mesures préventives qui vous paraissent le plus utile en cas de catastrophe ?
 transfert de documents (catalogues ou publications) et le stockage des duplicata dans un autre lieu.
 sprinklers
 alarmes
 gardiens, rondes régulières
- E - Informations sur la personne qui a rempli le questionnaire**
- E.1 Nom :
- E.2 Fonction :
- E.3 Adresse électronique :
- E.4 Téléphone :

gence national ?
 des collections
sauver en premier ?
 plus de 10 ans
s 2 ans tous les 5 ans moins
curité civile ?
 l'administration locale
onnel ?
voisins susceptibles de vous aider en cas de
pondre immédiatement à votre demande en
 congélation
er en cas d'urgence ou de catastrophe ?
déquate de procéder au sauvetage des

Encuesta sobre prevención de desastres en las bibliotecas nacionales

por Marie-Thérèse Varlamoff
y Marie-France Plassard

Nota: esta encuesta fue presentada durante la sesión conjunta del PAC, la Sección sobre Bibliotecas Nacionales y la Sección sobre Preservación y Conservación en el Congreso de la IFLA, celebrado en Buenos Aires, en agosto de 2004.

Introducción

El éxito de la preconferencia de Berlín "Preparing for the Worst, Planning for the Best" llevó al programa fundamental IFLA-PAC a organizar esta sesión conjuntamente con las secciones de bibliotecas nacionales y de conservación. La encuesta, cuyos principales resultados les presentaremos aquí, es la continuación de la resolución adoptada como producto de la conferencia de la IFLA en Glasgow, la cual tiene como objetivo sensibilizar a las instituciones responsables del patrimonio nacional en cuanto a la necesidad de diseñar un plan de emergencia a fin de prevenir los desastres de la mejor manera posible.

Encuesta

Es por ello que se elaboró esta encuesta, con el objeto de determinar cuáles eran las bibliotecas nacionales que contaban con un plan de emergencia y los distintos puntos que éstos tenían en común. Para ello, en febrero de 2004, el PAC redactó y envió un cuestionario a 177 bibliotecas nacionales (utilizando el directorio de la CDNL). El 25 de marzo se fijó como fecha límite para la recepción de las respuestas.

El informe que se presenta a continuación fue preparado por Marie-France Plassard. El cuestionario cubrió los siguientes aspectos: nombre y naturaleza de los desastres ocurridos en el curso de los últimos 5 y 10 años. Las bibliotecas debían indicar si se encontraban ubicadas en una región o lugar amenazado por desastres y la naturaleza de dicha amenaza.

El edificio constituía otra parte del cuestionario:

- ¿Está la biblioteca repartida en varios edificios?
- ¿Cuántos años de construido tiene el edificio?
- ¿Comparte el edificio con otras instituciones?

Una parte importante del cuestionario tenía que ver con el plan contra desastres propiamente dicho. Si la biblioteca no contaba con un plan o si no había intención de tener uno, la pregunta estaba orientada a conocer las razones de ello. Se revisaron las diferentes partes del plan, en particular los sistemas de alarmas, seguros, participación del personal y cooperación eventual de otras instituciones u organismos. Las respuestas debían enviarse antes del 30 de abril de 2004. Hasta la fecha 73 instituciones la han completado (aproximadamente el 41%).

¿Planes de emergencia?

De un total de 73 bibliotecas, 39 respondieron que contaban con un plan de emergencia, lo cual representa un 53%. Estas bibliotecas corresponden a los siguientes países: Argentina, Australia, Belice, Canadá, Chile, China, Colombia, Corea, Cuba, Eslovenia, Estonia, Fiji, Francia, Indonesia, Islandia, Italia (Florenia), Jamaica, Kirghizistán, Kuwait, Mauricio, Moldavia, Myanmar, Nueva Zelanda, Ouzbekistán, Países Bajos, Perú, Portugal, República Checa, Reino Unido (Biblioteca Británica, Biblioteca Nacional de Escocia y Biblioteca Nacional de Gales), Rumania, Singapur, Siria, Suiza, Trinidad y Tobago, Ucrania, Venezuela, Vietnam.

Las 28 bibliotecas que respondieron que no tenían un plan de emergencia, pero que tenían la intención de redactar uno y ponerlo en práctica, se encontraban en distintas etapas de elaboración. Estas bibliotecas nacionales se encuentran en los siguientes países: Alemania, Barbados, Benin, Costa Rica, Croacia, Egipto, El Salvador, Eslovaquia, España (Cataluña), Ghana, Grecia, Guatemala, Hungría, Italia (B.N. Roma), Japón, Lesoto, las Maldivas, Lituania, Madagascar, Nicaragua, Noruega, Panamá, Seychelles, Suecia, Togo, Túnez, Tuvalu y el Vaticano. Solamente 6 países no cuentan con un plan de emergencia y no tienen la intención de redactar uno. Éstos son Armenia, Burundi, Gambia, Paquistán, Tonga y Tailandia.

Las razones enunciadas varían, pero la mayoría de las veces tienen que ver con la falta de personal, la falta de recursos financieros y la ausencia de un modelo. Algunos países consideran que existen pocos riesgos en su región. Armenia, Gambia y Tonga reconocieron que se encuentran en zonas de riesgo, y Tailandia y Tonga indicaron haber sufrido desastres en los últimos 10 años.

Influencia de los desastres

Es difícil determinar si las 28 bibliotecas que tienen la intención de preparar un plan de emergencia lo hacen después y como consecuencia de desastres ocurridos recientemente. La mayor parte de las bibliotecas que tienen la intención de implantar un plan no han sufrido desastres en los últimos diez años, a excepción de Costa Rica, Egipto, El Salvador, Eslovaquia, Grecia, Guatemala, Lituania, Lesoto, las Maldivas y Panamá. Algunas bibliotecas reportan la existencia de riesgos limitados, aunque al mismo tiempo mencionan haber sido víctimas de desastres en los últimos diez años. La falta de recursos financieros y de personal para preparar y poner en práctica el plan de emergencia son los argumentos más frecuentemente aludidos, así como la ausencia de un modelo. Esta carencia pone de manifiesto el deseo de tener acceso a un modelo y a directrices.

De las 39 bibliotecas que tienen un plan de emergencia, 15 indicaron que fueron víctimas de un desastre en los últimos 10 años.

31 bibliotecas mencionaron que se encuentran ubicadas en áreas de riesgo. Algunas de las que han sido víctimas de desastres piensan que éstos fueron producto de accidentes, ya que no mencionan que se encuentren en un sitio de riesgo.

Los desastres mencionados con más frecuencia son:

- incendio (45 casos),
- inundación (30 casos),
- terremoto (24 casos),
- actos de terrorismo (13 casos),
- conflictos internos (5 casos)
- guerra (3 casos).

Los demás desastres citados por las bibliotecas que respondieron la encuesta fueron:

- huracanes (sobre todo en las Antillas),
- desastres causados por el hombre,
- y desastres biológicos (como el moho y los insectos - infestaciones - en los países bálticos).

Edificio

En cuanto a los edificios:

- 47 bibliotecas abarcan más de un edificio cada una, entre 2 y 15. Algunos edificios se encuentran en distintas ciudades, como en el caso de Alemania y Noruega.
- 26 bibliotecas comparten el edificio con otras instituciones.
- 8 bibliotecas ocupan edificios antiguos de más de 100 años. Éstas se encuentran en España (Cataluña), Francia, Grecia, Noruega, República Checa, Suecia, Túnez, el Vaticano.
- 18 edificios tienen de 50 a 100 años de antigüedad;
- 16 de 25 a 50 años;
- 21 de 10 a 25 años;
- 18 edificios tienen menos de 10 años.

La pregunta se refería al edificio principal, pero varias bibliotecas mencionaron la antigüedad de todos los edificios que ocupan, lo cual explica el número superior de edificios con respecto al de las respuestas.

Resulta interesante hacer una comparación entre la existencia de un plan de emergencia y la antigüedad de los edificios. De 8 países cuyas bibliotecas tienen más de 100 años de existencia, sólo 2 tienen un plan de emergencia escrito (Francia y la República Checa). Los otros 6 tienen previsto preparar uno. En cuanto a las bibliotecas que ocupan edificios de entre 50 y 100 años de antigüedad, 11 tienen un plan, 6 tienen previsto prepararlo y una sola no tiene intenciones de hacerlo. Para los edificios de entre 25 y 50 años, sólo 8 cuentan con un plan, mientras que 6 prevén tener uno y 2 no. En cuanto a los edificios entre 10 y 15 años, 11 tienen un plan, 7 tienen la intención de tener uno y 3 no. Finalmente, 11 países que tienen edificios nuevos (construidos hace menos de 10 años) ya cuentan con un plan o tienen la intención de preparar uno.

Actualización del plan de emergencia

En lo que respecta a los planes de emergencia, cabe señalar que la mayoría (salvo 13 de ellos) no constituyen parte de un plan nacional: 9 de los planes existentes tienen más de 10 años y en general son actualizados anualmente, excepto 3 de ellos (para uno de los cuales no está prevista ninguna actualización). La mayoría de los planes tiene menos de 5 años (20) y su actualización se hace cada 5 años, y en pocos casos cada 2 años. Dos bibliotecas no tienen previsto actualizar su plan.

El resto de los planes tiene menos de un año y por lo tanto no han sido objeto de una actualización. Los planes generalmente son establecidos después de asesorarse con los bomberos y el gobierno local. Una vez se mencionó la consulta a la fuerza armada, así como a la policía.

En cuanto al establecimiento de prioridades, 6 países que tienen un plan de emergencia no han establecido prioridades, mientras que 8 que tienen la intención de establecer un plan de emergencia ya tienen establecidas sus prioridades. Entre los países que no tienen la intención de establecer un plan, 3 han establecido prioridades. Una de las preguntas tenía que ver con la seguridad de las personas, los edificios y las colecciones. 20 respuestas tienen que ver con la seguridad de los tres, mientras que 3 respuestas mencionaron solamente la seguridad de las colecciones o de los edificios. Apartando las respuestas que tienen que ver con los tres elementos, la seguridad de las personas fue mencionada sólo 7 veces, indudablemente porque en ciertos casos los procedimientos de seguridad para las personas no forman parte del plan de emergencia.

Funcionamiento del plan de emergencia

En lo que respecta a las pruebas del plan de emergencia, 25 respuestas indican que no se ha realizado ninguna prueba. Cinco países que tienen la intención de establecer un plan de emergencia dicen que lo han probado, lo que hace suponer que su plan está casi terminado. Más extraño aún resulta el hecho de que 2 países que no tienen la intención de tener un plan de emergencia indicaron haberlo probado.

Cerca de la mitad de las instituciones organizan prácticas o simulacros, de las cuales sólo 26 lo hacen de manera regular. Solicitar o recibir ayuda de otras instituciones son prácticas menos extendidas que contactar proveedores de servicios, lo cual es lo habitual para la mitad de las instituciones. Los servicios mencionados con mayor frecuencia son aquellos que pueden proveer materiales o empresas de transporte. Las empresas de servicios de congelación se mencionan rara vez. Entre los demás servicios mencionados se encuentran la desinfección, asesoría de expertos, liofilización, logística, restauración, limpieza del sitio, deshumidificación de los locales, almacenamiento y capacitación. Aproximadamente, la mitad de las bibliotecas puede suministrar recomendaciones técnicas.

Un elemento muy importante de la aplicación de un plan de emergencia es la designación de un miembro del personal como responsable, así como las listas actualizadas de personas a quienes contactar en casos de emergencia. 51 países indican que poseen listas y los mismos países, excepto 2, que han designado un responsable. Entre esos 51 países, 2 respondieron que no tenían la intención de tener un plan de emergencia.

Medidas preventivas

La última parte del cuestionario tiene que ver con la prevención. La primera pregunta trataba el punto del fácil acceso a los equipos de emergencia, con respecto a lo cual, 42 bibliotecas respondieron afirmativamente. Las otras preguntas estaban relacionadas con las alarmas contra incendio o intrusión y con qué frecuencia son revisadas. 59 países cuentan con alarmas contra incendio, 31 de los cuales poseen también alarmas contra intrusión. Sólo un país respondió que tenía una alarma contra intrusión pero no contra incendio. En 50 bibliotecas se revisan las alarmas.

La siguiente pregunta era acerca de los seguros. Solamente 23 bibliotecas tienen asegurado el edificio. Una de ellas respondió que solamente una parte de sus edificios estaba asegurada. Las razones argumentadas son múltiples y variables. El costo elevado de los seguros, la cobertura por parte del Estado ('lamentablemente' según una de las bibliotecas) y el costo del avalúo. El número de bibliotecas que ha asegurado sus colecciones es todavía menor (16). 19 bibliotecas tienen asegurado su material.

La última pregunta tenía que ver con el tipo de medidas preventivas consideradas de mayor utilidad y adecuadas en casos de desastre. Estas medidas son la duplicación de los documentos y el almacenamiento de las copias en otro lugar, los rociadores de agua, las alarmas, además de los vigilantes y rondas regulares. 13 bibliotecas enumeraron todas estas medidas. La duplicación fue en todos los casos considerada como la medida más útil, ya que se menciona en 50 respuestas. Más de la mitad de las respuestas menciona las alarmas y un poco menos los vigilantes. Los rociadores de agua ocupan el último lugar, citados por cerca de la tercera parte de las bibliotecas. Entre las otras medidas se mencionó recurrir a expertos y contar con recursos disponibles en forma inmediata en caso de desastre.

Conclusión

Resulta difícil dar una imagen precisa de la situación en todas las bibliotecas nacionales, ya que solamente el 41% de las instituciones contactadas respondió la encuesta. Es igualmente difícil determinar por qué el 59% restante no respondió. Es posible que haya habido problemas de comunicación. Algunos países indicaron que el cuestionario tomó varias semanas en llegar a su destino y disponían de muy poco tiempo antes de la fecha límite de entrega.

1. Al examinar detenidamente las respuestas, se determinó que las bibliotecas que tenían un plan de emergencia sólido, probado y actualizado regularmente, **no estaban sistemáticamente situadas en un país industrializado**. Por sólo mencionar dos ejemplos: Cuba cuenta con un plan de emergencia, lo ha probado, organiza prácticas regulares, tiene designado un responsable entre los miembros del personal y tiene asegurados los edificios, las colecciones y el material. Singapur figura entre los muy pocos países que actualiza anualmente su plan. La biblioteca posee sistemas de alarma contra incendio e intrusión y asegura sus colecciones y su material.

2. Las razones invocadas para no tener un plan de emergencia varían, como se dijo anteriormente, pero están sobre todo relacionadas con la **falta de recursos** (de personal o financieros) y con la ausencia de un modelo.

3. De allí que es necesario **crear conciencia** sobre la importancia de la prevención de desastres, de lo que debería formar parte de las prioridades, incluso en las bibliotecas que disponen de un presupuesto limitado. La biblioteca y los archivos nacionales de Tuvalu han señalado que han hecho un esfuerzo por llamar la atención sobre este punto, lo que representa un buen ejemplo a seguir.

4. **'Pocos riesgos'** es una razón adicional para no tener un plan de emergencia. Es necesario reflexionar acerca del hecho de que un país no está nunca totalmente exento de un desastre. Algunos países que se sienten totalmente seguros han reportado que habían sufrido desastres, evidentemente inesperados, en el curso de los últimos 10 años.

5. Se debe estudiar otro aspecto de los riesgos: su correlación con la **antigüedad de los edificios**. Además, no se debe subestimar la importancia de contar con un buen seguro.

6. En cuanto a los planes, ya se ha hablado de la necesidad de producir un **plan modelo** y recomendaciones (o de revisar y actualizar los planes ya existentes).

7. Es necesario reflexionar acerca del hecho de que sólo una tercera parte de los planes existentes

forman parte de un **plan a escala nacional**. ¿Se debería integrar los planes de emergencia en una política de emergencia nacional?

8. Hay que destacar la importancia de **probar** los planes y **actualizarlos** regularmente. Un plan que no se actualiza y revisa completamente por lo menos una vez al año pierde su eficacia.

9. Es igualmente indispensable establecer prioridades, aunque el porcentaje de respuestas afirmativas a esta pregunta fue relativamente bajo.

10. Se constata el mismo porcentaje bajo de respuestas en lo relativo a los establecimientos que cuentan con **recomendaciones técnicas**, lo que sin embargo constituye uno de los componentes esenciales del plan de emergencia.

Recomendación

Se debe fomentar, especial pero no exclusivamente, la cooperación entre las instituciones con presupuestos limitados. Finalmente, se debe insistir en el hecho de que es indispensable designar a un miembro del personal como responsable en caso de desastre, ya que la coordinación es el factor fundamental para garantizar la eficacia de las operaciones.

Manual IFLA-PAC sobre planes de emergencia

Después de analizar los resultados de la encuesta y haber organizado dos seminarios, uno en México, en octubre de 2003, sobre terremotos y otro en Trinidad y Tobago, en mayo de 2004, sobre los desastres en el Caribe, y haber participado en la segunda reunión internacional sobre la conservación de archivos en el clima tropical, Curazao, noviembre de 2003, el PAC tomó la decisión de hacer una contribución a la ya larga lista de publicaciones sobre planes de emergencia.

Se trata de un manual básico, del mismo tipo de los "Principes de Conservation de l'IFLA" publicados en 1998, sobre los riesgos eventuales que se deben considerar y los elementos que se deben tomar en cuenta para establecer un plan de emergencia. Este manual, igual para archivos y bibliotecas, será elaborado por un comité formado por representantes de archivos y bibliotecas. John McIlwaine, antiguo Presidente de la Sección PAC (Preservación y Conservación) y Ted Steemers, Presidente del Comité de Conservación de Archivos, aceptaron prestar su colaboración en esta tarea.

La publicación del manual está prevista para el año 2006 y estará disponible en una versión trilingüe (francés, inglés, español).

Cuestionario de la IFLA sobre Preparación contra Desastres

Mucho agradeceríamos no enviara el cuestionario respondido A MÁS TARDAR EL 25 DE MARZO

Marie-Thérèse Varlamoff
IFLA-PAC
Bibliothèque nationale de France
Quai François-Mauriac - 75013 Paris - France

A - Institución

- A.1 Nombre de la institución :
- A.2 Nombre del director :
- A.3 Dirección :
- A.4 Teléfono :
- A.5 Fax :
- A.6 Correo electrónico :

B - Desastres

- B.1 ¿Su institución ha sufrido algún desastre en los últimos?
 5 años sí no
 10 años sí no
- B.2 ¿Qué tipo de desastre fue ?
 natural causado por el hombre
- B.3 ¿Cuántos desastres ha sufrido en los últimos 10 años?
 1 2 3 más :.....
- B.4 ¿Su institución está ubicada en una región o lugar amenazado por desastres naturales?
 sí no
- B.5 ¿Qué tip de desastre es más probable que se produzca?
 incendio erupción volcánica
 inundación guerras
 terremoto conflictos internos
 deslaves terrorismo
 maremoto otros:

C - Edificaciones

- C.1 Su instituciones está localizada en:
 un edificio 2 3 4
 varios edificios: 5 más:.....
- C.2 Su edificio principal tiene:
 menos de 5 años 5 a 10 años
 10 a 25 años 25 a 50 años
 50 a 100 años más de 100 años
- C.3 ¿Comparte el edificio con otros ocupantes?
 sí no

D - Plan contra desastres

Un plan contra desastres es un documento escrito que trata los aspectos de seguridad y rescate de las colecciones y la seguridad del edificio. No debe asumirse como medidas de seguridad que tienen que ver con la seguridad pública y tienen carácter obligatorio.

- D.1 ¿Tiene un plan contra de desastres escrito?
 sí no
- D.2 ¿Tiene previsto redactar e implantar uno ?
 sí no
- D.3 ¿Indique las principales razones por las que no existe un plan contra desastres:
 pocos riesgos
 no hay personal disponible para redactarlo e implantarlo
 falta de un modelo para redactarlo
 falta de recursos para implantarlo: falta de personal falta de dinero
 proximidad a la estación de bomberos
 otros, por favor detalle:

D.18 ¿Algún miembro de su personal es responsable del plan contra desastres y su aplicación?
 sí no

D.19 Nombre y cargo de esta persona (opcional):

D.20 ¿Dispone de equipos de emergencia de fácil acceso?
 sí no

D.21 ¿Qué tipo de sistemas de alarma posee?
 contra incendio contra intrusos

D.22 ¿Sus sistemas de alarma son revisados regularmente?
 sí no

D.23 ¿El edificio está asegurado?
 sí no

D.24 ¿Las colecciones están aseguradas?
 sí no, ¿por qué?

D.25 ¿Los equipos están asegurados?
 sí no, ¿por qué?

D.26 ¿Qué medidas preventivas considera más útiles y adecuadas en caso de desastre?
 duplicación de documentos (colecciones, catálogos) y almacenamiento en otro lugar
 rociadores de agua
 alarmas
 vigilantes, rondas regulares

E - Información de la persona que ha respondido al cuestionario

E.1 Nombre:

E.2 Cargo:

E.3 Correo electrónico:

E.4 Teléfono:

■ Addenda

Article intitulé « La Bibliothèque Orientale : histoire, conservation et numérisation », par May Semaan Seigneurie et Antoine Saliba, publié dans le n° 33 (Septembre 2004) de « International Preservation News »

Il est important de noter que le chantier de conservation des manuscrits de la Bibliothèque Orientale a démarré grâce à une première expertise généreusement offerte par Madame Marie Lorraine Vannier Mercier, restauratrice de livres et conseiller formateur en conservation préventive. Madame Vannier Mercier est revenue ensuite à Beyrouth, dans le cadre d'une mission de l'Université Saint-Joseph, pour planifier le chantier, former l'équipe et la diriger dans le lancement des travaux pendant deux semaines. En matière de conservation préventive, tout le travail qui s'effectue à la Bibliothèque Orientale depuis 2000 s'inspire des priorités et des principes établis par Madame Vannier Mercier.

■ ABINIA - Chile

During her visit to Chile (October 2004) where she attended the ABINIA (Asociación de estados iberoamericanos para el desarrollo de las bibliotecas nacionales de Iberoamerica) Annual Conference, Marie-Thérèse Varlamoff presented a paper focusing on the survey on IFLA-PAC disaster planning in the Latin America perspective. She had the opportunity to visit the preservation premises at the National Library of Chile which

hosts one of the recently created regional PAC centres and to discuss the disaster plan implemented at the National Library with Ximena Cruzat, Director of the National Library and PAC Regional Director.

A visit to the Dirección de Bibliotecas, Archivos y Museos (DIBAM) proved how much committed in the preservation of their cultural heritage the Chileans are. Magdalena Krebs, Head of Centro Nacional de Conservación y Restauración (CNCR) and Paloma Mujica, Head of Paper Conservation of the CNCR showed her around the DIBAM. Marie-Thérèse Varlamoff delivered a second speech on the Blue Shield at the Universidad Internacional SEK. The conservators who attended the seminar showed a great interest and some of them will hopefully join the Chilean Committee of the Blue Shield under construction at the initiative of Ximena Cruzat.

■ ICBS: Torino Declaration

On July 23-24th, 2004, representatives from the International Committee of the Blue Shield and from National Blue Shield Committees convened in Torino, Italy, to take stock of the situation and propose a strategy for the future.

At the end of the meeting they issued a declaration (see opposite). A second meeting took place in The Hague (October 18-19th, 2004) and it was decided to take measures to establish a part-time secretariat in Paris. ICOM offered to host it.

As to November 2004, there are 11 existing National Blue Shield Committees:

- Belgium
- Benin
- Czech Republic
- Former Yugoslav Republic of Macedonia
- France
- Italy
- Netherlands
- Norway
- Poland
- United-Kingdom and Ireland
- Venezuela

Torino Declaration

Resolutions of the first Blue Shield International Meeting held in Torino, Italy

23-24th July, 2004

The representatives of the founding members of the International Committee of the Blue Shield (ICA, ICOM, ICOMOS, IFLA)¹ and of the National Blue Shield Committees of Belgium, Czech Republic, France, Italy, the former Yugoslav Republic of Macedonia, Madagascar, Norway, Poland, United Kingdom and Ireland, and Venezuela, and the representatives of Cultural Emergency Response and Cultural Heritage Without Borders, meeting in Torino, Italy, on the occasion of the first international meeting of the International and National Committees of the Blue Shield,

1. Mindful of the right and responsibility of each country to protect its cultural heritage, and referring to the Universal Declaration on Cultural Diversity unanimously adopted by UNESCO in 2001², supporting the project to develop an international convention on cultural diversity as recommended by the 32nd General Conference and affirming the

2003 UNESCO Declaration concerning the Intentional Destruction of Cultural Heritage,

2. Recalling the Convention for the Protection of Cultural Property in the Event of Armed Conflict adopted at The Hague in 1954, its First Protocol of 1954 and its Second Protocol of 1999³ which entered into force on 9th March 2004,
3. Recalling the founding objectives of the ICBS of April 1996 and its Charter concluded in Strasbourg on 14th April 2000⁴,
4. Deeply concerned by the effects of human-made or natural disasters devastating both movable and immovable cultural heritage:
 - a. recommend that the Convention for the Protection of Cultural Property in the Event of Armed Conflict adopted at The Hague in 1954, the First Protocol of 1954 and the Second Protocol of 1999 be signed and ratified by all state parties to UNESCO and to the United Nations,
 - b. 1) recommend that the United Nations and other international organisations include the protection of the movable and immovable cultural heritage, and of vital records⁵, from destruction and displacement in the mandate of their peace support operations,
 - b. 2) encourage national governments to include the protection of the movable and immovable cultural heritage from destruction and displacement in the mandate of their humanitarian operations,
 - c. recommend that governments and relevant organisations of the United Nations act to prevent

looting and destruction of cultural heritage sites and buildings and illicit trade in cultural property,

- d. considering the importance of risk preparedness, response and recovery, recommend that cultural heritage professionals and others integrate these stages into their programmes,
- e. recommend that ICA, ICOM, ICOMOS and IFLA national members should create a National Committee of the Blue Shield, where such committees do not exist, and urge national authorities to support these committees' role and actions to protect movable and immovable cultural heritage in the event of natural or man-made disasters, and
- f. decide to establish and strengthen the ICBS as a visible, effective entity.

1. <http://www.ifla.org/blueshield.htm#3>
2. <http://unesdoc.unesco.org/images/0012/001271/127161e.pdf#page=9>
3. portal.unesco.org/culture/en/ev.php-URL_ID=2407&URL_DO=DO_TOPIC&URL_SECTION=201.html
4. <http://www.ifla.org/VII/4/admin/nc-req.htm>
5. Vital records are the core current documents that provide evidence of citizens' rights and entitlements and the basis for continuity of administration.

Resolutions of Thanks

The above mentioned participants of the First Blue Shield International Meeting give their heartfelt thanks to:

1. UNESCO for supporting participation in the meeting,
2. the Città di Torino, Provincia di Torino, Regione Piemonte for their generous patronage and hospitality,
3. the Centro Ricerche Archeologiche e Scavi di Torino for the

organisation of the special session on protection of cultural heritage in Iraq, and the Ministero per i beni e le attività culturali, Ministero degli Esteri e Nucleo Carabinieri Tutela Patrimonio Culturale and Polish Ministry of Culture for their valued contributions,

4. the Archivio di Stato di Torino and Museo della Resistenza, della Deportazione, della Guerra, dei Diritti e della Libertà for hosting the professional and working sessions, and
5. ICOM Italia and the Centro Ricerche Archeologiche e Scavi di Torino for their effective organisation of the meeting.

News Release

"Conservators Beyond Borders": Call for Participants

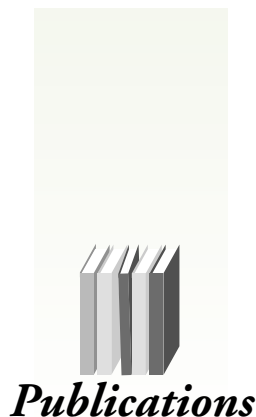
A humanitarian relief organization called "Conservators Beyond Borders" is now being formed to provide charitable emergency assistance to cultural institutions affected by natural and man-made disasters. A not-for-profit based in the United States, "Conservators Beyond Borders" will help institutions in crisis to ensure that irreplaceable cultural property is not lost as a disastrous byproduct of catastrophic events.

Relying on rotating groups of trained conservators to supply hands-on training in triage methodologies for all forms of cultural property, "Conservators Beyond Borders" will provide timely, state-of-the-art disaster recovery consultation and preventive-conservation assessments to

libraries, archives, and museums internationally, irrespective of race, creed, religion, political affiliation, or financial constraints of the cultural institution's staff.

If you support this concept, are interested in taking part in emergency consultations with cultural heritage institutions, and think you may have sufficient flexibility to participate in disaster recovery projects on short notice, or are simply willing to address the need for this type of activity in writing, please provide me with a hard-copy, one-page letter (on letter-head) communicating your support for and/or your willingness to work to provide humanitarian relief to help preserve cultural property. Your letter should define your areas of conservation specialization, language skills, previous disaster recovery experience (if any), and other relevant professional qualifications. These letters will be appended to the "Conservators Beyond Borders" prospectus being drafted for fundraising purposes to initiate this program, so please address the letter to me (using the address at the bottom of this letter) with the idea that your readership will include grant reviewers. Include too, your updated contact information (name, mailing address, work, home and cell phone numbers, and email address), and any thoughts you have on potential startup funding sources that might support "Conservators Beyond Borders", as well as people who could be formative in establishing an international communications network for the purpose of relaying first response alerts. I look forward to receiving your responses and questions and appreciate your help in initiating "Conservators Beyond Borders".

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Mediterraneum, vol. 4 Protection, Conservation and Exploitation of Underwater Cultural Heritage

Edited by Fabio Maniscalco

Number 4 of the collection of studies «Mediterraneum. Protection and Exploitation of Cultural Heritage » is divided in two sections.

- The first one focuses on the international regulation and national rules regarding the tutelage of underwater cultural heritage.
- The second section is subdivided in geographical areas and analyses, also through individual experiences, multiple aspects related to tutelage, conservation and valorization of underwater cultural patrimony.

The book also contains a vast and exhaustive bibliography and numerous panels to probe the question.

This last volume of the monographic series « *Mediterraneum* » is certainly a precious instrument for the experts of the sector, but also for anyone caring about the safeguarding of the international underwater cultural heritage.

Informations and / or orders:
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Survey of the State of Audio Collections in Academic Libraries

By Abby Smith,
David Randal Allen,
and Karen Allen

The libraries and archives of the United States house a rich heritage of audio recordings spanning more than a hundred years. In 2003, the Council on Library and Information Resources (CLIR) undertook a survey to document the state of original audio collections in academic libraries and to identify the scale and extent of barriers to their preservation and access. The 100-question survey explored virtually all areas of library stewardship, including access and bibliographic control, rights management, preservation, funding and collection policies. Two groups of academic libraries were surveyed – 18 member libraries of the Association of Research Libraries (ARL) and 51 member libraries of the Oberlin Group.

Respondents reported that a range of collections or items of high importance are not accessible. The main reasons for this inacces-

sibility related to a lack of bibliographic control. Physical fragility, lack of playback equipment for obsolete formats, access restrictions imposed by donors, and staff concerns about privacy rights were also commonly cited as barriers to access.

Changes in federal copyright law have meant that most audio recordings, even those made before 1923, will remain under copyright protection until well into the second half of this century. Use of these resources is complicated by the so-called underlying rights - those adhering to performers, composers, and distributors - that are difficult to untangle and trace for purposes of clearance.

Respondents from both ARL and Oberlin libraries identified the same features that make their audio collections worthy of preservation: uniqueness or rarity, historic value, and significance of content for research and teaching were most often cited.

Forty-two percent of the respondents said that between 80% and 100% of their preservation-worthy recorded-sound collections is available for listening. In many cases, original recordings, rather than 'listening copies', are served. Most respondents said that a lack of appropriate playback equipment was not a barrier to preservation.

Most ARL libraries have undertaken at least one recorded-sound preservation project in the past five years. By contrast, of the 19 Oberlin group libraries responding to this question, only 6 replied that they had undertaken an audio-preservation project in the past five years.

Among the institutions surveyed, all but a few ARL institutions reported that staffing for record-

ed-sound collections is minimal, with few full-time positions. Funding for preservation of and access to recorded sound appears to differ greatly between the two survey groups.

Although many respondents reported that lack of funding was the primary obstacle to making audio collections accessible, the survey revealed that simply spending more money on the same approaches will not lower barriers to the use of these collections. New approaches to intellectual and inventory control, new technologies for audio capture and automatic metadata extraction, new programs of education and training, and more-aggressive access policies under the fair use exemption of the copyright law for education will be needed to help ensure the preservation of most of the rare and historically important audio collections on campuses.

59p. August 2004

ISBN: 1-932326-11-1

The text of the report is available free on CLIR's website at <http://www.clir.org/pubs/abstract/pub128abst.html>.

Print copies can be ordered at this URL for \$20 per copy plus shipping.

For more information:

Council on Library and Information Resources

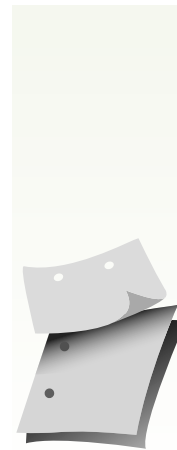
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Events and Training

Stage international Conduite d'un projet de conservation des collections de bibliothèques ou d'archives

Bibliothèque nationale de France,
Paris

La Bibliothèque nationale de France a organisé du 27 septembre au 22 octobre 2004 avec le concours des Archives de France et d'IFLA-PAC son troisième stage international de conservation. 15 stagiaires de 13 pays (Belgique, Brésil, Espagne, Ethiopie, Inde, Liban, Nouvelle-Calédonie, Pologne, Portugal, Sénégal, Tchad, Turquie, Vietnam) ont suivi le stage qui, cette année, se déroulait sur quatre semaines dont une optionnelle. Au cours de cette dernière semaine, les stagiaires divisés en plusieurs groupes ont pu se perfectionner à la conservation des archives, à la préservation des documents audiovisuels et visiter de façon individuelle plus approfondie des départements spécifiques, manuscrits orientaux de la BnF, par exemple. Ces stages sont gratuits et s'adressent à des collègues étrangers francophones. Le prochain stage aura lieu en 2006. Pour une éventuelle prise

en charge de leur voyage et de leur séjour, les candidats peuvent contacter l'Ambassade de France. Au delà des notions techniques et organisationnelles qu'ils permettent d'acquérir, ces stages présentent en outre un intérêt majeur : ils permettent de tisser entre les stagiaires et les intervenants un réseau de professionnels très motivés qui, au-delà du stage, continuent à échanger questions, expériences et réussites, autant de facteurs permettant d'intégrer davantage la conservation parmi les missions essentielles d'une bibliothèque.

Workshop on Disasters

February 9-10th, 2005
Havana, Cuba

In the framework of the Blue Shield and following the previous workshops organised in Mexico, October 2003 and Trinidad & Tobago, May 2004, IFLA-PAC is organising jointly with the National Library José Martí a third workshop on disaster in Havana, February 9-10th, 2005, focusing in priority on hurricanes in the Caribbean area. The workshop will be in Spanish and will gather Cuban participants from the cultural arena. Foreign participants are welcome.

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Comité français du Bouclier Bleu (CFBB)

8 avril 2005
Toulouse, France

Afin de sensibiliser les institutions culturelles de la région à la nécessité de se prémunir contre les catastrophes, la Bibliothèque municipale de Toulouse organise le 8 avril 2005 une journée de présentation qui rassemblera des participants et des intervenants des bibliothèques, archives, musées, monuments et sites. Des études de cas de sinistres récents seront présentées et des stratégies d'intervention proposées.

Inscription et renseignements auprès de :
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International Conference Mounting and Housing Art on Paper for Storage and Display: History, Science and Present Day Practice

May 19 - 20th, 2005
London, United Kingdom

This two day international conference hosted by the British Museum will bring together a range of experience and expertise to focus on the mounting and storage of art on paper. The first part of the conference will be dedicated to historical mounting and contemporary mounting and housing practice. The day after, lecturers will focus more particularly on materials and microenvironments, preservation concepts in traditional Japanese mounting and mounting / housing as a stra-

tegy in preservation planning. The event will end with a poster display.

Programme details can be found on the British Museum website:
www.thebritishmuseum.ac.uk/whatson/events/conferences.html
Enquiries and booking: acalton@thebritishmuseum.ac.uk

IFLA World Library and Information Congress

August 14-18th, 2005
Oslo, Norway

Next IFLA Congress will take place in Oslo, August 14-18th, 2005.

A pre-seminar will be organised jointly by the IFLA Newspapers Section and the Preservation and Conservation Section on August 11-12th. Speakers will focus on "Preservation Storage Solutions for all Library Materials".

For most of us, it will be the unique occasion to visit the vault of the National Library of Norway, in Mo I Rana (see IPN n°30, September, 2003).

During the Congress, the Section PAC and PAC Core Activity will organise jointly an Open Session on the theme: "Housing for Eternity: Sustainable Solutions and Mistakes to Avoid".

PAC CORE ACTIVITY

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